HSBC HOLDINGS PLC
Form 20-F
February 25, 2016
Table of Contents

As filed with the Securities and Exchange Commission on February 25, 2016.

SECURITIES AND EXCHANGE COMMISSION

WASHINGTON, D.C. 20549

FORM 20-F

¨ **REGISTRATION STATEMENT PURSUANT TO SECTION 12(b) OR 12(g) OF THE SECURITIES EXCHANGE ACT OF 1934**

Or

þ **ANNUAL REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934**

For the fiscal year ended December 31, 2015

Or

¨ **TRANSITION REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934**

Or

¨ **SHELL COMPANY REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934**

Date of event requiring this shell company report __________

For the transition period from N/A to N/A

Commission file number: 001-14930

HSBC Holdings plc

(Exact name of Registrant as specified in its charter)

N/A	**United Kingdom**
(Translation of Registrant s name into English)	(Jurisdiction of incorporation or organisation)

8 Canada Square

London E14 5HQ

United Kingdom

(Address of principal executive offices)

Russell C Picot

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London E14 5HQ

United Kingdom

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(Name, Telephone, Email and/or Facsimile number and Address of Company Contact Person)

Securities registered or to be registered pursuant to Section 12(b) of the Securities Exchange Act of 1934:

Title of each class	Name of each exchange on which registered
Ordinary Shares, nominal value US$0.50 each.	London Stock Exchange Hong Kong Stock Exchange Euronext Paris Bermuda Stock Exchange New York Stock Exchange*
American Depository Shares, each representing 5 Ordinary Shares of nominal value US$0.50 each.	New York Stock Exchange
6.20% Non-Cumulative Dollar Preference Shares, Series A	New York Stock Exchange*
American Depositary Shares evidenced by American Depositary receipts, each representing one-fortieth of a Share of 6.20% Non-Cumulative Dollar Preference Shares, Series A	New York Stock Exchange
5.10% Senior Unsecured Notes Due 2021	New York Stock Exchange
4.00% Senior Unsecured Notes Due 2022	New York Stock Exchange
4.875% Senior Unsecured Notes Due 2022	New York Stock Exchange
7.625% Subordinated Notes due 2032	New York Stock Exchange
7.35% Subordinated Notes due 2032	New York Stock Exchange
6.5% Subordinated Notes 2036	New York Stock Exchange

6.5% Subordinated Notes 2037	New York Stock Exchange
6.8% Subordinated Notes Due 2038	New York Stock Exchange
6.100% Senior Unsecured Notes due 2042	New York Stock Exchange
8.125% Perpetual Subordinated Capital Securities Exchangeable at the Issuer s Option into Non- Cumulative Dollar Preference Shares	New York Stock Exchange
8.00% Perpetual Subordinated Capital Securities Exchangeable at the Issuer s Option into Non- Cumulative Dollar Preference Shares, Series 2	New York Stock Exchange
4.250% Subordinated Notes due 2024	New York Stock Exchange
5.250% Subordinated Notes due 2044	New York Stock Exchange
4.250% Subordinated Notes due 2025	New York Stock Exchange

Securities registered or to be registered pursuant to Section 12(g) of the Securities Exchange Act of 1934: None

Securities for which there is a reporting obligation pursuant to Section 15(d) of the Securities Exchange Act of 1934: None

Indicate the number of outstanding shares of each of the issuer s classes of capital or common stock as of the close of the period covered by the annual report:

Ordinary Shares, nominal value US$0.50 each 19,685,096,934

Indicate by check mark if the registrant is a well-known seasoned issuer, as defined in Rule 405 of the Securities Act.

¨ Yes þ No

If this report is an annual or transition report, indicate by check mark if the registrant is not required to file reports pursuant to Section 13 or 15(d) of the Securities Exchange Act of 1934.

¨ Yes þ No.

Indicate by check mark whether the registrant (1) has filed all reports required to be filed by Section 13 or 15(d) of the Securities Exchange Act of 1934 during the preceding 12 months (or for such shorter period that the registrant was required to file such reports), and (2) has been subject to such filing requirements for the past 90 days.

þ Yes ¨ No

Indicate by check mark whether the registrant has submitted electronically and posted on its corporate Web site, if any, every Interactive Data File required to be submitted and posted pursuant to Rule 405 of Regulation S-T (§232.405 of this chapter) during the preceding 12 months (or for such shorter period that the registrant was required to submit and post such files).

¨ Yes ¨ No

Indicate by check mark whether the registrant is a large accelerated filer, an accelerated filer, or a non-accelerated filer. See definition of accelerated filer and large accelerated filer in Rule 12b-2 of the Exchange Act. (Check one):

Large accelerated filer þ Accelerated filer ¨ Non-accelerated filer ¨

Indicate by check mark which basis of accounting the registrant has used to prepare the financial statements included in this filing:

U.S. GAAP ¨ Other ¨

International Financial Reporting Standards as issued by the
International Accounting Standards Board þ

If Other has been checked in response to the previous question indicate by check mark which financial statement item the registrant has elected to follow.

¨ Item 17 ¨ Item 18

If this is an annual report, indicate by check mark whether the registrant is a shell company (as defined in Rule 12b-2 of the Exchange Act).

¨ Yes þ No

* Not for trading, but only in connection with the registration of American Depositary Shares.

Table of Contents

Table of Contents

As a reminder

Cautionary statement regarding forward-looking statements
Certain defined terms
HSBC at a glance
Who we are
Group Chairman s Statement
Group Chief Executive s Review
Our strategy
Value of the network
Delivering our network to customers
Progress on selected strategic actions
Financial overview
Global businesses
Regions
How we do business
Our approach to tax
Our conduct
Risk overview
Remuneration

This *Strategic Report* was approved by the Board on 22 February 2016. Douglas Flint, Group Chairman

Detailed financial performance
48 Financial summary
65 Global businesses
76 Geographical regions

Regulation and supervision
Disclosures pursuant to Section 13(r) of the Securities Exchange Act
Risk
Capital

Corporate Governance Report
Biographies of Directors and senior management

Board of Directors
Board committees
Internal control
Employees
Directors Remuneration Report

Report of Independent Registered Public Accounting Firm to the Board of Directors and Shareholders of HSBC Holdings plc only

Financial Statements
Notes on the Financial Statements

Shareholder information
Glossary of accounting terms and US equivalents
Abbreviations
Glossary
Index

Table of Contents

Strategic Report

Cautionary statement regarding forward-looking statements

This Form 20-F contains certain forward-looking statements with respect to HSBC s financial condition, results of operations, capital position and business.

Statements that are not historical facts, including statements about HSBC s beliefs and expectations, are forward-looking statements. Words such as expects , anticipates , intends , plans , believes , seeks , estimates , and reasonably possible , variations of these words and similar expressions are intended to identify forward-looking statements. These statements are based on current plans, estimates and projections, and therefore undue reliance should not be placed on them. Forward-looking statements speak only as of the date they are made. HSBC makes no commitment to revise or update any forward-looking statements to reflect events or circumstances occurring or existing after the date of any forward-looking statements.

Written and/or oral forward-looking statements may also be made in the periodic reports to the US Securities and Exchange Commission, summary financial statements to shareholders, proxy statements, offering circulars and prospectuses, press releases and other written materials, and in oral statements made by HSBC s Directors, officers or employees to third parties, including financial analysts.

Forward-looking statements involve inherent risks and uncertainties. Readers are cautioned that a number of factors could cause actual results to differ, in some instances materially, from those anticipated or implied in any forward-looking statement. These include, but are not limited to:

- changes in general economic conditions in the markets in which we operate, such as continuing or deepening recessions and fluctuations in employment beyond those factored into consensus forecasts; changes in foreign exchange rates and interest rates; volatility in equity markets; lack of liquidity in wholesale funding markets; illiquidity and downward price pressure in national real estate markets; adverse changes in central banks policies with respect to the provision of liquidity support to financial markets; heightened market concerns over sovereign creditworthiness in over-indebted countries; adverse changes in the funding status of public or private defined benefit pensions; and consumer perception as to the continuing availability of credit and price competition in the market segments we serve;

- changes in government policy and regulation, including the monetary, interest rate and other policies of central banks and other regulatory authorities; initiatives to change the size, scope of activities and interconnectedness of financial institutions in connection with the implementation of stricter regulation of financial institutions in key markets worldwide; revised capital and liquidity benchmarks which could serve to deleverage bank balance sheets and lower returns available from the current business model and portfolio mix; imposition of levies or taxes designed to change business mix and risk appetite; the practices, pricing or responsibilities of financial institutions

serving their consumer markets; expropriation, nationalisation,
confiscation of assets and changes in legislation relating to foreign ownership; changes in bankruptcy legislation in the principal markets in which we operate and the consequences thereof; general changes in government policy that may significantly influence investor decisions; extraordinary government actions as a result of current market turmoil; other unfavourable political or diplomatic developments producing social instability or legal uncertainty which in turn may affect demand for our products and services; the costs, effects and outcomes of product regulatory reviews, actions or litigation, including any additional compliance requirements; and the effects of competition in the markets where we operate including increased competition from non bank financial services companies, including securities firms; and

factors specific to HSBC, including discretionary RWA growth and our success in adequately identifying the risks we face, such as the incidence of loan losses or delinquency, and managing those risks (through account management, hedging and other techniques). Effective risk management depends on, among other things, our ability through stress testing and other techniques to prepare for events that cannot be captured by the statistical models it uses; and our success in addressing operational, legal and regulatory, and litigation challenges, notably compliance with the DPA.

Table of Contents

Certain defined terms

Unless the context requires otherwise, HSBC Holdings means HSBC Holdings plc and HSBC , the Group , we , us our refer to HSBC Holdings together with its subsidiaries. Within this document the Hong Kong Special

Administrative Region of the People s Republic of China is referred to as Hong Kong . When used in the terms shareholders equity and total shareholders equity , shareholders means holders of HSBC Holdings

ordinary shares and those preference shares and capital securities issued by HSBC Holdings classified as equity. The abbreviations $m and $bn represent millions and billions (thousands of millions) of US dollars, respectively.

Table of Contents

Strategic Report

HSBC at a glance

We are one of the most international banking

and financial services organisations in the world.

Group

Our operating model consists of four global businesses and five geographical regions supported by 11 global functions.

Reported profit before tax

(2014: $18.7bn)

$18.9bn

Reported revenue

(2014: $61.2bn)

$59.8bn

Key highlights

We grew adjusted revenue by 1%, primarily in client-facing GB&M, CMB and Principal RBWM.

Adjusted operating expenses increased by 5% from 2014. However, costs in the second half of the year were in line with the first half as our cost saving initiatives began to take effect.

Through management initiatives, we were able to reduce risk-weighted assets (RWAs) by $124bn in 2015 and therefore also the amount of capital we are required to hold.

Adjusted profit before tax

(2014: $22.0bn)

$20.4bn

Risk-weighted assets

(2014: $1,220bn)

$1,103bn

Global businesses

Our global businesses set globally consistent

business strategies and operating models.

They manage the products and business

propositions offered to our customers.

Retail Banking and Wealth Management (RBWM)	**Commercial Banking (CMB)**	**Global Banking and Markets (GB&M)**	**Global Private Banking (GPB)**
We help millions of people across the world to	We support more than two million business customers in	We provide financial services and products to	We help high net worth individuals and their

manage their finances, buy their homes, and save and invest for the future. Our Insurance and Asset Management businesses support all our global businesses in meeting their customers needs.	55 countries with banking products and services to help them operate and grow. Our customers range from small enterprises focused primarily on their domestic markets, through to large companies operating globally.	companies, governments and institutions. Our comprehensive range of products and solutions, across capital financing, advisory and transaction banking services, can be combined and customised to meet our clients specific objectives.	families to grow, manage and preserve their wealth.
Further details on page 30	**Further details on page 28**	**Further details on page 29**	**Further details on page 31**
Reported profit before tax			
$5.0bn	$8.0bn	$7.9bn	$0.3bn

Table of Contents

HSBC at a glance

Key metrics

Geographical regions

For further details on our regions, see page 32.

We operate in 71 countries and territories around the world. Our operating entities represent HSBC to customers, regulators, employees and other stakeholders.

Market presence

Table of Contents

Table of Contents

Strategic Report

Group Chairman s

Statement

We enter 2016 with a clear strategy and with

a plan for its implementation already well

under way. Our diversified business model

and balance sheet strength form the foundation

for our future progress, and position HSBC

well to deal with today s challenging economic

and financial conditions.

2015 was marked by some seismic shifts in global economic conditions, most notably the continuation of a sharp decline in commodity and oil prices, in part attributable to growing concerns over China s slowing economic growth. As a consequence, monetary policy remained accommodative throughout the major developed economies and key currency interest rates remained at historically low levels. Fiscal priorities continued to focus on controlling spending, an emphasis replicated in the private sector as weak revenue growth persisted in many industries.

Against this backdrop, the Group s financial performance in 2015 was broadly satisfactory, with reported profit before tax rising 1% to $18.9bn. On the adjusted basis used to measure management and business performance, profit before tax of $20.4bn was 7% lower than that achieved in 2014, driven by higher costs and credit charges.

Earnings per share of $0.65 compared with $0.69 in 2014. Sound management of capital, accelerated run-off of legacy books and shrinking the balance sheet in areas that can no longer support the expanded capital requirements now in force, contributed to the common equity tier 1 ratio increasing by 0.8 percentage points to 11.9%. This capital released from managing the asset base, together with that generated from operations, allowed the Board to approve a fourth interim dividend in respect of 2015 of $0.21 per ordinary share. This took dividends per ordinary share in respect of the year to $0.51, $0.01 higher than 2014. Total dividends in respect of 2015 amounted to $10.0bn, $0.4bn higher than in respect of 2014.

In approving the dividend increase, the Board noted that prospective dividend growth remained dependent upon the long-term overall profitability of the Group and delivering further release of less efficiently deployed capital. Actions to address these points are core elements of the Investor Update provided last June.

Table of Contents

Group Chairman s Statement

Sound progress on strategic initiatives

The *Strategic Report* highlights delivery to date against the strategic objectives laid out in last June s Investor Update.

When assessing management performance during 2015, outside of the financial results, the Board took particular account of the following aspects.

The successful negotiation of a majority stake in a new nationally licensed securities joint-venture in mainland China is the culmination of more than a decade of seeking out an appropriate platform through which to participate in the country s fast-developing securities markets. Once final approvals have been received, we believe this will establish a landmark opportunity for HSBC to contribute to the development of China s capital markets.

Our three major businesses generated higher revenue, notwithstanding the uncertain economic environment and the considerable reshaping necessitated by regulatory changes

During 2015, the Group maintained, reinforced and broadened its leadership position in all aspects of the internationalisation of the renminbi. This position has been built over the past five years to establish a highly competitive platform to service China s international trade and investment flows as it pursues the financial liberalisation and outgoing investment priorities laid out in the recent 13th five-year plan. The recent highly successful State visit to the UK, following an equally successful Economic and Financial dialogue in China, served to illustrate the huge potential for mutually beneficial cooperation between the UK and China from which HSBC is uniquely positioned to benefit in the realm of financial services.

The disposal of our Brazilian operations, which is expected to complete shortly, was both timely and well executed. This divestment was a key element of the Board s desire to simplify the Group and redeploy capital to geographic areas where we have greater competitive strength, most particularly in Asia.

Our three major businesses generated higher revenue, notwithstanding the uncertain economic environment and the considerable reshaping necessitated by regulatory changes. Global Banking and Markets and Retail Banking and Wealth Management, in particular, have made significant changes to their business models and are now beginning to see the benefits. Commercial Banking continued to leverage the value of the Group s international network and product capabilities. Global Private Banking, chastened by the exposure of historical failings in Switzerland, accelerated disposal of a number of customer portfolios as it refocused its business model on core customer segments within a fully transparent operating model.

Across all businesses, the Board recognised a heightened emphasis on customer focus, which permeated recruitment, training, product design and incentives. This is essential to the restoration of trust.

Finally, and underpinning the above, we made further progress embedding the standards now expected to protect customers and the financial system from bad actors and financial crime. We are, however, not yet where we need to be. There is still more investment to make with ever greater urgency as more and more activity takes place digitally through multiple channels and via increasingly sophisticated mobile devices. HSBC s determination to address emerging risks and identify bad actors remains resolute. The Board has made it one of its top priorities to oversee and ensure management s delivery of the necessary enhancements to customer and transaction screening systems.

The regulatory landscape has

become clearer

The second half of 2015 saw completion of some of the most important and complex initiatives undertaken to repair the fault lines that contributed to the global financial crisis. International agreement was reached on the amount of total loss-absorbing capacity that global systemically important banks, such as HSBC, need for orderly resolution, without risks to public funds. This allowed the Financial Stability Board to report to G20 leaders that they had finalised the tools needed to end too big to fail in the banking sector. There is still much to do to build these tools into national legislative and regulatory frameworks; however, this international agreement is an important step forward towards finally settling the capital base against which we can assess our target returns.

There is now broad agreement that the implementation of the suite of regulatory reforms introduced post-crisis has made the financial system more resilient. Accordingly, public policy priorities are now focusing on harnessing this greater strength and resilience to support economic growth, which we welcome.

Concentration within the current regulatory agenda is increasingly on new and emerging risks and vulnerabilities. There is growing industry participation in dialogue around these emerging threats, most notably regarding cyber risk, the changing liquidity dynamics resulting from more market-based finance and financial exclusion stemming from excessive risk aversion.

Likewise, addressing the root causes of the misconduct issues that have bedevilled our industry in recent years has led to growing cooperation arising out of the multiplicity of joint working groups and enquiries that have examined the most serious failings. 2016 sees the introduction of the new Senior Managers Regime in the UK, which will reinforce individual responsibility and accountability, which we welcome.

Also in the UK, 2015 saw further clarity given to the operation of the ring-fenced bank structure and a welcome announcement of a reduction in the scope and rate of the bank levy going forward.

It is too early to say whether this amounts to a new understanding between the industry and the public, but it is encouraging that the industry is once again gaining a voice at a time of great economic and geopolitical uncertainty. We can only fulfil our essential role if we have regained trust, a fact that is now fully understood.

Board changes

Subsequent to the changes announced with our interim results, we have made further changes to the Board. Safra Catz stepped down from the Board at the end of 2015 and Sir Simon Robertson, our Deputy Chairman, and Rona Fairhead will retire at the forthcoming Annual General Meeting.

There is now broad agreement that the implementation of the suite of regulatory reforms introduced post-crisis has made the financial system more resilient

Safra served on the Board for nearly eight years while Simon and Rona are HSBC s longest serving non-executive Directors, having served for close to 10 and 12 years, respectively. Over their respective periods of service, they have made invaluable contributions to the Group, not least during the global financial crisis, for which the Board is extremely grateful. Their combined expertise and experience in matters of governance, audit and risk, remuneration, technology, and international business affairs has been invaluable to HSBC and they will, upon their retirement, be sorely missed. On behalf of shareholders and the Board, I want to take this further opportunity to recognise their immense contributions to HSBC.

Review of headquarters location

As we announced last week, the Board concluded its review of domicile alternatives and decided unanimously to remain headquartered in the UK. As we evaluated jurisdictions against the specified criteria, it became clear that the combination of our strategic focus on Asia and maintaining our hub in one of the world s leading international financial centres, London, was not only compatible, but offered the best outcome for our customers and shareholders. This decision was taken after some 10 months of careful analysis and assessment of geopolitical, economic, regulatory and financial factors. Advice was taken from internationally respected experts and from leading financial advisers. After considering all the relevant factors, the Board concluded that having our headquarters in the UK and our significant business in Asia Pacific led from Hong Kong, delivers the best of both worlds to our stakeholders. The completion of this review closes out one of the 10 strategic actions set out at our Investor Update last June.

The Board was delighted to announce the appointments of Paul Walsh and Henri de Castries as independent non-executive Directors. Paul joined the Board on 1 January 2016 and Henri s appointment takes effect from 1 March 2016.

Paul Walsh was Group CEO of Diageo plc between 2000 and 2013. Under his leadership, Diageo was refocused from a diversified food, beverage and hotels conglomerate into one of the world s leading global alcoholic beverage businesses. In building this position, Paul took Diageo from a largely European and US business into emerging markets and to global leadership through the acquisition of many of the world s leading brands.

Henri de Castries has more than 25 years of international experience in the finance industry. Henri has been Chairman and Chief Executive Officer of AXA, one of the world s leading global insurance and asset management companies since April 2010 after serving as Chairman of its Management Board from May 2000.

Their international experience and track record in leading the reshaping of growing businesses, including undertaking business portfolio realignments, will be of great value to the Board as we address the opportunities and challenges ahead.

Table of Contents

Group Chairman s Statement

Looking back our 150th anniversary

In 2015, HSBC marked its 150th anniversary by recognising its staff for their essential contributions through the ages, and its customers for their shared commitment and loyalty. As we enter the next period of our history, I want to reiterate these messages of gratitude and underline our recognition that such commitment and loyalty have to be earned.

HSBC has also always recognised its responsibilities to the communities it serves and so in this special year committed $150m of additional funding to community projects around the world over three years.

We also wanted to identify a distinctive cause with global significance to mark our special anniversary.

We enter 2016 with a clear strategy and with much of the Group s required reshaping completed or under way

We were delighted, therefore, to announce a partnership with Cancer Research UK to support the scientific leaders of tomorrow through a $25m contribution towards the development and construction of the Francis Crick Institute. This state-of-the-art biomedical research facility will open in the heart of London in 2016 and support more than 1,200 scientists, collaborating to tackle the diseases that pose the greatest threat to humanity cancer, heart disease, lung disease and infectious diseases, including HIV and malaria.

To mark HSBC s support, 150 PhD students, selected from across the world, will have the opportunity to conduct vital research at the new institute.

Looking ahead

Current market conditions are inevitably concentrating attention on the risks that exist within the global economy. It is, however, important also to recognise again the resilience that our diversified business model and balance sheet strength provide, as well as noting the many counterbalances that should help to underpin the global economy.

China s slower economic growth will undoubtedly contribute to a bumpier financial environment, but it is still expected to be the largest contributor to global growth as its economy transitions to higher added value manufacturing and services and becomes more consumer driven. This transition is driving our focus on the Pearl River Delta as a priority growth opportunity given its concentration of high tech, research focused and digital businesses.

There is a real possibility of meaningful stimulus for the global economy to come from further trade liberalisation initiatives such as the Trans-Pacific Partnership agreement, which was signed earlier this month.

The global focus on infrastructure development, most notably the Belt and Road initiative in China and the Juncker plan in Europe will expand public/ private financing opportunities.

Similarly, the agreements reached on climate change at the recent COP21 conference in Paris will require further significant infrastructure renewal. They will also greatly expand the market for sustainable financing options such as green bonds where HSBC is a leading participant. Reinforcing this position, the Group recently committed $1bn to a green bond portfolio to fund projects in sectors such as renewable energy, energy efficiency, clean transportation and climate change adaption as well as SME financing in sectors such as public transport, education and healthcare.

Technology advancements in financial services are broadening access, improving customer service and lowering the costs of service delivery. At the same time, the amount of data held digitally is exploding, reinforcing the need to bolster cyber security. There is an urgent public policy need to clarify how responsibility is to be shared, given the growing number of routes through which customers can authorise movement of money from their accounts or the sharing of data within these accounts.

We enter 2016 with a clear strategy and with much of the Group s required reshaping completed or under way. Our 264,000 staff, like their predecessors, went the extra mile consistently throughout 2015 to meet the demands placed on them by our customers, regulators and the public. I want to place on the record the Board s appreciation of that commitment and our gratitude for what they have achieved to make HSBC fit for the next 150 years.

Douglas Flint

Group Chairman

22 February 2016

Table of Contents

Strategic Report

Group Chief Executive s Review

HSBC is better balanced, better connected and better placed to capitalise on higher return businesses than it was 12 months ago.

Business performance

Our performance in 2015 again demonstrated the fundamental strength of our business. Targeted investment, prudent lending and our diversified, universal banking business model helped us achieve revenue growth in a difficult market environment whilst also reducing risk-weighted assets.

We also started to implement the actions that we announced at our Investor Update in June to adapt HSBC to new operating conditions. Completing these plans will refocus the business to achieve stronger, sustainable growth and we are acting on them quickly and efficiently.

On an adjusted basis, we grew revenue over the course of the year. Global Banking and Markets performed strongly and Commercial Banking grew steadily in spite of slower trade. Principal Retail Banking and Wealth Management also grew following a strong Wealth Management performance in the first half. Global Private Banking grew in Asia, but was down overall due to the impact of the continued repositioning of the business.

Our adjusted operating expenses increased as we continued to strengthen our compliance capability whilst also investing for growth. However, a combination of strict cost management and the cost reduction programmes that we started in the middle of the year helped us keep second half costs flat relative to the first half, excluding the bank levy.

Loan impairment charges remained generally low despite an increase in provisions towards the end of the year. This demonstrates again our prudent approach to lending and the benefit of our de-risking measures since 2011.

In total, we generated $11.3bn of capital in 2015, which enabled us to increase the dividend and strengthen the common equity tier 1 ratio.

HSBC HOLDINGS PLC

10

Adapting HSBC

The plans that we announced at our Investor Update are designed to grow income, reduce costs and thereby increase our return on equity. There is a lot to do to achieve our targets but we have made a good start.

Reducing our risk-weighted assets (RWAs) is vital to achieving a better return for shareholders. In 2015, management action reduced RWAs by $124bn, which takes us nearly half-way towards our target to be achieved by the end of 2017. Much of this reduction came from Global Banking and Markets, although a large proportion also came from Commercial Banking, accelerated asset sales in our US Consumer and Mortgage Lending portfolio and the sale of our investment in Industrial Bank. We expect to deliver further RWA reductions in 2016, in addition to a decrease of around $33bn from the sale of our business in Brazil.

The plans that we announced at our Investor Update are designed to grow income, reduce costs and increase our return on equity. There is a lot to do to achieve our targets but we have made a good start

We have received a number of offers for our business in Turkey since June, none of which were deemed to be in the best interests of shareholders. We have therefore decided to retain and restructure our Turkish operations, maintaining our wholesale banking business and refocusing our retail banking network. This will provide better value for shareholders and continue to allow our clients to capitalise on HSBC s international footprint.

Our cost-reduction measures are already having an impact on our cost base and HSBC is now a leaner business than at the half-year. All of our initiatives to reduce costs are under way and we expect further progress in 2016.

We continued to redevelop our businesses in the US and Mexico over the course of 2015. These are important businesses in the context of the wider Group and we are committed to turning them around. An increase in cross-border business across the NAFTA area and improved collaboration between global businesses helped to generate increased revenue. They remain works in progress.

We are investing in areas of the business that extract the greatest gain from our international network and market-leading strength in Asia.

Investment in flagship transaction banking products helped to increase our market share, particularly in Payments and Cash Management, Foreign Exchange and Securities Services.

The development of our Asia businesses is gaining momentum and we achieved growth in excess of GDP in seven out of eight of our priority Asia markets.

We continue to expand our business in the Pearl River Delta and reached a number of milestones in 2015, including the signing of an agreement to form the first majority foreign-owned securities company in mainland China. When approved, this will allow us to engage in the full spectrum of securities business in the country.

We remain the world s number one bank for offshore renminbi services and increased revenue by 3% year-on-year in this vitally important growth market.

Summary and outlook

HSBC is better balanced, better connected and better placed to capitalise on higher return businesses than it was 12 months ago. Our universal banking model is generating higher income from collaboration between businesses and our operating expenses and capital ratio are trending in the right direction. Maintaining these trends while boosting revenue will be the principal challenge in the year ahead.

The current economic environment is uncertain, but our diversified banking model, low earnings volatility and strong capital generation give us strength and resilience that will stand us in good stead.

We remain focused on delivering our nine remaining strategic actions by the end of 2017.

Stuart Gulliver

Group Chief Executive

22 February 2016

Table of Contents

Table of Contents

Table of Contents

Table of Contents

Table of Contents

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Table of Contents

Table of Contents

Strategic Report

Financial overview

Reported results

This table shows our reported results for the last three years. The results for 2015 are described below.

Reported results	2015 $m	2014 $m	2013 $m
Net interest income	**32,531**	34,705	35,539
Net fee income	**14,705**	15,957	16,434
Net trading income	**8,723**	6,760	8,690
Other income	**3,841**	3,826	3,982
Net operating income before loan impairment charges and other credit risk provisions (revenue)	**59,800**	61,248	64,645
Loan impairment charges and other credit risk provisions (LICs)	**(3,721)**	(3,851)	(5,849)
Net operating income	**56,079**	57,397	58,796
Total operating expenses	**(39,768)**	(41,249)	(38,556)
Operating profit	**16,311**	16,148	20,240
Share of profit in associates and joint ventures	**2,556**	2,532	2,325
Profit before tax	**18,867**	18,680	22,565

Reported profit before tax

Reported profit before tax was $18.9bn, up by $0.2bn or 1% from 2014. This was driven by a favourable movement in significant items of $2.6bn partly offset by $0.9bn of adverse effects of foreign currency translation between the years. The favourable movement in significant items included lower fines, settlements, UK customer redress and associated provisions (down by $1.3bn in total) and a gain on the partial disposal of Industrial Bank ($1.4bn).

Excluding the effects of significant items and currency translation, profit before tax was down by 7% from 2014. We describe the drivers of our performance under Adjusted performance on page 23.

Reported revenue

Revenue of $59.8bn was $1.4bn or 2% lower than in 2014. Revenue benefited from a favourable movement in significant items but this was more than offset by the adverse effect of currency translation of $4.8bn between the years.

Significant items affecting revenue in 2015 included:

- a $1.4bn gain on the partial sale of our shareholding in Industrial Bank;
- lower provisions and charges relating to the ongoing review of compliance with the Consumer Credit Act in the UK ($0.6bn lower than in 2014); and
- an increase in favourable movements on our own debt designated at fair value from changes in credit spreads of $0.6bn.

Reported LICs

Loan impairment charges and other credit risk provisions (LICs) of $3.7bn were $0.1bn or 3% lower than in 2014, reflecting the favourable impact of currency translation between the years.

Reported operating expenses

Operating expenses of $39.8bn were $1.5bn or 4% lower than in 2014. This reduction primarily reflected the favourable effect of currency translation of $3.3bn between the years.

The total of significant items was broadly in line with 2014, although there were notable movements as follows:

- lower provisions and charges relating to UK customer redress ($0.7bn lower than in 2014); and
- the non-recurrence of a charge of $0.6bn in 2014 relating to a settlement with the US Federal Housing Finance Agency; broadly offset by
- settlements and provisions in connection with legal matters ($0.5bn higher than in 2014); and
- costs-to-achieve relating to business transformation of $0.9bn in 2015 (for further details, see page 58).

Reported income from associates

Income from associates of $2.6bn was in line with 2014.

HSBC HOLDINGS PLC

22

Table of Contents

Financial overview

Adjusted performance

Our reported results are prepared in accordance with IFRSs as detailed in the Financial Statements on page 347. We also present adjusted performance measures as we believe these help explain our performance and these are highlighted with the following symbol:

To arrive at adjusted performance, we adjust for:

- the year-on-year effects of foreign currency translation; and
- the effect of significant items that distort year-on-year comparisons and are excluded in order to understand better the underlying trends in the business.

For reconciliations of our reported results to an adjusted basis, including lists of significant items, see pages 66 67 and 77 78.

Adjusted results

This table shows our adjusted results for 2015. These are discussed in more detail on the following pages.

Adjusted results	2015 $m	2014 $m
Net operating income before loan income charges and other credit risk provisions (revenue)	**57,765**	57,227
Loan impairment charges and other credit risk provisions (LICs)	**(3,721)**	(3,168)
Total operating expenses	**(36,182)**	(34,576)
Operating profit	**17,862**	19,483
Share of profit in associates and joint ventures	**2,556**	2,493
Profit before tax	**20,418**	21,976

Adjusted profit before tax

Our adjusted profit before tax fell by $1.6bn or 7%.

We grew adjusted revenue by $0.5bn or 1%, notably in GB&M (up by $1.2bn or 7%), CMB (up by $0.4bn or 3%) and Principal RBWM, which is our RBWM business excluding the US run-off portfolio (up by $0.4bn or 2%). These increases were partly offset in GPB (down by $0.1bn or 6%) and Other (down by $0.3bn).

Our LICs were $0.6bn or 17% higher than in 2014, primarily due to increases in CMB ($0.5bn) and RBWM ($0.3bn), partly offset by a reduction in GB&M ($0.3bn).

Our adjusted operating expenses increased by $1.6bn or 5%. Excluding the bank levy, operating expenses in the second half of 2015 were broadly in line with the first half of the year. This was despite investment and inflationary pressures, and partly reflects the initial effect of our cost saving initiatives as well as a strong focus on cost management.

Adjusted performance (continued)

Adjusted revenue

Adjusted revenue rose by 1% in part due to growth in GB&M, CMB and Principal RBWM reflecting the following:

GB&M: Revenue of $18.0bn was $1.2bn or 7% higher than in 2014. This was driven by higher revenue in all client-facing businesses except Principal Investments. In Equities, revenue increased by $0.5bn, reflecting higher client flows and increased market volatility. Revenue from transaction banking products rose $0.4bn as volatility drove higher client flows in Foreign Exchange, as assets under custody in Asia rose in Securities Services, and as deposits rose in Payments and Cash Management (PCM). Revenue was also higher in Balance Sheet Management (BSM), rising $0.1bn.

CMB: We grew revenue by $0.4bn or 3%, in particular in Credit and Lending (up by $0.4bn) and PCM (up by $0.1bn). This growth was mainly in Hong Kong and the UK, reflecting average balance sheet growth. In Hong Kong, lending balance growth was primarily in 2014 and the first half of 2015. Balances were

business, revenue was higher (up by $0.4bn or 2%). This was driven by increased Wealth Management revenue in Asia (up by $0.2bn) in the first half of 2015, from growth in investment distribution, which more than offset weaker investor sentiment in the second half of 2015. There was

GPB: Our revenue fell by $0.1bn or 6% reflecting lower brokerage and account services fee income from a managed reduction in client assets. However, revenue increased in Asia, notably in the first half of 2015, due to higher client activity as a result of stock market

broadly unchanged for the remainder of 2015 reflecting subdued demand for credit. In Global Trade and Receivables Finance, performance was resilient (revenue down $44m or 2%) despite a significant decline in commodity prices (approximately 40%) and stagnant world trade.

RBWM: Our revenue was broadly unchanged from 2014. We continued to reduce the size of the balances in our US Consumer and Mortgage Lending (CML) run-off portfolio, resulting in a fall in revenue of $0.3bn. However, in our Principal RBWM also growth in Europe (up by $0.3bn), notably from insurance manufacturing. We also increased our current account, savings and deposit revenue by $0.1bn, notably in Hong Kong and the UK, from an increase in customer deposit balances of $32bn. This was partly offset by a decrease in Personal Lending revenue of $0.3bn, primarily from lower overdraft fees in the UK after the introduction of a text message alert service in late 2014.

performance.

Other: Revenue was $0.3bn or 4% lower, reflecting adverse hedging ineffectiveness movements compared with favourable movements in 2014 (a net adverse movement of $0.2bn), together with the non-recurrence of a gain on the external hedging of an intra-Group financing transaction of $0.2bn. In addition, dividend income was $0.1bn lower following the partial sale of our shareholding in Industrial Bank.

Adjusted performance (continued)

Adjusted LICs

Our LICs were $0.6bn or 17% higher than in 2014, mainly in CMB ($0.5bn). This included a fourth quarter increase in specific LICs in a small number of countries, largely reflecting local factors, as well as LICs related to oil and gas.

LICs increased in RBWM by $0.3bn, mainly in Brazil as delinquency rates increased; while in the UAE, impairments on mortgages rose, following a review of the quality and value of collateral.

In GB&M, there was a reduction of $0.3bn in specific impairments as 2014 included a small number of significant charges, notably in Brazil and Hong Kong.

Adjusted operating expenses

Our adjusted operating expenses in 2015 were up $1.6bn or 5% on 2014.

Run-the-bank costs rose by $0.8bn or 2%. This was mainly due to wage

For further details on the categorisation of run-the-bank and change-the-bank costs, see page 58.

Adjusted income from associates

Our share of profit from associates and joint-ventures was broadly unchanged in 2015. The majority of this profit was from our investments in Bank of Communications Co. (BoCom) and The Saudi British Bank.

inflation in Latin America and Asia. We also recruited additional staff across the Group to support business growth.

Change-the-bank costs rose by $0.5bn or 16% on 2014. This reflected investment in regulatory programmes and compliance, including infrastructure and systems.

The bank levy of $1.4bn was $0.4bn or 34% higher than in 2014. Excluding the bank levy, adjusted operating expenses in the second half of 2015 were broadly in line with the first half of the year. This was despite investment and inflation, and reflected the initial effect of our cost-saving initiatives and a strong focus on cost management. This included a reduction in full-time equivalent staff in the second half of the year of 4,585 and lower travel costs.

Balance sheet and capital strength

Balance sheet strength

Total reported assets were $2.4 trillion, 8.5% lower than at 31 December 2014. On a constant currency basis, total assets were $91bn or 4% lower. This reduction in part reflects the efficient use of our balance sheet to maximise shareholder returns.

We are focused on reducing our use of the balance sheet in areas that are capital intensive relative to returns. This provides capacity for growth in higher returning business areas and regions. For example, in GB&M, we have reduced trading assets by decreasing holdings of debt securities in our Rates business in Europe and North America.

Capital strength

We manage our capital in an effort to ensure we exceed current regulatory requirements and are well placed to meet those expected in the future.

We monitor our position by using capital ratios. These measure capital relative to a regulatory assessment of risks taken. We quantify how these risks relate to our businesses using risk-weighted assets. Details of these risks are included on page 227.

Our common equity tier 1 (CET1) ratio at 31 December 2015 was 11.9%, up from 11.1% at 31 December 2014.

Distributable reserves

The distributable reserves of HSBC Holdings plc at 31 December 2015 were $47bn, and at 31 December 2014 were $49bn.

Table of Contents

For detailed information on our financial performance, see pages 50 to 60.

Delivering on our Group financial targets

Return on equity

Our medium-term target is to achieve a return on equity (RoE) of more than 10%. This target is modelled on a CET1 ratio in the range of 12% to 13%.

In 2015, we achieved an RoE of 7.2% compared with 7.3% in 2014. The bank levy and significant items, such as fines, penalties, customer redress and associated provisions, had a significant effect on our 2015 RoE, reducing the return achieved by 190 basis points.

Adjusted jaws

Our target is to grow revenue faster than operating expenses on an adjusted basis. This is referred to as positive jaws. In 2015, we grew adjusted revenue by 0.9% whilst our adjusted operating expenses rose by

4.6%.

Jaws was therefore negative 3.7%. Jaws for 2015 was affected by the revenue performance in the second half of the year. Adjusted revenue growth in the first half of 2015 was 4.5% but fell in the second half of 2015, reflecting the economic environment, including slowing GDP growth in China. This resulted in overall revenue growth of 0.9% for 2015.

The increase in adjusted operating expenses in 2015 included a $0.4bn rise in the bank levy (to $1.4bn). Excluding this increase, jaws in 2015 would have been negative 2.8%. During the second half of 2015, we made progress on our cost saving plans set out at our Investor Update. We reduced the growth rate in adjusted operating expenses, down from 7.3% in the first half of 2015 to 4.7% for the year.

Progressive dividend

In 2015, we increased the dividends per ordinary share in respect of the year to $0.51 from $0.50 in 2014.

Global businesses

We manage our products and services globally through four global businesses.

For further details on the financial performance of our global businesses, see pages 68 to 73.

Commercial Banking (CMB)

Customers

CMB serves more than two million customers in 55 countries and territories. Our customers range from small enterprises focused primarily on their domestic markets through to corporates operating globally.

We have been simplifying our product range and services to meet clients needs better. Since 2013, we have reduced the number of products we offer around the world from 975 to fewer than 410. We have also completed role-specific conduct training for more than 20,000 employees to help ensure that products are sold appropriately.

Products and services

In 2015, the quality of our service was recognised by several leading awards. For the fourth consecutive year, we were recognised as the Best Global Cash Manager (for Non-Financial Institutions) in the *Euromoney* Cash Management survey. We were also recognised as the Best Overall Global Trade Finance Bank, among other awards, in the *Trade Finance* Awards for Excellence.

Business synergies

CMB is at the centre of business synergies within the Group, enabling nearly $6bn of business synergy revenue in 2015. For example, it provides trade finance, working capital and liquidity management solutions to GB&M clients. It also provides Capital Finance expertise, and Insurance and Asset Management capabilities from across the Group to benefit customers.

Continued revenue growth in Hong Kong and the UK

Adjusted profit before tax of $8.2bn was $0.4bn or 5% lower than in 2014, as revenue growth was more than offset by a rise in LICs and higher costs.

We grew revenue by $0.4bn or 3%, in particular in Credit and Lending, and PCM. This was mainly in Hong Kong and the UK, reflecting average balance sheet growth, although demand for credit in Hong Kong was subdued in the second half of 2015, with balances remaining broadly unchanged.

LICs were $0.5bn or 36% higher, reflecting enhanced credit risk in the oil and gas sector, notably in North America, Asia, and Middle East and North Africa. In addition, we raised

We support our customers with tailored financial products and services to allow them to operate efficiently and to grow. This includes providing them with working capital, term loans, payment services and international trade facilitation, among other services. We offer expertise in mergers and acquisitions, and provide access to financial markets.

Areas of focus

We are focused on creating value from our network, which covers 90% of global trade and capital flows. We are therefore investing in digital and technology aspects of our core Payments and Cash Management (PCM), and Global Trade and Receivables Finance propositions, as well as in the Pearl River Delta, ASEAN and NAFTA growth areas.

We achieved significant risk-weighted asset efficiencies through management initiatives in 2015 and continue to ensure our capital is deployed effectively.

LICs against a small number of specific clients in Indonesia, the UAE and the UK.

Costs increased by $0.4bn or 6%, notably in Asia and the US, due to wage inflation and investment in growth initiatives, regulatory programmes and compliance.

Management initiatives set out in our Investor Update in June 2015 contributed a reduction in risk-weighted assets (RWAs) of $23.0bn or more than 75% of our 2015 2017 target.

Adjusted profit before tax

-5%

Table of Contents

Global Banking and Markets (GB&M)

Customers

GB&M supports major government, corporate and institutional clients worldwide in achieving their long-term strategic goals through tailored and innovative solutions. Our deep sector expertise extends across transaction banking, financing, advisory, capital markets and risk management. We serve nearly 4,000 clients in more than 50 countries and territories, helping them to realise opportunities in the markets that matter to them.

We continue to strengthen the services we provide and our relationships with clients. We regularly assess these relationships, using benchmarking and internal programmes. As a result, in 2015 we improved the on-boarding experience for clients and enabled relationship bankers to spend more time understanding clients needs. Customer feedback allows us to identify opportunities to further improve our business and the wider client experience.

accolades, including Most Innovative Investment Bank and Best Bank for Securities Services in *The Banker* awards. We were ranked number one Bank for Corporates (Global Market Share) in the *Euromoney* FX Survey, and for the third consecutive year we were voted Best Bond House in Asia by *FinanceAsia.*

In addition, we provide award-winning research to investors with an emphasis on emerging markets.

Business synergies

In 2015, GB&M enabled business synergies of $8.4bn, supporting growth in a number of areas. For example, we provide Markets products to CMB and RBWM customers, Capital Financing products to CMB customers, and also use CMB and Asset Management products to serve GB&M clients.

Adjusted profit growth of 14% compared with 2014

Adjusted profit before tax was higher by $1.1bn due to higher revenue and lower LICs, partly offset by increased costs.

Our revenue increased by $1.2bn or 7%, with higher revenue in all businesses except Principal Investments. In client-facing GB&M, revenue rose due to increased client flows and volatility in Equities (up by $0.5bn) and in transaction banking products (up by $0.4bn). Revenue was also higher in Balance Sheet Management (up $0.1bn).

LICs were $0.3bn lower. This reflected minimal impairments in 2015 compared with a net charge in 2014 in client-facing GB&M. However, in 2015 we had lower net releases of credit risk provisions, primarily on available-for-sale asset-backed securities in legacy credit.

Products and services

Our product specialists continue to deliver a comprehensive range of transaction banking, financing, advisory, capital markets and risk management services. In 2015, our product strengths were recognised by numerous

Areas of focus

Deepening relationships with clients in both event and transaction banking products remains a priority. We will focus on regions where we see the greatest growth opportunities such as NAFTA, ASEAN and the Pearl River Delta. We also plan to grow our business from the internationalisation of China s renminbi currency and by investing in digital capabilities.

We made significant progress towards reducing RWAs in 2015. This will remain a focus as we continue to exit legacy credit, manage our Markets and Capital Financing businesses and employ a disciplined approach to new client business.

Our continued focus on cost discipline will result in further simplification of the business from streamlining of our business lines, operations and technology.

Our operating expenses increased by $0.4bn or 5%, mainly from higher performance-related costs and higher staff costs reflecting wage inflation. In addition, we continued to invest in our PCM and Foreign Exchange businesses, as well as in regulatory programmes and compliance.

Management initiatives identified in our Investor Update in June 2015 contributed to an overall reduction in RWAs of $72bn this year. This is 54% of our target of $134bn (stated at December 2015 exchange rates).

The graph below shows reported and adjusted profit before tax. The difference between these figures primarily reflects fines, penalties and charges in relation to legal matters, which totalled $1.9bn and $0.9bn in 2014 and 2015, respectively. Significant items are detailed on page 66.

Adjusted profit before tax

+14%

Retail Banking and Wealth Management (RBWM)

Customers

RBWM serves close to 45 million customers worldwide through four main business areas: Retail Banking, Wealth Management, Asset Management and Insurance.

Since 2012, we have taken numerous actions to improve the way we conduct our business. We have removed the formulaic link between product sales and remuneration, paying all staff on a discretionary basis, which includes assessment of their behaviour and the satisfaction of our customers. We have simplified our product range, reviewed the fairness of our product features and pricing, and enhanced the way we monitor the quality of our sales.

Products and services

Asset Management and Insurance

We operate our own Asset Management and Insurance businesses. By owning these businesses directly, we can tailor their products to the needs of customers and maintain end-to-end control over their quality. We are investing for growth in these businesses, leveraging our network and strong client relationships.

Business synergies

RBWM makes a significant contribution to the overall success of the Group. In 2015, Insurance Manufacturing (within Wealth Management) and Asset Management generated revenue of $1.7bn and $1.1bn, respectively, from the provision of services to clients across all of our global businesses. In addition, the foreign exchange and wealth management needs of our RBWM clients create opportunities for GB&M.

Despite a challenging second half of 2015, Wealth Management revenue grew by 8%

Total RBWM Total RBWM adjusted profit before tax fell by $0.7bn or 10%, with a decrease in profit before tax in both Principal RBWM and from the continued reduction in our US run-off portfolio.

The graph below shows reported and adjusted profit before tax. The difference between them primarily reflects fines, penalties and charges in relation to legal matters, which totalled $1.6bn and $1.3bn in 2014 and 2015, respectively. Significant items are detailed on page 66.

Principal RBWM In our Principal RBWM business, profit before tax was down by $0.5bn or 7%, reflecting higher costs and LICs. Revenue grew.

RBWM provides services to individuals under the HSBC Premier and Advance propositions aimed at mass affluent and emerging affluent customers who value international connectivity and benefit from our global reach and scale. For customers who have simpler everyday banking needs, RBWM offers a full range of banking products and services reflecting local requirements.

RBWM s strong deposit franchise supports a stable and diversified core funding base for the Group, and the branch network supports the needs of other global business clients while enhancing the visibility of the HSBC brand.

Areas of focus

RBWM s focus is on growing the business through relationship-led personal lending and wealth management, while transforming our customer experience and cost base through investment in digital infrastructure.

Revenue rose $0.4bn in Wealth Management in Asia in the first half of the year from investment distribution, offsetting weaker investor sentiment in the second half of 2015. Wealth Management income in Europe also grew as insurance manufacturing increased. Deposit and savings income grew in Asia and the UK as deposits increased by $32bn. This was partly offset by lower overdraft fees in the UK.

LICs increased by $0.3bn or 20%, mainly in Brazil from increased impairment charges following the economic slowdown, and the UAE following a review of collateral in the mortgage book.

Costs rose by $0.5bn or 4%, driven by inflation in Asia and Latin America. Our marketing costs also increased as we relaunched our Global Advance account proposition with notable investment in the UK, and we continued to invest in regulatory programmes and compliance.

Adjusted profit before tax total RBWM

-10%

Table of Contents

Global Private Banking (GPB)

Customers

GPB serves high net worth individuals and families, including those with international banking needs, through 18 booking centres covering our priority markets.

Since 2011, GPB has taken significant steps to simplify and improve the way it conducts its business. We have reduced the number of booking centres to refocus resources on a smaller number of locations where we have the scale to support our new client service model and enhanced sales quality standards.

We have also reduced the number of offshore markets we cover to ensure appropriate focus is given to key growth areas.

GPB remains committed to implementing the most effective global

Products and services

We work closely with our clients to provide solutions to grow, manage and preserve wealth. Our products and services include: Investment Management, incorporating advisory, discretionary and brokerage services; Private Wealth Solutions, comprising trusts and estate planning, designed to protect wealth and preserve it for future generations; and a full range of Private Banking services.

Business synergies

GPB aims to bring the best of the Group s research, product and service capabilities to GPB clients.

To achieve this, we have three client service groups: the Corporate Client Group, enhancing connectivity with CMB and GB&M; the Wealth Client Group, delivering a seamless transition across the RBWM and GPB wealth franchises; and the

Continued repositioning of our GPB business

Adjusted profit before tax fell by 26% to $0.5bn, mainly because revenue fell by 6% as we continued to reposition the GPB business.

However, revenue increased in Asia, notably in the first half of 2015, due to higher client activity as a result of a strong stock market performance, which more than offset the weaker investor sentiment in the second half of the year.

We attracted positive net new money of $14bn in 2015 in the parts of the business that fit our target model, mainly in Hong Kong, the UK, Singapore and the US.

Adjusted profit before tax

-26%

standards, including customer due diligence, a tax transparency framework and financial crime compliance measures.

Global Solutions Group, delivering non-traditional wealth management solutions.

Wherever possible, GPB uses product capabilities within GB&M, CMB and RBWM, including asset management, research, insurance, trade finance and capital financing, to offer a unique proposition to our clients.

Areas of focus

GPB aspires to build on HSBC s commercial banking heritage and be the leading private bank for high net worth business owners and principals. We work closely and systematically with CMB and GB&M to deliver a coordinated private and corporate coverage model for our clients.

Table of Contents

Table of Contents

Table of Contents

Table of Contents

Building lasting business relationships

Ensuring fair outcomes

We recognise that delivering fair outcomes for customers and upholding financial market integrity is critical to a sustainable business model.

We continue to enhance our product governance processes to further ensure products are designed to meet customers needs and are sold appropriately. In the UK, for example, we have started to alert customers by text message when they are about to go into overdraft. As a result, customer complaints in this area have declined by 67% and customers have saved more than $129.9m in fees.

For further details on the steps we have taken to strengthen conduct across the Group, see page 40. For further details on compliance risk and for further details on conduct-related costs included in significant items, see pages 178 and 97, respectively.

Increasing quality of service

We seek feedback from customers in order to assess how well we are doing and what we can do better. In 2015, we improved our processes for responding to customer complaints and tools for understanding their causes. For example, in India our analysis of customer complaints led us to improve customer communication regarding minimum balances and change our fee structure. Complaints in this area subsequently reduced by 62%.

Through our commercial banking research programmes, we have spoken to more than 50,000 businesses to gather feedback on our products and services from existing and potential customers. We use competitor benchmarking, brand tracking and customer surveys to evaluate our performance. In RBWM, we conducted more than 350,000 individual customer surveys.

Developing long-term opportunities

Technology and climate change are two areas that present both challenges and opportunities to us and our customers.

Investing in technology

We are investing in innovation and digital capabilities to serve customers better, and enhancing security around financial transactions and customer data.

In 2015, we enabled the Apple Pay mobile payment service for customers in the UK and the US, and launched live-chat online customer service in six markets including the UK, Hong Kong and France. We made digital secure keys available in the UK to simplify the customer login experience. In Argentina and the Philippines, we launched our new online banking platform, which will be deployed in additional countries in 2016.

Facilitating a low-carbon economy

Reducing global carbon dioxide emissions is a critical challenge for society. We see the potential for financial services to facilitate investment that can help the world transition to a low-carbon economy.

In 2015, our Global Research team was ranked number one for Integrated Climate Change for the second year running in the Extel Survey. Furthermore, our Asset Management business joined the Montreal Pledge to disclose the carbon intensity of its portfolio.

For more information about our climate business, see page 37.

HSBC Global Research

1st

for integrated climate

change research, ranked

by Extel Survey 2015.

Table of Contents

Empowering people

Valuing diversity

We are proud to provide an open, supportive and inclusive workplace where people can grow and achieve their potential. Our commitment to diversity and inclusion helps us attract, develop and retain employees. We are also committed to reflecting the communities we serve.

Our employees lead and organise seven global employee networks to promote diversity. They focus on gender, age, ethnicity, sexual orientation, religion, working parents and disability.

To help managers address bias in hiring, promotion and talent identification, we use education programmes and have expanded mentoring initiatives for under-represented groups.

In 2015, we won Diversity Team of the Year at the European Diversity Awards. We were also one of 10 companies recognised as a Top Global Employer in Stonewall s Global Workplace Equality Index.

We continue to address gender representation, particularly at senior levels, with additional focus on promotions and hiring. We also continue to expand support and flexible working programmes for parents returning to work.

Our award-winning Balance employee network aims to address gender diversity across HSBC, encouraging dialogue and a better understanding of the challenges and opportunities in promoting a gender-balanced workforce throughout the Group. It is available to staff of all genders, and had active groups in more than 30 offices around the world in 2015.

Encouraging ownership

We promote individual ownership and responsibility, and have created forums to encourage dialogue. In 2015, we continued to facilitate agenda-free exchange meetings across the Group for employees to collaborate on ideas and initiatives to improve our work. We also held 14 webcasts with senior executives to promote understanding of our strategic actions and allow employees to ask questions.

Equipping employees

Our training programmes reinforce a culture grounded in our values. In 2015, we completed a three-year programme of values-led leadership training for all employees.

We are building employee training centres in Birmingham, Dubai and mainland China. These will operate alongside HSBC University, our online training service.

In 2015, we also launched HSBC Confidential, which brought together all our existing whistleblowing channels on to a global platform that allows employees to raise concerns confidentially without fear of personal repercussions. The global channel can be accessed by telephone, email, web or mail. For further details, see Whistleblowing on page 179.

Rewarding positive behaviours

We have embedded behaviour ratings in our performance review processes, which are factored into variable pay considerations.

In 2015, we introduced an At Our Best online recognition tool for all employees. It allows them to recognise colleagues actions by awarding points that are redeemed for gifts and benefits.

Exchange meeting participation

(% of employees that attended a 2015 meeting)

53%

Employee retention

84.1%

Ensuring sustainable outcomes

Tax

Managing environmental

and social impacts

We continue to reduce the environmental impact of our operations and have robust policies and processes to manage sustainability risks in our business activities.

We are reducing the amount of energy we consume, and increasing the proportion from renewable sources. We have signed agreements to increase the percentage of our electricity from new wind and solar sources to 9%, and have a target of 25% by 2020. We report on our carbon dioxide emissions for the year in the Report of the Directors on page 98.

Our sustainability risk policies cover a number of sensitive industries and themes. After we issued new standards in our forestry and agricultural commodities policies in 2014, we took the decision to stop banking more than 160 customers as soon as possible because they did not comply. In 2015, HSBC was recognised as a leader in the Forest 500 ranking of 150 investors policies on the sustainability of forest commodity supply chains.

We also support a transition to certified, sustainable palm oil. Our standards require our palm oil customers to have all their operations certified as sustainable by the end of 2018, and we continue to support them in meeting this goal.

In 2015, there were more than 2,300 attendances by relationship and risk managers of training on our sustainability risk policies to help ensure their implementation is robust.

Details on our sustainability risk framework and policies are available online at www.hsbc.com/citizenship/ sustainability/finance.

Respecting human rights

We apply human rights considerations directly as they affect our employees and indirectly through our suppliers and customers, and through our action to prevent bribery and corruption. For example, our code of conduct for suppliers includes elements related to human rights, as do our project finance lending and sustainability risk policies. Our Statement on Human Rights, issued in 2015, explains how we do this and is available on our website. We will integrate the provisions of the Modern Slavery Act 2015 into our business and supply chain, and will report in line with the guidelines published by the UK government.

We are guided by the International Bill of Human Rights, and support the UN Declaration of Human Rights and the principles concerning fundamental rights set out in the International Labour Organisation s Declaration on

Fundamental Principles and Rights at Work.

Investing in our communities

We believe that education and the environment are essential to resilient communities and thriving economies. For more than 10 years, we focused our community investment activities on these two areas. In 2015, following survey responses from employees, we decided to add medical charities to the causes we support.

In 2015, we contributed a total of $205m to charitable programmes and our employees volunteered 304,555 hours in community activities during the working day.

We marked our 150th year by setting up an additional fund of $150m to support causes selected by our employees. It will support 140 charities across the world over three years. We also made a one-off $62m donation to charities in Hong Kong from the sale of commemorative HK$150 bank notes.

Our approach to tax

We apply the spirit as well as the letter of the law in all territories where we operate, and have adopted the UK Code of Practice for the Taxation of Banks. As a consequence, we pay our fair share of tax in the countries in which we operate. We continue to strengthen our processes to help ensure our banking services are not associated with any arrangements known or suspected to be designed to facilitate tax evasion.

HSBC continued to support global initiatives to improve tax transparency such as:

- the US Foreign Account Tax Compliance Act (FATCA);
- the OECD Standard for Automatic Exchange of Financial Account Information (also known as the Common Reporting Standard);
- the Capital Requirements Directive IV (CRD IV) Country by Country Reporting; and
- the OECD Base Erosion and Profit Shifting (BEPS) initiative.

We do not expect the BEPS initiative or similar initiatives adopted by national governments to adversely impact HSBC s results.

Table of Contents

Table of Contents

Risk overview

We actively manage risk to protect

and enable the business.

Managing risk

As a provider of banking and financial services, managing risk is part of our core day-to-day activities. Our success in doing so is due to our clear risk appetite, which is aligned to our strategy. We set out the aggregate level and types of risk that we are willing to accept in order to achieve our medium- and long-term strategic objectives in our risk appetite statement, which is approved by the Board, covering:

- risks that we accept as part of doing business, such as credit risk and market risk;
- risks that we incur to generate income, such as operational risk and capital and liquidity risk, which are managed to remain below an acceptable tolerance; and
- risks that we have zero tolerance for, such as reputational risk.

Our risk management framework and its key components, and our exposure to risks arising from the business activities of the global businesses are shown on pages 101 and 109.

The strategic actions designed to increase our return on equity are described on page 18.

To ensure that risks are managed in a consistent way across the Group, we employ a risk management framework that is applicable to all levels of the organisation and across all risk types. It sets out governance and structures,

responsibilities and processes. Global Risk, led by the Group Chief Risk Officer, who is an executive Director, is responsible for enterprise-wide risk oversight and is independent from the sales and trading functions of the Group s businesses. This independence ensures the necessary balance in risk/ return decisions.

Key risk appetite metrics

Component	Measure	Risk appetite	2015

Returns	Return on average ordinary shareholders equity in excess of our estimated cost of equity of 9%	≥10%	7.2%
Capital	Common equity tier 1 ratio CRD IV end point basis	≥10%	11.9%
Liquidity	HSBC consolidated balance sheet advances-to- deposits ratio	£90%	72%
Loan impairment charges	RBWM loan impairment charges as % of advances[1]	<0.65%	0.58%
	Wholesale loan impairment charges as % of advances	<0.45%	0.26%

[1] Including the loans of the Brazilian operations held for sale.

Risk management and stress testing

Stress testing is an integral component of our risk management framework. It is an important tool for us to assess potential vulnerabilities in our businesses, business model or portfolios. It allows us to understand the sensitivities of the core assumptions in our strategic and capital plans, and improve decision-making through balancing risk and return.

Internal stress test scenarios are closely aligned to our assessment of top and emerging risks. The potential impact from these scenarios, were they to occur, may prompt pre-emptory management actions including a reduction in limits or direct exposures, or closer monitoring of exposures sensitive to stress.

Our approach to stress testing and the results of regulatory stress testing programmes are discussed on pages 103 and 116, respectively.

We also participate in regulatory stress test exercises in a number of jurisdictions. The primary Group-wide exercise is requested by the Bank of England. The 2015 scenario incorporated a synchronised global downturn affecting Asia, Brazil and the eurozone in particular, a reduction in global risk appetite and market liquidity, and a recession in the

UK.

The results were published by the Bank of England on 1 December 2015 and are summarised below. Our CET1 ratio remained well above the regulatory minimum despite our significant presence in the countries and regions affected by the scenario, demonstrating our resilience to a severe stress situation in our core markets.

2015 Bank of England Stress Test Results Group Common Equity Tier 1 Ratio	
31 December 2014 actual (end point)	11.1%
Minimum stressed ratio before management actions	7.0%
Minimum stressed ratio after management actions	7.7%
Bank of England minimum ratio	4.5%
31 December 2015 actual (end point)	11.9%

Table of Contents

Risk overview

Top and emerging risks

We employ a top and emerging risks framework at all levels of the organisation to identify current and forward-looking risks so that we may take action that either prevents them materialising or limits their effect.

Top risks are those that may have a material impact on the financial results, reputation or business model of the Group in the year ahead. Emerging risks are those that have large unknown components and may form beyond a one-year horizon. If these risks were to occur, they could have a material effect on HSBC.

Our current top and emerging risks are summarised below.

During 2015, we made two changes to our top and emerging risks to reflect our assessment of their effect on the Group. Turning of the credit cycle was added as a new risk, reflecting the risk of deterioration in the credit environment. Internet crime and fraud was removed as mitigating actions taken have reduced credit and fraud losses through digital channels.

In addition, four risks were renamed to better reflect the issues facing HSBC. We use the new names below.

Our top and emerging risks

are discussed in more detail

on page 110.

Risk	Trend	Mitigants
Externally driven		
Economic outlook and capital flows		We closely monitor economic developments in key markets, undertaking business or portfolio reviews or stress tests as required, and take appropriate action as circumstances evolve.

Geopolitical risk	We continuously assess the impact of the geopolitical outlook on our country limits and exposures to ensure we remain within our risk appetite.
Turning of the credit cycle	We undertook portfolio and limit reviews and conducted stress tests on the sectors and portfolios that are most sensitive to the credit cycle.
Regulatory developments affecting our business model and profitability	We actively assess the effect of relevant developments and engage closely with governments and regulators, seeking to ensure that requirements are considered properly and implemented in an effective manner.
US DPA and related agreements and consent orders	We are continuing to take concerted action to remedy anti-money laundering and sanctions compliance deficiencies and to implement Global Standards.
Regulatory focus on conduct of business and financial crime	We are enhancing our financial crime and regulatory compliance controls and resources and are implementing significant programmes to enhance the management of conduct and financial crime risks.
Dispute risk	We continue to focus on identifying emerging regulatory and judicial trends, and sharing lessons learned globally in an effort to avoid or limit future litigation exposure.
Cyber threat and unauthorised access to systems	We continue to improve our governance and controls framework to protect HSBC s information and technical infrastructure against ever-increasing and sophisticated cyber threats.

Internally driven	
People risk	We continue to focus on attracting and retaining key talent and are implementing a number of initiatives to improve employee capability, collaboration and engagement.
Execution risk	We have strengthened our prioritisation and governance processes for significant strategic, regulatory and compliance projects. Risks related to the disposals of our operations in Brazil and Turkey were subject to close management oversight.
Third-party risk management	We are enhancing our third-party risk management governance, processes and procedures and have conducted enhanced risk assessments of our most critical third parties.
Model risk	We have strengthened our governance framework, created centralised global analytical functions and recruited additional subject matter experts in our modelling and independent model review teams.
Data management	A number of key initiatives and projects are in progress to implement our data strategy to enable consistent data aggregation, reporting and management.

Risk heightened during 2015

Risk remained at the same level as 2014

Remuneration

Our remuneration policy supports the achievement of our strategic objectives through balancing reward for both short-term and long-term sustainable performance.

Remuneration principles

The remuneration strategy for our employees is based on a series of key principles.

For full details of our remuneration policy, see www.hsbc.com/~/media/HSBC-com/InvestorRelationsAssets/governance/151023-remuneration-policy.

What we do

Focus on total compensation with a strong link between pay and performance

Judge not only what is achieved but how it is achieved in line with HSBC Values

Operate a thorough performance management and HSBC Values assessment process

Recognise and reward our employees for outstanding positive behaviour

What we don t do

Reward inappropriate or excessive risk taking or short-term performance at the expense of long-term company sustainability

Use only a formulaic approach to determine bonuses for our executives

Award discretionary bonuses to employees rated unacceptable against our HSBC Values and behaviours

Allow our employees to hedge against their unvested or retained awards

Design our policy to align compensation with long-term shareholder interests	Offer employment contracts with a notice period of more than 12 months
Apply consequence management to strengthen the alignment between risk and reward	Have pre-arranged individual severance agreements

Single figure of remuneration for our executive Directors

(£000)

For full details of our Directors pay and performance for 2015, see the Directors Remuneration Report on page 285.

How much our executive Directors earned in 2015 (£000)

	Douglas Flint Group Chairman		**Stuart Gulliver** Group Chief Executive		**Iain Mackay** Group Finance Director		**Marc Moses** Group Chief Risk Officer	
	2015	2014	**2015**	2014	**2015**	2014	**2015**	2014
Fixed pay								
Base salary	**1,500**	1,500	**1,250**	1,250	**700**	700	**700**	700
Fixed pay allowance			**1,700**	1,700	**950**	950	**950**	950
Pension	**750**	750	**625**	625	**350**	350	**350**	350
Total fixed pay	**2,250**	2,250	**3,575**	3,575	**2,000**	2,000	**2,000**	2,000
Variable pay								
Annual incentive			**1,072**	1,290	**1,068**	867	**827**	1,033
GPSP			**1,969**	2,112	**1,101**	1,131	**1,101**	1,131
Total variable pay			**3,041**	3,402	**2,169**	1,998	**1,928**	2,164
Total fixed and variable pay	**2,250**	2,250	**6,616**	6,977	**4,169**	3,998	**3,928**	4,164
Benefits	**151**	136	**662**	589	**54**	43	**6**	6

Non-taxable benefits	**95**	105	**53**	53	**28**	28	**29**	33
Notional return on deferred cash		41	**9**		**5**	11	**5**	36
Total single figure of remuneration	**2,496**	2,532	**7,340**	7,619	**4,256**	4,080	**3,968**	4,239

Policy for executive Directors

We are making changes to our Directors remuneration policy

Our current remuneration policy was approved by shareholders at the 2014 Annual General Meeting (AGM) and was applied for 2015. Due to increased

regulatory requirements, we are putting forward a new remuneration policy for shareholder approval at the AGM this year. For further details, see page 288.

The table below summarises how each element of pay was implemented in 2015 and how it will change for 2016 if the new policy is approved.

For full details of the current Directors remuneration policy, see page 381 of the 2013 Directors Remuneration Report.

Pay	Element	Implementation in 2015	Proposed changes to policy for 2016
Fixed	**Base salary**	Benchmarked on an annual basis Increases will not exceed more than 15% of base salary levels as at 2013 during the term of the policy Amounts have not changed since 2010	No change to policy: Increase will not exceed more than 15% of base salary levels as at 2016 during the term of the policy
	Fixed pay allowance	Fixed pay allowances introduced in 2014 to ensure the total compensation package remains competitive as a consequence of new regulatory requirements in 2013 Granted in immediately vested shares, subject to a retention period with 20% released after one year and the remainder after five years	Maximum fixed pay allowance for each executive Director is 150% of base salary Granted in immediately vested shares, subject to a retention period released pro-rata over a period of five years

	Pension	Cash allowance in lieu of pension of up to 50% of base salary	Reduced to a maximum of 30% of base salary
	Benefits	Takes account of local market practice, including but not limited to medical and income protection insurance	No change to current provided benefits Post-departure benefits introduced for up to seven years from date of departure
Variable	**Annual incentive**	Maximum is 67% of fixed pay (equal to approximately 181% of base salary) Measured against an annual scorecard A minimum of 60% will be deferred and vest over a three-year period Delivered in cash and shares, with a minimum of 50% delivered in shares	Maximum is 215% of base salary 100% delivered in shares subject to a retention period, with the Remuneration Committee to have discretion to defer a portion of the awards or apply a longer retention period
	Long-term incentive	Group Performance Share Plan Maximum of 133% of fixed pay (equal to approximately 381% of base salary) Measured against 2014 long-term scorecard Delivered in shares with a five-year vesting period Required to hold shares until retirement	New long-term incentive plan Maximum is 320% of base salary Performance targets set annually for each three-year forward-looking performance period Introduction of relative total shareholder return as a performance measure Delivered in shares, subject to the outcome of the performance conditions at the end of the three-year performance period, in equal instalments between the third and seventh anniversary of the grant date A retention period may be applied to ensure compliance with regulatory requirements

HSBC HOLDINGS PLC

45

Table of Contents

Table of Contents

Financial review

All disclosures in the Financial Review section are unaudited unless otherwise stated.

Disclosures marked as audited should be considered audited in the context of financial statements taken as a whole.

Table of Contents

Report of the Directors: Financial summary

Use of non-GAAP financial measures

Financial summary

Use of non-GAAP financial measures	48
Reconciliation of 2015 and 2014 reported and adjusted items	49
Reconciliation of 2014 and 2013 reported and adjusted items	49a
Return on equity and return on tangible equity	49b
Consolidated income statement	50
Group performance by income and expense item	51
Net interest income	51
Net fee income	53
Net trading income	54
Net income from financial instruments designated at fair value	54
Gains less losses from financial investments	55
Net insurance premium income	56
Other operating income	56
Net insurance claims and benefits paid and movement in liabilities to policyholders	57
Loan impairment charges and other credit risk provisions	57
Operating expenses	58
Share of profit in associates and joint ventures	60
Tax expense	60
2014 compared with 2013	60a
Consolidated balance sheet	61
Movement in 2015	62
Average balance sheet	63a
Average balance sheet and net interest income	63a
Analysis of changes in net interest income and net interest expense	63g
Short-term borrowings	63j
Loan maturity and interest sensitivity analysis	63k
Deposits	63l
Ratio of earnings to fixed charges	63o
Reconciliation of RoRWA measures	64
Critical accounting estimates and judgements	64

The management commentary included in the Strategic Report, the Report of the Directors: Financial Review , together with the Employees and Corporate sustainability sections of Corporate Governance and the Directors Remuneration Report is presented in compliance with the IFRSs Practice Statement Management Commentary *issued by the IASB.*

Use of non-GAAP financial measures

Our reported results are prepared in accordance with IFRSs as detailed in the Financial Statements starting on page 336. In measuring our performance, the financial measures that we use include those which have been derived from our reported results in order to eliminate factors which distort year-on-year comparisons. These are considered non-GAAP financial measures.

The primary non-GAAP financial measure we use is adjusted performance . Other non-GAAP financial measures are described and reconciled to the most relevant reported financial measure when used.

Adjusted performance

Adjusted performance is computed by adjusting reported results for the year-on-year effects of foreign currency translation differences and significant items that distort year-on-year comparisons. Significant items are excluded from adjusted performance because management and investors would ordinarily identify and consider them separately in order to better understand the underlying trends in a business.

These items, which are detailed in the tables starting on pages 66 and 77, include:

- gains or losses on the disposal or reclassification of subsidiaries, associates and joint ventures;
- fines, penalties, customer redress and associated provisions, together with settlements and provisions relating to legal matters when their size or historical nature mean they warrant separate consideration;
- costs incurred to achieve the productivity and cost reduction targets outlined in the Investor Update of June 2015; and
- credit spread movements on our long-term debt designated at fair value.

We consider adjusted performance provides useful information for investors by aligning internal and external reporting, identifying and quantifying items management believe to be significant and providing insight into how management assesses year-on-year performance.

Foreign currency translation differences

Foreign currency translation differences reflect the movements of the US dollar against most major currencies during 2015. We exclude the translation differences when deriving constant currency data because using this data allows us to assess balance sheet and income statement performance on a like-for-like basis to better understand the underlying trends in the business.

Foreign currency translation differences

Foreign currency translation differences for 2015 are computed by retranslating into US dollars for non-US dollar branches, subsidiaries, joint ventures and associates:

the income statements for 2014 at the average rates of exchange for 2015; and

the balance sheet at 31 December 2014 at the prevailing rates of exchange on 31 December 2015.

No adjustment has been made to the exchange rates used to translate foreign currency denominated assets and liabilities into the functional currencies of any HSBC branches, subsidiaries, joint ventures or associates. When reference is made to foreign currency translation differences in tables or commentaries, comparative data reported in the functional currencies of HSBC s operations have been translated at the appropriate exchange rates applied in the current year on the basis described above.

Significant items

The tables starting on pages 66 and 77, detail the effect of significant items on each of our geographical segments and global businesses in 2015 and 2014.

The following table reconciles selected reported items for 2015 and 2014 to adjusted items at a Group level.

Reconciliation of 2015 and 2014 reported and adjusted items

Reconciliation of reported and adjusted items

	2015 $m	2014 $m	Change %
Revenue[1]			
Reported	**59,800**	61,248	(2)
Currency translation		(4,775)	
Own credit spread[2]	**(1,002)**	(417)	
Acquisitions, disposals and dilutions		(9)	
Other significant items	**(1,033)**	1,180	
Adjusted	**57,765**	57,227	1
Loan impairment charges and other credit risk provisions			
Reported	**(3,721)**	(3,851)	3
Currency translation		683	
Acquisitions, disposals and dilutions			
Other significant items			
Adjusted	**(3,721)**	(3,168)	(17)
Total operating expenses			
Reported	**(39,768)**	(41,249)	4
Currency translation		3,278	
Acquisitions, disposals and dilutions		40	
Other significant items	**3,586**	3,355	

Adjusted	**(36,182)**	(34,576)	(5)
Adjusted cost efficiency ratio	**62.6%**	60.4%	
Share of profit in associates and joint ventures			
Reported	**2,556**	2,532	1
Currency translation		(39)	
Acquisitions, disposals and dilutions			
Other significant items			
Adjusted	**2,556**	2,493	3
Profit before tax			
Reported	**18,867**	18,680	1
Currency translation		(853)	
Own credit spread[2]	**(1,002)**	(417)	
Acquisitions, disposals and dilutions		31	
Other significant items	**2,553**	4,535	
Adjusted	**20,418**	21,976	(7)

For footnotes, see page 99.

Reconciliation of 2014 and 2013 reported and adjusted items

Reconciliation of reported and adjusted items

	2014 $m	2013 $m	Change %
Revenue[1]			
Reported	61,248	64,645	(5)
Currency translation		(686)	
Own credit spread[2]	(417)	1,246	
Acquisitions, disposals and dilutions	(9)	(2,757)	
Other significant items	1,180	(594)	
Adjusted	62,002	61,854	
Loan impairment charges and other credit risk provisions			
Reported	(3,851)	(5,849)	34
Currency translation		168	
Acquisitions, disposals and dilutions		67	
Other significant items			
Adjusted	(3,851)	(5,614)	31
Total operating expenses			
Reported	(41,249)	(38,556)	(7)
Currency translation		348	
Acquisitions, disposals and dilutions	40	488	
Other significant items	3,355	2,038	
Adjusted	(37,854)	(35,682)	(6)
Adjusted cost efficiency ratio	61.1%	57.7%	
Share of profit in associates and joint ventures			
Reported	2,532	2,325	9
Currency translation		11	
Acquisitions, disposals and dilutions		87	
Other significant items			
Adjusted	2,532	2,423	4
Profit before tax			
Reported	18,680	22,565	(17)

Currency translation		(159)	
Own credit spread[2]	(417)	1,246	
Acquisitions, disposals and dilutions	31	(2,115)	
Other significant items	4,535	1,444	
Adjusted	22,829	22,981	(1)

For footnotes, see page 100a.

Negative percentage change numbers are favourable:

positive numbers are unfavourable.

Return on equity and Return on tangible equity

Return on tangible equity (ROTE) is computed by adjusting reported results for the movements in the present value of in-force long-term insurance business (PVIF), impairments of goodwill, and adjusting the reported equity for goodwill, intangibles and PVIF. The

adjustment to reported results and reported equity excludes amounts attributable to non-controlling interests.

We provide ROTE as an additional measure to ROE to provide a way to look at our performance which is closely aligned to our capital position.

The following table details the adjustments made to the reported results and equity:

	2015	2014	2013
	$m	$m	$m
Profit			
Profit attributable to the ordinary shareholders of the parent company	**12,572**	13,115	15,631
Goodwill impairment (net of tax)			279
Increase in PVIF (net of tax)	**(494)**	(213)	(397)
Profit attributable to the ordinary shareholders, excl. goodwill impairment and PVIF	**12,078**	12,902	15,513
Equity			
Average ordinary shareholders equity	**174,627**	178,898	169,260
Effect of Goodwill, PVIF and other intangibles (net of deferred tax)	**(25,012)**	(27,740)	(28,024)
Average tangible equity	**149,615**	151,158	141,236
	%	%	%
Ratio			
Return on equity	**7.2**	7.3	9.2
Return on tangible equity	**8.1**	8.5	11.0

49b

Table of Contents

Report of the Directors: Financial summary (continued)

Consolidated income statement / Group performance by income and expense item

Consolidated income statement

Five-year summary consolidated income statement

	2015	2014	2013	2012	2011
	$m	$m	$m	$m	$m
Net interest income	**32,531**	34,705	35,539	37,672	40,662
Net fee income	**14,705**	15,957	16,434	16,430	17,160
Net trading income	**8,723**	6,760	8,690	7,091	6,506
Net income/(expense) from financial instruments designated at fair value	**1,532**	2,473	768	(2,226)	3,439
Gains less losses from financial investments	**2,068**	1,335	2,012	1,189	907
Dividend income	**123**	311	322	221	149
Net insurance premium income	**10,355**	11,921	11,940	13,044	12,872
Gains on disposal of US branch network, US cards business and Ping An Insurance (Group) Company of China, Ltd				7,024	
Other operating income	**1,055**	1,131	2,632	2,100	1,766
Total operating income	**71,092**	74,593	78,337	82,545	83,461
Net insurance claims and benefits paid and movement in liabilities to policyholders	**(11,292)**	(13,345)	(13,692)	(14,215)	(11,181)
Net operating income before loan impairment charges and other credit risk provisions	**59,800**	61,248	64,645	68,330	72,280
Loan impairment charges and other credit risk provisions	**(3,721)**	(3,851)	(5,849)	(8,311)	(12,127)
Net operating income	**56,079**	57,397	58,796	60,019	60,153
Total operating expenses	**(39,768)**	(41,249)	(38,556)	(42,927)	(41,545)
Operating profit	**16,311**	16,148	20,240	17,092	18,608
Share of profit in associates and joint ventures	**2,556**	2,532	2,325	3,557	3,264
Profit before tax	**18,867**	18,680	22,565	20,649	21,872

Tax expense	**(3,771)**	(3,975)	(4,765)	(5,315)	(3,928)
Profit for the year	**15,096**	14,705	17,800	15,334	17,944
Profit attributable to shareholders of the parent company	**13,522**	13,688	16,204	14,027	16,797
Profit attributable to non-controlling interests	**1,574**	1,017	1,596	1,307	1,147

Five-year financial information

	2015	2014	2013	2012	2011
	$	$	$	$	$
Basic earnings per share	**0.65**	0.69	0.84	0.74	0.92
Diluted earnings per share	**0.64**	0.69	0.84	0.74	0.91
Dividends per ordinary share[3]	**0.50**	0.49	0.48	0.41	0.39
	%	%	%	%	%
Dividend payout ratio[4]	**76.5**	71.0	57.1	55.4	42.4
Post-tax return on average total assets	**0.6**	0.5	0.7	0.6	0.6
Return on average ordinary shareholders equity	**7.2**	7.3	9.2	8.4	10.9
Average foreign exchange translation rates to $:					
$1: £	**0.654**	0.607	0.639	0.631	0.624
$1:	**0.902**	0.754	0.753	0.778	0.719

For footnotes, see page 99.

Unless stated otherwise, all tables in the Annual Report and Accounts 2015 are presented on a reported basis.

For a summary of our financial performance in 2015, see page 22.

Group performance by income and expense item

Net interest income

	2015 $m	2014 $m	2013 $m
Interest income	**47,189**	50,955	51,192
Interest expense	**(14,658)**	(16,250)	(15,653)
Net interest income[5]	**32,531**	34,705	35,539
Average interest-earning assets	**1,726,949**	1,786,536	1,669,368
Gross interest yield[6]	**2.73%**	2.85%	3.07%
Less: cost of funds	**(1.00%)**	(1.05%)	(1.10%)
Net interest spread[7]	**1.73%**	1.80%	1.97%
Net interest margin[8]	**1.88%**	1.94%	2.13%

For footnotes, see page 99.

Summary of interest income by type of asset

	2015			2014			2013		
	Average balance $m	**Interest income $m**	**Yield %**	Average balance $m	Interest income $m	Yield %	Average balance $m	Interest income $m	Yie
rt-term funds loans and ances to banks	**221,924**	**2,277**	**1.03**	237,148	3,068	1.29	236,377	2,851	1.
ans and advances ustomers	**909,707**	**33,104**	**3.64**	931,311	37,429	4.02	897,322	38,529	4.
verse repurchase eements -trading	**162,308**	**1,301**	**0.80**	198,273	1,800	0.91	114,324	995	0.

ancial estments	**396,113**	**7,508**	**1.90**	399,816	8,323	2.08	393,309	8,002	2.0
er erest-earning ets	**36,897**	**2,999**	**8.13**	19,988	335	1.68	28,036	815	2.9
al erest-earning ets	**1,726,949**	**47,189**	**2.73**	1,786,536	50,955	2.85	1,669,368	51,192	3.0
ding assets and ancial assets ignated at fair ue[9,10]	**195,285**	**4,626**	**2.37**	238,958	5,596	2.34	354,817	5,763	1.6
pairment owances	**(10,606)**			(14,015)			(15,954)		
n-interest-earning ets	**682,143**			668,564			683,785		
ar ended December	**2,593,771**	**51,815**	**2.00**	2,680,043	56,551	2.11	2,692,016	56,955	2.1

footnotes, see page 99.

mary of interest expense by type of liability and equity

	2015			2014			2013		
	Average balance $m	**Interest expense $m**	**Cost %**	Average balance $m	Interest expense $m	Cost %	Average balance $m	Interest expense $m	Co
posits by banks[11]	**55,863**	**378**	**0.68**	61,217	481	0.79	61,616	555	0.9
ancial liabilities ignated at fair ue own debt ued[12]	**58,489**	**717**	**1.23**	66,374	837	1.26	72,333	967	1.3
stomer ounts[13]	**1,075,901**	**7,401**	**0.69**	1,088,493	9,131	0.84	1,035,500	8,794	0.8
ourchase eements -trading	**117,947**	**355**	**0.30**	190,705	652	0.34	94,410	405	0.4
ot securities in ue	**129,039**	**3,521**	**2.73**	129,724	4,554	3.51	150,976	4,182	2.7
er erest-bearing bilities	**28,396**	**2,286**	**8.05**	10,120	595	5.88	11,345	750	6.6
al erest-bearing bilities	**1,465,635**	**14,658**	**1.00**	1,546,633	16,250	1.05	1,426,180	15,653	1.1
ding liabilities	**151,294**	**2,071**	**1.37**	178,518	2,856	1.60	301,353	3,027	1.0
financial									

ilities designated air value cluding own debt ued)									
n-interest bearing rent accounts	**190,914**			185,990			184,370		
al equity and er non-interest ring liabilities	**785,928**			768,902			780,113		
ar ended December	**2,593,771**	**16,729**	**0.64**	2,680,043	19,106	0.71	2,692,016	18,680	0.(

For footnotes, see page 99.

Table of Contents

Report of the Directors: Financial summary (continued)

Group performance by income and expense item

Reported net interest income of $32.5bn decreased by $2.2bn or 6% compared with 2014. This included the significant items and currency translation summarised in the table below.

Significant items and currency translation

	2015	2014
	$m	$m
Significant items		
Provisions arising from the ongoing review of compliance with the Consumer Credit Act in the UK	(10)	(632)
Acquisitions, disposals and dilutions		38
	(10)	(594)
Currency translation		2,890
Year ended 31 December	**(10)**	2,296

Excluding the significant items and currency translation tabulated above, net interest income was broadly unchanged compared with 2014, as increases in Asia and Latin America were offset by a reduction in North America.

On a reported basis, net interest spread and margin both fell, mainly due to adverse foreign exchange movements in Latin America and Europe, partly offset by a reduction in significant items, namely lower provisions arising from the ongoing review of compliance with the Consumer Credit Act (CCA) in the UK. Excluding these factors, net interest spread and margin were marginally lower due to reduced yields on customer lending in Europe and North America. However, during the year, we changed the mix of our overall portfolio towards higher yielding customer lending balances. This was through a managed reduction in the average balances of lower yielding short-term funds, reverse repos and financial investments, notably in Europe, reflecting our continued focus on the efficient use of our balance sheet.

Interest income by type of asset and interest expense by type of liability, and the associated average balances as set out in the summary tables above, were affected by the reclassification in June 2015, of our operations in Brazil to Assets

held for sale in Other interest-earning assets and liabilities of disposal groups held for sale in Other interest-bearing liabilities , respectively.

Interest income

Reported interest income decreased by $3.8bn compared with 2014 driven by currency translation, notably in Latin America and Europe, although this was partly offset in Europe as 2014 included higher provisions arising from the on-going review of compliance with the CCA.

Excluding these factors, interest income was broadly unchanged compared with 2014.

Interest income on loans and advances to customers was broadly unchanged as lower interest income in Europe and North America was offset by increases in Asia and Latin America.

In Europe, the reduction in interest income was driven by lower yields on mortgages in the UK in line with competitive pricing, and the effect of downward movements in market interest rates in the eurozone. Interest income also fell in North America as the CML portfolio continued to decrease from run-off and sales. In addition, new lending to customers in RBWM and CMB was at reduced yields in the current low interest rate

environment, although the effect of this was partly offset by an increase in average term lending balances.

By contrast, in Asia, the rise in interest income was driven by growth in average term lending balances, primarily in Hong Kong and mainland China. This was partly offset by compressed yields on customer lending, notably in mainland China and Australia due to central bank rate reductions, although yields in Hong Kong marginally increased. In Latin America, the increase was primarily in Argentina, driven by growth in average balances.

Interest income on short-term funds and financial investments in Balance Sheet Management marginally decreased. This was driven by lower interest income in Europe, due to a managed reduction in average balances, and in Asia, reflecting movement in central bank interest rates in mainland China and India. These factors were partly offset in North America by a change in product mix towards higher yielding mortgage backed securities in order to maximise the effectiveness of the portfolio.

Interest income from other interest-earning assets rose due to the reclassification of our operations in Brazil to Assets held for sale in June 2015. In Brazil, excluding the impact of currency translation, interest income rose due to growth in average term lending balances and financial investments, together with higher yields reflecting successive increases in central bank interest rates in 2014 and 2015.

Interest expense

Reported interest expense decreased by $1.6bn compared with 2014 driven by currency translation, primarily in Latin America and Europe.

Excluding this, interest expense fell driven by a lower cost of customer accounts, debt issued and repos.

Interest expense on customer accounts fell marginally despite growth in average balances. This reflected central bank rate reductions in a number of markets, notably Mexico, mainland China, Australia and India. Europe was affected by downward movements in market rates in the eurozone. This was partly offset by rising costs in North America, in line with promotional deposit offerings.

Interest expense on debt issued also fell, primarily in Europe as new debt was issued at lower prevailing rates and average outstanding balances fell as a result of net redemptions. Interest expense also fell on repos, notably in Europe,

reflecting the managed reduction in average balances.

Table of Contents

Interest expense on other interest-bearing liabilities increased due to the reclassification of our operations in Brazil. In Brazil, excluding currency translation, interest expense rose, primarily on debt securities in issue and also

on customer accounts driven by successive increases in central bank rates. Other interest expense also increased in North America, as 2014 benefited from the release of accrued interest associated with uncertain tax positions.

Net fee income

	2015	2014	2013
	$m	$m	$m
Account services	**2,745**	3,407	3,581
Funds under management	**2,570**	2,658	2,673
Cards	**2,281**	2,460	2,455
Credit facilities	**1,919**	1,890	1,907
Broking income	**1,441**	1,371	1,388
Unit trusts	**1,007**	1,005	891
Imports/exports	**971**	1,115	1,157
Remittances	**772**	833	849
Underwriting	**762**	872	866
Global custody	**721**	726	698
Insurance agency commission	**519**	516	551
Other	**2,308**	2,692	2,957
Fee income	**18,016**	19,545	19,973
Less: fee expense	**(3,311)**	(3,588)	(3,539)
Year ended 31 December	**14,705**	15,957	16,434

Reported net fee income fell by $1.3bn compared with 2014, primarily reflecting the adverse effects of currency translation

between the years of $1.2bn, notably in Europe and Latin America, as tabulated below.

Significant items and currency translation

	2015	2014
	$m	$m
Significant items		
Acquisitions, disposals and dilutions		10
Currency translation		1,204
Year ended 31 December		1,214

On an adjusted basis, net fee income decreased by $38m. This reflected a reduction in Europe, primarily within RBWM and GB&M, largely offset by increases in Asia in RBWM and North America in GB&M.

Account services fee income fell significantly by $348m, mainly in the UK in RBWM where lower overdraft fees reflected re-pricing and fewer overdrawn balances following the introduction in November 2014 of a text-alert service for customers. Account services fees also fell in Switzerland due to the continuing repositioning of our GPB business.

Import and export fees fell too (by $79m), mainly in Asia reflecting a reduction in trade activity. In addition, our underwriting fee income fell by $65m, mainly in Hong Kong in GB&M, where there was reduced activity in equity capital markets, although this was partly offset by higher debt issuances in the US.

By contrast, our credit facilities fee income grew strongly (by $190m) in North America and, to a lesser extent, in Asia, reflecting continued growth in average lending

balances, although balances were broadly unchanged in Asia in the second half of the year.

Our fee income from broking and unit trusts also grew (up by $182m), mainly in Hong Kong, driven by higher sales of equities and mutual funds in RBWM. This was from increased stock market turnover, in part facilitated by the Shanghai-Hong Kong Stock Connect platform and greater investor appetite following improvements in Asian equity markets in the first half of the year, however there was weaker investor sentiment in the second half of the year.

Fees from funds under management increased by $157m. In our Global Asset Management business, this was notably in France and the US due to volume growth from fixed income products. In addition, fee income from funds under management also increased in Germany from growth in Securities Services in GB&M, and in Hong Kong from increased funds under management in GPB.

Fee expenses were marginally higher by $101m due to a rise in brokerage fees, notably in Germany.

Table of Contents

Report of the Directors: Financial summary (continued)

Group performance by income and expense item

Net trading income

	2015 $m	2014 $m	2013 $m
Trading activities	**7,285**	5,419	6,921
Ping An contingent forward sale contract			(682)
Net interest income on trading activities	**1,775**	1,907	2,047
Gain/(loss) on termination of hedges	**(11)**	1	(194)
Other trading income hedge ineffectiveness:			
on cash flow hedges	**15**	34	22
on fair value hedges	**(11)**	19	65
Fair value movement on non-qualifying hedges[14]	**(330)**	(620)	511
Year ended 31 December	**8,723**	6,760	8,690

For footnote, see page 99.

Reported net trading income of $8.7bn was $2.0bn higher than in 2014, predominantly in Europe. The movement in net trading income in part reflected the favourable

significant items and currency translation summarised in the table below.

Significant items and currency translation

	2015 $m	2014 $m
Significant items		
Included within trading activities:	**230**	(332)

favourable/(adverse) debit valuation adjustment on derivative contracts	**230**	(332)
Included in other net trading income:	**(327)**	(539)
fair value movement on non-qualifying hedges	**(327)**	(541)
acquisitions, disposals and dilutions		2
	(97)	(871)
Currency translation		520
Year ended 31 December	**(97)**	(351)

On an adjusted basis, net trading income from trading activities increased by $1.7bn compared with 2014, driven by our client-facing GB&M businesses, notably Equities, Foreign Exchange and Credit. This was primarily in the UK following an increase in volatility and client activity.

Net trading income from trading activities also rose due to a number of other valuation movements. In 2014, we revised our estimation methodology for valuing

uncollateralised derivative portfolios by introducing the funding fair value adjustment (FFVA) which resulted in a charge of $263m. In addition, the Equities and Rates businesses benefited from favourable movements on own credit spreads compared with minimal movements in 2014.

These movements contributed to an increase in net trading income from trading activities in Rates, although client activity remained subdued.

Net income from financial instruments designated at fair value

	2015	2014	2013
	$m	$m	$m
Net income/(expense) arising from:			
financial assets held to meet liabilities under insurance and investment contracts	**531**	2,300	3,170
liabilities to customers under investment contracts	**34**	(435)	(1,237)
HSBC s long-term debt issued and related derivatives	**863**	508	(1,228)
change in own credit spread on long-term debt (significant item)	**1,002**	417	(1,246)
other changes in fair value	**(139)**	91	18
other instruments designated at fair value and related derivatives	**104**	100	63
Year ended 31 December	**1,532**	2,473	768

Assets and liabilities from which net income from financial instruments designated at fair value arose

	2015	2014	2013
	$m	$m	$m
Financial assets designated at fair value at 31 December	**23,852**	29,037	38,430
Financial liabilities designated at fair value at 31 December	**66,408**	76,153	89,084

Including:			
Financial assets held to meet liabilities under:			
insurance and investment contracts with DPF	**11,119**	10,650	10,717
unit-linked insurance and other insurance and investment contracts	**11,153**	16,333	25,423
Long-term debt issues designated at fair value	**60,188**	69,681	75,278

The majority of the financial liabilities designated at fair value are fixed-rate long-term debt issuances and are managed in conjunction with interest rate swaps as part of our interest rate management strategy.

Reported net income from financial instruments designated at fair value was $1.5bn in 2015, compared with $2.5bn in 2014. The former included favourable movements in the fair value of our own long-term debt of $1.0bn due to changes in credit spread, compared with favourable movements of $417m in 2014.

Significant items and currency translation

	2015	2014
	$m	$m
Significant items		
Own credit spread	**1,002**	417
Currency translation		303
Year ended 31 December	**1,002**	720

On an adjusted basis, which excludes changes in our own credit spread and the net adverse effect of currency translation shown above, net income from financial instruments at fair value decreased by $1.2bn.

Net income from financial assets held to meet liabilities under insurance and investment contracts of $531m was $1.8bn lower than in 2014. This was primarily driven by weaker equity markets in Hong Kong and the UK, notably in the second half of the year. The fair value movement in

2015 included gains in Brazil and France, partly offset by losses in Hong Kong. These gains and losses are broadly offset by Net insurance claims and benefits paid and movements in liabilities to policyholders and Liabilities to customers under investment contracts .

Other changes in fair value reflected a net adverse movement due to interest and exchange rate hedging ineffectiveness.

Gains less losses from financial investments

	2015	2014	2013
	$m	$m	$m
Net gains/(losses) from disposal of:			
debt securities	**345**	665	491
equity securities	**1,829**	1,037	1,697
other financial investments	**5**	6	(1)
	2,179	1,708	2,187
Impairment of available-for-sale equity securities	**(111)**	(373)	(175)
Year ended 31 December	**2,068**	1,335	2,012

In 2015, gains less losses from financial investments increased by $733m on a reported basis compared with 2014. This was driven by the significant items and currency

translation tabulated below, notably the gain on the partial sale of our shareholding in Industrial Bank Co. Ltd (Industrial Bank) of $1.4bn.

Significant items and currency translation

	2015	2014
	$m	$m
Significant items		
Gain on sale of shareholding in Bank of Shanghai		428
Gain on the partial sale of shareholding in Industrial Bank	**1,372**	
Impairment of our investment in Industrial Bank		(271)
	1,372	157
Currency translation		95
Year ended 31 December	**1,372**	252

On an adjusted basis, excluding all significant items and currency translation tabulated above, gains less losses from financial investments decreased by $387m. This was primarily in our GB&M business, driven by lower gains on disposals of available-for-sale debt securities, notably in the UK and US and lower gains on equity securities in Principal Investments in the UK.

In addition, we recorded minor losses on disposals from our legacy credit portfolio compared with gains in 2014. The disposal of these assets reflects our continued efforts to manage down low-returning assets to maximise returns.

Table of Contents

Report of the Directors: Financial summary (continued)

Group performance by income and expense item

Net insurance premium income

	2015	2014	2013
	$m	$m	$m
Gross insurance premium income	11,012	12,370	12,398
Reinsurance premiums	(657)	(449)	(458)
Year ended 31 December	**10,355**	11,921	11,940

Reported net insurance premium income was $1.6bn lower, largely from the adverse effects of currency translation of $930m.

Significant items and currency translation

	2015	2014
	$m	$m
Significant items		
Currency translation		930
Year ended 31 December		930

On an adjusted basis, excluding the effect of currency translation, net insurance premium income fell by $636m or 6%, driven by Asia, primarily in Hong Kong where it declined because of lower unit-linked contract premiums and new reinsurance agreements.

In Europe, premium income fell mainly in the UK, reflecting a decision to exit the commercial pensions market in 2014.

Other operating income

	2015	2014	2013
	$m	$m	$m
Rent received	**171**	162	155
Gains/(losses) recognised on assets held for sale	**(244)**	220	(729)
Gains on investment properties	**61**	120	113
Gain on disposal of property, plant and equipment, intangible assets and non-financial investments	**53**	32	178
Gains/(losses) arising from dilution of interest in Industrial Bank and other associates and joint ventures		(32)	1,051
Gain on disposal of HSBC Bank (Panama) S.A.			1,107
Change in present value of in-force long-term insurance business	**799**	261	525
Other	**215**	368	232
Year ended 31 December	**1,055**	1,131	2,632

Change in present value of in-force long-term insurance business

	2015	2014	2013
	$m	$m	$m
Value of new business	809	870	924
Expected return	(552)	(545)	(505)
Assumption changes and experience variances	504	(116)	88
Other adjustments	38	52	18
Year ended 31 December	799	261	525

Reported other operating income decreased by $76m from 2014. This was partly due to the significant items recorded in the table below.

Significant items and currency translation

	2015	2014
	$m	$m

Significant items		
Included within gains/(losses) recognised on assets held for sale:	**(232)**	168
disposal costs of our Brazilian operation	**(18)**	
gain/(loss) on sale of several tranches of real estate secured accounts in the US	**(214)**	168
Included within the remaining line items:		(41)
acquisitions, disposals and dilutions		(41)
Currency translation		(64)
Year ended 31 December	**(232)**	63

Excluding the significant items and currency translation tabulated above, other operating income increased by $219m compared with 2014. This was primarily from higher favourable movements in present value of in-force (PVIF) long-term insurance business, partly offset by lower

disposal and revaluation gains on investment properties, mainly in Asia.

The higher favourable movement in the PVIF balance was driven by changes in interest rates and investment return assumptions, notably in France and Hong Kong.

Net insurance claims and benefits paid and movement in liabilities to policyholders

	2015	2014	2013
	$m	$m	$m
Net insurance claims and benefits paid and movement in liabilities to policyholders:			
gross	**11,872**	13,723	13,948
less reinsurers share	**(580)**	(378)	(256)
Year ended 31 December[15]	**11,292**	13,345	13,692

For footnote, see page 99.

Reported net insurance claims and benefits paid and movement in liabilities to policyholders were $2.1bn lower

than in 2014, in part reflecting the effect of currency translation of $1.1bn.

Significant items and currency translation

	2015	2014
	$m	$m
Significant items		
Currency translation		1,109
Year ended 31 December		1,109

Excluding the effects of currency translation, net insurance claims and benefits paid and movements in liabilities to policyholders were $0.9bn lower.

This was primarily driven by a decrease in returns on financial assets supporting liabilities to policyholders, where the policyholder shares in the investment risk. This decrease in returns reflected a weaker equity market performance in Hong Kong in the second half of the year.

The gains or losses recognised on the financial assets designated at fair value that are held to support these insurance contract liabilities are reported in Net income from financial instruments designated at fair value .

In addition, movements in liabilities to policyholders were lower due to a decrease in premiums written in Asia, as explained in Net earned insurance premiums .

Loan impairment charges and other credit risk provisions

	2015	2014	2013
	$m	$m	$m
Loan impairment charges:			
new allowances net of allowance releases	**4,400**	5,010	7,344
recoveries of amounts previously written off	**(808)**	(955)	(1,296)
	3,592	4,055	6,048
Individually assessed allowances	**1,505**	1,780	2,320
Collectively assessed allowances	**2,087**	2,275	3,728
Releases of impairment on available-for-sale debt securities	**(17)**	(319)	(211)
Other credit risk provisions	**146**	115	12
Year ended 31 December	**3,721**	**3,851**	**5,849**
Impairment charges on loans and advances to customers as a percentage of average gross loans and advances to customers	**0.39%**	0.43%	0.67%

Reported loan impairment charges and other credit risk provisions (LICs) of $3.7bn were $0.1bn lower than in 2014,

primarily due to favourable currency translation of $683m.

Excluding the effects of currency translation, LICs were $0.6bn higher than in 2014.

Significant items and currency translation

	2015	2014
	$m	$m
Significant items		
Currency translation		683
Year ended 31 December		683

Table of Contents

Report of the Directors: Financial summary (continued)

Group performance by income and expense item

In the fourth quarter of 2015, our LICs increased compared with the third quarter following a rise in individually assessed LICs in a small number of countries. This was reflective of specific circumstances associated with those countries with no common underlying theme. In addition, we increased our collectively assessed LICs on exposures related to the oil and gas industry by $0.2bn, notably in North America, Middle East and North Africa, and Asia. For more information on our exposure to the oil and gas sector, see page 117.

The following paragraphs set out in more detail the factors that have contributed to movements in our collectively and individually assessed LICs compared with 2014.

On an adjusted basis, **collectively assessed LICs** rose by $221m, mainly in Middle East and North Africa, North America and Asia, partly offset in Europe. It arose from the following:

- in Middle East and North Africa (up by $167m), this was mainly in the UAE in RBWM, where we increased the impairment allowances on our mortgage book following a review of the quality and value of collateral. In addition, LICs grew in our CMB business, notably relating to the oil and foodstuffs industries;
- in North America (up by $132m) and Asia (up by $108m), this reflected an increase in allowances against our oil and gas exposures. In our US CML portfolio, LICs were higher than in 2014 reflecting lower favourable market value adjustments of underlying properties as improvements in the housing market conditions were less pronounced in 2015. This was partly offset by a fall in LICs from lower levels of newly impaired loans and reduced lending balances from continued run-off and sales. Additionally, collectively assessed LICs rose in Indonesia following credit deterioration; and
- in Europe, collectively assessed LICs were $192m lower, most notably in our GB&M business in the UK, as 2014 included additional impairment charges from revisions to certain estimates used in our corporate collective loan impairment calculation.

Individually assessed LICs were broadly unchanged from 2014 on an adjusted basis. This reflected decreases in Latin America, Europe and Asia which were offset by increases in Middle East and North Africa and in North America. This included the following:

in Latin America (down by $95m), Europe (down by $44m) and Asia (down by $44m), we saw reductions in individually assessed LICs in our GB&M business as 2014 included significant impairment charges related to corporate clients in our respective regions. In Asia, the reduction was partly offset by an increase in LICs against a small number of CMB customers in Indonesia; and

in Middle East and North Africa (up by $134m) and North America (up by $47m), individually assessed LICs increased in our CMB business. In the former, this primarily related to higher LICs on food wholesalers, while in North America LICs rose in the oil and gas sector.

In 2015, there were lower net releases of credit risk provisions than in 2014, down by $0.3bn, mainly on available-for-sale asset-backed securities (ABS s) in our UK GB&M business.

Operating expenses

In addition to detailing operating expense items by category, as set out in the table below, we also categorise adjusted expenses as follows:

run-the-bank costs comprise business-as-usual running costs that keep operations functioning at the required quality and standard year-on-year, maintain IT infrastructure and support revenue growth. Run-the-bank costs are split between front office and back office, reflecting the way the Group is organised into four global businesses (front office) supported by global functions (back office);

change-the-bank costs comprise expenses relating to the implementation of mandatory regulatory changes and other investment costs incurred relating to projects to change business-as-usual activity to enhance future operating capabilities;

costs-to-achieve comprise those specific costs relating to the achievement of the strategic actions set out in the Investor Update in June 2015. They comprise costs incurred between 1 July 2015 and 31 December 2017 and do not include ongoing initiatives such as Global Standards. Any costs arising within this category have been incurred as part of a significant transformation programme. Costs-to-achieve are included within significant items and incorporate restructuring costs which were identified as a separate significant item prior to 1 July 2015; and

the UK bank levy is reported as a separate category.

Operating expenses

	2015	2014	2013
	$m	$m	$m
By expense category			
Employee compensation and benefits	**19,900**	20,366	19,196
Premises and equipment (excluding depreciation and impairment)	**3,830**	4,204	4,183
General and administrative expenses	**13,832**	14,361	12,882
Administrative expenses	**37,562**	38,931	36,261

Depreciation and impairment of property, plant and equipment	**1,269**	1,382	1,364
Amortisation and impairment of intangible assets	**937**	936	931
Year ended 31 December	**39,768**	41,249	38,556

Table of Contents

	2015 $m	2014 $m
By expense group		
Run-the-bank front office	**15,482**	14,879
Run-the-bank back office	**15,784**	15,631
Change-the-bank	**3,494**	3,002
Bank levy	**1,421**	1,063
Significant items	**3,586**	3,396
Currency translation		3,278
Year ended 31 December	**39,768**	41,249

Reported operating expenses for 2015 of $39.8bn were $1.5bn or 4% lower than in 2014. The reduction in reported expenses was driven by the favourable effects of currency translation between the years. Significant items increased by $0.2bn, with a reduction in fines, penalties, redress and associated provisions of $0.7bn, more than offset by transformation costs (costs-to-achieve) of $0.9bn.

Costs-to-achieve, which relate to specific programmes

aimed at achieving the cost reduction and productivity outcomes outlined in the Investor Update, comprise:

- severance costs of $0.4bn across a number of areas including CMB ($147m), RBWM ($49m), Risk ($44m) and GB&M ($45m);
- staff costs for the transformation programme in progress of $0.1bn in the second half of 2015; and
- other costs of $0.4bn, including software write-offs, US portfolio run-off costs and consultancy costs.

Significant items and currency translation

	2015	2014

	$m	$m
Significant items		
Disposal costs of our Brazilian operations	**110**	
Charge in relation to settlement agreement with Federal Housing Finance Authority		550
Costs-to-achieve	**908**	
Cost to establish UK ring-fenced bank	**89**	
Regulatory provisions in GPB	**172**	65
Restructuring and other related costs	**117**	278
Settlements and provisions in connection with legal matters	**1,649**	1,187
UK customer redress programmes	**541**	1,275
Acquisitions, disposals and dilutions		40
	3,586	3,395
Currency translation		3,278
Year ended 31 December	**3,586**	6,673

On an adjusted basis, operating expenses of $36.2bn were $1.6bn or 5% higher than in 2014, reflecting increases in both run-the-bank and change-the-bank costs.

Run-the-bank costs totalled $31.3bn for 2015, an increase of $0.8bn or 2% on 2014. This was primarily driven by targeted investment in Latin America, Asia and Europe. We recruited new staff to support growth in targeted areas as follows:

- in GB&M we invested in Payments and Cash Management (PCM) mainly in Europe;
- in CMB, we invested in PCM revenue-generating full time equivalent staff (FTEs) in North America and Asia; and
- in RBWM, we invested in additional FTEs in Asia in our branch network to support revenue growth.

Our total expenditure on regulatory programmes and compliance in 2015, including both run-the-bank and change-the-bank elements, was $2.9bn, up by $0.7bn or 33% from 2014.

Run-the-bank costs associated with regulatory programmes and compliance increased by $0.2bn reflecting the continued implementation of our Global Standards programme to enhance our financial crime risk controls and capabilities, and to meet our external commitments.

Change-the-bank costs totalled $3.5bn in 2015, an increase of $0.5bn or 16% on 2014, primarily driven by regulatory programmes and compliance costs. This reflected investment in strategic IT infrastructure including systems enhancements for customer due diligence, transaction monitoring and sanctions screening as part of the Global Standards programme. These actions were in line with our strategic target to complete the implementation of Global Standards in 2017. There was also further investment in stress testing and other programmes to meet legal and regulatory requirements.

The bank levy totalled $1.4bn, up by $0.4bn or 34% from 2014. Excluding the bank levy, operating expenses in the second half of 2015 were broadly in line with the first half of the year. Investment in regulatory programmes and compliance and inflationary pressures were offset by cost saving initiatives mainly driven by reduced staff costs. This reflected a reduction in FTEs of 4,585 from 30 June 2015 to 31 December 2015. In addition we reduced travel and entertainment costs through a strong focus on cost management.

Excluding investment in regulatory programmes and compliance, and the bank levy, adjusted operating expenses grew

by 2% compared with 2014.

Table of Contents

Report of the Directors: Financial summary (continued)

Group performance by income and expense item / Consolidated balance sheet

Staff numbers (full-time equivalents)

	2015	2014	2013
Geographical regions			
Europe	**67,509**	69,363	68,334
Asia	**120,144**	118,322	113,701
Middle East and North Africa	**8,066**	8,305	8,618
North America	**19,656**	20,412	20,871
Latin America	**39,828**	41,201	42,542
At 31 December	**255,203**	257,603	254,066

The number of employees, expressed in FTEs, at 31 December 2015 was 255,203, a decrease of 4,585 from 30 June 2015 reflecting the initial impact of cost saving initiatives. Compared with 31 December 2014, FTEs decreased by 2,400. This was driven by reductions in global businesses and global functions, offset by an increase in compliance of 2,419 FTEs.

The average number of FTEs adjusted for business disposals increased by 1.2% compared with 2014 due to additional FTE requirements for regulatory programmes and compliance, and investment in growth areas.

Reported cost efficiency ratios[16]

	2015	2014	2013
	%	%	%
HSBC	**66.5**	67.3	59.6
Geographical regions			
Europe	**93.7**	93.7	84.0
Asia	**43.0**	44.0	40.7
Middle East and North Africa	**48.1**	47.7	51.5

North America	**84.9**	78.9	72.9
Latin America	**72.6**	71.7	56.1
Global businesses			
Retail Banking and Wealth Management	**72.4**	71.7	64.7
Commercial Banking	**45.4**	44.3	41.7
Global Banking and Markets	**59.4**	67.7	51.9
Global Private Banking	**84.3**	74.8	91.4

For footnote, see page 99.

Share of profit in associates and joint ventures

	2015	2014	2013
	$m	$m	$m
Associates			
Bank of Communications Co., Limited	**2,011**	1,974	1,878
The Saudi British Bank	**462**	455	403
Other	**45**	64	5
Share of profit in associates	**2,518**	2,493	2,286
Share of profit in joint ventures	**38**	39	39
Year ended 31 December	**2,556**	2,532	2,325

Our reported share of profit in associates and joint ventures was $2.6bn, an increase of $24m or 1%, driven by higher contributions from Bank of Communications Co., Limited (BoCom) and The Saudi British Bank.

Our share of profit from BoCom rose as a result of balance sheet growth, partly offset by higher operating expenses.

Profits from The Saudi British Bank also rose, by $7m, reflecting strong balance sheet growth.

Tax expense

	2015	2014	2013
	$m	$m	$m
Profit before tax	**18,867**	18,680	22,565
Tax expense	**(3,771)**	(3,975)	(4,765)
Profit after tax for the year ended 31 December	**15,096**	14,705	17,800
Effective tax rate	**20.0%**	21.3%	21.1%

The effective tax rate for the year was 20.0% (2014: 21.3%) and was in line with expectations.

We expect the effective rate of tax to increase due to the introduction of the 8% surcharge on UK banking profits in 2016.

Table of Contents

Report of the Directors: Financial summary (continued)

2014 compared with 2013

Net interest income

Reported net interest income of $35bn decreased by $834m or 2% compared with 2013. This included the significant items and currency translation summarised in the table below.

Significant items and currency translation

	2014	2013
	$m	$m
Significant items		
Provisions arising from the ongoing review of compliance with the Consumer Credit Act in the UK	(632)	
Acquisitions, disposals and dilutions	38	386
	(594)	386
Currency translation		518
Year ended 31 December	(594)	904

On a reported basis, net interest spread and margin both fell, reflecting lower yields on customer lending in North America and Europe. In North America, this was due to changes in the composition of the lending portfolios towards lower yielding secured assets and to the run-off of the CML portfolio. In Europe, it was principally due to a significant item, namely provisions arising from the ongoing review of compliance with the Consumer Credit Act (CCA) in the UK. These factors were partially offset by a lower cost of funds.

Excluding the significant items and currency translation tabulated above, net interest income rose by $664m or 2% from 2013, driven by increases in Asia, partly reflecting growth in customer lending volumes.

Interest income

Reported interest income was broadly unchanged, as decreases in interest income from customer lending (which included the effect of the CCA provisions) were offset by increases in income from short-term funds, as well as a rise due to the change in the management of reverse repo transactions (see page 60b).

Interest income on loans and advances to customers decreased, principally in North America and Latin America, partially offset by increases in Asia. In North America, this was a consequence of the disposal of the higher yielding non-real estate loan portfolio and the reduction in the CML portfolio from run-off and sales. In addition, new lending to customers in RBWM and CMB was at lower yields, reflecting a shift in the portfolio towards higher levels of lower yielding first lien real estate secured loans. In Latin America, interest income on customer lending also decreased, reflecting a fall in yields in both Brazil and Mexico, despite the rise in average balances in term lending in both countries. In Brazil, the falling yield reflected the shift in product and client mix to more secured, relationship-led lending while, in Mexico, it was driven by reductions in Central Bank interest rates. The region was also affected by the disposal of non-strategic businesses.

By contrast, we recorded increased interest income on customer lending in Asia, driven by growth in term lending volumes and, to a lesser extent, residential

mortgages during the year. This increase in balances was partially offset by compressed yields. In Europe, excluding the effect of the CCA provisions noted above, interest income on customer lending rose due to increases in mortgage and term lending balances.

Interest income on short-term funds and financial investments increased both in Latin America and Asia, as interest rates rose in certain countries in these regions (notably in Brazil, Argentina and mainland China) and average balances grew. However, in Europe, interest income on short-term funds and financial investments fell as maturing positions were replaced by longer-term but lower-yielding bonds.

Interest expense

Reported interest expense increased in the year. We recorded increased interest expense on customer accounts in Asia and Latin America, partly offset by a reduction in North America. In Asia, the growth was principally from an increase in the average balances of customer accounts. In Latin America, interest expense on customer accounts rose as reductions in average balances were more than offset by the increase in the cost of funds due to interest rate rises, notably in Brazil. However, the effects of this were partly offset by a fall in the cost of funds in Mexico as Central Bank rates fell, and the disposal of non-strategic businesses. Conversely, in North America, interest expense on customer deposits declined as a result of a strategic decision to re-price deposits downwards. In addition, other interest expense decreased due to a release of accrued interest associated with an uncertain tax position.

Interest expense on debt issued rose. We recorded an increase in the cost of funds which was partly offset by decreased overall balances. Interest expense rose in Latin America, notably in Brazil, in line with interest rate rises and increased medium-term loan note balances. By contrast, in North America the business disposals led to a decline in our funding requirements. The cost of funds also fell as higher coupon debt matured and was repaid. In Europe, interest expense on debt also decreased, as average outstanding balances fell as a result of net redemptions and the cost of funds reduced.

Table of Contents

Report of the Directors: Financial Review (continued)

Repos and reverse repos

During the final quarter of 2013, GB&M changed the way it managed reverse repurchase (reverse repo) and repurchase (repo) activities. This had the effect of reducing the net interest margin as average interest earning assets and interest bearing liabilities increased significantly. These reverse repo and repo agreements have a lower gross yield and cost of funds, respectively, than the remainder of our portfolio.

Net interest income includes the expense of internally funded trading assets, while related revenue is reported in Net trading income . The internal cost of funding these assets decreased, as average trading asset balances fell to a greater extent than trading liabilities. In reporting our global business results, this cost is included within Net trading income .

Net fee income

Reported net fee income fell by $477m, primarily in Latin America and North America. In Latin America, the decrease included the effect of currency translation and the continued repositioning and disposal of businesses, notably the sale of our Panama operations in 2013. In North America, net fee income was lower following the expiry of the Transition Servicing Agreements we entered into with the buyer of the Card and Retail Services (CRS) business, and adverse adjustments to mortgage servicing rights valuations.

Net trading income

Account services fee income decreased, notably in Latin America and Europe. In Latin America, the fall was due to a reduction in customer numbers in Mexico, as we continued to reposition the business, and in Brazil, due to strong market competition. In Europe, account services fees were lower, primarily in Switzerland due to the repositioning of our GPB business, and in the UK, in part reflecting the implementation of the Retail Distribution Review in 2013.

By contrast, unit trust fees rose, primarily in Asia, due to increased sales of equity funds in Hong Kong.

Other fee income declined in North America due to the expiry of the Transition Servicing Agreements and in Latin America following the sale of our operations in Panama in 2013 and the continued repositioning of the business in Mexico.

In addition, fee expenses were higher due to adverse adjustments to mortgage servicing rights valuations in North America, reflecting mortgage interest rate decreases in 2014 which compared with increases in 2013.

Reported net trading income of $6.8bn was $1.9bn lower, predominantly in Europe. The reduction in net trading income was partly driven by the significant items summarised in the table below.

Significant items and currency translation

	2014	2013
	$m	$m
Significant items		
Included within trading activities:	(332)	548
Debit valuation adjustment on derivative contracts	(332)	106
FX gains relating to sterling debt issued by HSBC Holdings		442
Included in other net trading income:	(539)	(346)
Ping An contingent forward sale contract[51]		(682)
Loss on early termination of cash flow hedges in the US run-off portfolio		(199)
Fair value movement on non-qualifying hedges	(541)	511
Acquisitions, disposals and dilutions	2	24
	(871)	202
Currency translation		(11)
Year ended 31 December	(871)	191

For footnote, see page 100a.

Excluding the significant items and currency translation tabulated above, net trading income from trading activities decreased by $0.6bn, notably in Markets within GB&M. This was predominantly driven by our Foreign Exchange business, which was affected by lower volatility and reduced client flows. In Equities, revenue decreased, as 2013 benefited from higher revaluation gains which more than offset a rise in 2014 in revenue from increased client flows and higher derivatives income.

In 2014, we revised our estimation methodology for valuing uncollateralised derivative portfolios by introducing the funding fair value adjustment (FFVA), resulting in a reduction in net trading income of $263m, primarily in Rates ($164m) and Credit ($97m). Excluding the FFVA, Credit was also affected by adverse movements

on credit spreads and a reduction in revenue in Legacy Credit. By contrast, Rates was affected by favourable market movements, notably in Asia, along with minimal fair value movements on our own credit spread on structured liabilities compared with adverse movements in 2013. These factors were partly offset by a fall in Rates in Europe.

Included within net trading income from trading activities, there were favourable foreign exchange movements on assets held as economic hedges of foreign currency debt designated at fair value, compared with adverse movements in 2013. These movements offset fair value movements on the foreign currency debt which are reported in Net income/(expense) from financial instruments designated at fair value .

HSBC HOLDINGS PLC

60b

Report of the Directors: Financial Review (continued)

In addition, net interest income from trading activities fell due to lower average balances, notably relating to reverse repo and repo agreements, in line with the change in the way GB&M manages these agreements. The net interest income from these activities is now recorded in Net interest income .

Net income/(expense) from financial instruments designated at fair value

The accounting policies for the designation of financial instruments at fair value and the treatment of the associated income and expenses are described in Note 2 on the Financial Statements.

The majority of the financial liabilities designated at fair value are fixed-rate long-term debt issues, the interest rate profile of which has been changed to floating through swaps as part of a documented interest rate management strategy. The movement in fair value of these long-term debt issues and the related hedges includes the effect of our credit spread changes and any ineffectiveness in the economic relationship between the related swaps and own debt. The size and direction of the changes in the credit spread on our debt and ineffectiveness, which are recognised in the income statement, can be volatile from year to year, but do not alter the cash flows expected as part of the documented interest rate management strategy. As a consequence, fair value movements arising from changes in our own credit spread on long-term debt and other fair value movements on the debt and related derivatives are not regarded internally as part of managed performance and are therefore not allocated to global businesses, but are reported in Other . Credit spread movements on own debt designated at fair value are excluded from adjusted results, and related fair value movements are not included in the calculation of regulatory capital.

Reported net income from financial instruments designated at fair value was $2.5bn in 2014, compared with $768m in 2013. The former included favourable movements in the fair value of our own long-term debt of

$417m due to changes in credit spread, compared with adverse movements of $1.2bn in 2013. Excluding this significant item, net income from financial instruments designated at fair value increased by $42m.

Net income arising from financial assets held to meet liabilities under insurance and investment contracts of $2.3bn was $870m lower than in 2013. This was driven by weaker equity market performance in the UK and France, partly offset by improved equity market performance in Hong Kong and higher net income on the bonds portfolio in Brazil.

Investment gains or losses arising from equity markets result in a corresponding movement in liabilities to customers, reflecting the extent to which unit-linked policyholders, in particular, participate in the investment performance of the associated asset portfolio. Where these relate to assets held to back investment contracts, the corresponding movement in liabilities to customers is also recorded under Net income/(expense) from financial instruments designated at fair value . This is in contrast to gains or losses related to assets held to back insurance contracts or investment contracts

with discretionary participation features (DPF), where the corresponding movement in liabilities to customers is recorded under Net insurance claims and benefits paid and movement in liabilities to policyholders .

Other changes in fair value reflected a net favourable movement due to interest and exchange rate hedging ineffectiveness. This was partly offset by net adverse foreign exchange movements on foreign currency debt designated at fair value and issued as part of our overall funding strategy (offset from assets held as economic hedges in Net trading income).

Gains less losses from financial investments

Reported gains less losses from financial investments were $1.3bn, a decrease of $677m from 2013. The decrease primarily reflected the significant items summarised below.

Significant items and currency translation

	2014	2013
	$m	$m
Significant items		
Gain on sale of shareholding in Bank of Shanghai	428	
Impairment on our investment in Industrial Bank	(271)	
Net gain on completion of Ping An disposal[51]		1,235
Acquisitions, disposals and dilutions		5
	157	1,240
Currency translation		(10)
Year ended 31 December	157	1,230

For footnote, see page 100a.

Excluding the significant items and currency translation noted above, gains less losses from financial investments increased by $396m, primarily driven by higher net gains on the disposal of debt securities as we actively managed the Legacy Credit portfolio. In addition, we reported higher gains on sale of available-for-sale equity securities and lower impairments on available-for-sale equity securities

from improved market conditions and business performance of the underlying portfolio.

Table of Contents

Report of the Directors: Financial Review (continued)

Net insurance premium income

Reported net insurance premium income was broadly unchanged, with reductions in Europe and Latin America largely offset by higher premium income in Asia.

In Asia, premium income rose, primarily in Hong Kong, due to increased new business from deferred annuity, universal life and endowment contracts. This was partly offset by lower new business from unit-linked contracts.

In Europe, premium income decreased, mainly in the UK, reflecting lower sales following the withdrawal of external independent financial adviser distribution channels for

certain linked insurance contracts in the second half of 2013. This was partly offset by increases in France, mainly reflecting higher sales of investment contracts with DPF.

Net insurance premium income also fell in Latin America, primarily in Brazil, reflecting lower sales, in part due to changes in our distribution channel.

Other operating income

Reported other operating income of $1.1bn decreased by $1.5bn from 2013. This was largely due to the significant items summarised in the table below.

Significant items and currency translation

	2014	2013
	$m	$m
Significant items		
Included within gains/(losses) recognised on assets held for sale:	168	(772)
write-off of allocated goodwill relating to the GPB Monaco business		(279)
loss on sale of the non-real estate portfolio in the US		(271)

gain/(loss) on sale of several tranches of real estate secured accounts in the US	168	(123)
Household Insurance Group Holding company s disposal of its insurance manufacturing business[52]		(99)
Included within the remaining line items:	(41)	2,193
reclassification gain in respect of our holding in Industrial Bank Co., Limited following the issue of additional share capital to third parties[52]		1,089
HSBC Latin America Holdings UK Limited s disposal of HSBC Bank (Panama) S.A.[53]		1,107
HSBC Insurance (Asia-Pacific) Holdings Limited s disposal of its shareholding in Bao Viet Holdings[52]		104
loss on sale of an HFC Bank UK secured loan portfolio		(146)
acquisitions, disposals and dilutions	(41)	39
Currency translation		(18)
Year ended 31 December	127	1,403

For footnotes, see page 100a.

Excluding the significant items and currency translation tabulated above, other operating income decreased by $0.2bn compared with 2013. This was primarily from lower favourable movements in 2014 in present value of in-force (PVIF) long-term insurance business, and lower disposal and revaluation gains on investment properties, mainly in Hong Kong. The decrease was partly offset by gains reported in Legacy Credit in GB&M in the UK as we actively managed the portfolio.

Lower favourable movements in the PVIF long-term insurance business asset in 2014 were mainly due to the following factors:

a reduction in the value of new business, mainly in Brazil, due to higher interest rates and lower volumes; and

adverse assumption changes and experience variances in 2014 compared with favourable movements in 2013. This was mainly driven by falling interest rates in France and adverse actuarial assumption updates in Hong Kong, partly offset by the favourable effects of interest rate fluctuations, mainly in Asia and Brazil.

Net insurance claims and benefits paid and movement in liabilities to policyholders

Reported net insurance claims and benefits paid and movement in liabilities to policyholders were $347m lower than in 2013.

Movements in claims resulting from investment returns on the assets held to support policyholder contracts, where

the policyholder bears investment risk, decreased. This reflected weaker equity market performance in the UK and France, partly offset by improved equity market performance in Hong Kong and higher net income on the bonds portfolio in Brazil. The gains or losses recognised on the financial assets designated at fair value held to support these insurance and investment contract liabilities are reported in Net income from financial instruments designated at fair value .

Loan impairment charges and other credit risk provisions

Reductions in claims resulting from a decrease in new business written in Europe and Latin America were mostly offset by increases in Hong Kong as explained under Net earned insurance premiums .

Reported loan impairment charges and other credit risk provisions (LICs) of $3.9bn were $2.0bn lower than in 2013, primarily in North America, Europe and Latin America. The percentage of impairment charges to average gross loans and advances fell to 0.4% at 31 December 2014 from 0.7% at 31 December 2013.

Individually assessed charges decreased by $540m, primarily in Europe, partly offset by an increase in Asia and the Middle East and North Africa. In Europe, they were lower, mainly in CMB in the UK, reflecting improved quality in the portfolio and the economic environment, as well as in GB&M. In Asia, the increase was on a small number of exposures in Hong Kong and in mainland China, primarily in CMB and GB&M, while in the Middle East and North Africa we recorded net charges compared with net releases in 2013, mainly due to lower releases on a particular UAE-related exposure in GB&M.

Report of the Directors: Financial Review (continued)

Collectively assessed charges declined by $1.5bn, primarily due to decreases in North America and Latin America. In North America, the reduction was mainly in RBWM, reflecting reduced levels of delinquency and new impaired loans in the CML portfolio. A decrease in lending balances from continued portfolio run-off and loan sales was partly offset by an increase relating to less favourable market value adjustments of underlying properties as improvements in housing market conditions were less pronounced in 2014 than in 2013. In Latin America, the reduction in collectively assessed charges was driven by the adverse effect of changes to the impairment model and assumption revisions for restructured loan portfolios in Brazil which occurred in 2013, both in RBWM and CMB. Charges were also lower due to reduced Business Banking

provisions reflecting improved delinquency rates and the effect of the disposal of non-strategic businesses.

Net releases of credit risk provisions of $204m were broadly unchanged, as higher releases on available-for-sale ABSs in GB&M in Europe were offset by provisions in Latin America and North America. In Latin America, a provision was made in Brazil against a guarantee in GB&M. In North America we recorded provisions in Canada, compared with releases in 2013, and in the US reflecting a deterioration in the underlying asset values of a specific GB&M exposure.

Operating expenses

Reported operating expenses of $41bn were $2.7bn or 7% higher than in 2013. The increase in operating expenses was partly driven by the significant items noted in the table below, including settlements and provisions in connection with foreign exchange investigations, of which $809m was recorded in the fourth quarter of 2014 (see Note 40 on the Financial Statements for further details).

Significant items and currency translation

	2014	2013
	$m	$m
Significant items		
		(430)

Accounting gain arising from change in basis of delivering ill-health benefits in the UK		
Charge in relation to settlement agreement with Federal Housing Finance Authority	550	
Madoff-related litigation costs		298
Settlements and provisions in connection with foreign exchange investigations	1,187	
Regulatory provisions in GPB	65	352
UK customer redress programmes	1,275	1,235
US customer remediation provision relating to CRS		100
Restructuring and other related costs	278	483
Acquisitions, disposals and dilutions	40	488
	3,395	2,526
Currency translation		348
Year ended 31 December	3,395	2,874

Excluding significant items and currency translation, operating expenses were $2.2bn or 6% higher than in 2013.

Regulatory Programmes and Compliance costs increased as a result of the continued focus on Global Standards and the broader regulatory reform programme being implemented by the industry to build the necessary infrastructure to meet today s enhanced compliance standards, along with implementation costs to meet obligations such as stress tests in different jurisdictions and structural reform.

During 2014, we accelerated the deployment of Global Standards throughout the Group. Our global businesses and Compliance function have developed operating procedures to meet our new global AML and sanctions policies and these are now being implemented in every country, encompassing local requirements as necessary. During 2014, we invested in developing our financial crime compliance expertise and building strategic infrastructure solutions for customer due diligence, transaction monitoring and sanctions screening.

We continued to invest in strategic initiatives in support of organically growing our business, primarily in CMB in both Asia, in Business Banking and Global Trade and Receivables Finance and, to a lesser extent, in Europe. We also increased expenditure on marketing and advertising to

support revenue generating initiatives, primarily in RBWM s core propositions of Premier and Advance and personal lending products.

The increase in costs also reflected:

- inflationary pressures, including wage inflation, primarily in Asia and Latin America;

- the UK bank levy charge, which increased to $1.1bn in 2014 from $904m in 2013, mainly due to an increase in the rate of the levy. Both years also included adjustments relating to the previous year s bank levy charge (2014: $45m favourable adjustment; 2013: $12m adverse adjustment); and

- the Financial Services Compensation Scheme levy in the UK, as a result of the timing of the recognition.

During 2014, we generated further sustainable savings of $1.3bn, primarily driven by re-engineering our back office processes, which in part offset the investments and inflation noted above.

The average number of FTEs was broadly unchanged as reductions through sustainable savings programmes were broadly offset by the initiatives related to Regulatory Programmes and Compliance and business growth.

Table of Contents

Report of the Directors: Financial Review (continued)

Share of profit in associates and joint ventures

HSBC s reported share of profit in associates and joint ventures was $2.5bn, an increase of $207m or 9%, in part due to the non-recurrence of an impairment charge of $106m on our banking associate in Vietnam in 2013. Excluding this, our share of profit in associates and joint ventures increased, driven by higher contributions from BoCom and The Saudi British Bank.

Our share of profit from BoCom rose as a result of balance sheet growth and increased trading income, partly offset by higher operating expenses and a rise in loan impairment charges.

At 31 December 2014, we performed an impairment review of our investment in BoCom and concluded that it was not impaired, based on our value in use calculation (see Note 19 on the Financial Statements for further details).

In future periods, the value in use may increase or decrease depending on the effect of changes to model inputs. It is expected that the carrying amount will increase in 2015 due to retained profits earned by BoCom. At the point where the carrying amount exceeds the value in use, HSBC would continue to recognise its share of BoCom s profit or loss, but the carrying amount would be reduced to equal

the value in use, with a corresponding reduction in income, unless the market value has increased to a level above the carrying amount.

Profits from The Saudi British Bank rose, reflecting strong balance sheet growth.

The effective tax rate for 2014 of 21.3% was lower than the blended UK corporation tax rate for the year of 21.5%.

Tax expense

The effective tax rate in the year reflected the following recurring benefits: tax exempt income from government bonds and equities held by a number of Group entities and recognition of the Group s share of post-tax profits of associates and joint ventures within our pre-tax income. In addition, the effective tax rate reflected a current tax credit for prior periods. This was partly offset by non-tax deductible settlements and provisions in connection with foreign exchange investigations.

The tax expense decreased by $0.8bn to $4.0bn for 2014, primarily due to a reduction in accounting profits and the benefit of the current tax credit for previous years.

In 2014, the tax borne and paid by the Group to the relevant tax authorities, including tax on profits, bank levy and employer-related taxes, was $7.9bn (2013: $8.6bn). The amount differs from the tax charge reported in the income statement due to indirect taxes such as VAT and the bank levy which are included in pre-tax profit, and the timing of payments.

We also play a major role as tax collector for governments in the jurisdictions in which we operate. Such taxes include employee-related taxes and taxes withheld from payments to deposit holders. In 2014, we collected $9.1bn (2013: $8.8bn).

Table of Contents

Consolidated balance sheet

Five-year summary consolidated balance sheet

	2015	2014	2013	2012	2011
	$m	$m	$m	$m	$m
ASSETS					
Cash and balances at central banks	**98,934**	129,957	166,599	141,532	129,902
Trading assets	**224,837**	304,193	303,192	408,811	330,451
Financial assets designated at fair value	**23,852**	29,037	38,430	33,582	30,856
Derivatives	**288,476**	345,008	282,265	357,450	346,379
Loans and advances to banks	**90,401**	112,149	120,046	117,085	139,078
Loans and advances to customers[17]	**924,454**	974,660	992,089	962,972	899,010
Reverse repurchase agreements non-trading	**146,255**	161,713	179,690	70,112	83,328
Financial investments	**428,955**	415,467	425,925	421,101	400,044
Assets held for sale	**43,900**	7,647	4,050	19,269	39,558
Other assets	**139,592**	154,308	159,032	160,624	156,973
Total assets at 31 December	**2,409,656**	2,634,139	2,671,318	2,692,538	2,555,579
LIABILITIES AND EQUITY					
Liabilities					
Deposits by banks	**54,371**	77,426	86,507	95,480	95,205
Customer accounts	**1,289,586**	1,350,642	1,361,297	1,311,396	1,223,140
Repurchase agreements non-trading	**80,400**	107,432	164,220	40,567	48,402
Trading liabilities	**141,614**	190,572	207,025	304,563	265,192
Financial liabilities designated at fair value	**66,408**	76,153	89,084	87,720	85,724
Derivatives	**281,071**	340,669	274,284	358,886	345,380
Debt securities in issue	**88,949**	95,947	104,080	119,461	131,013
Liabilities under insurance contracts	**69,938**	73,861	74,181	68,195	61,259

Liabilities of disposal groups held for sale	**36,840**	6,934	2,804	5,018	22,200
Other liabilities	**102,961**	114,525	117,377	118,123	111,971
Total liabilities at 31 December	**2,212,138**	2,434,161	2,480,859	2,509,409	2,389,486
Equity					
Total shareholders equity	**188,460**	190,447	181,871	175,242	158,725
Non-controlling interests	**9,058**	9,531	8,588	7,887	7,368
Total equity at 31 December	**197,518**	199,978	190,459	183,129	166,093
Total liabilities and equity at 31 December	**2,409,656**	2,634,139	2,671,318	2,692,538	2,555,579

Five-year selected financial information

	2015	2014	2013	2012	2011
	$m	$m	$m	$m	$m
Called up share capital	**9,842**	9,609	9,415	9,238	8,934
Capital resources[18,19]	**189,833**	190,730	194,009	180,806	170,334
Undated subordinated loan capital	**2,368**	2,773	2,777	2,778	2,779
Preferred securities and dated subordinated loan capital[20]	**42,844**	47,208	48,114	48,260	49,438
Risk-weighted assets[18]	**1,102,995**	1,219,765	1,092,653	1,123,943	1,209,514
Financial statistics					
Loans and advances to customers as a percentage of customer accounts	**71.7**	72.2	72.9	73.4	73.5
Average total shareholders equity to average total assets	**7.31**	7.01	6.55	6.16	5.64
Net asset value per ordinary share at year-end[21] ($)	**8.73**	9.28	9.27	9.09	8.48
Number of $0.50 ordinary shares in issue (millions)	**19,685**	19,218	18,830	18,476	17,868
Closing foreign exchange translation rates to $:					
$1: £	**0.675**	0.642	0.605	0.619	0.646
$1:	**0.919**	0.823	0.726	0.758	0.773

For footnotes, see page 99.

A more detailed consolidated balance sheet is contained in the Financial Statements on page 339.

Report of the Directors: Financial summary (continued)

Consolidated balance sheet

Combined view of customer lending and customer deposits

	2015	2014
	$m	$m
Combined customer lending		
Loans and advances to customers	**924,454**	974,660
Loans and advances to customers reported in Assets held for sale	**19,021**	577
Brazil[22]	**17,001**	
other	**2,020**	577
At 31 December	**943,475**	975,237
Combined customer deposits		
Customer accounts	**1,289,586**	1,350,642
Customer accounts reported in Liabilities of disposal groups held for sale	**16,682**	145
Brazil[22]	**15,094**	
other	**1,588**	145
At 31 December	**1,306,268**	1,350,787

For footnote, see page 99.

Movement in 2015

Total reported assets of $2.4 trillion were 9% lower than at 31 December 2014 on a reported basis and 4% lower on a constant currency basis. One of the main drivers for this reduction was a fall in trading assets which reflects our ongoing focus on the efficient use of the balance sheet in the context of new prudential regulations.

Our ratio of customer advances to customer accounts was 71.7%. Both customer loans and customer accounts fell on a reported basis with these movements including:

- adverse currency translation movements of $52bn and $65bn, respectively;
- the transfer to Assets held for sale and Liabilities of disposal groups held for sale of balances relating to the planned disposal of our operations in Brazil of $17bn and $15bn, respectively; and
- a $13bn reduction in corporate overdraft and current account balances relating to a small number of clients in our PCM business in the UK who settled their overdraft and deposit balances on a net basis, with customers increasing the frequency with which they settled their positions.

Excluding these movements, customer lending grew by $32bn (or 4%) driven by Europe, and customer accounts grew by $32bn (or 3%), notably in Asia.

Assets

Cash and balances at central banks fell by $31bn, primarily in North America as we managed the balance of our liquid asset portfolio to maximise investment returns.

Trading assets decreased by $79bn, of which $16bn was driven by adverse currency translation, as we continued our reduction in trading inventory in the context of the prudential regulation. This resulted in reductions in holdings of debt securities by the Rates business, notably in Europe and North America. In addition, lower settlement balances also reflected our actions to improve efficiency of balance sheet usage.

Derivative assets decreased by $57bn or 16%, driven by valuation movements in interest rate contracts, reflecting shifts in major yield curves, notably in France and the UK.

Loans and advances to customers decreased by $50bn on a reported basis, driven by Latin America and Europe. This included the following items:

- adverse currency translation movements of $52bn;
- reclassification of $17bn to Assets held for sale relating to our operations in Brazil; and
- a $13bn reduction in corporate overdraft balances in Europe, with a corresponding fall in corporate customer accounts.

Excluding these factors, customer lending balances grew by $32bn, largely from growth in Europe of $20bn, North America of $5bn and Asia of $4bn.

In Europe, the growth was from increased term lending to CMB customers, notably in the UK and Germany and higher balances in GB&M. In North America, the growth in balances was driven by increased term lending to corporate and commercial customers in CMB and GB&M, partly offset by a decline in RBWM from the continued reduction in the US run-off portfolio and the transfer to Assets held for sale of US first lien mortgage balances. In Asia, balances rose largely from residential mortgage lending in Hong Kong and mainland China. CMB lending balances also rose, although GB&M lending fell. Both of these businesses were affected by weakening demand for trade lending, while GB&M s reduction also reflected our active management of overall client returns.

Liabilities

Repurchase agreements decreased by $27bn or 25%, driven by falls in Europe, notably in the UK, and in North America. We continued to closely manage these balances, as we reassessed the overall returns on these activities in light of the evolving regulatory landscape and overall client returns.

Customer accounts decreased by $61bn and included the following items:

- adverse currency translation movements of $65bn;
- reclassification of over $15bn to Liabilities of disposal groups held for sale relating to our operations in Brazil; and
- a $13bn reduction in corporate current account balances, in line with the fall in corporate overdraft positions.

Excluding these factors, customer accounts grew by $32bn, notably in Asia in the first half of the year, reflecting growth in RBWM from increased savings balances by new and existing Premier customers, together with a rise in our PCM business in CMB.

Balances in Europe were broadly unchanged. Growth in our PCM business in CMB and a rise in RBWM balances reflecting customers continued preference for holding balances in current and savings accounts were broadly offset by a fall in GB&M.

Trading liabilities fell by $49bn, mainly in North America and Europe reflecting the reduction in trading assets and our focus on optimising the funding of trading assets.

The decrease in *derivative liabilities* was in line with that of derivative assets as the underlying risk was broadly matched.

Equity

Total shareholders equity fell by $2.0bn or 1%. The effects of profits generated in the year and the issue of new contingent convertible securities were more than offset by the combined effect of dividends paid and an increase in accumulated foreign exchange losses, which reflected the marked appreciation in the US dollar against a number of currencies, notably sterling and the euro. We recorded fair value gains in our available-for-sale reserve relating to our equity interest in Visa Europe of $432m. These were more than offset by fair value gains transferred to the income statement and fair value losses on debt securities during the year. The gains on Visa Europe were assessed against the expected consideration to be received from the proposed sale to Visa Inc. This transaction is expected to complete in 2016, at which point we will transfer the fair value gains to the income statement.

Risk-weighted assets

Risk-weighted assets (RWA s) totalled $1,103bn at 31 December 2015, a decrease of $117bn during 2015. After foreign currency translation differences, RWAs reduced by $65bn in 2015, driven by targeted RWA initiatives of $124bn, partly offset by business growth of $35bn, and from growth in our associates of $14bn. The RWA initiatives included:

- the accelerated sell-down of our consumer mortgage portfolio in the US and the GB&M legacy book, together contributing $30bn to the reduction; and
- exposure reductions, process improvements and refined calculations, which reduced RWAs by $93bn, 61% of which were in GB&M.

The business growth of $35bn was from higher term lending to corporate customers in CMB and from higher general lending to corporates in GB&M. There was an increase of $14bn in our associates, BoCom and The Saudi British Bank.

Customer accounts by country

	2015	2014
	$m	$m
Europe	**497,876**	545,959
UK	**404,084**	439,313
France[23]	**35,635**	40,750
Germany	**13,873**	15,757
Switzerland	**10,448**	11,058
other	**33,836**	39,081
Asia	**598,620**	577,491
Hong Kong	**421,538**	389,094
Australia	**17,703**	19,312
India	**11,795**	11,678
Indonesia	**5,366**	5,788
Mainland China	**46,177**	46,588
Malaysia	**14,114**	16,292
Singapore	**41,307**	43,731
Taiwan	**11,812**	14,901
other	**28,808**	30,107
Middle East and North Africa (excluding Saudi Arabia)	**36,468**	39,720
Egypt	**6,602**	7,663
United Arab Emirates	**18,281**	19,771
other	**11,585**	12,286
North America	**135,152**	138,884
US	**86,322**	84,894
Canada	**39,727**	43,871
other	**9,103**	10,119
Latin America	**21,470**	48,588
Mexico	**15,798**	18,360
other	**5,672**	30,228
included in other: Brazil[22]		23,204
At 31 December	**1,289,586**	1,350,642

For footnotes, see page 99.

Table of Contents

Report of the Directors: Financial Review (continued)

Average balance sheet

Average balance sheet and net interest income

Average balances and related interest are shown for the domestic operations of our principal commercial banks by geographical region. Other operations comprise the operations of our principal commercial banking and consumer finance entities outside their domestic markets and all other banking operations, including investment banking balances and transactions.

Average balances are based on daily averages for the principal areas of our banking activities with monthly or less frequent averages used elsewhere. Balances and transactions with fellow subsidiaries are reported gross in the principal commercial banking and consumer finance

entities and the elimination entries are included within Other operations .

Net interest margin numbers are calculated by dividing net interest income as reported in the income statement by the average interest-earning assets from which interest income is reported within the Net interest income line of the income statement. Total interest-earning assets include loans where the carrying amount has been adjusted as a result of impairment allowances. In accordance with IFRSs, we recognise interest income on assets after the carrying amount has been adjusted as a result of impairment. Fee income which forms an integral part of the effective interest rate of a financial instrument is recognised as an adjustment to the effective interest rate and recorded in Interest income .

Assets

	2015			2014			2013	
	Average balance $m	**Interest income $m**	**Yield %**	Average balance $m	Interest income $m	Yield %	Average balance $m	Inte inc

assets measured at (itemised below)	**1,726,949**	**47,189**	**2.73**	1,786,536	50,955	2.85	1,669,368	51.
and financial assets ir value[54,55]	**195,285**	**4,626**	**2.37**	238,958	5,596	2.34	354,817	5.
owances	**(10,606)**			(14,015)			(15,954)	
rning assets	**682,143**			668,564			683,785	
l interest income	**2,593,771**	**51,815**	**2.00**	2,680,043	56,551	2.11	2,692,016	56.
on all interest-earning			**2.70**			2.79		
ds and loans and nks								
HSBC Bank	**79,101**	**827**	**1.05**	96,638	997	1.03	89,921	
HSBC Private Banking Holdings (Suisse)	**11,498**	**4**	**0.03**	9,704	10	0.10	15,400	
HSBC France	**5,242**	**40**	**0.76**	7,055	66	0.94	10,603	
Hang Seng Bank	**14,379**	**210**	**1.46**	15,374	279	1.81	16,496	
The Hongkong and Shanghai Banking Corporation	**55,951**	**536**	**0.96**	57,141	822	1.44	53,372	
HSBC Bank Malaysia	**3,994**	**121**	**3.03**	5,060	158	3.12	5,487	
HSBC Bank Middle East	**5,038**	**30**	**0.60**	4,678	29	0.62	5,018	
HSBC Bank USA	**35,271**	**134**	**0.38**	28,148	105	0.37	24,907	
HSBC Bank Canada	**767**	**2**	**0.26**	606	4	0.66	425	
HSBC Mexico	**2,463**	**76**	**3.09**	2,675	86	3.21	2,846	
Brazilian operations	**1,717**	**193**	**11.24**	5,416	498	9.19	5,579	
HSBC Bank Argentina	**1,050**	**4**	**0.38**	1,083	12	1.11	1,199	
s	**5,453**	**100**	**1.83**	3,570	2	0.06	5,124	
	221,924	**2,277**	**1.03**	237,148	3,068	1.29	236,377	2.

Table of Contents

Report of the Directors: Financial Review (continued)

Assets *(continued)*

		2015 Average balance $m	2015 Interest income $m	2015 Yield %	2014 Average balance $m	2014 Interest income $m	2014 Yield %	2013 Average balance $m	2013 Interest income $m	2013 Yield %
Loans and advances to customers										
Europe	HSBC Bank	**291,311**	**9,916**	**3.40**	302,817	10,423	3.44	292,200	10,631	3.64
	HSBC Private Banking Holdings (Suisse)	**12,006**	**136**	**1.13**	13,026	159	1.22	15,235	194	1.27
	HSBC France	**41,257**	**1,252**	**3.03**	43,736	1,626	3.72	47,404	1,656	3.49
	HSBC Finance							173	10	5.78
Asia	Hang Seng Bank	**86,149**	**2,579**	**2.99**	79,586	2,410	3.03	72,537	2,179	3.00
	The Hongkong and Shanghai Banking Corporation	**261,705**	**8,082**	**3.09**	263,732	8,517	3.23	237,915	8,022	3.37
	HSBC Bank Malaysia	**12,517**	**589**	**4.71**	13,548	672	4.96	13,928	683	4.90
MENA	HSBC Bank Middle East	**27,240**	**1,041**	**3.82**	26,618	1,133	4.26	25,537	1,124	4.40
North America	HSBC Bank USA	**74,013**	**1,981**	**2.68**	63,770	1,791	2.81	56,538	1,776	3.14

	HSBC Finance	**21,529**	**1,705**	**7.92**	26,446	2,171	8.21	34,146	3,064	8.97
	HSBC Bank Canada	**33,280**	**1,086**	**3.26**	37,472	1,371	3.66	39,199	1,431	3.65
Latin America	HSBC Mexico	**14,304**	**1,319**	**9.22**	15,770	1,542	9.78	15,335	1,658	10.81
	Brazilian operations	**10,388**	**1,915**	**18.43**	27,275	4,579	16.79	25,688	4,604	17.92
	HSBC Bank Argentina	**3,381**	**880**	**26.03**	3,078	798	25.93	3,615	799	22.10
Other operations		**20,627**	**623**	**3.02**	14,437	237	1.64	17,872	698	3.91
		909,707	**33,104**	**3.64**	931,311	37,429	4.02	897,322	38,529	4.29
Reverse repurchase agreements – non-trading										
Europe	HSBC Bank	**53,036**	**354**	**0.67**	66,360	450	0.68	28,131	113	0.40
	HSBC France	**12,986**	**7**	**0.05**	29,703	62	0.21	45,929	48	0.10
Asia	The Hongkong and Shanghai Banking Corporation	**26,714**	**273**	**1.02**	23,562	333	1.41	11,722	272	2.32
	HSBC Bank Malaysia	**1,001**	**32**	**3.20**	991	31	3.13	378	11	2.91
MENA	HSBC Bank Middle East	**272**	**2**	**0.74**	18	2	11.11	620	7	1.13
North America	HSBC Bank USA	**4,589**	**23**	**0.50**	1,196	10	0.84	1,837	13	0.71
	HSBC Finance									
	HSBC Bank Canada	**5,814**	**40**	**0.69**	7,169	84	1.17	9,196	93	1.01
Latin America	HSBC Mexico	**877**	**27**	**3.08**	90	3	3.33	133	5	3.76
	Brazilian operations	**3,248**	**421**	**12.96**	7,241	753	10.40	5,541	404	7.29
	HSBC Bank Argentina	**42**	**7**	**16.67**	88	10	11.36	138	13	9.42
Other operations		**53,729**	**115**	**0.21**	61,855	62	0.10	10,699	16	0.15
		162,308	**1,301**	**0.80**	198,273	1,800	0.91	114,324	995	0.87
Financial investments										
Europe	HSBC Bank	**73,043**	**753**	**1.03**	100,609	867	0.86	88,406	1,223	1.38
	HSBC Private Banking Holdings (Suisse)	**7,479**	**75**	**1.00**	10,890	114	1.05	13,509	183	1.35
		13,608	**17**	**0.12**	12,685	113	0.89	13,733	94	0.68

	HSBC France									
Asia	Hang Seng Bank	**39,891**	**647**	**1.62**	33,246	655	1.97	31,502	601	1.91
	The Hongkong and Shanghai Banking Corporation	**128,922**	**1,909**	**1.48**	118,096	2,109	1.79	104,740	1,781	1.70
	HSBC Bank Malaysia	**2,864**	**104**	**3.63**	2,749	94	3.42	2,197	72	3.28
MENA	HSBC Bank Middle East	**8,186**	**70**	**0.86**	10,515	104	0.99	11,838	113	0.95
North America	HSBC Bank USA	**49,268**	**893**	**1.81**	47,963	774	1.61	56,302	884	1.57
	HSBC Finance									
	HSBC Bank Canada	**17,486**	**199**	**1.14**	17,970	246	1.37	20,364	279	1.37
Latin America	HSBC Mexico	**6,301**	**286**	**4.54**	9,914	409	4.13	7,782	351	4.51
	Brazilian operations	**3,520**	**515**	**14.63**	8,350	1,003	12.01	7,404	740	9.99
	HSBC Bank Argentina	**650**	**149**	**22.92**	518	130	25.10	451	71	15.74
Other operations		**44,895**	**1,891**	**4.21**	26,311	1,705	6.48	35,081	1,610	4.59
		396,113	**7,508**	**1.90**	399,816	8,323	2.08	393,309	8,002	2.03

Table of Contents

Report of the Directors: Financial Review (continued)

Assets *(continued)*

		2015 Average balance $m	2015 Interest income $m	2015 Yield %	2014 Average balance $m	2014 Interest income $m	2014 Yield %	2013 Average balance $m	2013 Interest income $m	2013 Yi
er rest-earning assets										
ope	HSBC Bank	**61,355**	**100**	**0.16**	85,604	25	0.03	73,607	64	0
	HSBC Private Banking Holdings (Suisse)	**2,200**	**24**	**1.09**	5,220	32	0.61	7,441	69	0
	HSBC France	**2,818**	**61**	**2.16**	6,016	97	1.61	14,294	111	0
	Hang Seng Bank	**3,551**	**14**	**0.39**	2,504	14	0.56	2,088	14	0
	The Hongkong and Shanghai Banking Corporation	**82,422**	**451**	**0.55**	86,361	583	0.68	62,369	498	0
	HSBC Bank Malaysia	**92**			152			456	2	0
NA	HSBC Bank Middle East	**1,263**	**37**	**2.93**	2,221	32	1.44	1,888	87	4
h erica	HSBC Bank USA	**4,012**	**132**	**3.29**	6,936	123	1.77	6,386	103	1
	HSBC Finance	**5,538**	**7**	**0.13**	6,081	5	0.08	6,821	19	0

	HSBC Bank Canada	**249**	**5**	**2.01**	292	5	1.71	1,691	42	2
n erica	HSBC Mexico	**517**	**1**	**0.19**	324			265	6	2
	Brazilian operations	**20,972**	**2,744**	**13.08**	1,215	136	11.19	2,394	107	4
	HSBC Bank Argentina	**69**			61			93		
er operations		**(148,161)**	**(577)**		(182,999)	(717)		(151,757)	(307)	
		36,897	**2,999**	**8.13**	19,988	335	1.68	28,036	815	2
al interest-earning ts										
ope	HSBC Bank	**557,846**	**11,950**	**2.14**	652,028	12,762	1.96	572,265	12,911	2
	HSBC Private Banking Holdings (Suisse)	**33,183**	**239**	**0.72**	38,840	315	0.81	51,585	456	0
	HSBC France	**75,911**	**1,377**	**1.81**	99,195	1,964	1.98	131,963	2,002	1
	Hang Seng Bank	**143,970**	**3,450**	**2.40**	130,710	3,358	2.57	122,623	3,045	2
	The Hongkong and Shanghai Banking Corporation	**555,714**	**11,251**	**2.02**	548,892	12,364	2.25	470,118	11,382	2
	HSBC Bank Malaysia	**20,468**	**846**	**4.13**	22,500	955	4.24	22,446	930	4
NA	HSBC Bank Middle East	**41,999**	**1,180**	**2.81**	44,050	1,300	2.95	44,901	1,358	3
h erica	HSBC Bank USA	**167,153**	**3,163**	**1.89**	148,013	2,803	1.89	145,970	2,860	1
	HSBC Finance	**27,067**	**1,712**	**6.33**	32,527	2,176	6.69	40,967	3,083	7
	HSBC Bank Canada	**57,596**	**1,332**	**2.31**	63,509	1,710	2.69	70,875	1,848	2
n erica	HSBC Mexico	**24,462**	**1,709**	**6.99**	28,773	2,040	7.09	26,361	2,129	8
	Brazilian operations	**39,845**	**5,788**	**14.53**	49,497	6,969	14.08	46,606	6,243	13
	HSBC Bank Argentina	**5,192**	**1,040**	**20.03**	4,828	950	19.68	5,496	901	16
er operations		**(23,457)**	**2,152**		(76,826)	1,289		(82,808)	2,044	
		1,726,949	**47,189**	**2.73**	1,786,536	50,955	2.85	1,669,368	51,192	3

footnotes, see page 100a.

ity and liabilities

	2015			2014			2013		
	Average balance $m	**Interest expense $m**	**Cost %**	Average balance $m	Interest expense $m	Cost %	Average balance $m	Interest expense $m	C
mary									
rest-bearing lities measured at rtised cost nised below)	**1,465,635**	**14,658**	**1.00**	1,546,633	16,250	1.05	1,426,180	15,653	1
ing liabilities and ncial liabilities gnated at fair value luding own debt ed)	**151,294**	**2,071**	**1.37**	178,518	2,856	1.60	301,353	3,027	1
-interest bearing ent accounts	**190,914**			185,990			184,370		
l equity and other interest bearing lities	**785,928**			768,902			780,113		
l equity and lities	**2,593,771**	**16,729**	**0.64**	2,680,043	19,106	0.71	2,692,016	18,680	0
rage cost on all rest-bearing lities			**1.03**			1.11			1

Table of Contents

Report of the Directors: Financial Review (continued)

Equity and liabilities (continued)

		2015			2014			2013		
		Average balance $m	**Interest expense $m**	**Cost %**	Average balance $m	Interest expense $m	Cost %	Average balance $m	Interest expense $m	Cos %
eposits by banks[56]										
urope	HSBC Bank	**16,333**	**75**	**0.46**	20,508	139	0.68	21,230	165	0.78
	HSBC Private Banking Holdings (Suisse)	**400**	**1**	**0.25**	354	1	0.28	351	1	0.28
	HSBC France	**7,323**	**41**	**0.56**	6,191	53	0.86	7,747	69	0.89
sia	Hang Seng Bank	**1,098**	**19**	**1.73**	960	9	0.94	1,095	15	1.37
	The Hongkong and Shanghai Banking Corporation	**19,426**	**80**	**0.41**	19,589	79	0.40	15,663	90	0.57
	HSBC Bank Malaysia	**974**	**26**	**2.67**	1,095	26	2.37	864	20	2.31
ENA	HSBC Bank Middle East	**737**	**3**	**0.41**	982	3	0.31	1,471	3	0.20
orth merica	HSBC Bank USA	**5,503**	**17**	**0.31**	6,436	12	0.19	8,131	16	0.20
	HSBC Bank Canada	**319**	**1**	**0.31**	371	1	0.27	607	2	0.33
atin	HSBC	**1,506**	**55**	**3.65**	2,078	73	3.51	1,018	46	4.52

merica	Mexico									
	Brazilian operations	**1,024**	**49**	**4.79**	2,309	84	3.64	3,356	94	2.8
	HSBC Bank Argentina	**10**	**2**	**20.00**	10	1	10.00	20	2	10.0
ther operations		**1,210**	**9**	**0.74**	334			63	32	50.7
		55,863	**378**	**0.68**	61,217	481	0.79	61,616	555	0.9
nancial liabilities esignated at fair alue own debt sued[57]										
urope	HSBC Holdings	**18,816**	**263**	**1.40**	18,745	234	1.25	19,719	366	1.8
	HSBC Bank	**20,758**	**316**	**1.52**	27,762	421	1.52	28,969	443	1.5
	HSBC France	**8,472**	**31**	**0.37**	8,232	66	0.80	9,173	67	0.7
orth merica	HSBC Bank USA	**2,100**	**32**	**1.52**	2,032	33	1.62	1,933	35	1.8
	HSBC Finance	**5,169**	**47**	**0.91**	7,195	58	0.81	8,878	80	0.9
ther operations		**3,174**	**28**	**0.88**	2,408	25	1.04	3,661	(24)	(0.6
		58,489	**717**	**1.23**	66,374	837	1.26	72,333	967	1.3
ustomer accounts[58]										
urope	HSBC Bank	**364,503**	**2,051**	**0.56**	372,151	2,268	0.61	329,867	2,229	0.6
	HSBC Private Banking Holdings (Suisse)	**7,201**	**29**	**0.40**	8,165	31	0.38	16,414	70	0.4
	HSBC France	**15,900**	**116**	**0.73**	20,988	189	0.90	24,519	237	0.9
sia	Hang Seng Bank	**106,783**	**464**	**0.43**	98,794	472	0.48	91,778	360	0.3
	The Hongkong and Shanghai Banking Corporation	**394,313**	**2,446**	**0.62**	377,748	2,743	0.73	344,968	2,548	0.7
	HSBC Bank Malaysia	**11,865**	**264**	**2.23**	13,457	291	2.16	13,673	295	2.1
ENA	HSBC Bank Middle East	**14,360**	**53**	**0.37**	16,533	75	0.45	18,387	106	0.5
orth merica	HSBC Bank USA	**61,314**	**147**	**0.24**	57,015	78	0.14	56,411	104	0.1
	HSBC Bank Canada	**35,998**	**197**	**0.55**	40,682	319	0.78	41,905	330	0.7
atin merica	HSBC Mexico	**12,568**	**201**	**1.60**	15,050	300	1.99	15,316	383	2.5
		6,938	**830**	**11.96**	18,542	1,828	9.86	20,602	1,467	7.1

	Brazilian operations									
	HSBC Bank Argentina	**2,989**	**436**	**14.59**	2,758	373	13.52	3,318	343	10.34
ther operations		**41,169**	**167**	**0.41**	46,610	164	0.35	58,342	322	0.55
		1,075,901	**7,401**	**0.69**	1,088,493	9,131	0.84	1,035,500	8,794	0.85
epurchase greements on-trading										
urope	HSBC Bank	**31,782**	**119**	**0.37**	72,481	213	0.29	29,019	111	0.38
	HSBC Private Banking Holdings (Suisse)				74			67		0.14
	HSBC France	**8,965**	**2**	**0.02**	29,539	59	0.20	37,554	34	0.09
sia	Hang Seng Bank	**203**	**4**	**1.97**	11			6		4.24
	The Hongkong and Shanghai Banking Corporation	**3,022**	**70**	**2.32**	1,760	56	3.18	779	32	4.11
	HSBC Bank Malaysia	**43**	**1**	**2.33**	35	1	2.86	65	1	1.54
ENA	HSBC Bank Middle East				2			17	1	5.88
orth merica	HSBC Bank USA	**6,828**	**26**	**0.38**	11,485	20	0.17	9,269	12	0.13
	HSBC Bank Canada	**2,534**	**17**	**0.67**	2,167	25	1.15	2,996	30	1.00
atin merica	HSBC Mexico	**2,127**	**62**	**2.91**	4,748	152	3.20	1,842	90	4.89
	Brazilian operations	**334**	**6**	**1.80**	910	96	10.55	1,104	87	7.88
	HSBC Bank Argentina	**5**			3					
ther operations		**62,104**	**48**	**0.08**	67,490	30	0.04	11,692	7	0.06
		117,947	**355**	**0.30**	190,705	652	0.34	94,410	405	0.43

Table of Contents

Report of the Directors: Financial Review (continued)

Equity and liabilities (continued)

		2015 Average balance $m	**Interest expense $m**	**Cost %**	2014 Average balance $m	Interest expense $m	Cost %	2013 Average balance $m	Interest expense $m	C
t securities in e										
ope	HSBC Holdings	**16,230**	**904**	**5.57**	16,781	945	5.63	13,405	807	6
	HSBC Bank	**41,413**	**359**	**0.87**	56,949	589	1.03	64,528	768	1
	HSBC France	**12,379**	**40**	**0.32**	10,846	52	0.48	13,365	54	0
	Hang Seng Bank	**428**	**7**	**1.64**	1,155	8	0.69	1,393	12	0
	The Hongkong and Shanghai Banking Corporation	**5,520**	**123**	**2.23**	6,365	176	2.77	7,586	186	2
	HSBC Bank Malaysia	**385**	**17**	**4.42**	461	19	4.12	967	26	2
NA	HSBC Bank Middle East	**2,199**	**33**	**1.50**	2,262	45	1.99	3,057	64	2
h erica	HSBC Bank USA	**31,089**	**542**	**1.74**	15,935	414	2.60	14,012	415	2
	HSBC Finance	**8,961**	**407**	**4.54**	13,045	483	3.70	19,888	739	3
	HSBC Bank Canada	**8,718**	**211**	**2.42**	10,232	257	2.51	13,158	342	2
n erica	HSBC Mexico	**2,005**	**90**	**4.49**	1,061	57	5.37	813	41	5

	Brazilian operations	**4,795**	**782**	**16.31**	12,707	1,565	12.32	10,963	863	7
	HSBC Bank Argentina				1			52	10	19
er operations		**(5,083)**	**6**		(18,076)	(56)		(12,211)	(145)	
		129,039	**3,521**	**2.73**	129,724	4,554	3.51	150,976	4,182	2
er rest-bearing ilities										
ope	HSBC Bank	**77,583**	**471**	**0.61**	103,819	646	0.62	96,464	659	0
	HSBC Private Banking Holdings (Suisse)	**8,347**	**94**	**1.13**	7,903	23	0.29	7,869	13	0
	HSBC France	**10,481**	**112**	**1.07**	12,838	34	0.26	26,159	77	0
	HSBC Finance							23		
.	Hang Seng Bank	**1,899**	**35**	**1.84**	1,918	45	2.35	2,021	48	2
	The Hongkong and Shanghai Banking Corporation	**78,630**	**412**	**0.52**	91,468	635	0.69	60,056	490	0
	HSBC Bank Malaysia	**1,158**	**15**	**1.30**	1,342	14	1.04	1,339	8	0
NA	HSBC Bank Middle East	**2,429**	**46**	**1.89**	2,617	57	2.18	2,557	58	2
h erica	HSBC Bank USA	**16,250**	**81**	**0.50**	17,632	11	0.06	17,793	176	0
	HSBC Finance	**5,807**	**241**	**4.15**	5,817	258	4.44	5,265	220	4
	HSBC Bank Canada	**2,539**	**7**	**0.28**	599	4	0.67	3,007	25	0
n erica	HSBC Mexico	**837**	**16**	**1.91**	1,031	13	1.26	1,658	19	1
	Brazilian operations	**16,943**	**1,897**	**11.20**	3,927	357	9.09	3,497	189	5
	HSBC Bank Argentina	**22**	**4**	**18.18**	40	7	17.50	29	3	10
er operations		**(194,529)**	**(1,145)**		(240,831)	(1,509)		(216,392)	(1,235)	
		28,396	**2,286**	**8.05**	10,120	595	5.88	11,345	750	6
al interest-bearing ilities										
ope	HSBC Holdings	**35,046**	**1,167**	**3.33**	35,526	1,179	3.32	33,125	1,173	3
	HSBC Bank	**552,372**	**3,391**	**0.61**	653,670	4,276	0.65	570,077	4,375	0

	HSBC Private Banking Holdings (Suisse)	**15,948**	**124**	**0.78**	16,496	55	0.33	24,701	84	0
	HSBC France	**63,520**	**342**	**0.54**	88,634	453	0.51	118,517	538	0
	HSBC Finance							23		
.	Hang Seng Bank	**110,411**	**533**	**0.48**	102,927	535	0.52	96,293	435	0
	The Hongkong and Shanghai Banking Corporation	**500,911**	**3,131**	**0.63**	496,930	3,689	0.74	428,959	3,346	0
	HSBC Bank Malaysia	**14,425**	**323**	**2.24**	16,390	351	2.14	16,908	350	2
NA	HSBC Bank Middle East	**20,580**	**148**	**0.72**	22,994	190	0.83	25,489	232	0
h erica	HSBC Bank USA	**123,084**	**845**	**0.69**	110,535	568	0.51	107,549	758	0
	HSBC Finance	**19,937**	**695**	**3.49**	26,057	799	3.07	34,031	1,039	3
	HSBC Bank Canada	**50,108**	**433**	**0.86**	54,051	606	1.12	61,673	729	1
n erica	HSBC Mexico	**19,043**	**424**	**2.23**	23,968	595	2.48	20,647	579	2
	Brazilian operations	**30,034**	**3,564**	**11.87**	38,395	3,930	10.24	39,522	2,700	6
	HSBC Bank Argentina	**3,026**	**442**	**14.61**	2,812	381	13.55	3,419	358	10
er operations		**(92,810)**	**(904)**		(142,752)	(1,357)		(154,753)	(1,043)	
		1,465,635	**14,658**	**1.00**	1,546,633	16,250	1.05	1,426,180	15,653	1

For footnotes, see page 100a.

Table of Contents

Report of the Directors: Financial Review (continued)

Net interest margin[59]

		2015 %	2014 %	2013 %
Total		**1.88**	1.94	2.13
Europe	HSBC Bank	**1.53**	1.30	1.49
	HSBC Private Banking Holdings (Suisse)	**0.35**	0.67	0.72
	HSBC France	**1.36**	1.52	1.11
	HSBC Finance			5.78
Asia	Hang Seng Bank	**2.03**	2.16	2.13
	The Hongkong and Shanghai Banking Corporation	**1.46**	1.58	1.70
	HSBC Bank Malaysia	**2.56**	2.68	2.58
MENA	HSBC Bank Middle East	**2.46**	2.52	2.51
North America	HSBC Bank USA	**1.39**	1.51	1.44
	HSBC Finance	**3.76**	4.23	4.99
	HSBC Bank Canada	**1.56**	1.74	1.58
Latin America	HSBC Mexico	**5.25**	5.02	5.88
	Brazilian operations	**5.58**	6.14	7.60
	HSBC Bank Argentina	**11.52**	11.79	9.88

Distribution of average total assets

		2015 %	2014 %	2013 %
Europe	HSBC Bank	**37.0**	39.2	40.1
	HSBC Private Banking Holdings (Suisse)	**1.4**	1.5	2.0
	HSBC France	**7.4**	9.0	11.4
Asia	Hang Seng Bank	**6.5**	5.7	5.3
	The Hongkong and Shanghai Banking Corporation	**30.0**	26.3	25.0
	HSBC Bank Malaysia	**0.9**	0.9	1.0
MENA	HSBC Bank Middle East	**1.9**	1.9	2.0
North America	HSBC Bank USA	**9.6**	8.5	8.7

	HSBC Finance	**1.2**	1.3	1.7
	HSBC Bank Canada	**2.8**	3.0	3.2
Latin America	HSBC Mexico	**1.4**	1.5	1.5
	Brazilian operations	**2.0**	2.4	2.3
	HSBC Bank Argentina			
Other operations (including consolidation adjustments)		**(2.1)**	(1.2)	(4.2)
		100.0	100.0	100.0

For footnote, see page 100a.

Table of Contents

Report of the Directors: Financial Summary (continued)

Analysis of changes in net interest income and net interest expense

The following tables allocate changes in net interest income and net interest expense between volume and rate for 2015 compared with 2014, and for 2014 compared with 2013. We isolate volume variances and allocate any change arising from both volume and rate to rate.

Interest income

			Increase/(decrease) in 2015 compared with 2014			Increase/(decrease) in 2014 compared with 2013		
		2015	Volume	Rate	2014	Volume	Rate	2013
		$m	$m	$m	$m	$m	$m	$m
Short-term funds and loans and advances to banks								
Europe	HSBC Bank	**827**	**(181)**	**11**	997	66	51	880
	HSBC Private Banking Holdings (Suisse)	**4**	**2**	**(8)**	10	(4)	4	10
	HSBC France	**40**	**(17)**	**(9)**	66	(31)	4	93
Asia	Hang Seng Bank	**210**	**(18)**	**(51)**	279	(17)	45	251
	The Hongkong and Shanghai Banking Corporation	**536**	**(17)**	**(269)**	822	57	(44)	809
	HSBC Bank Malaysia	**121**	**(33)**	**(4)**	158	(13)	9	162
MENA	HSBC Bank Middle East	**30**	**2**	**(1)**	29	(2)	4	27
North America	HSBC Bank USA	**134**	**26**	**3**	105	11	10	84
		2	**1**	**(3)**	4	1		3

	HSBC Bank Canada							
Latin America	HSBC Mexico	**76**	**(7)**	**(3)**	86	(7)	(16)	109
	Brazilian operations	**193**	**(340)**	**35**	498	(11)	121	388
	HSBC Bank Argentina	**4**		**(8)**	12	(2)	(4)	18
Other operations		**100**	**1**	**97**	2	(5)	(10)	17
		2,277	**(196)**	**(595)**	3,068	9	208	2,851
Loans and advances to customers								
Europe	HSBC Bank	**9,916**	**(396)**	**(111)**	10,423	386	(594)	10,631
	HSBC Private Banking Holdings (Suisse)	**136**	**(12)**	**(11)**	159	(28)	(7)	194
	HSBC France	**1,252**	**(92)**	**(282)**	1,626	(128)	98	1,656
	HSBC Finance					(10)		10
Asia	Hang Seng Bank	**2,579**	**199**	**(30)**	2,410	211	20	2,179
	The Hongkong and Shanghai Banking Corporation	**8,082**	**(65)**	**(370)**	8,517	870	(375)	8,022
	HSBC Bank Malaysia	**589**	**(51)**	**(32)**	672	(19)	8	683
MENA	HSBC Bank Middle East	**1,041**	**26**	**(118)**	1,133	48	(39)	1,124
North America	HSBC Bank USA	**1,981**	**288**	**(98)**	1,791	227	(212)	1,776
	HSBC Finance	**1,705**	**(404)**	**(62)**	2,171	(691)	(202)	3,064
	HSBC Bank Canada	**1,086**	**(153)**	**(132)**	1,371	(63)	3	1,431
Latin America	HSBC Mexico	**1,319**	**(143)**	**(80)**	1,542	47	(163)	1,658
	Brazilian operations	**1,915**	**(2,835)**	**171**	4,579	284	(309)	4,604
	HSBC Bank Argentina	**880**	**79**	**3**	798	(119)	118	799
Other operations		**623**	**102**	**284**	237	(134)	(327)	698
		33,104	**(868)**	**(3,457)**	37,429	1,458	(2,558)	38,529
Reverse repurchase agreements non-trading								
Europe	HSBC Bank	**354**	**(91)**	**(5)**	450	153	184	113
	HSBC France	**7**	**(35)**	**(20)**	62	(16)	30	48
Asia	The Hongkong and Shanghai Banking Corporation	**273**	**44**	**(104)**	333	275	(214)	272
	HSBC Bank Malaysia	**32**		**1**	31	18	2	11

MENA	HSBC Bank Middle East	**2**	**28**	**(28)**	2	(7)	2	7
North America	HSBC Bank USA	**23**	**29**	**(16)**	10	(5)	2	13
	HSBC Finance							
	HSBC Bank Canada	**40**	**(16)**	**(28)**	84	(20)	11	93
Latin America	HSBC Mexico	**27**	**26**	**(2)**	3	(2)		5
	Brazilian operations	**421**	**(415)**	**83**	753	124	225	404
	HSBC Bank Argentina	**7**	**(5)**	**2**	10	(5)	2	13
Other operations		**115**	**(8)**	**61**	62	77	(31)	16
		1,301	**(327)**	**(172)**	1,800	730	75	995

Report of the Directors: Financial Summary (continued)

Interest income (continued)

		2015	Increase/(decrease) in 2015 compared with 2014		2014	Increase/(decrease) in 2014 compared with 2013		2013
			Volume	Rate		Volume	Rate	
		$m	$m	$m	$m	$m	$m	$m
Financial investments								
Europe	HSBC Bank	**753**	**(237)**	**123**	867	168	(524)	1,223
	HSBC Private Banking Holdings (Suisse)	**75**	**(36)**	**(3)**	114	(35)	(34)	183
	HSBC France	**17**	**8**	**(104)**	113	(7)	26	94
Asia	Hang Seng Bank	**647**	**131**	**(139)**	655	33	21	601
	The Hongkong and Shanghai Banking Corporation	**1,909**	**194**	**(394)**	2,109	227	101	1,781
	HSBC Bank Malaysia	**104**	**4**	**6**	94	18	4	72
MENA	HSBC Bank Middle East	**70**	**(23)**	**(11)**	104	(13)	4	113
North America	HSBC Bank USA	**893**	**21**	**98**	774	(131)	21	884
	HSBC Finance							
	HSBC Bank Canada	**199**	**(7)**	**(40)**	246	(33)		279
Latin America	HSBC Mexico	**286**	**(149)**	**26**	409	96	(38)	351
	Brazilian operations	**515**	**(580)**	**92**	1,003	94	169	740
	HSBC Bank Argentina	**149**	**33**	**(14)**	130	11	48	71
Other operations		**1,891**	**1,204**	**(1,018)**	1,705	(403)	498	1,610

		2015	Volume	Rate	2014	Volume	Rate	2013
		7,508	**(77)**	**(738)**	8,323	132	189	8,002

Interest expense

			Increase/(decrease) in 2015 compared with 2014			Increase/(decrease) in 2014 compared with 2013		
		2015	**Volume**	**Rate**	2014	Volume	Rate	2013
		$m	**$m**	**$m**	$m	$m	$m	$m
Deposits by banks								
Europe	HSBC Bank	**75**	**(19)**	**(45)**	139	(6)	(20)	165
	HSBC Private Banking Holdings (Suisse)	**1**			1			1
	HSBC France	**41**	**10**	**(22)**	53	(14)	(2)	69
Asia	Hang Seng Bank	**19**	**1**	**9**	9	(2)	(4)	15
	The Hongkong and Shanghai Banking Corporation	**80**	**(1)**	**2**	79	22	(33)	90
	HSBC Bank Malaysia	**26**	**(3)**	**3**	26	5	1	20
MENA	HSBC Bank Middle East	**3**	**(1)**	**1**	3	(1)	1	3
North America	HSBC Bank USA	**17**	**(2)**	**7**	12	(3)	(1)	16
	HSBC Bank Canada	**1**			1	(1)		2
Latin America	HSBC Mexico	**55**	**(20)**	**2**	73	48	(21)	46
	Brazilian operations	**49**	**(47)**	**12**	84	(29)	19	94
	HSBC Bank Argentina	**2**		**1**	1	(1)		2
Other operations		**9**		**9**		138	(170)	32
		378	**(47)**	**(170)**	481	(4)	(70)	555
Customer accounts								
Europe	HSBC Bank	**2,051**	**(46)**	**(171)**	2,268	288	(249)	2,229
	HSBC Private Banking Holdings (Suisse)	**29**	**(4)**	**2**	31	(35)	(4)	70
	HSBC France	**116**	**(46)**	**(27)**	189	(34)	(14)	237
Asia	Hang Seng Bank	**464**	**38**	**(46)**	472	27	85	360
	The Hongkong and Shanghai Banking Corporation	**2,446**	**121**	**(418)**	2,743	243	(48)	2,548
	HSBC Bank Malaysia	**264**	**(34)**	**7**	291	(5)	1	295
MENA	HSBC Bank Middle East	**53**	**(10)**	**(12)**	75	(11)	(20)	106
North	HSBC Bank USA	**147**	**6**	**63**	78	1	(27)	104

America								
	HSBC Bank Canada	**197**	**(37)**	**(85)**	319	(10)	(1)	330
Latin America	HSBC Mexico	**201**	**(49)**	**(50)**	300	(7)	(76)	383
	Brazilian operations	**830**	**(1,144)**	**146**	1,828	(147)	508	1,467
	HSBC Bank Argentina	**436**	**31**	**32**	373	(58)	88	343
Other operations		**167**	**(19)**	**22**	164	(65)	(93)	322
		7,401	**(106)**	**(1,624)**	9,131	450	(113)	8,794

Table of Contents

Report of the Directors: Financial Summary (continued)

Interest expense (continued)

			Increase/(decrease) in 2015 compared with 2014			Increase/(decrease) in 2014 compared with 2013		
		2015	**Volume**	**Rate**	2014	Volume	Rate	2013
		$m	**$m**	**$m**	$m	$m	$m	$m
Repurchase agreements non-trading								
Europe	HSBC Bank	**119**	**(118)**	**24**	213	165	(63)	111
	HSBC France	**2**	**(41)**	**(16)**	59	(7)	32	34
Asia	Hang Seng Bank	**4**		**4**				
	The Hongkong and Shanghai Banking Corporation	**70**	**40**	**(26)**	56	40	(16)	32
	HSBC Bank Malaysia	**1**			1	(1)	1	1
MENA	HSBC Bank Middle East					(1)		1
North America	HSBC Bank USA	**26**	**(8)**	**14**	20	3	5	12
	HSBC Bank Canada	**17**	**4**	**(12)**	25	(8)	3	30
Latin America	HSBC Mexico	**62**	**(84)**	**(6)**	152	141	(79)	90
	Brazilian operations	**6**	**(61)**	**(29)**	96	(15)	24	87
	HSBC Bank Argentina							
Other operations		**48**	**(2)**	**20**	30	33	(10)	7
		355	**(247)**	**(50)**	652	414	(167)	405
Financial liabilities designated at fair value own debt issued								
Debt securities in issue								

Europe	HSBC Holdings	**904**	**(31)**	**(10)**	945	203	(65)	807
	HSBC Bank	**359**	**(160)**	**(70)**	589	(90)	(89)	768
	HSBC France	**40**	**7**	**(19)**	52	(10)	8	54
Asia	Hang Seng Bank	**7**	**(5)**	**4**	8	(2)	(2)	12
	The Hongkong and Shanghai Banking Corporation	**123**	**(23)**	**(30)**	176	(28)	18	186
	HSBC Bank Malaysia	**17**	**(3)**	**1**	19	(14)	7	26
MENA	HSBC Bank Middle East	**33**	**(1)**	**(11)**	45	(17)	(2)	64
North America	HSBC Bank USA	**542**	**394**	**(266)**	414	57	(58)	415
	HSBC Finance	**407**	**(151)**	**75**	483	(255)	(1)	739
	HSBC Bank Canada	**211**	**(38)**	**(8)**	257	(76)	(9)	342
Latin America	HSBC Mexico	**90**	**51**	**(18)**	57	12	4	41
	Brazilian operations	**782**	**(975)**	**192**	1,565	137	565	863
	HSBC Bank Argentina					(10)		10
Other operations		**6**		**62**	(56)		89	(145)
		3,521	**(24)**	**(1,009)**	4,554	(589)	961	4,182

Report of the Directors: Financial Review (continued)

Short-term borrowings

Short-term borrowings in the form of repurchase agreements are shown separately on the face of the balance sheet. Other forms of short-term borrowings are included within customer accounts, deposits by banks, debt securities in issue and trading liabilities. Short-term borrowings are defined by the US Securities and Exchange Commission as Federal funds purchased and securities sold under agreements to repurchase, commercial paper and other short-term borrowings.

Our only significant short-term borrowings are securities sold under agreements to repurchase and certain debt securities in issue. For securities sold under agreements to repurchase, we run matched repo and reverse repo trading books. We generally observe lower year-end demand in our reverse repo lending business which results in lower repo balances at the balance sheet date. Additional information on these is provided in the table below.

Repos and short-term bonds

	2015	2014	2013
	$m	$m	$m
Securities sold under agreements to repurchase			
Outstanding at 31 December	**80,842**	111,230	181,641
Average amount outstanding during the year	**120,241**	195,482	218,580
Maximum quarter-end balance outstanding during the year	**120,141**	227,637	210,452
Weighted average interest rate during the year	**0.4%**	0.3%	0.3%
Weighted average interest rate at the year-end	**0.8%**	0.6%	0.5%
Short-term bonds			
Outstanding at 31 December	**36,614**	38,868	40,667
Average amount outstanding during the year	**40,449**	39,547	46,455
Maximum quarter-end balance outstanding during the year	**42,483**	41,117	54,933
Weighted average interest rate during the year	**1.3%**	1.7%	1.4%

Weighted average interest rate at the year-end	**1.2%**	1.6%	0.7%

Contractual obligations

The table below provides details of our material contractual obligations as at 31 December 2015.

	Payments due by period				
	Total	**Less than 1 year**	**1 3 years**	**3 5 years**	**More than 5 years**
	$m	**$m**	**$m**	**$m**	**$m**
Long-term debt obligations	**178,557**	**47,244**	**43,141**	**27,214**	**60,958**
Term deposits and certificates of deposit	**97,591**	**89,701**	**6,958**	**594**	**338**
Capital (finance) lease obligations	**48**	**17**	**10**	**4**	**17**
Operating lease obligations	**5,333**	**980**	**1,543**	**1,085**	**1,725**
Purchase obligations	**468**	**377**	**5**	**34**	**52**
Short positions in debt securities and equity shares	**43,828**	**28,677**	**5,093**	**1,565**	**8,493**
Current tax liability	**783**	**783**			
Pension/healthcare obligation	**17,016**	**1,488**	**3,057**	**3,354**	**9,117**
	343,624	**169,267**	**59,807**	**33,850**	**80,700**

Report of the Directors: Financial Review (continued)

Loan maturity and interest sensitivity analysis

At 31 December 2015, the geographical analysis of loan maturity and interest sensitivity by loan type on a contractual repayment basis was as follows:

	Europe $m	Asia $m	MENA $m	North America $m	Latin America $m	Total $m
Maturity of 1 year or less						
Loans and advances to banks	14,045	50,016	7,271	5,726	3,312	80,370
Commercial loans to customers						
Manufacturing and international trade and services	60,605	83,210	9,049	10,904	3,285	167,053
Real estate and other property related	10,833	22,548	1,537	4,469	719	40,106
Non-bank financial institutions	16,121	11,078	216	6,636	411	34,462
Governments	1,550	329	1,445	20	286	3,630
Other commercial	28,929	17,458	2,986	6,324	974	56,671
	118,038	134,623	15,233	28,353	5,675	301,922
Maturity after 1 year but within 5 years						
Loans and advances to banks	4,000	3,104	648	654	2	8,408
Commercial loans to customers						
Manufacturing and international trade and services	31,424	21,834	2,386	15,576	1,956	73,176
Real estate and other property related	18,694	36,206	900	8,312	260	64,372
Non-bank financial institutions	13,713	2,885	1,747	3,023	250	21,618
Governments	1,064	286	250	90	106	1,796
Other commercial	16,871	14,233	1,807	8,936	1,198	43,045
	81,766	75,444	7,090	35,937	3,770	204,007
Interest rate sensitivity of loans						

and advances to banks and commercial loans to customers						
Fixed interest rate	**16,908**	**2,182**	**1,027**	**4,003**	**898**	**25,018**
Variable interest rate	**68,858**	**76,366**	**6,711**	**32,588**	**2,874**	**187,397**
	85,766	**78,548**	**7,738**	**36,591**	**3,772**	**212,415**
Maturity after 5 years						
Loans and advances to banks	**303**	**1,233**		**105**		**1,641**
Commercial loans to customers						
Manufacturing and international trade and services	**9,641**	**1,427**	**621**	**2,532**	**427**	**14,648**
Real estate and other property related	**4,052**	**8,823**	**161**	**3,233**	**643**	**16,912**
Non-bank financial institutions	**3,785**	**7**	**357**	**163**	**20**	**4,332**
Governments	**1,039**	**517**		**93**	**380**	**2,029**
Other commercial	**7,063**	**4,353**	**1,126**	**2,393**	**1,140**	**16,075**
	25,580	**15,127**	**2,265**	**8,414**	**2,610**	**53,996**
Interest rate sensitivity of loans and advances to banks and commercial loans to customers						
Fixed interest rate	**6,020**	**1,230**	**530**	**1,063**	**345**	**9,188**
Variable interest rate	**19,863**	**15,130**	**1,735**	**7,456**	**2,265**	**46,449**
	25,883	**16,360**	**2,265**	**8,519**	**2,610**	**55,637**

Table of Contents

Report of the Directors: Financial Review (continued)

Deposits

The following tables summarise the average amount of bank deposits, customer deposits and certificates of deposit (CD s) and other money market instruments (which are included within Debt securities in issue in

the balance sheet), together with the average interest rates paid thereon for each of the past three years. The geographical analysis of average deposits is based on the location of the office in which the deposits are recorded and excludes balances with HSBC companies.

Deposits by banks

	2015		2014		2013	
	Average balance	**Average rate**	Average balance	Average rate	Average balance	Average rate
	$m	**%**	$m	%	$m	%
Europe	**32,367**		36,427		42,687	
Demand and other non-interest bearing	**8,094**		8,819		13,198	
Demand interest bearing	**5,412**	**0.3**	5,778	0.4	5,154	0.5
Time	**9,885**	**0.9**	14,191	1.0	17,465	1.1
Other	**8,976**	**0.2**	7,639	0.4	6,870	0.7
Asia	**27,618**		26,524		26,928	
Demand and other non-interest bearing	**6,114**		5,189		9,606	
Demand interest bearing	**16,107**	**0.5**	13,828	0.5	12,181	0.6
Time	**2,209**	**1.5**	3,581	0.7	4,282	0.8
Other	**3,188**	**0.5**	3,926	0.3	859	1.6
Middle East and North Africa	**1,478**		1,546		2,529	
Demand and other non-interest	**730**		563		1,058	

bearing						
Demand interest bearing	**3**		3		12	
Time	**723**	**0.4**	938	0.2	1,422	0.2
Other	**22**		42		37	
North America	**9,327**		10,497		12,237	
Demand and other non-interest bearing	**3,499**		3,686		3,488	
Demand interest bearing	**1,956**	**0.2**	2,557	0.1	2,787	0.1
Time	**3,746**	**0.4**	3,308	0.3	5,110	0.3
Other	**126**		946	0.1	852	
Latin America	**2,719**		4,642		4,703	
Demand and other non-interest bearing	**88**		162		118	
Demand interest bearing	**205**	**7.8**	837	3.8	333	4.5
Time	**1,905**	**4.5**	2,244	3.0	2,783	3.1
Other	**521**	**10.4**	1,399	4.4	1,469	4.4
Total	**73,509**		79,636		89,084	
Demand and other non-interest bearing	**18,525**		18,419		27,467	
Demand interest bearing	**23,683**	**0.5**	23,003	0.6	20,468	0.5
Time	**18,468**	**1.2**	24,262	1.0	31,062	1.1
Other	**12,833**	**0.6**	13,952	0.7	10,087	1.2

Table of Contents

Report of the Directors: Financial Review (continued)

Customer accounts

	2015		2014		2013	
	Average balance $m	**Average rate %**	Average balance $m	Average rate %	Average balance $m	Average rate %
Europe	**476,749**		490,511		462,669	
Demand and other non-interest bearing	**73,834**		73,088		75,480	
Demand interest bearing	**316,349**	**0.4**	314,374	0.4	272,973	0.4
Savings	**49,068**	**1.2**	57,464	1.4	63,585	1.4
Time	**35,803**	**0.9**	43,760	1.0	50,010	1.1
Other	**1,695**	**2.4**	1,825	2.6	621	8.2
Asia	**590,436**		566,595		533,002	
Demand and other non-interest bearing	**67,460**		62,988		59,023	
Demand interest bearing	**399,209**	**0.2**	374,026	0.2	347,526	0.2
Savings	**100,801**	**2.3**	108,074	2.3	104,099	2.2
Time	**22,035**	**0.9**	21,381	0.9	20,978	0.7
Other	**931**	**0.4**	126	2.4	1,376	0.4
Middle East and North Africa	**37,876**		39,076		40,451	
Demand and other non-interest bearing	**18,996**		18,410		16,801	
Demand interest bearing	**11,009**	**0.3**	11,587	0.4	13,248	0.4
Savings	**7,120**	**1.9**	7,974	2.1	9,981	2.6
Time	**751**	**1.2**	1,074	1.2	357	1.4
Other			31		64	
North America	**136,773**		135,692		137,181	
Demand and other non-interest bearing	**29,390**		27,361		27,992	
Demand interest bearing	**37,234**	**0.2**	38,843	0.3	37,837	0.3
Savings	**60,157**	**0.4**	60,075	0.5	63,565	0.6

Time	**9,927**	**0.4**	9,290	0.2	7,673	0.3
Other	**65**		123	0.8	114	1.8
Latin America	**32,097**		50,918		54,585	
Demand and other non-interest bearing	**8,349**		12,452		13,092	
Demand interest bearing	**6,848**	**0.9**	7,412	1.2	7,237	1.8
Savings	**10,896**	**18.3**	22,062	10.0	24,652	7.4
Time	**5,952**	**2.5**	8,850	2.8	9,459	4.4
Other	**52**	**9.6**	142	5.6	145	9.7
Total	**1,273,931**		1,282,792		1,227,888	
Demand and other non-interest bearing	**198,029**		194,299		192,388	
Demand interest bearing	**770,649**	**0.3**	746,242	0.3	678,821	0.3
Savings	**228,042**	**2.3**	255,649	2.3	265,882	2.1
Time	**74,468**	**0.9**	84,355	1.1	88,477	1.3
Other	**2,743**	**1.9**	2,247	2.6	2,320	3.1

HSBC HOLDINGS PLC

63m

Report of the Directors: Financial Review (continued)

Certificates of deposit and other money market instruments

	2015		2014		2013	
	Average balance	**Average rate**	Average balance	Average rate	Average balance	Average rate
	$m	**%**	$m	%	$m	%
Europe	**22,539**	**0.5**	20,970	0.4	28,680	0.5
Asia	**1,275**	**2.4**	2,441	1.6	3,199	2.0
North America	**11,336**	**0.4**	5,406	0.3	5,583	0.6
Latin America	**6,971**	**22.1**	12,035	12.1	9,335	8.3
	42,121	**4.1**	40,852	3.9	46,797	2.3

Certificates of deposit and other time deposits

The maturity analysis of certificates of deposit (CD s) and other wholesale time deposits is expressed by remaining maturity. The majority of CDs and time deposits are in amounts of $100,000 and over or the equivalent in other currencies.

	At 31 December 2015				
	3 months or less	**After 3 months but within 6 months**	**After 6 months but within 12 months**	**After 12 months**	**Total**
	$m	**$m**	**$m**	**$m**	**$m**
Europe	**29,727**	**5,668**	**5,728**	**5,303**	**46,426**
Certificates of deposit	**2,085**	**2,715**	**2,445**		**7,245**
Time deposits:					
banks	**4,402**	**334**	**337**	**3,379**	**8,452**

customers	**23,240**	**2,619**	**2,946**	**1,924**	**30,729**
Asia	**21,079**	**1,504**	**936**	**751**	**24,270**
Certificates of deposit	**590**	**101**	**181**	**605**	**1,477**
Time deposits:					
banks	**355**	**76**	**1**		**432**
customers	**20,134**	**1,327**	**754**	**146**	**22,361**
Middle East and North Africa	**327**	**19**	**7**	**202**	**555**
Time deposits:					
banks	**265**	**15**			**280**
customers	**62**	**4**	**7**	**202**	**275**
North America	**13,826**	**2,435**	**1,187**	**1,367**	**18,815**
Certificates of deposit	**5,372**	**2,071**	**566**	**444**	**8,453**
Time deposits:					
banks	**2,735**	**107**			**2,842**
customers	**5,719**	**257**	**621**	**923**	**7,520**
Latin America	**6,317**	**852**	**89**	**267**	**7,525**
Certificates of deposit	**779**	**103**	**20**	**89**	**991**
Time deposits:					
banks	**574**	**323**	**22**	**177**	**1,096**
customers	**4,964**	**426**	**47**	**1**	**5,438**
Total	**71,276**	**10,478**	**7,947**	**7,890**	**97,591**
Certificates of deposit	**8,826**	**4,990**	**3,212**	**1,138**	**18,166**
Time deposits:					
banks	**8,331**	**855**	**360**	**3,556**	**13,102**
customers	**54,119**	**4,633**	**4,375**	**3,196**	**66,323**

Report of the Directors: Financial Review (continued)

Ratio of earnings to fixed charges[60]

	2015	2014	2013	2012	2011
Ratio of earnings to fixed charges					
excluding interest on deposits	**3.68**	3.39	3.84	3.03	2.82
including interest on deposits	**2.00**	1.86	2.09	1.76	1.68
Ratio of earnings to combined fixed charges and preference share dividends					
excluding interest on deposits	**3.05**	3.07	3.50	2.79	2.64
including interest on deposits	**1.85**	1.79	2.01	1.71	1.64

For footnote, see page 100a.

Report of the Directors: Financial summary / Global businesses

Reconciliation of RoRWA / Critical estimates and judgements / Summary

Reconciliation of RoRWA measures

Performance Management

During 2015, we targeted a return on average ordinary shareholders equity of 10%. For internal management purposes we monitor global businesses and geographical regions by pre-tax return on average risk-weighted assets. This metric is calibrated against return on equity (RoE) and capital requirements to ensure that we are best placed to achieve capital strength and business profitability combined with regulatory capital efficiency objectives. We targeted a return on average RWAs of 2.3% in 2015.

In addition to the return on average risk-weighted assets (RoRWA) we measure our performance internally using the non-GAAP measure of adjusted RoRWA, which is adjusted profit before tax as a percentage of average risk-weighted assets adjusted for the effects of foreign currency translation differences and significant items. Excluded from adjusted RoRWA are certain items which distort year-on-year performance as explained on page 48.

We also present the non-GAAP measure of adjusted RoRWA excluding run-off portfolios.

Reconciliation of adjusted RoRWA (excluding run-off portfolios)

	2015			2014		
	Pre-tax return	**Average RWAs[25]**	**RoRWA[24]**	Pre-tax return	Average RWAs[25]	RoRWA[24]
	$m	**$bn**	**%**	$m	$bn	%
Reported	**18,867**	**1,174**	**1.6**	18,680	1,209	1.5
Adjusted	**20,418**	**1,171**	**1.7**	21,976	1,150	1.9

Run-off portfolios	**447**	**84**	**0.5**	847	115	0.7
Legacy credit in GB&M	**(5)**	**35**		149	48	0.3
US CML and other[26]	**452**	**49**	**0.9**	698	67	1.0
Adjusted (excluding run-off portfolios)	**19,971**	**1,087**	**1.8**	21,129	1,035	2.0

Reconciliation of reported and adjusted average risk-weighted assets

	Year ended 31 December		
	2015	2014	Change
	$bn	$bn	%
Average reported RWAs[25]	**1,174**	1,209	(2.9)
Currency translation adjustment[27]		(50)	
Significant items	**(3)**	(9)	
Average adjusted RWAs[25]	**1,171**	1,150	1.8

For footnotes, see page 99.

Critical accounting estimates and judgements

The results of HSBC reflect the choice of accounting policies, assumptions and estimates that underlie the preparation of HSBC s consolidated financial statements. The significant accounting policies, including the policies which include critical accounting estimates and judgements, are described in Note 1 and in the individual Notes on the Financial Statements. The accounting policies listed below are highlighted as they involve a high degree of judgement and estimation uncertainty and have a material impact on the financial statements:

Impairment of loans and advances: Note 1(j) on page 354;

Deferred tax assets: Note 8 on page 370;
Valuation of financial instruments: Note 13 on page 378;

Impairment of interests in associates: Note 19 on page 402;

Goodwill impairment: Note 20 on page 406; and

Provisions: Note 29 on page 421.

In view of the inherent uncertainties and the high level of subjectivity involved in the recognition or measurement of the items above, it is possible that the outcomes in the next financial year could differ from those on which management s estimates are based, resulting in the recognition and measurement of materially different amounts from those estimated by management in the 2015 Financial Statements.

Global businesses

Summary	65
Reconciliation of 2015 and 2014 reported and adjusted items for global businesses	66
Reconciliation of 2014 and 2013 reported and adjusted items for global businesses	67a
Retail Banking and Wealth Management	68
Commercial Banking	70
Global Banking and Markets	71
Global Private Banking	72
Other	73
Analysis by global business	74

Summary

HSBC reviews operating activity on a number of bases, including by geographical region and by global business.

The tables and charts below present global businesses followed by geographical regions (page 76). Performance is analysed in this order because certain strategic themes, business initiatives and trends affect more than one geographical region. All tables are on a reported basis unless stated otherwise.

Basis of preparation

The results of global businesses are presented in accordance with the accounting policies used in the preparation of HSBC s consolidated financial statements. Our operations are closely integrated and, accordingly, the presentation of global business data includes internal allocations of certain items of income and expense. These allocations include the costs of certain support services and global functions to the extent that they can be meaningfully attributed to operational business lines. While such allocations have been made on a systematic and consistent basis, they necessarily involve a degree of subjectivity. Those costs which are not allocated to global businesses are included in Other .

Where relevant, income and expense amounts presented include the results of inter-segment funding along with inter-company and inter-business line transactions. All such transactions are undertaken on arm s length terms.

The expense of the UK bank levy is included in the Europe geographical region as HSBC regards the levy as a cost of being headquartered in the UK. For the purposes of the presentation by global business, the cost of the levy is included in Other .

Profit/(loss) before tax

	2015		2014		2013	
	$m	**%**	$m	%	$m	%
Retail Banking and Wealth Management[28]	**4,967**	**26.3**	5,581	29.9	6,553	29.1
Commercial Banking[28]	**7,973**	**42.3**	8,814	47.2	8,537	37.8
Global Banking and Markets	**7,910**	**41.9**	5,889	31.5	9,441	41.8
Global Private Banking	**344**	**1.8**	626	3.4	193	0.9
Other[29]	**(2,327)**	**(12.3)**	(2,230)	(12.0)	(2,159)	(9.6)
Year ended 31 December	**18,867**	**100.0**	18,680	100.0	22,565	100.0

Total assets[30]

	2015		2014	
	$m	**%**	$m	%
Retail Banking and Wealth Management	**473,284**	**19.6**	500,864	19.0
Commercial Banking	**365,290**	**15.2**	370,958	14.1
Global Banking and Markets	**1,616,704**	**67.1**	1,839,644	69.8
Global Private Banking	**81,448**	**3.4**	88,342	3.4
Other	**147,417**	**6.1**	164,537	6.2
Intra-HSBC items	**(274,487)**	**(11.4)**	(330,206)	(12.5)
At 31 December	**2,409,656**	**100.0**	2,634,139	100.0

Risk-weighted assets

2015	2014

	$bn	%	$bn	%
Retail Banking and Wealth Management	**189.5**	**17.2**	207.2	17.0
Commercial Banking	**421.0**	**38.2**	430.3	35.3
Global Banking and Markets	**440.6**	**39.9**	516.1	42.3
Global Private Banking	**19.3**	**1.7**	20.8	1.7
Other	**32.6**	**3.0**	45.4	3.7
At 31 December	**1,103.0**	**100.0**	1,219.8	100.0

For footnotes, see page 99.

Table of Contents

Report of the Directors: Global businesses (continued)

Reconciliations

Reconciliation of reported and adjusted items

global businesses

2015 compared with 2014

	2015					
	RBWM $m	CMB $m	GB&M $m	GPB $m	Other $m	Total $m
Revenue[1]						
Reported[31]	23,516	14,870	18,233	2,172	7,604	59,800
Significant items	326	17	(199)	(31)	(2,148)	(2,035)
disposal costs of Brazilian operations					18	18
DVA on derivative contracts			(230)			(230)
fair value movements on non-qualifying hedges[32]	90	(1)	31	(1)	208	327
gain on the partial sale of shareholding in Industrial Bank					(1,372)	(1,372)
loss on sale of several tranches of real estate secured accounts in the US	214					214
own credit spread[2]					(1,002)	(1,002)
provisions/(releases) arising from the ongoing review of compliance with the Consumer Credit Act in the UK	22	18		(30)		10
Adjusted[31]	23,842	14,887	18,034	2,141	5,456	57,765
LICs						
Reported	(1,939)	(1,770)		(12)		(3,721)
Adjusted	(1,939)	(1,770)		(12)		(3,721)
Operating expenses						
Reported[31]	(17,020)	(6,744)	(10,834)	(1,832)	(9,933)	(39,768)
Significant items	1,537	202	1,035	206	606	3,586

disposal costs of Brazilian operations	66	16	14	1	13	110
costs-to-achieve	198	163	69	16	462	908
costs to establish UK ring-fenced bank					89	89
regulatory provisions in GPB				171	1	172
restructuring and other related costs	32	5	22	18	40	117
settlements and provisions in connection with legal matters	700		949			1,649
UK customer redress programmes	541	18	(19)		1	541
Adjusted[31]	(15,483)	(6,542)	(9,799)	(1,626)	(9,327)	(36,182)
Share of profit in associates and joint ventures						
Reported	410	1,617	511	16	2	2,556
Adjusted	410	1,617	511	16	2	2,556
Profit/(loss) before tax						
Reported	4,967	7,973	7,910	344	(2,327)	18,867
Significant items	1,863	219	836	175	(1,542)	1,551
revenue	326	17	(199)	(31)	(2,148)	(2,035)
operating expenses	1,537	202	1,035	206	606	3,586
Adjusted	6,830	8,192	8,746	519	(3,869)	20,418

Table of Contents

	2014					
	RBWM	CMB	GB&M	GPB	Other	Total
	$m	$m	$m	$m	$m	$m
Revenue[1]						
Reported[31]	25,149	15,748	17,778	2,377	6,365	61,248
Currency translation[31]	(2,209)	(1,242)	(1,296)	(138)	(158)	(4,775)
Significant items	877	9	328	41	(501)	754
DVA on derivative contracts			332			332
fair value movements on non-qualifying hedges[32]	493	(1)	8	1	40	541
gain on sale of several tranches of real estate secured accounts in the US	(168)					(168)
gain on sale of shareholding in Bank of Shanghai					(428)	(428)
impairment of our investment in Industrial Bank					271	271
own credit spread[2]					(417)	(417)
provisions arising from the ongoing review of compliance with the Consumer Credit Act in the UK	568	24		40		632
(gain)/loss and trading results from disposals and changes in ownership levels	(16)	(14)	(12)		33	(9)
Adjusted[31]	23,817	14,515	16,810	2,280	5,706	57,227
LICs						
Reported	(1,936)	(1,558)	(365)	8		(3,851)
Currency translation	340	256	86	3	(2)	683
Significant items	2	(2)				
trading results from disposals and changes in ownership levels	2	(2)				
Adjusted	(1,594)	(1,304)	(279)	11	(2)	(3,168)

Operating expenses						
Reported[31]	(18,030)	(6,981)	(12,028)	(1,778)	(8,601)	(41,249)
Currency translation[31]	1,851	627	782	100	186	3,278
Significant items	1,118	189	1,896	71	121	3,395
charge in relation to the settlement agreement with the Federal Housing Finance Authority	17		533			550
regulatory provisions in GPB				65		65
restructuring and other related costs	88	37	27	6	120	278
settlements and provisions in connection with legal matters			1,187			1,187
UK customer redress programmes	992	138	145			1,275
trading results from disposals and changes in ownership levels	21	14	4		1	40
Adjusted[31]	(15,061)	(6,165)	(9,350)	(1,607)	(8,294)	(34,576)
Share of profit in associates and joint ventures						
Reported	398	1,605	504	19	6	2,532
Currency translation	(5)	(28)	(7)		1	(39)
Adjusted	393	1,577	497	19	7	2,493
Profit/(loss) before tax						
Reported	5,581	8,814	5,889	626	(2,230)	18,680
Currency translation	(23)	(387)	(435)	(35)	27	(853)
Significant items	1,997	196	2,224	112	(380)	4,149
revenue	877	9	328	41	(501)	754
LICs	2	(2)				
operating expenses	1,118	189	1,896	71	121	3,395
Adjusted	7,555	8,623	7,678	703	(2,583)	21,976

For footnotes, see page 99.

Reconciliation of reported and adjusted items

global businesses

2014 compared with 2013

	2014					
	RBWM $m	CMB $m	GB&M $m	GPB $m	Other $m	Total $m
Revenue[1]						
Reported[31]	25,149	15,748	17,778	2,377	6,365	61,248
Significant items	877	9	328	41	(501)	754
DVA on derivative contracts			332			332
fair value movements on non-qualifying hedges[32]	493	(1)	8	1	40	541
gain on sale of several tranches of real estate secured accounts in the US	(168)					(168)
gain on sale of shareholding in Bank of Shanghai					(428)	(428)
impairment of our investment in Industrial Bank					271	271
own credit spread[2]					(417)	(417)
provisions arising from the ongoing review of compliance with the Consumer Credit Act in the UK	568	24		40		632
(gain)/loss and trading results from disposals and changes in ownership levels	(16)	(14)	(12)		33	(9)
Adjusted[31]	26,026	15,757	18,106	2,418	5,864	62,002
LICs						
Reported	(1,936)	(1,558)	(365)	8		(3,851)
Significant items	2	(2)				

trading results from disposals and changes in ownership levels	2	(2)				
Adjusted	(1,934)	(1,560)	(365)	8		(3,851)
Operating expenses						
Reported[31]	(18,030)	(6,981)	(12,028)	(1,778)	(8,601)	(41,249)
Significant items	1,118	189	1,896	71	121	3,395
charge in relation to the settlement agreement with the Federal Housing Finance Authority	17		533			550
regulatory provisions in GPB				65		65
restructuring and other related costs	88	37	27	6	120	278
settlements and provisions in connection with legal matters			1,187			1,187
UK customer redress programmes	992	138	145			1,275
trading results from disposals and changes in ownership levels	21	14	4		1	40
Adjusted[31]	16,912	(6,792)	(10,132)	(1,707)	(8,480)	(37,854)
Share of profit in associates and joint ventures						
Reported	398	1,605	504	19	6	2,532
Adjusted	398	1,605	504	19	6	2,532
Profit before tax						
Reported	5,581	8,814	5,889	626	(2,230)	18,680
Significant items	1,997	196	2,224	112	(380)	4,149
revenue	877	9	328	41	(501)	754
LICs	2	(2)				
operating expenses	1,118	189	1,896	71	121	3,395
Adjusted	7,578	9,010	8,113	738	(2,610)	22,829

Table of Contents

Report of the Directors: Financial summary

Reconciliation of reported and adjusted items global businesses (continued)

	2013					
	RBWM	CMB	GB&M	GPB	Other	Total
	$m	$m	$m	$m	$m	$m
Revenue[1]						
Reported[31]	27,453	15,652	19,176	2,439	5,651	64,645
Currency translation[31]	(460)	(176)	(62)	12	(60)	(686)
Significant items	(95)	(643)	(582)	274	(1,059)	(2,105)
debit valuation adjustment on derivative contracts			(106)			(106)
fair value movements on non-qualifying hedges[32]	(262)		18		(267)	(511)
FX gains relating to sterling debt issued by HSBC Holdings					(442)	(442)
write-off of allocated goodwill relating to the GPB Monaco business				279		279
HSBC Insurance (Asia-Pacific) Holdings Limited s disposal of its shareholding in Bao Viet Holdings	(104)					(104)
HSBC Latin America Holdings UK Limited s disposal of HSBC Bank (Panama) S.A.	(310)	(479)	(317)	(1)		(1,107)
loss on early termination of cash flow hedges in the US run-off portfolio	199					199
loss on sale of an HFC Bank UK secured loan portfolio	146					146
loss on sale of non-real estate secured accounts in the US	271					271
loss on sale of several tranches of real estate secured accounts in the US	123					123
net gain on completion of Ping An disposal					(553)	(553)
own credit spread[2]					1,246	1,246

reclassification gain in respect of our holdings in Industrial Bank Co., Limited following the issue of additional share capital to third parties					(1,089)	(1,089)
other (gain)/loss and trading results from disposals and changes in ownership levels	(158)	(164)	(177)	(4)	46	(457)
Adjusted[31]	26,898	14,833	18,532	2,725	4,532	61,854
LICs						
Reported	(3,510)	(2,101)	(207)	(31)		(5,849)
Currency translation	175	19	(23)	(2)	(1)	168
Significant items	65	2				67
other trading results from disposals and changes in ownership levels	65	2				67
Adjusted	(3,270)	(2,080)	(230)	(33)	(1)	(5,614)
Operating expenses						
Reported[31]	(17,774)	(6,523)	(9,960)	(2,229)	(7,796)	(38,556)
Currency translation[31]	309	117	(44)	(6)	32	348
Significant items	1,306	120	442	429	229	2,526
accounting gain arising from change in basis of delivering ill-health benefits in the UK	(189)	(160)	(81)			(430)
Madoff-related litigation costs			298			298
regulatory provisions in GPB				352		352
restructuring and other related costs	167	31	13	73	199	483
UK customer redress programmes	953	148	134			1,235
US customer remediation provisions relating to CRS	100					100
other trading results from disposals and changes in ownership levels	275	101	78	4	30	488
Adjusted[31]	(16,159)	(6,286)	(9,562)	(1,806)	(7,535)	(35,682)
Share of profit in associates and joint ventures						
Reported	384	1,509	432	14	(14)	2,325
Currency translation		8	2		1	11
Significant items	13	19	34		21	87
other trading results from disposals and changes in ownership levels	13	19	34		21	87
Adjusted	397	1,536	468	14	8	2,423

	2013					
	RBWM	CMB	GB&M	GPB	Other	Total
	$m	$m	$m	$m	$m	$m
Profit before tax						
Reported	6,553	8,537	9,441	193	(2,159)	22,565
Currency translation	24	(32)	(127)	4	(28)	(159)
Significant items	1,289	(502)	(106)	703	(809)	575
revenue	(95)	(643)	(582)	274	(1,059)	(2,105)
LICs	65	2				67
operating expenses	1,306	120	442	429	229	2,526
share of profit in associates and joint ventures	13	19	34		21	87
Adjusted	7,866	8,003	9,208	900	(2,996)	22,981

For footnotes, see page 100a.

Table of Contents

Report of the Directors: Global businesses (continued)

RBWM

Retail Banking and Wealth Management

RBWM provides banking and wealth management services for our personal customers to help them secure their future prosperity and realise their ambitions.

				Principal RBWM consists of		
	Total RBWM[28] $m	US run-off portfolio $m	Principal RBWM $m	Banking operations $m	Insurance manufacturing $m	manag
rest income	15,926	1,033	14,893	13,127	1,757	
(expense)	6,218	(4)	6,222	5,726	(560)	
(expense)[33]	1,372	(203)	1,575	876	680	
rating	23,516	826	22,690	19,729	1,877	
	(1,939)	(62)	(1,877)	(1,877)		
rating	21,577	764	20,813	17,852	1,877	
erating s	(17,020)	(1,384)	(15,636)	(14,459)	(432)	
ng oss)	4,557	(620)	5,177	3,393	1,445	
from es[35]	410		410	357	24	
	4,967	(620)	5,587	3,750	1,469	

oss) before [24]	2.5%	(1.3%)	3.7%			
rest income	17,130	1,390	15,740	13,983	1,746	
(expense)	6,836	(4)	6,840	6,264	(534)	
(expense)[33]	1,183	(49)	1,232	602	608	
rating	25,149	1,337	23,812	20,849	1,820	
	(1,936)	(30)	(1,906)	(1,906)		
rating	23,213	1,307	21,906	18,943	1,820	
erating s	(18,030)	(738)	(17,292)	(16,060)	(453)	
g profit	5,183	569	4,614	2,883	1,367	
from es[35]	398		398	323	40	
efore tax	5,581	569	5,012	3,206	1,407	
[24]	2.5%	0.8%	3.2%			
rest income	18,808	2,061	16,747	15,003	1,725	
(expense)	7,211	11	7,200	6,786	(625)	
(expense)[33]	1,434	(400)	1,834	1,014	779	
rating	27,453	1,672	25,781	22,803	1,879	
	(3,510)	(705)	(2,805)	(2,806)		
rating	23,943	967	22,976	19,997	1,879	
erating s	(17,774)	(1,166)	(16,608)	(15,307)	(554)	
g oss)	6,169	(199)	6,368	4,690	1,325	
(expense) ociates[35]	384	(1)	385	299	62	
oss) before	6,553	(200)	6,753	4,989	1,387	
[24]	2.6%	(0.2%)	4.2%			

For footnotes, see page 99.

RBWM comprises the Principal RBWM business and the US run-off portfolio. We believe that highlighting Principal RBWM (and its constituent business streams, Banking Operations, Insurance Manufacturing and Asset Management) allows management to identify more readily the causes of material changes from year-to-year in the ongoing business and assess the factors and trends that are expected to have a material effect on the business in future years.

Insurance manufacturing for RBWM excluded other global businesses which contributed net operating income of $286m (2014: $358m, 2013: $397m) and profit before tax of $201m (2014: $263m, 2013: $266m) to overall insurance manufacturing. In 2015 insurance manufacturing net operating income for RBWM included $1,686m within Wealth Management (2014: $1,529m) and $191m within other products (2014: $350m).

Principal RBWM performance

Principal RBWM: management view of adjusted revenue

	2015 $m	2014 $m
Net operating income[1]		
Current accounts, savings and deposits	**5,602**	5,530
Wealth management products	**6,282**	5,825
investment distribution[36]	**3,512**	3,271
life insurance manufacturing	**1,686**	1,529
asset management	**1,084**	1,025
Personal lending	**9,962**	10,218
mortgages	**2,873**	2,956
credit cards	**3,868**	3,961
other personal lending[37]	**3,221**	3,301
Other[38]	**841**	759
Year ended 31 December	**22,687**	**22,332**

For footnotes, see page 99.

Profit before tax ($m)

Revenue ($m)

Operating expenses ($m)

For details of significant items, see page 66.

Report of the Directors: Global businesses (continued)

CMB / GB&M

Commercial Banking

CMB serves more than two million customers in 55 countries and territories. Our customers range from small enterprises focused primarily on their domestic markets through to corporates operating globally.

	2015 $m	2014 $m	2013 $m
Net interest income	**9,859**	10,158	9,731
Net fee income	**4,190**	4,570	4,527
Other income[33]	**821**	1,020	1,394
Net operating income[1]	**14,870**	**15,748**	**15,652**
LICs[34]	**(1,770)**	(1,558)	(2,101)
Net operating income	**13,100**	**14,190**	**13,551**
Total operating expenses	**(6,744)**	(6,981)	(6,523)
Operating profit	**6,356**	**7,209**	**7,028**
Income from associates[35]	**1,617**	1,605	1,509
Profit before tax	**7,973**	**8,814**	**8,537**
RoRWA[24]	**1.9%**	2.1%	2.2%

For footnotes, see page 99.

Management view of adjusted revenue

	2015 $m	2014 $m
Net operating income[1]		
Global Trade and Receivables Finance	**2,403**	2,447
Credit and Lending	**6,002**	5,609
Payments and Cash Management, current accounts and savings deposits	**4,568**	4,423
Markets products, Insurance and Investments and Other[39]	**1,914**	2,036
Year ended 31 December	**14,887**	14,515

For footnotes, see page 99.

Profit before tax ($m)

Revenue ($m)

Operating expenses ($m)

For details of significant items, see page 66.

Table of Contents

Global Banking and Markets

GB&M supports major government,

corporate and institutional clients worldwide

in achieving their long-term strategic goals

through tailored and innovative solutions.

2015	Total GB&M $m	Legacy $m	GB&M client-facing and BSM $m
Net interest income	**6,931**	**127**	**6,804**
Net fee income/(expense)	**3,375**	**(11)**	**3,386**
Net trading income[40]	**7,169**	**9**	**7,160**
Other income/(expense)[33]	**758**	**(64)**	**822**
Net operating income[1]	**18,233**	**61**	**18,172**
LICs[34]		**37**	**(37)**
Net operating income	**18,233**	**98**	**18,135**
Total operating expenses	**(10,834)**	**(103)**	**(10,731)**
Operating profit/(loss)	**7,399**	**(5)**	**7,404**
Income from associates[35]	**511**		
Profit/(loss) before tax	**7,910**		
RoRWA[24]	**1.6%**		**1.8%**
2014			
Net interest income/(expense)	7,022	(172)	7,194

Net fee income/(expense)	3,560	(7)	3,567
Net trading income/(expense)[40]	5,861	(55)	5,916
Other income[33]	1,335	232	1,103
Net operating income/ (expense)[1]	17,778	(2)	17,780
LICs[34]	(365)	349	(714)
Net operating income	17,413	347	17,066
Total operating expenses	(12,028)	(708)	(11,320)
Operating profit/(loss)	5,385	(361)	5,746
Income from associates[35]	504		
Profit/(loss) before tax	5,889		
RoRWA[24]	1.2%	(0.8%)	1.3%
2013			
Net interest income	6,766	38	6,728
Net fee income/(expense)	3,482	(7)	3,489
Net trading income[40]	6,780	198	6,582
Other income/(expense)[33]	2,148	(80)	2,228
Net operating income[1]	19,176	149	19,027
LICs[34]	(207)	206	(413)
Net operating income	18,969	355	18,614
Total operating expenses	(9,960)	(170)	(9,790)
Operating profit	9,009	185	8,824
Income from associates[35]	432		
Profit before tax	9,441		
RoRWA[24]	2.3%	0.6%	2.5%

For footnotes, see page 99.

The GB&M client-facing and Balance Sheet Management (BSM) businesses measure excludes the effects of the legacy credit portfolio and income from associates. This allows GB&M management to identify more readily the cause of material changes from year to year in the ongoing businesses and assess the factors and trends that are expected to have a material effect on the businesses in future years.

Management view of adjusted revenue

	2015 $m	2014 $m
Total operating income[1]		
Markets[41]	**6,882**	5,775
Legacy credit	**61**	(16)
Credit	**659**	532
Rates	**1,638**	1,419
Foreign Exchange	**2,918**	2,722
Equities	**1,606**	**1,118**
	1,606	**1,118**
Capital Financing	**3,789**	3,777
Payments and Cash Management	**1,801**	1,680

Securities Services	**1,698**	1,589
Global Trade and Receivables Finance	**718**	701
Balance Sheet Management	**2,943**	2,845
Principal Investments	**243**	498
Other[42]	**(40)**	(55)
Year ended 31 December	**18,034**	16,810

For footnotes, see page 99.

Profit before tax ($m)

Revenue ($m)

Operating expenses ($m)

For details of significant items, see page 66.

Table of Contents

Report of the Directors: Global businesses (continued)

GPB / Other

Global Private Banking

GPB serves high net worth individuals and

families with complex and international

needs within the Group s priority markets.

	2015	2014	2013
	$m	$m	$m
Net interest income	**870**	994	1,146
Net fee income	**959**	1,056	1,150
Other income[33]	**343**	327	143
Net operating income[1]	**2,172**	2,377	2,439
LICs[34]	**(12)**	8	(31)
Net operating income	**2,160**	2,385	2,408
Total operating expenses	**(1,832)**	(1,778)	(2,229)
Operating profit	**328**	607	179
Income from associates[35]	**16**	19	14
Profit before tax	**344**	626	193
RoRWA[24]	**1.7%**	2.9%	0.9%

Reported client assets[43]

	2015	2014
	$bn	$bn
At 1 January	**365**	382
Net new money	**1**	(3)
Of which: areas targeted for growth	**14**	14
Value change	**1**	8
Disposals		(11)
Exchange and other	**(18)**	(11)

At 31 December	**349**	365

Reported client assets by geography

	2015	2014
	$bn	$bn
Europe	**168**	179
Asia	**112**	112
North America	**61**	63
Latin America	**8**	11
At 31 December	**349**	365

For footnotes, see page 99.

Profit before tax ($m)

Revenue ($m)

Operating expenses ($m)

For details of significant items, see page 66.

Table of Contents

Other[29]

Other contains the results of HSBC s holding company and financing operations, central support and functional costs with associated recoveries, unallocated investment activities, centrally held investment companies, certain property transactions and movements in fair value of own debt.

	2015	2014	2013
	$m	$m	$m
Net interest expense	**(710)**	(501)	(737)
Net fee income/(expense)	**(37)**	(65)	64
Net trading income/(expense)	**(192)**	(92)	6
Changes in fair value of long-term debt issued and related derivatives	**863**	508	(1,228)
Changes in other financial instruments designated at fair value	**61**	(9)	(576)
Net income/(expense) from financial instruments designated at fair value	**924**	499	(1,804)
Other income	**7,619**	6,524	8,122
Net operating income[1]	**7,604**	6,365	5,651
LICs[34]			
Net operating income	**7,604**	6,365	5,651
Total operating expenses	**(9,933)**	(8,601)	(7,796)
Operating loss	**(2,329)**	(2,236)	(2,145)
Income/(expense) from associates[35]	**2**	6	(14)
Loss before tax	**(2,327)**	(2,230)	(2,159)

For footnotes, see page 99.

Loss before tax ($m)

Revenue ($m)

Operating expenses ($m)

For details of significant items, see page 66.

Table of Contents

Report of the Directors: Group businesses (continued)

Analysis by global business

Analysis by global business

HSBC profit/(loss) before tax and balance sheet data

	2015					
	Retail Banking and Wealth Management	Commercial Banking	Global Banking and Markets	Global Private Banking	Other[29]	Inter-segment elimination[44]
	$m	$m	$m	$m	$m	$m
oss) before						
est expense)	15,926	9,859	6,931	870	(710)	(345)
expense)	6,218	4,190	3,375	959	(37)	
expense) g net ncome	540	571	5,714	327	(204)	
est expense) g activities	(19)	(16)	1,455	(2)	12	345
ng expense)[40]	521	555	7,169	325	(192)	345
in fair long-term ed and erivatives					863	
	556	110	(58)		61	

expense) er financial nts ed at fair							
expense) ancial nts ed at fair	556	110	(58)		924		
ss losses ancial nts	68	37	598	23	1,342		
l income	23	16	40	11	33		
rance income	9,204	1,106	5	42	(2)		
erating	972	252	177	3	6,246	(6,595)	
erating	**33,488**	**16,125**	**18,237**	**2,233**	**7,604**	**(6,595)**	
rance	**(9,972)**	**(1,255)**	**(4)**	**(61)**			**(**
rating	**23,516**	**14,870**	**18,233**	**2,172**	**7,604**	**(6,595)**	
pairment and other k ns	**(1,939)**	**(1,770)**		**(12)**			
rating	**21,577**	**13,100**	**18,233**	**2,160**	**7,604**	**(6,595)**	
e 46	**(4,966)**	**(2,443)**	**(3,735)**	**(654)**	**(8,102)**		**(**
erating	**(12,054)**	**(4,301)**	**(7,099)**	**(1,178)**	**(1,831)**	**6,595**	**(**
erating	**(17,020)**	**(6,744)**	**(10,834)**	**(1,832)**	**(9,933)**	**6,595**	**(**
ng oss)	**4,557**	**6,356**	**7,399**	**328**	**(2,329)**		
profit in s and joint	**410**	**1,617**	**511**	**16**	**2**		
oss) before	**4,967**	**7,973**	**7,910**	**344**	**(2,327)**		
	%	%	%	%	%		
HSBC s fore tax	**26.3**	**42.3**	**41.9**	**1.8**	**(12.3)**		

ciency ratio	72.4	45.4	59.4	84.3	130.6		
sheet							
	$m	$m	$m	$m	$m		
d advances ners (net)	340,009	302,240	236,932	42,942	2,331		9
ed in held for	5,258	8,010	3,689	85	1,979		
ets	473,284	365,290	1,616,704	81,448	147,417	(274,487)	2,4
r accounts	584,872	361,701	261,728	80,404	881		1,2
ed in held for	7,758	3,363	2,551	3,010			

Table of Contents

	2014						
	Retail Banking and Wealth Management[28]	Commercial Banking[28]	Global Banking and Markets	Global Private Banking	Other[29]	Inter-segment elimination[44]	
	$m	$m	$m	$m	$m	$m	
oss) before							
rest (expense)	17,130	10,158	7,022	994	(501)	(98)	3
(expense)	6,836	4,570	3,560	1,056	(65)		1
(expense) ng net income	(26)	618	4,063	298	(100)		
rest (expense) on activities	9	(2)	1,798	(4)	8	98	
ing (expense)[40]	(17)	616	5,861	294	(92)	98	
s in fair f long-term ued and derivatives					508		
(expense) her financial ents ted at fair							
	1,684	279	12	(1)	(9)		
	1,684	279	12	(1)	499		

(expense) ancial ents ted at fair ss losses ancial ents	14	31	1,117	9	164		
d income	24	18	80	5	184		
rance n income	10,609	1,257	5	50			1
perating	726	241	124	33	6,176	(6,169)	
perating	37,006	17,170	17,781	2,440	6,365	(6,169)	7
rance [5]	(11,857)	(1,422)	(3)	(63)			(1
rating	25,149	15,748	17,778	2,377	6,365	(6,169)	6
pairment s)/recoveries er credit risk ons	(1,936)	(1,558)	(365)	8			
rating	23,213	14,190	17,413	2,385	6,365	(6,169)	5
ee s[46]	(5,126)	(2,351)	(3,655)	(732)	(8,502)		(2
perating s	(12,904)	(4,630)	(8,373)	(1,046)	(99)	6,169	(2
perating s	(18,030)	(6,981)	(12,028)	(1,778)	(8,601)	6,169	(4
ng oss)	5,183	7,209	5,385	607	(2,236)		1
f profit in es and joint s	398	1,605	504	19	6		
oss) before	5,581	8,814	5,889	626	(2,230)		1
	%	%	%	%	%		
f HSBC s efore tax	29.9	47.2	31.5	3.4	(12.0)		
iciency ratio	71.7	44.3	67.7	74.8	135.1		
sheet data[30]							
	$m	$m	$m	$m	$m		
nd advances mers (net)	360,704	313,039	254,463	44,102	2,352		97
	198		288	91			

ed in held for							
sets	500,864	370,958	1,839,644	88,342	164,537	(330,206)	2,63
er accounts	583,757	361,318	319,121	85,465	981		1,35
ed in held for							
				145			

For footnotes, see page 99.

Table of Contents

Report of the Directors: Financial Review (continued)

Profit/(loss) before tax and balance sheet data (continued)

	2013						
	Retail Banking and Wealth Management[28]	Commercial Banking[28]	Global Banking and Markets	Global Private Banking	Other[29]	Inter-segment elimination[44]	T
	$m	$m	$m	$m	$m	$m	
(loss) tax							
erest e/(expense)	18,808	9,731	6,766	1,146	(737)	(175)	35
e income	7,211	4,527	3,482	1,150	64		16
g e/(expense) ing net t income	695	643	4,953	390	(38)		6
erest e/(expense) g activities	(4)	1	1,827	4	44	175	2
ding e[40]	691	644	6,780	394	6	175	8
es in fair of long-term sued and derivatives					(1,228)		(1
	1,643	327	599	4	(576)	(1)	1
e/(expense) nancial							

nents ated at fair							
e/(expense) nancial nents ated at fair	1,643	327	599	4	(1,804)	(1)	
less losses nancial nents	55	1	747	(3)	1,212		2
nd income	22	14	129	8	149		
surance um income	10,598	1,320	6	16			11
operating e/(expense)	554	611	670	(239)	6,761	(5,725)	2
operating e	39,582	17,175	19,179	2,476	5,651	(5,726)	78
surance [45]	(12,129)	(1,523)	(3)	(37)			(13
erating e[1]	27,453	15,652	19,176	2,439	5,651	(5,726)	64
mpairment s and other risk ons	(3,510)	(2,101)	(207)	(31)			(5
erating e	23,943	13,551	18,969	2,408	5,651	(5,726)	58
yee ses[46]	(5,308)	(2,238)	(3,549)	(776)	(7,325)		(19
operating ses	(12,466)	(4,285)	(6,411)	(1,453)	(471)	5,726	(19
operating ses	(17,774)	(6,523)	(9,960)	(2,229)	(7,796)	5,726	(38
ing (loss)	6,169	7,028	9,009	179	(2,145)		20
of (loss) in ates and entures	384	1,509	432	14	(14)		2
(loss) tax	6,553	8,537	9,441	193	(2,159)		22
	%	%	%	%	%		
of HSBC s before tax	29.1	37.8	41.8	0.9	(9.6)		1
fficiency	64.7	41.7	51.9	91.4	138.0		

ce sheet

	$m	$m	$m	$m	$m		
and ces to ners (net)	376,463	296,475	272,473	44,224	2,454		992
assets	518,718	358,990	1,975,509	97,655	171,812	(451,366)	2,671
ner nts	583,140	351,152	328,800	96,770	1,435		1,361

For footnotes, see page 99.

Table of Contents

Report of the Directors: Geographical regions

Summary / Reconciliations

Geographical regions

Summary	76
Reconciliation of 2015 and 2014 reported and adjusted items for geographical regions	77
Reconciliation of 2014 and 2013 reported and adjusted items for geographical regions	78a
Europe	79
Asia	82
Middle East and North Africa	86
North America	89
Latin America	92

Summary

Additional information on results in 2015 may be found in the Financial Summary on pages 48 to 64.

In the analysis of profit and loss by geographical regions that follows, operating income and operating expenses include intra-HSBC items of $3,375m (2014: $2,972m; 2013: $2,628m).

All tables are on a reported basis unless otherwise stated.

Basis of preparation

The results of the geographical regions are presented in accordance with the accounting policies used in the preparation of HSBC s consolidated financial statements. Our operations are closely integrated, and accordingly, the presentation of the geographical data includes internal allocation of certain items of income and expense. These allocations include the costs of certain support services and global functions to the extent that they can be meaningfully attributed to geographical regions. While such allocations have been done on a systematic and consistent basis, they necessarily involve a degree of subjectivity.

Where relevant, income and expense amounts presented include the results of inter-segment funding along with inter-company transactions. All such transactions are undertaken on an arm s length basis.

The expense of the UK bank levy is included in the Europe geographical region as HSBC regards the levy as a cost of being headquartered in the UK.

Profit/(loss) before tax

	2015		2014		2013	
	$m	**%**	$m	%	$m	%
Europe	**643**	**3.4**	596	3.2	1,825	8.1
Asia	**15,763**	**83.5**	14,625	78.3	15,853	70.3
Middle East and North Africa	**1,537**	**8.1**	1,826	9.8	1,694	7.5

North America	**614**	**3.3**	1,417	7.6	1,221	5.4
Latin America	**310**	**1.7**	216	1.1	1,972	8.7
Year ended 31 December	**18,867**	**100.0**	18,680	100.0	22,565	100.0

Total assets[30]

	2015		2014	
	$m	**%**	$m	%
Europe	**1,129,365**	**46.9**	1,290,926	49.0
Asia	**889,747**	**36.9**	878,723	33.4
Middle East and North Africa	**59,236**	**2.5**	62,417	2.4
North America	**393,960**	**16.3**	436,859	16.6
Latin America	**86,262**	**3.6**	115,354	4.4
Intra-HSBC items	**(148,914)**	**(6.2)**	(150,140)	(5.8)
At 31 December	**2,409,656**	**100.0**	2,634,139	100.0

Risk-weighted assets[47]

	2015		2014	
	$bn	**%**	$bn	%
At 31 December	**1,103.0**	**100.0**	1,219.8	100.0
Europe	**337.4**	**30.6**	375.4	30.1
Asia	**459.7**	**41.7**	499.8	40.0
Middle East and North Africa	**60.4**	**5.5**	63.0	5.0
North America	**191.6**	**17.4**	221.4	17.8
Latin America	**73.4**	**6.7**	88.8	7.1

For footnotes, see page 99.

Table of Contents

Reconciliation of reported and adjusted items   geographical regions

2015 compared with 2014

	2015							
	Europe	Asia	MENA	North America	Latin America	Total	UK	Hong Kong
	$m	$m	$m	$m	$m	$m	$m	$m
Revenue[1]								
Reported[31]	21,058	25,303	2,565	7,657	6,592	59,800	15,493	15,616
Significant items	(656)	(1,431)	(10)	98	(36)	(2,035)	(595)	(1,383)
disposal costs of Brazilian operations					18	18		
debit valuation adjustment (DVA) on derivative contracts	(95)	(58)	(1)	(21)	(55)	(230)	(78)	(13)
fair value movements on non-qualifying hedges[32]	200	2		124	1	327	204	6
gain on the partial sale of shareholding in Industrial Bank		(1,372)				(1,372)		(1,372)
loss on sale of several tranches of real estate secured accounts in the US				214		214		
	(771)	(3)	(9)	(219)		(1,002)	(731)	(4)

own credit spread[2]								
provisions arising from the ongoing review of compliance with the Consumer Credit Act in the UK	**10**					**10**	**10**	
Adjusted[31]	**20,402**	**23,872**	**2,555**	**7,755**	**6,556**	**57,765**	**14,898**	**14,233**
Loan impairment charges and other credit risk provisions (LIC s)								
Reported	**(690)**	**(693)**	**(299)**	**(544)**	**(1,495)**	**(3,721)**	**(248)**	**(155)**
Adjusted	**(690)**	**(693)**	**(299)**	**(544)**	**(1,495)**	**(3,721)**	**(248)**	**(155)**
Operating expenses								
Reported[31]	**(19,733)**	**(10,889)**	**(1,234)**	**(6,501)**	**(4,786)**	**(39,768)**	**(15,555)**	**(5,686)**
Significant items	**2,405**	**130**	**15**	**851**	**185**	**3,586**	**2,151**	**49**
disposal costs of Brazilian operations					**110**	**110**		
costs-to-achieve	**600**	**122**	**14**	**103**	**69**	**908**	**536**	**43**
costs to establish UK ring-fenced bank	**89**					**89**	**89**	
regulatory provisions in GPB	**172**					**172**		
restructuring and other related costs	**68**	**8**	**1**	**34**	**6**	**117**	**50**	**6**
settlements and provisions in connection with legal matters	**935**			**714**		**1,649**	**935**	
UK customer redress programmes	**541**					**541**	**541**	
Adjusted[31]	**(17,328)**	**(10,759)**	**(1,219)**	**(5,650)**	**(4,601)**	**(36,182)**	**(13,404)**	**(5,637)**
Share of profit in associates								

and joint ventures								
Reported	**8**	**2,042**	**505**	**2**	**(1)**	**2,556**	**10**	**31**
Adjusted	**8**	**2,042**	**505**	**2**	**(1)**	**2,556**	**10**	**31**
Profit/(loss) before tax								
Reported	**643**	**15,763**	**1,537**	**614**	**310**	**18,867**	**(300)**	**9,806**
Significant items	**1,749**	**(1,301)**	**5**	**949**	**149**	**1,551**	**1,556**	**(1,334)**
revenue	**(656)**	**(1,431)**	**(10)**	**98**	**(36)**	**(2,035)**	**(595)**	**(1,383)**
operating expenses	**2,405**	**130**	**15**	**851**	**185**	**3,586**	**2,151**	**49**
Adjusted	**2,392**	**14,462**	**1,542**	**1,563**	**459**	**20,418**	**1,256**	**8,472**

Table of Contents

Report of the Directors: Geographical regions (continued)

Reconciliations / Europe

Reconciliation of reported and adjusted items (continued)

	2014							
	Europe	Asia	MENA	North America	Latin America	Total	UK	Hong Kong
	$m	$m	$m	$m	$m	$m	$m	$m
Revenue[1]								
Reported[31]	21,571	23,677	2,548	8,152	8,272	61,248	15,727	13,844
Currency translation[31]	(2,013)	(680)	(50)	(252)	(1,871)	(4,775)	(1,058)	4
Significant items	708	(48)	(3)	116	(19)	754	353	(119)
DVA on derivative contracts	234	69	5	16	8	332	203	26
fair value movements on non-qualifying hedges[32]	235	4		302		541	(8)	11
gain on sale of several tranches of real estate secured accounts in the US				(168)		(168)		
gain on sale of shareholding in Bank of Shanghai		(428)				(428)		(428)
impairment of our investment in Industrial		271				271		271

Bank own credit spread[4]	(393)	4	6	(34)		(417)	(474)	1
provisions arising from the ongoing review of compliance with the Consumer Credit Act in the UK	632					632	632	
(gain)/loss and trading results from disposals and changes in ownership levels		32	(14)		(27)	(9)		
Adjusted[31]	20,266	22,949	2,495	8,016	6,382	57,227	15,022	13,729
LICs								
Reported	(764)	(647)	6	(322)	(2,124)	(3,851)	(214)	(320)
Currency translation	104	26		13	540	683	4	
Significant items			(2)		2			
trading results from disposals and changes in ownership levels			(2)		2			
Adjusted	(660)	(621)	4	(309)	(1,582)	(3,168)	(210)	(320)
Operating expenses								
Reported[31]	(20,217)	(10,427)	(1,216)	(6,429)	(5,932)	(41,249)	(15,576)	(5,424)
Currency translation[31]	1,499	352	16	129	1,373	3,278	809	(1)
Significant items	2,601	58	33	578	125	3,395	2,553	56
charge in relation to the settlement agreement with the Federal Housing Finance Authority				550		550		
	16	49				65		49

regulatory provisions in GPB								
restructuring and other related costs	123	9	2	28	116	278	91	7
settlements and provisions in connection with legal matters	1,187					1,187	1,187	
UK customer redress programmes	1,275					1,275	1,275	
trading results from disposals and changes in ownership levels			31		9	40		
Adjusted[31]	(16,117)	(10,017)	(1,167)	(5,722)	(4,434)	(34,576)	(12,214)	(5,369)
Share of profit in associates and joint ventures								
Reported	6	2,022	488	16		2,532	7	42
Currency translation	1	(38)		(2)		(39)	(1)	(1)
Adjusted	7	1,984	488	14		2,493	6	41
Profit/(loss) before tax								
Reported	596	14,625	1,826	1,417	216	18,680	(56)	8,142
Currency translation	(409)	(340)	(34)	(112)	42	(853)	(246)	2
Significant items	3,309	10	28	694	108	4,149	2,906	(63)
revenue	708	(48)	(3)	116	(19)	754	353	(119)
LICs			(2)		2			
operating expenses	2,601	58	33	578	125	3,395	2,553	56
Adjusted	3,496	14,295	1,820	1,999	366	21,976	2,604	8,081

For footnotes, see page 99.

Table of Contents

Reconciliation of reported and adjusted items geographical regions

2014 compared with 2013

	2014							
	Europe $m	Asia $m	MENA $m	North America $m	Latin America $m	Total $m	UK $m	Hong Kong $m
Revenue[1]								
Reported[31]	21,571	23,677	2,548	8,152	8,272	61,248	15,727	13,844
Significant items	708	(48)	(3)	116	(19)	754	353	(119)
DVA on derivative contracts	234	69	5	16	8	332	203	26
fair value movements on non-qualifying hedges[32]	235	4		302		541	(8)	11
gain on sale of several tranches of real estate secured accounts in the US				(168)		(168)		
gain on sale of shareholding in Bank of Shanghai		(428)				(428)		(428)
impairment of our investment in Industrial Bank		271				271		271
	(393)	4	6	(34)		(417)	(474)	1

own credit spread[2]								
provisions arising from the ongoing review of compliance with the Consumer Credit Act in the UK	632					632	632	
(gain)/loss and trading results from disposals and changes in ownership levels		32	(14)		(27)	(9)		
Adjusted[31]	22,279	23,629	2,545	8,268	8,253	62,002	16,080	13,725
LICs								
Reported	(764)	(647)	6	(322)	(2,124)	(3,851)	(214)	(320)
Significant items			(2)		2			
trading results from disposals and changes in ownership levels			(2)		2			
Adjusted	(764)	(647)	4	(322)	(2,122)	(3,851)	(214)	(320)
Operating expenses								
Reported[31]	(20,217)	(10,427)	(1,216)	(6,429)	(5,932)	(41,249)	(15,576)	(5,424)
Significant items	2,601	58	33	578	125	3,395	2,553	56
charge in relation to the settlement agreement with the Federal Housing Finance Authority				550		550		
restructuring and other related costs	123	9	2	28	116	278	91	7
regulatory provisions in GPB	16	49				65		49

settlements and provisions in connection with legal matters	1,187					1,187	1,187	
UK customer redress programmes	1,275					1,275	1,275	
trading results from disposals and changes in ownership levels			31		9	40		
Adjusted[31]	(17,616)	(10,369)	(1,183)	(5,851)	(5,807)	(37,854)	(13,023)	(5,368)
Share of profit in associates and joint ventures								
Reported	6	2,022	488	16		2,532	7	42
Adjusted	6	2,022	488	16		2,532	7	42
Profit before tax								
Reported	596	14,625	1,826	1,417	216	18,680	(56)	8,142
Significant items	3,309	10	28	694	108	4,149	2,906	(63)
revenue	708	(48)	(3)	116	(19)	754	353	(119)
LICs			(2)		2			
operating expenses	2,601	58	33	578	125	3,395	2,553	56
Adjusted	3,905	14,635	1,854	2,111	324	22,829	2,850	8,079

Table of Contents

Reconciliation of reported and adjusted items geographical regions (continued)

	2013							
	Europe $m	Asia $m	MENA $m	North America $m	Latin America $m	Total $m	UK $m	Hong Kong $m
Revenue[1]								
Reported[31]	20,967	24,432	2,503	8,803	10,568	64,645	14,253	13,203
Currency translation[31]	651	(280)	(13)	(139)	(914)	(686)	789	5
Significant items	585	(1,698)	(88)	675	(1,579)	(2,105)	323	3
debit valuation adjustment on derivative contracts	(65)	(40)	(2)	14	(13)	(106)	(78)	(12)
fair value movements on non-qualifying hedges[32]	(297)	32		(246)		(511)	(263)	14
FX gains relating to sterling debt issued by HSBC Holdings	(442)					(442)	(442)	
HSBC Insurance (Asia-Pacific) Holdings Limited s disposal of its shareholding in		(104)				(104)		

Bao Viet Holdings								
HSBC Latin America Holdings UK Limited s disposal of HSBC Bank (Panama) S.A.					(1,107)	(1,107)		
loss on early termination of cash flow hedges in the US run-off portfolio				199		199		
loss on sale of an HFC Bank UK secured loan portfolio	146					146	146	
loss on sale of non-real estate secured accounts in the US				271		271		
loss on sale of several tranches of real estate secured accounts in the US				123		123		
net gain on completion of Ping An disposal		(553)				(553)		
own credit spread[2]	1,015	2	4	225		1,246	1,011	1
reclassification gain in respect of our holdings in Industrial Bank Co., Limited following the issue of additional share capital to third parties		(1,089)				(1,089)		
write-off of allocated goodwill relating to the	279					279		

GPB Monaco business other (gain)/loss and trading results from disposals and changes in ownership levels	(51)	54	(90)	89	(459)	(457)	(51)	
Adjusted[31]	22,203	22,454	2,402	9,339	8,075	61,854	15,365	13,211
LICs								
Reported	(1,530)	(498)	42	(1,197)	(2,666)	(5,849)	(1,003)	(137)
Currency translation	(54)	18		13	191	168	(83)	
Significant items			6		61	67		
other trading results from disposals and changes in ownership levels			6		61	67		
Adjusted	(1,584)	(480)	48	(1,184)	(2,414)	(5,614)	(1,086)	(137)

Table of Contents

Reconciliation of reported and adjusted items geographical regions (continued)

	2013							
	Europe	Asia	MENA	North America	Latin America	Total	UK	Hong Kong
	$m	$m	$m	$m	$m	$m	$m	$m
Operating expenses								
Reported[31]	(17,613)	(9,936)	(1,289)	(6,416)	(5,930)	(38,556)	(12,096)	(5,045)
Currency translation[31]	(376)	127	6	65	535	348	(455)	(1)
Significant items	1,665	193	69	215	384	2,526	937	41
accounting gain arising from change in basis of delivering ill-health benefits in the UK	(430)					(430)	(430)	
Madoff-related litigation costs	298					298		
regulatory provisions in GPB	317	35				352		35
restructuring and other related costs	217	86	4	101	75	483	104	6
UK customer redress programmes	1,235					1,235	1,235	

US customer remediation provisions relating to CRS				100		100		
other trading results from disposals and changes in ownership levels	28	72	65	14	309	488	28	
Adjusted[31]	(16,324)	(9,616)	(1,214)	(6,136)	(5,011)	(35,682)	(11,614)	(5,005)
Share of profit in associates and joint ventures								
Reported	1	1,855	438	31		2,325	6	68
Currency translation		14	(1)	(2)		11		(1)
Significant items	5	82				87	5	
other trading results from disposals and changes in ownership levels	5	82				87	5	
Adjusted	6	1,951	437	29		2,423	11	67
Profit before tax								
Reported	1,825	15,853	1,694	1,221	1,972	22,565	1,160	8,089
Currency translation	221	(121)	(8)	(63)	(188)	(159)	251	3
Significant items	2,255	(1,423)	(13)	890	(1,134)	575	1,265	44
revenue	585	(1,698)	(88)	675	(1,579)	(2,105)	323	3
LICs			6		61	67		
operating expenses	1,665	193	69	215	384	2,526	937	41
share of profit in associates and joint ventures	5	82				87	5	
Adjusted	4,301	14,309	1,673	2,048	650	22,981	2,676	8,136

For footnotes, see page 99.

HSBC HOLDINGS PLC

78c

Table of Contents

Europe

Our principal banking operations in Europe are HSBC Bank plc in the UK, HSBC France, HSBC Private Bank (Suisse) SA and HSBC Trinkaus & Burkhardt AG. Through these operations we provide a wide range of banking, treasury and financial services to personal, commercial and corporate customers across Europe.

	2015 $m	2014 $m	2013 $m
Net interest income	**10,005**	10,611	10,693
Net fee income	**4,891**	6,042	6,032
Net trading income	**4,060**	2,534	4,423
Other income/(expense)	**2,102**	2,384	(181)
Net operating income[1]	**21,058**	21,571	20,967
LICs[34]	**(690)**	(764)	(1,530)
Net operating income	**20,368**	20,807	19,437
Total operating expenses	**(19,733)**	(20,217)	(17,613)
Operating profit	**635**	590	1,824
Income from associates[35]	**8**	6	1
Profit before tax	**643**	596	1,825
Cost efficiency ratio	**93.7%**	93.7%	84.0%
RoRWA[24]	**0.2%**	0.2%	0.6%
Year-end staff numbers	**67,509**	69,363	68,334

For footnotes, see page 99.

Country view of adjusted revenue

	2015 $m	2014 $m
UK	**14,898**	15,022
France	**2,619**	2,487

Germany	**827**	788
Switzerland	**631**	698
Other	**1,427**	1,271
Year ended 31 December	**20,402**	20,266

Profit before tax ($m)

Revenue ($m)

Operating expenses ($m)

For details of significant items, see page 77.

Profit/(loss) before tax by country within global businesses

	Retail Banking and Wealth Management	**Commercial Banking**	**Global Banking and Markets**	**Global Private Banking**	**Other**	**Total**
	$m	**$m**	**$m**	**$m**	**$m**	**$m**
UK	**964**	**2,040**	**384**	**169**	**(3,857)**	**(300)**
France[23]	**388**	**152**	**112**	**14**	**(27)**	**639**
Germany	**23**	**66**	**157**	**20**	**(27)**	**239**
Switzerland		**8**		**(220)**	**(4)**	**(216)**
Other	**(181)**	**53**	**395**	**31**	**(17)**	**281**
Year ended 31 December 2015	**1,194**	**2,319**	**1,048**	**14**	**(3,932)**	**643**
UK	589	2,193	(801)	191	(2,228)	(56)
France[23]	(181)	240	354		(199)	214
Germany	28	71	162	27	(10)	278
Switzerland		5	2	38	(3)	42
Other	(122)	39	332	59	(190)	118
Year ended 31 December 2014	314	2,548	49	315	(2,630)	596
UK	1,471	1,684	1,246	252	(3,493)	1,160
France[23]	285	255	351	21	(162)	750
Germany	30	70	183	44	(25)	302

Switzerland		2	2	(291)		(287)
Other	(33)	77	19	(191)	28	(100)
Year ended 31 December 2013	1,753	2,088	1,801	(165)	(3,652)	1,825

Report of the Directors: Financial Review (continued)

2015 compared with 2014

In Europe, our operations reported a profit before tax of $643m in 2015, an increase of 8% compared with 2014. This was driven by a favourable movement in significant items of $1.6bn partly offset by $0.4bn of adverse effects of foreign currency translation between the years. The favourable movement in significant items included lower fines, settlements, UK redress and associated provisions. These were partly offset by costs-to-achieve relating to business transformation of $0.6bn.

Adjusted profit before tax decreased by 32% to $2.4bn.

Our adjusted **revenue** rose by $136m to $20.4bn. In our GB&M business we increased revenue by $651m, with growth in both our client facing businesses and in Balance Sheet Management. In the former, this was notably in Equities, Credit and Foreign Exchange reflecting higher volatility and client flows. Revenue also increased in Rates, partly offset by reductions in Principal investments and Capital Financing. In CMB, we increased revenue by $69m, primarily from Credit and Lending following balance sheet growth, although overdraft fees fell. These increases were partly offset in GPB where revenue continued to fall (down $157m) reflecting the repositioning we are undertaking in this business.

In 2015, revenue was also affected by adverse fair value movements from interest and exchange rate ineffectiveness in the hedging of our long-term debt. This compared with favourable movements in 2014. The prior year period also included a gain arising from the external hedging of an intra-Group financing transaction.

Adjusted **LICs** of $690m were marginally higher ($30m) than in 2014. LICs increased in RBWM, primarily from lower recoveries, while in our CMB business, LICs increased reflecting an increase in individually assessed LICs, notably in the UK and Spain. By contrast, LICs declined in our GB&M business due to lower individually assessed LICs and lower collective provisions, as 2014 included an increase due to a revision to certain estimates used in our corporate loan impairment calculation. This was partly offset by lower net releases on available-for-sale assets compared with 2014.

Adjusted **operating expenses** rose by $1.2bn or 8% to $17.3bn. The increase was mainly in the UK as we continued our investment in regulatory programmes and compliance, as well as in growth initiatives. The UK bank levy charge was $1.4bn. This was $0.4bn higher than in 2014.

2014 compared with 2013

Our European operations reported a profit before tax of $596m in 2014 compared with $1.8bn in 2013. The decrease in reported profit before tax was driven by a number of significant items including charges relating to UK customer redress ($1.3bn), settlements and provisions in relation to regulatory investigations into foreign exchange ($1.2bn) and provisions arising from the ongoing review of compliance with the CCA in the UK ($632m).

Adjusted profit before tax decreased by $396m or 9%.

Adjusted revenue increased by $76m, as growth in the UK was partly offset by a reduction in France.

In the UK, revenue increased by $715m. This was driven by favourable fair value movements of $222m from ineffectiveness in the hedging of long-term debt issued principally by HSBC Holdings in 2014, compared with adverse movements of $480m in 2013, and a gain arising from external hedging of an intra-Group financing transaction.

In our CMB business in the UK, revenue increased from deposit balance growth in Payments and Cash Management and wider spreads and higher fees in term lending. By contrast, in our GB&M in the UK business revenue decreased. This included the introduction of the FFVA on certain derivative contracts which resulted in a charge affecting Rates and Credit. Revenue also fell in Foreign Exchange, reflecting lower volatility and reduced client flows. In RBWM, lower revenue reflected spread compression, notably on mortgages, and lower fee income from investment products and overdrafts as well as higher fees payable under partnership agreements.

In France revenue was $160m lower, principally in RBWM in the Insurance business due to adverse movements of $203m in the PVIF asset, compared with favourable movements of $48m in 2013.

Revenue in Switzerland also decreased reflecting the repositioning of the GPB business and reduction in client assets.

Adjusted LICs reduced as individually assessed provisions fell in both CMB and GB&M. The latter also recorded higher net releases on available or sale ABSs, although these factors were partly offset by a revision in certain estimates in our corporate collective loan impairment calculation.

Adjusted operating expenses rose by $1.3bn, mainly in the UK, reflecting growth in regulatory programmes and compliance costs in all businesses and increased staff costs. In addition, the UK bank levy charge of $1.1bn in respect of 2014 was $0.2bn higher than in 2013, primarily due to an increase in the rate of the levy. Expenses also increased due to the timing of the recognition of the Financial Services Compensation Scheme levy in the UK. These increases were partly offset by sustainable cost savings of over $330m.

Table of Contents

Report of the Directors: Geographical regions (continued)

Europe

Profit/(loss) before tax and balance sheet data   Europe

	2015						
	Retail Banking and Wealth Management	Commercial Banking	Global Banking and Markets	Global Private Banking	Other	Inter-segment elimination[44]	
	$m	$m	$m	$m	$m	$m	
loss) before							
erest /(expense)	5,128	3,433	1,848	471	(689)	(186)	1
/(expense)	1,880	1,683	849	509	(30)		
; /(expense) ng net income	103	35	3,270	186	(203)		
erest /(expense) on activities	(3)	(6)	493	(3)	2	186	
ling /(expense)[40]	100	29	3,763	183	(201)	186	
s in fair f long-term ued and derivatives					671		
/(expense) her financial ents ted at fair	446	6	(70)		47		

/(expense) nancial ents ted at fair	446	6	(70)		718		
ess losses nancial ents	12	8	231	23			
nd income		1	12	7	2		
urance m income	2,295	135		42			
perating	360	7	61	7	1,229	(312)	
perating	**10,221**	**5,302**	**6,694**	**1,242**	**1,029**	**(312)**	**2**
urance [5]	(2,918)	(139)		(61)			(
erating [1]	**7,303**	**5,163**	**6,694**	**1,181**	**1,029**	**(312)**	**2**
npairment s)/recoveries er credit risk ons	(260)	(475)	62	(18)	1		
erating	**7,043**	**4,688**	**6,756**	**1,163**	**1,030**	**(312)**	**2**
perating es	(5,851)	(2,368)	(5,715)	(1,149)	(4,962)	312	(1
ing loss)	**1,192**	**2,320**	**1,041**	**14**	**(3,932)**		
f profit/(loss) ciates nt ventures	2	(1)	7				
loss) before	**1,194**	**2,319**	**1,048**	**14**	**(3,932)**		
	%	%	%	%	%		
f HSBC s efore tax	6.3	12.3	5.6	0.1	(20.9)		
ficiency ratio	80.1	45.9	85.4	97.3	482.2		
e sheet data[30]	$m	$m	$m	$m	$m		
nd advances omers (net)	156,156	110,617	101,568	23,273	427		39
ssets	205,866	124,105	804,373	56,470	57,943	(119,392)	1,12
er accounts	200,437	132,928	126,225	37,810	476		49

Table of Contents

	2014					
	Retail Banking and Wealth Management	Commercial Banking	Global Banking and Markets	Global Private Banking	Other	Inter-segment elimination[44]
	$m	$m	$m	$m	$m	$m
loss) before						
rest /(expense)	5,196	3,616	1,956	594	(654)	(97)
/(expense)	2,456	1,900	1,087	626	(27)	
/(expense) ng net income	(260)	33	1,943	140	(92)	
rest /(expense) on activities	14	2	660	(4)	1	97
ling /(expense)[40]	(246)	35	2,603	136	(91)	97
s in fair f long-term ued and derivatives					614	
/(expense) her financial ents ted at fair	616	119	14	(1)	(11)	
	616	119	14	(1)	603	
/(expense) nancial ents						

ted at fair							
ess losses nancial ents	12	10	730	9	11		
d income	3	7	50	2	3		
urance n income	2,741	217		50			
perating /(expense)	(127)	45	(3)	29	1,249	(186)	
perating	10,651	5,949	6,437	1,445	1,094	(186)	2
urance 5	(3,450)	(306)		(63)			(
rating 1	7,201	5,643	6,437	1,382	1,094	(186)	2
npairment s)/recoveries er credit risk ons	(268)	(502)		4	2		
rating	6,933	5,141	6,437	1,386	1,096	(186)	2
perating s	(6,621)	(2,594)	(6,391)	(1,071)	(3,726)	186	(2
ng oss)	312	2,547	46	315	(2,630)		
f profit in es t ventures	2	1	3				
oss) before	314	2,548	49	315	(2,630)		
	%	%	%	%	%		
f HSBC s efore tax	1.7	13.6	0.3	1.7	(14.1)		
ficiency ratio	91.9	46.0	99.3	77.5	340.6		
sheet data[30]							
	$m	$m	$m	$m	$m		
nd advances mers (net)	165,112	106,342	113,136	24,766	377		40
sets	221,679	120,819	948,951	64,676	64,182	(129,381)	1,29
er accounts	202,413	135,837	166,075	41,380	254		54

For footnotes, see page 99.

Table of Contents

Report of the Directors: Financial Review (continued)

Profit/(loss) before tax and balance sheet data *Europe (continued)*

	2013					
	Retail Banking and Wealth Management	Commercial Banking	Global Banking and Markets	Global Private Banking	Other	Inter-segment elimination[44]
	$m	$m	$m	$m	$m	$m
oss) before						
rest (expense)	5,600	3,353	1,774	722	(694)	(62)
(expense)	2,545	1,789	957	744	(3)	
income g net income	206	30	2,181	192	698	
rest income ng s	2	5	1,013	4	30	62
ing 0	208	35	3,194	196	728	62
s in fair long-term ued and derivatives					(936)	
(expense) ner l ents ed at fair	1,059	271	591	4	(570)	(1)

(expense) ancial ents ed at fair	1,059	271	591	4	(1,506)	(1)	
ss losses ancial ents	52		344	(17)			
d income	4	2	65	4			
rance n (expense)	2,782	361	(1)	16			
perating (expense)	(103)	9	110	(253)	766		
perating (expense)	12,147	5,820	7,034	1,416	(709)	(1)	2
rance	(4,136)	(567)		(37)			
rating (expense)[1]	8,011	5,253	7,034	1,379	(709)	(1)	2
pairment and other sk ns	(329)	(935)	(242)	(24)			
rating (expense)	7,682	4,318	6,792	1,355	(709)	(1)	
perating s	(5,934)	(2,231)	(4,987)	(1,519)	(2,943)	1	(
ng oss)	1,748	2,087	1,805	(164)	(3,652)		
f oss) in es and joint s	5	1	(4)	(1)			
oss) before	1,753	2,088	1,801	(165)	(3,652)		
	%	%	%	%	%		
f HSBC s efore tax	7.8	9.2	8.0	(0.7)	(16.2)		
iciency	74.1	42.5	70.9	110.2	(415.1)		
sheet							
	$m	$m	$m	$m	$m		
nd s to rs (net)	177,357	105,498	145,136	27,289	830		4
sets	238,499	124,242	1,054,506	75,718	72,174	(172,180)	1,39

er accounts	205,288	134,120	191,715	49,789	1,021	58

For footnotes, see page 99.

Table of Contents

Report of the Directors: Geographical regions (continued)

Asia

Asia

Our principal banking subsidiaries in Hong Kong are The Hongkong and Shanghai Banking Corporation Limited and Hang Seng Bank Limited. The former is the largest bank incorporated in Hong Kong and is our flagship bank in Asia.

We offer a wide range of banking and financial services in mainland China through our local subsidiaries, HSBC Bank (China) Company Limited and Hang Seng Bank (China) Limited. We also participate indirectly in mainland China through our associate, Bank of Communications Co., Ltd.

Outside Hong Kong and mainland China in Asia, we conduct business in 18 countries and territories, with particularly strong coverage in Australia, India, Indonesia, Malaysia, Singapore and Taiwan.

	2015 $m	2014 $m	2013 $m
Net interest income	12,184	12,273	11,432
Net fee income	6,032	5,910	5,936
Net trading income	3,090	2,622	2,026
Other income	3,997	2,872	5,038
Net operating income[1]	25,303	23,677	24,432
LICs[34]	(693)	(647)	(498)
Net operating income	24,610	23,030	23,934
Total operating expenses	(10,889)	(10,427)	(9,936)
Operating profit	13,721	12,603	13,998
Income from associates[35]	2,042	2,022	1,855
Profit before tax	15,763	14,625	15,853
Cost efficiency ratio	43.0%	44.0%	40.7%
RoRWA[24]	3.3%	3.1%	3.8%
Year-end staff numbers	120,144	118,322	113,701

For footnotes, see page 99.

Country view of adjusted revenue

	2015	2014
	$m	$m
Hong Kong	**14,233**	13,729
Australia	**847**	814
India	**1,845**	1,738
Indonesia	**536**	497
Mainland China	**2,606**	2,429
Malaysia	**984**	899
Singapore	**1,288**	1,234
Taiwan	**417**	469
Other	**1,116**	**1,140**
Year ended 31 December	**23,872**	**22,949**

Profit before tax ($m)

Revenue ($m)

Operating expenses ($m)

For details of significant items, see page 77.

Table of Contents

Profit/(loss) before tax by country within global businesses

	Retail Banking and Wealth Management	Commercial Banking	Global Banking and Markets	Global Private Banking	Other	Total
	$m	$m	$m	$m	$m	$m
Hong Kong	**3,799**	**2,384**	**2,119**	**177**	**1,327**	**9,806**
Australia	**61**	**79**	**238**		**(5)**	**373**
India	**(25)**	**97**	**379**	**14**	**141**	**606**
Indonesia	**(6)**	**(112)**	**80**		**31**	**(7)**
Mainland China	**297**	**1,569**	**1,062**	**(3)**	**135**	**3,060**
Malaysia	**119**	**95**	**215**		**13**	**442**
Singapore	**80**	**122**	**259**	**65**	**(19)**	**507**
Taiwan	**11**	**24**	**133**		**(13)**	**155**
Other	**50**	**250**	**449**	**(1)**	**73**	**821**
Year ended 31 December 2015	**4,386**	**4,508**	**4,934**	**252**	**1,683**	**15,763**
Hong Kong	3,727	2,264	1,807	146	198	8,142
Australia	78	126	232		(4)	432
India	4	121	442	11	122	700
Indonesia	10	53	110		25	198
Mainland China	292	1,533	954	(3)	175	2,951
Malaysia	156	122	190		28	496
Singapore	129	168	243	57	(8)	589
Taiwan	19	35	166		1	221
Other	57	320	432		87	896
Year ended 31 December 2014	4,472	4,742	4,576	211	624	14,625

Hong Kong	3,742	2,110	1,971	208	58	8,089
Australia	100	131	189		26	446
India	(21)	113	418	7	136	653
Indonesia	12	106	126		36	280
Mainland China	223	1,536	842	(4)	1,644	4,241
Malaysia	148	105	236		25	514
Singapore	147	120	262	74	22	625
Taiwan	7	30	158		5	200
Other	61	207	473	(1)	65	805
Year ended 31 December 2013	4,419	4,458	4,675	284	2,017	15,853

Analysis of mainland China profit/(loss) before tax

	Retail Banking and Wealth Management $m	Commercial Banking $m	Global Banking and Markets $m	Global Private Banking $m	Other $m	Total $m
BoCom and other associates	**260**	**1,448**	**301**			**2,009**
Mainland China operations	**37**	**121**	**761**	**(3)**	**135**	**1,051**
Year ended 31 December 2015	**297**	**1,569**	**1,062**	**(3)**	**135**	**3,060**
BoCom and other associates	255	1,421	296		1	1,973
Mainland China operations	37	112	658	(3)	174	978
Year ended 31 December 2014	292	1,533	954	(3)	175	2,951
BoCom and other associates	247	1,360	284		(38)	1,853
Mainland China operations	(24)	176	558	(4)	40	746
Industrial Bank					1,089	1,089
Ping An					553	553
Year ended 31 December 2013	223	1,536	842	(4)	1,644	4,241

Report of the Directors: Financial Review (continued)

2015 compared with 2014

Our operations in Asia reported a profit before tax of $15.8bn in 2015 compared with $14.6bn in 2014, an increase of 8%. This was mainly driven by a favourable movement in significant items of $1.3bn partly offset by $0.3bn of adverse effects of foreign currency translation between the years. In 2015, significant items included a gain on the partial sale of our shareholding in Industrial Bank ($1.4bn). By contrast, significant items in 2014 included the gain on sale of our investment in Bank of Shanghai ($428m) and an impairment of our investment in Industrial Bank ($271m).

On an adjusted basis, profit before tax of $14.5bn was $167m or 1% higher than in 2014.

Adjusted **revenue** was $24bn. This was $923m or 4% higher than in 2014. The increase was primarily in GB&M from Foreign Exchange and Equities, mainly in Hong Kong. We increased revenue in our RBWM business from growth in lending and deposit balances, as well as higher sales of Wealth Management products. This was primarily due to growth in Investment Distribution revenue, notably in the first half of 2015 following high levels of stock market turnover which more than offset weaker investor sentiment experienced in the second half. CMB also recorded revenue growth, mainly in Hong Kong from a rise in average lending and deposit balances, coupled with wider spreads on deposit and trade-related lending. However, there was a notable slowing of demand for credit in the second half of 2015.

Adjusted **LICs** of $693m were 12% higher. In CMB, our LICs increased from a rise in specific LICs, notably in Indonesia. This was partly offset by a decrease in GB&M in Hong Kong as 2014 included a significant impairment charge, which was partially released in 2015.

Our adjusted **operating expenses** rose by $742m or 7% to $10.8bn, with increases in all of our businesses. This was primarily due to higher staff costs following wage inflation, and growth in average FTEs, mainly in RBWM to support business growth. In addition, cost growth reflected our continued investment in regulatory programmes and compliance.

Adjusted **share of profit** from associates and joint ventures rose by $58m, mainly from BoCom.

2014 compared with 2013

Our operations in Asia reported a profit before tax of $14.6bn in 2014 compared with $15.9bn in 2013, a decrease of 8%. The reduction was due to the effect of a number of significant items. In 2013, these included an accounting gain arising from the reclassification of Industrial Bank as a financial investment ($1.1bn) and the net gain on completion of the Ping An disposal ($553m). In 2014, significant items included the gain on sale of our investment in Bank of

Shanghai ($428m) and an impairment of our investment in Industrial Bank ($271m).

On an adjusted basis, profit before tax rose by $326m or 2%.

Adjusted revenue was $1.2bn or 5% higher. The increase was primarily in Hong Kong and mainland China, mainly in our CMB and RBWM businesses from balance sheet growth. In addition, we grew revenue in GB&M from portfolio growth in Balance Sheet Management and increased term lending. Revenue was also higher in India and Australia.

Adjusted LICs rose by $167m or 35%, principally in our GB&M and CMB businesses from a rise in individually assessed impairment charges against a small number of customers in Hong Kong and mainland China. This was partly offset by a reduction in individually assessed LICs in CMB in New Zealand, Malaysia and Vietnam.

Operating expenses rose by $753m following investment in the region, notably in regulatory programmes and compliance. In addition, we incurred higher costs at our Global Service Centres following migration of activities from other areas of the Group. Cost growth also reflected wage inflation and additional headcount, notably in Hong Kong and mainland China to support business growth, mainly in CMB, and increased marketing activity. These factors were partly offset by around $270m of sustainable cost savings achieved in 2014.

Adjusted share of profit from associates and joint ventures rose by $71m, mainly from BoCom.

Table of Contents

Report of the Directors: Geographical regions (continued)

Asia

Profit before tax and balance sheet data Asia

	2015					
	Retail Banking and Wealth Management $m	Commercial Banking $m	Global Banking and Markets $m	Global Private Banking $m	Other $m	Inter-segment elimination[44] $m
ore tax						
st xpense)	5,132	3,613	3,373	175	(70)	(39)
come	2,939	1,466	1,304	310	13	
ncome net come	225	352	1,801	127	13	
st xpense) on tivities	(23)	(11)	559	1	7	39
g	202	341	2,360	128	20	39
n fair ong-term d and rivatives					5	
xpense) r financial ts d at fair	(329)	(30)	10		14	
	(329)	(30)	10		19	
xpense)						

ncial ts l at fair losses ncial ts	35	23	117		1,384	
income	2		1		25	
nce ncome)	6,006	780			(2)	
rating	659	149	146	2	2,878	(1,116)
rating	**14,646**	**6,342**	**7,311**	**615**	**4,267**	**(1,116)**
nce	**(5,925)**	**(837)**				
ting	**8,721**	**5,505**	**7,311**	**615**	**4,267**	**(1,116)**
airment recoveries credit risk s	**(307)**	**(425)**	**40**		**(1)**	
ting	**8,414**	**5,080**	**7,351**	**615**	**4,266**	**(1,116)**
rating	**(4,320)**	**(2,020)**	**(2,719)**	**(363)**	**(2,583)**	**1,116**
g profit	**4,094**	**3,060**	**4,632**	**252**	**1,683**	
rofit in and joint	**292**	**1,448**	**302**			
fore tax	**4,386**	**4,508**	**4,934**	**252**	**1,683**	
	%	%	%	%	%	
HSBC s ore tax	**23.2**	**23.9**	**26.2**	**1.3**	**8.9**	
iency ratio	**49.5**	**36.7**	**37.2**	**59.0**	**60.5**	
heet data[30]						
	$m	**$m**	**$m**	**$m**	**$m**	
advances ers (net)	**117,807**	**130,513**	**93,007**	**13,144**	**1,904**	
ts	**172,719**	**157,838**	**540,404**	**14,488**	**69,080**	**(64,782)**
accounts	**303,536**	**165,202**	**100,998**	**28,685**	**199**	

Table of Contents

	Retail Banking and Wealth Management	Commercial Banking	Global Banking and Markets	2014 Global Private Banking	Other	Inter-segment elimination[44]
	$m	$m	$m	$m	$m	$m
efore tax						
rest /(expense)	5,003	3,439	3,579	177	(16)	91
income	2,792	1,529	1,311	272	6	
/(expense) ng net income	216	382	1,220	142	(5)	
rest /(expense) on activities	(13)	(9)	771		9	(91)
ling [40]	203	373	1,991	142	4	(91)
s in fair f long-term ued and derivatives					(4)	
/(expense) her financial ents ted at fair	543	(6)	(2)		2	
	543	(6)	(2)		(2)	
/(expense) ancial ents ted at fair						

ess losses nancial ents	1	5	46		148		
d income	1		1		177		
urance m income	6,596	794					
perating	516	95	141	3	2,734	(1,158)	
perating	15,655	6,229	7,067	594	3,051	(1,158)	3
urance 5	(6,979)	(782)					(
rating 1	8,676	5,447	7,067	594	3,051	(1,158)	2
npairment s)/recoveries er credit risk ons	(317)	(228)	(103)	1			
rating	8,359	5,219	6,964	595	3,051	(1,158)	2
perating s	(4,191)	(1,897)	(2,686)	(384)	(2,427)	1,158	(1
ng profit	4,168	3,322	4,278	211	624		1
f profit in es and joint s	304	1,420	298				
efore tax	4,472	4,742	4,576	211	624		1
	%	%	%	%	%		
f HSBC s efore tax	23.9	25.4	24.5	1.1	3.4		
ficiency ratio	48.3	34.8	38.0	64.6	79.5		
e sheet data[30]							
	$m	$m	$m	$m	$m		
nd advances mers (net)	115,643	132,509	99,934	12,894	1,975		36
sets	166,577	158,747	548,865	14,905	79,477	(89,848)	87
er accounts	286,670	155,608	104,896	29,847	470		57

For footnotes, see page 99.

Table of Contents

Report of the Directors: Financial Review (continued)

Profit before tax and balance sheet data Asia (continued)

	2013						
	Retail Banking and Wealth Management	Commercial Banking	Global Banking and Markets	Global Private Banking	Other	Inter-segment elimination[44]	
	$m	$m	$m	$m	$m	$m	
efore tax							
erest /(expense)	4,895	3,103	3,245	205	(124)	108	1
/(expense)	2,758	1,518	1,419	249	(8)		
g /(expense) ng net income	238	377	1,483	175	(739)		
erest /(expense) ing activities	(16)	(6)	608		14	(108)	
ding /(expense)[40]	222	371	2,091	175	(725)	(108)	
s in fair f long-term ued and derivatives					(1)		
/(expense) her financial ents ted at fair	315		7		(7)		

/(expense) nancial ents ted at fair	315		7		(8)		
ess losses nancial ments	(1)		58	14	1,204		
nd income		1	6		145		
urance m income	6,263	654	1				
perating	764	97	163	12	3,871	(1,232)	
perating	15,216	5,744	6,990	655	4,355	(1,232)	3
urance 5	(6,609)	(687)					(
erating 1	8,607	5,057	6,990	655	4,355	(1,232)	2
npairment s and other isk ons	(347)	(144)	(3)	(4)			
erating	8,260	4,913	6,987	651	4,355	(1,232)	2
perating es	(4,138)	(1,786)	(2,560)	(367)	(2,317)	1,232	(
ng profit	4,122	3,127	4,427	284	2,038		1
f loss) in tes and joint s	297	1,331	248		(21)		
efore tax	4,419	4,458	4,675	284	2,017		1
	%	%	%	%	%		
f HSBC s efore tax	19.6	19.8	20.7	1.3	8.9		
ficiency ratio	48.1	35.3	36.6	56.0	53.2		
e sheet							
	$m	$m	$m	$m	$m		
and advances omers (net)	111,769	122,882	89,722	10,904	1,620		33
ssets	158,456	146,898	515,023	12,994	82,453	(84,033)	83
ner accounts	278,392	141,958	96,546	31,250	337		54

For footnotes, see page 99.

HSBC HOLDINGS PLC

85a

Table of Contents

Report of the Directors: Geographical regions (continued)

Middle East and North Africa

Middle East and North Africa

The network of branches of HSBC Bank Middle East Limited, together with HSBC s subsidiaries and associates, gives us wide coverage in the region. Our associate in Saudi Arabia, The Saudi British Bank (40% owned), is the Kingdom s fifth largest bank by total assets.

	2015 $m	2014 $m	2013 $m
Net interest income	**1,531**	1,519	1,486
Net fee income	**633**	650	622
Net trading income	**325**	314	357
Other income	**76**	65	38
Net operating income[1]	**2,565**	2,548	2,503
LICs[34]	**(299)**	6	42
Net operating income	**2,266**	2,554	2,545
Total operating expenses	**(1,234)**	(1,216)	(1,289)
Operating profit	**1,032**	1,338	1,256
Income from associates[35]	**505**	488	438
Profit before tax	**1,537**	1,826	1,694
Cost efficiency ratio	**48.1%**	47.7%	51.5%
RoRWA[24]	**2.5%**	2.9%	2.7%
Year-end staff numbers	**8,066**	8,305	8,618

For footnotes, see page 99.

Country view of adjusted revenue

	2015 $m	2014 $m
Egypt	**610**	493
United Arab Emirates	**1,407**	1,446

Other	**538**	556
Year ended 31 December	**2,555**	2,495

Profit before tax ($m)

Revenue ($m)

Operating expenses ($m)

For details of significant items, see page 77.

Profit/(loss) before tax by country within global businesses

	Retail Banking and Wealth Management $m	Commercial Banking $m	Global Banking and Markets $m	Global Private Banking $m	Other $m	Total $m
Egypt	**50**	**101**	**256**		**3**	**410**
United Arab Emirates	**91**	**19**	**292**		**(35)**	**367**
Saudi Arabia	**112**	**169**	**202**	**16**	**1**	**500**
Other	**19**	**119**	**123**		**(1)**	**260**
Year ended 31 December 2015	**272**	**408**	**873**	**16**	**(32)**	**1,537**
Egypt	64	94	177			335
United Arab Emirates	154	190	364		(46)	662
Saudi Arabia	91	168	203	19	5	486
Other	14	152	182		(5)	343
Year ended 31 December 2014	323	604	926	19	(46)	1,826
Egypt	31	37	166		(29)	205
United Arab Emirates	142	290	275	1	(72)	636
Saudi Arabia	82	146	188	15	7	438
Other	3	172	240			415
Year ended 31 December 2013	258	645	869	16	(94)	1,694

Table of Contents

Report of the Directors: Financial Review (continued)

2015 compared with 2014

Our operations in Middle East and North Africa reported a profit before tax of $1.5bn in 2015, a decrease of $0.3bn or 16% compared with 2014.

On an adjusted basis, profit before tax of $1.5bn was $0.3bn or 15% lower than in 2014.

Adjusted **revenue** of $2.6bn was $60m or 2% higher than in 2014. This was mainly from revenue growth in our GB&M business in Egypt from growth in lending and investments, and in RBWM in the UAE from higher fee income on cards and wealth products.

Adjusted **LICs** of $299m compared with a net release of $4m in 2014. In 2015, LICs included higher impairment charges in our CMB business against specific exposures in the oil and foodstuff industries. LICs also increased in our RBWM business in the UAE from higher collective impairment charges on our mortgage book which included the effect of a review of portfolio collateral. By contrast, 2014 included releases in GB&M.

Operating expenses of $1.2bn were $52m or 5% higher than in 2014. This was mainly from higher staff costs, in part reflecting continued investment in Global Standards and wage inflation. In addition, FTEs increased primarily reflecting a rise in customer-facing staff in RBWM.

Adjusted **share of profits** from associates and joint ventures increased by $17m or 3%, mainly from The Saudi British Bank.

2014 compared with 2013

Our operations in Middle East and North Africa reported a profit before tax of $1.8bn, an increase of 8% on a reported basis, despite the effects of business disposals, including the loss on sale of our Pakistan business.

On an adjusted basis, profit before tax grew by 11%.

Adjusted revenue was $143m or 6% higher. The growth was primarily in Egypt from improved deposit spreads in our RBWM business from re-pricing, as well as from the non-recurrence of losses on disposal of available-for-sale debt securities in GB&M in 2013. In addition, the Egyptian Central Bank resumed interest payments on overnight placements during 2014, which contributed to the rise in revenue in all global businesses.

In the UAE, we increased revenue by $47m, primarily in our GB&M businesses from a rise in Capital Financing due to increased advisory mandates in Project and Export Finance and a gain on restructuring a specific loan in Credit and Lending. In addition, we grew revenue in our Equities and Securities Services businesses from increased customer

flows.

Adjusted net loan impairment releases were lower by $44m, primarily due to lower releases from a particular UAE-related exposure in GB&M.

Operating expenses of $1,183m decreased by $31m on an adjusted basis. In Egypt, expenses fell following charges recorded in 2013 relating to changes in the interpretation of tax regulations. In the UAE, expenses reduced due to the non-recurrence of charges incurred in 2013 on customer redress programmes in RBWM relating to fees charged on overseas credit card transactions. This was partly offset by wage inflation, investment in regulatory programmes and compliance, growth in customer-facing staff in RBWM and increased service and product support staff in CMB.

Adjusted share of profits from associates and joint ventures increased by 12%, mainly from The Saudi British Bank.

Table of Contents

Profit/(loss) before tax and balance sheet data Middle East and North Africa

	2015					
	Retail Banking and Wealth Management	Commercial Banking	Global Banking and Markets	Global Private Banking	Other	Inter-segment elimination[44]
	$m	$m	$m	$m	$m	$m
s) before						
st income	587	451	478		3	12
xpense) ncome	176	249	213		(5)	
net come	51	62	216			
st xpense) on tivities			8			(12)
g	51	62	224			(12)
se from nstruments d at fair					6	
losses ncial ts	7	5	5			
income	1	1	7			
rating	12	11	25		99	(103)

rating ance	**834**	**779**	**952**		**103**	**(103)**
ting airment recoveries credit risk s	**834** **(121)**	**779** **(183)**	**952** **5**		**103**	**(103)**
ting rating	**713** **(557)**	**596** **(357)**	**957** **(286)**		**103** **(137)**	**(103)** **103**
g **ss)** rofit in and joint	**156** **116**	**239** **169**	**671** **202**	**16**	**(34)** **2**	
ss) before	**272**	**408**	**873**	**16**	**(32)**	
	%	*%*	*%*	*%*	*%*	
HSBC s ore tax	**1.4**	**2.2**	**4.6**	**0.1**	**(0.2)**	
iency ratio	**66.8**	**45.8**	**30.0**		**133.0**	
heet data[30]						
	$m	**$m**	**$m**	**$m**	**$m**	
l advances ers (net)	**6,374**	**13,695**	**9,825**			
ts	**7,194**	**15,546**	**35,929**	**92**	**3,067**	**(2,592)**
accounts	**17,172**	**12,192**	**6,901**		**203**	

Report of the Directors: Geographical regions (continued)

Middle East and North Africa / North America

	2014					
	Retail Banking and Wealth Management	Commercial Banking	Global Banking and Markets	Global Private Banking	Other	Inter-segment elimination[44]
	$m	$m	$m	$m	$m	$m
loss) before						
erest income	615	467	410		3	24
/(expense)	152	268	240		(10)	
g /(expense) ng net income	58	68	207		(5)	
erest /(expenses) ng activities			10			(24)
ding /(expense)[40]	58	68	217		(5)	(24)
pense from al instruments ted at fair					(3)	
ess losses nancial nents	1	1	20			
nd income	1	1	12			
perating	8		27		108	(111)
	835	805	926		93	(111)

perating							
urance[5]							
erating[1]	835	805	926		93	(111)	
npairment s)/recoveries er credit risk ons	(26)	(21)	53				
erating	809	784	979		93	(111)	
perating es	(578)	(348)	(256)		(145)	111	(
ng loss)	231	436	723		(52)		
f profit in tes and joint s	92	168	203	19	6		
loss) before	323	604	926	19	(46)		
	%	%	%	%	%		
f HSBC s efore tax	1.7	3.2	5.0	0.1	(0.2)		
ficiency ratio	69.2	43.2	27.6		155.9		
e sheet data[30]							
	$m	$m	$m	$m	$m		
nd advances omers (net)	6,318	13,104	9,641				2
ssets	7,073	14,911	39,229	77	2,900	(1,773)	6
her accounts	18,024	11,809	9,630		257		3

For footnotes, see page 99.

Table of Contents

Report of the Directors: Financial Review (continued)

Profit/(loss) before tax and balance sheet data *Middle East and North Africa (continued)*

	2013					
	Retail Banking and Wealth Management	Commercial Banking	Global Banking and Markets	Global Private Banking	Other	Inter-segment elimination[44]
	$m	$m	$m	$m	$m	$m
oss) before						
est income	585	486	390		4	21
expense)	161	269	197		(5)	
income g net ncome	59	85	220			
est income g activities			14			(21)
ng)	59	85	234			(21)
nse from instruments ed at fair					(2)	
ss losses ancial ents			(18)			
d income			9			
erating	25	30	15		99	(120)
erating	830	870	827		96	(120)

rance						
ating	830	870	827		96	(120)
pairment)/recoveries r credit risk ns	(49)	(20)	110	1		
ating	781	850	937	1	96	(120)
erating s	(606)	(350)	(256)		(197)	120
g oss)	175	500	681	1	(101)	
profit in es and joint	83	145	188	15	7	
oss) before	258	645	869	16	(94)	
	%	%	%	%	%	
HSBC s fore tax	1.1	2.9	3.8	0.1	(0.4)	
ciency ratio	73.0	40.2	31.0		205.2	
sheet data[30]						
	$m	$m	$m	$m	$m	
d advances mers (net)	6,152	11,814	9,241		4	
ets	7,016	13,776	39,302	64	3,340	(2,688)
r accounts	18,771	12,402	7,432	1	77	

For footnotes, see page 99.

Table of Contents

North America

Our principal North American businesses are located in the US and Canada. Operations in the US are primarily conducted through HSBC Bank USA, N.A., and HSBC Finance, a national consumer finance company. HSBC Markets (USA) Inc. is the intermediate holding company of, *inter alia*, HSBC Securities (USA) Inc. Canadian operations are conducted through HSBC Bank Canada.

	2015 $m	2014 $m	2013 $m
Net interest income	**4,532**	5,015	5,742
Net fee income	**2,018**	1,940	2,143
Net trading income	**545**	411	948
Other income/(expense)	**562**	786	(30)
Net operating income[1]	**7,657**	8,152	8,803
LICs[34]	**(544)**	(322)	(1,197)
Net operating income	**7,113**	7,830	7,606
Total operating expenses	**(6,501)**	(6,429)	(6,416)
Operating profit	**612**	1,401	1,190
Income from associates[35]	**2**	16	31
Profit before tax	**614**	1,417	1,221
Cost efficiency ratio	**84.9%**	78.9%	72.9%
RoRWA[24]	**0.3%**	0.6%	0.5%
Year-end staff numbers	**19,656**	20,412	20,871

For footnotes, see page 99.

Country view of adjusted revenue

	2015 $m	2014 $m
US	**5,926**	6,083
Canada	**1,585**	1,663
Other	**244**	270
Year ended 31 December	**7,755**	8,016

Profit before tax ($m)

Revenue ($m)

Operating expenses ($m)

For details of significant items, see page 77.

Profit/(loss) before tax by country within global businesses

	Retail Banking and Wealth Management $m	Commercial Banking $m	Global Banking & Markets $m	Global Private Banking $m	Other $m	Total $m
US	**(736)**	**302**	**355**	**65**	**55**	**41**
Canada	**58**	**259**	**189**		**(21)**	**485**
Other	**33**	**12**	**49**	**(6)**		**88**
Year ended 31 December 2015	**(645)**	**573**	**593**	**59**	**34**	**614**
US	513	400	(403)	82	(60)	532
Canada	96	514	242		(23)	829
Other	23	(1)	49	3	(18)	56
Year ended 31 December 2014	632	913	(112)	85	(101)	1,417
US	(358)	296	633	53	(350)	274
Canada	131	506	280		(3)	914
Other	20	(16)	16	4	9	33
Year ended 31 December 2013	(207)	786	929	57	(344)	1,221

Table of Contents

Report of the Directors: Financial Review (continued)

2015 compared with 2014

In North America, our operations reported a profit before tax of $614m in 2015 compared with $1.4bn in 2014. The effect of currency translation between years and net movement in significant items together had an adverse effect of $0.4bn on the reported profit before tax. The movement in significant items included the effect of fines, penalties and charges in relation to legal matters, as well as a net loss on the sale of several tranches of real estate secured loans in our US CML portfolio.

Adjusted profit before tax was $1.6bn or 22% lower than in 2014.

Adjusted **revenue** fell by $261m or 3%. The reduction was mainly in our CML portfolio in RBWM and reflected lower average lending balances as we continued with our programme to run-off and sell tranches of the portfolio. Lower revenue was in part offset by growth in our GB&M business. This was mainly from an increase in income in Markets and Balance Sheet Management and in Capital Finance from volume growth.

Adjusted **LICs** increased by $235m or 76%. This was mainly in our CMB business in the US and Canada and reflected an increase in both collectively and individually assessed allowances against our oil and gas exposures. In our US CML portfolio LICs were also higher than in 2014. This reflected lower favourable market value adjustments on underlying properties as improvements in housing market conditions were less pronounced in 2015. This was partly offset by a reduction in LICs from lower levels of newly impaired loans and lower lending balances from continued run-off and sales.

Adjusted **operating expenses** were $72m or 1% lower. In RBWM, our costs fell reflecting the reduced size of our CML portfolio which resulted in lower support services, project and staff costs. In addition, 2014 included certain legal costs which did not recur. This reduction was offset by cost growth in our CMB businesses, primarily staff costs to support the expansion of our franchise.

2014 compared with 2013

Our operations in North America reported a profit before tax of $1.4bn in 2014 compared with $1.2bn in 2013. The effect of currency translation between years and net movement in significant items together contributed $247m of the increase in reported profit before tax. The movement in significant items included a charge in relation to the settlement agreement with the Federal Housing Finance Authority.

Adjusted profit before tax was $63m or 3% higher.

Adjusted revenue fell by $1.1bn or 12%. This was primarily in our CML portfolio in RBWM and reflected lower average lending balances driven by the continued run-off and loan sales. In addition, our loan yields fell as we sold our higher yielding CML non-real estate personal loan portfolio. Revenue was also lower in our GB&M business, driven by a reduction in Balance Sheet Management income as we reported lower gains on sales of available-for-sale debt, and the adverse performance of economic hedges used to manage interest rate risk. Credit revenue also reduced, primarily in our legacy credit portfolio.

Adjusted LICs fell by 73% to $322m. This was mainly in our CML portfolio in RBWM reflecting reduced levels of delinquency, new impaired loans and lower lending balances from the continued run-off and loan sales. This was partly offset by less favourable market value adjustments to underlying property prices because improvements in housing market conditions were less pronounced in 2014 than in 2013. LICs also fell in our Principal RBWM business due to lower levels of delinquency, and in Canada in CMB from lower individually and collectively assessed LICs.

Adjusted operating expenses decreased by $285m. This reflected lower divestiture costs, as our former Cards business reached the end of the data separation process, and lower costs following continued run-off and loan sales in our CML portfolio. In addition, we achieved over $185m of sustainable cost savings, primarily reflecting organisational effectiveness initiatives. Partly offsetting these reductions were higher legal costs and the growth in costs associated with regulatory programmes and compliance as we continued our investment in Global Standards.

Table of Contents

Report of the Directors: Geographical regions (continued)

North America

Profit/(loss) before tax and balance sheet data   North America

	2015						
	Retail Banking and Wealth Management $m	Commercial Banking $m	Global Banking and Markets $m	Global Private Banking $m	Other $m	Inter-segment elimination[44] $m	T
/(loss) before							
nterest income	2,188	1,365	771	206	31	(29)	4,
ee ne/(expense)	499	539	876	117	(13)		2,
ng ne/(expense) ding net st income	12	33	188	11	(7)		
nterest income ding activities	7	1	271			29	
ading ne/(expense)[40]	19	34	459	11	(7)	29	
ges in fair of long-term ssued and d derivatives					181		
ncome from financial ments nated at fair							
xpense from cial instruments nated at fair					181		

less losses financial tments			189		(42)		
end income	16	12	19	4	6		
nsurance um income							
operating ne	(142)	53	76	(6)	1,804	(1,608)	
operating ne	**2,580**	**2,003**	**2,390**	**332**	**1,960**	**(1,608)**	**7,**
nsurance s[45]							
perating ne[1]	**2,580**	**2,003**	**2,390**	**332**	**1,960**	**(1,608)**	**7,**
impairment ges)/recoveries ther credit risk sions	(159)	(323)	(68)	6			(
perating ne	**2,421**	**1,680**	**2,322**	**338**	**1,960**	**(1,608)**	**7,**
operating ses	(3,066)	(1,109)	(1,729)	(279)	(1,926)	1,608	(6,
ating t/(loss)	**(645)**	**571**	**593**	**59**	**34**		
of profit in iates and joint res		2					
t/(loss) before	**(645)**	**573**	**593**	**59**	**34**		
	%	%	%	%	%		
of HSBC s before tax	(3.4)	3.0	3.1	0.3	0.3		
efficiency ratio	118.8	55.4	72.3	84.0	98.3		8
ce sheet data[30]							
	$m	$m	$m	$m	$m		
s and advances tomers (net)	53,737	40,696	27,940	6,478			128,
assets	62,127	47,009	282,201	8,629	14,489	(20,495)	393,
omer accounts	51,685	45,475	24,182	13,807	3		135,

	2014						
	Retail Banking and Wealth Management	Commercial Banking	Global Banking and Markets	Global Private Banking	Other	Inter-segment elimination[44]	T
	$m	$m	$m	$m	$m	$m	
/(loss) before							
terest income e	2,645	1,455	587	204	157	(33)	5
e/(expense) ng	497	572	775	130	(34)		1
e/(expense) ding net st income	(165)	34	302	13	3		
terest income ding activities	7	1	183			33	
ading e/(expense)[40]	(158)	35	485	13	3	33	
ges in fair of long-term ssued and d derivatives					(99)		
come from financial ments nated at fair							
xpense from ial instruments nated at fair					(99)		
less losses financial ments		15	237		5		

end income	13	8	16	3	4		
surance um income							
operating e	268	61	101	1	1,872	(1,719)	
operating e	3,265	2,146	2,201	351	1,908	(1,719)	8
surance [45]							
erating e[1]	3,265	2,146	2,201	351	1,908	(1,719)	8
mpairment es)/recoveries her credit risk ions	(117)	(148)	(63)	8	(2)		
erating e	3,148	1,998	2,138	359	1,906	(1,719)	7
operating ses	(2,516)	(1,101)	(2,250)	(274)	(2,007)	1,719	(6
ting /(loss)	632	897	(112)	85	(101)		1
of profit in ates and joint res		16					
/(loss) before	632	913	(112)	85	(101)		1
	%	%	%	%	%		
of HSBC s before tax	3.4	4.9	(0.6)	0.5	(0.5)		
fficiency ratio	77.1	51.3	102.2	78.1	105.2		
ce sheet data[30]							
	$m	$m	$m	$m	$m		
and advances tomers (net)	60,365	41,966	21,110	6,346			129
assets	74,680	48,411	319,819	8,386	16,823	(31,260)	436
mer accounts	51,258	45,275	30,301	12,050			138

For footnotes, see page 99.

Table of Contents

Report of the Directors: Financial Review (continued)

Profit/(loss) before tax and balance sheet data North America (continued)

	2013						
	Retail Banking and Wealth Management $m	Commercial Banking $m	Global Banking and Markets $m	Global Private Banking $m	Other $m	Inter-segment elimination[44] $m	Total $m
rofit/(loss) efore tax							
et interest come	3,483	1,430	582	195	89	(37)	5,742
et fee come	605	593	741	125	79		2,143
rading come cluding et interest come	48	40	613	19	7		727
et interest come on ading tivities	11	1	172			37	221
et trading come[40]	59	41	785	19	7	37	948
hanges in ir value of ng-term ebt issued d related erivatives					(288)		(288
et income om other							

nancial struments esignated fair value							
et expense om nancial struments esignated fair value					(288)		(288
ains less sses from nancial vestments	4		282		8		294
ividend come	12	9	48	4	4		77
et surance emium come	34						34
ther perating come/ xpense)	(454)		229	1	1,829	(1,713)	(108
otal perating come	3,743	2,073	2,667	344	1,728	(1,713)	8,842
et surance aims[45]	(39)						(39
et perating come[1]	3,704	2,073	2,667	344	1,728	(1,713)	8,803
oan npairment harges and her credit sk ovisions	(950)	(223)	(20)	(4)			(1,197
et perating come	2,754	1,850	2,647	340	1,728	(1,713)	7,606
otal perating xpenses	(2,960)	(1,096)	(1,718)	(283)	(2,072)	1,713	(6,416
perating ofit/(loss)	(206)	754	929	57	(344)		1,190
hare of ofit/(loss) associates d joint	(1)	32					31

entures							
rofit/(loss) efore tax	(207)	786	929	57	(344)		1,221
	%	%	%	%	%		%
hare of SBC s rofit before x	(0.9)	3.5	4.1	0.3	(1.6)		5.4
ost ficiency tio	79.9	52.9	64.4	82.3	119.9		72.9
alance eet data[30]							
	$m	$m	$m	$m	$m		$m
oans and lvances to ustomers et)	66,192	37,735	18,070	5,956			127,953
otal assets	82,530	45,706	313,701	8,542	13,211	(31,655)	432,035
ustomer counts	53,600	49,225	24,113	13,871			140,809

For footnotes, see page 99.

Table of Contents

Report of the Directors: Geographical regions (continued)

Latin America

Latin America

Our operations in Latin America principally comprise HSBC Bank Brasil S.A.-Banco Múltiplo and HSBC México, S.A. In addition to banking services, we operate insurance

businesses in Brazil, Mexico and Argentina. During the year our operations in Brazil were classified as held for sale.

	2015			2014			2013		
	Total Latin America $m	**Brazil $m**	**Other Latin America $m**	Total Latin America $m	Brazil $m	Other Latin America $m	Total Latin America $m	Brazil $m	Other Latin America $m
Net interest income	**4,318**	**2,225**	**2,093**	5,310	3,040	2,270	6,186	3,542	2,644
Net fee income	**1,131**	**560**	**571**	1,415	741	674	1,701	862	839
Net trading income	**664**	**370**	**294**	856	452	404	936	469	467
Other income	**479**	**429**	**50**	691	584	107	1,745	491	1,254
Net operating income[1]	**6,592**	**3,584**	**3,008**	8,272	4,817	3,455	10,568	5,364	5,204
LICs[34]	**(1,495)**	**(965)**	**(530)**	(2,124)	(1,500)	(624)	(2,666)	(1,712)	(954)
Net operating income	**5,097**	**2,619**	**2,478**	6,148	3,317	2,831	7,902	3,652	4,250
Total operating	**(4,786)**	**(2,613)**	**(2,173)**	(5,932)	(3,564)	(2,368)	(5,930)	(3,301)	(2,629)

expenses									
Operating profit/(loss)	**311**	**6**	**305**	216	(247)	463	1,972	351	1,621
Income from associates[35]	**(1)**	**(1)**							
Profit/(loss) before tax	**310**	**5**	**305**	216	(247)	463	1,972	351	1,621
Loans and advances to customers (net)	**17,293**		**17,293**	43,122	23,749	19,373	43,918	24,924	18,994
reported in held for sale[22]	**17,001**	**17,001**							
Customer accounts	**21,470**		**21,470**	48,588	23,204	25,384	51,389	23,999	27,390
reported in held for sale[22]	**15,094**	**15,094**							
Cost efficiency ratio	**72.6%**	**72.9%**	**72.2%**	71.7%	74.0%	68.5%	56.1%	61.5%	50.5%
RoRWA[24]	**0.4%**		**0.8%**	0.2%	(0.5%)	1.2%	2.0%	0.7%	3.7%
Year-end staff numbers	**39,828**	**19,145**	**20,683**	41,201	19,564	21,637	42,542	19,869	22,673

For footnotes, see page 99.

Country view of adjusted revenue

	2015 $m	2014 $m
Argentina	**1,036**	940
Mexico	**1,968**	1,931
Other	**3,552**	3,511
included in Other: Brazil	**3,550**	3,443
Year ended 31 December	**6,556**	6,382

Profit before tax ($m)

Revenue ($m)

Operating expenses ($m)

For details of significant items, see page 49.

Table of Contents

Profit/(loss) before tax by country within global businesses

	Retail Banking and Wealth Management[28] $m	Commercial Banking[28] $m	Global Banking and Markets $m	Global Private Banking $m	Other $m	Tot $
gentina	**43**	**152**	**125**		**(3)**	**31**
zil	**(344)**	**11**	**336**	**6**	**(4)**	
xico	**73**	**(5)**	**(15)**	**(3)**	**(18)**	**3**
er	**(12)**	**7**	**16**		**(55)**	**(4**
ar ended December 5	**(240)**	**165**	**462**	**3**	**(80)**	**31**
gentina	68	119	219		(22)	38
zil	(230)	(97)	115	(2)	(33)	(24
xico	7	(23)	89	(2)	(20)	5
er	(5)	8	27		(2)	2
ar ended December 4	(160)	7	450	(4)	(77)	21
gentina	112	127	170		(1)	40
zil	(209)	52	514	5	(11)	35
xico	138	(144)	115	(3)	11	11
er	289	525	368	(1)	(85)	1,09
ar ended December 3	330	560	1,167	1	(86)	1,97

For footnote, see page 99.

Table of Contents

Report of the Directors: Financial Review (continued)

2015 compared with 2014

In Latin America we reported a profit before tax of $310m in 2015, an increase of $94m or 44% compared with 2014. Reported profit before tax was reduced by restructuring costs of $116m in 2014 and costs relating to the planned disposal of our operations in Brazil of $110m in addition to costs-to-achieve of $69m in 2015.

On an adjusted basis, profit before tax of $0.5bn was $0.1bn or 25% higher than in 2014.

Adjusted **revenue** of $6.6bn was $174m or 3% higher than in 2014, primarily from growth in our RBWM and CMB businesses. Revenue growth in RBWM was mainly in Mexico as our sales campaigns contributed to higher revenue across all core products, and in Argentina from higher deposit balances and wider spreads. In CMB, we increased revenue in Argentina from wider deposit spreads, growth in our deposit balances and higher fees in Payments and Cash Management. Growth in lending balances in Brazil also contributed. These increases were partly offset by lower revenue in GB&M. In Argentina, this reflected lower foreign exchange revenue as 2014 included a notably strong performance, while in Mexico our revenue from Rates decreased from valuation adjustments due to higher counterparty credit risk and wider spreads.

Our adjusted **LICs** of $1.5bn were $87m or 5% lower than in 2014. This was mainly due to lower individually assessed LICs in GB&M as 2014 included a significant charge related to a single exposure in Brazil. In addition, LICs decreased in our CMB business in Brazil and Mexico. By contrast, LICs in our RBWM business rose as delinquency rates increased in Brazil as the economy slowed.

Adjusted **operating expenses** of $4.6bn were $167m or 4% higher than in 2014. This was largely due to union-agreed salary increases and inflationary pressures in Brazil and Argentina. Notably, costs in Brazil were largely unchanged overall as the increases mentioned above were broadly offset by the cessation of amortisation costs following the classification of the business to held for sale.

2014 compared with 2013

In Latin America we reported a profit before tax of $216m in 2014 compared with $2.0bn in 2013. The reduction included the adverse effect of currency translation between the years and an adverse movement in significant items, which together reduced 2014 reported profit before tax by $1.4bn. Significant items included the non-recurrence of a $1.1bn gain on sale of our operations in Panama in 2013.

Adjusted profit before tax decreased by $326m to $324m.

Adjusted revenue increased by 2% to $8.3bn. This was mainly in Argentina in our GB&M business from favourable trading results and higher revenue in Balance Sheet Management, and from higher insurance income in our RBWM business. In addition, RBWM and CMB revenue benefited from wider spreads as interest rates increased, and we grew our lending and deposit balances. By contrast, revenue in both Mexico and Brazil declined. In Mexico, this was primarily in our RBWM businesses from lower insurance sales volumes and continued repositioning. In Brazil, lower revenue reflected a change in the portfolio mix in our CMB business to reflect an increase in lower-yielding MMEs while, in GB&M, revenue reduced in Balance Sheet Management.

Adjusted LICs fell by 12% to $2.1bn. This was primarily in Mexico and, to a lesser extent, in Brazil. In Mexico, our LICs improved due to lower individually assessed charges in CMB, in particular relating to certain homebuilders following a change in the public housing policy in 2013, and in GB&M due to the non-recurrence of a large specific provision booked in 2013.

In Brazil, the fall was driven by changes to the impairment model and assumption revisions for restructured loan account portfolios which occurred in 2013 in both RBWM and CMB. In addition, collectively assessed impairments reduced in CMB, notably in Business Banking, reflecting improved delinquency rates. This was partly offset by an increase in GB&M driven by an individually assessed impairment and a provision made against a guarantee.

Adjusted operating expenses increased by $796m. This was largely due to union-agreed salary increases and inflationary pressures in Brazil and Argentina. In addition, we incurred higher transactional taxes in Argentina, and an accelerated depreciation charge and impairment of an intangible asset in RBWM in Brazil. Despite these factors, we generated sustainable cost savings of over $155m.

Table of Contents

Report of the Directors: Geographical regions (continued)

Latin America

Profit/(loss) before tax and balance sheet data Latin America

	2015					
	Retail Banking and Wealth Management[28] $m	Commercial Banking[28] $m	Global Banking and Markets $m	Global Private Banking $m	Other $m	Inter-segment elimination[44] $m
oss) before						
rest income	2,891	997	461	18	15	(64)
(expense)	724	253	133	23	(2)	
(expense) ng net income	149	89	239	3	(7)	
rest income ng activities			124		3	64
ing (expense)[40]	149	89	363	3	(4)	64
s in fair f long-term ued and derivatives						
ome from nancial ents ted at fair	439	134	2			

ome from l ents ted at fair	**439**	**134**	**2**				
ss losses nancial ents	**14**	**1**	**56**				
d income	**4**	**2**	**1**				
rance n income	**903**	**191**	**5**				
perating	**83**	**32**	**12**		**236**	**(224)**	
perating	**5,207**	**1,699**	**1,033**	**44**	**245**	**(224)**	
urance s	**(1,129)**	**(279)**	**(4)**				
rating n	**4,078**	**1,420**	**1,029**	**44**	**245**	**(224)**	
pairment and other visions	**(1,092)**	**(364)**	**(39)**				
rating	**2,986**	**1,056**	**990**	**44**	**245**	**(224)**	
perating s	**(3,226)**	**(890)**	**(528)**	**(41)**	**(325)**	**224**	
ing loss)	**(240)**	**166**	**462**	**3**	**(80)**		
f loss in es t ventures		**(1)**					
loss) before	**(240)**	**165**	**462**	**3**	**(80)**		
	%	**%**	**%**	**%**	**%**		
f HSBC s efore tax	**(1.3)**	**0.9**	**2.4**		**(0.3)**		
iciency ratio	**79.1**	**62.7**	**51.3**	**93.2**	**132.7**		
sheet)	**$m**	**$m**	**$m**	**$m**	**$m**		
nd advances mers (net)	**5,935**	**6,719**	**4,592**	**47**			**1**
sets	**25,378**	**20,792**	**36,953**	**1,769**	**2,838**	**(1,468)**	**8**
er accounts	**12,042**	**5,904**	**3,422**	**102**			**2**

HSBC HOLDINGS PLC

Table of Contents

	2014					
	Retail Banking and Wealth Management[28]	Commercial Banking[28]	Global Banking and Markets	Global Private Banking	Other	Inter-segment elimination[44]
	$m	$m	$m	$m	$m	$m
oss) before						
rest income	3,671	1,181	490	19	9	(60)
ncome	939	301	147	28		
(expense) g net ncome	125	101	391	3	(1)	
rest (expense) g activities	1	4	174		(2)	60
ing (expense)[40]	126	105	565	3	(3)	60
s in fair long-term ued and lerivatives ome from ancial ents ed at fair	525	166				
ome from l ents ed at fair	525	166				

ss losses ancial ents			84				
d income	6	2	1				
rance n income	1,272	246	5				
perating	61	40	19		213	(184)	
erating	6,600	2,041	1,311	50	219	(184)	
rance	(1,428)	(334)	(3)				
rating	5,172	1,707	1,308	50	219	(184)	
pairment and other visions	(1,208)	(659)	(252)	(5)			
rating	3,964	1,048	1,056	45	219	(184)	
erating s	(4,124)	(1,041)	(606)	(49)	(296)	184	
g oss)	(160)	7	450	(4)	(77)		
profit in es t ventures oss) before	(160)	7	450	(4)	(77)		
	%	%	%	%	%		
HSBC s efore tax	(0.8)		2.4		(0.5)		
iciency ratio	79.7	61.0	46.3	98.0	135.2		
sheet							
	$m	$m	$m	$m	$m		
nd advances mers (net)	13,266	19,118	10,642	96			4
sets	30,855	28,070	55,827	298	1,155	(851)	1
er accounts	25,392	12,789	8,219	2,188			4

For footnotes, see page 99.

Table of Contents

Report of the Directors: Financial Review (continued)

Profit/(loss) before tax and balance sheet data — Latin America (continued)

	2013					
	Retail Banking and Wealth Management	Commercial Banking	Global Banking and Markets	Global Private Banking	Other	Inter-segment elimination[44]
	$m	$m	$m	$m	$m	$m
ss) before						
est expense)	4,245	1,359	775	24	(12)	(205)
ncome	1,142	358	168	32	1	
expense) g net ncome	144	111	456	4	(4)	
est expense) g activities	(1)	1	20			205
ng expense)[40]	143	112	476	4	(4)	205
in fair long-term ed and erivatives me from ancial nts ed at fair	269	56	1			
me from	269	56	1			

nts ed at fair							
ss losses ancial nts		1	81				
l income	6	2	1				
rance income	1,519	305	6				
erating	322	475	310	1	196	(189)	
erating	7,646	2,668	1,818	61	181	(189)	
rance	(1,345)	(269)	(3)				
ating	6,301	2,399	1,815	61	181	(189)	
pairment and other k ns	(1,835)	(779)	(52)				
ating	4,466	1,620	1,763	61	181	(189)	
erating	(4,136)	(1,060)	(596)	(60)	(267)	189	
g ss)	330	560	1,167	1	(86)		
profit in s and joint							
ss) before	330	560	1,167	1	(86)		
	%	%	%	%	%		
HSBC s fore tax	1.4	2.5	5.2		(0.4)		
ciency ratio	65.6	44.2	32.8	98.4	147.5		
sheet							
	$m	$m	$m	$m	$m		
d advances ners (net)	14,993	18,546	10,304	75			
ets	32,217	28,368	52,977	337	634	(534)	1
r account	27,089	13,447	8,994	1,859			

For footnotes, see page 99.

Table of Contents

Report of the Directors: Other information

FuM / Disclosure philosophy / Taxes paid / Conduct-related matters

Other information

Funds under management and assets held in custody	96
Our disclosure philosophy	96
Taxes paid by region and country	97
Conduct-related matters	97
Carbon dioxide emissions	98
Property	98
Disclosure controls	98a
Management s assessment of internal controls over financial reporting	98a

Change in registrant s certifying accountant 98a

Funds under management and assets held in custody

Funds under management[48]

	2015 $bn	2014 $bn
Funds under management		
At 1 January	**954**	921
Net new money	**(3)**	38
Value change	**2**	40
Exchange and other	**(57)**	(45)
At 31 December	**896**	954
Funds under management by business		
Global Asset Management	**419**	445
Global Private Banking	**261**	275
Affiliates	**4**	5
Other	**212**	229
At 31 December	**896**	954

For footnote, see page 99.

Funds under management (FuM) represents assets managed, either actively or passively, on behalf of our customers. At 31 December 2015, FuM amounted to $896bn, a decrease of 6% primarily due to adverse foreign exchange movements as the US dollar strengthened against all major currencies. Excluding currency translation, FuM was broadly unchanged compared with 31 December 2014 as a reduction in GPB and other FuM was broadly offset by an increase in Global Asset Management FuM.

Global Asset Management FuM decreased by 6% to $419bn compared with 31 December 2014. Excluding currency translation, FuM increased by 2% as we attracted $8bn of net new money, notably in fixed income products from our customers in Asia and net inflows into liquidity funds in North America and Europe.

GPB FuM decreased by 5% to $261bn compared with 31 December 2014. Excluding currency translation, FuM decreased by 1%, reflecting the ongoing repositioning of our client base. This was partly offset by favourable market movements, principally in Europe, and from positive net new money in areas targeted for growth.

Other FuM, of which the main element is a corporate trust business in Asia, decreased by 7% to $212bn, primarily due to net outflows.

Assets held in custody[48] and under administration

Custody is the safekeeping and servicing of securities and other financial assets on behalf of clients. At 31 December 2015, we held assets as custodian of $6.2 trillion, 3% lower than the $6.4 trillion held at 31 December 2014.
This decrease was driven by adverse foreign exchange movements, primarily in Europe and Asia. Excluding this, assets held as custodian increased by 2% compared with 31 December 2014, due to incremental net asset inflows

in Asia and Europe, partly offset by adverse market movements, particularly in the second half of 2015.

Our Assets Under Administration business, which includes the provision of bond and loan administration services and the valuation of portfolios of securities and other financial assets on behalf of clients, complements the Custody business. At 31 December 2015, the value of assets held under administration by the Group amounted to $3.2 trillion. This was broadly unchanged compared with 31 December 2014, which included adverse foreign exchange movements, primarily in Europe. Excluding the impact of currency translation, assets held under administration increased by 4% driven by net asset inflows in Europe and Asia.

Our disclosure philosophy

HSBC strives to maintain the highest standards of disclosure in our reporting.

It has long been our policy to provide disclosures that help investors and other stakeholders understand the Group s performance, financial position and changes thereto.

In accordance with this policy, the information provided in the Notes on the Financial Statements and the Report of the Directors goes beyond the minimum levels required by accounting standards, statutory and regulatory requirements and listing rules. In particular, we provide additional disclosures having regard to the recommendations of two Enhanced Disclosures Task Force reports. *Enhancing the Risk Disclosures of Banks,* issued in October 2012, aims to help financial institutions identify areas that investors had highlighted as needing better and more transparent information about banks risks, and how these risks relate to performance measurement and reporting. We have complied with all 32 recommendations in this report and in our Pillar 3 Disclosures 2015 document. The Risk , Capital and Corporate Governance sections of this report and the financial statements are accompanied by detailed tables of contents to assist the reader to navigate through the disclosures. *Impact of Expected Credit Loss Approaches on Bank Risk Disclosures,* issued in December 2015, provides further guidance on the application of the existing recommendations in the context of an Expected Credit Loss (ECL) framework which we have considered in developing the commentary under Future accounting developments on page 347. In addition, we continue to enhance our disclosures in line with good practice recommendations issued by relevant regulators and standard setters and in response to feedback received from users of our financial statements.

Taxes paid by region and country

The following tables reflect a geographical view of HSBC s operations.

Breakdown of tax paid by region[49]

	2015 $bn	2014 $bn
Region		
UK	**2.5**	2.4
Rest of Europe	**1.1**	1.2
Asia	**2.8**	2.7
Middle East and North Africa	**0.4**	0.3
North America	**0.4**	(0.1)
Latin America	**1.2**	1.4
Total	**8.4**	7.9

For footnote, see page 99.

Taxes paid by country[49]

	2015 $m	2014 $m	2013 $m
Asia	**2,780**	2,687	2,536
Home and priority markets	**2,445**	2,399	2,185
Hong Kong	**1,415**	1,273	1,248
Mainland China	**277**	278	207
India	**285**	290	318
Australia	**173**	204	105
Malaysia	**92**	133	106
Indonesia	**70**	76	74
Singapore	**80**	101	88

Taiwan	**53**	44	39
Other markets	**335**	288	351
Europe	**3,660**	3,625	3,500
Home and priority markets	**3,346**	3,391	3,244
UK	**2,526**	2,363	2,107
France	**620**	790	844
Germany	**108**	131	151
Switzerland	**92**	107	142
Turkey	**16**	75	82
Other markets	**298**	159	174
Middle East and North Africa	**433**	294	321
Priority markets	**407**	246	283
Saudi Arabia	**151**	84	70
UAE	**120**	102	98
Egypt	**136**	60	115
Other markets	**26**	48	38
North America	**353**	(108)	414
Priority markets	**353**	(108)	410
US	**127**	(377)	125
Canada	**226**	269	285
Other markets			4
Latin America	**1,184**	1,384	1,836
Priority markets	**431**	534	643
Argentina	**340**	333	318
Mexico	**91**	201	325
Brazil	**735**	804	1,002
Other markets	**18**	46	191
Total	**8,410**	7,882	8,607

For footnote, see page 99.

Conduct-related matters

Conduct-related costs included in significant items

	2015 $m	2014 $m	2013 $m
Income statement			
Net interest income	**10**	632	
Provisions arising from the ongoing review of compliance with the Consumer Credit Act in the UK	**10**	632	
Operating expenses	**2,362**	3,077	1,687
Comprising:			
Legal proceedings and regulatory matters	**1,821**	1,802	352
charge in relation to the settlement agreement with the Federal Housing Finance Authority		550	
regulatory provisions in GPB	**172**	65	352
settlements and provisions in connection with legal matters	**1,649**	1,187	

Customer remediation	**541**	1,275	1,335
UK customer redress programmes	**541**	1,275	1,235
US customer remediation provisions relating to Card and Retail Services			100
Total charge for the year relating to significant items	**2,372**	3,709	1,687
Of which:			
Total provisions charge for the year	**2,362**	2,500	1,687
Total provisions utilised during the year	**1,021**	2,503	1,238
Balance sheet at 31 December			
Total provisions	**3,926**	2,545	2,793
legal proceedings and regulatory matters	**2,729**	1,154	657
customer remediation	**1,197**	1,391	2,136
Accruals, deferred income and other liabilities	**168**	379	

The table above provides a summary of conduct-related costs incurred and included within significant items (see pages 66 and 77).

HSBC defines conduct as ensuring that we deliver fair outcomes for our customers and that we do not disrupt the orderly and transparent operation of financial markets. The Board places a strong emphasis on conduct, requiring adherence to high behavioural standards and doing the right thing. This includes ensuring that the lessons of unexpected outcomes, mistakes and control failings are both acknowledged and responded to in a timely and effective manner.

Board oversight of conduct matters is provided by the Conduct & Values Committee, which oversees the promotion and embedding of HSBC Values and our required global conduct outcomes, and the Remuneration Committee, which

Report of the Directors: Other information (continued)

Carbon dioxide emissions / Property / Footnotes

considers conduct and compliance-related matters relevant to remuneration. The reports of these committees may be found on pages 270 to 273.

An overview of our conduct framework is set out in page 41. The management of conduct of business and the steps taken to raise standards and deal with historical incidents are described on page 178.

Regulatory focus on conduct of business and financial crime is one of the Group s top and emerging risks which is discussed on page 112.

Total conduct-related costs within significant items were $2.4bn, a decrease of $1.3bn compared with 2014. Provisions raised in 2015 resulted from the on-going consequences of a small number of significant historical events.

Operating expenses included significant items related to conduct matters of $2.4bn, including $1.8bn in respect of legal proceedings and regulatory matters, of which $0.2bn related to regulatory matters in our private banking operations and $1.6bn was in respect of settlements and provisions in connection with legal matters. These are discussed in Note 40 on the Financial Statements.

Customer remediation costs charged to operating expenses included $0.5bn in respect of the mis-selling of payment protection insurance (PPI). Cumulative PPI provisions made since the Judicial Review ruling in the first half of 2011 totalled $4.7bn, of which $3.6bn had been paid as at 31 December 2015 (see Note 29 on the Financial Statements).

Carbon dioxide emissions

HSBC s carbon dioxide emissions are calculated on the basis of the energy used in our buildings and employee business travel from over 28 countries (covering about 91% of our operations by FTE).

The data, gathered on energy consumption and distance travelled, are converted to carbon dioxide emissions using conversion factors from the following sources, if available, in order of preference:

1. electricity attribute certificates or equivalent instruments;

2. contracts for electricity, such as Power Purchase Agreements;

3. supplier/utility emission rates;

4. residual mix (sub-national or national);

5. other grid-average emission factors (sub-national or national); and

6. for other types of energy than electricity and travel, if no specific factors can be obtained, we use the latest available factors provided by the UK Department for Environment, Food and Rural Affairs and/or the Department of Energy and Climate Change in the UK.

This is the market-based methodology recommended by the revised guidelines of the Greenhouse Gas Protocol for 2015 disclosure onwards.

To incorporate all of the operations over which we have financial (management) control, the calculated carbon dioxide emissions are scaled up on the basis of the FTE coverage rate to account for any missing data (typically less than 10% of FTEs). In addition, emission uplift rates are applied to allow for uncertainty on the quality and coverage of emission measurement and estimation. The rates are 4% for electricity, 10% for other energy and 6% for business travel, based on the *Intergovernmental Panel on Climate Change Good Practice Guidance* and *Uncertainty Management in National Greenhouse Gas Inventories*, and our internal analysis of data coverage and quality.

Carbon dioxide emissions in tonnes

	2015	2014[50]
Total	**771,000**	795,000
From energy	**662,000**	676,000
From travel	**109,000**	119,000

Carbon dioxide emissions in tonnes per FTE

	2015	2014[50]
Total	**2.97**	3.08
From energy	**2.54**	2.62
From travel	**0.42**	0.46

For footnote, see page 99.

Our greenhouse gas reporting year runs from October to September. For the year from 1 October 2014 to 30 September 2015, carbon dioxide emissions from our global operations were 771,000 tonnes.

Independent assurance of our carbon dioxide emissions will be available in the first half of 2016 on our website.

Property

At 31 December 2015, we operated from some 6,860 operational properties worldwide.

Approximately 1,840 were located in Europe, 1,760 in Asia, 430 in North America, 2,590 in Latin America and 240 in Middle East and North Africa. These properties had an area of approximately 51.9m square feet (2014: 54.3m square feet).

Our freehold and long leasehold properties, together with all our leasehold land in Hong Kong, were valued in 2015. The value of these properties was $11.3bn (2014: $10.8bn) in excess of their carrying amount in the consolidated balance sheet on an historical cost based measure. In addition, properties with a net book value of $1.4bn (2014: $1.6bn) were held for investment purposes.

Our operational properties are stated at cost, being historical cost or fair value at the date of transition to IFRSs (their deemed cost) less any impairment losses, and are depreciated on a basis calculated to write off the assets over their estimated useful lives. Properties owned as a consequence of an acquisition are recognised initially at fair value.

Table of Contents

Report of the Directors: Financial Review (continued)

Disclosure controls

The Group Chief Executive and Group Finance Director, with the assistance of other members of management, carried out an evaluation of the effectiveness of the design and operation of HSBC Holdings disclosure controls and procedures as at 31 December 2015. Based upon that evaluation, the Group Chief Executive and Group Finance Director concluded that our disclosure controls and procedures as at 31 December 2015 were effective to provide reasonable assurance that information required to be disclosed in the reports which the company files and submits under the US Securities Exchange Act of 1934, as amended, is recorded, processed, summarised and reported as and when required. There are inherent limitations to the effectiveness of any system of disclosure controls and procedures, including the possibility of human error and the circumvention or overriding of the controls and procedures. Accordingly, even effective disclosure controls and procedures can only provide reasonable assurance of achieving their control objectives.

During the year it was determined that the control environment associated with IT privileged access required significant improvement. Deficiencies were noted in the design and operation of controls for the granting, release and monitoring of privileged access in a number of systems. For the identified deficiencies, management responded by implementing a programme to determine the scale and nature of the deficiencies, remediate identified control deficiencies and determine if privileged access had been misused during 2015. Management also identified and assessed the effectiveness of relevant IT, business, monitoring and period-end mitigating controls. Please see Effectiveness of Internal Controls on page 277.

There have been no changes in HSBC Holdings internal control over financial reporting during the year ended 31 December 2015, that have materially affected, or are reasonably likely to materially affect, HSBC Holdings internal control over financial reporting.

Management s assessment of internal controls over financial reporting

Management is responsible for establishing and maintaining an adequate internal control structure and procedures for financial reporting, and has completed an assessment of the effectiveness of the Group s internal controls over financial reporting for the year ended 31 December 2015. In making the assessment, management used the framework for internal control evaluation contained in the Financial Reporting Council s Guidance on Risk Management, Internal Control and Related Financial and Business Reporting (September 2014), as well as the criteria established by the Committee of Sponsoring Organisations of the Treadway Commission (COSO) in Internal Control-Integrated Framework (2013) .

Based on the assessment performed, management concluded that for the year ended 31 December 2015, the Group s internal controls over financial reporting were effective.

PricewaterhouseCoopers LLP, which has audited the consolidated financial statements of the Group for the year ended 31 December 2015, has also audited the effectiveness of the Group s internal control over financial reporting under Auditing Standard No. 5 of the Public Company Accounting Oversight Board (United States) as stated in their report on pages 323 and 335.

Change in registrant s certifying accountant

In line with corporate governance practices and regulatory changes in Europe and elsewhere, in 2013 we conducted a tender process for HSBC Holdings plc and its subsidiaries (the Group) statutory audit contract. Following the tender in 2015 the engagement of KPMG Audit Plc (KPMG), HSBC s previous auditor, was not renewed, and PricewaterhouseCoopers LLP (PwC) became the Group s statutory auditor for the financial year ended 31 December 2015. This decision was taken by the Board of Directors on the recommendation of the Group Audit Committee, itself advised by a selection panel chaired by the Group Finance Director and including, among others, two members of the Group Audit Committee. The appointment of PwC was approved by the shareholders at the 2015 Annual General Meeting of the Company. KPMG resigned as the Group s auditor effective 31 March 2015, and PwC was formally engaged on 31 March 2015.

During the two years prior to 31 December 2014, (i) KPMG did not issue any reports on the financial statements of the Group or on the effectiveness of internal control over financial reporting that contained an adverse opinion or a disclaimer of opinion, nor were the auditors reports of KPMG qualified or modified as to uncertainty, audit scope, or accounting principles, (ii) there was not any disagreement over any matter of accounting principles or practices, financial statement disclosure, or auditing scope or procedures, which disagreements if not resolved to KPMG s satisfaction, would have caused it to make reference to the subject matter of the disagreement in connection with its auditors reports, or any reportable event as described in Item 16F(a)(1)(v) of Form 20-F.

Further, in the two years prior to 31 December 2014 we did not consult with PwC regarding either (i) the application of accounting principles to a specified transaction, either completed or proposed, or the type of audit opinion that might be rendered with respect to the consolidated financial statements of the Group; or (ii) any matter that was the subject of a disagreement as that term is used in Item 16F(a)(1)(iv) of Form 20-F or a reportable event as described in Item 16F(a)(1)(v) of Form 20-F.

Report of the Directors: Financial Review (continued)

HSBC has agreed to indemnify and hold KPMG harmless against and from any and all legal costs and expenses incurred by KPMG in successful defence of any legal action or proceeding that arises as a result of KPMG s consent to the inclusion (or incorporation by reference) of its audit report on the Company s past financial statements included (or incorporated by reference) herein or in any registration statement of HSBC Holdings on Form F-3 or Form S-8.

Table of Contents

Footnotes to pages 48 to 98

Use of non-GAAP financial measures

1 *Net operating income before loan impairment charges and other credit risk provisions, also referred to as revenue.*
2 *Own credit spread includes the fair value movements on our long-term debt attributable to credit spread where the net result of such movements will be zero upon maturity of the debt. This does not include fair value changes due to own credit risk in respect of trading liabilities or derivative liabilities.*

Consolidated income statement/Group performance by income and expense item

3 *Dividends recorded in the financial statements are dividends per ordinary share declared in a year and are not dividends in respect of, or for, that year.*
4 *Dividends per ordinary share expressed as a percentage of basic earnings per share.*
5 *Net interest income includes the cost of internally funding trading assets, while the related external revenues are reported in Trading income . In our global business results, the cost of funding trading assets is included with Global Banking and Market s net trading income as interest expense.*
6 *Gross interest yield is the average annualised interest rate earned on average interest-earning assets (AIEA).*
7 *Net interest spread is the difference between the average annualised interest rate earned on AIEA, net of amortised premiums and loan fees, and the average annualised interest rate paid on average interest-bearing funds.*
8 *Net interest margin is net interest income expressed as an annualised percentage of AIEA.*
9 *Interest income on trading assets is reported as Net trading income in the consolidated income statement.*
10 *Interest income on financial assets designated at fair value is reported as Net income from financial instruments designated at fair value in the consolidated income statement.*
11 *Including interest-bearing bank deposits only.*
12 *Interest expense on financial liabilities designated at fair value is reported as Net income on financial instruments designated at fair value in the consolidated income statement, other than interest on own debt which is reported in Interest expense .*
13 *Including interest-bearing customer accounts only.*
14 *Trading income also includes movements on non-qualifying hedges. These hedges are derivatives entered into as part of a documented interest rate management strategy for which hedge accounting was not, nor could be,*

applied. They are principally cross-currency and interest rate swaps used to economically hedge fixed rate debt issued by HSBC Holdings and floating rate debt issued by HSBC Finance. The size and direction of the changes in the fair value of non-qualifying hedges that are recognised in the income statement can be volatile from year-to-year, but do not alter the cash flows expected as part of the documented interest rate management strategy for both the instruments and the underlying economically hedged assets and liabilities if the derivative is held to maturity.

15 *Net insurance claims and benefits paid and movement in liabilities to policyholders arise from both life and non-life insurance business. For non-life business, amounts reported represent the cost of claims paid during the year and the estimated cost of incurred claims. For life business, the main element of claims is the liability to policyholders created on the initial underwriting of the policy and any subsequent movement in the liability that arises, primarily from the attribution of investment performance to savings-related policies. Consequently, claims rise in line with increases in sales of savings-related business and with investment market growth.*

16 *The cost efficiency ratio is defined as total operating expenses divided by net operating income before loan impairment charges and other credit risk provisions.*

Consolidated balance sheet

17 *Net of impairment allowances.*

18 *On 1 January 2014, CRD IV came into force and the calculation of capital resources and risk-weighted assets for 2014 and 2015 are calculated and presented on this basis. 2011 to 2013 comparatives are on a Basel 2.5 basis.*

19 *Capital resources are total regulatory capital, the calculation of which is set out on page 234.*

20 *Including perpetual preferred securities, details of which can be found in Note 30 on the Financial Statements.*

21 *The definition of net asset value per ordinary share is total shareholders equity, less non-cumulative preference shares and capital securities, divided by the number of ordinary shares in issue excluding shares the company has purchased and are held in treasury.*

22 *In the first half of 2015 our operations in Brazil were classified as held for sale. As a result, balance sheet accounts have been classified to Assets held for sale and Liabilities of disposal groups held for sale . There is no separate income statement classification.*

23 *France primarily comprises the domestic operations of HSBC Finance, HSBC Assurances Vie and the Paris branch of HSBC Bank plc.*

Reconciliation of RoRWA measures

24 *Pre-tax return on average risk-weighted assets (RoRWA) is calculated using pre-tax return and reported average RWAs. Adjusted RoRWA is calculated using adjusted pre-tax return and adjusted average RWAs.*

25 *Reported average risk-weighted assets (average RWAs) are calculated using an average of RWAs at quarter-ends on a Basel 2.5 basis for 31 December 2013 and a CRD IV end point basis from all periods from 1 January 2014. Adjusted average RWAs are calculated using reported average RWAs adjusted for the effects of currency translation differences and significant items.*

26 *Other includes treasury services related to the US Consumer and Mortgage Lending business and commercial operations in run-off. US CML includes loan portfolios within the run-off business that are designated held for sale.*

27 *Currency translation adjustment is the effect of translating the assets and liabilities of subsidiaries and associates for the previous year-end at the rates of exchange applicable at the current year-end.*

Global businesses and geographical regions

28

In the first half of 2015, a portfolio of customers was transferred from CMB to RBWM in Latin America in order to better align the combined banking needs of the customers with our established global businesses. Comparative data have been re-presented accordingly.

29 *The main items reported under Other are the results of HSBC s holding company and financing operations, which includes net interest earned on free capital held centrally, operating costs incurred by the head office operations in providing stewardship and central management services to HSBC, along with the costs incurred by the Group Service Centres and Shared Service Organisations and associated recoveries. The results also include fines and penalties as part of the settlement of investigations into past inadequate compliance with anti-money laundering and sanctions laws, the UK bank levy together with unallocated investment activities, centrally held investment companies, gains arising from the dilution of interests in associates and joint ventures and certain property transactions. In addition, Other also includes part of the movement in the fair value of long-term debt designated at fair value (the remainder of the Group s movement on own debt is included in GB&M).*

Table of Contents

Report of the Directors: Other information / Risk

Footnotes / Managing risk

30 *Assets by geographical region and global businesses include intra-HSBC items. These items are eliminated, where appropriate, under the heading Intra-HSBC items or Inter-segment elimination , as appropriate.*
31 *Amounts are non-additive across geographical regions and global businesses due to inter-company transactions within the Group.*
32 *Excludes items where there are substantial offsets in the income statement for the same year.*
33 *Other income in this context comprises where applicable net trading income, net income/(expense) from other financial instruments designated at fair value, gains less losses from financial investments, dividend income, net insurance premium income and other operating income less net insurance claims and benefits paid and movement in liabilities to policyholders.*
34 *Loan impairment charges and other credit risk provisions.*
35 *Share of profit in associates and joint ventures.*
36 *Investment distribution includes Investments, which comprises mutual funds (HSBC manufactured and third party), structured products and securities trading, and Wealth Insurance distribution, consisting of HSBC manufactured and third-party life, pension and investment insurance products.*
37 *Other personal lending includes personal non-residential closed-end loans and personal overdrafts.*
38 *Other mainly includes the distribution and manufacturing (where applicable) of retail and credit protection insurance.*
39 *Markets products, Insurance and Investments and Other includes revenue from Foreign Exchange, insurance manufacturing and distribution, interest rate management and GCF products.*
40 *Net interest income includes the cost of internally funding trading assets, while the related revenues are reported in net trading income. In our global business results, the total cost of funding trading assets is included within GB&M s net trading income as an interest expense. In the statutory presentation, internal interest income and expense are eliminated.*
41 *In 2015, Markets included a favourable fair value movement of $202m on the widening of credit spreads on structured liabilities (2014: adverse fair value movement of $15m; 2013: adverse fair value movement of $66m).*
42 *Other in GB&M includes net interest earned on free capital held in the global business not assigned to products, allocated funding costs and gains resulting from business disposals. Within the management view of total operating income, notional tax credits are allocated to the businesses to reflect the economic benefit generated by certain activities which is not reflected within operating income, for example notional credits on income earned from tax-exempt investments where the economic benefit of the activity is reflected in tax expense. In order to reflect the total operating income on an IFRSs basis, the offset to these tax credits are included within Other .*
43 *Client assets are translated at the rates of exchange applicable for their respective period-ends, with the effects of currency translation reported separately. The main components of client assets were funds under management ($261bn at 31 December 2015) which were not reported on the Group s balance sheet, and customer deposits ($88bn at 31 December 2015), of which $80bn was reported on the Group s balance sheet and $8bn were off-balance sheet deposits.*

44 *Inter-segment elimination comprises (i) the costs of shared services and Group Service Centres included within Other which are recovered from global businesses, and (ii) the intra-segment funding costs of trading activities undertaken within GB&M. HSBC s Balance Sheet Management business, reported within GB&M, provides funding to the trading businesses. To report GB&M s Net trading income on a fully funded basis, Net interest income and Net interest income/(expense) on trading activities are grossed up to reflect internal funding transactions prior to their elimination in the inter-segment column.*

45 *Net insurance claims and benefits paid and movement in liabilities to policyholders.*

46 *Employee expenses comprises costs directly incurred by each global business. The reallocation and recharging of employee and other expenses directly incurred in the Other category is shown in Other operating expenses .*

47 *RWAs are non-additive across geographical regions due to market risk diversification effects within the Group.*

48 *Funds under management and assets held in custody are not reported on the Group s balance sheet, except where it is deemed that we are acting as principal rather than agent in our role as investment manager, and these assets are consolidated as Structured entities (see Note 39 on the Financial Statements).*

49 *Taxes paid by HSBC relate to HSBC s own tax liabilities including tax on profits earned, employer taxes, bank levy and other duties/levies such as stamp duty. Numbers are reported on a cash flow basis.*

50 *Following the release of the new* GHG Protocol Scope 2 Guidance*, we decided to use the state-specific eGRID emission factors for our US operations until such time as we obtain supplier-specific emission factors. For 2014, therefore, our reported total carbon dioxide emissions have increased by 43,000 tonnes and our carbon dioxide emissions per FTE have increased by 0.16 tonnes.*

Table of Contents

Report of the Directors: Financial Review (continued)

2014 compared with 2013

51 *In 2013, we recorded a net gain on $553m on the completion of the Ping An disposal. This represented the net effect of $1,235m gain on derecognition of equity securities classified as available for sale and recorded in Gains less losses from financial investments , partly offset by $682m on a contingent forward sale contract, recorded in Net trading income .*

52 *The operating results of these disposals and acquisitions were not removed from adjusted results as they were not significant.*

53 *Excludes items where there are substantial offsets in the income statement for the same year.*

Average balance sheet

54 *Interest income on trading assets is reported as Net trading income in the consolidated income statement.*

55 *Interest income on financial assets designated at fair value is reported as Net income from financial instruments designated at fair value in the consolidated income statement.*

56 *This includes interest-bearing bank deposits only. See page 63i for an analysis of all bank deposits.*

57 *Interest expense on financial liabilities designated at fair value is reported as Net income on financial instruments designated at fair value in the consolidated income statement, other than interest on own debt which is reported in Interest Expense .*

58 *This includes interest-bearing customer accounts only. See page 63m for an analysis of all customer accounts.*

59 *Net interest margin is calculated as net interest income divided by average interest earning assets.*

Ratio of earnings to fixed charges

60 *For the purpose of calculating the ratios, earnings consist of income from continuing operations before taxation and non-controlling interests, plus fixed charges, and after deduction of the unremitted pre-tax income of associated undertakings. Fixed charges consist of total interest expense, including or excluding interest on deposits, as appropriate, dividends on preference shares and other equity instruments, as applicable, and the proportion of rental expense deemed representative of the interest factor.*

Report of the Directors: Financial Review (continued)

Regulation and supervision

With listings of its ordinary shares in London, Hong Kong, New York, Paris and Bermuda, HSBC Holdings complies with the relevant requirements for listing and trading on each of these exchanges. In the UK, these are the Listing Rules of the Financial Conduct Authority (FCA) in its role as the UK Listing Authority; in Hong Kong, The Rules Governing the Listing of Securities on The Stock Exchange of Hong Kong Limited (HKSE); in the US, where the shares are traded in the form of ADS, HSBC Holdings shares are registered with the US Securities and Exchange Commission (SEC). As a consequence of its US listing, HSBC Holdings is also subject to the reporting and other requirements of the US Securities Act of 1933, as amended, the Securities Exchange Act of 1934, as amended, and the New York Stock Exchange s (NYSE) Listed Company Manual, in each case as applied to foreign private issuers. In France and Bermuda, HSBC Holdings is subject to the listing rules of Euronext, Paris and the Bermuda Stock Exchange respectively, applicable to companies with secondary listings.

A statement of our compliance with the provisions of the UK Corporate Governance Code issued by the Financial Reporting Council and with the Hong Kong Corporate Governance Code set out in Appendix 14 to the Rules Governing the Listing of Securities on The Stock Exchange of Hong Kong Limited can be found in the Report of the Directors: Corporate Governance Codes on page 256.

Our operations throughout the world are regulated and supervised by over 400 different central banks and other regulatory authorities in those jurisdictions in which we have offices, branches or subsidiaries. These authorities impose a variety of requirements and controls designed to provide financial stability, transparency in financial markets and a contribution to economic growth. The regulations include capital requirements, disclosure standards and restrictions on certain types of products or transaction structures, requirements on recovery and resolutions, market liquidity, governance standards and financial crime.

The Prudential Regulation Authority (PRA) is the HSBC Group s consolidated lead regulator. The other UK regulator, the FCA, supervises 11 HSBC regulated entities in the UK, including six where the PRA is responsible for prudential supervision. The FCA also supervises the Group globally in relation to financial crime matters. Additionally, both the PRA and FCA have certain limited direct supervisory powers over our unregulated qualifying parent company HSBC Holdings, including (in the FCA s case) pursuant to the FCA Direction in connection with HSBC Holdings and HSBC North America Holdings, Inc. having entered into agreements as part of a global settlement with a number of US authorities in relation to the Group s failure to comply with anti-money laundering (AML) rules, US sanctions requirements and related matters. In addition, each operating bank, finance company or insurance operation within HSBC is regulated by local supervisors.

The Group s primary regulatory authorities are those in the UK, Hong Kong and the US, our principal jurisdictions of operation. However, and in addition, with the implementation of the EU s Single Supervisory Mechanism (SSM) in 2014, the European Central Bank (ECB) assumed direct supervisory responsibility for HSBC France and HSBC Malta as significant supervised entities within the eurozone for the purposes of the EU s SSM Regulation. Under the SSM, the ECB increasingly engages with the relevant National Competent Authorities in relation to HSBC s businesses in other eurozone countries and more widely with other HSBC regulators. It is therefore expected that we will continue to see changes in how the Group is regulated and supervised on a day-to-day basis in the eurozone and more generally as the ECB and other of our regulators develop their powers having regard to some of the regulatory initiatives highlighted in this report.

UK regulation and supervision

The UK financial services regulatory structure is comprised of three regulatory bodies: the Financial Policy Committee (FPC), a committee of the Bank of England (BoE), the PRA, a subsidiary of the BoE, and the FCA.

The FPC is responsible for macro-prudential supervision, focusing on systemic risk that may affect the UK s financial stability. The PRA and the FCA are micro-prudential supervisors. The Group s banking subsidiaries such as HSBC Bank plc (our principal authorised institution in the UK) are dual-regulated firms, subject to prudential regulation by the PRA and to conduct regulation by the FCA. Other (generally smaller, non-bank) UK-based Group subsidiaries are solo regulated by the FCA (i.e. the FCA is responsible for both prudential and conduct regulation of those subsidiaries). HSBC Group is subject to consolidated supervision by the PRA.

UK banking and financial services institutions are subject to multiple regulations. The primary UK statute in this context is the Financial Services and Markets Act 2000 (FSMA), as amended by subsequent legislation. Other UK financial services legislation includes that derived from EU directives and regulations relating to banking, securities, insurance, investments and sales of personal financial services.

The PRA and FCA are together responsible for authorising and supervising all our operating businesses in the UK which require authorisation under FSMA. These include deposit-taking, retail banking, consumer credit, life and general insurance, pensions, investments, mortgages, custody and share-dealing businesses and treasury and capital markets activity. The FCA is also responsible for promoting effective competition in the interests of consumers and an independent subsidiary of the FCA, The Payment Systems Regulator, regulates payment systems in the UK.

PRA and FCA rules establish the minimum criteria for the authorisation of banks and other financial sector entities that carry out regulated activities. In the UK, the PRA and FCA have the right to object, on prudential grounds, to persons who hold, or intend to hold, 10% or more of the voting power or shares of a financial institution that it regulates, or of its parent undertaking. In its capacity as our

Report of the Directors: Financial Review (continued)

supervisor on a consolidated basis, the PRA receives information on the capital adequacy of, and sets requirements for, the Group as a whole as well as conducting stress tests both on HSBC s UK entities and more widely on the Group, including in conjunction with other regulators. Individual banking subsidiaries in the Group are directly regulated by their local banking supervisors, who set and monitor, *inter alia*, their capital adequacy requirements.

The Group is subject to capital requirements as set out in CRD IV and implemented by the PRA. The regulatory capital framework has been, and continues to be, significantly enhanced. It is also envisaged that existing Pillar 1 and Pillar 2 capital requirements will be complemented by a specification of total loss absorbing capacity (TLAC). TLAC parallels European requirements for entities in the EU to meet minimum requirements for eligible liabilities, which can absorb losses in the event of a failure of a bank or be bailed in to provide additional capital resources.

On 29 January 2016, the FPC published a consultation on its proposed framework for the systemic risk buffer. It is proposed that it will apply to ring-fenced banks and large building societies and will be implemented from 1 January 2019. The buffer to be applied to HSBC s ring-fenced bank has yet to be determined. Details on the capital framework and regulatory developments on capital requirements can be found in the Capital section on page 239.

The PRA and FCA monitor authorised institutions through ongoing supervision and the review of routine and *ad hoc* reports relating to financial, prudential and conduct of business matters. They may also obtain independent reports from a skilled person on the adequacy of procedures and systems covering internal control and governing records and accounting. The PRA meet regularly with the Group s senior executives to discuss our adherence to the PRA s prudential guidelines. In addition, both the PRA and FCA regularly discuss fundamental matters relating to our business in the UK and internationally with relevant management, including areas such as strategic and operating plans, risk control, loan portfolio composition and organisational changes, including succession planning and recovery and resolution arrangements.

There are a substantial number of other ongoing regulatory initiatives affecting the Group driven by or from the UK. These include further changes to the UK bank levy, ongoing implementation of requirements regarding recovery and resolution plans (see further details outlined below under Recovery and resolution) and of the recommendations of the UK Independent Commission on Banking (ICB) and the Parliamentary Commission on Banking Standards (PCBS) in relation to the ring-fencing of retail banking activities.

We have started making changes to our corporate structure to mitigate or remove critical inter-dependencies to further facilitate the resolution of the Group. In particular, in order to remove operational dependencies (where one subsidiary bank provides critical services to another), we are in the process of transferring critical services from our subsidiary banks to a separately incorporated group of service companies (ServCo group).

The Group presented a ring-fencing project plan to regulators in January 2016. The plan provides for the transfer into a separate subsidiary of the HSBC Group, the qualifying components of HSBC Bank plc s UK RBWM, CMB and GPB businesses. The plan remains subject to the approval of the PRA, the FCA and other applicable regulators. Further reforms currently in the process of implementation as a result of ICB and PCBS proposals include the introduction of a new framework for individuals aimed at strengthening accountability in banking (including a new Senior Managers and Certification Regime) and remuneration rules intended to strengthen the alignment between risk and reward. In October 2015, HM Treasury announced that the Senior Managers and Certification Regime would be extended to all authorised firms by 2018. HSBC is actively engaged in the preparation for these new regimes.

Other relevant regulatory initiatives include a continued high level of focus by the FCA on the management of conduct of business and on customer outcomes.

The FCA is also involved (along with HM Treasury) in the implementation of the recommendations coming from the Fair and Effective Financial Markets Review. These were published in June 2015 and include recommendations to raise standards, professionalism and accountability of individuals, improve the quality, clarity and market-wide understanding of FICC trading practices, strengthen regulation of FICC markets in the UK and raise standards in global FICC markets, and promote fairer FICC market structures and forward-looking conduct risk identification and mitigation. The Review s Chairs will provide an implementation report by June 2016. During 2015, HM Treasury also launched the Financial Advice Market Review to examine how financial advice could work better for consumers. This review is being undertaken with the FCA and following a call for inputs in October 2015, is expected to report during the second quarter of 2016. In a similar vein, the UK Competition and Markets Authority (CMA) investigation into the supply of retail banking services to personal current account and to SME customers in the UK continues. The investigation is based on the CMA concerns that there are features of both sectors that (alone or in combination) it suspects prevent, restrict or distort competition. The CMA published provisional findings and possible remedies in October 2015 and the statutory deadline for the CMA s final report is 5 May 2016.

The FCA also continues to apply close scrutiny to the Group s financial crime control framework both generally in conjunction with the exercise of its wider powers under FSMA and more specifically under the FCA Direction as described above. This includes ongoing consideration of the Group s progress in meeting its obligations under the US DPA and other commitments outlined below.

Hong Kong regulation and supervision

Banking in Hong Kong is subject to the provisions of the Banking Ordinance and to the powers, functions and duties ascribed by the Banking Ordinance to the Hong Kong Monetary Authority (the HKMA). The HKMA is the government authority in Hong Kong responsible for

Report of the Directors: Financial Review (continued)

maintaining monetary and banking stability. One of the principal functions of the HKMA is to promote the stability and integrity of the financial system, including the banking system in Hong Kong. The HKMA is responsible for regulating and supervising banking business and the business of taking deposits in Hong Kong. Under the Banking Ordinance, the HKMA is the licensing authority responsible for the authorisation, suspension and revocation of authorised institutions. To provide checks and balances, the HKMA is required under the Ordinance to consult with the Financial Secretary on important authorisation decisions, such as suspension and revocation.

The HKMA follows international practices as recommended by the Basel Committee on Banking Supervision (Basel Committee) to supervise authorised institutions. The HKMA adopts a risk-based supervisory approach based on a policy of continuous supervision , through on-site examinations, off-site reviews, prudential meetings, co-operation with external auditors and sharing information with other supervisors. The HKMA requires all authorised institutions to have adequate systems of internal control and requires the institutions external auditors, upon request, to report on those systems and other matters such as the accuracy of information provided to the HKMA. In addition, the HKMA may from time to time conduct tripartite discussions with banks and their external auditors.

The HKMA has the power to serve a notice of objection on persons if they are no longer deemed to be fit and proper to be controllers of the bank, if they may otherwise threaten the interests of depositors or potential depositors, or if they have contravened any conditions specified by the HKMA. The HKMA may revoke authorisation in the event of an institution s non-compliance with the provisions of the Banking Ordinance. These provisions require, among other things, the furnishing of accurate reports.

To enhance the exchange of supervisory information and co-operation, the HKMA has entered into Memoranda of Understanding or other formal arrangements with a number of banking supervisory authorities within and outside Hong Kong.

The marketing of, dealing in and provision of advice and asset management services in relation to securities and futures in Hong Kong are subject to the provisions of the Securities and Futures Ordinance of Hong Kong. Entities engaging in activities regulated by the Ordinance are required to be licensed or registered with the Securities and Futures Commission (SFC). The HKMA is the frontline regulator for banks involved in the securities and futures business. Amongst other functions, the Securities and Futures Ordinance vested the SFC with powers to set and enforce market regulations, including investigating breaches of rules and market misconduct and taking appropriate enforcement action. The SFC is responsible for licensing and supervising intermediaries conducting SFC regulated activities, for example investment advisors, fund managers and brokers. Additionally, the SFC sets standards for the authorisation and regulation of investment products and reviews and authorises offering documents of retail investment products to be marketed to the public.

In November 2015, the Hong Kong Government gazetted the Financial Institutions (Resolution) Bill (the FIR Bill). If passed by the Legislative Council in its gazetted form, the FIR Bill would establish a cross-sector resolution regime to allow authorities in Hong Kong to resolve an in-scope financial institution.

The FIR Bill contains five stabilisation options that may be exercised in respect of an in-scope financial institution: (i) transfer of all or part of the business of the entity, or its securities, to a private sector purchaser; (ii) transfer of all or part of the business of the entity, or its securities, to a bridge institution wholly or partially owned by the Hong Kong Government; (iii) transfer of all or part of the business of the entity to an asset management vehicle wholly or partially owned by the Hong Kong Government; (iv) bail-in; and (v) temporary public ownership of the entity. The exercise of the stabilisation options is subject to certain safeguards to which the relevant authorities must have regard.

US regulation and supervision

The Group is subject to extensive federal and state supervision and regulation in the US. Banking laws and regulations of the Federal Reserve Board (FRB), the Office of the Comptroller of the Currency (the OCC) and the Federal Deposit Insurance Corporation (the FDIC) (collectively, the US banking regulators) govern many aspects of our US business. Furthermore, since we have substantial operations outside the US which conduct many of their day-to-day transactions with the US, HSBC entities operations outside the US are also subject to the extra-territorial effects of US regulation in many respects. The requirements of the US DPA entered into by HSBC in December 2012 and described in this section under Anti-money laundering and related regulation should also be noted in this context.

HSBC and its US operations are subject to supervision, regulation and examination by the FRB because HSBC is a bank holding company under the US Bank Holding Company Act of 1956, as a result of its control of HSBC Bank USA, N.A., McLean, Virginia (HSBC Bank USA); and HSBC Trust Company (Delaware), N.A., Wilmington, Delaware (HTCD). HSBC North America Holdings Inc. (HNAH) is also a bank holding company . Both HSBC and HNAH have elected to be financial holding companies pursuant to the provisions of the Gramm-Leach-Bliley Act (the GLB Act) and, accordingly, may affiliate with securities firms and insurance companies and engage in other activities that are financial in nature or incidental or complementary to activities that are financial in nature.

Under regulations implemented by the FRB, if any financial holding company, or any depository institution controlled by a financial holding company, ceases to meet certain capital or management standards, the FRB may impose corrective capital and/or managerial requirements on the financial holding company and place limitations on its ability to conduct the broader financial activities permissible for financial holding companies. In addition, the FRB may require divestiture of the holding company s depository institutions or its affiliates engaged in broader

Report of the Directors: Financial Review (continued)

financial activities in reliance on financial holding company status under the GLB Act if the deficiencies persist. The regulations also provide that if any depository institution controlled by a financial holding company fails to maintain a satisfactory rating under the Community Reinvestment Act of 1977, the FRB must prohibit the financial holding company and its subsidiaries from engaging in any additional activities other than those permissible for bank holding companies that are not financial holding companies. See page 113 for further information on the regulatory consent orders with which HSBC Bank USA must comply in accordance with the agreement entered into with the OCC in December 2012 (the GLBA Agreement).

The two US banks, HSBC Bank USA and HTCD, are subject to regulation and examination primarily by the OCC. HSBC Bank USA and HTCD are subject to additional regulation and supervision, secondly by the FDIC, and by the FRB and the Consumer Financial Protection Bureau (CFPB). Banking laws and regulations restrict many aspects of their operations and administration, including the establishment and maintenance of branch offices, capital and reserve requirements, deposits and borrowings, investment and lending activities, payment of dividends and numerous other matters.

In July 2010, the US enacted the Dodd-Frank Wall Street Reform and Consumer Protection Act (Dodd-Frank), which provided a broad framework for significant regulatory changes extending to many areas of US financial regulation. The implementation of Dodd-Frank has required further detailed rulemakings by different US regulators, including the Department of the Treasury, the FRB, the FDIC, the SEC, the Commodity Futures Trading Commission (CFTC) and the CFPB. Although there remains some rule drafting to be completed, most of the extra-territorial provisions of Dodd Frank have been enacted through rulemakings. The FRB, in consultation with the Financial Stability Oversight Council (FSOC) may take certain actions, including preventing mergers, restricting financial products offered, restricting or terminating activities, imposing conditions on activities or requiring the sale or transfer of assets, against any bank holding company with assets greater than $50bn that is found to pose a grave threat to financial stability. The FSOC is supported by the Office of Financial Research (OFR) which may impose data reporting requirements on financial institutions. The cost of operating both the FSOC and OFR is paid for through an assessment on large bank holding companies.

In the US, parent company insolvencies are governed by the US Bankruptcy Code, 11 U.S.C. § 101 et seq. (the Bankruptcy Code). Chapter 7 of the Bankruptcy Code sets forth the procedures for liquidation of a debtor company s assets for distribution to creditors, whereas Chapter 11 permits the operation of the debtor s business while either negotiating a plan of reorganisation with the company s creditors or liquidating the business. Subsidiary banks are subject to the Federal Deposit Insurance Act (the FDIA). Under the FDIA, the FDIC has the authority as receiver to liquidate and wind-up a bank s affairs and to succeed to all rights, titles, powers, and privileges of the bank and relevant associated persons.

Under a special regime introduced by Title II of Dodd-Frank, the US Secretary of the Treasury has the authority to appoint the FDIC as receiver of certain qualifying parent companies and their subsidiaries under specified conditions. The FDIC s powers under what is referred to as the Orderly Liquidation Authority (OLA) incorporate elements of both the FDIA and the Bankruptcy Code and are intended to minimise the adverse effects of a complex financial group s failure on the financial stability of the US. In respect of a banking group with a parent company not organised under the laws of the US, any actions under the OLA would likely be directed at the US-based intermediate holding company.

In January 2014, the FRB implemented the Basel III capital framework for bank holding companies such as HNAH, which will be required to phase in many of the requirements, including a minimum supplementary leverage ratio of 3% and an effective minimum total risk-based capital ratio of 10.5% over a transition period from 2014 to 2019. The 10.5% ratio includes the capital conservation buffer which is not a minimum requirement, per se, but rather a necessary condition to allow capital distributions. A counter-cyclical capital buffer requirement, applicable to banking organisations that meet the advanced approaches thresholds, also applies to HNAH and HBUS, and the buffer has been currently set at 0%. Additionally, failure to maintain minimum regulatory ratios in simulated stress conditions, as required by the FRB s Comprehensive Capital Analysis and Review (CCAR) programme, would restrict HNAH from engaging in capital distributions such as dividends or share repurchases. In addition to the CCAR stress testing requirements, the Dodd-Frank Act Stress Test (DFAST) requires HNAH and HSBC Bank USA to undergo regulatory stress tests conducted by the FRB annually, and to conduct and publish the results of its own internal stress tests semi-annually.

Under the CCAR process, the FRB evaluates bank holding companies annually on their capital adequacy, internal capital adequacy assessment process and plans for capital distributions, and will provide a non-objection in relation to capital distributions only for companies that can demonstrate sufficient capital strength after making the capital distributions. HNAH submitted its latest CCAR capital plan and annual company-run DFAST results in January 2015. In July 2015, HNAH submitted its latest mid-cycle company-run DFAST results. HSBC Bank USA is subject to the OCC s DFAST requirements, which require certain banks to conduct annual company-run DFAST, and submitted its latest annual DFAST results in January 2015. The company run stress tests are forward looking exercises to assess the impact of hypothetical macroeconomic baseline, adverse and severely adverse scenarios provided by the FRB and the OCC for the annual exercise, and internally developed scenarios for both the annual and mid-cycle exercises, on the financial condition and capital adequacy of a bank-holding company or bank over a nine quarter planning horizon.

In late 2014, the FRB and OCC revised aspects of their rules pertaining to CCAR and DFAST. These revisions included, among other changes, a forward shift of the timeline for the submission of capital plans and stress tests for bank

Report of the Directors: Financial Review (continued)

holding companies subject to CCAR and the company run stress tests for national banks subject to DFAST. Under these rules, for the 2016 capital plan cycle and going forward, bank holding companies will be required to submit their capital plans and stress testing results to the FRB one quarter later than in past years. National banks are similarly required to submit the results of their company-run stress tests to the OCC by 5 April. The final rule made certain other substantive changes to the capital plan and stress test regulations, including limiting a bank holding company s ability to make capital distributions (subject to certain exceptions) if its actual capital issuances in that quarter were less than the amount indicated in the capital plan. HNAH plans to submit its 2016 capital plan to the FRB, and HSBC Bank USA plans to submit the results of its company-run stress tests to the OCC, on or before 5 April 2016.

On 11 March 2015, the FRB informed HNAH that it did not object to HNAH s capital plan or the planned capital distributions included in its 2015 CCAR submission.

Large international banks, such as HSBC Holdings generally with regard to its US operations, are also required to file resolution plans describing what strategy would be followed to resolve the institution. If the FRB and the FDIC both determine that these resolution plans are not credible (which, although not defined, is generally believed to mean the regulators do not believe the plans are feasible or would otherwise allow for the rapid and orderly resolution of the US businesses in a way that protects systematically important functions without severe systematic disruption and without exposing taxpayers to loss), our failure to cure deficiencies in a resolution plan required by Dodd-Frank to be filed by HSBC Holdings would enable the FRB and the FIDC, acting jointly, to impose more stringent prudential limits or require the divestiture of assets or operations.

In March 2015, the FRB and the FDIC announced the completion of their reviews of the second round of resolution plans submitted in 2014 by three foreign banking organisations, including the HSBC Holdings resolution submitted in 2014 (the 2014 Plan). Although the agencies noted some improvements in the 2014 Plan, they jointly identified specific shortcomings that were to be addressed with the 2015 annual submission. In addition, the FDIC board of directors stated in a press release that the 2014 resolution plans submitted by these filers are not credible and do not facilitate an orderly resolution under the US Bankruptcy Code (although the FRB did not make such a determination or join in this public statement). In August 2014, the FRB and FDIC made these same determinations with respect to the plans filed in 2013 by the nine largest financial institutions required to submit resolution plans under Dodd-Frank. The FRB and FDIC requested that these filers reflect the requested improvements in their 2015 submissions. HSBC and HSBC Bank USA submitted their 2015 resolution plans to the FDIC and the FRB in December 2015.

In February 2014, the FRB finalised its rule requiring enhanced supervision of the US operations of non-US banks such as HSBC Holdings. The rule requires certain

large non-US banks with significant operations in the United States to establish a single intermediate holding company (IHC) to hold their US bank and non-bank subsidiaries. HSBC currently operates in the US through an IHC structure and HNAH will be designated its IHC. The implementation of this rule, from 1 July 2016, will not have a significant impact on HSBC s US operations. HNAH submitted its IHC implementation plan to the FRB on 31 December 2014, as required.

An IHC may calculate its capital requirements under the US standardised approach, even if it meets the asset thresholds that would require a bank holding company to use advanced approaches. HNAH received approval from the FRB to opt out of the advanced approaches in 2014, and HSBC Bank USA received approval from the OCC to opt out of the advanced approach in 2015. HNAH and HSBC Bank USA will, however, remain subject to the other capital requirements applicable to advanced approaches banking organisations such as: the supplementary leverage ratio, the countercyclical capital buffer, stress testing requirements, enhanced risk management standards, enhanced governance and stress testing requirements for liquidity management, and other applicable prudential standards. Most of these requirements will become effective on 1 July 2016.

The US banking regulators adopted a final rule in September 2014 that implements a quantitative liquidity requirement consistent with the liquidity coverage ratio standard established by the Basel Committee. The final rule establishes a liquidity coverage ratio (LCR), which is designed to ensure that a banking organisation maintains an adequate level of unencumbered high-quality liquid assets equal to the entity s expected net cash outflow for a 30-day time horizon under an acute liquidity stress scenario. The rule, which applies to HNAH, is more stringent than the Basel III LCR in several respects. Starting on 1 January 2015, covered companies, including HNAH and HSBC Bank USA, were required to maintain an LCR of 80%, increasing annually by 10% increments and reaching 100% on 1 January 2017.

In November 2015, the FSB issued final standards for TLAC requirements for global systemically important banks (G-SIB s), which will apply to HSBC Holdings once implemented in the UK. The new standards also permit authorities in host jurisdictions to require internal TLAC to be prepositioned (issued by local entities to either parent entities or third parties). The purpose of these new standards is to ensure that G-SIBs have sufficient loss absorbing and recapitalisation capacity available to implement an orderly resolution with continuity of critical functions and minimal impact on financial stability and to ensure cooperation between home and host authorities during resolution. The new standards call for all G-SIBs to be subject to TLAC requirements starting 1 January 2019, to be fully phased in by 1 January 2022. In the US, the FRB published proposed rules on 30 November 2015 for implementing the FSB s TLAC standard in the US. The proposed rules require, among other things, the US intermediate holding companies of non US G-SIBs, including HNAH, to maintain minimum amounts of internal TLAC which would include minimum levels of tier

Report of the Directors: Financial Review (continued)

1 capital and long-term debt satisfying certain eligibility criteria, and a related TLAC buffer commencing 1 January 2019. The TLAC proposal also includes clean holding company requirements that impose limitations on the types of financial transactions HSBC s US intermediate holding company, HNAH, could engage in. The FSB s TLAC standard and the FRB s TLAC proposal represent a significant expansion of the current regulatory capital framework that may, if adopted as proposed, require both HNAH and HSBC to make material modifications to the terms of outstanding debt instruments or to issue additional long-term debt.

HSBC Bank USA and HTCD are subject to risk-based assessments from the FDIC, which insures deposits generally to a maximum of $250,000 per depositor for domestic deposits. Dodd-Frank changes the FDIC s risk-based deposit insurance assessment framework primarily by basing assessments on an FDIC-insured institution s total assets less tangible equity rather than US domestic deposits, which is expected to shift a greater portion of the aggregate assessments to large FDIC-insured institutions. In October 2015, the FDIC proposed an additional surcharge on the quarterly assessments of insured depository institutions with total consolidated assets of $10bn or more, including HSBC Bank USA. The new large bank pricing system will result in higher assessment rates for banks with high-risk asset concentrations, less stable balance sheet liquidity, or potentially higher loss severity in the event of failure.

HSBC s US consumer finance operations are subject to extensive state-by-state regulation in the US, and to laws relating to consumer protection (both in general, and in respect of sub-prime lending operations, which have been subject to enhanced regulatory scrutiny); discrimination in extending credit; use of credit reports; privacy matters; disclosure of credit terms; and correction of billing errors. These operations are subject to regulations and legislation that limit operations in certain jurisdictions.

In December 2013, US regulators finalised the Volcker Rule , which limits the ability of banking entities to sponsor or invest in certain private equity or hedge funds or to engage in certain types of proprietary trading. During 2015, the Group implemented its conformance plans related to its businesses and risk management and control frameworks both in the US and elsewhere, including establishing a defined Volcker compliance programme and related CEO attestation processes to ensure compliance with the final rule by the relevant effective dates.

Title VII of Dodd-Frank provides for an extensive framework for the regulation of over-the-counter (OTC) derivatives by the CFTC and the SEC, including mandatory clearing, exchange trading and public and regulatory transaction reporting of certain OTC derivatives, as well as rules regarding the registration of swap dealers and major swap participants, and related capital, margin, business conduct, record keeping and other requirements applicable to such entities.

The CFTC has adopted many of the most significant provisions of Title VII, which came into effect in 2013 and 2014. In particular, HSBC Bank USA and HSBC Bank plc are

provisionally registered as swap dealers with the CFTC. Because HSBC Bank plc is a non-US swap dealer, the CFTC generally limits its direct regulation of HSBC Bank plc to swaps with US persons and certain affiliates of US persons. However, the CFTC continues to consider whether to apply mandatory clearing, exchange trading, public transaction reporting, margin and business conduct rules to swaps with non-US persons arranged, negotiated or executed by US personnel or agents. The CFTC is also considering whether to apply regulatory transaction reporting requirements on all swaps entered into by a non-US swap dealer or instead to permit reliance on transaction reporting under comparable EU rules. The application of CFTC rules to HSBC Bank plc s swaps with non-US persons could have an adverse effect on the willingness of non-US counterparties to trade swaps with HSBC Bank plc and we continue to assess how developments in these areas will affect our business.

In June 2014, the SEC finalised rules regarding the cross-border application of the security-based swap dealer and major security-based swap participant definitions. These rules share many similarities with parallel guidance finalised by the CFTC in July 2013. In January 2015, the SEC also finalised rules regarding reporting and public dissemination requirements for security-based swap transaction data. In August 2015, the SEC also finalised rules for the registration of security-based swap dealers and major security-based swap participants. The SEC has not yet finalised the implementation dates for these rules or finalised several related Title VII rules. Because our equity and credit derivatives businesses are also subject to the CFTC s jurisdiction under Title VII, material differences between the final SEC rules and existing CFTC rules could materially increase our costs of compliance with Title VII by requiring the implementation of significant additional policies, procedures, documentation, systems and controls for those businesses.

In November 2015, the OCC, jointly with other US banking regulators, adopted final rules establishing margin requirements. The final margin rules will require HSBC Bank USA and HSBC Bank plc to collect and post initial and variation margin for certain non-cleared swaps and security-based swaps entered into with other swap dealers and financial end-users that exceed a minimum threshold of transactional activity. For certain non-cleared swaps and security-based swaps entered into with financial end-users that do not meet the minimum transactional activity threshold, HSBC Bank USA and HSBC Bank plc will only be required to collect and post variation margin (but not initial margin). The US banking regulators final rules do not impose margin requirements for non-cleared swaps and security-based swaps entered into with non-financial end-users, certain sovereigns and multilateral development banks or qualifying hedging transactions with certain small depository institutions.

The final margin rules also limit the types of assets that are eligible to satisfy initial and variation margin requirements, require initial margin to be segregated at a third-party custodian, impose requirements on internal models used to calculate initial margin requirements and contain specific provisions for cross-border transactions and inter-

affiliate transactions. The final margin rules follow a phased implementation schedule, with variation margin requirements coming into effect in September 2016 and March 2017 and initial margin requirements phased in on an annual basis from September 2016 through September 2020, with the relevant compliance dates depending on the transactional volume of the parties and their affiliates. These final rules, as well as parallel margin rules from the CFTC, the SEC, and certain non-US regulators will increase the costs and liquidity burden associated with trading non-cleared swaps and security-based swaps and may adversely affect our business in such products. In particular, the imposition of initial margin requirements on inter-affiliate transactions will significantly increase the cost of certain consolidated risk management activities and may adversely affect HSBC to a greater extent than some of our competitors.

Dodd-Frank also included a swaps push-out provision that would have effectively limited the range of OTC derivatives activities in which an insured depository institution, including HSBC Bank USA, could engage. The scope of this provision was significantly reduced in December 2014 and now effectively only restricts HSBC Bank USA s ability to enter into certain structured finance swaps after 16 July 2015 that are not entered into for hedging or risk mitigation purposes.

Dodd-Frank grants the SEC discretionary rule-making authority to modify the standard of care that applies to brokers, dealers and investment advisers when providing personalised investment advice to retail customers and to harmonise other rules applying to these regulated entities. Dodd-Frank also expands the extra-territorial jurisdiction of US courts over actions brought by the SEC or the US with respect to violations of the anti-fraud provisions in the Securities Act, the Securities Exchange Act of 1934 and the Investment Advisers Act of 1940. In addition, regulations which the FSOC, the CFPB or other regulators may adopt could affect the nature of the activities which our FDIC-insured depository institution subsidiaries may conduct, and may impose restrictions and limitations on the conduct of such activities.

The implementation of the remaining Dodd-Frank provisions, including those related to the recommended imposition of the fiduciary standard on broker-dealers, could result in additional costs or limit or restrict the way we conduct our business in the US.

Global and regional prudential and other regulatory developments

The Group is subject to regulation and supervision by a large number of regulatory bodies and other agencies.
In addition to changes being pursued at a country level, changes are also being pursued globally through the actions of bodies such as the G-20, the FSB and Basel Committee, as well as regionally through the EU. Key areas include the work of the FSB on G-SIBs, the Basel Committee s ongoing consultations on revised standardised approaches across a number of risk areas, and the FSB s final standard for requirements for total loss

absorbing capacity. See further details in the Capital section on page 239.

We are also subject to regulatory stress testing in many jurisdictions. These have increased both in frequency and in the granularity of information required by supervisors. They include the programmes of the Bank of England, the FRB (as explained in the US regulation and supervision section), the OCC, the EBA, the ECB, the HKMA and other regulators. For further details, see Regulatory stress tests on page 116.

There are a number of consultations which have been issued by the Basel Committee and are yet to be finalised. These are likely to have an impact on the standardised approach for credit risk and operational risk and will determine whether the capital floor will be included in the Basel capital framework.

In January 2016, the Basel Committee published the final rules arising from the Fundamental Review of the Trading Book. The new regime includes amendments to the trading book boundary and new market risk capital calculations for both the modelled and standardised approaches. Basel implementation is planned for 2019. See further details in the Capital section on page 239.

In October 2014, the Basel Committee finalised their recommendations for the calculation of the net stable funding ratio (NSFR). The NSFR is a significant component of the Basel III reforms. It requires banks to maintain a stable funding profile in relation to their on- and off-balance sheet activities, thus reducing the likelihood that disruptions to a bank s regular sources of funding will erode its liquidity position in a way that could increase the risk of its failure and potentially lead to broader systemic stress. Further details on NSFR can be found on page 155.

In January 2016, the Basel Committee finalised its Fundamental Review of the Trading Book (FRTB) which is expected to increase market risk capital requirements once implemented by national regulators. Further details on the FRTB can be found on page 241.

All finalised Basel Committee proposals would need to be transposed into EU requirements before coming into effect.

Recovery and resolution

Globally there have been a number of developments relating to banking structural reform and the introduction of recovery and resolution regimes.

As recovery and resolution planning has developed, some regulators and national authorities have also required changes to the corporate structures of banks. These include requiring the local incorporation of banks or ring-fencing of certain businesses.

We are working with our primary regulators to develop and agree a resolution strategy for HSBC. It is our view that a strategy by which the Group breaks up at a subsidiary bank level at the point of resolution (referred to as a multiple point of entry) is the optimal approach, as it is aligned to our existing legal and business structure. Similarly to all G-SIBs, we are working with our regulators to mitigate or remove critical inter-dependencies between our

Table of Contents

Report of the Directors: Financial Review (continued)

subsidiaries to further facilitate the resolution of the Group. In particular, in order to remove operational dependencies (where one subsidiary bank provides critical services to another), we are in the process of transferring critical services from our subsidiary banks to a separate internal ServCo group.

During 2015, more than 18,000 employees performing shared services in the UK were transferred to the ServCo group. Further transfers of employees, critical shared services and assets in the UK, Hong Kong and other jurisdictions will occur in due course.

European regulation

Through the UK s membership of the EU, HSBC is both directly and indirectly subject to European financial services regulation.

CRD IV implemented Basel III in the EU and, in the UK, the PRA rulebook CRR Firms Instrument 2013 transposed the various national discretions under CRD IV into UK law. CRD IV and the PRA requirements came into force on 1 January 2014.

Additionally, the EU is implementing its Banking Union to increase integration in the eurozone banking system. As part of this, in November 2014, the Single Supervisory Mechanism (SSM) established the ECB as the single supervisor for all banks in the eurozone with direct supervisory responsibility for larger and systemically important banks, including HSBC France and HSBC Malta. A Single Resolution Mechanism (SRM) was also established to apply to all banks covered by the SSM. This is intended to ensure that bank resolution is managed effectively through a Single Resolution Board and a Single Resolution Fund, financed by the banking sector. Non-eurozone countries within the EU may opt to join the Banking Union, but the UK has indicated that it will not do so.

In January 2014, the European Commission published legislative proposals on the structural reform of the European banking sector which would prohibit proprietary trading in financial instruments and commodities, and enable supervisors, at their discretion, to require trading activities such as market-making, complex derivatives and securitisation operations to be undertaken in a separate subsidiary from deposit taking activities. In June 2015, the European Council published its negotiating position on the regulation which will need to be agreed with the European Parliament before being finalised.

In the EU, BRRD was finalised and published in June 2014. This came into effect from 1 January 2015, with the option to delay implementation of bail-in provisions until 1 January 2016. Regardless of this, the UK introduced bail-in powers from 1 January 2015. The UK transposition of the BRRD builds on the resolution framework already in place in the UK. In January 2015, the PRA published a policy statement containing updated requirements for recovery

and resolution planning which revises PRA rules that have been in force since 1 January 2014. In addition, the EBA has produced a number of Regulatory Technical Standards, some of which are yet to be finalised, that will further inform the BRRD requirements.

The BRRD also introduces requirements for banks to maintain at all times a sufficient aggregate amount of own funds and eligible liabilities (that is, liabilities that may be bailed in using the bail-in tool) known as the minimum requirements for eligible liabilities (MREL). In December 2015, the Bank of England issued a consultation paper on its approach to MREL for all UK banks, building societies and certain investment firms. Alongside the Bank of England s MREL consultation paper, the PRA published consultation paper on the interaction between MREL and capital buffers and how it would treat a breach of MREL.

The EU also continues to pursue the development of markets, and conduct-related EU regulations. This includes completing implementation of measures such as the European Markets Infrastructure Regulation. Additionally, a number of other EU market-related regulations have moved through the legislative process in 2015 and will be subject to significant implementation work in 2016. This includes the Markets in Financial Instrument Regulation/Directive (MiFID II), the Market Abuse Regulation, EU s Framework for Benchmarks and Indices, the Mortgage Credit Directive, the Packaged Retail Investment and Insurance Products Regulation, the Second Payment Services Directive, Money Markets Fund Regulation, the Payment Accounts Directive, and the Fourth Money Laundering Directive are all expected to progress further towards implementation during 2016. The Group continues to enhance and strengthen its governance and resourcing more generally around regulatory change management and the implementation of required measures, actively to address this ongoing and significant agenda of regulatory change.

Anti-money laundering and sanctions regulation

HSBC places a high priority on its obligations to deter money laundering and terrorist financing and to enforce global sanctions. The European Commission has published a Fourth Directive on the prevention of the use of the financial system for the purpose of money laundering and terrorist financing. Member States are required to incorporate the Fourth Directive into national laws by 26 June 2017 and financial institutions are required to comply with these laws from this date. HSBC policy requires that all Group companies must adhere to the letter and spirit of all applicable laws and regulations and we have policies, procedures and training intended to ensure that our employees know and understand our criteria for deciding when a client relationship or business should be evaluated as higher risk.

Risk mitigation measures aimed at deterring money laundering, terrorist and proliferation (weapons) financing (collectively referred to as AML) and enforcing sanctions have been focused in three key areas:

- managing risk;
- transitioning to a new operating and governance model; and
- meeting HSBC s regulatory obligations.

100i

Report of the Directors: Financial Review (continued)

Revised global AML and sanctions policies were approved in 2014. During 2015, global businesses and countries introduced new AML and sanctions procedures arising from the new policies and focused on embedding the procedures required to effect these policies in our day-to-day business operations globally. This supported our ongoing effort to address the US DPA requirements. These actions were in line with our strategic target to implement the highest or most effective standards globally. The work of the Monitor, who was appointed to assess the effectiveness of our AML and sanctions compliance programme is discussed on page 116 and our progress on implementing Global Standards is detailed on page 21.

Conducting customer due diligence (CDD) is one of the fundamental ways in which we know our customers and understand and manage financial crime risk. Enhanced minimum standards for customer due diligence, including, as applicable, standards to determine beneficial ownership information, are continuing to be deployed across the four global businesses.

The AML and sanctions programmes are being better aligned to the three lines of defence model (described on page 177) with roles and accountability across all three lines clearly set out and embedded through employee awareness initiatives.

As part of our continuing evaluation of AML and sanctions risk, we also monitor activities relating to the countries subject to US economic sanctions programmes administered by OFAC, as well as those subject to United Nations, UK and EU sanctions, as well as complying with local lists as required in the jurisdictions in which we operate. HSBC policy requires all Group companies to comply to the extent applicable with US sanctions laws. This means that not only must US subsidiaries and US nationals comply with US sanctions, but that HSBC subsidiaries outside the US which are not US persons must not participate in transactions within US jurisdictions (including most US dollar transactions) that would contravene US sanctions. We do not consider that our business activities with counterparties with whom transactions are restricted or prohibited under US sanctions are material to our business, and such activities represented a very small part of the Group s total assets at 31 December 2015 and total revenues for the year ended 31 December 2015.

Other

HSBC Bank USA entered into a Consent Cease and Desist Order with the OCC, and HNAH entered into a Consent Cease and Desist Order with the FRB in October 2010. These Orders require improvement of our compliance risk management programme, including AML controls across our US businesses. Steps continue to be taken to address the requirements of these Orders and to ensure that compliance and effective policies and procedures are maintained.

Disclosures pursuant to Section 13(r) of the Securities Exchange Act

Section 13(r) of the Securities Exchange Act requires each issuer registered with the SEC to disclose in its annual or quarterly reports whether it or any of its affiliates have knowingly engaged in specified activities or transactions with persons or entities targeted by US sanctions programmes relating to Iran, terrorism, or the proliferation of weapons of mass destruction, even if those activities are not prohibited by US law and are conducted outside the US by non-US affiliates in compliance with local laws and regulations.

To comply with this requirement, HSBC Holdings plc (together with its affiliates, HSBC) has requested relevant information from its affiliates globally. The following activities conducted by HSBC are disclosed in response to Section 13(r).

Loans in repayment

Between 2001 and 2005, the Project and Export Finance division of HSBC arranged or participated in a portfolio of loans to Iranian energy companies and banks. All of these loans were guaranteed by European and Asian export credit agencies and have varied maturity dates with final maturity in 2018. For those loans that remain outstanding, we continue to seek repayment in accordance with our obligations to the supporting export credit agencies. Details of these loans follow.

At 31 December 2015, we had 10 loans outstanding to an Iranian petrochemical company. These loans were supported by the official export credit agencies of the following countries: the UK, France, Germany, Spain, South Korea and Japan. We continue to seek repayments from the Iranian company under the outstanding loans in accordance with their original maturity profiles. Two repayments have been made under each of the ten loans in 2015.

Bank Melli acted as a sub-participant in two of the aforementioned loans to the Iranian petrochemical company. One repayment was made into a frozen account during the first quarter of 2015, and no further payments were made in 2015. One of the loans to the Iranian petrochemical company, supported by the Spanish Export Credit Agency, was fully repaid in 2015. Bank Saderat acted as a sub-participant on the loan and the final repayment due to the bank was paid into a frozen account.

We held a sub-participation in a loan provided by another international bank to Bank Tejarat with a guarantee from the Government of Iran, supported by the Italian Export Credit Agency. The facility matured in 2014 and the final claim for non-payment was paid by the Italian Export Credit Agency in the first quarter of 2015.

Estimated gross revenue to HSBC generated by the loans in repayment for 2015, which includes interest and fees, was approximately $702,000 and net estimated profit was approximately $545,000. While we intend to continue to seek repayment under the existing loans, all of which were

Report of the Directors: Financial Review (continued)

entered into before the petrochemical sector of Iran became a target of US sanctions, we do not currently intend to extend any new loans.

Legacy contractual obligations related to guarantees

Between 1996 and 2007, we provided guarantees to a number of its non-Iranian customers in Europe and the Middle East for various business activities in Iran. In a number of cases, we issued counter indemnities in support of guarantees issued by Iranian banks as the Iranian beneficiaries of the guarantees required that they be backed directly by Iranian banks. The Iranian banks to which we provided counter indemnities included Bank Tejarat, Bank Melli, and the Bank of Industry and Mine.

We have worked with relevant regulatory authorities to obtain licences where required and ensure compliance with laws and regulations.

There was no measurable gross revenue in 2015 under those guarantees and counter indemnities. We do not allocate direct costs to fees and commissions and, therefore, have not disclosed a separate net profit measure. We are seeking to cancel all relevant guarantees and counter indemnities and do not currently intend to provide any new guarantees or counter indemnities involving Iran. Two were cancelled in 2015 and approximately 20 remain outstanding.

Other relationships with Iranian banks

Activity related to US-sanctioned Iranian banks not covered elsewhere in this disclosure includes the following:

We maintain several frozen accounts in the UK for an Iranian-owned, UK-regulated financial institution. In April 2007, the UK government issued a licence authorising us to handle certain transactions (operational payments and settlement of pre-sanction transactions) for this institution. In December 2013, the UK government issued a new licence allowing HSBC to deposit certain cheque payments. There was some licensed activity in 2015. Estimated counter revenue in 2015 for this financial institution, which includes fees and/or commissions, was approximately $56,900. This customer relationship has generated negative revenue, given the European Central Bank s negative interest rate. In the second quarter of 2015, the UK government issued a licence to HSBC to collect the negative interest rate from this institution, and we commenced the collection of the negative interest rate in the fourth quarter of 2015.

We acted as the trustee and administrator for a pension scheme involving two employees of a US-sanctioned Iranian bank in Hong Kong. Under the rules of this scheme, we accepted contributions from the Iranian bank each month and allocated the funds into the pension accounts of the Iranian bank s employees. We ran and operated this pension scheme in accordance with Hong Kong laws and regulations. Estimated gross revenue, which includes fees and/or commissions, generated by the pension scheme in 2015 was approximately $3,100.

For the Iranian bank related-activity discussed in this section, we do not allocate direct costs to fees and commissions and, therefore, have not disclosed a separate net profit measure. We currently intend to continue to wind down this activity, to the extent legally permissible, and not enter into any new such activity.

Activity related to US Executive Order 13224

We maintain a frozen personal account for an individual customer who was sanctioned under US Executive Order 13224, and by the UK and the UN Security Council. Activity in 2015 was permitted by a licence issued by the UK Government. We are in the process of exiting the customer relationship.

We maintained an account for an individual customer that was sanctioned under US Executive Order 13224 in the second quarter of 2015. We settled the outstanding credit balance due from the customer and closed the account in the second quarter of 2015.

We maintain an account for an individual customer sanctioned under US Executive Order 13224 in 2015. The account was frozen in the third quarter of 2015.

For activity related to US Executive Order 13224, there was no measurable gross revenue or net profit generated to HSBC in 2015.

Activity related to US Executive Order 13382

In the second quarter of 2015, we maintained non-US currency accounts for an individual customer sanctioned under Executive Order 13382. We exited the customer relationship in the second quarter of 2015. There was no measurable gross revenue or net profit to HSBC in 2015.

Other activity

We held a lease of branch premises in London which we entered into in 2005 and was due to expire in 2020. The landlord of the premises is owned by the Iranian government and is a specially designated national under US Sanctions programmes. We have exercised a break clause in the lease and have exited the property. We closed the branch in the third quarter of 2014 and terminated the relationship with the lessor in 2015.

We maintained an account for a corporate customer in Armenia for whom we received funds from an account at Bank Mellat CJSC Armenia for the sale of computer equipment during the first quarter of 2015.

We maintained an account for a corporate customer in Oman during the first quarter of 2015 for whom we processed a cheque payment drawn on an account at Bank Melli in Oman for the sale of carpet-related products and services.

We maintain an account for a corporate customer in France that made a payment to the Iranian Civil Aviation Authority to settle flight-related expenses during the second quarter of 2015. This activity was permitted by a licence issued by France.

We maintain an account for a corporate customer in the UAE for whom we processed a cheque payment from a hospital owned by the Government of Iran for the purchase of medical equipment in the first quarter of 2015.

HSBC HOLDINGS PLC

100k

Table of Contents

Report of the Directors: Financial Review (continued)

We maintain a corporate customer in the UK for whom we received a cheque payment in the second quarter of 2015 from Bank Saderat in London, UK for health and safety services.

For the activity in this section, there was no measurable gross revenue or net profit to HSBC in 2015.

Frozen accounts and transactions

We maintain several accounts that are frozen under relevant sanctions programmes and on which no activity, except as licensed or otherwise authorised, took place during 2015. In 2015, we also froze payments where required under relevant sanctions programmes. There was no gross revenue or net profit to HSBC in 2015 relating to these frozen accounts.

Risk	Page	App[1]
Managing risk	101	
Risk management framework	101	
Governance and structure	102	
Responsibilities	104	
Processes	105	
Risk factors	108	
Risk governance		193
Risk appetite		194

Risk factors	109a	
Top and emerging risks	110	
Externally driven	110	
Internally driven	114	
Areas of special interest	116	
Financial crime compliance and regulatory compliance	116	
The Monitor	116	
Regulatory stress tests	116	
Oil and gas prices	117	
Metals and mining	117	
Mainland China exposures	117	
Credit risk	118	195
Liquidity and funding	154	204

Market risk	166	
		210
Operational risk	176	
		217
Compliance risk	178	217
Legal risk		218
Global security and fraud risk		218
Systems risk		219
Vendor risk management		219
Risk management of insurance operations	180	219
Other material risks	189	
Reputational risk	189	224
Fiduciary risk	189	224
Pension risk	189	225
Sustainability risk	190	226

1 *Appendix to Risk risk policies and practices.*

For details of HSBC s policies and practices regarding risk management and governance see the Appendix to Risk on page 193.

Managing risk

All of our activities involve, to varying degrees, the measurement, evaluation and management of risk or combinations of risks.

Our conservative risk profile

We maintain a conservative risk profile which encompasses the following:

Financial position

- Strong capital position, defined by regulatory and internal capital ratios.
- Liquidity and funding management for each operating entity, on a stand-alone basis.

Operating model

- Returns generated in line with risk taken.
- Sustainable and diversified earnings mix, delivering consistent returns for shareholders.

Business practice

- Zero tolerance for knowingly engaging in any business, activity or association where foreseeable reputational risk or damage has not been considered and/or mitigated.
- No appetite for deliberately or knowingly causing detriment to consumers arising from our products and services or incurring a breach of the letter or spirit of regulatory requirements.
- No appetite for inappropriate market conduct by a member of staff or by any Group business.

Risk management framework

Managing risk effectively is fundamental to the delivery of our strategic priorities. In doing so, we employ a risk management framework at all levels of the organisation and across all risk types. It fosters the continuous monitoring of the risk environment and an integrated evaluation of risks and their interactions. It also ensures that we have a

consistent approach to risk management across the Group.

Our enterprise risk management framework is underpinned by our risk culture and is reinforced by the HSBC Values and our Global Standards. These are instrumental in aligning the behaviours of individuals with the Group s attitude to assuming and managing risk and helping to ensure that our risk profile remains in line with our risk appetite.

Our enterprise risk management framework is set out overleaf.

Table of Contents

Report of the Directors: Risk (continued)

Managing risk

Governance and structure

Corporate and risk governance

Robust risk governance and accountability are embedded throughout the Group through an established framework that ensures appropriate oversight of and accountability for the effective management of risk.

The Board has ultimate responsibility for the effective management of risk and approves HSBC s risk appetite. The Board is advised on risk-related matters by the following committees:

- The Group Risk Committee advises the Board on risk appetite and its alignment with strategy, risk governance and internal controls, and high-level risk related matters.

- The Financial System Vulnerabilities Committee reports to the Board on matters relating to financial crime and financial system abuse and provides a forward-looking perspective on financial crime risk.

- The Conduct & Values Committee oversees the design and application of HSBC s policies, procedures and standards to ensure that we conduct business responsibly and consistently adhere to HSBC Values, and advises the Board accordingly.

Executive accountability for the ongoing monitoring, assessment and management of the risk environment and the effectiveness of our risk management policies resides with the RMM, the Risk Management Meeting of the Group Management Board (GMB). Day-to-day risk management activities are the responsibility of senior managers of individual businesses, supported by global functions as described under Three lines of defence below.

The consistency of governance structures across HSBC is enforced through risk management committees, as set out in our enterprise risk management framework, and adherence to consistent standards and risk management policies.

The executive and non-executive risk governance structures and their interactions are set out on page 193, with similar arrangements in place for major operating subsidiaries.

The report of the Group Risk Committee is on page 266, of the Financial System Vulnerabilities Committee is on page 268, and of the Conduct & Values Committee is on page 272.

Risk appetite

The Group s Risk Appetite Statement (RAS) is the written articulation of the aggregated level and types of risk that we are willing to accept in our business activities in order

to achieve our medium to long-term business objectives. It is a key component of our management of risk and is reviewed on an ongoing basis, with formal approval from the Board every six months on the recommendation of the Group Risk Committee.

The Group s actual risk appetite profile is reported to the RMM on a monthly basis to enable senior management to monitor the risk profile and guide business activity in order to balance risk and return, allowing risks to be promptly identified and mitigated, and inform risk-adjusted remuneration to drive a strong risk culture across the Group.

The RAS is established and monitored as part of the Global Risk Appetite Framework, which provides a globally consistent and structured approach to the management, measurement and control of risk by detailing the processes, governance and other features of how risk appetite is cascaded to drive day-to-day decision-making through policies, limits and the control framework.

Risk appetite informs the strategic and financial planning process, defining the desired forward-looking risk profile of the Group. It is also embedded in other enterprise risk tools such as top and emerging risks and stress testing, to ensure consistency in risk management.

Global businesses, geographical regions and strategic countries are required to have their own RASs, which are subject to assurance to ensure they remain directionally aligned to the Group s. All RASs and business activities are guided and underpinned by a set of qualitative principles, outlined in the Appendix to Risk on page 194. Additionally, quantitative metrics are defined along with appetite and tolerance thresholds for 10 risk areas.

Enterprise-wide risk management tools

The following processes to identify, manage and mitigate risks are integral to risk management at HSBC, helping to ensure that we remain within our risk appetite.

Risk map

The risk map process provides a point-in-time view of the risk profile of the Group across a suite of risk categories including our material banking risks and insurance risks (see page 105). It assesses the potential for these risks to materially affect our financial results, reputation or business sustainability on current and projected bases.

The risk categories presented on the risk map are regularly assessed through our risk appetite profile, are stress tested and, where thematic issues arise, are considered for classification as top or emerging risks.

Top and emerging risks

Identifying, managing and monitoring risks are integral to our approach to risk management. Our top and emerging risks process provides a forward-looking view of those risks which have the potential to threaten the execution of our strategy and our global operations. Top and emerging risks are generally described thematically, and may have an impact across multiple risk map categories, global businesses or regions.

We define a top risk as a thematic issue arising across any combination of risk map categories, regions or global businesses which has the potential to have a material effect on the Group s financial results, reputation or long-term business model, and which may form and crystallise between six months and one year. The risk impact may be well understood by senior management, with some mitigating actions already in place. Stress tests of varying granularity may also have been carried out to assess the effect.

An emerging risk is defined as a thematic issue that has large unknown components which may form and crystallise beyond a one-year time horizon. If it were to materialise, it could have a significant material effect on a combination of the Group s long-term strategy, profitability and reputation. Existing management action plans are likely to be minimal, reflecting the uncertain nature of these risks at this stage. Some high-level analysis and/or stress testing may have been carried out to assess the impact.

Our top and emerging risk framework enables us to identify and manage current and forward-looking risks to ensure our risk appetite remains appropriate. The ongoing assessment of our top and emerging risks is informed by a comprehensive suite of risk factors (see page 108) and the results of our stress testing programme. When our top and emerging risks result in our risk appetite being exceeded, or have the potential to exceed, we take steps to mitigate them, including reducing our exposure to areas of stress.

Our current top and emerging risks are discussed on page 110.

Stress testing

Our stress testing and scenario analysis programme examines the sensitivities of our capital plans and unplanned demand for regulatory capital under a number of scenarios and ensures that top and emerging risks are appropriately considered. These scenarios include, but are not limited to, adverse macroeconomic events, failures at country, sector and counterparty levels, geopolitical occurrences and a variety of projected major operational risk events.

At Board level, the Group Chief Risk Officer and the Group Finance Director are the two executive Directors jointly accountable for oversight of stress testing in HSBC. The Stress Testing Management Board, which is chaired by the Group Finance Director, is responsible for stress testing strategy and stewardship. Updates on stress testing are provided regularly to the RMM. The Group Risk Committee is informed and consulted on the bank s stress testing activities, as appropriate, and approves the key elements of the Bank of England concurrent stress test, including final results.

The development of macroeconomic scenarios is a critical part of the process. Potential scenarios are defined and generated by a panel of economic experts from various global teams, including Risk and Finance. Scenarios are translated into financial impacts, such as on our forecast profitability and RWAs, using a suite of stress testing models and methodologies. Models are subject to independent model review and go through a process of validation and approval. Model overlays may be considered where necessary.

Table of Contents

Report of the Directors: Risk (continued)

Managing risk

Stress testing results are subject to a review and challenge process at regional, global business and Group levels and action plans are developed to mitigate identified risks. The extent to which these action plans would be implemented in the event of particular scenarios occurring depends on senior management s evaluation of the risks and their potential consequences, taking into account HSBC s risk appetite.

In addition to the Group-wide risk scenarios, each major HSBC subsidiary conducts regular macroeconomic and event-driven scenario analyses specific to their region. They also participate in local regulatory stress testing programmes, where required.

Stress testing is applied to risks such as operational risk, including market risk, liquidity and funding risk, credit risk and conduct to evaluate the potential effects of stress scenarios on portfolio values, structural long-term funding positions, income or capital.

Reverse stress testing is run annually on both Group and, where required, subsidiary entity bases. This stress test is conducted by assuming the business model is non-viable and works backwards to identify a range of occurrences that could bring that event about. Non-viability might occur before the bank s capital is depleted, and could result from a variety of events, including idiosyncratic or systemic events or combinations thereof. It could imply failure of the Group s holding company or one of its major subsidiaries. Reverse stress testing is used to strengthen our resilience by identifying potential stresses and vulnerabilities which the Group might face and helping to inform early-warning triggers, management actions and contingency plans designed to mitigate their effect, were they to occur.

HSBC participated in regulatory stress testing programmes in a number of jurisdictions during 2015, as outlined on page 116. In addition, we have conducted an internal stress test, incorporating the latest portfolio developments and business plan. For this exercise management considers that the Bank of England 2015 scenario reflects key risks which merit examination at this time. The results of this exercise are used for internal risk and capital management processes, including the Internal Capital Adequacy Assessment Process (ICAAP).

Responsibilities

Three lines of defence

We use the three lines of defence model to underpin our approach to strong risk management. It defines responsibilities for: identifying, assessing, measuring, managing, monitoring and mitigating risks; encouraging collaboration; and enabling efficient coordination of risk and control activities.

For details of the three lines of defence model, see page 177.

People

All employees are required to identify, assess and manage risk within the scope of their assigned responsibilities and, as such, they are critical to the effectiveness of the three lines of defence.

Clear and consistent employee communication on risk conveys strategic messages and sets the tone from senior leadership. We deploy a suite of mandatory training on critical risk and compliance topics to embed skills and understanding and strengthen the risk culture within HSBC. It reinforces the attitude to risk in the behaviour expected of employees, as described in our risk policies. The training is updated regularly, describing technical aspects of the various risks assumed by the Group and how they should be managed effectively. A confidential disclosure line enables staff to raise concerns (see page 179).

Our risk culture is reinforced by our approach to remuneration. Individual awards, including those for executives, are based on compliance with HSBC Values and the achievement of financial and non-financial objectives which are aligned to our risk appetite and global strategy.

For further information on risk and remuneration, see the Report of the Group Remuneration Committee on page 270.

Independent Risk function

Global Risk, headed by the Group Chief Risk Officer, is responsible for the enterprise risk management framework. This includes establishing global policy, monitoring risk profiles and forward-looking risk identification and management. Global Risk also has functional responsibility for risk management in support of HSBC s global businesses and regions through its Risk sub-functions, which are independent from the sales and trading functions of the Group s businesses. This independence ensures the necessary balance in risk/return decisions.

Processes

Banking and insurance risks

The material risk types associated with our banking and insurance manufacturing operations are described in the tables below.

Description of risks   banking operations

Risks	Arising from	Measurement, monitoring and management of risk
Credit risk (page 118)		
The risk of financial loss if a customer or counterparty fails to meet an obligation under a contract.	Credit risk arises principally from direct lending, trade finance and leasing business, but also from certain other products such as guarantees and derivatives.	Credit risk is: **measured** as the amount which could be lost if a customer or counterparty fails to make repayments. In the case of derivatives, the measurement of exposure takes into account the current mark-to-market value to HSBC of the contract and the expected potential change in that value over time caused by movements in market rates; **monitored** within limits approved by individuals within a framework of delegated authorities. These limits represent the peak exposure or loss to which HSBC could be subjected should the customer or counterparty fail to perform its contractual obligations; and

		managed through a robust risk control framework which outlines clear and consistent policies, principles and guidance for risk managers.
Liquidity and funding risk (page 154)		
The risk that we do not have sufficient financial resources to meet our obligations as they fall due or that we can only do so at excessive cost.	Liquidity risk arises from mismatches in the timing of cash flows. Funding risk arises when the liquidity needed to fund illiquid asset positions cannot be obtained at the expected terms and when required.	Liquidity and funding risk is: **measured** using internal metrics including stressed operational cash flow projections, coverage ratios and advances to core funding ratios; **monitored** against the Group s liquidity and funding risk framework and overseen by regional Asset and Liability Management Committees (ALCO s), Group ALCO and the RMM; and **managed** on a stand-alone basis with no reliance on any Group entity (unless pre-committed) or central bank unless this represents routine established business-as-usual market practice.
Market risk (page 166)		
The risk that movements in market factors, including foreign exchange rates and commodity prices, interest rates, credit spreads and equity prices, will reduce our income or the value of our portfolios.	Exposure to market risk is separated into two portfolios: trading portfolios comprise positions arising from market-making and warehousing of customer-derived positions. non-trading portfolios comprise positions that primarily arise from the interest rate management of our retail and commercial banking assets and liabilities, financial investments designated as available for sale and held to	Market risk is: **measured** in terms of value at risk, which is used to estimate potential losses on risk positions as a result of movements in market rates and prices over a specified time horizon and to a given level of confidence, augmented with stress testing to evaluate the potential impact on portfolio values of more extreme, though plausible, events or movements in a set of financial variables; **monitored** using measures including the sensitivity of net interest income and the sensitivity of structural foreign exchange which are applied to the market risk positions within each risk type; and **managed** using risk limits approved by the GMB for HSBC Holdings and our various global businesses. These units are allocated across business lines and to the Group s legal entities.

maturity, and
exposures arising from
our insurance
operations (page 180).

Table of Contents

Report of the Directors: Risk (continued)

Managing risk

Risks	Arising from	Measurement, monitoring and management of risk
Operational risk (page 176)		
The risk of loss resulting from inadequate or failed internal processes, people and systems or from external events, including legal risk.	Operational risk arises from day to day operations or external events, and is relevant to every aspect of our business. Compliance risk and Fiduciary risk are discussed below. Other operational risks are covered in the Appendix to Risk (page 217).	Operational risk is: **measured** using both the top risk analysis process and the risk and control assessment process, which assess the level of risk and effectiveness of controls; **monitored** using key indicators and other internal control activities; and **managed** primarily by global business and functional managers. They identify and assess risks, implement controls to manage them and monitor the effectiveness of these controls utilising the operational risk management framework. Global Operational Risk is responsible for the framework and for overseeing the management of operational risks within global businesses and global functions.
Compliance risk (page 178)		
The risk that we fail to observe the letter and spirit	Compliance risk is part of operational risk, and	Compliance risk is:

of all relevant laws, codes, rules, regulations and standards of good market practice, and incur fines and penalties and suffer damage to our business as a consequence.	arises from rules, regulations, other standards and Group policies, including those relating to anti-money laundering, anti-bribery and corruption, counter-terrorist and proliferation financing, sanctions compliance and conduct of business. The US DPA is discussed on page 113 and the Monitor on page 116.	**measured** by reference to identified metrics, incident assessments (whether affecting HSBC or the wider industry), regulatory feedback and the judgement and assessment of compliance officers in our global businesses, regions and functions; **monitored** against our compliance risk assessments and metrics, the results of the monitoring and control activities of the second line of defence functions, including the Financial Crime Compliance and Regulatory Compliance sub-functions, and the results of internal and external audits and regulatory inspections; and **managed** by establishing and communicating appropriate policies and procedures, training employees in them, and monitoring activity to assure their observance. Proactive risk control and/or remediation work is undertaken where required.
Other material risks		
Reputational risk (page 189)		
The risk of failure to meet stakeholder expectations as a result of any event, behaviour, action or inaction, either by HSBC itself, our employees or those with whom we are associated, that might cause stakeholders to form a negative view of the Group. This may result in financial or non-financial impacts, loss of confidence, or other consequences.	Primary reputational risks arise directly from an action or inaction by HSBC, its employees or associated parties that are not the consequence of another type of risk. Secondary reputational risks are those arising indirectly and are a result of another risk caused either by HSBC, its employees or associated third parties.	Reputational risk is: **measured** by reference to our reputation as indicated by our dealings with all relevant stakeholders, including media, regulators, customers and employees; **monitored** through a reputational risk management framework that is integrated into the Group s broader risk taxonomy; and **managed** by every member of staff and is covered by a number of policies and guidelines. There is a clear structure of committees and individuals charged with mitigating

		reputational risk, including the Group Reputational Risk Policy Committee, the Global Risk Resolution Committee and reputational risk committees in the regions and global businesses.
Fiduciary risk (page 189)		
The risk of breaching our fiduciary duties, defined as any duty where HSBC holds, manages, oversees or has responsibilities for assets for a third party that involves a legal and/or regulatory duty to act with the highest standard of care and with utmost good faith.	Fiduciary risk is part of operational risk, and arises from our business activities where we act in a fiduciary capacity (designated businesses) as Trustee, Investment Manager or as mandated by law or regulation.	Fiduciary risk is: **measured** by each designated business monitoring against their own risk appetite statements and by the operational risk and control assessment process, which assesses the level of risk and the effectiveness of the key controls; **monitored** through a combination of testing, key indicators and other metrics such as client and regulatory feedback; and **managed** within the designated businesses via established governance frameworks, and comprehensive policies, procedures and training programmes.

Table of Contents

Risks	Arising from	Measurement, monitoring and management of risk
Pension risk (page 189)		
The risk that contributions from Group companies and members fail to generate sufficient funds to meet the cost of accruing benefits for the future service of active members, and the risk that the performance of assets held in pension funds is insufficient to cover existing pension liabilities.	Pension risk arises from investments delivering an inadequate return, economic conditions leading to corporate failures, adverse changes in interest rates or inflation, or members living longer than expected (longevity risk). Pension risk includes operational risks listed above.	Pension risk is: **measured** in terms of the schemes ability to generate sufficient funds to meet the cost of their accrued benefits; **monitored** through the specific risk appetite that has been developed at both Group and regional levels; and **managed** locally through the appropriate pension risk governance structure and globally through the RMM.
Sustainability risk (page 190)		
The risk that financial services provided to customers by the Group indirectly result in unacceptable impacts on people or on the environment.	Sustainability risk arises from the provision of financial services to companies or projects which indirectly result in unacceptable impacts on people or on the	Sustainability risk is: **measured** by assessing the potential sustainability effect of a customer s activities and assigning a Sustainability Risk Rating to all high risk transactions;

	environment.	**monitored** quarterly by the RMM and monthly by Group Sustainability Risk; and **managed** using sustainability risk policies covering project finance lending and sector-based sustainability policies for sectors and themes with potentially high environmental or social impacts.

Our insurance manufacturing subsidiaries are separately regulated from our banking operations. Risks in the insurance entities are managed using methodologies and processes appropriate to insurance activities, but remain subject to oversight at Group level. Our insurance

operations are also subject to the operational risks and the other material risk types presented above in relation to the banking operations, and these are covered by the Group s risk management processes.

Description of risks insurance manufacturing operations

Risks	Arising from	Measurement, monitoring and management of risk
Financial risks (page 183)		
Our ability to effectively match the liabilities arising under insurance contracts with the asset portfolios that back them is contingent on the management of financial risks such as market, credit and liquidity risks, and the extent to which these risks are borne by the policyholders.	Exposure to financial risks arises from: market risk of changes in the fair values of financial assets or their future cash flows from fluctuations in variables such as interest rates, foreign exchange rates and equity prices;	Financial risks are: **measured** separately for each type of risk: market risk is measured in terms of exposure to fluctuations in key financial variables; credit risk is measured as the amount which could be lost if a customer or counterparty fails to make repayments; and

Liabilities to policyholders under unit-linked contracts move in line with the value of the underlying assets, and as such the policyholder bears the majority of the financial risks.	credit risk and the potential for financial loss following the default of third parties in meeting their obligations; and	liquidity risk is measured using internal metrics including stressed operational cash flow projections. **monitored** within limits approved by individuals within a framework of delegated authorities; and
Contracts with DPF share the performance of the underlying assets between policyholders and the shareholder in line with the type of contract and the specific contract terms.	liquidity risk of entities not being able to make payments to policyholders as they fall due as there are insufficient assets that can be realised as cash.	**managed** through a robust risk control framework which outlines clear and consistent policies, principles and guidance for risk managers. Subsidiaries manufacturing products with guarantees are usually exposed to falls in market interest rates and equity prices to the extent that the market exposure cannot be managed by utilising any discretionary participation (or bonus) features within the policy contracts they issue.

Report of the Directors: Risk (continued)

Risks managed by HSBC

Risks	Arising from	Measurement, monitoring and management of risk
Insurance risk (page 188)		
The risk that, over time, the cost of the contract, including claims and benefits may exceed the total amount of premiums and investment income received.	The cost of claims and benefits can be influenced by many factors, including mortality and morbidity experience, lapse and surrender rates.	Insurance risk is: **measured** in terms of life insurance liabilities; **monitored** by the RBWM Risk Management Committee, which checks the risk profile of the insurance operations against a risk appetite for insurance business agreed by the GMB; and **managed** both centrally and locally using product design, underwriting, reinsurance and claims-handling procedures.

Risks incurred in our business activities

The chart below provides a high level guide to how our business activities are reflected in our risk measures and in the Group s balance sheet. The third-party assets and

liabilities indicate the contribution each business makes to the balance sheet, while RWAs illustrate the relative size of the risks incurred in respect of each business.

Exposure to risks arising from the business activities of global businesses

For footnote, see page 191.

Risk factors

We have identified a comprehensive suite of risk factors which covers the broad range of risks our businesses are exposed to.

A number of the risk factors have the potential to affect the results of our operations or financial condition, but may not necessarily be deemed as top or emerging risks. However, they inform the ongoing assessment of our top and emerging risks. The risk factors are:

Macroeconomic and geopolitical risk

Current economic and market conditions may adversely affect our results.

We are subject to political and economic risks in the countries in which we operate, including the risk of government intervention.

We may suffer adverse effects as a result of the interaction between market perceptions surrounding mainland China s slowdown, the course of global monetary policies, economic conditions in the eurozone and damage from plummeting oil prices, all of which may result in further capital outflows from emerging markets.

Table of Contents

Changes in foreign currency exchange rates may affect our results.

Macro-prudential, regulatory and legal risks to our business model

Failure to implement and adhere to our obligations under the deferred prosecution agreements could have a material adverse effect on our results and operations.

We may fail to effectively manage affiliate risk.

Failure to comply with certain regulatory requirements could have a material adverse effect on our results and operations.

We may fail to meet the requirements of regulatory stress tests.

We are subject to a number of legal and regulatory actions and investigations, the outcomes of which are inherently difficult to predict.

We are subject to unfavourable legislative or regulatory developments and changes in the policy of regulators or governments.

We may fail to comply with all applicable regulations, particularly any changes thereto.

We and our UK subsidiaries may become subject to stabilisation provisions under the Banking Act 2009, as amended, in certain significant stress situations.

Structural separation of banking and trading activities proposed or enacted in a number of jurisdictions could have a material adverse effect on us.

We are subject to tax-related risks in the countries in which we operate.

Risks related to our business, business operations, governance and internal control systems

The delivery of our strategic actions is subject to execution risk.

We may not achieve any of the expected benefits of our strategic initiatives.

We may fail to increase the cross-selling and/or business synergies required to achieve our growth strategy.

We operate in markets that are highly competitive.

Our risk management measures may not be successful.
Operational risks are inherent in our business.

Our operations are subject to the threat of fraudulent activity.

Our operations are subject to disruption from the external environment.

Our operations utilise third-party suppliers and service providers.

Our operations are highly dependent on our information technology systems.

We may not be able to meet regulatory requests for data.

Our operations have inherent reputational risk.

We may suffer losses due to employee misconduct.

We rely on recruiting, retaining and developing appropriate senior management and skilled personnel.

Our financial statements are based in part on judgements, estimates and assumptions which are subject to uncertainty.

We could incur losses or be required to hold additional capital as a result of model limitations or failure.

Third parties may use us as a conduit for illegal activities without our knowledge.

We have significant exposure to counterparty risk.

Market fluctuations may reduce our income or the value of our portfolios.

Liquidity, or ready access to funds, is essential to our businesses.

Any reduction in the credit rating assigned to HSBC Holdings, any subsidiaries of HSBC Holdings or any of their respective debt securities could increase the cost or decrease the availability of our funding and adversely affect our liquidity position and interest margin.

Risks concerning borrower credit quality are inherent in our businesses.

Our insurance businesses are subject to risks relating to insurance claim rates and changes in insurance customer behaviour.

HSBC Holdings is a holding company and, as a result, is dependent on loan payments and dividends from its subsidiaries to meet its obligations, including obligations with respect to its debt securities, and to provide profits for payment of future dividends to shareholders.

We may be required to make substantial contributions to our pension plans.

Table of Contents

Report of the Directors: Financial Review (continued)

Risk factors

Macroeconomic and geopolitical risk

Current economic and market conditions may adversely affect our results

Our earnings are affected by global and local economic and market conditions. Economic growth remained weak in 2015, with a number of headwinds adversely affecting both developed and emerging market countries. Oil and gas prices continued to fall sharply in 2015 and in early 2016 while the slowdown of the mainland Chinese economy dampened global trade and caused volatility in currency and global stock markets. Uncertainties remain concerning the outlook and the future economic environment and there can be no assurance that the global economy as a whole will improve significantly or at all.

The uncertain and at times volatile economic conditions continue to create a challenging operating environment for financial services companies such as HSBC. In particular, we may face the following challenges to our operations and operating model in connection with these factors:

- the demand for borrowing from creditworthy customers may diminish if economic activity slows or remains subdued;

- as capital flows are increasingly disrupted, some emerging markets have imposed protectionist measures that could affect financial institutions and their clients, and others may be tempted to follow suit;

- European banks may come under renewed stress as subdued economic conditions raise asset quality worries, particularly in the EU, and uncertainties about the new EU bank resolution regime raise funding costs;

- geopolitical risks, which remain elevated in many parts of the world, directly affect the economies of the countries in which we operate and present a clear risk of disruption to the global economy due to links to the global resources supply chain;

the prolonged period of low, or negative, interest rates constrains, for example, through margin compression and low returns on assets, the net interest income we earn from investing our excess deposits;

our ability to borrow from other financial institutions or to engage in funding transactions may be adversely affected by market disruption, for example, in the event of contagion from stress in the eurozone sovereign and financial sectors; and

market developments may depress consumer and business confidence beyond expected levels. If economic growth remains subdued, for example, asset prices and payment patterns may be adversely affected, leading to greater than expected increases in our delinquencies, default rates, write-offs and loan impairment charges.

The occurrence of any of these events or circumstances could have a material adverse effect on our business prospects, financial condition, customers and results of operations.

We are subject to political and economic risks in the countries in which we operate, including the risk of government intervention

We operate through an international network of subsidiaries and affiliates in over 70 countries and territories around the world. Our results are, therefore, subject to the risks of loss from unfavourable political developments, currency fluctuations, social instability and changes in government policies. These may take the form of expropriation, restrictions on international ownership, interest-rate caps, limits on dividend flows and tax in the jurisdictions in which we operate.

In the Middle East, the intervention of Russia and the rise of the terrorist group, Daesh, has added to an already complex and divisive civil war in Syria and further destabilised Iraq. The lifting of sanctions following a deal between Iran and the five permanent members of the UN Security Council on the country s nuclear programme has done little to calm regional tensions. Conflict in Ukraine has continued, despite a ceasefire agreement being signed in early 2015.

European states are experiencing heightened political tension, reflecting concerns over migration, fears of terrorism and the possibility that the UK may vote to exit the EU following a referendum expected to occur within the lifetime of the current Parliament, and as early as mid-2016. An exit could have a significant impact on UK, European and global macroeconomic conditions, as well as substantial political ramifications.

In Asia, territorial disputes between Japan and mainland China and other states have strained diplomatic relations and are testing the resolve of the US to defend freedom of navigation.

Continued unfavourable political developments could have a material adverse effect on our business, prospects, financial condition and results of operations.

We may suffer adverse effects as a result of the interaction between market perceptions surrounding mainland China s slowdown, the course of global monetary policies, economic conditions in the eurozone and damage from plummeting oil prices, all of which may result in further capital outflows from emerging markets

Market confidence in mainland Chinese growth and the adequacy of policymaking is waning, causing heightened volatility. The authorities have to find a difficult balance between socio-economic stability and the pursuit of financial system liberalisation. A scenario where the government includes a sharp devaluation in a package of measures to stimulate the economy could prompt large capital outflows and have a negative knock-on impact on the world economy.

With regard to the FRB s monetary policy, the prevailing market view is that a course of gradually tightening economic conditions will be pursued against the backdrop of subdued inflation. Should the FRB instead tighten monetary policy more quickly, the consequent realignment of market expectations would likely accelerate capital outflows from emerging markets. Alternatively, the FRB could be forced by poor economic performance into a policy reversal, which would increase market volatility.

Table of Contents

Report of the Directors: Financial Review (continued)

Oil prices have fallen precipitously since mid-2014 as a result of increasing uncertainty surrounding the mainland Chinese economy as well as the backdrop of an oversupplied oil market. Consequently, any recovery in oil prices may be gradual. This may complicate policymakers tasks of raising inflation, and could potentially threaten the stability of some oil-exporting countries.

Economic conditions in the eurozone continue to be uncertain. Any default on the sovereign debt of Greece or any eurozone nation and the resulting impact on other eurozone countries could have a material adverse effect on us, including (a) significant market dislocation, (b) heightened counterparty risk and (c) an adverse effect on the management of market risk.

Moreover, a significant number of financial institutions throughout Europe have substantial exposures to sovereign debt issued by eurozone nations that are under severe financial stress. Should any of those nations default on their debt or experience a significant widening of credit spreads, major financial institutions and banking systems throughout Europe could be destabilised, resulting in, among other things, significant disruptions in financial activities.

Any significant changes in UK government policies or political structure could have an impact on our business. Uncertainty over the forthcoming EU referendum, which must be held in the UK before 31 December 2017, could worsen global market conditions. The outcome of this referendum, or any other major UK political developments, could affect the fiscal, monetary and regulatory landscape to which we are subject.

Unfavourable market conditions and global monetary policies could have a material adverse effect on our business, prospects, financial condition and results of operations.

Changes in foreign currency exchange rates may affect our results

We prepare our accounts in US dollars because the US dollar and currencies linked to it form the major currency bloc in which we transact and fund our business. A substantial portion of our assets, liabilities, assets under management, revenues and expenses are denominated in other currencies. Changes in foreign exchange rates, including those which may result from a currency becoming de-pegged from the US dollar, have an effect on our reported income, cash flows and shareholders equity and could have a material adverse effect on our business, prospects, financial condition and results of operations.

Macro-prudential, regulatory and legal risks to our business model

Failure to implement and adhere to our obligations under the deferred prosecution agreement could have a material adverse effect on our results and operations

An independent compliance monitor (the Monitor) was appointed in 2013 under the 2012 agreements entered into with the US DoJ and the UK FCA to produce annual

assessments of the effectiveness of our AML and sanctions compliance programme. Additionally, the Monitor is serving as HSBC s independent consultant under the consent order of the US FRB. HSBC Bank USA is also subject to an agreement entered into with the OCC in December 2012, the Gramm-Leach-Bliley Act (GLBA) Agreement and other consent orders. In January 2016, the Monitor delivered has second annual follow-up review report as required by the US DPA. The Monitor s report is discussed on page 116 of the *Annual Report and Accounts 2015*.

The design and execution of AML and sanctions remediation plans are complex and require major investments in people, systems and other infrastructure. This complexity creates significant execution risk, which could affect our ability to effectively identify and manage financial crime risk and remedy AML and sanctions compliance deficiencies in a timely manner. This could, in turn, impact our ability to satisfy the Monitor or comply with the terms of the US DPA and related agreements and consent orders, and may require us to take additional remedial measures in the future.

Under the terms of the US DPA, upon notice and an opportunity to be heard, the DoJ has sole discretion to determine whether HSBC has breached the US DPA. Potential consequences of breaching the US DPA could include the imposition of additional terms and conditions on HSBC, an extension of the agreement, including its monitorship, or the criminal prosecution of HSBC, which could, in turn, entail further financial penalties and collateral consequences.

Breach of the US DPA or related agreements and consent orders could have a material adverse effect on our business, financial condition and results of operations, including loss of business and withdrawal of funding, restrictions on performing dollar-clearing functions through HSBC Bank USA or revocation of bank licences. Even if we are not determined to have breached these agreements, but the agreements are amended or their terms extended, our business, reputation and brand could suffer materially.

We may fail to effectively manage affiliate risk

HSBC Bank USA, as the primary US dollar correspondent bank for the Group, is subject to heightened financial crime risk arising from business conducted on behalf of clients as well as its non-US HSBC affiliates. If HSBC Bank USA fails to conduct adequate due diligence on clients, including its affiliates, or otherwise inappropriately processes US dollar payments on behalf of non-US HSBC affiliates, it could be in breach of applicable US AML and sanctions laws and regulations, become subject to legal or regulatory enforcement actions by OFAC or other US agencies and be required to pay substantial fines or penalties. In addition, any such breaches of US legislation would likely constitute a breach of the US DPA, leading to the potential consequences

Table of Contents

Report of the Directors: Financial Review (continued)

described under Failure to implement and adhere to our obligations under the deferred prosecution agreement could have a material adverse effect on our results and operations . In particular, any such breaches could result in legal judgements that may compel HSBC to restructure its operations or cease to offer certain products or services, which could potentially include a suspension or restriction of HSBC Bank USA s ability to process US dollar payment transactions, all of which would have a material adverse effect on our business, financial condition, results of operations and prospects.

Failure to comply with certain regulatory requirements would have a material adverse effect on our results and operations

As reflected in the agreement entered into with the OCC in December 2012 (the GLBA Agreement), the OCC has determined that HSBC Bank USA is not in compliance with the requirements that a national bank, and each depository institution affiliate of the national bank, must be both well capitalised and well managed in order to own or control a financial subsidiary. As a result, HSBC Bank USA and its parent holding companies, including HSBC Holdings, do not meet the qualification requirements for financial holding company status. If all of our affiliate depositary institutions are not in compliance with these requirements within the time periods specified in the GLBA Agreement, as they may be extended, HSBC could be required either to divest HSBC Bank USA or to divest or terminate any financial activities conducted in reliance on financial holding company status under the GLBA. Similar consequences could result for financial subsidiaries of HSBC Bank USA that engage in activities in reliance on expanded powers provided for in the GLBA. Any such divestiture or termination of activities would have a material adverse effect on our business, prospects, financial condition and results of operation.

We may fail to meet the requirements of regulatory stress tests

We are subject to regulatory stress testing in many jurisdictions. These exercises are designed to assess the resilience of banks to adverse economic or financial developments and ensure that they have robust, forward-looking capital planning processes that account for the risks associated with their business profile. Assessment by regulators is on both a quantitative and qualitative basis, the latter focusing on our data provision, stress testing capability and internal management processes and controls.

During 2015, we participated in the regulatory stress test programmes of the PRA, the FRB and the OCC among others, which are described on page 116 of the *Annual Report and Accounts 2015*.

Failure to meet quantitative or qualitative requirements of regulatory stress test programmes, or the failure by regulators to approve our stress results and capital plans, could have a material adverse effect on our prospects, financial condition and results of operations.

We are subject to a number of legal and regulatory actions and investigations, the outcomes of which are inherently difficult to predict

We face significant legal and regulatory risks in our business. The volume and amount of damages claimed in litigation, regulatory proceedings and other adversarial proceedings against financial institutions are increasing for many reasons, including a substantial increase in the number of regulatory changes taking place globally, increased media attention and higher expectations from regulators and the public. In addition, criminal prosecutions of financial institutions for, among other things, alleged conduct, breaches of AML and sanctions regulations, antitrust violations, market manipulation, aiding and abetting tax evasion and providing unlicensed cross-border banking services, have become more commonplace and may increase in frequency due to increased media attention and higher expectations from prosecutors and the public. Any such prosecution of HSBC or one or more of its subsidiaries could result in substantial fines, penalties and/or forfeitures and could have a material adverse effect on our business, financial condition, results of operations, prospects and reputation, including the potential loss of key licences, requirement to exit certain businesses and withdrawal of funding from depositors and other stakeholders.

Additionally, we continue to be subject to a number of material legal proceedings, regulatory actions and investigations (including criminal) as described in Note 40 on the Financial Statements. It is inherently difficult to predict the outcome of many of the legal, regulatory and other adversarial proceedings involving our businesses, particularly those cases in which the matters are brought on behalf of various classes of claimants, seek damages of unspecified or indeterminate amounts or involve novel legal claims. Moreover, we may face additional legal proceedings, investigations or regulatory actions in the future, including in other jurisdictions and/or with respect to matters similar to, or broader than, the existing legal proceedings, investigations or regulatory actions. An unfavourable result in one or more of these proceedings could have a material adverse effect on our business, prospects, financial condition, reputation and/or results of operations.

We are subject to unfavourable legislative or regulatory developments and changes in the policy of regulators or governments

Our businesses are subject to ongoing regulation and associated regulatory risks, including the effects of changes in the laws, regulations, policies, voluntary codes of practice and interpretations in the UK, the US, Hong Kong, the EU and the other markets in which we operate. This is particularly so in the current environment, where we expect government and regulatory intervention in the banking sector to continue to remain high for the foreseeable future. Additionally, many of these changes increasingly have an effect beyond the country in which they are enacted as regulators either deliberately enact

Report of the Directors: Financial Review (continued)

regulation with extra-territorial impact or our operations mean that the Group is obliged to give effect to local laws and regulations on a wider basis.

In recent years, regulators and governments have focused on reforming both the prudential regulation of the financial services industry to improve financial stability, and the ways in which business is conducted. Measures include enhanced capital, liquidity and funding requirements, the separation or prohibition of certain activities by banks, changes in the operation of capital markets activities, the introduction of tax levies and transaction taxes, changes in compensation practices and adjustments to how business is conducted. The US Government, the UK Government, our regulators in the UK, US, Hong Kong, the EU or elsewhere may intervene further in relation to areas of industry risk already identified, or in new areas, which could adversely affect us.

HSBC has been classified by the Financial Stability Board (FSB) as a global systemically important bank (G-SIB) and therefore is subject to what the FSB refers to as a multi-pronged and integrated set of policies . These include proposals that would place additional capital and total loss absorbing capacity (TLAC) requirements on the Group and require enhanced reporting. In December 2015, the PRA reconfirmed that HSBC is a designated global systemically important institution (G-SII), the EU equivalent of G-SIB, subject to a 2.5% CET1 buffer requirement from 2019. The FRB s rules implementing the G-SIB surcharge in the US would only apply to US G-SIBs and would not impose additional capital requirements on HNAH. For further details on the FRB s TLAC proposal in the US, see page 100f.

Separately, the Bank Recovery Resolution Directive (BRRD) introduces requirements for European banks to maintain at all times a sufficient aggregate amount of own funds and eligible liabilities (that is, liabilities that may be bailed in using the bail-in tool), known as the minimum requirements for eligible liabilities (MREL). The TLAC proposals from the FSB address many of the same issues. The PRA is consulting on the application of MREL regulations as required by the EU, whilst at the same time considering their compatibility with the TLAC proposals. The extent to which the detail of the implementation may create issues remains uncertain.

More stringent regulatory requirements, including enhanced capital, liquidity and funding requirements and those governing the development of parameters applied in, and controls around, models used for measuring risk can give rise to changes that may adversely affect our business, including increases in capital requirements.

There may be changes in laws, rules or regulations, or in their interpretation or enforcement, or in how new laws, rules or regulations are implemented. Further, there may be uncertainty and lack of international regulatory coordination as enhanced supervisory standards are developed and implemented. These developments are expected to continue to change the way in which we are regulated and supervised and could affect the manner in which we conduct our business activities, capital requirements, risk management or how the Group is structured; which could

have a material adverse effect on our business, prospects, financial condition, reputation and results of operations.

We may fail to comply with all applicable regulations, particularly any changes thereto.

Authorities in many jurisdictions have the power to bring administrative or judicial proceedings against us which could result in, among other things, the suspension or revocation of our licences, cease and desist orders, fines, civil penalties, criminal penalties or other disciplinary action.

Areas where changes could have an adverse effect on our business, prospects, financial condition or results of operations include, but are not limited to:

- general changes in government, central bank or regulatory or competition policy, or changes in regulatory regimes that may influence investor decisions in particular markets in which we operate;

- the structural separation of banking and trading activities proposed or enacted in a number of jurisdictions (see above);

- requirements flowing from arrangements for the resolution strategy of the Group and its individual operating entities, which may have different effects in different countries;

- the implementation of extra-territorial laws, including initiatives to share tax information such as the Common Reporting Standard introduced by the OECD;

- the implementation of CRD IV, notably the UK application of the capital buffer framework and its interaction with Pillar 2 and the PRA buffer;

- the implementation of the BRRD s minimum requirements for eligible liabilities, MREL, by the Bank of England and its interaction with TLAC requirements for G-SIBs in other jurisdictions;

- the international developments on non-modelled, standardised requirements for credit and operational risk, and the use of capital floors;

- the implementation, particularly in the US and Hong Kong, of TLAC requirements established by the FSB which require G-SIBs to hold minimum levels of capital and TLAC at the level of each resolution entity and material subgroup. Under the FSB Standard, G-SIBs are required to meet the TLAC requirement alongside the minimum regulatory capital requirements set out in the Basel III framework. Specifically, they will be required to meet a minimum TLAC requirement of at least 16% of the resolution group s risk-weighted assets (TLAC RWA minimum) from 1 January 2019 and at least 18% from 1 January 2022. Minimum TLAC must also be at least 6% of the Basel III leverage ratio denominator from 1 January 2019 and at least 6.75% from 1 January 2022;

the increasing focus by regulators on how institutions conduct business, particularly with regard to the delivery of fair outcomes for customers and

Report of the Directors: Financial Review (continued)

orderly/transparent markets, promoting effective competition in the interests of consumers and ensuring the orderly and transparent operation of global financial markets;

restrictions on the structure of remuneration and increasing requirements to detail management accountability within the Group (e.g. the requirements of the Senior Managers and Certification Regime in the UK);

the continued focus in the UK on matters relating to institutional culture , employee conduct and obligations more generally such as whistleblowing;

the implementation of any measures as a result of regulators increased focus on conduct matters, including measures resulting from ongoing thematic work into the workings of the retail, SME and wholesale banking sectors and the provision of financial advice to consumers;

external bodies applying or interpreting standards or laws differently to us;

further requirements relating to financial reporting, corporate governance and employee compensation; and

expropriation, nationalisation, confiscation of assets and changes in legislation or regulations relating to foreign ownership.

We and our UK subsidiaries may become subject to stabilisation provisions under the Banking Act 2009, as amended, in certain significant stress situations

The Banking Act 2009, as amended (the Banking Act) implements Directive 2014/59/EU establishing the framework for the recovery and resolution of credit institutions and investment firms (the BRRD) in the UK and creates a special resolution regime (the SRR). Under the SRR, the HM Treasury, the Bank of England and the PRA and FCA (together, the Authorities) are granted substantial powers to resolve and stabilise UK-incorporated institutions with permission to accept deposits pursuant to Part 4A of the FSMA that are failing or are likely to fail to satisfy the threshold conditions (within the meaning of section 55B of the FSMA) where it is in the public interest to do so. The SRR presently consists of five stabilisation options: (i) transfer of all of the business of a relevant entity or the shares of the relevant entity to a private sector purchaser; (ii) transfer of all or part of the business of the relevant entity to a bridge

bank wholly-owned by the Bank of England; (iii) transfer of part of the assets, rights or liabilities of the relevant entity to one or more asset management vehicles for management of the transferor s assets, rights or liabilities; (iv) the write down and conversation of the relevant entity s equity, capital

instruments and liabilities; and (v) temporary public ownership of the relevant entity. These tools may also be applied to a parent company or affiliate of a relevant entity where certain conditions are met. The SRR provides for modified insolvency and administration procedures for relevant entities too. It also confers ancillary powers on the Authorities, including the power to modify or override certain contractual arrangements in certain circumstances. The Authorities are also empowered by order to amend the law for the purpose of enabling the powers under the SRR to be used effectively. An order may make provision which has retrospective effect.

In general, the Banking Act requires the Authorities to have regard to specified objectives in exercising the powers provided for by the Banking Act. One of the objectives (which is required to be balanced as appropriate with the other specified objectives) refers to the protection and enhancement of the stability of the financial system of the UK. The Banking Act includes provisions related to compensation in respect of transfer instruments and orders made under it.

There is considerable uncertainty about how the Authorities may exercise the powers granted to them under the Banking Act. However, if we are at or approaching the point of non-viability such as to require regulatory intervention, any exercise of any resolution regime powers by the Authorities may result in holders of our ordinary shares losing all or a part of their shareholdings and/or in the rights of holders of our ordinary shares being adversely affected, including by the dilution of their percentage ownership of our share capital, and/or could have a material adverse effect on the market price of our ordinary shares and/or holders of other instruments being adversely affected.

Structural separation of banking and trading activities proposed or enacted in a number of jurisdictions could have a material adverse effect on us

In December 2013, the UK Financial Services (Banking Reform) Act 2013 received Royal Assent. It implements the recommendations of the Independent Commission on Banking which, among other things, establish a framework for ring-fencing UK retail banking in separately incorporated banking entities (ring-fenced banks) from trading activities. Secondary legislation has also been finalised. The PRA has finalised the first phase of the rules on UK ring-fenced banks, covering legal structures, governance and operations. The PRA has also published a consultation on the second phase of ring-fencing rules in relation to prudential requirements, intra-group arrangements and use of financial market infrastructure. Finalised rules are expected to be published in the second half of 2016, with the implementation of ring-fencing in 2019.

The proposed separation of retail and SME banking in the UK would be a material change to the structure of HSBC Bank plc. Considerable uncertainty remains over the likely cost of implementing structural separation at this time, although we expect it to be material.

Table of Contents

Report of the Directors: Financial Review (continued)

In January 2014, the European Commission published legislative proposals on the structural reform of the European banking sector which would prohibit proprietary trading in financial instruments and commodities, and enable supervisors to require trading activities such as market-making, complex derivatives and securitisation operations to be undertaken in a separate subsidiary from deposit taking activities. The proposals are currently subject to discussion in the European Parliament and the Council. The implementation date for any separation under the final rules would depend upon the date on which the final legislation is agreed.

We are subject to tax-related risks in the countries in which we operate

HSBC is subject to the substance and interpretation of tax laws in all countries in which we operate and is subject to routine review and audit by tax authorities in relation thereto. We provide for potential tax liabilities that may arise on the basis of the amounts expected to be paid to the tax authorities. The amounts ultimately paid may differ materially from the amounts provided depending on the ultimate resolution of such matters. Changes to tax law, tax rates and penalties for failure to comply could have a material adverse effect on our business, prospects, financial condition and results of operations.

Risks related to our business, business operations, governance and internal control systems

The delivery of our strategic actions is subject to execution risk

At our Investor Update in June 2015, HSBC set out 10 strategic actions to be completed by 2017. Nine of these are business-led initiatives, while one is expected to be completed by the Board of Directors. The work required to execute these actions is substantial. Alongside the strategic actions, we continue to implement a number of externally driven regulatory programmes. The magnitude and complexity of the projects required to meet these demands has resulted in heightened execution risk. The cumulative impact of the collective change initiatives underway within the Group is significant and has direct implications on resourcing and our people. A failure to successfully complete our ten strategic actions or other regulatory programmes could have a significant impact on financial condition, profitability, prospects and share price, as well as wider reputational and regulatory implications.

There also remains heightened risk around the execution of a number of disposals across the Group in line with our strategy. The potential risks of disposals include regulatory breaches, industrial action, loss of key personnel and interruption to systems and processes during business transformation. They can have both financial and reputational implications and could also adversely affect the successful delivery of our strategic priorities.

We may not achieve any of the expected benefits of our strategic initiatives

The Group s strategy (see pages 12 to 13), is built around two trends, the continued growth of international trade

and capital flows, and wealth creation, particularly in faster-growing markets. We have analysed those trends, and have developed criteria to help us better deploy capital in response thereto. The development and implementation of our strategy requires difficult, subjective and complex judgements, including forecasts of economic conditions in various parts of the world. We may fail to correctly identify the trends we seek to exploit and the relevant factors in making decisions as to capital deployment and cost reduction.

Our ability to execute our strategy may also be limited by our operational capacity and the increasing complexity of the regulatory environment in which we operate. We continue to pursue our cost management initiatives, though they may not be as effective as expected and we may be unable to meet our cost saving targets. In addition, factors beyond our control, including but not limited to, the economic and market conditions and other challenges discussed in detail above, could limit our ability to achieve any of the expected benefits of these initiatives.

Failure to achieve any of the expected benefits of our strategic initiatives could have a material adverse effect on our business, prospects, financial condition and results of operations.

We may fail to increase the cross-selling and/or business synergies required to achieve our growth strategy

Increasing the number of HSBC products held by our customers through cross-selling and driving business synergies across our global businesses is key to our ability to grow revenue and earnings, particularly in the current environment of slow economic growth and regulatory reform initiatives. In RBWM many of our competitors also focus on cross-selling, notably in retail banking and investment products and mortgage lending. A key opportunity to drive business synergies arises between CMB and GB&M, which is an area where many of our competitors also focus. In both instances, this may limit our ability to cross-sell additional products to our customers or may influence us to sell our products at lower prices, reducing our net interest income and revenue from our fee-based products. It could also affect our ability to retain existing customers. Failure to deliver cross-selling and/or business synergies required to achieve our growth strategy could have a material adverse effect on our business, prospects, financial condition and results of operations.

We operate in markets that are highly competitive

We compete with other financial institutions in a highly competitive industry that is undergoing significant changes as a result of financial regulatory reform and increased public scrutiny stemming from the financial crisis and continued challenging economic conditions.

We target internationally mobile clients who need sophisticated global solutions and generally compete on the basis of the quality of our customer service, the wide variety of products and services that we can offer our customers and the ability of those products and services to satisfy our customers needs, the extensive distribution channels available for our customers, our innovation, and

Report of the Directors: Financial Review (continued)

our reputation. Continued and increased competition in any one or all of these areas may negatively affect our market share and/or cause us to increase our capital investment in our businesses in order to remain competitive. Additionally, our products and services may not be accepted by our targeted clients.

In many markets, there is increased competitive pressure to provide products and services at current or lower prices. Consequently, our ability to reposition or reprice our products and services from time to time may be limited and could be influenced significantly by the actions of our competitors who may or may not charge similar fees for their products and services. Any changes in the types of products and services that we offer our customers and/or the pricing for those products and services could result in a loss of customers and market share.

Further, new entrants to the market or new technologies could require us to spend more to modify or adapt our products to attract and retain customers. We may not respond effectively to these competitive threats from existing and new competitors and may be forced to increase our investment in our business to modify or adapt our existing products and services or develop new products and services to respond to our customers needs.

Any of these factors may have a material adverse effect on our business, prospects, financial condition and results of operations.

Our risk management measures may not be successful

The management of risk is an integral part of all our activities. Risk constitutes our exposure to uncertainty and the consequent variability of return. Specifically, risk equates to the adverse effect on profitability or financial condition arising from different sources of uncertainty including retail and wholesale credit risk, market risk, operational risk, non-traded market risk, insurance risk, concentration risk, liquidity and funding risk, litigation risk, reputational risk, strategic risk, pension obligation risk and regulatory risk. While we employ a broad and diversified set of risk monitoring and risk mitigation techniques, such techniques and the judgements that accompany their application cannot anticipate every unfavourable event or the specifics and timing of every outcome. Failure to manage risks appropriately could have a significant effect on our business prospects, financial condition and results of operations.

Operational risks are inherent in our business

We are exposed to many types of operational risk that are inherent in banking operations including fraudulent and other criminal activities (both internal and external),

breakdowns in processes or procedures and systems failure or non-availability. These risks apply equally when we rely on outside suppliers or vendors to provide services to us and our customers. These operational risks could have a

material adverse effect on our business, prospects, financial condition and results of operations.

Our operations are subject to the threat of fraudulent activity

Fraudsters may target any of our products, services and delivery channels including lending, internet banking, payments, bank accounts and cards. This may result in financial loss to the bank, an adverse customer experience, reputational damage and potential regulatory action depending on the circumstances of the event which could have a material adverse effect on our business, prospects, financial condition and results of operations.

Our operations are subject to disruption from the external environment

HSBC operates in many geographical locations, which are subject to events that are outside our control. These events may be acts of God, such as natural disasters and epidemics, geopolitical risks, including acts of terrorism and social unrest, and infrastructure issues such as transport or power failure. These risk events may give rise to disruption to our services, result in physical damage and/or loss of life, which and could have a material adverse effect on our business, prospects, financial condition and results of operations.

Our operations utilise third-party suppliers and service providers

HSBC relies on third parties to supply goods and services. Global regulators have increased their scrutiny of the use of third-party service providers by financial institutions, including with respect to how outsourcing decisions are made and how key relationships are managed. Risks arising from the use of third-parties may be less transparent and therefore more challenging to manage. The inadequate management of third-party risk could impact our ability to meet strategic, regulatory and client expectations. This may lead to a range of effects, including regulatory censure, civil penalties, or damage both to shareholder value and to our reputation, which could have a material adverse effect on our business, prospects, financial condition and results of operations.

Our operations are highly dependent on our information technology systems

The reliability and security of our information and technology infrastructure and our customer databases are crucial to maintaining the service availability of banking applications and processes and to protecting the HSBC brand. The proper functioning of our payment systems, financial control, risk management, credit analysis and reporting, accounting, customer service and other information technology systems, as well as the communication networks between our branches and main data processing centres, are critical to our operations.

Report of the Directors: Financial Review (continued)

Critical system failure, any prolonged loss of service availability or any material breach of data security, particularly involving confidential customer data, could cause serious damage to our ability to service our clients, could breach regulations under which we operate and could cause long-term damage to our business and brand that could have a material adverse effect on our business, prospects, financial condition and results of operations.

Cyber and information security incidents are routinely monitored for and investigated. In most instances these are not significant and are managed within normal operating processes.

However, HSBC remains susceptible to a wide range of cyber risks that impact and/or are facilitated by technology. The threat from cyber attacks is a concern for our organisation and failure to protect our operations from internet crime or cyber attacks may result in financial loss and/or loss of customer data or other sensitive information which could undermine our reputation and our ability to attract and keep customers.

For example, in 2015 a case was detected in which a former HSBC employee exposed online details of 86,000 US consumer mortgage customers, and pay details for 2,000 current and former HSBC employees. The regulators were notified, and customers contacted and offered credit protection services.

Moreover, during 2015, we were subjected to 23 denial of service attacks on our external facing websites across the Group. A denial of service attack is the attempt to intentionally disrupt, paralyse and potentially extract data from a computer network by flooding it with data sent simultaneously from many individual computers.

Although the cyber-attacks in 2015 had a negligible effect on our customers, services or firm, future cyber attacks could have a material adverse effect on our business, prospects, financial condition, reputation and results of operations.

We may not be able to meet regulatory requests for data

The volume, granularity, frequency and scale of regulatory and other reporting requirements necessitate a clear data strategy to enable consistent data aggregation, reporting and management. Inadequate management information systems or processes, including those relating to risk data aggregation and risk reporting, could lead to a failure to meet regulatory reporting requirements or other internal or external information demands. Financial institutions that fail to comply with the principles for effective risk data aggregation and risk reporting as set out by the Basel Committee by the required deadline may face supervisory measures. Any of these failures could have a material adverse effect on our business, prospects, financial condition and results of operations.

Our operations have inherent reputational risk

Reputational risk is the risk of failure to meet stakeholder expectations as a result of any event, behaviour, action or inaction, either by HSBC, our employees or those with whom we are associated, that might cause stakeholders

to form a negative view of the Group. This may result in financial or non-financial impacts, loss of confidence or other consequences.

Modern technologies, in particular online social media channels and other broadcast tools which facilitate communication with large audiences in short time frames and with minimal costs, may significantly enhance and accelerate the effect of damaging information and allegations. It could also arise from negative public opinion about the actual, or perceived, manner in which we conduct our business activities, or financial performance, as well as actual or perceived practices in banking and the financial services industry generally. Negative public opinion may adversely affect our ability to retain and attract customers, in particular, corporate and retail depositors, and retain and motivate staff, and could have a material adverse effect on our business, prospects, financial condition, reputation and results of operations.

We may suffer losses due to employee misconduct

Our businesses are exposed to risk from potential non-compliance with policies, including HSBC Values and related behaviours, and employee misconduct such as fraud or negligence, all of which could result in regulatory sanctions or reputational or financial harm. In recent years, a number of multinational financial institutions have suffered material losses due to the actions of rogue traders or other employees. It is not always possible to deter employee misconduct and the precautions we take to prevent and detect this activity may not always be effective. Employee misconduct could have a material adverse effect on our business, prospects, financial condition and results of operations.

We rely on recruiting, retaining and developing appropriate senior management and skilled personnel

The demands being placed on the human capital of the Group are unprecedented. The cumulative workload arising from a regulatory reform programme that is often extra-territorial and still evolving consumes significant human resources, placing increasingly complex and conflicting demands on a workforce where the required expert capabilities are in short supply and globally mobile.

Our continued success depends in part on the retention of key members of our management team and wider employee base. The ability to continue to attract, train, motivate and retain highly qualified professionals is a key element of our strategy. The successful implementation of our growth strategy depends on the availability and skilled management in each of our global businesses and global functions. If global businesses or global functions fail to staff their operations appropriately or lose one or more

Report of the Directors: Financial Review (continued)

of their key senior executives and fail to replace them in a satisfactory and timely manner, or fail to implement successfully the organisational changes required to support the Group s strategy, our business prospects, financial condition and results of operations, including control and operational risks, could be materially adversely affected.

Our financial statements are based in part on judgements, estimates and assumptions which are subject to uncertainty

The preparation of financial statements requires management to make judgements, estimates and assumptions that affect the reported amounts of assets, liabilities, income and expenses. Due to the inherent uncertainty in making estimates, particularly those involving the use of complex models, actual results reported in future periods may be based upon amounts which differ from those estimates. Estimates, judgements, assumptions and models are continually evaluated and are based on historical experience and other factors, including expectations of future events that are believed to be reasonable under the circumstances. Revisions to accounting estimates are recognised in the period in which the estimate is revised and in any future periods affected. The accounting policies deemed critical to our results and financial position, based upon materiality and significant judgements and estimates, include impairment of loans and advances, goodwill impairment, valuation of financial instruments, deferred tax assets, provisions and interests in associates, which are discussed in detail in Critical accounting estimates and judgements on page 64.

The valuation of financial instruments measured at fair value can be subjective, in particular where models are used which include unobservable inputs. Given the uncertainty and subjectivity associated with valuing such instruments, future outcomes may differ materially from those assumed using information available at the reporting date. The effect of these differences on the future results of operations and the future financial position of the Group may be material. For further details, see Critical accounting estimates and judgements on page 64.

If the judgement, estimates and assumptions we use in preparing our consolidated financial statements are subsequently found to be materially different from those assumed using information available at the reporting date, this could affect our business, prospects, financial condition, prospects and results of operations.

We could incur losses or be required to hold additional capital as a result of model limitations or failure

HSBC uses models for a range of purposes in managing our business, including regulatory and economic capital calculations, stress testing, granting credit, pricing and financial reporting, including the valuation of financial instruments measured at fair value, as explained above. HSBC could face adverse consequences as a result of decisions, which may lead to actions by management based on models that are poorly developed, implemented or used, or as a result of the modelled outcome being misunderstood or the use of such information for purposes for which it was not designed. In addition, supervisory

concerns over the internal models and assumptions used by banks in the calculation of regulatory capital have led to the imposition of risk weight and loss given default floors, which have the potential to increase our capital requirement. Risks arising from the use of models could have a material adverse effect on our business, prospects, financial condition, results of operations, minimum capital requirements and reputation.

Third parties may use us as a conduit for illegal activities without our knowledge

We are required to comply with applicable AML laws and regulations and have adopted various policies and procedures, including internal control and know your customer procedures, aimed at preventing use of HSBC products and services for the purpose of committing or concealing financial crime. A major focus of US and UK government policy relating to financial institutions in recent years has been combating money laundering and enforcing compliance with US and EU economic sanctions, and this prioritisation is evidenced by our agreements with US and UK authorities relating to various investigations regarding past inadequate compliance with AML and sanctions laws. Certain US subsidiaries of HSBC Holdings have entered into a consent cease and desist order with the OCC and a similar consent order with the FRB which require the implementation of improvements to compliance procedures regarding obligations under the US Bank Secrecy Act (the BSA), FCA Direction and AML rules. These consent orders do not preclude additional enforcement actions by bank regulatory, governmental or law enforcement agencies or private litigation.

A number of the remedial actions taken or being taken as a result of the matters to which the US DPA relates are intended to ensure that the Group s businesses are better protected in respect of these risks. However, there can be no assurance that the steps that continue to be taken to address the requirements of the US DPA will be completely effective. Breach of the US DPA or related agreements and consent orders could have a material adverse effect on our business, financial condition and results of operations, including loss of business and withdrawal of funding, restrictions on performing dollar-clearing functions through HSBC Bank USA or revocation of bank licences.

In relevant situations, and where permitted by regulation, we may rely upon certain counterparties to maintain and properly apply their own appropriate AML procedures. While permitted by regulation, such reliance may not be effective in preventing third parties from using us (and our relevant counterparties) as a conduit for money laundering including illegal cash operations without our knowledge (and that of our relevant counterparties). Becoming a party to money laundering, association with, or even accusations of being associated with, money laundering will damage our reputation and could make us subject to fines, sanctions and/or legal enforcement (including being added to blacklists that would prohibit certain parties from engaging in transactions with us). Any one of these outcomes could have a material adverse effect on our business, prospects, financial condition and results of operations.

Table of Contents

Report of the Directors: Financial Review (continued)

We have significant exposure to counterparty risk

We are exposed to counterparties that are involved in virtually all major industries, and we routinely execute transactions with counterparties in financial services, including brokers and dealers, central clearing counterparties, commercial banks, investment banks, mutual and hedge funds, and other institutional clients. Many of these transactions expose us to credit risk in the event of default by our counterparty or client. Our ability to engage in routine transactions to fund our operations and manage our risks could be materially adversely affected by the actions and commercial soundness of other financial services institutions. Financial institutions are necessarily interdependent because of trading, clearing, counterparty or other relationships. As a consequence, a default by, or decline in market confidence in, individual institutions, or anxiety about the financial services industry generally, can lead to further individual and/or systemic difficulties, defaults and losses.

Mandatory central clearing of OTC derivatives, including under Dodd-Frank and the EU s European Market Infrastructure Regulation, brings risks to HSBC. As a clearing member, we will be required to underwrite losses incurred at Central Counterparty (CCP) by the default of other clearing members and their clients. Hence central clearing brings with it a new element of interconnectedness between clearing members and clients which we believe may increase rather than reduce our exposure to systemic risk. At the same time, our ability to manage such risk ourselves will be reduced because control has been largely outsourced to CCPs and it is unclear at present how, at a time of stress, regulators and resolution authorities will intervene.

Where bilateral counterparty risk has been mitigated by taking collateral, our credit risk may remain high if the collateral we hold cannot be realised or has to be liquidated at prices which are insufficient to recover the full amount of our loan or derivative exposure. There is a risk that collateral cannot be realised, including situations where this arises by change of law that may influence our ability to foreclose on collateral or otherwise enforce contractual rights.

The Group also has credit exposure arising from mitigants such as credit default swaps (CDSs), and other credit derivatives, each of which is carried at fair value. The risk of default by counterparties to CDSs and other credit derivatives used as mitigants affects the fair value of these instruments depending on the valuation and the perceived credit risk of the underlying instrument against which protection has been purchased. Any such adjustments or fair value changes may have a material adverse effect on our financial condition and results of operations.

Market fluctuations may reduce our income or the value of our portfolios

Our businesses are inherently subject to risks in financial markets and in the wider economy, including changes in, and increased volatility of, interest rates, inflation rates, credit spreads, foreign exchange rates, commodity, equity,

bond and property prices, and the risk that our customers

act in a manner inconsistent with our business, pricing and hedging assumptions.

Market movements will continue to significantly affect us in a number of key areas. For example, banking and trading activities are subject to interest rate risk, foreign exchange risk, inflation risk and credit spread risk. Changes in interest rate levels, interbank spreads over official rates, yield curves and spreads affect the interest rate spread realised between lending and borrowing costs. A declining interest rate environment could increase prepayment activity which reduces the weighted average lives of our interest-earning assets and could have a material adverse effect on us. The potential for future volatility and margin changes remains. Competitive pressures on fixed rates or product terms in existing loans and deposits sometimes restrict our ability to change interest rates applying to customers in response to changes in official and wholesale market rates. Our pension scheme assets include equity and debt securities, the cash flows of which change as equity prices and interest rates vary.

Our insurance businesses are exposed to the risk that market fluctuations will cause mismatches to occur between product liabilities and the investment assets which back them. Market risks can affect our insurance products in a number of ways depending upon the product and associated contract. For example, mismatches between assets and liability yields and maturities give rise to interest rate risk. Some of these risks are borne directly by the customer and some are borne by the insurance businesses, with their excess capital invested in the markets. Some insurance contracts involve guarantees and options that increase in value in adverse investment markets. There is a risk that the insurance businesses will bear some of the cost of such guarantees and options. The performance of the investment markets will thus have a direct effect upon the value embedded in the insurance and investment contracts and our operating results, financial condition and prospects.

It is difficult to predict with any accuracy changes in market conditions, and such changes may have a material adverse effect on our business, prospects, financial condition and results of operations.

Liquidity, or ready access to funds, is essential to our businesses

Our ability to borrow on a secured or unsecured basis and the cost of so doing can be affected by increases in interest rates or credit spreads, the availability of credit, regulatory requirements relating to liquidity or the market perceptions of risk relating to HSBC or the banking sector, including our perceived or actual creditworthiness.

Current accounts and savings deposits payable on demand or at short notice form a significant part of our funding, and we place considerable importance on maintaining their stability. For deposits, stability depends upon preserving investor confidence in our capital strength and liquidity, and on comparable and transparent pricing. Although deposits have been, over time, a stable source of funding, this may not continue.

Report of the Directors: Financial Review (continued)

We also access wholesale markets in order to provide funding for entities that do not accept deposits, to align asset and liability maturities and currencies and to maintain a presence in local markets. In 2015, we issued the equivalent of $22bn of debt securities in the public capital markets in a range of currencies and maturities from a number of Group entities, including $7bn of subordinated securities issued by HSBC Holdings. An inability to obtain financing in the unsecured long-term or short-term debt capital markets, or to access the secured lending markets, could have a substantial adverse effect on our liquidity. Unfavourable macroeconomic developments, market disruptions or regulatory developments may increase our funding costs or challenge our ability to raise funds to support or expand our businesses.

If we are unable to raise funds through deposits and/or in the capital markets, our liquidity position could be adversely affected and we might be unable to meet deposit withdrawals on demand or at their contractual maturity, to repay borrowings as they mature, to meet our obligations under committed financing facilities and insurance contracts, or to fund new loans, investments and businesses. We may need to liquidate unencumbered assets to meet our liabilities. In a time of reduced liquidity, we may be unable to sell some of our assets, or we may need to sell assets at depressed prices, which in either case could materially adversely affect our business, prospects, financial condition and results of operations.

Any reduction in the credit rating assigned to HSBC Holdings, any subsidiaries of HSBC Holdings or any of their respective debt securities could increase the cost or decrease the availability of our funding and adversely affect our liquidity position and net interest margin

Credit ratings affect the cost and other terms upon which we are able to obtain market funding. Rating agencies regularly evaluate HSBC Holdings and certain of its subsidiaries, as well as their respective debt securities. Their ratings are based on a number of factors, including their assessment of the relative financial strength of HSBC or of the relevant entity, as well as conditions affecting the financial services industry generally. There can be no assurance that the rating agencies will maintain HSBC s or the relevant entity s current ratings or outlook, particularly given the rating agencies current review of their bank rating methodologies and the potential impact on HSBC s or its subsidiaries ratings.

At the date hereof, HSBC Holdings long-term debt was rated AA-, A and A1 by Fitch, Standard & Poor s (S&P) and Moody s, respectively. Ratings outlooks by Fitch, S&P and Moody s were stable. Any reductions in these ratings and outlook could increase the cost of our funding, limit access to capital markets and require additional collateral to be placed and, consequently, materially adversely affect our interest margins and our liquidity position.

Under the terms of our current collateral obligations under derivative contracts, we could be required to post additional collateral as a result of a downgrade in HSBC s

credit rating as described on page 164 of the *Annual Report and Accounts 2015*.

Risks concerning borrower credit quality are inherent in our businesses

Risks arising from changes in credit quality and the recoverability of loans and amounts due from borrowers and counterparties (e.g. reinsurers and counterparties in derivative transactions) are inherent in a wide range of our businesses. Adverse changes in the credit quality of our borrowers and counterparties arising from a general deterioration in economic conditions or systemic risks in the financial systems could reduce the recoverability and value of our assets and require an increase in our loan impairment charges.

We estimate and recognise impairment allowances for credit losses inherent in our credit exposure. This process, which is critical to our results and financial condition, requires difficult, subjective and complex judgements, including forecasts of how the economic conditions might impair the ability of our borrowers to repay their loans and the ability of other counterparties to meet their obligations. As is the case with any such assessments, we may fail to estimate accurately the effect of factors that we identify or fail to identify relevant factors. Further, the information we use to assess the creditworthiness of our counterparties may be inaccurate or incorrect. Any failure by us to accurately estimate the ability of our counterparties to meet their obligations may have a material adverse effect on our business, prospects, financial conditions and results of operations.

Our insurance businesses are subject to risks relating to insurance claim rates and changes in insurance customer behaviour

We provide various insurance products for customers with whom we have a banking relationship, including several types of life insurance products. The cost of claims and benefits can be influenced by many factors, including mortality and morbidity rates, lapse and surrender rates and, if the policy has a savings element, the performance of assets to support the liabilities. Adverse developments in any of these factors may materially adversely affect our financial condition and results of operations.

HSBC Holdings is a holding company and, as a result, is dependent on loan payments and dividends from its subsidiaries to meet its obligations, including obligations with respect to its debt securities, and to provide profits for payment of future dividends to shareholders

HSBC Holdings is a non-operating holding company and, as such, its principal source of income is from operating subsidiaries which hold the principal assets of HSBC. As a separate legal entity, HSBC Holdings relies on remittance of its subsidiaries loan interest payments and dividends in order to be able to pay obligations to debt holders as they fall due and to pay dividends to its shareholders. The ability of HSBC Holdings subsidiaries and affiliates to pay dividends could be restricted by changes in regulation, exchange controls and other requirements.

Table of Contents

Report of the Directors: Financial Review (continued)

We may be required to make substantial contributions to our pension plans

We operate a number of pension plans throughout the world, including defined benefit plans. Pension scheme obligations fluctuate with changes in long-term interest rates, inflation, salary levels and the longevity of scheme members. The level of contributions we make to our pension plans has a direct effect on our cash flow. To the extent plan assets are insufficient to cover existing liabilities, higher levels of contributions will be required. As a result, deficits in those pension plans may have a material adverse effect on our business, prospects, financial condition and results of operations.

Table of Contents

Report of the Directors: Risk (continued)

Top and emerging risks

Top and emerging risks

Our approach to identifying and monitoring top and emerging risks is described on page 103. Our current top and emerging risks are as follows:

Externally driven

Economic outlook and capital flows

Geopolitical risk

Turning of the credit cycle

Regulatory developments with adverse impact on business model and profitability

Regulatory focus on conduct of business and financial crime

Dispute risk

Regulatory commitments and consent orders

Cyber threat and unauthorised access to systems

Economic outlook and capital flows

Economic growth remained subdued in 2015, with a number of headwinds adversely affecting both developed and emerging market countries.

The slowdown of the mainland Chinese economy has dampened global trade flows and caused volatility in currency and global stock markets. Market concerns persist as to the scale of the slowdown and the potential for further depreciation of the renminbi and emerging market currencies.

Oil and gas prices fell further during 2015 and early 2016 as a result of continuing global supply and demand imbalances, raising the risk that any recovery in oil prices over the medium term will be even more gradual than currently expected. Although oil importers benefit from low prices, low oil prices increase fiscal and financing challenges for exporters and accentuate deflationary risks.

Emerging market economies have been affected by falling commodity prices, the economic slowdown in mainland China and a vulnerability to monetary policy normalisation in the US. This has led to steep depreciation in several key emerging market currencies against the US dollar and substantial capital outflows.

The economic recovery in the eurozone remains fragile, driven by a combination of low oil prices, a weak euro, slowing growth and loose monetary policy. Populist parties are in the ascendancy in several EU countries, helped by the subdued economic backdrop as well as other issues such as migration. A referendum on the UK s EU membership is expected to occur within the lifetime of the current Parliament, and may be held as early as mid-2016 (see Geopolitical risk below). While the risk of Greece exiting the EU has faded, the implementation of required structural reforms could prove politically challenging.

Potential impact on HSBC

We earn a significant proportion of our profits from our operations in Asia. Our results could be adversely affected by a prolonged or severe slowdown in regional economic growth or contraction in global trade and capital flows as a consequence.

HSBC s results could be impacted by a prolonged period of low oil prices, particularly in conjunction with a low inflation environment and/or low or negative interest rates.

The intensification of fragmentation risks in the EU could have both political and economic consequences for Europe.

Mitigating actions

We closely monitor economic developments in key markets and sectors with the aim of ensuring trends are identified, the implications for specific customers, customer segments or portfolios are assessed, and appropriate mitigating action which may include revising key risk appetite metrics or limits is taken as circumstances evolve.

We use internal stress testing and scenario analysis as well as regulatory stress test programmes to evaluate the impact of macroeconomic shocks on our businesses and portfolios. Analyses undertaken on our oil and gas portfolio and mainland China exposures are discussed on page 117.

Geopolitical risk

Our operations and portfolios are exposed to risks arising from political instability, civil unrest and military conflict in many parts of the world.

In the Middle East, the intervention of Russia and the rise of the terrorist group, Daesh, have added to an already complex civil war in Syria and further destabilised Iraq. These are conflicts which show few signs of resolution.

Daesh has proved capable of carrying out attacks in neighbouring countries and further afield. The lifting of sanctions following a deal between Iran and the five permanent members of the UN Security Council on the country s nuclear programme has done little to calm regional tensions.

Violence in Ukraine has abated but the conflict in the east of the country has not been resolved. Sanctions imposed by the US and EU against the Russian government, institutions and individuals have damaged the Russian economy.

European states are experiencing heightened political tension, reflecting concerns over migration, fears of terrorism and the possibility that the UK may vote to exit the EU following a referendum. An exit could have a significant impact on UK, European and global macroeconomic conditions, as well as substantial political ramifications.

In Asia, territorial disputes between Japan and China and other states have strained diplomatic relations and are testing the resolve of the US to defend freedom of navigation.

Potential impact on HSBC

Our results are subject to the risk of loss from physical conflicts or terrorist attacks, unfavourable political developments, currency fluctuations, social instability and changes in government policies in the jurisdictions in which we operate.

Table of Contents

Physical conflicts or terrorist attacks could expose our staff to physical risk and/or result in physical damage to our assets and disruption to our operations.

The effect of a UK exit from the EU on HSBC would depend on the manner in which the exit occurs. A disorderly exit could force changes to HSBC s operating model, affect our ability to access ECB and high value euro payments, and affect our transaction volumes due to possible disruption to global trade flows.

Mitigating actions

We continuously monitor the geopolitical outlook, in particular in countries where we have material exposures and/or a physical presence.

Our internal credit risk ratings of sovereign counterparties take geopolitical factors into account and drive our appetite for conducting business in those countries. Where necessary, we adjust our country limits and exposures to reflect our risk appetite and mitigate risks as appropriate.

We run internal stress tests and scenario analyses, including reverse stress tests, on our portfolios that take into account geopolitical scenarios, such as conflicts in countries where we have a significant presence, or political developments that could disrupt our operations, including the potential effect of a UK exit on our business model.

Turning of the credit cycle

The long-anticipated move by the US Federal Reserve Board (FRB) to raise interest rates and the slowdown in mainland China s economy, which is expected to continue, have increased risk aversion in global markets. This tendency has deepened since the turn of 2016, with market volatility increasing. In 2015, emerging markets experienced net capital outflows for the first time since 1988, with several major currencies at decade-plus lows against the US dollar and global corporate defaults rose to the highest since 2009. 2016 could see an intensification of these trends and the appearance of stress in a wide array of credit segments, particularly if monetary policy is tightened quickly, sentiment regarding China worsens and oil prices fail to recover. The combination of these factors with substantial amounts of external refinancing being due in emerging markets in 2016-18 increases the risk of sharper and more protracted volatility.

Potential impact on HSBC

Impairment allowances or losses could begin to rise from their historical lows in 2014 and 2015 if the credit quality of our customers is affected by less favourable global economic conditions in some markets.

There may be impacts on the delinquency and losses in some portfolios which may be impacted by worsening macroeconomic conditions and their possible effects on particular geographies or industry sectors.

Particular portfolios such as oil and gas may come under particular strain which is partly cyclical and partly driven by geopolitical concerns.

Mitigating actions

We closely monitor economic developments in key markets and sectors, taking portfolio actions where necessary including enhanced monitoring or reducing limits and exposures.

We stress test those portfolios of particular concern to identify sensitivity to loss, with management actions taken to control appetite where necessary.

Where customers are either individually or collectively assessed, regular portfolio reviews are undertaken for sensitive portfolios to ensure that individual customer or portfolio risks are understood and that the level of facilities offered and our ability to manage through any downturn are appropriate.

Regulatory developments with adverse impact on business model and profitability

Financial service providers continue to face stringent and costly regulatory and supervisory requirements, particularly in the areas of capital and liquidity management, conduct of business, financial crime, operational structures and the integrity of financial services delivery. Government intervention and control over financial institutions both on a sector-wide basis and individually, together with measures to reduce systemic risk, may significantly affect the competitive landscape locally, regionally and/or globally for some or all of the Group s businesses. These measures may be introduced with different, potentially conflicting requirements and to differing timetables by different regulatory regimes. Regulatory changes may affect our activities, both of the Group as a whole and of some or all of our principal subsidiaries. These changes include:

the UK s Financial Services (Banking Reform) Act 2013, which requires the ring-fencing of our UK retail banking activities from wholesale banking, together with the structural separation of other activities required by US legislation and rules (including the Volcker Rule implemented in December 2013 under the Dodd-Frank Act), and potential further changes under the European Commission s Banking Structural Reform Regulation which proposes similar structural reform for larger EU banks as well as structural changes in other jurisdictions;

revisions in the regime for the operation of capital markets, notably mandatory central clearing of over the counter (OTC) derivatives and mandatory margin requirements for non-cleared derivatives under the Dodd-Frank Act, the EU s European Market Infrastructure Regulation (EMIR) and similar local measures being progressed in Hong Kong, Singapore and Canada;

HSBC HOLDINGS PLC

Table of Contents

Report of the Directors: Risk (continued)

Top and emerging risks

those arising from the Markets in Financial Instruments Regulation/Directive (MiFID II), which includes mandatory trading of derivatives on organised venues, enhanced transparency and reporting requirements, controls on high frequency and algorithmic trading, changes to the use of dealing commissions and potential future restrictions on the ability of non-EU Group companies to provide certain services to EU based clients. Aspects of MiFID II also further enhance protections for investors in line with many regulators focus on the wider conduct of business and delivery of fair outcomes for customers;

changes aimed at promoting effective competition in the interests of consumers, including investigations ordered by the UK Competition and Markets Authority and work to increase competition more generally;

the recommendations arising out of the *Final Report on the Fair and Effective Financial Markets Review* undertaken by the Bank of England, which include changes to market conduct rules and forward looking supervision in the operation of wholesale financial markets in the UK;

continued focus in the UK and elsewhere on matters relating to management accountability, institutional culture, employee conduct and increased obligations on market abuse and whistleblowing. In the UK, this includes implementing the individual accountability regime and wider recommendations made by the Parliamentary Commission on Banking Standards and the activities of the Banking Standards Board;

the Basel Committee on Banking Supervision (Basel Committee) initiatives to enhance the risk sensitivity and robustness of the standardised approaches, to minimise reliance on internal models, and to incorporate capital floors in the Basel capital framework;

the implementation of the Capital Requirements Directive (CRD IV), notably the UK application of the capital framework and its interaction with Pillar 2;

proposals from the Financial Stability Board for global systemically important banks (G-SIB s) to hold minimum levels of capital and debt as total loss absorbing capacity (TLAC), together with the Bank of England s consultation on UK implementation of MREL (for further details, see Capital on page 239);

requirements flowing from arrangements for the resolution strategy of the Group and its individual operating entities, which may have different effects in different countries; and

the continued risk of further changes to regulation relating to taxes affecting financial service providers, including financial transaction taxes and ongoing implementation of initiatives to share tax information such as the Common Reporting Standard introduced by the Organisation for Economic Co-operation and Development (OECD).

Potential impact on HSBC

Proposed changes in and/or the implementation of regulations including mandatory central clearing of OTC derivatives, EMIR, ring-fencing and similar requirements, MiFID II, the Volcker Rule, recovery and resolution plans, tax information sharing initiatives and findings from competition orientated enquiries and investigations may affect the manner in which we conduct our activities and how the Group is structured.

Requirements for higher levels of capital or TLAC may increase the funding costs for the Group and reduce our return on equity.

Mandatory central clearing of OTC derivatives also brings new risks to HSBC in its role as a clearing member, as we will be required to underwrite losses incurred by central clearing counterparties from the default of other clearing members and their clients. Hence central clearing brings with it a new element of interconnectedness between clearing members and clients which we believe may increase rather than reduce our exposure to systemic risk.

Increased regulatory scrutiny of conduct of business and management accountability may affect the industry in areas such as employee recruitment and retention, product pricing and profitability in both retail and wholesale markets. HSBC s businesses may be affected by these developments.

These measures have the potential to increase our cost of doing business and curtail the types of business we can carry out, which may adversely affect future profitability.

Mitigating actions

We are engaged closely with governments and regulators in the countries in which we operate to help ensure that the new requirements are considered properly and can be implemented in an effective manner.

We have enhanced our governance around central clearing counterparties and appointed specialists to manage the associated liquidity and collateral risks.

We continue to enhance and strengthen governance and resourcing more generally around regulatory change management and the implementation of required measures to actively address this ongoing and significant agenda of regulatory change.

Regulatory focus on conduct of business and financial crime

Financial service providers are at risk of regulatory sanctions or fines related to conduct of business and financial crime. The incidence of regulatory proceedings against financial service firms has become more common-place and may increase in frequency due to increased media attention and higher expectations from prosecutors and the public, with a consequent increase also in civil litigation arising from or relating to issues which are subject to regulatory investigation, sanction or fine.

Regulators in the UK and other countries have continued to increase their focus on conduct matters relating to fair outcomes for customers and orderly and transparent operations in financial markets. For further details, see Compliance risk on page 178.

Potential impact on HSBC

HSBC may face regulatory censure or sanctions including fines and/or be exposed to legal proceedings and litigation.

Regulators in the UK and other countries may identify future industry-wide mis-selling, market conduct or other issues that could affect the Group. This may lead from time to time to significant direct costs or liabilities and/or changes in the practices of such businesses. Also, decisions taken by the Financial Ombudsman Service in the UK (or similar overseas bodies) could, if applied to a wider class or grouping of customers, have a material adverse effect on the operating results, financial condition and prospects of the Group.

Mitigating actions

We have taken a number of steps including introduction of new global policies, enhancement to the product governance processes, establishment of a global conduct programme and review of sale processes and incentive schemes (see Compliance risk on page 178).

US deferred prosecution agreement and related agreements and consent orders

An independent compliance monitor (the Monitor) was appointed in 2013 under the 2012 agreements entered into with the US Department of Justice (DoJ) and the UK Financial Conduct Authority (FCA) to produce annual assessments of the effectiveness of our AML and sanctions compliance programme. Additionally, the Monitor is serving as HSBC s independent consultant under the consent order of the FRB. HSBC Bank USA is also subject to an agreement entered into with the Office of the Comptroller of the Currency (OCC) in December 2012, the Gramm-Leach-Bliley Act Agreement and other consent orders. In January 2016, the Monitor delivered his second annual follow-up review report as required by the US DPA. The Monitor s report is discussed on page 116.

Potential impact on HSBC

The design and execution of AML and sanctions remediation plans are complex and require major investments in people, systems and other infrastructure. This complexity creates significant execution risk, which could affect our ability to effectively identify and manage financial crime risk and remedy AML and sanctions compliance deficiencies in a timely manner. This could, in turn, impact our ability to satisfy the Monitor or comply with the terms of the US DPA and related agreements and consent orders, and may require us to take additional remedial measures in the future.
Under the terms of the US DPA, upon notice and an opportunity to be heard, the DoJ has sole discretion to determine whether HSBC has breached the US DPA. Potential consequences of breaching the US DPA could include the imposition of additional terms and conditions on HSBC, an extension of the agreement, including its monitorship, or the criminal prosecution of HSBC, which could, in turn, entail further financial penalties and collateral consequences.

Breach of the US DPA or related agreements and consent orders could have a material adverse effect on our business, financial condition and results of operations, including loss of business and withdrawal of funding, restrictions on performing dollar-clearing functions through HSBC Bank USA or revocation of bank licences. Even if we are not determined to have breached these agreements, but the agreements are amended or their terms extended, our business, reputation and brand could suffer materially.

Mitigating actions

We are continuing to take concerted action to remedy AML and sanctions compliance deficiencies and to implement Global Standards. We are also working to implement the agreed recommendations flowing from the Monitor s 2013 and 2014 reviews, and will implement the agreed recommendations from the 2015 review.

During 2015, we continued to make progress toward putting in place a robust and sustainable AML and sanctions compliance programme, including continuing to build a strong Financial Crime Compliance sub-function, rolling out improved systems and infrastructure to manage financial crime risk and improve transaction monitoring and enhancing internal audits.

Dispute risk

HSBC is party to legal proceedings and regulatory matters in a number of jurisdictions arising out of its normal business operations. Further details are provided in Note 40 on the Financial Statements.

Potential impact on HSBC

Dispute risk may give rise to potential financial loss as well as significant reputational damage. This in turn could adversely affect customer, investor and other stakeholder confidence.

Mitigating actions

We continue to focus on identifying emerging regulatory and judicial trends, and sharing globally lessons learned in an effort to avoid or limit future litigation exposure and regulatory enforcement action.

We continue to review and enhance our financial crime and regulatory compliance controls and resources.

Table of Contents

Report of the Directors: Risk (continued)

Top and emerging risks

Cyber threat and unauthorised access to systems

Like other public and private organisations, we continue to be a target of cyber attacks which, in some cases, disrupt services including the availability of our external facing websites, compromise organisational and customer information or expose security weaknesses. Management of cyber risks is coming under increased regulatory scrutiny.

Potential impact on HSBC

A major cyber attack, which could result from unauthorised access to our systems, may result in financial loss as well as significant reputational damage which could adversely affect customer and investor confidence in HSBC. Any loss of customer data would also trigger regulatory breaches which could result in fines and penalties being incurred.

Mitigating actions

The security of our information and technology infrastructure is crucial for maintaining our banking applications and processes and protecting our customers and the HSBC brand. We continue to strengthen our ability to prevent, detect and respond to the ever-increasing and sophisticated threat of cyber attacks by enhancing our governance and controls framework and technology infrastructure, processes and controls.

We took part in the PRA s Cyber Vulnerability Testing exercise during 2015 and are making further enhancements to improve our resilience to, and ability to recover from, cyber attacks.

We have realigned the responsibilities and accountabilities for cyber and information risk management to align with the operational risk lines of defence operational model and instigated a number of security improvement programmes within IT.

Internally driven

People risk

Execution risk

Third-party risk management

Model risk

Data management

People risk

Significant demands continue to be placed on our staff. The cumulative workload arising from regulatory reform and remediation programmes together with those related to the delivery of our strategy is hugely consumptive of human resources, placing increasingly complex and conflicting demands on a workforce in a world where expertise is often in short supply and globally mobile.

Potential impact on HSBC

Changes in remuneration policy and practice resulting from CRD IV regulations, European Banking Authority (EBA) Guidelines and PRA remuneration rules apply on a Group-wide basis for any material risk takers. This presents significant challenges for HSBC because a significant number of our material risk takers are based outside the EU.

The Senior Managers and Certification regimes and the related Rules of Conduct, which come into force in 2017 for other employees, set clear expectations of the accountabilities and behaviour of both senior and more junior employees.

Organisational changes to support the Group s strategy and/or implement regulatory reform programmes have the potential to lead to increased staff turnover.

Mitigating actions

The changes in remuneration under the CRD IV regulations, EBA guidelines and PRA remuneration rules have necessitated a review of our remuneration policy, especially the balance between fixed and variable pay, to ensure we can remain globally competitive on a total compensation basis and retain our key talent.

We continue to increase the level of specialist resource in key areas, and to engage with our regulators as they finalise new regulations.

Risks related to organisational change and disposals are subject to close management oversight, especially in those countries where staff turnover is particularly high.

Execution risk

Execution risk heightened during 2015 due to a number of factors. Significant programmes are under way to deliver nine business actions to capture value from our global presence, announced at the Investor Update in June 2015. These, along with the regulatory reform agenda and our commitments under the US DPA require the management of complex projects that are resource demanding and time sensitive. In addition, the risks arising from the disposal of our business in Brazil require careful management.

Potential impact on HSBC

- Risks arising from the number, magnitude and complexity of projects underway to meet these demands may include financial losses, reputational damage or regulatory censure.
- The potential risks of disposals include regulatory breaches, industrial action, loss of key personnel and interruption to systems and processes during business transformation. They can have both financial and reputational implications.

Mitigating actions

- We have strengthened our prioritisation and governance processes for significant projects, which are monitored by the GMB.
- We have invested in our project implementation and IT capabilities and increased our focus on resource management.
- Risks relating to disposals are carefully assessed and monitored and are subject to close management oversight.

Table of Contents

Third-party risk management

HSBC, in common with peers in the financial services industry, utilises third parties for the provision of a range of goods and services. Global regulators have raised concerns regarding the dependency on third parties, and expect firms to be able to demonstrate adequate control over the selection, governance and oversight of their third parties (including affiliates). Risks arising from the use of third-party service providers may be less transparent and therefore more challenging to manage or influence.

Potential impact on HSBC

- Any deficiency in the management of third-party risk could affect our ability to meet strategic, regulatory and client expectations. This may lead to a range of consequences including regulatory censure, civil penalties or reputational damage.

Mitigating actions

- HSBC is undertaking a multi-year strategic plan to enhance its third-party risk management capability. We are implementing a programme that will provide a holistic view of third-party risks. This will enable the consistent risk assessment of any third-party service against key criteria, along with the associated control monitoring, testing and assurance throughout the third-party lifecycle.

- The Group s most critical third parties were identified and subjected to enhanced risk assessment, with remediation plans agreed where necessary. Plans are in place to extend the assessment to a broader group of third parties.

- In addition, the highest priority third-party vendors in the US went through enhanced risk assessment with findings remediated in 2015. A risk monitoring solution was implemented for all vendors and a due diligence solution is in the process of being implemented.

Model risk

We use models for a range of purposes in managing our business, including regulatory and economic capital calculations, stress testing, credit approvals, pricing, financial crime and fraud risk management and financial

reporting. Model risk is the potential for adverse consequences as a result of decisions based on incorrect model outputs and reports or the use of such information for purposes for which it was not designed. This risk can arise from models that are poorly developed, implemented or used, or from the modelled outcome being misunderstood and acted upon inappropriately by management. The regulatory environment and supervisory concerns over banks use of internal models to determine regulatory capital is also considerable, and further contributes to model risk.

Potential impact on HSBC

- HSBC could incur losses, be required to hold additional capital, fail to meet regulatory standards or incur higher operating expenses due to the use of inappropriate models or poor model risk management.
  Supervisory concerns over the internal models and assumptions used by banks in the calculation of regulatory capital have led to the imposition of floors in risk weight and model parameters such as the loss given default. Such changes have the potential to increase our capital requirement and/or make it more volatile.

- Our reputation may be questioned due to our inability to comply with specific modelling and model risk management requirements.

Mitigating actions

- We have strengthened our model risk governance framework by establishing global model oversight committees and implementing policies and standards in accordance with key regulatory requirements.

- We have strengthened our governance over the development, usage and validation of models including the creation of centralised global analytical functions with necessary subject-matter expertise.

- We have hired additional subject matter experts as part of our independent model review function and empowered the function to ensure appropriate challenge and feedback are given to models prior to and as part of their ongoing use.

Data management

Regulators require more frequent and granular data submissions, which must be produced on a consistent, accurate and timely basis. As a G-SIB, HSBC must comply with the principles for effective risk data aggregation and risk reporting set out by the Basel Committee.

Potential impact on HSBC

- Ineffective data management capabilities could impact our ability to aggregate and report complete, accurate and consistent data to regulators, investors and senior management on a timely basis.

- Financial institutions that fail to meet their Basel Committee data obligations by the required deadline may face supervisory measures.

Mitigating actions

We have set a data strategy for the Group and defined Group-level principles, standards and policies to enable consistent data aggregation, reporting and management. We continue to focus on enhancing data governance, quality and architecture to support our objectives of ensuring reliability of information used in support of internal controls and external financial reporting.

A number of key initiatives and projects to implement our data strategy and work towards meeting our Basel Committee data obligations are in progress.

Table of Contents

Report of the Directors: Risk (continued)

Areas of special interest

Areas of special interest

During 2015, we considered a number of particular areas because of the effect they may have on the Group. Whilst these areas may already have been identified in top and emerging risks, further details of the actions taken during the year are provided below.

Financial crime compliance and regulatory compliance

We continued to experience increased levels of compliance risk as regulators and other agencies pursued investigations into historical activities. Examples include continued engagement with respect to compliance with AML and sanctions law (historical investigations gave rise to the US DPA and related FCA Direction), on-going interaction with regulators relating to mis-selling of the PPI policies and allegations of pressure selling in the UK, investigations in relation to conduct in the foreign exchange market, and benchmark interest rate and commodity price setting. Details of these investigations and legal proceedings may be found in Note 40 on the Financial Statements. The work of the Monitor, who was appointed to assess the effectiveness of our AML and sanctions compliance programme, is discussed below.

The level of inherent compliance risk remained high in 2015 as the industry continued to experience greater regulatory scrutiny and heightened levels of regulatory oversight and supervision.

For further information about the Group s compliance risk management, see page 178.

The Monitor

Under the agreements entered into with the DoJ and the FCA in 2012, including the five-year US DPA, the Monitor was appointed to produce annual assessments of the effectiveness of the Group s AML and sanctions compliance programme.

In January 2016, the Monitor delivered his second annual follow-up review report based on various thematic and country reviews he had conducted over the course of 2015. In his report, the Monitor concluded that, in 2015, HSBC made progress in developing an effective and sustainable financial crime compliance programme. However, he expressed significant concerns about the pace of that progress, instances of potential financial crime and systems and controls deficiencies, whether HSBC is on track to meet its goal to the Monitor s satisfaction within the five-year period of the US DPA and, pending further review and discussion with HSBC, did not certify as to HSBC s implementation of and adherence to remedial measures specified in the US DPA. The US deferred prosecution agreement and related agreements and consent orders are discussed in top and emerging risks on page 113.

Regulatory stress tests

Stress testing is an important tool for regulators to assess vulnerabilities in the banking sector and in individual banks, the results of which could have a significant effect on minimum capital requirements, risk and capital management

practices and planned capital actions, including the payment of dividends, going forward.

We are subject to regulatory stress testing in many jurisdictions. These have increased both in frequency and in the granularity of information required by supervisors. They include the programmes of the Bank of England (BoE), the FRB, the OCC, the EBA and the Hong Kong Monetary Authority and other regulators. Assessment by regulators is on both quantitative and qualitative bases, the latter focusing on portfolio quality, data provision, stress testing capability, forward-looking capital management processes and internal management processes.

In 2015, the Group took part in the BoE s concurrent stress test exercise involving major UK banks. The 2015 stress scenario incorporates a global recession in which disinflationary pressures and weakening expectations of growth lead to diminished risk appetite, falling commodity prices and lower market liquidity. Several emerging economies are adversely affected, as is the eurozone, where the rate of deflation increases. The UK experiences a downturn as the global recession affects exports and as financial linkages and weaker confidence affects other parts of the economy.

Selected key economic variables for the BoE 2015 concurrent stress test, as specified by the BoE

	GDP growth[1]	Unemploy-ment[2]	House Price Index	Equity prices[3]
	%	%	%	%
Hong Kong	(5.6)	5.8	40	65
China	1.7		35	
UK	(3.1)	9.2	20	36

1 *Worst quarter (percentage quarter on quarter year earlier).*
2 *Peak percentage.*
3 *Price fall percentage (start to trough).*

The results were published by the BoE alongside the *Financial Stability Report* on 1 December 2015. The stressed CET1 capital ratio of HSBC was deemed by the BoE to fall to a minimum of 7.7%, taking into account management mitigating actions accepted by the BoE for this exercise. This was above the hurdle ratio of 4.5% set for this exercise. The leverage ratio fell to a minimum of 3.7% after management actions, also above the minimum hurdle ratio of 3%.

HSBC North America Holdings Inc. (HNAH) participated in the 2015 Comprehensive Capital Analysis and Review (CCAR) and the annual Dodd-Frank Act Stress Test (DFAST) programmes as required by the FRB. In addition, HSBC Bank USA N.A. (HSBC Bank USA) participated in the OCC s 2015 DFAST programme. The CCAR and DFAST submissions were made on 5 January 2015 and their results publically disclosed on 5 March 2015. On 11 March 2015, HNAH received notice that the FRB did not object to its 2015 Capital Plan a key component of the CCAR submission. Under DFAST, HNAH is also required to conduct a company-run mid-cycle stress test, the results of which were disclosed on 16 July 2015. Under this test HNAH maintained capital levels in excess of regulatory minimums; specifically, the stressed common equity tier 1 ratio fell to a minimum of 7.5% compared with a required level of 4.5%.

Other entities in the Group, including The Hongkong and Shanghai Banking Corporation Limited and HSBC Bank plc, continue to participate in regulatory stress tests conducted at a subsidiary level by local regulators.

In October 2015, the BoE published details of its medium-term approach to stress testing the UK banking system. Key features of the approach include an annual cyclical stress test and a biennial exploratory stress test, starting in 2017.

The EBA plan to conduct stress tests in 2016. Details of their proposed approach were published by them in November 2015.

Oil and gas prices

Oil and commodity prices have remained low since the middle of 2014 as a result of existing global supply and demand imbalances, with significant price declines in late 2015 and early 2016. Continued lower oil prices cause increased credit risks within oil-related industries together with fiscal and financing challenges for energy exporters.

The overall portfolio of exposures directly exposed to oil and gas companies had drawn risk exposures amounting to about $29bn (2014: $34bn) with sub-sectoral distributions as follows: integrated producers 48%, service companies 28%, pure producers 17% and infrastructure companies 7%.

The credit quality distribution of the oil and gas portfolio was as follows: strong and good categories made up 56% of the portfolio, satisfactory 35%, sub-standard 7% and impaired 2%. The majority of the exposures were located in North America, Asia and Europe.

Oil and gas related counterparties have responded rapidly to the changing economic outlook, cutting back on capital expenditure as well as reducing operating expenses in order to manage cash flows and sustain profitability.

Large integrated producers remained resilient. Within the pure producers sector, the higher cost entities such as shale and oil sands producers showed more evidence of stress, resulting in credit grade deterioration. Similarly, service companies continued to be more vulnerable as producers curtailed capital expenditures.

Individually assessed loan impairment charges in 2015 remained contained at approximately $0.3bn. Oil prices are now predicted to remain lower for longer and the oil price recovery is dependent on the removal of the excess supply that currently exists in the market. In view of these factors collective allowances for exposures related to oil and gas were increased by $0.2bn at the end of the year. Total allowances in respect of the oil and gas portfolio were $0.6bn.

The sector remains under enhanced monitoring with risk appetite and new lending has been significantly curtailed.

Metals and mining

Metals prices declined during 2015 although the pace and extent of the price decline was more gradual than for oil and gas.

Precious metals, copper, nickel and zinc prices are generally forecast to improve slightly in 2016. The outlook for steel, aluminium and bulk metals is more negative due to a combination of oversupply and reduction in demand. The low oil and gas prices benefit most metals and mining customers given that they are large consumers of energy.

Our total drawn risk exposure to metals and mining was $18bn (steel and aluminium $9bn, copper, nickel and zinc $4bn, iron ore and metallurgical coal $3bn, precious metals $2bn). Individually assessed loan impairments were $0.1bn.

Given the pressures in metals prices the metals and mining sector is under heightened management review.

Mainland China exposures

Mainland China s economic growth rate slowed in 2014 and 2015 with a gross domestic product of 6.9% in 2015 compared with 7.3% in 2014 (2013: 7.7%). China s economic growth rate remains very strong when compared with developed western economies. Although the largest foreign bank in China, HSBC s overall lending market share is very small at about 0.2%. This allows us to be selective in our lending to mainland China-related exposures, targeting high quality lending centred around specific priority sectors. The portfolio has continued to perform well with loan impairment charges remaining at their existing low levels.

The total mainland China portfolio had drawn risk exposures of $143bn, of which $77bn was booked onshore, with the remainder mainly booked in Hong Kong. Retail lending amounted to $8bn, focused primarily on residential mortgages in selected geographical areas. Wholesale lending amounted to $135bn. 51% of the wholesale portfolio was corporate lending with 26% to banks and the remainder to China sovereign. The lending to banks was 99% investment grade. The corporate portfolio was also of high quality with 62% of the portfolio of investment grade. Only 2% of the corporate portfolio was rated substandard which compares favourably with the Group as a whole. The corporate portfolio was well diversified with less than 40% of lending to state owned enterprises. The corporate real estate portfolio amounted to about $15bn. This portfolio which is primarily focused on tier 1 and tier 2 cities and the Pearl River Delta, was managed carefully under a series of caps ensuring that the lending to this sector remained within our risk appetite.

Our resultant ability to be selective in our lending and apply our traditionally strong underwriting standards means we have a high quality portfolio which we would expect to be resilient even in a situation where mainland China s growth rate slows further.

Table of Contents

Report of the Directors: Risk (continued)

Credit risk

Credit risk

	Page	App[1]	Tables	Page
Credit risk	120	195	*Summary of credit risk*	120
			Gross loans to customers and banks over five years	121
			Loan impairment charge over five years	121
			Loan impairment charges by geographical region	121
			Loan impairment charges by industry	121
			Loan impairment allowances over five years	121
Credit risk management		195		
Assets held for sale	121		*Loans and advances to banks and customers measured at amortised cost*	121
			Gross loans and impairment allowances on loans and advances to customers and banks reported in Assets held for sale	122
			Loan impairment charges and other credit risk provisions	122
Credit exposure	122			
Maximum exposure to credit risk	122			
Other credit risk mitigants	122		*Maximum exposure to credit risk*	123
			Loan and other credit-related commitments	123
Concentration of exposure	123	196		
Financial investments	123			
Trading assets	124			
Derivatives	124			
Loans and advances	124		*Gross loans and advances by industry sector and by geographical region*	124
Credit quality of financial instruments	125	196		
Credit quality classification			*Distribution of financial instruments by credit quality*	
		196		125
	127			127

Past due but not impaired gross financial instruments			*Past due but not impaired gross financial instruments by geographical region*	
			Ageing analysis of days for past due but not impaired gross financial instruments	127
Impaired loans	128		*Movement in impaired loans by geographical region*	128
Renegotiated loans and forbearance	129	197	*Renegotiated loans and advances to customers by geographical region*	129
			Movement in renegotiated loans and advances to customers by geographical region	131
			Renegotiated loans by arrangement type: corporate and commercial and financial	132
			Renegotiated loans by arrangement type: personal lending	132
Impairment of loans and advances	132		*Loan impairment charge to the income statement by industry sector*	132
			Loan impairment charge to the income statement by assessment type	132
			Charge for impairment losses as a percentage of average gross loans and advances to customers by geographical region	133
			Movement in impairment allowances by industry sector and geographical region	134
			Movement in impairment allowances on loans and advances to customers and banks	135
Impairment assessment		201		
Wholesale lending	135		*Total wholesale lending*	136
Commercial real estate	137		*Commercial real estate lending*	137
			Commercial real estate loans and advances maturity analysis	138
			Commercial real estate loans and advances including loan commitments by level of collateral	139
			Other corporate, commercial and non-bank financial institutions loans and advances including loan commitments by level of collateral rated CRR/EL8 to 10 only	140

Table of Contents

	Page	App[1]	Tables	Page
Other credit risk exposures	141			
Derivatives	141		*Notional contract amounts and fair values of derivatives by product type*	142
			OTC collateral agreements by type	142
Reverse repos non-trading by geographical region	143		*Reverse repos non-trading by geographical region*	143
Loan Management Unit		202		
Personal lending	143		*Total personal lending*	143
Mortgage lending	144		*UK interest-only mortgage loans*	145
Other personal lending	145		*HSBC Finance US Consumer and Mortgage Lending residential mortgages*	145
			Trends in two months and over contractual delinquency in the US	146
			Gross loan portfolio of HSBC Finance real estate secured balances	146
			Number of renegotiated real estate secured accounts remaining in HSBC Finance s portfolio	146
HSBC Finance loan modifications and re-age programmes	146			
Collateral and other credit enhancements held	147		*Residential mortgage loans including loan commitments by level of collateral*	147
Supplementary information	148		*Gross loans and advances by industry sector over 5 years*	148
			Reconciliation of reported and constant currency impaired loans, allowances and charges by geographical region	149
			Reconciliation of reported and constant currency loan impairment charges to the income statement	149
			Loan impairment charges by industry sector over 5 years	150
			Charge for impairment losses as a percentage of average gross loans and advances to customers	150

Refinance risk 203

HSBC Holdings 152

Securitisation exposures and other structured products 152 203

Movement in impairment allowances over 5 years 150

Gross loans and advances to customers by country 151

HSBC Holdings maximum exposure to credit risk 152

Carrying amount of HSBC s consolidated holdings of ABSs 153

Definitions and classifications of ABSs and CDOs 203

1 *Appendix to Risk risk policies and practices.*

Report of the Directors: Risk (continued)

Credit risk

Credit risk

Credit risk is the risk of financial loss if a customer or counterparty fails to meet an obligation under a contract. It arises principally from direct lending, trade finance and leasing business, but also from other products such as guarantees and credit derivatives and from holding assets in the form of debt securities.

There have been no material changes to the policies and practices for the management of credit risk in 2015.

A summary of our current policies and practices regarding credit risk is provided in the Appendix to Risk on page 193.

Our maximum exposure to credit risk is presented on page 122 and credit quality on page 125. While credit risk arises across most of our balance sheet, losses have typically been incurred on loans and advances and securitisation exposures and other structured products. As a result, our disclosures focus primarily on these two areas.

Our exposures to mainland China and the effects of the decline in metals and mining and oil and gas prices are provided in Areas of special interest on page 116.

In 2015, reported gross loans and advances declined by $75bn, mainly due to foreign exchange effects reducing balances by $51bn and the reclassification of Brazilian assets as Assets held for sale reducing balances by a further $31bn. Additional details relating to the Brazilian reclassification are provided on page 121. Excluding foreign exchange movements and the reclassification, both wholesale and personal lending grew.

Loan impairment charges reduced by $0.5bn or 11% compared with 2014 with notable decreases in Latin America from favourable foreign exchange effects.

Information on constant currency movements is provided on page 148. While tables are presented on a reported basis, the commentary that follows in this summary section excludes the effects of the Brazilian reclassification and is on a constant currency basis.

Summary of credit risk

	2015 $bn	2014 $bn	Page
At year-end			
Maximum exposure to credit risk			
total assets subject to credit risk	**2,234**	2,434	
off-balance sheet commitments subject to credit risk[1]	**713**	699	
	2,947	3,133	123
Gross loans and advances			
personal lending	**374**	393	143
wholesale lending	**650**	706	136
	1,024	1,099	124
Impaired loans			
personal lending	**12**	15	128
wholesale lending	**12**	14	128
	24	29	128
Impaired loans as a % of gross loans and advances			
personal lending	**3.1%**	3.9%	
wholesale lending	**1.9%**	2.0%	
total	**2.3%**	2.7%	
	$bn	$bn	
Impairment allowances			
personal lending	**2.9**	4.6	135
wholesale lending	**6.7**	7.8	136
	9.6	12.4	134
Loans and advances net of impairment allowances	**1,015**	1,087	
For year ended 31 December			
Loan impairment charge	**3.6**	4.1	133
personal lending	**1.8**	1.8	132
wholesale lending	**1.8**	2.3	132
Other credit risk provisions	**0.1**	(0.2)	
	3.7	3.9	

For footnote, see page 191.

In 2015, wholesale and personal gross loans and advances grew by $0.5bn and $7bn, respectively.

In wholesale lending, Asia balances decreased by $9.6bn and were partly offset by an increase of $7.5bn in North America and $3.2bn in Europe. Middle East and North Africa decreased $1.2bn and Latin America remained relatively unchanged.

In personal lending, Asia balances grew by $7.4bn across both its mortgage and other personal lending, and there was a $1.9bn increase in the Premier mortgage portfolio in the US and Canada. The increase was partly offset by a $5.0bn reduction in the US CML portfolio as a result of the ongoing run-off of the portfolio and continued loan sales.

Loan impairment charges increased by $0.2bn compared with 2014, notably in Middle East and North Africa and North America.

Gross loans to customers and banks over five years ($bn)

Loan impairment charge over five years ($bn)

Loan impairment charges by geographical region ($bn)

Loan impairment charges by industry ($bn)

Loan impairment allowances over five years

Assets held for sale

(Audited)

During 2015, gross loans and advances and related impairment allowances arising in our Brazilian operations were reclassified from Loans and advances to customers and Loans and advances to banks to Assets held for sale in the balance sheet.

Disclosures relating to assets held for sale are provided in the following credit risk management tables, primarily where the disclosure is relevant to the measurement of these financial assets:

- Maximum exposure to credit risk (page 122);
- Distribution of financial instruments by credit quality (page 125);
- Past due but not impaired gross financial instruments by geographical region (page 127); and
- Ageing analysis of days past due but not impaired gross financial instruments (page 127).

Although there was a reclassification on the balance sheet, there was no separate income statement reclassification. As a result, charges for loan impairment losses shown in the credit risk disclosures include loan impairment charges relating to financial assets classified as Assets held for sale .

Loans and advances to customers and banks measured at amortised cost

(Audited)

	Total gross loans and advances $m	Impairment allowances on loans and advances $m
As reported	**1,024,428**	**(9,573)**
Reported in Assets held for sale	**24,544**	**(1,454)**
At 31 December 2015	**1,048,972**	**(11,027)**

At 31 December 2014, the gross loans and advances and related impairment allowances of our Brazilian operations were $31bn and $1.7bn, respectively. Gross loans and advances reduced by $8.5bn, mainly as a result of foreign exchange movements.

Lending balances held for sale continue to be measured at amortised cost less allowances for impairment; such carrying amounts may differ from fair value. Any difference between the carrying amount and the sales price, which is the fair value at the time of sale, would be recognised as a gain or loss at the time of sale.

See Note 23 on the Financial Statements for the carrying amount and the fair value at 31 December 2015 of loans and advances to banks and customers classified as held for sale.

Table of Contents

Report of the Directors: Risk (continued)

Credit risk

Gross loans and impairment allowances on loans and advances to customers and banks reported in Assets held for sale

(Audited)

	Brazil $m	Other $m	Total $m
Gross loans			
Loans and advances to customers	**18,103**	**2,042**	**20,145**
personal	**5,571**	**40**	**5,611**
corporate and commercial	**12,532**	**2,002**	**14,534**
Financial	**4,399**		**4,399**
non-bank financial institutions	**331**		**331**
banks	**4,068**		**4,068**
At 31 December 2015	**22,502**	**2,042**	**24,544**
Impairment allowances			
Loans and advances to customers	**(1,433)**	**(21)**	**(1,454)**
personal	**(664)**		**(664)**
corporate and commercial	**(769)**	**(21)**	**(790)**
Financial			
non-bank financial institutions			
banks			
At 31 December 2015	**(1,433)**	**(21)**	**(1,454)**

The table below analyses the amount of LICs arising from assets held for sale. The held for sale assets primarily relate to the Brazilian operations.

Loan impairment charges and other credit risk provisions

(Audited)

	2015 $m
LICs arising from:	
assets held for sale	**965**
assets not held for sale	**2,757**
Year ended 31 December	**3,722**

Credit exposure

Maximum exposure to credit risk

(Audited)

The table on page 123 provides information on balance sheet items, offsets and loan and other credit-related commitments. Commentary on balance sheet movements is provided on page 62.

The offset in derivatives decreased in line with the decrease in maximum exposure amounts.

The offset on corporate and commercial loans to customers decreased by $15bn. This reduction was mainly related to corporate overdraft balances where a small number of clients benefited from the use of net interest arrangements across overdrafts and deposits. As a result, while net risk exposures are generally stable, gross balances can be volatile.

Maximum exposure to credit risk table (page 123)

The table presents our maximum exposure to credit risk from balance sheet and off-balance sheet financial instruments before taking account of any collateral held or other credit enhancements (unless such enhancements meet accounting offsetting requirements). For financial assets recognised on the balance sheet, the maximum exposure to credit risk equals their carrying amount; for financial guarantees and similar contracts granted, it is the maximum amount that we would have to pay if the guarantees were called upon. For loan commitments and other credit-related commitments, it is generally the full amount of the committed facilities.

The offset in the table relates to amounts where there is a legally enforceable right of offset in the event of counterparty default and where, as a result, there is a net exposure for credit risk purposes. However, as there is no intention to settle these balances on a net basis under normal circumstances, they do not qualify for net presentation for accounting purposes. No offset has been applied to off-balance sheet collateral. In the case of derivatives the offset column also includes collateral received in cash and other financial assets.

Other credit risk mitigants

While not disclosed as an offset in the Maximum exposure to credit risk table, other arrangements are in place which reduce our maximum exposure to credit risk. These include a charge over collateral over borrowers specific assets

such as residential properties. Other credit risk mitigants include short positions in securities and financial assets held as part of linked insurance/investment contracts where the risk is predominantly borne by the policyholder. In addition, we hold collateral in the form of financial instruments that are not recognised on the balance sheet.

See Note 32 and from page 139 and page 147 respectively on the Financial Statements for further details on collateral in respect of certain loans and advances and derivatives.

Table of Contents

Maximum exposure to credit risk

(Audited)

	2015			2014		
	Maximum exposure $m	**Offset $m**	**Net $m**	Maximum exposure $m	Offset $m	Net $m
Cash and balances at central banks	**98,934**		**98,934**	129,957		129,957
Items in the course of collection from other banks	**5,768**		**5,768**	4,927		4,927
Hong Kong Government certificates of indebtedness	**28,410**		**28,410**	27,674		27,674
Trading assets	**158,346**		**158,346**	228,944		228,944
Treasury and other eligible bills	**7,829**		**7,829**	16,170		16,170
debt securities	**99,038**		**99,038**	141,532		141,532
loans and advances to banks	**22,303**		**22,303**	27,581		27,581
loans and advances to customers	**29,176**		**29,176**	43,661		43,661
Financial assets designated at fair value	**4,857**		**4,857**	9,031		9,031
Treasury and other eligible bills	**396**		**396**	56		56
debt securities	**4,341**		**4,341**	8,891		8,891
loans and advances to banks	**120**		**120**	84		84
loans and advances to customers						

Derivatives	**288,476**	**(258,755)**	**29,721**	345,008	(313,300)	31,708
Loans and advances to customers held at amortised cost	**924,454**	**(52,190)**	**872,264**	974,660	(67,094)	907,566
personal	**371,203**	**(5,373)**	**365,830**	388,954	(4,412)	384,542
corporate and commercial	**493,078**	**(44,260)**	**448,818**	535,184	(59,197)	475,987
non-bank financial institutions	**60,173**	**(2,557)**	**57,616**	50,522	(3,485)	47,037
Loans and advances to banks held at amortised cost	**90,401**	**(53)**	**90,348**	112,149	(258)	111,891
Reverse repurchase agreements non-trading	**146,255**	**(900)**	**145,355**	161,713	(5,750)	155,963
Financial investments	**423,120**		**423,120**	404,773		404,773
Treasury and other similar bills	**104,551**		**104,551**	81,517		81,517
debt securities	**318,569**		**318,569**	323,256		323,256
Assets held for sale	**40,078**		**40,078**	1,375		1,375
disposal groups	**38,097**		**38,097**	889		889
non-current assets held for sale	**1,981**		**1,981**	486		486
Other assets	**25,310**		**25,310**	33,889		33,889
endorsements and acceptances	**9,149**		**9,149**	10,775		10,775
other	**16,161**		**16,161**	23,114		23,114
Total balance sheet exposure to credit risk	**2,234,409**	**(311,898)**	**1,922,511**	2,434,100	(386,402)	2,047,698
Total off-balance sheet[2]	**712,546**		**712,546**	698,458		698,458
financial guarantees and similar contracts	**46,116**		**46,116**	47,078		47,078
loan and other credit-related commitments[2]	**666,430**		**666,430**	651,380		651,380
At 31 December	**2,946,955**	**(311,898)**	**2,635,057**	3,132,558	(386,402)	2,746,156

For footnote, see page 191

Loan and other credit-related commitments[2]

	Europe $m	Asia $m	MENA $m	North America $m	Latin America $m	Total $m
Personal	**70,013**	**103,153**	**3,092**	**14,510**	**12,175**	**202,943**
Corporate and commercial	**105,303**	**159,947**	**20,139**	**102,369**	**18,155**	**405,913**

Financial	**20,230**	**11,619**	**186**	**24,543**	**996**	**57,574**
At 31 December 2015	**195,546**	**274,719**	**23,417**	**141,422**	**31,326**	**666,430**
Personal	86,247	96,497	2,995	15,636	11,679	213,054
Corporate and commercial	98,045	138,366	20,141	102,911	17,540	377,003
Financial	26,605	9,355	711	23,559	1,093	61,323
At 31 December 2014	210,897	244,218	23,847	142,106	30,312	651,380

For footnote, see page 191.

Concentration of exposure

The geographical diversification of our lending portfolio and our broad range of global businesses and products ensured that we did not overly depend on a few markets to generate growth in 2015. This diversification also supported our strategy for growth in faster-growing markets and those with international connectivity.

Financial investments

Our holdings of available-for-sale government and government agency debt securities, corporate debt securities, ABSs and other securities were spread across a wide range of issuers and geographical regions in 2015, with 14% invested in securities issued by banks and other financial institutions and 75% in government or government agency debt securities. We also held assets backing insurance and investment contracts.

Table of Contents

Report of the Directors: Risk (continued)

Credit risk

For an analysis of financial investments, see Note 17 on the Financial Statements.

Trading assets

Trading securities remained the largest concentration within trading assets at 77% in 2015 and 2014. The largest concentration within the trading securities portfolio was in government and government agency debt securities. We had significant exposures to US Treasury and government agency debt securities ($15bn) and UK ($10bn) and Hong Kong ($6.5bn) government debt securities.

For an analysis of debt and equity securities held for trading, see Note 12 on the Financial Statements.

Derivatives

Derivative assets were $288bn at 31 December 2015 (2014: $345bn). Details of derivative amounts cleared through an exchange, central counterparty and non-central counterparty are shown on page 142.

For an analysis of derivatives, see page 141 and Note 16 on the Financial Statements.

Loans and advances

The following tables analyse loans by industry sector and by the location of the principal operations of the lending subsidiary or, in the case of the operations of The Hongkong and Shanghai Banking Corporation, HSBC Bank, HSBC Bank Middle East Limited and HSBC Bank USA, by the location of the lending branch. Excluding the effect of the classification of Brazilian assets as Assets held for sale , the distribution of loans across geographical regions and industries remained similar to last year.

For an analysis of loans and advances by country see page 151.

Gross loans and advances by industry sector and by geographical region

(Audited)

	Europe $m	Asia $m	MENA $m	North America $m	Latin America $m	Total $m	As a % of total gross loans
Personal	**170,526**	**132,707**	**6,705**	**58,186**	**5,958**	**374,082**	**36.5**
first lien residential mortgages	**125,544**	**94,606**	**2,258**	**50,117**	**1,986**	**274,511**	**26.8**
other personal[3]	**44,982**	**38,101**	**4,447**	**8,069**	**3,972**	**99,571**	**9.7**
Wholesale							
Corporate and commercial	**191,765**	**211,224**	**22,268**	**62,882**	**11,374**	**499,513**	**48.8**
manufacturing	**39,003**	**34,272**	**2,504**	**17,507**	**2,572**	**95,858**	**9.4**
international trade and services	**62,667**	**72,199**	**9,552**	**11,505**	**3,096**	**159,019**	**15.5**
commercial real estate	**26,256**	**32,371**	**690**	**7,032**	**1,577**	**67,926**	**6.7**
other property-related	**7,323**	**35,206**	**1,908**	**8,982**	**45**	**53,464**	**5.2**
government	**3,653**	**1,132**	**1,695**	**203**	**772**	**7,455**	**0.7**
other commercial[4]	**52,863**	**36,044**	**5,919**	**17,653**	**3,312**	**115,791**	**11.3**
Financial	**51,969**	**68,321**	**10,239**	**16,308**	**3,996**	**150,833**	**14.7**
non-bank financial institutions	**33,621**	**13,969**	**2,321**	**9,822**	**681**	**60,414**	**5.9**
banks	**18,348**	**54,352**	**7,918**	**6,486**	**3,315**	**90,419**	**8.8**
Total wholesale	**243,734**	**279,545**	**32,507**	**79,190**	**15,370**	**650,346**	**63.5**
Total gross loans and advances at 31 December 2015	**414,260**	**412,252**	**39,212**	**137,376**	**21,328**	**1,024,428**	**100.0**
Percentage of total gross loans and advances	**40.4%**	**40.3%**	**3.8%**	**13.4%**	**2.1%**	**100.0%**	
Personal	178,531	129,515	6,571	65,400	13,537	393,554	35.8
first lien residential mortgages	131,000	93,147	2,647	55,577	4,153	286,524	26.0
other personal[3]	47,531	36,368	3,924	9,823	9,384	107,030	9.8
Wholesale							
Corporate and commercial	212,523	220,799	20,588	57,993	30,722	542,625	49.4
manufacturing	39,456	37,767	2,413	15,299	12,051	106,986	9.7

international trade and services	76,629	72,814	9,675	13,484	8,189	180,791	16.4
commercial real estate	28,187	35,678	579	6,558	2,291	73,293	6.7
other property-related	7,126	34,379	1,667	8,934	281	52,387	4.8
government	2,264	1,195	1,552	164	968	6,143	0.6
other commercial[4]	58,861	38,966	4,702	13,554	6,942	123,025	11.2
Financial	45,081	76,957	13,786	16,439	10,753	163,016	14.8
non-bank financial institutions	23,103	13,997	3,291	9,034	1,393	50,818	4.6
banks	21,978	62,960	10,495	7,405	9,360	112,198	10.2
Total wholesale	257,604	297,756	34,374	74,432	41,475	705,641	64.2
Total gross loans and advances at 31 December 2014	436,135	427,271	40,945	139,832	55,012	1,099,195	100.0
Percentage of total gross loans and advances	39.7%	38.9%	3.7%	12.7%	5.0%	100.0%	

For footnotes, see page 191.

Table of Contents

Credit quality of financial instruments

(Audited)

We assess credit quality on all financial instruments which are subject to credit risk. Additional credit quality information in respect of our consolidated holdings of ABSs is provided on page 153.

For the purpose of the following disclosure, retail loans which are past due up to 90 days and are not otherwise classified as impaired in accordance with our disclosure convention are not disclosed within the expected loss grade to which they relate, but are separately classified as past due but not impaired.

Distribution of financial instruments by credit quality

(Audited)

	Neither past due nor impaired				Past due		Total	
				Sub-	but not		gross	Impairment
	Strong	Good	Satisfactory	standard	impaired	Impaired	amount	allowances[5]
	$m	$m	$m	$m	$m	$m	$m	$m
s	**97,365**	**583**	**939**	**47**			**98,934**	
	5,318	**32**	**416**	**2**			**5,768**	
of s	**28,410**						**28,410**	

	116,633	**21,243**	**19,894**	**576**			**158,346**	
nd e	**6,749**	**790**	**190**	**100**			**7,829**	
	77,088	**10,995**	**10,656**	**299**			**99,038**	
	14,546	**4,391**	**3,239**	**127**			**22,303**	
s	**18,250**	**5,067**	**5,809**	**50**			**29,176**	
t	**3,037**	**701**	**736**	**383**			**4,857**	
nd e	**139**	**193**		**64**			**396**	
	2,898	**508**	**616**	**319**			**4,341**	
			120				**120**	
s	**248,101**	**32,056**	**7,209**	**1,110**			**288,476**	
	472,691	**214,152**	**194,393**	**16,836**	**12,179**	**23,758**	**934,009**	**(9,555)**
	309,720	**29,322**	**15,021**	**944**	**7,568**	**11,507**	**374,082**	**(2,879)**
and	**127,673**	**168,772**	**171,466**	**15,379**	**4,274**	**11,949**	**499,513**	**(6,435)**
	35,298	**16,058**	**7,906**	**513**	**337**	**302**	**60,414**	**(241)**
t ost	**73,226**	**11,929**	**4,836**	**407**	**1**	**20**	**90,419**	**(18)**
g	**108,238**	**16,552**	**20,931**	**46**		**488**	**146,255**	
	382,328	**18,600**	**16,341**	**4,525**		**1,326**	**423,120**	
nd r	**93,562**	**3,963**	**4,756**	**2,270**			**104,551**	
	288,766	**14,637**	**11,585**	**2,255**		**1,326**	**318,569**	

	10,177	**9,605**	**17,279**	**1,635**	**703**	**2,133**	**41,532**	**(1,454)**
	10,149	**8,815**	**16,213**	**1,567**	**701**	**2,085**	**39,530**	**(1,433)**
nt or	**28**	**790**	**1,066**	**68**	**2**	**48**	**2,002**	**(21)**
	8,306	**5,688**	**10,204**	**632**	**147**	**333**	**25,310**	
ents	**1,084**	**3,850**	**3,798**	**343**	**22**	**52**	**9,149**	
	7,222	**1,838**	**6,406**	**289**	**125**	**281**	**16,161**	
er	**1,553,830**	**331,141**	**293,178**	**26,199**	**13,030**	**28,058**	**2,245,436**	**(11,027)**
	%	**%**	**%**	**%**	**%**	**%**	**%**	
of	**69.2**	**14.7**	**13.1**	**1.2**	**0.6**	**1.2**	**100.0**	

Table of Contents

Report of the Directors: Risk (continued)

Credit risk

Distribution of financial instruments by credit quality (continued)

	Neither past due nor impaired				Past due but not		Total gross	Impairment
	Strong	Good	Satisfactory	Sub-standard	impaired	Impaired	amount	allowances[5]
	$m	$m	$m	$m	$m	$m	$m	$m
t nks e	127,971	1,438	195	353			129,957	
from s g nt	4,515	46	365	1			4,927	
dness	27,674						27,674	
sets[6]	168,521	35,042	24,740	641			228,944	
and ble	13,938	1,641	559	32			16,170	
urities d	111,138	17,786	12,305	303			141,532	
	17,492	4,961	5,016	112			27,581	
rs	25,953	10,654	6,860	194			43,661	
ssets at	3,017	4,476	1,207	331			9,031	
and ble	5			51			56	

urities d	3,011	4,476	1,124	280			8,891		
	1		83				84		
rs s[6]	269,490	58,596	15,962	960			345,008		
o held ed	487,734	239,136	196,685	20,802	13,357	29,283	986,997	(12,337)	
	320,678	32,601	15,109	1,130	8,876	15,160	393,554	(4,600)	
e and l	141,375	192,799	171,748	18,986	3,922	13,795	542,625	(7,441)	
x s	25,681	13,736	9,828	686	559	328	50,818	(296)	
o at cost	83,766	19,525	7,945	914	1	47	112,198	(49)	
s ing	98,470	28,367	33,283	1,593			161,713		
ts	347,218	27,373	22,600	5,304		2,278	404,773		
and ar	68,966	6,294	4,431	1,826			81,517		
urities	278,252	21,079	18,169	3,478		2,278	323,256		
d for	802	43	79		2	465	1,391	(16)	
groups	768	43	79				890		
ent for	34				2	465	501	(16)	
ts	12,213	7,521	12,897	631	208	419	33,889		
ments ances	1,507	4,644	4,281	298	34	11	10,775		
income	10,706	2,877	8,616	333	174	408	23,114		
ber	1,631,391	421,563	315,958	31,530	13,568	32,492	2,446,502	(12,402)	2
	%	%	%	%	%	%	%		
e of	66.7	17.2	12.9	1.3	0.6	1.3	100.0		

For footnotes, see page 191.

Table of Contents

Past due but not impaired gross financial instruments

(Audited)

Past due but not impaired gross financial instruments are those loans where, although customers have failed to make payments in accordance with the contractual terms of their

facilities, they have not met the impaired loan criteria described on page 128.

In personal lending, past due but not impaired balances decreased, mainly due to the Brazilian reclassification and the continued run-off and loan sales in the CML portfolio.

Past due but not impaired gross financial instruments by geographical region

(Audited)

	Europe $m	Asia $m	MENA $m	North America $m	Latin America $m	Total $m
Loans and advances to customers held at amortised cost	**1,928**	**3,405**	**909**	**5,392**	**545**	**12,179**
personal	**1,152**	**2,573**	**180**	**3,287**	**376**	**7,568**
corporate and commercial	**762**	**790**	**710**	**1,843**	**169**	**4,274**
non-bank financial institutions	**14**	**42**	**19**	**262**		**337**
Assets held for sale				**2**	**701**	**703**
disposal group					**701**	**701**
non-current assets held for sale				**2**		**2**
Other financial instruments	**10**	**39**	**15**	**80**	**4**	**148**
At 31 December 2015	**1,938**	**3,444**	**924**	**5,474**	**1,250**	**13,030**
Loans and advances to customers held at amortised cost	2,409	4,260	704	4,634	1,350	13,357
personal	1,159	2,880	182	3,759	896	8,876
corporate and commercial	1,244	1,102	508	623	445	3,922

non-bank financial institutions	6	278	14	252	9	559
Assets held for sale				2		2
disposal group						
non-current assets held for sale				2		2
Other financial instruments	6	52	31	95	25	209
At 31 December 2014	2,415	4,312	735	4,731	1,375	13,568

Ageing analysis of days for past due but not impaired gross financial instruments

(Audited)

	Up to 29 days $m	30-59 days $m	60-89 days $m	90-179 days $m	180 days and over $m	Total $m
Loans and advances to customers held at amortised cost	**9,403**	**1,917**	**727**	**111**	**21**	**12,179**
personal	**5,665**	**1,401**	**502**			**7,568**
corporate and commercial	**3,432**	**505**	**225**	**93**	**19**	**4,274**
non-bank financial institutions	**306**	**11**		**18**	**2**	**337**
Assets held for sale	**476**	**137**	**90**			**703**
disposal group	**476**	**136**	**89**			**701**
non-current assets held for sale		**1**	**1**			**2**
Other financial instruments	**80**	**35**	**14**	**10**	**9**	**148**
At 31 December 2015	**9,959**	**2,089**	**831**	**121**	**30**	**13,030**
Loans and advances to customers held at amortised cost	10,427	2,057	801	54	18	13,357
personal	6,477	1,717	676	5	1	8,876
corporate and commercial	3,417	328	114	48	15	3,922
non-bank financial institutions	533	12	11	1	2	559
Assets held for sale				1	1	2
disposal group						
non-current assets held for				1	1	2

sale						
Other financial instruments	130	33	18	11	17	209
At 31 December 2014	10,557	2,090	819	66	36	13,568

Table of Contents

Report of the Directors: Risk (continued)

Credit risk

Impaired loans

(Audited)

Impaired loans and advances are those that meet any of the following criteria:

wholesale loans and advances classified as Customer Risk Rating (CRR) 9 or CRR 10. These grades are assigned when the bank considers that either the customer is unlikely to pay their credit obligations in full without recourse to security, or when the customer is more than 90 days past due on any material credit obligation to HSBC.

retail loans and advances classified as Expected Loss (EL) 9 or EL 10. These grades are typically assigned to retail loans and advances more than 90 days past due
unless individually they have been assessed as not impaired.

renegotiated loans and advances that have been subject to a change in contractual cash flows as a result of a concession which the lender would not otherwise consider, and where it is probable that without the concession the borrower would be unable to meet the contractual payment obligations in full, unless the concession is insignificant and there are no other indicators of impairment. Renegotiated loans remain classified as impaired until there is sufficient evidence to demonstrate a significant reduction in the risk of non-payment of future cash flows, and there are no other indicators of impairment.

Movement in impaired loans by geographical region

	Europe $m	Asia $m	MENA $m	North America $m	Latin America $m	Total $m

Impaired loans at 1 January 2015	10,242	2,048	1,981	11,694	3,365	29,330
personal	2,544	491	242	10,826	1,057	15,160
corporate and commercial	7,385	1,545	1,696	862	2,307	13,795
financial	313	12	43	6	1	375
Classified as impaired during the year	3,909	1,893	338	2,986	2,434	11,560
personal	1,257	813	178	2,245	1,502	5,995
corporate and commercial	2,567	1,079	159	740	924	5,469
financial	85	1	1	1	8	96
Transferred from impaired to unimpaired during the year	(964)	(204)	(107)	(1,786)	(245)	(3,306)
personal	(211)	(169)	(82)	(1,699)	(185)	(2,346)
corporate and commercial	(734)	(35)	(6)	(87)	(60)	(922)
financial	(19)		(19)			(38)
Amounts written off	(870)	(595)	(335)	(589)	(1,312)	(3,701)
personal	(280)	(416)	(113)	(493)	(961)	(2,263)
corporate and commercial	(577)	(179)	(222)	(95)	(351)	(1,424)
financial	(13)			(1)		(14)
Net repayments and other	(2,640)	(767)	(111)	(3,375)	(3,212)	(10,105)
personal	(780)	(203)		(2,885)	(1,171)	(5,039)
corporate and commercial	(1,778)	(562)	(110)	(486)	(2,033)	(4,969)
financial	(82)	(2)	(1)	(4)	(8)	(97)
Impaired loans at 31 December 2015	9,677	2,375	1,766	8,930	1,030	23,778
personal	2,530	516	225	7,994	242	11,507
corporate and commercial	6,863	1,848	1,517	934	787	11,949
financial	284	11	24	2	1	322
	%	%	%	%	%	%
Impaired loans as a percentage of gross loans	2.3	0.6	4.5	6.5	4.8	2.3
personal	1.5	0.4	3.4	13.7	4.1	3.1
corporate and commercial	3.6	0.9	6.8	1.5	6.9	2.4
financial	0.5	0.0	0.2	0.0	0.0	0.2

Table of Contents

	Europe $m	Asia $m	MENA $m	North America $m	Latin America $m	Total $m
Impaired loans at 1 January 2014	13,228	1,623	2,285	15,123	4,244	36,503
personal	2,938	526	317	13,669	1,348	18,798
corporate and commercial	9,714	1,082	1,765	1,427	2,889	16,877
financial	576	15	203	27	7	828
Classified as impaired during the year	3,367	1,970	346	4,724	3,342	13,749
personal	1,168	857	193	4,360	1,958	8,536
corporate and commercial	2,166	1,113	153	354	1,383	5,169
financial	33			10	1	44
Transferred from impaired to unimpaired during the year	(1,661)	(230)	(320)	(2,609)	(730)	(5,550)
personal	(282)	(184)	(178)	(2,551)	(364)	(3,559)
corporate and commercial	(1,319)	(46)	(53)	(57)	(366)	(1,841)
financial	(60)		(89)	(1)		(150)
Amounts written off	(2,037)	(617)	(111)	(1,369)	(2,048)	(6,182)
personal	(631)	(470)	(77)	(1,007)	(1,371)	(3,556)
corporate and commercial	(1,201)	(147)	(29)	(356)	(673)	(2,406)
financial	(205)		(5)	(6)	(4)	(220)
Net repayments and other	(2,655)	(698)	(219)	(4,175)	(1,443)	(9,190)
personal	(649)	(238)	(13)	(3,645)	(514)	(5,059)
corporate and commercial	(1,975)	(457)	(140)	(506)	(926)	(4,004)
financial	(31)	(3)	(66)	(24)	(3)	(127)
Impaired loans at	10,242	2,048	1,981	11,694	3,365	29,330

31 December 2014						
personal	2,544	491	242	10,826	1,057	15,160
corporate and commercial	7,385	1,545	1,696	862	2,307	13,795
financial	313	12	43	6	1	375
	%	%	%	%	%	%
Impaired loans as a percentage of gross loans	2.3	0.5	4.8	8.4	6.1	2.7
personal	1.4	0.4	3.7	16.6	7.8	3.9
corporate and commercial	3.5	0.7	8.2	1.5	7.5	2.5
financial	0.7	0.0	0.3	0.0	0.0	0.2

At 31 December 2014, our Brazilian impaired loans were $1.4bn in corporate and commercial and $0.8bn in personal.

Excluding the Brazilian reclassification to Assets held for sale , corporate and commercial impaired loans decreased $0.4bn including the favourable effects of a $0.8bn foreign exchange reduction. In personal, the continued run-off of the US CML portfolio reduced collectively assessed impaired loan balances by a further $2.7bn. Net repayments and other included $2.1bn of CML portfolio assets that were reclassified as held for sale or sold during the year. Whilst there was a reduction in total personal impaired loans, there was a marginal increase in the UK resulting from improved identification of impaired residential mortgages.

Renegotiated loans and forbearance

The contractual terms of a loan may be modified for a number of reasons, including changes in market conditions, customer retention and other factors not related to the current or potential credit deterioration of a customer. Forbearance describes concessions made on the contractual terms of a loan in response to an obligor s financial difficulties. We classify and report loans on which concessions have been granted under conditions of credit distress as renegotiated loans when their contractual payment terms have been modified because we have

significant concerns about the borrowers ability to meet contractual payments when due. On renegotiation, where the existing agreement is cancelled and a new agreement is made on substantially different terms, or if the terms of an existing agreement are modified such that the renegotiated loan is substantially a different financial instrument, the loan would be derecognised and recognised as a new loan for accounting purposes. However, the newly recognised financial asset will retain the renegotiated loan classification. Concessions on loans made to customers which do not affect the payment structure or basis of repayment, such as waivers of financial or security covenants, do not directly provide concessionary relief to customers in terms of their ability to service obligations as they fall due and are therefore not included in this classification.

The most significant portfolio of renegotiated loans remained in North America, substantially all of which were retail loans held by HSBC Finance Corporation (HSBC Finance).

The following tables show the gross carrying amounts of the Group s holdings of renegotiated loans and advances to customers by industry sector, geography, credit quality classification and by arrangement type.

HSBC HOLDINGS PLC

129

Table of Contents

Report of the Directors: Risk (continued)

Credit risk

Renegotiated loans and advances to customers by geographical region

	Europe $m	Asia $m	MENA $m	North America $m	Latin America $m	Total $m
First lien residential mortgages	1,461	68	36	10,680	37	12,282
neither past due nor impaired	512	47	11	3,376	27	3,973
past due but not impaired	174	5	4	1,567	3	1,753
impaired	775	16	21	5,737	7	6,556
Other personal lending[3]	298	272	33	1,054	35	1,692
neither past due nor impaired	131	141	24	410	10	716
past due but not impaired	51	16	2	173	1	243
impaired	116	115	7	471	24	733
Corporate and commercial	5,215	599	1,411	638	506	8,369
neither past due nor impaired	1,467	119	343	93	130	2,152
past due but not impaired	109		14			123
impaired	3,639	480	1,054	545	376	6,094
Non-bank financial institutions	340	4	272			616
neither past due nor impaired	143		248			391
past due but not impaired			24			24
impaired	197	4				201
Renegotiated loans at 31 December 2015	7,314	943	1,752	12,372	578	22,959
neither past due nor impaired	2,253	307	626	3,879	167	7,232
	334	21	44	1,740	4	2,143

past due but not impaired						
impaired	**4,727**	**615**	**1,082**	**6,753**	**407**	**13,584**
Impairment allowances on renegotiated loans	**1,402**	**193**	**575**	**1,014**	**155**	**3,339**
renegotiated loans as % of total gross loans	**1.8%**	**0.3%**	**5.6%**	**9.5%**	**3.2%**	**2.5%**
First lien residential mortgages	1,605	94	58	13,540	60	15,357
neither past due nor impaired	529	63	19	3,695	32	4,338
past due but not impaired	221	8	1	1,894	5	2,129
impaired	855	23	38	7,951	23	8,890
Other personal lending[3]	324	292	27	1,267	326	2,236
neither past due nor impaired	184	173	16	453	14	840
past due but not impaired	40	22	5	214	1	282
impaired	100	97	6	600	311	1,114
Corporate and commercial	5,469	501	1,439	427	1,324	9,160
neither past due nor impaired	1,383	102	483	36	303	2,307
past due but not impaired	68		31	1	1	101
impaired	4,018	399	925	390	1,020	6,752
Non-bank financial institutions	413	4	323	1	1	742
neither past due nor impaired	219		305			524
past due but not impaired						
impaired	194	4	18	1	1	218
Renegotiated loans at 31 December 2014	7,811	891	1,847	15,235	1,711	27,495
neither past due nor impaired	2,315	338	823	4,184	349	8,009
past due but not impaired	329	30	37	2,109	7	2,512
impaired	5,167	523	987	8,942	1,355	16,974
Impairment allowances on renegotiated loans	1,458	170	458	1,499	704	4,289
renegotiated loans as % of total gross loans	1.9%	0.2%	6.1%	11.5%	3.7%	2.8%

For footnote, see page 191.

The following table shows movements in renegotiated loans during the year. Renegotiated loans decreased by $4.5bn to $23bn in 2015, partly due to the Brazilian reclassification of $1bn. Renegotiated loans in personal lending reduced by $3.6bn. Included within other

movements is $2.1bn of CML portfolio assets that were transferred to Assets held for sale . Write-offs reduced as a result of improvements in US economic conditions and housing market.

Table of Contents

Movement in renegotiated loans and advances to customers by geographical region

	Europe $m	Asia $m	MENA $m	North America $m	Latin America $m	Total $m
Renegotiated loans at 1 January 2015	7,811	891	1,847	15,235	1,711	27,495
personal	1,929	386	85	14,807	386	17,593
corporate and commercial	5,469	501	1,439	427	1,324	9,160
non-bank financial institutions	413	4	323	1	1	742
Loans renegotiated in the year without derecognition	1,970	421	115	999	553	4,058
personal	471	87	7	625	250	1,440
corporate and commercial	1,494	334	89	374	303	2,594
non-bank financial institutions	5		19			24
Loans renegotiated in the year resulting in recognition of a new loan	222	16	196	(1)	175	608
personal	57			(1)	18	74
corporate and commercial	156	16	4		157	333
non-bank financial institutions	9		192			201
Repayments	(1,675)	(351)	(276)	(1,304)	(467)	(4,073)
personal	(574)	(88)	(32)	(1,166)	(185)	(2,045)
corporate and commercial	(1,054)	(263)	(159)	(138)	(282)	(1,896)
non-bank financial institutions	(47)		(85)			(132)
Amounts written off	(294)	(52)	(11)	(254)	(290)	(901)
personal	(45)	(24)	(5)	(241)	(139)	(454)
corporate and commercial	(249)	(28)	(6)	(12)	(150)	(445)

non-bank financial institutions				**(1)**	**(1)**	**(2)**
Other	**(720)**	**18**	**(119)**	**(2,303)**	**(1,104)**	**(4,228)**
personal	**(79)**	**(21)**	**14**	**(2,290)**	**(258)**	**(2,634)**
corporate and commercial	**(601)**	**39**	**44**	**(13)**	**(846)**	**(1,377)**
non-bank financial institutions	**(40)**		**(177)**			**(217)**
At 31 December 2015	**7,314**	**943**	**1,752**	**12,372**	**578**	**22,959**
personal	**1,759**	**340**	**69**	**11,734**	**72**	**13,974**
corporate and commercial	**5,215**	**599**	**1,411**	**638**	**506**	**8,369**
non-bank financial institutions	**340**	**4**	**272**			**616**
Renegotiated loans at 1 January 2014	9,756	767	2,094	18,789	2,769	34,175
personal	2,251	435	149	18,130	607	21,572
corporate and commercial	7,270	330	1,583	658	2,161	12,002
non-bank financial institutions	235	2	362	1	1	601
Loans renegotiated in the year without derecognition	1,543	371	296	862	725	3,797
personal	433	83	10	774	310	1,610
corporate and commercial	939	288	286	78	415	2,006
non-bank financial institutions	171			10		181
Loans renegotiated in the year resulting in recognition of a new loan	500	5	79		92	676
personal	69	2			28	99
corporate and commercial	381		61		64	506
non-bank financial institutions	50	3	18			71
Repayments	(2,416)	(246)	(562)	(1,518)	(1,036)	(5,778)
personal	(635)	(96)	(47)	(1,319)	(288)	(2,385)
corporate and commercial	(1,757)	(149)	(445)	(189)	(747)	(3,287)
non-bank financial institutions	(24)	(1)	(70)	(10)	(1)	(106)
Amounts written off	(828)	(42)	(23)	(640)	(510)	(2,043)
personal	(88)	(28)	(7)	(568)	(223)	(914)
corporate and commercial	(740)	(14)	(16)	(72)	(286)	(1,128)
non-bank financial institutions					(1)	(1)
Other	(744)	36	(37)	(2,258)	(329)	(3,332)
personal	(101)	(10)	(20)	(2,210)	(48)	(2,389)
corporate and commercial	(624)	46	(30)	(48)	(283)	(939)
non-bank financial institutions	(19)		13		2	(4)

At 31 December 2014	7,811	891	1,847	15,235	1,711	27,495
personal	1,929	386	85	14,807	386	17,593
corporate and commercial	5,469	501	1,439	427	1,324	9,160
non-bank financial institutions	413	4	323	1	1	742

A range of forbearance strategies are employed in order to improve the management of customer relationships, maximise collection opportunities and, if possible, avoid default, foreclosure or repossession.

The table below shows the arrangement type as a percentage of the total value of arrangements offered. Corporate renegotiated loans often require the granting of more than one arrangement type as part of an effective strategy. The percentages reported in the table below includes the effect of loans being reported in more than one arrangement type.

Report of the Directors: Risk (continued)

Credit risk

Renegotiated loans by arrangement type: corporate and commercial and financial

	%
Maturity term extensions	**42.4**
Reductions in margin, principal forgiveness, debt equity swaps and interest, fees or penalty payment forgiveness	**19.6**
Other changes to repayment profile	**14.1**
Interest only conversion	**13.9**
Other	**10.0**
At 31 December 2015	**100.0**

In personal lending, renegotiated loans have been allocated to the single most dominant arrangement type.

Renegotiated loans by arrangement type: personal lending

	%
Personal	
interest rate and terms modifications	**11.4**
payment concessions	**6.0**
collection re-age[8]	**35.0**
modification re-age[9]	**42.9**
other	**4.7**
At 31 December 2015	**100.0**

For footnotes, see page 191.

Impairment of loans and advances

(Audited)

For an analysis of loan impairment charges and other credit risk provisions by global business, see page 65.

The tables below analyse the loan impairment charges for the year by industry sector, for impaired loans and advances that are either individually or collectively assessed, and collective impairment allowances on loans and advances that are classified as not impaired.

Loan impairment charge to the income statement by industry sector

	Europe $m	Asia $m	MENA $m	North America $m	Latin America $m	Total $m
Personal	**263**	**309**	**122**	**157**	**983**	**1,834**
first lien residential mortgages	**(7)**	**(1)**	**49**	**70**	**41**	**152**
other personal[3]	**270**	**310**	**73**	**87**	**942**	**1,682**
Corporate and commercial	**432**	**372**	**195**	**319**	**451**	**1,769**
manufacturing and international trade and services	**158**	**250**	**107**	**26**	**305**	**846**
commercial real estate and other property-related	**33**	**18**	**49**	**24**	**47**	**171**
other commercial[4]	**241**	**104**	**39**	**269**	**99**	**752**
Financial	**14**		**(18)**	**(7)**		**(11)**
Total loan impairment charge for the year ended 31 December 2015	**709**	**681**	**299**	**469**	**1,434**	**3,592**
Personal	245	321	25	117	1,095	1,803
first lien residential mortgages	(75)	6	(24)	26	15	(52)
other personal[3]	320	315	49	91	1,080	1,855
Corporate and commercial	790	327	6	196	937	2,256
manufacturing and international trade and services	520	197	36	116	382	1,251
commercial real estate and other property-related	78	29	(28)	27	176	282
other commercial[4]	192	101	(2)	53	379	723
Financial	44	(4)	(32)	(13)	1	(4)
Total loan impairment charge for the year ended	1,079	644	(1)	300	2,033	4,055

31 December 2014
For footnotes, see page 191.

Loan impairment charge to the income statement by assessment type

	Europe $m	Asia $m	MENA $m	North America $m	Latin America $m	Total $m
Individually assessed impairment allowances	**495**	**300**	**161**	**227**	**322**	**1,505**
new allowances	**991**	**518**	**216**	**290**	**401**	**2,416**
release of allowances no longer required	**(455)**	**(179)**	**(52)**	**(46)**	**(93)**	**(825)**
recoveries of amounts previously written off	**(41)**	**(39)**	**(3)**	**(17)**	**14**	**(86)**
Collectively assessed impairment allowances[10]	**214**	**381**	**138**	**242**	**1,112**	**2,087**
new allowances net of allowance releases	**561**	**507**	**168**	**301**	**1,272**	**2,809**
recoveries of amounts previously written off	**(347)**	**(126)**	**(30)**	**(59)**	**(160)**	**(722)**
Total loan impairment charge for the year ended 31 December 2015	**709**	**681**	**299**	**469**	**1,434**	**3,592**

For footnote, see page 99.

Table of Contents

	Europe $m	Asia $m	MENA $m	North America $m	Latin America $m	Total $m
Individually assessed impairment allowances	617	351	32	190	590	1,780
new allowances	1,112	542	134	298	738	2,824
release of allowances no longer required	(486)	(171)	(95)	(88)	(90)	(930)
recoveries of amounts previously written off	(9)	(20)	(7)	(20)	(58)	(114)
Collectively assessed impairment allowances[10]	462	293	(33)	110	1,443	2,275
new allowances net of allowance releases	757	426	2	205	1,726	3,116
recoveries of amounts previously written off	(295)	(133)	(35)	(95)	(283)	(841)
Total loan impairment charge for the year ended 31 December 2014	1,079	644	(1)	300	2,033	4,055

For footnote, see page 191.

On a reported basis, loan impairment charges of $3.6bn were $0.5bn lower than in 2014, primarily due to favourable currency translation in Latin America and Europe.

The commentary that follows is on a constant currency basis, while tables are presented on a reported basis.

Loan impairment charges increased by $219m compared with 2014. Notably, in the fourth quarter of 2015, our loan impairment charges increased compared with the third quarter following a rise in individually assessed loan impairment charges in a small number of countries. This was reflective of specific circumstances associated with those countries with no common underlying theme. In addition, we increased our collectively assessed loan impairment allowances on exposures related to the oil and gas industry by $0.2bn. This was primarily in North America, Middle East and North Africa, and Asia.

The commentary that follows sets out in more detail the factors that have contributed to movements in loan impairment charges compared with 2014.

Collectively assessed loan impairment allowances rose by $221m, mainly in Middle East and North Africa, North America and Asia, partly offset in Europe. It arose from the following:

- in Middle East and North Africa (up by $167m), this was mainly in the UAE and reflected increased impairment allowances on our residential mortgage book following a review of the quality and value of collateral. In addition, loan impairment allowances increased on our corporate and commercial exposures, notably in the oil and foodstuffs industries;

- in North America (up by $132m) and Asia (up by $108m), the increase was in the other commercial sector. This reflected an increase in allowances against our oil and gas exposures in the regions. In our US CML portfolio, loan impairment allowances on residential mortgages were higher than in 2014 following lower favourable market value adjustments of underlying properties as improvements in housing market conditions were less pronounced in 2015.

- in Europe, collectively assessed loan impairment allowances were $192m lower as 2014 included additional impairment charges from revisions to certain estimates used in our corporate collective loan impairment calculation.

Individually assessed loan impairment allowances were broadly unchanged from 2014. This reflected decreases in Latin America, Europe and Asia which were offset by increases in Middle East and North Africa and in North America. This included the following:

- in Latin America (down by $95m), Europe (down by $44m) and Asia (down by $44m), we saw reductions in individually assessed loan impairment allowances as 2014 included significant impairment charges related to corporate and commercial exposures in our respective regions. In Asia, the reduction was partly offset by an increase in loan impairment allowances against a small number of customers in Indonesia; and

- in Middle East and North Africa (up by $134m) and North America (up by $47m), individually assessed loan impairment allowances increased. In the former, this primarily related to higher loan impairment allowances on food wholesalers, while in North America the rise was in the oil and gas sector.

Charge for impairment losses as a percentage of average gross loans and advances to customers by geographical region

	Europe %	Asia %	MENA %	North America %	Latin America %	Total %
New allowances net of allowance releases	**0.31**	**0.23**	**1.07**	**0.41**	**5.37**	**0.48**
Recoveries	**(0.11)**	**(0.05)**	**(0.11)**	**(0.06)**	**(0.50)**	**(0.09)**
Total charge for impairment losses at 31 December 2015	**0.20**	**0.18**	**0.96**	**0.35**	**4.87**	**0.39**
Amount written off net of recoveries	**0.25**	**0.12**	**0.97**	**0.45**	**3.94**	**0.37**
New allowances net of allowance releases	0.37	0.22	0.14	0.32	5.00	0.53
Recoveries	(0.08)	(0.04)	(0.14)	(0.09)	(0.72)	(0.10)
Total charge for impairment losses at 31 December 2014	0.29	0.18		0.23	4.28	0.43
Amount written off net of recoveries	0.49	0.13	0.58	0.97	3.59	0.58

Table of Contents

Report of the Directors: Risk (continued)

Credit risk

Movement in impairment allowances by industry sector and by geographical region

	Europe $m	Asia $m	MENA $m	North America $m	Latin America $m	Total $m
Impairment allowances at 1 January 2015	4,455	1,356	1,406	2,640	2,529	12,386
Amounts written off						
Personal	(627)	(416)	(114)	(554)	(996)	(2,707)
first lien residential mortgages	(12)	(6)	(1)	(344)	(24)	(387)
other personal[3]	(615)	(410)	(113)	(210)	(972)	(2,320)
Corporate and commercial	(657)	(179)	(222)	(106)	(309)	(1,473)
manufacturing and international trade and services	(234)	(149)	(214)	(28)	(213)	(838)
commercial real estate and other property-related	(244)	(5)	(8)	(57)	(30)	(344)
other commercial[4]	(179)	(25)		(21)	(66)	(291)
Financial	(12)			(2)		(14)
Total amounts written off	(1,296)	(595)	(336)	(662)	(1,305)	(4,194)
Recoveries of amounts written off in previous years						
Personal	340	135	30	57	119	681
first lien residential mortgages	6	4		26	(17)	19
other personal[3]	334	131	30	31	136	662
Corporate and commercial	46	30	3	18	27	124
manufacturing and international trade and services	16	20	2	8	15	61
commercial real estate and other property-related	24	5		5	2	36
other commercial[4]	6	5	1	5	10	27
Financial	2			1		3
Total recoveries of amounts written off in previous years	388	165	33	76	146	808

Charge to income statement	**709**	**681**	**299**	**469**	**1,434**	**3,592**
Exchange and other movements[11]	**(387)**	**(82)**	**16**	**(482)**	**(2,084)**	**(3,019)**
Impairment allowances at 31 December 2015	**3,869**	**1,525**	**1,418**	**2,041**	**720**	**9,573**
Impairment allowances against banks:						
individually assessed			**18**			**18**
Impairment allowances against customers:						
individually assessed	**2,661**	**908**	**1,068**	**327**	**438**	**5,402**
collectively assessed[10]	**1,208**	**617**	**332**	**1,714**	**282**	**4,153**
Impairment allowances at 31 December 2015	**3,869**	**1,525**	**1,418**	**2,041**	**720**	**9,573**
Impairment allowances at 1 January 2014	5,598	1,214	1,583	4,242	2,564	15,201
Amounts written off						
Personal	(724)	(463)	(157)	(1,030)	(1,359)	(3,733)
first lien residential mortgages	(21)	(17)	(4)	(731)	(40)	(813)
other personal[3]	(703)	(446)	(153)	(299)	(1,319)	(2,920)
Corporate and commercial	(1,202)	(146)	(47)	(346)	(684)	(2,425)
manufacturing and international trade and services	(732)	(86)	(41)	(81)	(428)	(1,368)
commercial real estate and other property-related	(342)	(53)	(6)	(153)	(39)	(593)
other commercial[4]	(128)	(7)		(112)	(217)	(464)
Financial	(203)		(8)	(6)	(4)	(221)
Total amounts written off	(2,129)	(609)	(212)	(1,382)	(2,047)	(6,379)
Recoveries of amounts written off in previous years						
Personal	271	143	35	86	283	818
first lien residential mortgages	3	3		40	33	79
other personal[3]	268	140	35	46	250	739
Corporate and commercial	29	9	7	25	58	128
manufacturing and international trade and services	19	7	7	6	46	85
commercial real estate and other property-related	11			3	1	15
other commercial[4]	(1)	2		16	11	28
Financial	4	1		4		9
Total recoveries of amounts written off in previous years	304	153	42	115	341	955
Charge to income statement	1,079	644	(1)	300	2,033	4,055
Exchange and other movements[11]	(397)	(46)	(6)	(635)	(362)	(1,446)
Impairment allowances at 31 December 2014	4,455	1,356	1,406	2,640	2,529	12,386
Impairment allowances against banks:						
individually assessed	31		18			49
Impairment allowances against customers:						

individually assessed	2,981	812	1,110	276	1,016	6,195
collectively assessed[10]	1,443	544	278	2,364	1,513	6,142
Impairment allowances at 31 December 2014	4,455	1,356	1,406	2,640	2,529	12,386

For footnotes, see page 191.

Table of Contents

Movement in impairment allowances on loans and advances to customers and banks

(Audited)

	Banks individually assessed	Customers Individually assessed	Customers Collectively assessed[10]	Total
	$m	$m	$m	$m
At 1 January 2015	**49**	**6,195**	**6,142**	**12,386**
Amounts written off		**(1,368)**	**(2,826)**	**(4,194)**
Recoveries of loans and advances previously written off		**86**	**722**	**808**
Charge to income statement	**(11)**	**1,516**	**2,087**	**3,592**
Exchange and other movements[11]	**(20)**	**(1,027)**	**(1,972)**	**(3,019)**
At 31 December 2015	**18**	**5,402**	**4,153**	**9,573**
Impairment allowances:				
on loans and advances to customers		**5,402**	**4,153**	**9,555**
personal		**426**	**2,453**	**2,879**
corporate and commercial		**4,800**	**1,635**	**6,435**
non-bank financial institutions		**176**	**65**	**241**
	%	**%**	**%**	**%**
as a percentage of loans and advances		**0.6**	**0.4**	**0.9**
	$m	$m	$m	$m
At 1 January 2014	58	7,072	8,071	15,201
Amounts written off	(6)	(2,313)	(4,060)	(6,379)
Recoveries of loans and advances previously written off		114	841	955
Charge to income statement	4	1,776	2,275	4,055
Exchange and other movements[11]	(7)	(454)	(985)	(1,446)
At 31 December 2014	49	6,195	6,142	12,386

Impairment allowances:				
on loans and advances to customers		6,195	6,142	12,337
personal		468	4,132	4,600
corporate and commercial		5,532	1,909	7,441
non-bank financial institutions		195	101	296
	%	%	%	%
as a percentage of loans and advances		0.6	0.6	1.1

For footnotes, see page 191.

Wholesale lending

On a reported basis and excluding the effects of the Brazilian reclassification of loans and advances to Assets held for sale , gross loans decreased by $32bn, mainly due to adverse foreign exchange effects.

The commentary that follows is on a constant currency basis, while tables are presented on a reported basis.

Wholesale lending increased by $0.5bn in the year. However, in Asia it fell by $9.6bn, mainly in Hong Kong and, to a lesser extent, mainland China and Taiwan. In Asia, the fourth quarter of 2015 saw lower than expected credit growth with a continuation of the slowdown in trade, the repayment of some existing corporate loans and slower demand for new lending.

In Europe, lending increased by $3.2bn, mainly in the UK and Germany. In the UK it rose by $1.9bn with increases in financial partly offset by decreases in corporate and commercial , mainly relating to corporate overdraft

balances where a small number of clients benefit from the use of net interest arrangements between overdrafts and deposits.

In Middle East and North Africa, overall lending reduced by $1.2bn with decreases of $3.2bn in financial offset by increases of $2.0bn in corporate and commercial .

In North America, lending increased by $7.5bn, mainly comprising $3.7bn in the US and $4.9bn in Canada.
The increase in Canada included: $3.8bn following a change in balance sheet presentation where certain bankers acceptances previously disclosed under Trading assets were included in Loans and advances ; and $1.0bn relating to corporate overdraft balances and the use of net interest arrangements between overdraft and deposits. Comparatives have not been restated.

Excluding the effects of the Brazilian reclassification, lending in Latin America increased by $0.6bn, mainly in Argentina.

Table of Contents

Report of the Directors: Risk (continued)

Credit risk

Total wholesale lending

	Europe $m	Asia $m	MENA $m	North America $m	Latin America $m	Total $m
Corporate and commercial (A)	**191,765**	**211,224**	**22,268**	**62,882**	**11,374**	**499,513**
manufacturing	**39,003**	**34,272**	**2,504**	**17,507**	**2,572**	**95,858**
international trade and services	**62,667**	**72,199**	**9,552**	**11,505**	**3,096**	**159,019**
commercial real estate	**26,256**	**32,371**	**690**	**7,032**	**1,577**	**67,926**
other property-related	**7,323**	**35,206**	**1,908**	**8,982**	**45**	**53,464**
government	**3,653**	**1,132**	**1,695**	**203**	**772**	**7,455**
other commercial[4]	**52,863**	**36,044**	**5,919**	**17,653**	**3,312**	**115,791**
Financial	**51,969**	**68,321**	**10,239**	**16,308**	**3,996**	**150,833**
non-bank financial institutions (B)	**33,621**	**13,969**	**2,321**	**9,822**	**681**	**60,414**
banks (C)	**18,348**	**54,352**	**7,918**	**6,486**	**3,315**	**90,419**
Gross loans at 31 December 2015 (D)	**243,734**	**279,545**	**32,507**	**79,190**	**15,370**	**650,346**
Impairment allowances on wholesale lending						
Corporate and commercial (a)	**2,735**	**1,256**	**1,157**	**777**	**510**	**6,435**
manufacturing	**528**	**254**	**135**	**140**	**49**	**1,106**
international trade and services	**813**	**599**	**439**	**123**	**48**	**2,022**
	613	**35**	**145**	**76**	**343**	**1,212**

commercial real estate						
other property-related	**237**	**72**	**267**	**55**	**1**	**632**
government	**6**				**2**	**8**
other commercial	**538**	**296**	**171**	**383**	**67**	**1,455**
Financial	**194**	**13**	**22**	**30**		**259**
non-bank financial institutions (b)	**194**	**13**	**4**	**30**		**241**
banks (c)			**18**			**18**
Impairment allowances at 31 December 2015 (d)	**2,929**	**1,269**	**1,179**	**807**	**510**	**6,694**
	%	%	%	%	%	%
(a) as a percentage of (A)	**1.4**	**0.6**	**5.2**	**1.2**	**4.5**	**1.3**
(b) as a percentage of (B)	**0.6**	**0.1**	**0.2**	**0.3**		**0.4**
(c) as a percentage of (C)			**0.2**			
(d) as a percentage of (D)	**1.2**	**0.5**	**3.6**	**1.0**	**3.3**	**1.0**
	$m	$m	$m	$m	$m	$m
Corporate and commercial (E)	212,523	220,799	20,588	57,993	30,722	542,625
manufacturing	39,456	37,767	2,413	15,299	12,051	106,986
international trade and services	76,629	72,814	9,675	13,484	8,189	180,791
commercial real estate	28,187	35,678	579	6,558	2,291	73,293
other property-related	7,126	34,379	1,667	8,934	281	52,387
government	2,264	1,195	1,552	164	968	6,143
other commercial[1]	58,861	38,966	4,702	13,554	6,942	123,025
Financial	45,081	76,957	13,786	16,439	10,753	163,016
non-bank financial institutions (F)	23,103	13,997	3,291	9,034	1,393	50,818
banks (G)	21,978	62,960	10,495	7,405	9,360	112,198
Gross loans at 31 December 2014 (H)	257,604	297,756	34,374	74,432	41,475	705,641
Impairment allowances on wholesale lending						
Corporate and commercial (e)	3,112	1,089	1,171	608	1,461	7,441

manufacturing	529	242	141	152	348	1,412
international trade and services	877	533	536	157	237	2,340
commercial real estate	909	44	147	101	476	1,677
other property-related	203	55	219	57	12	546
government	4		1			5
other commercial	590	215	127	141	388	1,461
Financial	252	13	39	39	2	345
non-bank financial institutions (f)	221	13	21	39	2	296
banks (g)	31		18			49
Impairment allowances at 31 December 2014 (h)	3,364	1,102	1,210	647	1,463	7,786
	%	%	%	%	%	%
(e) as a percentage of (E)	1.5	0.5	5.7	1.0	4.8	1.4
(f) as a percentage of (F)	0.9	0.1	0.6	0.4	0.1	0.6
(g) as a percentage of (G)	0.1		0.2			
(h) as a percentage of (H)	1.3	0.4	3.5	0.9	3.5	1.1

For footnote, see page 191.

Commercial real estate

Commercial real estate lending

	Europe $m	Asia $m	MENA $m	North America $m	Latin America $m	Total $m
Neither past due nor impaired	**24,533**	**32,182**	**466**	**6,659**	**1,086**	**64,926**
Past due but not impaired	**89**	**119**	**25**	**212**	**9**	**454**
Impaired loans	**1,634**	**70**	**199**	**161**	**482**	**2,546**
Total gross loans and advances at 31 December 2015	**26,256**	**32,371**	**690**	**7,032**	**1,577**	**67,926**
Of which:						
renegotiated loans[12]	**1,586**	**6**	**182**	**150**	**210**	**2,134**
Impairment allowances	**613**	**35**	**145**	**76**	**343**	**1,212**
Neither past due nor impaired	25,860	35,430	333	6,136	1,535	69,294
Past due but not impaired	18	170	47	100	28	363
Impaired loans	2,309	78	199	322	728	3,636
Total gross loans and advances at 31 December 2014	28,187	35,678	579	6,558	2,291	73,293
Of which:						
renegotiated loans[12]	1,954	19	183	191	377	2,724
Impairment allowances	909	44	147	101	476	1,677

For footnote, see page 191.

Commercial real estate lending includes the financing of corporate, institutional and high net worth individuals who are investing primarily in income-producing assets and, to a lesser extent, in their construction and development. The business focuses mainly on traditional core asset classes such as retail, offices, light industrial and residential building projects. The portfolio is globally diversified with larger concentrations in Hong Kong, the UK, the US and Canada.

In more developed markets, our exposure mainly comprises the financing of investment assets, the redevelopment of existing stock and the augmentation of both commercial and residential markets to support economic and population growth. In lesser developed commercial real estate markets our exposures comprise lending for development assets on relatively short tenors with a particular focus on supporting the larger, better capitalised developers involved in residential construction or in assets supporting economic expansion.

Our global exposure is centred largely on cities representing key locations of economic, political or cultural significance. In many lesser developed markets, industry is evolving to move away from the development and rapid construction of recent years to increasingly focus on investment stock consistent with more developed markets.

Excluding the effects of the Brazilian reclassification, commercial real estate lending was lower by $4.5bn including decreases of $3.2bn relating to adverse foreign exchange movements.

The commentary that follows is on a constant currency basis, while tables are presented on a reported basis.

The commercial real estate lending was lower by $1.3bn, largely due to a decrease of $2.6bn in Asia, mainly in Hong Kong and, to a lesser extent, mainland China and Singapore. The decrease in Asia was mainly due to the repayment and maturity of loans and was partly offset by increases of $1.0bn in North America and $0.4bn in Mexico. Europe and Middle East and Africa remained largely unchanged.

Refinance risk in commercial real estate

Commercial real estate lending tends to require the repayment of a significant proportion of the principal at maturity. Typically, a customer will arrange repayment through the acquisition of a new loan to settle the existing debt. Refinance risk is the risk that a customer, being unable to repay the debt on maturity, fails to refinance it at commercial rates. We monitor our commercial real estate portfolio closely, assessing those drivers that may indicate potential issues with refinancing. The principal driver is the vintage of the loan, when origination reflected previous market norms which do not apply in the current market. Examples might be higher loan-to-value (LTV) ratios and/or lower interest cover ratios. The range of refinancing sources in the local market is also an important consideration, with risk increasing when lenders are restricted to banks and when bank liquidity is limited. In addition, underlying fundamentals such as the reliability of tenants, the ability to let and the condition of the property are important as they influence property values.

Report of the Directors: Risk (continued)

Credit risk

Commercial real estate loans and advances maturity analysis

	Europe $m	Asia $m	MENA $m	North America $m	Latin America $m	Total $m
On demand, overdrafts or revolving						
< 1 year[13]	**6,830**	**8,811**	**252**	**2,992**	**694**	**19,579**
1-2 years	**4,367**	**5,934**	**66**	**939**	**102**	**11,408**
2-5 years	**11,459**	**11,399**	**235**	**2,037**	**138**	**25,268**
> 5 years	**3,600**	**6,227**	**137**	**1,064**	**643**	**11,671**
At 31 December 2015	**26,256**	**32,371**	**690**	**7,032**	**1,577**	**67,926**
On demand, overdrafts or revolving						
< 1 year[13]	7,382	9,810	264	1,855	1,325	20,636
1-2 years	4,643	6,689	24	1,158	205	12,719
2-5 years	11,686	12,156	156	2,131	320	26,449
> 5 years	4,476	7,023	135	1,414	441	13,489
At 31 December 2014	28,187	35,678	579	6,558	2,291	73,293

For footnote, see page 191.

Collateral on loans and advances

Collateral held is analysed separately below for commercial real estate and for other corporate, commercial and financial (non-bank) lending. This reflects the greater correlation between collateral performance and principal repayment in the commercial real estate sector than applies to other lending. In each case, the analysis includes off-balance sheet loan commitments, primarily undrawn credit lines.

The collateral measured in the tables below consists of fixed first charges on real estate and charges over cash and marketable financial instruments. The values in the tables represent the expected market value on an open market basis; no adjustment has been made to the collateral for any expected costs of recovery. Cash is valued at its nominal value and marketable securities at their fair value. The LTV ratios presented are calculated by directly associating loans and advances with the collateral that individually and uniquely supports each facility. When collateral assets are shared by multiple loans and advances, whether specifically or, more generally, by way of an all monies charge, the collateral value is pro-rated across the loans and advances protected by the collateral.

Other types of collateral which are commonly taken for corporate and commercial lending such as unsupported guarantees and floating charges over the assets of a customer s business are not measured in the tables below. While such mitigants have value, often providing rights in insolvency, their assignable value is not sufficiently certain and they are therefore assigned no value for disclosure purposes.

For impaired loans the collateral values cannot be directly compared with impairment allowances recognised. The LTV tables below use open market values with no adjustments. Impairment allowances are calculated on a different basis, by considering other cash flows and adjusting collateral values for costs of realising collateral as explained further on page 202.

Commercial real estate loans and advances

The value of commercial real estate collateral is determined by using a combination of professional and internal valuations and physical inspections. Due to the complexity of valuing collateral for commercial real estate, local valuation policies determine the frequency of review on the basis of local market conditions. Revaluations are sought with greater frequency as concerns over the performance of the collateral or the direct obligor increase. Revaluations may also be sought where customers amend their banking requirements, resulting in the Group extending further funds or other significant rearrangements of exposure or collateral, which may change the customer risk profile. As a result, the real estate collateral values used for CRR1-7 might date back to the last point at which such considerations applied. For CRR 8 and 9-10 almost all collateral would have been revalued within the last three years.

In Hong Kong, market practice is typically for lending to major property companies to be either secured by guarantees or unsecured. In Europe, facilities of a working capital nature are generally not secured by a first fixed charge and are therefore disclosed as not collateralised.

Table of Contents

Commercial real estate loans and advances including loan commitments by level of collateral

(Audited)

	Europe $m	Asia $m	MENA $m	North America $m	Latin America $m	Total $m
Rated CRR/EL 1 to 7						
Not collateralised	**4,498**	**12,329**	**499**	**8**	**500**	**17,834**
Fully collateralised	**25,773**	**26,270**	**36**	**9,997**	**542**	**62,618**
Partially collateralised (A)	**3,025**	**1,924**		**1,264**	**52**	**6,265**
collateral value on A	**2,106**	**1,175**		**981**	**8**	**4,270**
	33,296	**40,523**	**535**	**11,269**	**1,094**	**86,717**
Rated CRR/EL 8						
Not collateralised	**28**					**28**
Fully collateralised	**668**	**4**		**9**	**1**	**682**
LTV ratio:						
less than 50%	**86**			**5**	**1**	**92**
51% to 75%	**377**	**4**		**4**		**385**
76% to 90%	**174**					**174**
91% to 100%	**31**					**31**
Partially collateralised (B)	**120**	**1**		**1**		**122**
collateral value on B	**87**					**87**
	816	**5**		**10**	**1**	**832**
Rated CRR/EL 9 to 10						
Not collateralised	**65**	**51**	**5**	**2**	**299**	**422**
Fully collateralised	**900**	**18**	**7**	**76**	**123**	**1,124**
LTV ratio:						
less than 50%	**174**	**10**	**7**	**15**	**15**	**221**
51% to 75%	**425**	**2**		**27**	**59**	**513**
76% to 90%	**140**	**2**		**10**	**4**	**156**
91% to 100%	**161**	**4**		**24**	**45**	**234**

Partially collateralised (C)	**716**	**5**	**181**	**66**	**64**	**1,032**
collateral value on C	**397**	**3**	**89**	**35**	**31**	**555**
	1,681	**74**	**193**	**144**	**486**	**2,578**
At 31 December 2015	**35,793**	**40,602**	**728**	**11,423**	**1,581**	**90,127**
Rated CRR/EL 1 to 7						
Not collateralised	5,351	16,132	361	87	1,719	23,650
Fully collateralised	25,873	26,323	23	9,093	556	61,868
Partially collateralised (D)	1,384	1,599		1,819	152	4,954
collateral value on D	1,032	901		1,199	47	3,179
	32,608	44,054	384	10,999	2,427	90,472
Rated CRR/EL 8						
Not collateralised	34	7		9	2	52
Fully collateralised	568	23		30	1	622
LTV ratio:						
less than 50%	64			16	1	81
51% to 75%	222	11		10		243
76% to 90%	132	9		4		145
91% to 100%	150	3				153
Partially collateralised (E)	365			7		372
collateral value on E	296			2		298
	967	30		46	3	1,046
Rated CRR/EL 9 to 10						
Not collateralised	369	48	6	1	499	923
Fully collateralised	992	15	7	166	178	1,358
LTV ratio:						
less than 50%	78	6	7	28	10	129
51% to 75%	593	2		91	43	729
76% to 90%	167	2		17	53	239
91% to 100%	154	5		30	72	261
Partially collateralised (F)	1,085	15	181	37	50	1,368
collateral value on F	664	5	89	30	13	801
	2,446	78	194	204	727	3,649
At 31 December 2014	36,021	44,162	578	11,249	3,157	95,167

Table of Contents

Report of the Directors: Risk (continued)

Credit risk

Other corporate, commercial and financial (non-bank) loans are analysed separately below. For financing activities in other corporate and commercial lending, collateral value is not strongly correlated to principal repayment performance. Collateral values are generally refreshed when an obligor s general credit performance deteriorates and we have to

assess the likely performance of secondary sources of repayment should it prove necessary to rely on them.

Accordingly, the table below reports values only for customers with CRR 8 to 10, recognising that these loans and advances generally have valuations which are comparatively recent.

Other corporate, commercial and non-bank financial institutions loans and advances including loan commitments by level of collateral rated CRR/EL 8 to 10 only

(Audited)

	Europe $m	Asia $m	MENA $m	North America $m	Latin America $m	Total $m
Rated CRR/EL 8						
Not collateralised	**1,618**	**164**	**36**	**609**	**102**	**2,529**
Fully collateralised	**434**	**41**		**454**	**1**	**930**
LTV ratio:						
less than 50%	**65**	**13**		**95**	**1**	**174**
51% to 75%	**337**	**8**		**85**		**430**
76% to 90%	**28**	**18**		**168**		**214**
91% to 100%	**4**	**2**		**106**		**112**
Partially collateralised (A)	**109**	**47**	**1**	**179**		**336**
collateral value on A	**73**	**17**		**58**		**148**
	2,161	**252**	**37**	**1,242**	**103**	**3,795**
Rated CRR/EL 9 to 10						
Not collateralised	**2,850**	**889**	**814**	**80**	**244**	**4,877**

Fully collateralised	**824**	**440**	**188**	**323**	**78**	**1,853**
LTV ratio:						
less than 50%	**283**	**94**	**46**	**47**	**44**	**514**
51% to 75%	**346**	**149**	**3**	**47**	**8**	**553**
76% to 90%	**96**	**74**	**25**	**27**	**9**	**231**
91% to 100%	**99**	**123**	**114**	**202**	**17**	**555**
Partially collateralised (B)	**1,702**	**506**	**441**	**423**	**7**	**3,079**
collateral value on B	**795**	**236**	**55**	**283**	**5**	**1,374**
	5,376	**1,835**	**1,443**	**826**	**329**	**9,809**
At 31 December 2015	**7,537**	**2,087**	**1,480**	**2,068**	**432**	**13,604**
Rated CRR/EL 8						
Not collateralised	2,051	237	15	320	227	2,850
Fully collateralised	629	56	72	331	11	1,099
LTV ratio:						
less than 50%	120	13		186	5	324
51% to 75%	293			72	6	371
76% to 90%	51	9	69	46		175
91% to 100%	165	34	3	27		229
Partially collateralised (C)	105	44	1	148	6	304
collateral value on C	46	17	1	68	4	136
	2,785	337	88	799	244	4,253
Rated CRR/EL 9 to 10						
Not collateralised	4,185	939	813	62	1,420	7,419
Fully collateralised	615	143	147	231	124	1,260
LTV ratio:						
less than 50%	169	68	25	48	48	358
51% to 75%	136	27	19	39	35	256
76% to 90%	168	16	6	35	26	251
91% to 100%	142	32	97	109	15	395
Partially collateralised (D)	624	364	547	251	140	1,926
collateral value on D	341	169	92	141	46	789
	5,424	1,446	1,507	544	1,684	10,605
At 31 December 2014	8,209	1,783	1,595	1,343	1,928	14,858

Table of Contents

Other credit risk exposures

In addition to collateralised lending, other credit enhancements are employed and methods used to mitigate credit risk arising from financial assets. These are described in more detail below:

some securities issued by governments, banks and other financial institutions benefit from additional credit enhancement provided by government guarantees that cover the assets.

debt securities issued by banks and financial institutions include ABSs and similar instruments which are supported by underlying pools of financial assets. Credit risk associated with ABSs is reduced through the purchase of credit default swap (CDS) protection.

Disclosure of the Group s holdings of ABSs and associated CDS protection is provided on page 153.

trading assets include loans and advances held with trading intent. These mainly consist of cash collateral posted to satisfy margin requirements on derivatives, settlement accounts, reverse repos and stock borrowing. There is limited credit risk on cash collateral posted since in the event of default of the counterparty these would be set-off against the related liability. Reverse repos and stock borrowing are by their nature collateralised.

Collateral accepted as security that the Group is permitted to sell or repledge under these arrangements is described on page 162 on the Financial Statements.

the Group s maximum exposure to credit risk includes financial guarantees and similar contracts granted, as well as loan and other credit-related commitments. Depending on the terms of the arrangement, we may have recourse to additional credit mitigation in the event that a guarantee is called upon or a loan commitment is drawn and subsequently defaults.

For further information on these arrangements, see Note 37 on the Financial Statements.

Derivatives

HSBC participates in transactions exposing us to counterparty credit risk. Counterparty credit risk is the risk of financial loss if the counterparty to a transaction defaults before satisfactorily settling it. It arises principally from OTC derivatives and securities financing transactions and is calculated in both the trading and non-trading books.

Transactions vary in value by reference to a market factor such as interest rate, exchange rate or asset price.

The counterparty risk from derivative transactions is taken into account when reporting the fair value of derivative positions. The adjustment to the fair value is known as the credit value adjustment (CVA).

For an analysis of CVA, see Note 13 on the Financial Statements.

The table below reflects by risk type the fair values and gross notional contract amounts of derivatives cleared through an exchange, central counterparty and non-central counterparty.

Table of Contents

Report of the Directors: Risk (continued)

Credit risk

Notional contract amounts and fair values of derivatives by product type

	2015			2014		
	Notional amount	**Fair value**		Notional amount	Fair value	
		Assets	**Liabilities**		Assets	Liabilities
	$m	**$m**	**$m**	$m	$m	$m
Foreign exchange	**5,690,354**	**96,341**	**95,598**	5,573,415	97,312	95,759
exchange traded	**195,612**	**167**	**76**	81,785	229	369
central counterparty cleared OTC	**29,263**	**406**	**443**	18,567	321	349
non-central counterparty cleared OTC	**5,465,479**	**95,768**	**95,079**	5,473,063	96,762	95,041
Interest rate	**14,675,036**	**279,154**	**271,367**	22,328,518	473,243	468,152
exchange traded	**1,259,888**	**49**	**8**	1,432,333	112	161
central counterparty cleared OTC	**8,774,674**	**117,877**	**117,695**	15,039,001	261,880	264,509
non-central counterparty cleared OTC	**4,640,474**	**161,228**	**153,664**	5,857,184	211,251	203,482
Equity	**501,834**	**8,732**	**10,383**	568,932	11,694	13,654
exchange traded	**265,129**	**1,888**	**2,601**	289,140	2,318	3,201
non-central counterparty cleared OTC	**236,705**	**6,844**	**7,782**	279,792	9,376	10,453
Credit	**463,344**	**6,961**	**6,884**	550,197	9,340	10,061
central	**90,863**	**1,779**	**2,069**	126,115	1,999	2,111

counterparty cleared OTC						
non-central counterparty cleared OTC	**372,481**	**5,182**	**4,815**	424,082	7,341	7,950
Commodity and other	**51,683**	**3,148**	**2,699**	77,565	3,884	3,508
exchange traded	**8,136**	**38**		7,015	80	23
non-central counterparty cleared OTC	**43,547**	**3,110**	**2,699**	70,550	3,804	3,485
Total OTC derivatives	**19,653,486**	**392,194**	**384,246**	27,288,354	592,735	587,379
total OTC derivatives cleared by central counterparties	**8,894,800**	**120,062**	**120,207**	15,183,683	264,200	266,968
total OTC derivatives not cleared by central counterparties	**10,758,686**	**272,132**	**264,039**	12,104,671	328,535	320,411
Total exchange traded derivatives	**1,728,765**	**2,142**	**2,685**	1,810,273	2,739	3,755
Gross	**21,382,251**	**394,336**	**386,931**	29,098,627	595,473	591,134
Offset		**(105,860)**	**(105,860)**		(250,465)	(250,465)
Total at 31 December		**288,476**	**281,071**		345,008	340,669

The purposes for which HSBC uses derivatives are described in Note 16 on the Financial Statements.

The International Swaps and Derivatives Association (ISDA) Master Agreement is our preferred agreement for documenting derivatives activity. It provides the contractual framework within which dealing activity across a full range of OTC products is conducted, and contractually binds both parties to apply close-out netting across all outstanding transactions covered by an agreement if either party defaults or another pre-agreed termination event occurs. It is common, and our preferred practice, for the parties to execute a Credit Support Annex (CSA) in conjunction with the ISDA Master Agreement. Under a CSA, collateral is passed between the parties to mitigate the counterparty risk inherent in outstanding positions.

We manage the counterparty exposure arising from market risk on our OTC derivative contracts by using collateral agreements with counterparties and netting agreements. Currently, we do not actively manage our general OTC derivative counterparty exposure in the credit markets, although we may manage individual exposures in certain circumstances.

We place strict policy restrictions on collateral types and as a consequence the types of collateral received and pledged are, by value, highly liquid and of a strong quality, being predominantly cash.

Where a collateral type is required to be approved outside the collateral policy (which includes collateral that includes

wrong way risks), a submission to one of three regional Documentation Approval Committees (DAC s) for approval is required. These DACs require the participation and sign-off of senior representatives from regional Markets Chief Operating Officers, Legal and Risk.

The majority of our CSAs are with financial institutional clients.

As a consequence of our policy, the type of agreement we enter into is predominately ISDA CSAs, the majority of which are written under English law. The table below provides a breakdown of OTC collateral agreements by agreement type:

OTC collateral agreements by type

	Number of agreements
ISDA CSA (English law)	**2,670**
ISDA CSA (New York law)	**1,702**
ISDA CSA (Japanese law)	**17**
French Master Agreement and CSA equivalent[14]	**223**
German Master Agreement and CSA equivalent[15]	**93**
Others	**395**
At 31 December 2015	**5,100**

For footnotes, see page 191.

See page 122 and Note 32 on the Financial Statements for details regarding legally enforceable right of offset in the event of counterparty default and collateral received in respect of derivatives.

Reverse repos non-trading by geographical region

The amount of non-trading reverse repos include transactions with customers and banks and is set out below.

Reverse repos non-trading by geographical region

(Audited)

	Europe $m	Asia $m	MENA $m	North America $m	Latin America $m	Total $m
With customers	28,366	5,650		40,316		74,332
With banks	15,824	21,804	779	32,034	1,482	71,923
At 31 December 2015	**44,190**	**27,454**	**779**	**72,350**	**1,482**	**146,255**
With customers	25,841	5,409		35,060		66,310
With banks	34,748	22,813	19	29,008	8,815	95,403
At 31 December 2014	**60,589**	**28,222**	**19**	**64,068**	**8,815**	**161,713**

Personal lending

We provide a broad range of secured and unsecured personal lending products to meet customer needs. Personal lending includes advances to customers for asset purchases such as residential property where the

loans are secured by the assets being acquired. We also offer loans secured on existing assets, such as first liens on residential property, and unsecured lending products such as overdrafts, credit cards and payroll loans.

Total personal lending

	Europe $m	Asia $m	MENA $m	North America $m	Latin America $m	Total $m
First lien residential mortgages (A)	125,544	94,606	2,258	50,117	1,986	274,511
Of which:						
interest only (including offset)	40,906	936		180		42,022
affordability including ARMs	356	3,966		17,041		21,363
Other personal lending (B)	44,982	38,101	4,447	8,069	3,972	99,571
other	32,862	27,682	3,147	3,284	1,816	68,791
credit cards	12,115	10,189	929	996	1,780	26,009
second lien residential mortgages		33	2	3,762		3,797
motor vehicle finance	5	197	369	27	376	974
Total gross loans at 31 December 2015 (C)	170,526	132,707	6,705	58,186	5,958	374,082
Impairment allowances on personal lending						
First lien residential mortgages (a)	278	29	24	991	22	1,344
Other personal lending (b)	667	227	214	241	186	1,535
other	401	104	180	31	80	796
credit cards	265	122	29	30	102	548
second lien residential mortgages				180		180
motor vehicle finance	1	1	5		4	11
Total impairment allowances at 31 December 2015 (c)	945	256	238	1,232	208	2,879
	%	%	%	%	%	%
(a) as a percentage of A	0.2	0.0	1.1	2.0	1.1	0.5
(b) as a percentage of B	1.5	0.6	4.8	3.0	4.7	1.5
(c) as a percentage of C	0.6	0.2	3.5	2.1	3.5	0.8

Table of Contents

Report of the Directors: Risk (continued)

Credit risk

Total personal lending (continued)

	Europe $m	Asia $m	MENA $m	North America $m	Latin America $m	Total $m
First lien residential mortgages (D)	131,000	93,147	2,647	55,577	4,153	286,524
Of which:						
interest only (including offset)	44,163	956		276		45,395
affordability including ARMs	337	5,248		16,452		22,037
Other personal lending (E)	47,531	36,368	3,924	9,823	9,384	107,030
other	34,567	25,695	2,633	4,328	4,846	72,069
credit cards	12,959	10,289	897	1,050	3,322	28,517
second lien residential mortgages		56	2	4,433		4,491
motor vehicle finance	5	328	392	12	1,216	1,953
Total gross loans at 31 December 2014 (F)	178,531	129,515	6,571	65,400	13,537	393,554
Impairment allowances on personal lending						
First lien residential mortgages (d)	306	46	97	1,644	36	2,129
Other personal lending (e)	786	208	97	350	1,030	2,471
other	438	87	59	43	672	1,299
credit cards	347	119	33	36	298	833
second lien residential mortgages				271		271
motor vehicle finance	1	2	5		60	68
Total impairment allowances at 31 December 2014 (f)	1,092	254	194	1,994	1,066	4,600

	%	%	%	%	%	%
(d) as a percentage of D	0.2		3.7	3.0	0.9	0.7
(e) as a percentage of E	1.7	0.6	2.5	3.6	11.0	2.3
(f) as a percentage of F	0.6	0.2	3.0	3.0	7.9	1.2

On a reported basis, total personal lending was $374bn at 31 December 2015, down from $394bn at the end of 2014. The reduction of $20bn was mainly due to adverse foreign exchange movements of $19bn, the reclassification of $7.6bn of assets of our Brazilian operations as Assets held for sale and the run-off of our CML portfolio in North America of $5bn during the year. Excluding these factors, personal lending balances grew by $12bn in 2015. This was primarily driven by increased mortgage and other lending in Asia.

Loan impairment allowances reduced by $1.7bn on a reported basis, mainly due to the Brazilian reclassification ($0.8bn) and the run-off of the US CML portfolio ($0.7bn).

Personal lending loan impairment charges were largely unchanged at $1.8bn on a reported basis. On a constant currency basis, they were $0.3bn higher than in 2014, reflecting increased write-offs in the UAE following a review of the quality and value of residential mortgage collateral and the effects of adverse macroeconomic conditions in Brazil.

Mortgage lending

We offer a wide range of mortgage products designed to meet customer needs, including capital repayment, interest-only, affordability and offset mortgages.

Group credit policy prescribes the range of acceptable residential property LTV thresholds with the maximum upper limit for new loans set at between 75% and 95%.

Specific LTV thresholds and debt-to-income ratios are managed at regional and country levels and, although the parameters must comply with Group policy, strategy and risk appetite, they differ in the various locations in which we operate to reflect the local economic and housing market conditions, regulations, portfolio performance, pricing and other product features.

Reported gross mortgage lending balances declined by $12bn. Adverse foreign exchange differences and the Brazilian reclassification reduced the gross mortgage lending balances by further $13bn and $2.1bn respectively.

The commentary that follows is on a constant currency basis, while tables are presented on a reported basis.

Excluding the effect of the Brazilian reclassification and the US CML run-off portfolio, mortgage lending balances increased by $7.7bn during the year.

Mortgage lending in Asia, excluding the reclassification to other personal lending discussed on page 145, grew by $6.4bn. The increases were primarily attributable to continued growth in Hong Kong ($4.2bn), mainland China ($1.7bn) and Australia ($1.1bn) as a result of strong demand and our competitive customer offerings. During the year, mortgage lending in Singapore fell by $1.1bn due to a business decision to constrain the level of our mortgage portfolio, coupled with the effect of a range of personal lending regulations. The quality of our Asian mortgage book remained high with negligible defaults and impairment allowances. The average LTV ratio on new mortgage lending in Hong Kong was 43% compared with an estimated 29% for the overall portfolio.

In North America, the US CML portfolio, including second lien mortgages, declined by $5.2bn in 2015 as we continued to run it off. The US Premier mortgage portfolio increased by $1.1bn during 2015 as we focused on growth

in our core portfolios of higher quality mortgages. Our Canadian mortgage lending balances also grew by $0.8bn during the year. Collectively assessed impairment allowances reduced during the year due to continued improvements in the credit quality of the mortgage portfolio and continued loan sales.

In Europe, UK mortgage balances were unchanged and our products remained competitive in the prolonged low interest rate market environment. In the UK, the credit

Table of Contents

quality of our mortgage portfolio remained high, the LTV ratio on new lending was 57.8% compared with an average of 42.6% for the overall portfolio.

Exposure to UK interest-only mortgage loans

Interest-only mortgage products made up $40bn of total UK mortgage lending, including $16bn of offset mortgages in First Direct and $1.7bn of endowment mortgages.

The following information is presented for HSBC Bank plc s UK interest-only mortgage loans with balances of $18bn at the end of 2015. $0.2bn of interest-only mortgages matured during 2015. Of these, 2,636 loans with total balances of $0.1bn were repaid in full, 164 loans with balances of $0.03bn have agreed future repayment plans and 550 loans with balances of $0.1bn are subject to ongoing individual assessments.

The profile of expiring UK interest-only loans was as follows:

UK interest-only mortgage loans

	$m
2015 expired interest-only mortgage loans	**266**
Interest-only mortgage loans by maturity	
2016	**314**
2017	**384**
2018	**723**
2019	**801**
2020	**805**
2021-2025	**3,997**
Post 2025	**10,390**
Total at 31 December 2015	**17,680**

Other personal lending

Reported other personal lending balances declined by $7.5bn during the year, mainly due to adverse foreign exchange movements of $5.8bn and the Brazilian reclassification of $5.5bn. The reduction was offset by the growth in other personal lending in Hong Kong.

The commentary that follows is on a constant currency basis, while tables are presented on a reported basis.

Excluding the Brazilian reclassification, other personal lending increased by $4bn in 2015. This was driven by strong growth in personal loans and overdrafts in Hong Kong ($1.5bn), other unsecured personal lending portfolio in UK ($0.7bn) and other personal lending in France

($0.6bn). In Mexico, other unsecured personal lending grew by $0.6bn mainly in payroll and personal loans as a result of various sales and credit initiatives. In addition, we reclassified a total of $1.8bn of loans in Malaysia and India, and $0.4bn in the UAE, from residential mortgages to other personal lending following a review of the supporting collateral.

HSBC Finance

HSBC Finance US Consumer and Mortgage Lending residential mortgages[16]

	2015 $m	2014 $m
Residential mortgages:		
first lien	**17,157**	21,915
Other personal lending:		
second lien	**2,089**	2,509
Total (A) at 31 December	**19,246**	24,424
Impairment allowances	**986**	1,679
as a percentage of A	**5.1%**	6.9%

For footnote, see page 191.

Mortgage lending balances in HSBC Finance declined by $5.2bn or 21% during 2015. In addition to the continued loan sales in the CML portfolio, we transferred a further $2.4bn to Assets held for sale during the year, and these loans were sold in May, August and November 2015.

There was a decrease in impairment allowances reflecting reduced levels of delinquency, and lower levels of both new impaired loans and loan balances outstanding as a result of continued liquidation of the portfolio.

Among the first and second lien residential mortgages in our CML portfolio, two months and over delinquent balances halved to $1.2bn during 2015.

At 31 December 2015, renegotiated real estate secured accounts in HSBC Finance represented 91% (2014: 93%) of North America s total renegotiated loans. $5.1bn of renegotiated real estate secured loans was classified as impaired (2014: $7.6bn).

HSBC Bank USA

In HSBC Bank USA, mortgage balances grew by $1.1bn to $18bn at 31 December 2015 as we continued to implement our strategy to grow the HSBC Premier and Advance customer base. We continued to sell all agency-eligible new originations in the secondary market.

Table of Contents

Report of the Directors: Risk (continued)

Credit risk

Trends in two months and over contractual delinquency in the US

	2015 $m	2014 $m
In personal lending in the US		
First lien residential mortgages	**1,954**	3,271
Consumer and Mortgage Lending	**1,049**	2,210
other mortgage lending	**905**	1,061
Second lien residential mortgages	**161**	216
Consumer and Mortgage Lending	**106**	154
other mortgage lending	**55**	62
Credit card	**16**	17
Personal non-credit card	**3**	7
Total at 31 December	**2,134**	3,511
	%	%
As a percentage of the equivalent loans and receivables balances		
First lien residential mortgages	**5.7**	8.6
Second lien residential mortgages	**4.4**	5.0
Credit card	**2.3**	2.4
Personal non-credit card	**0.7**	1.4
Total at 31 December	**5.4**	8.1

Gross loan portfolio of HSBC Finance real estate secured balances

	Re-aged[17] $m	Modified and re-aged $m	Modified $m	Total renegotiated loans $m	Total non-renegotiated loans $m	Total gross loans $m	Total impairment allowances $m	Impairmen allowance gross loan
December	**4,858**	**5,257**	**519**	**10,634**	**8,612**	**19,246**	**986**	**5**

15

December								
4	6,637	6,581	587	13,805	10,619	24,424	1,679	6

For footnote, see page 191.

Number of renegotiated real estate secured accounts remaining in HSBC Finance s portfolio

	Number of renegotiated loans (000s)				Total number of loans
	Re-aged	Modified and re-aged	Modified	Total	(000s)
At 31 December 2015	**66**	**54**	**6**	**126**	**240**
At 31 December 2014	85	64	6	155	297

HSBC Finance loan modifications and re-age programmes

HSBC Finance maintains loan modification and re-age (loan renegotiation) programmes in order to manage customer relationships, improve collection opportunities and, if possible, avoid foreclosure.

Qualifying criteria

For an account to qualify for renegotiation it must meet certain criteria, and HSBC Finance retains the right to decline a renegotiation.

Renegotiated real estate secured loans are not eligible for a subsequent renegotiation for six or 12 months depending upon the action, with a maximum of five renegotiations permitted within a five-year period. Borrowers must be approved for a modification and, to activate it, must generally make two minimum qualifying monthly payments within 60 days. In certain circumstances where the debt has been restructured in bankruptcy proceedings, fewer or no payments may be required. Real estate secured loans

involving a bankruptcy and accounts whose borrowers are subject to a Chapter 13 plan filed with a bankruptcy court generally may be considered current upon receipt of one qualifying payment, while accounts whose borrowers have filed for Chapter 7 bankruptcy protection may be re-aged upon receipt of a signed reaffirmation agreement. In addition, any account may be re-aged without receipt of a payment in certain special circumstances (for example, in the event of a natural disaster or a hardship programme).

Within the constraints of our Group credit policy, we allow for multiple renegotiations under certain circumstances. Consequently, a significant proportion of loans included in the table above have undergone multiple re-ages or modifications. In this regard, multiple modifications have remained consistent at 70% to 75% of total modifications.

The accounts that received second or subsequent renegotiations during the year do not appear in the statistics presented. These statistics treat a loan as an addition to the volume of renegotiated loans on its first renegotiation only.

Table of Contents

Types of loan renegotiation programmes in HSBC Finance

A temporary modification is a change to the contractual terms of a loan that results in HSBC Finance giving up a right to contractual cash flows over a pre-defined period, typically two years. With a temporary modification the loan is expected to revert back to the original contractual terms, including the interest rate charged, after the modification period. An example is reduced interest payments.

A substantial number of HSBC Finance modifications involve interest rate reductions, which lower the amount of interest income HSBC Finance is contractually entitled to receive in future periods. Historically, modifications were granted for terms as low as six months, although more recent modifications have a minimum term of two years.

A permanent modification is a change to the contractual terms of a loan that results in HSBC Finance giving up a right to contractual cash flows over the life of the loan.

An example is a permanent reduction in the interest rate charged.

HSBC Finance also offers a re-age renegotiation programme, which results in the resetting of an account s contractual delinquency status to current (non-delinquent) upon fulfilment of certain requirements and without additional concessions. The overdue principal and/or interest is deferred and paid at a later date. Loan re-ageing enables customers who have been unable to make a small number of payments to have their loan delinquency status reset to current so that their credit score is not affected by the overdue balances. Re-aging may be offered to customers either without any modification of original loan terms, or as part of a loan modification transaction.

All renegotiation transactions described above with the exception of first time re-ages on accounts that are less than 60 days past due are classified as impaired. These remain classified as impaired until they have demonstrated a history of payment performance against their original contracted terms for at least 12 months, with the exception of permanent modifications. All modified loans with terms over two years are considered to be permanently impaired.

Collateral and other credit enhancements held

(Audited)

The tables below provide a quantification of the value of fixed charges we hold over specific assets where we have a history of enforcing, and are able to enforce, collateral in satisfying a debt in the event of the borrower failing to meet its contractual obligations, and where

the collateral is cash or can be realised by sale in an established market. The collateral valuation excludes any adjustments for obtaining and selling the collateral and, in particular, loans shown as not collateralised or partially collateralised may also benefit from other forms of credit mitigants. UK and Hong Kong are shown, both within regional figures and separately, due to the size of their portfolios.

Residential mortgage loans including loan commitments by level of collateral

(Audited)

	Europe $m	Asia $m	MENA $m	North America $m	Latin America $m	Total $m	UK $m	Hong Kong $m
Non-impaired loans and advances								
Fully collateralised	**128,113**	**100,102**	**2,144**	**41,567**	**1,869**	**273,795**	**122,221**	**61,784**
LTV ratio:								
less than 50%	**70,851**	**59,212**	**595**	**12,369**	**710**	**143,737**	**68,362**	**42,589**
51% to 75%	**47,933**	**33,237**	**985**	**22,071**	**903**	**105,129**	**45,762**	**15,961**
76% to 90%	**8,322**	**6,522**	**535**	**5,502**	**222**	**21,103**	**7,584**	**2,254**
91% to 100%	**1,007**	**1,131**	**29**	**1,625**	**34**	**3,826**	**513**	**980**
Partially collateralised:								
greater than 100% LTV (A)	**540**	**168**	**46**	**1,208**	**13**	**1,975**	**321**	**97**
collateral value on A	**434**	**155**	**37**	**1,147**	**11**	**1,784**	**221**	**95**
	128,653	**100,270**	**2,190**	**42,775**	**1,882**	**275,770**	**122,542**	**61,881**
Impaired loans and advances								
Fully collateralised	**1,407**	**222**	**44**	**6,713**	**109**	**8,495**	**1,191**	**46**
LTV ratio:								

less than 50%	**518**	**105**	**18**	**1,247**	**90**	**1,978**	**469**	**42**
51% to 75%	**619**	**76**	**13**	**2,819**	**14**	**3,541**	**540**	**3**
76% to 90%	**183**	**34**	**8**	**1,811**	**4**	**2,040**	**133**	**1**
91% to 100%	**87**	**7**	**5**	**836**	**1**	**936**	**49**	
Partially collateralised:								
greater than 100% LTV (B)	**178**	**8**	**18**	**628**	**1**	**833**	**49**	
collateral value on B	**160**	**6**	**13**	**547**		**726**	**36**	
	1,585	**230**	**62**	**7,341**	**110**	**9,328**	**1,240**	**46**
At 31 December 2015	**130,238**	**100,500**	**2,252**	**50,116**	**1,992**	**285,098**	**123,782**	**61,927**

Table of Contents

Report of the Directors: Risk (continued)

Credit risk

Residential mortgage loans including loan commitments by level of collateral (continued)

	Europe $m	Asia $m	MENA $m	North America $m	Latin America $m	Total $m	UK $m	Hong Kong $m
Non-impaired loans and advances								
Fully collateralised	135,875	99,257	2,431	43,317	3,759	284,639	130,333	57,703
LTV ratio:								
less than 50%	66,075	60,315	1,324	14,003	1,454	143,171	63,533	42,894
51% to 75%	56,178	31,142	856	20,872	1,777	110,825	54,095	12,135
76% to 90%	11,856	6,906	212	5,994	480	25,448	11,141	2,298
91% to 100%	1,766	894	39	2,448	48	5,195	1,564	376
Partially collateralised:								
greater than 100% LTV (C)	537	99	60	2,209	167	3,072	388	
collateral value on C	532	81	44	1,999	24	2,680	415	
	136,412	99,356	2,491	45,526	3,926	287,711	130,721	57,703
Impaired loans and advances								
Fully collateralised	906	256	122	8,618	154	10,056	781	48
LTV ratio:								
less than 50%	232	130	53	1,291	103	1,809	197	45
51% to 75%	417	90	29	3,462	35	4,033	376	3
76% to 90%	163	32	19	2,471	10	2,695	131	
91% to 100%	94	4	21	1,394	6	1,519	77	

Partially collateralised:								
greater than 100% LTV (D)	55	7	31	1,395	2	1,490	44	
collateral value on D	40	5	23	1,181	1	1,250	30	
	961	263	153	10,013	156	11,546	825	48
At 31 December 2014	137,373	99,619	2,644	55,539	4,082	299,257	131,546	57,751

Supplementary information

Gross loans and advances by industry sector over five years

	2015 $m	Currency translation adjustment[18] $m	Movement $m	2014 $m	2013 $m	2012 $m	2011 $m
Personal	**374,082**	**(20,232)**	**760**	393,554	410,728	415,093	393,625
first lien residential mortgages	**274,511**	**(13,697)**	**1,684**	286,524	299,875	301,862	278,963
other personal[3]	**99,571**	**(6,535)**	**(924)**	107,030	110,853	113,231	114,662
Corporate and commercial	**499,513**	**(30,496)**	**(12,616)**	542,625	545,981	517,120	478,064
manufacturing	**95,858**	**(8,043)**	**(3,085)**	106,986	113,850	112,149	96,054
international trade and services	**159,019**	**(10,148)**	**(11,624)**	180,791	184,668	169,389	152,709
commercial real estate	**67,926**	**(3,483)**	**(1,884)**	73,293	74,846	76,760	73,941
other property-related	**53,464**	**(1,256)**	**2,333**	52,387	44,832	40,532	39,539
government	**7,455**	**(354)**	**1,666**	6,143	7,277	10,785	11,079
other commercial[4]	**115,791**	**(7,212)**	**(22)**	123,025	120,508	107,505	104,742
Financial	**150,833**	**(9,577)**	**(2,606)**	163,016	170,627	164,013	184,035
non-bank financial institutions	**60,414**	**(2,210)**	**11,806**	50,818	50,523	46,871	44,832
banks	**90,419**	**(7,367)**	**(14,412)**	112,198	120,104	117,142	139,203
Total gross loans and advances	**1,024,428**	**(60,305)**	**(14,462)**	1,099,195	1,127,336	1,096,226	1,055,724
	23,758	**(1,868)**	**(3,657)**	29,283	36,428	38,671	41,584

Impaired loans and advances to customers							
Impairment allowances on loans and advances to customers	**9,555**	**(1,189)**	**(1,593)**	12,337	15,143	16,112	17,511
Loan impairment charge	**3,592**	**(682)**	**219**	4,055	6,048	8,160	11,505
new allowances net of allowance releases	**4,400**	**(821)**	**211**	5,010	7,344	9,306	12,931
recoveries	**(808)**	**139**	**8**	(955)	(1,296)	(1,146)	(1,426)

For footnotes, see page 191.

The personal lending currency effect on gross loans and advances of $20bn was made up as follows: Europe $10bn, Asia $4.2bn, Latin America $2.5bn and North America $3.3bn. The wholesale lending currency effect on gross loans and advances of $40bn was made up as follows:

Europe $17bn, Asia $8.7bn, Latin America $11bn, North America $2.7bn and Middle East and North Africa $0.7bn.

In the following two tables, negative percentage numbers are favourable, positive numbers are unfavourable.

Table of Contents

Reconciliation of reported and constant currency impaired loans, allowances and charges by geographical region

	31 December 2014 as reported $m	Currency translation adjustment[18] $m	31 December 2014 at 31 December 2015 exchange rates $m	Movement constant currency basis $m	**31 December 2015 as reported $m**	**Reported change %**	**Constant currency change %**
mpaired oans							
urope	10,242	(748)	9,494	183	**9,677**	**(5.5)**	**1.9**
sia	2,048	(118)	1,930	445	**2,375**	**16.0**	**23.1**
Iiddle East nd North frica	1,981	(19)	1,962	(196)	**1,766**	**(10.9)**	**(10.0**
orth merica	11,694	(71)	11,623	(2,693)	**8,930**	**(23.6)**	**(23.2**
atin merica	3,365	(913)	2,452	(1,422)	**1,030**	**(69.4)**	**(58.0**
	29,330	(1,869)	27,461	(3,683)	**23,778**	**(18.9)**	**(13.4**
mpairment llowances							
urope	4,455	(364)	4,091	(222)	**3,869**	**(13.2)**	**(5.4**
sia	1,356	(64)	1,292	233	**1,525**	**12.5**	**18.0**
Iiddle East nd North frica	1,406	(11)	1,395	23	**1,418**	**0.9**	**1.6**
orth merica	2,640	(51)	2,589	(548)	**2,041**	**(22.7)**	**(21.2**
atin merica	2,529	(702)	1,827	(1,107)	**720**	**(71.5)**	**(60.6**

	12,386	(1,192)	11,194	(1,621)	**9,573**	**(22.7)**	**(14.5**
oan mpairment harge							
urope	1,079	(134)	945	(236)	**709**	**(34.3)**	**(25.0**
sia	644	(27)	617	64	**681**	**5.7**	**10.4**
liddle East nd North frica	(1)	(1)	(2)	301	**299**		
orth merica	300	(10)	290	179	**469**	**56.3**	**61.7**
atin merica	2,033	(510)	1,523	(89)	**1,434**	**(29.5)**	**(5.8**
	4,055	(682)	3,373	219	**3,592**	**(11.4)**	**6.5**

For footnote, see page 191.

Reconciliation of reported and constant currency loan impairment charges to the income statement

	31 December 2014 as reported $m	Currency translation adjustment[18] $m	31 December 2014 at 31 December 2015 exchange rates $m	Movement constant currency basis $m	**31 December 2015 as reported $m**	**Reported change %**	**Constant currency change %**
oan mpairment harge							
urope	1,079	(134)	945	(236)	**709**	**(34.3)**	**(25.0**
new lowances	2,445	(303)	2,142	(97)	**2,045**	**(16.4)**	**(4.5**
releases	(1,062)	140	(922)	(26)	**(948)**	**(10.7)**	**2.8**
recoveries	(304)	29	(275)	(113)	**(388)**	**27.6**	**41.1**
sia	644	(27)	617	64	**681**	**5.7**	**10.4**
new lowances	1,115	(61)	1,054	224	**1,278**	**14.6**	**21.3**
releases	(318)	21	(297)	(135)	**(432)**	**35.8**	**45.5**
recoveries	(153)	13	(140)	(25)	**(165)**	**7.8**	**17.9**
liddle East nd North frica	(1)	(1)	(2)	301	**299**		
new lowances	355	(7)	348	144	**492**	**38.6**	**41.4**
releases	(314)	6	(308)	148	**(160)**	**(49.0)**	**(48.1**
recoveries	(42)		(42)	9	**(33)**	**(21.4)**	**(21.4**
orth merica	300	(10)	290	179	**469**	**56.3**	**61.7**

new lowances	908	(20)	888	(157)	**731**	**(19.5)**	**(17.7**
releases	(493)	8	(485)	299	**(186)**	**(62.3)**	**(61.6**
recoveries	(115)	2	(113)	37	**(76)**	**(33.9)**	**(32.7**
atin merica	2,033	(510)	1,523	(89)	**1,434**	**(29.5)**	**(5.8**
new lowances	2,707	(674)	2,033	(239)	**1,794**	**(33.7)**	**(11.8**
releases	(333)	69	(264)	50	**(214)**	**(35.7)**	**(18.9**
recoveries	(341)	95	(246)	100	**(146)**	**(57.2)**	**(40.7**
otal	4,055	(682)	3,373	219	**3,592**	**(11.4)**	**6.5**
new lowances	7,530	(1,065)	6,465	(125)	**6,340**	**(15.8)**	**(1.9**
releases	(2,520)	244	(2,276)	336	**(1,940)**	**(23.0)**	**(14.8**
recoveries	(955)	139	(816)	8	**(808)**	**(15.4)**	**(1.0**

For footnote, see page 191.

Table of Contents

Report of the Directors: Risk (continued)

Credit risk

Loan impairment charges by industry sector over five years

	2015 $m	2014 $m	2013 $m	2012 $m	2011 $m
Loan impairment charge/(release)					
Personal	**1,834**	1,803	3,196	5,362	9,318
Corporate and commercial	**1,769**	2,256	2,974	2,802	2,114
Financial	**(11)**	(4)	(122)	(4)	73
Year ended 31 December	**3,592**	4,055	6,048	8,160	11,505

Charge for impairment losses as a percentage of average gross loans and advances to customers

	2015 %	2014 %	2013 %	2012 %	2011 %
New allowances net of allowance releases	**0.48**	0.53	0.81	1.00	1.34
Recoveries	**(0.09)**	(0.10)	(0.14)	(0.12)	(0.15)
Total charge for impairment losses	**0.39**	0.43	0.67	0.88	1.19
Amount written off net of recoveries	**0.37**	0.58	0.59	0.93	1.14

Movement in impairment allowances over five years

	2015 $m	2014 $m	2013 $m	2012 $m	2011 $m
Impairment allowances at 1 January	**12,386**	15,201	16,169	17,636	20,241
Amounts written off	**(4,194)**	(6,379)	(6,655)	(9,812)	(12,480)
personal	**(2,707)**	(3,733)	(4,367)	(6,905)	(10,431)
corporate and commercial	**(1,473)**	(2,425)	(2,229)	(2,677)	(2,009)
financial	**(14)**	(221)	(59)	(230)	(40)
Recoveries of amounts written off in previous years	**808**	955	1,296	1,146	1,426

personal	**681**	818	1,097	966	1,175
corporate and commercial	**124**	128	198	172	242
financial	**3**	9	1	8	9
Loan impairment charge	**3,592**	4,055	6,048	8,160	11,505
Exchange and other movements[11]	**(3,019)**	(1,446)	(1,657)	(961)	(3,056)
Impairment allowances at 31 December	**9,573**	**12,386**	**15,201**	**16,169**	**17,636**
Impairment allowances					
individually assessed	**5,420**	6,244	7,130	6,629	6,662
collectively assessed	**4,153**	6,142	8,071	9,540	10,974
Impairment allowances at 31 December	**9,573**	12,386	15,201	16,169	17,636
	%	%	%	%	%
Amount written off net of recoveries as a percentage of average gross loans and advances to customers	**0.4**	0.6	0.6	1.0	1.2

For footnote, see page 191.

Gross loans and advances to customers by country

	First lien residential mortgages	Other personal[3]	Property-related	Commercial, international trade and other	Total
	$m	$m	$m	$m	$m
Europe	125,544	44,982	33,579	191,807	395,912
UK	117,346	20,797	25,700	149,327	313,170
France	3,606	12,130	6,070	20,380	42,186
Germany	4	203	347	7,941	8,495
Switzerland	511	8,045	224	834	9,614
Other	4,077	3,807	1,238	13,325	22,447
Asia	94,606	38,101	67,577	157,616	357,900
Hong Kong	60,943	24,389	50,825	80,609	216,766
Australia	9,297	726	1,592	6,448	18,063
India	1,248	431	637	5,728	8,044
Indonesia	56	346	71	4,965	5,438
Mainland China	5,716	1,645	6,185	23,703	37,249
Malaysia	2,792	3,113	1,993	4,947	12,845
Singapore	7,743	5,392	3,334	11,021	27,490
Taiwan	3,866	629	126	5,291	9,912
Other	2,945	1,430	2,814	14,904	22,093
Middle East and North Africa (excluding Saudi Arabia)	2,258	4,447	2,598	21,991	31,294
Egypt	1	549	104	2,097	2,751
UAE	1,854	2,286	1,833	14,199	20,172

Other	**403**	**1,612**	**661**	**5,695**	**8,371**
North America	**50,117**	**8,069**	**16,014**	**56,690**	**130,890**
US	**34,382**	**4,813**	**11,435**	**42,439**	**93,069**
Canada	**14,418**	**3,029**	**4,315**	**13,490**	**35,252**
Other	**1,317**	**227**	**264**	**761**	**2,569**
Latin America	**1,986**	**3,972**	**1,622**	**10,433**	**18,013**
Mexico	**1,881**	**2,828**	**1,498**	**7,844**	**14,051**
Other	**105**	**1,144**	**124**	**2,589**	**3,962**
At 31 December 2015	**274,511**	**99,571**	**121,390**	**438,537**	**934,009**
Europe	131,000	47,531	35,313	200,313	414,157
UK	123,239	21,023	25,927	156,577	326,766
France	2,914	12,820	7,341	21,834	44,909
Germany	6	212	304	7,275	7,797
Switzerland	298	8,149	225	614	9,286
Other	4,543	5,327	1,516	14,013	25,399
Asia	93,147	36,368	70,057	164,739	364,311
Hong Kong	56,656	22,891	52,208	82,362	214,117
Australia	9,154	815	2,130	6,360	18,459
India	1,235	285	613	5,099	7,232
Indonesia	64	469	202	5,476	6,211
Mainland China	4,238	1,981	6,606	24,875	37,700
Malaysia	5,201	1,750	1,988	5,217	14,156
Singapore	9,521	5,878	4,210	11,951	31,560
Taiwan	3,920	626	118	7,057	11,721
Other	3,158	1,673	1,982	16,342	23,155
Middle East and North Africa (excluding Saudi Arabia)	2,647	3,924	2,246	21,633	30,450
Egypt	1	510	98	2,272	2,881
UAE	2,263	1,782	1,545	13,814	19,404
Other	383	1,632	603	5,547	8,165
North America	55,577	9,823	15,492	51,535	132,427
US	37,937	5,482	11,461	38,632	93,512
Canada	16,236	4,085	3,708	11,825	35,854
Other	1,404	256	323	1,078	3,061
Latin America	4,153	9,384	2,572	29,543	45,652
Mexico	1,967	2,642	1,336	9,503	15,448
Other	2,186	6,742	1,236	20,040	30,204
Included in Other: Brazil	2,067	5,531	1,077	16,814	25,489

At 31 December 2014	**286,524**	**107,030**	**125,680**	**467,763**	**986,997**

For footnote, see page 191.

Table of Contents

Report of the Directors: Risk (continued)

Credit risk

The above tables analyse loans and advances by industry sector and by the location of the principal operations of the lending subsidiary or, in the case of the operations of The Hongkong and Shanghai Banking Corporation, HSBC Bank, HSBC Bank Middle East and HSBC Bank USA, by the location of the lending branch.

HSBC Holdings

(Audited)

Risk in HSBC Holdings is overseen by the HSBC Holdings Asset and Liability Management Committee (HALCO). The major risks faced by HSBC Holdings are credit risk, liquidity risk and market risk (in the form of interest rate risk and foreign exchange risk), of which the most significant is credit risk.

Credit risk in HSBC Holdings primarily arises from transactions with Group subsidiaries and from guarantees issued in support of obligations assumed by certain Group

operations in the normal conduct of their business. It is reviewed and managed within regulatory and internal limits for exposures by our Global Risk function, which provides high-level centralised oversight and management of credit risks worldwide.

HSBC Holdings maximum exposure to credit risk at 31 December 2015 is shown below. Its financial assets principally represent claims on Group subsidiaries in Europe and North America.

All the derivative transactions are with HSBC undertakings that are banking counterparties (2014: 100%) and for which HSBC Holdings has in place master netting arrangements. Since 2012, the credit risk exposure has been managed on a net basis and the remaining net exposure is specifically collateralised in the form of cash.

HSBC Holdings maximum exposure to credit risk

(Audited)

	2015	2014

	Maximum exposure $m	**Offset $m**	**Exposure to credit risk (net) $m**	Maximum exposure $m	Offset $m	Exposure to credit risk (net) $m
Cash at bank and in hand:						
balances with HSBC undertakings	**242**		**242**	249		249
Derivatives	**2,467**	**(2,467)**		2,771	(2,610)	161
Loans and advances to HSBC undertakings	**44,350**		**44,350**	43,910		43,910
Financial investments in HSBC undertakings	**4,285**		**4,285**	4,073		4,073
Other assets	**109**		**109**			
Financial guarantees and similar contracts	**68,333**		**68,333**	52,023		52,023
Loan and other credit-related commitments				16		16
At 31 December	**119,786**	**(2,467)**	**117,319**	**103,042**	**(2,610)**	**100,432**

The credit quality of loans and advances and financial investments, both of which consist of intra-Group lending, is assessed as strong or good , with 100% of the exposure being neither past due nor impaired (2014: 100%).

Securitisation exposures and other structured products

The following table summarises the carrying amount of our ABS exposure by categories of collateral and includes assets held in the GB&M legacy credit portfolio with a carrying value of $15bn (2014: $23bn).

At 31 December 2015, the available-for-sale reserve in respect of ABSs was a deficit of $1,021m (2014: deficit of $777m). For 2015, the impairment write-back in respect of ABSs was $85m (2014: write-back of $276m).

Table of Contents

Carrying amount of HSBC s consolidated holdings of ABSs

	Trading $m	Available for sale $m	Held to maturity $m	Designated at fair value through profit or loss $m	Loans and receivables $m	Total $m	Of which held through consolidated SEs $m
Mortgage-related assets:							
Sub-prime residential	**73**	**2,247**		**1**	**132**	**2,453**	**1,075**
US Alt-A residential		**1,989**	**7**		**55**	**2,051**	**1,796**
US Government agency and sponsored enterprises:							
MBSs	**166**	**15,082**	**13,997**			**29,245**	
Other residential	**812**	**780**			**108**	**1,700**	**253**
Commercial property	**590**	**2,308**			**201**	**3,099**	**1,656**
Leveraged finance-related assets	**240**	**2,294**			**149**	**2,683**	**1,310**
Student loan-related assets	**236**	**2,991**			**25**	**3,252**	**2,679**
Other assets	**1,184**	**880**		**23**	**128**	**2,215**	**565**
At 31 December 2015	**3,301**	**28,571**	**14,004**	**24**	**798**	**46,698**	**9,334**
Mortgage-related assets:							
Sub-prime residential	122	3,081			308	3,511	2,075
US Alt-A residential	96	3,022	11		110	3,239	2,411
US Government agency and sponsored enterprises:							
MBSs	82	10,401	13,436			23,919	
Other residential	928	1,220			330	2,478	652
Commercial property	654	3,627			516	4,797	2,854

Leveraged finance-related assets	172	3,660			218	4,050	2,526
Student loan-related assets	242	3,545			119	3,906	3,284
Other assets	1,264	1,114		19	646	3,043	758
At 31 December 2014	3,560	29,670	13,447	19	2,247	48,943	14,560

Risk elements in the loan portfolio

The disclosure of credit risk elements in this section reflects US accounting practice and classifications. The purpose of the disclosure is to present within the US disclosure framework those elements of the loan portfolios with a greater risk of loss. The three main classifications of credit risk elements presented are:

- impaired loans;
- unimpaired loans contractually more than 90 days past due as to interest or principal; and
- troubled debt restructurings not included in the above.

Interest foregone on impaired and restructured loans

Interest income that would have been recognised under the original terms of impaired and restructured loans amounted to approximately $2.1bn in 2015 (2014: $2.2bn). The table below analyses this by geographic region.

	2015 **$m**	2014 $m
Europe	**276**	218
Asia	**164**	113
Middle East and North Africa	**138**	135
North America	**1,097**	1,350
Latin America	**409**	411
Year ended 31 December	**2,084**	**2,227**

Interest recognised on impaired and restructured loans

Interest income from such loans of approximately $1.3bn was recorded in 2015 (2014: $1.5bn). The table below analyses this by geographical region.

	2015	2014
	$m	$m
Europe	**92**	112
Asia	**57**	38
Middle East and North Africa	**27**	40
North America	**832**	995
Latin America	**248**	284
Year ended 31 December	**1,256**	**1,469**

Impaired loans

In the following tables we present information on our impaired loans and advances in accordance with the classification approach described on page 128.

A loan is impaired, and an impairment allowance is recognised, when there is objective evidence of a loss event that has an effect on the cash flows of the loan which can be reliably estimated. In accordance with IFRSs, we recognise interest income on assets after they have been written down as a result of an impairment loss.

The balance of impaired loans at 31 December 2015 was $5.6bn lower than at 31 December 2014. This reduction was largely due to the reclassification of the assets of our Brazilian operations as Assets held for sale , and a combination of the continued run-off of the CML portfolio and reductions in corporate individually assessed impaired loans in Europe.

Unimpaired loans more than 90 days past due

Examples of unimpaired loans more than 90 days past due include individually assessed mortgages that are in arrears more than 90 days where there are no other indicators of impairment, but where the value of collateral is sufficient to repay both the principal debt and all potential interest for at least one year; and short-term trade facilities past due more than 90 days for technical reasons such as delays in documentation, but where there is no concern over the creditworthiness of the counterparty.

The amount of unimpaired loans contractually more than 90 days past due as to principal or interest at 31 December 2015 was $132m, $60m higher than at 31 December 2014. The increase was primarily in Middle East and North Africa.

Troubled debt restructurings

Under US GAAP, a troubled debt restructuring (TDR) is a loan the terms of which have been modified for economic or legal reasons related to the borrower s financial difficulties to grant a concession to the borrower that the lender would not otherwise consider. A modification which results in a delay in payment that is considered insignificant is not regarded as a concession for the purposes of this disclosure. The SEC requires separate disclosure of any loans which meet the definition of a TDR that are not included in the previous two loan categories. These are classified as TDRs in the table on page 153c. Loans that have been identified as a TDR under the US guidance retain this designation until maturity or derecognition. This treatment differs from the Group s impaired loans disclosure convention under IFRSs under which a loan may return to unimpaired status after demonstrating a significant reduction in the risk of non-payment of future cash flows. As a result, reported TDRs include those loans that have returned to unimpaired status under the Group s disclosure convention for renegotiated loans.

The balance of TDRs not included as impaired loans at 31 December 2015 was $6.2bn, $0.8bn lower than 2014 due to a reduction across all regions except Asia.

Potential problem loans

Potential problem loans are loans where information on possible credit problems among borrowers causes management to seriously doubt their ability to comply with the loan repayment terms. The following concentrations of credit risk have a higher risk of containing potential problem loans.

Mortgage lending on page 144 includes disclosure about certain homogeneous groups of loans which are collectively assessed for impairment, which may represent exposures to potential problem loans, including interest-only mortgages and affordability mortgages including ARMs (adjustable rate mortgages). Collectively assessed loans and advances, although not classified as impaired until more than 90 days past due, are assessed collectively

Table of Contents

Report of the Directors: Financial Review (continued)

for losses that have been incurred but have not yet been individually identified. This policy is further described on page 201 and page 356.

Renegotiated loans and forbearance on page 129 includes disclosure about the credit quality of loans whose contractual terms have been changed at some point in the life of the loan because of significant concerns about the borrower s ability to make contractual payments when due. Renegotiated loans are classified as impaired when:

- there has been a change in contractual cash flow as a result of a concession which the lender would otherwise not consider; and
- it is probable that without the concession, the borrower would be unable to meet contractual payment obligations in full.

This presentation applies unless the concession is insignificant and there are no other indicators of impairment. The renegotiated loan will continue to be disclosed as impaired until there is sufficient evidence to demonstrate a significant reduction in the risk of non-repayment of future cash flows, and there are no other indicators of impairment.

Renegotiated loans that are not classified as impaired may have a higher risk of becoming delinquent in the future, and may therefore be potential problem loans. Further information regarding the credit quality classification of renegotiated loans can be found on page 198.

Areas of special interest on page 117 includes information on metals and mining, oil and gas and mainland China. Refinancing risk in the commercial real estate sector is a separate area of focus and is covered on page 137.

Table of Contents

Analysis of risk elements in the loan portfolio by geographical region

The analysis below sets out the amount of risk elements in loan portfolios included within loans and advances to customers and banks in the consolidated balance sheet, trading loans classified as in default and assets obtained by taking possession of security. The table excludes the

amount of risk elements in loan portfolios classified as Assets held for sale in the consolidated balance sheet, which is set out in footnote 56 on page 192a.

During 2015, our Brazilian operations were reclassified to Assets held for sale . Further information can be found on page 121.

	2015	2014	2013	2012	2011
	$m	$m	$m	$m	$m
Impaired loans					
Europe	**9,677**	10,242	13,228	11,145	11,819
Asia	**2,375**	2,048	1,623	1,624	1,678
Middle East and North Africa	**1,766**	1,981	2,285	2,474	2,445
North America	**8,930**	11,694	15,123	20,345	22,758
Latin America	**1,030**	3,365	4,244	3,188	3,039
	23,778	29,330	36,503	38,776	41,739
Unimpaired loans contractually more than 90 days past due as to principal or interest					
Europe	**7**	6	25	33	41
Asia	**2**	1	33	14	24
Middle East and North Africa	**96**	59	56	108	214
North America	**27**	3	13	69	74
Latin America		3			10

	132	72	127	224	363
Troubled debt restructurings (not included in the classifications above)					
Europe	**1,495**	1,652	1,427	1,306	753
Asia	**284**	267	277	236	230
Middle East and North Africa	**584**	778	406	593	444
North America	**3,698**	3,932	4,643	3,813	2,300
Latin America	**164**	353	482	1,001	1,037
	6,225	6,982	7,235	6,949	4,764
Trading loans classified as in default					
North America		4	133	166	230
Risk elements on loans[57]					
Europe	**11,179**	11,900	14,680	12,484	12,613
Asia	**2,661**	2,316	1,933	1,874	1,932
Middle East and North Africa	**2,446**	2,818	2,747	3,175	3,103
North America	**12,655**	15,633	19,912	24,393	25,362
Latin America	**1,194**	3,721	4,726	4,189	4,086
	30,135	36,388	43,998	46,115	47,096
Assets held for resale[57]					
Europe	**24**	29	46	51	60
Asia	**19**	14	10	19	14
Middle East and North Africa					
North America	**116**	186	370	319	359
Latin America	**20**	16	27	55	69
	179	245	453	444	502
Total risk elements[56]					
Europe	**11,203**	11,929	14,726	12,535	12,673
Asia	**2,680**	2,330	1,943	1,893	1,946
Middle East and North Africa	**2,446**	2,818	2,747	3,175	3,103
North America	**12,771**	15,819	20,282	24,712	25,721
Latin America	**1,214**	3,737	4,753	4,244	4,155
At 31 December	**30,314**	**36,633**	**44,451**	**46,559**	**47,598**
	%	*%*	*%*	*%*	*%*
Loan impairment allowances as a percentage of risk elements on loans[58]	**31.8**	34.0	34.7	35.2	37.6

For footnotes, see page 192a.

Table of Contents

Report of the Directors: Financial Review (continued)

Country distribution of outstandings and cross-border exposures

We control the risk associated with cross-border lending through a centralised structure of internal country limits. Exposures to individual countries and cross-border exposure in the aggregate are kept under continual review.

The following table summarises the aggregate of our in-country foreign currency and cross-border outstandings by type of borrower to countries which individually

represent in excess of 0.75% of our total assets. The classification is based on the country of residence of the borrower but also recognises the transfer of country risk in respect of third-party guarantees, eligible collateral held and residence of the head office when the borrower is a branch. In accordance with the Bank of England Country Exposure Report (Form CE) guidelines, outstandings comprise loans and advances (excluding settlement accounts), amounts receivable under finance leases, acceptances, commercial bills, certificates of deposit and debt and equity securities (net of short positions), and exclude accrued interest and intra-HSBC exposures.

In-country foreign currency and cross-border amounts outstanding

	Banks $bn	Government and official institutions $bn	Other $bn	Total $bn
At 31 December 2015				
US	**4.7**	**51.3**	**24.7**	**80.7**
Mainland China	**21.2**	**6.8**	**26.0**	**54.0**
UK	**23.1**	**9.2**	**25.3**	**57.6**
Germany	**7.0**	**23.1**	**6.9**	**37.0**
Hong Kong	**3.1**	**0.5**	**30.0**	**33.6**
Japan	**7.6**	**19.4**	**14.4**	**41.4**
France[60]	**4.2**	**7.1**	**13.0**	**24.3**

Canada[60]	**6.2**	**8.3**	**7.5**	**22.0**
At 31 December 2014				
US	6.8	30.3	32.4	69.5
Mainland China	26.5	5.7	28.5	60.7
UK	24.0	8.3	41.8	74.2
Germany	7.7	26.6	6.7	41.0
Hong Kong	8.1	0.4	29.0	37.5
Japan	9.0	15.7	12.2	36.9
France	7.3	3.1	11.6	22.1
At 31 December 2013				
US	10.0	2.3	42.5	54.8
UK	5.9	34.3	24.5	64.7
Mainland China	28.8	6.9	19.3	55.0
Germany	10.0	12.9	31.9	54.8
France	12.8	21.1	5.6	39.5
Hong Kong	10.9	0.7	26.5	38.1
Japan	7.2	14.8	7.0	29.0
Ireland	6.2	8.7	11.2	26.1

For footnote, see page 192a.

Table of Contents

Report of the Directors: Risk (continued)

Liquidity and funding

Liquidity and funding

	Page	App[1]	Tables	Page
Liquidity and funding	155	204		
Primary sources of funding		204		
Liquidity and funding in 2015	155			
Wholesale senior funding markets	155			
Liquidity regulation	155			
Liquidity coverage ratio EC LCR Delegated Regulation	155		*Operating entities LCRs*	156
Management of liquidity and funding risk	156	204		
Forward-looking framework	156			
2015 framework	156			
Inherent liquidity risk categorisation		204		
Core deposits		204		
Advances to core funding ratio	156	205	*Advances to core funding ratios*	157
Stressed coverage ratios	157	205	*Stressed one-month and three-month coverage ratios*	157
Stressed scenario analysis		205		
Liquid assets of HSBC s principal operating entities	157	206	*Liquid assets of HSBC s principal entities*	158
Net contractual cash flows	158	206	*Net cash inflows/(outflows) for interbank loans and intra-Group deposits and reverse repo, repo and short positions*	159
Wholesale debt monitoring		207		
Liquidity behaviouralisation		207		
Funds transfer pricing		207		
Contingent liquidity risk arising from committed lending facilities	159		*The Group s contractual undrawn exposures*	159

			monitored under the contingent liquidity risk limit structure	
Sources of funding	159			
Repos and stock lending		208	*Funding sources and uses*	160
Cross-border intra-Group and cross-currency liquidity and funding risk	160		*Advances to core funding ratios by material currency*	160
Wholesale term debt maturity profile	162		*Wholesale funding cash flows payable by HSBC under financial liabilities by remaining contractual maturities*	161
Analysis of on-balance sheet encumbered and unencumbered assets and off-balance sheet collateral	162	209		
On-balance sheet encumbered and unencumbered assets	162			
Off-balance sheet collateral	162		*Analysis of on-balance sheet encumbered and unencumbered assets*	163
Additional contractual obligations	164			
Contractual maturity of financial liabilities	164		*Cash flows payable by HSBC under financial liabilities by remaining contractual maturities*	164
Management of cross-currency liquidity and funding risk		210		
HSBC Holdings	165	210	*Cash flows payable by HSBC Holdings under financial liabilities by remaining contractual maturities*	165

1 *Appendix to Risk risk policies and practices.*

Liquidity and funding

Liquidity risk is the risk that the Group will not have sufficient financial resources to meet its obligations as they fall due, or will have to do so at an excessive cost. The risk arises from mismatches in the timing of cash flows.

The risk arises when the funding needed for illiquid asset positions cannot be obtained at the expected terms and when required.

A summary of our current policies and practices regarding liquidity and funding is provided in the Appendix to Risk on page 204.

Liquidity and funding risk management framework

The objective of our liquidity framework is to allow us to withstand very severe liquidity stresses. It is designed to be adaptable to changing business models, markets and regulations.

Our Liquidity and Funding Risk Management Framework (LFRF) requires:

- liquidity to be managed by operating entities on a stand-alone basis with no implicit reliance on the Group or central banks;
- all operating entities to comply with their limits for the advances to core funding ratio; and
- all operating entities to maintain a positive stressed cash flow position out to three months under prescribed Group stress scenarios.

Liquidity and funding in 2015

The liquidity position of the Group remained strong in 2015. Our ratio of customer advances to customer deposits was 72% (2014: 72%). Both customer loans and customer accounts fell on a reported basis with these movements including:

- the transfer to Assets held for sale and Liabilities of disposal groups held for sale of balances relating to the planned disposal of our operations in Brazil;

- a reduction in corporate overdraft and current account balances relating to a small number of clients in our Payments and Cash Management business in the UK who settled their overdraft and deposit balances on a net basis, with customers increasing the frequency with which they settled their positions; and

- movements in currency markets, which changed the value of our customer loans and customer accounts when translated from their local currency into US dollars.

The HSBC UK liquidity group recorded an increase in its advances to core funding (ACF) ratio to 101% at 31 December 2015 (2014: 97%), mainly because of higher wholesale lending while core funding remained unchanged.

The Hongkong and Shanghai Banking Corporation recorded a decrease in its ACF ratio to 69% at 31 December 2015 (2014: 75%), mainly because of an increase in core deposits coupled with a decrease in corporate loans.

HSBC USA recorded a decrease in its ACF ratio to 89% at 31 December 2015 (2014: 100%), mainly because of growth in core funding, which was partially offset by higher loans to customers.

The HSBC UK liquidity group, The Hongkong and Shanghai Banking Corporation and HSBC USA are defined in footnotes 19 to 21 on page 191. The ACF ratio is discussed on page 205.

Wholesale senior funding markets

Conditions in the bank wholesale debt markets were generally positive in 2015. Periods of volatility remained, however, particularly during the latter months of the year when concerns over the decline in oil prices and economic growth in Europe and mainland China combined with a variety of other factors to leave the outlook uncertain, affecting market confidence.

In 2015, a number of Group entities issued the equivalent of $22bn (2014: $20bn) of long-term debt securities in the public capital markets in a range of currencies and maturities.

Liquidity regulation

Under European Commission (EC) Delegated Regulation 2015/61, the consolidated liquidity coverage ratio (LCR) became a minimum regulatory standard from 1 October 2015.

The European calibration of the net stable funding ratio (NSFR) is still pending following the Basel Committee s final recommendation in October 2014, and therefore external disclosure of this metric is currently on hold.

Non-EU regulators are expected to apply the LCR and NSFR reporting requirement locally and there is the potential for local requirements to diverge from the rules applicable to the Group.

Liquidity coverage ratio EC LCR Delegated Regulation

The calculation of the EC LCR metric involves two key assumptions: the definition of operational deposits and the ability to transfer liquidity from non-EU legal entities.

We define operational deposits as transactional (current) accounts arising from the provision of custody services by HSBC Security Services or Payments and Cash Management services, where the operational component is assessed to be the lower of the current balance and the separate notional values of debits and credits across the account in the previous calculation period.

No transferability of liquidity from non-EU entities is assumed other than to the extent currently permitted. This results in $94bn of high-quality liquid assets (HQLA) being excluded from the Group s LCR.

On the basis of these assumptions, we reported to the PRA a Group EC LCR at 31 December 2015 (on the basis of the Delegated Regulation) of 116%.

The ratio of total consolidated HQLAs to the EC LCR denominator at 31 December 2015 was 142%, reflecting the additional $94bn of HQLAs excluded from the Group LCR.

Table of Contents

Report of the Directors: Risk (continued)

Liquidity and funding

The liquidity position of the Group can also be represented by the stand-alone ratios of each of our principal operating entities. The table below displays the individual LCR levels for the principal HSBC operating entities on an EC LCR Delegated Regulation basis. The ratios shown for operating entities in non-EU jurisdictions can vary from their local LCR measures due to differences in the way non-EU regulators have implemented the Basel III recommendations.

Operating entities LCRs

	At 31 December 2015 %
HSBC UK liquidity group[19]	**107**
The Hongkong and Shanghai Banking Corporation Hong Kong Branch[20]	**150**
The Hongkong and Shanghai Banking Corporation Singapore Branch[20]	**189**
HSBC Bank USA[21]	**116**
HSBC France[22]	**127**
Hang Seng Bank	**199**
HSBC Canada[22]	**142**
HSBC Bank China	**183**

For footnotes, see page 191.

At 31 December 2015, all the Group s operating entities were individually within the risk tolerance level established by the Board and applicable under the new internal framework which took effect from 1 January 2016.

Management of liquidity and funding risk

Forward-looking framework

From 1 January 2016, the Group implemented a new internal LFRF, using the external LCR and NSFR regulatory framework as a foundation, but adding extra metrics/limits and overlays to address the risks that we consider are not adequately reflected by the external regulatory framework.

The key aspects of the new internal LFRF are:

i. stand-alone management of liquidity and funding by operating entity;

ii. operating entity classification by inherent liquidity risk (ILR) categorisation;

iii. minimum operating entity EC LCR requirement depending on ILR categorisation (EC LCR Delegated Regulation basis);

iv. minimum operating entity NSFR requirement depending on ILR categorisation (on the basis of the Basel 295 publication, pending finalisation of the EC NSFR delegated regulation);

v. legal entity depositor concentration limit;
vi. operating entity three-month and twelve-month cumulative rolling term contractual maturity limits covering deposits from banks, deposits from non-bank financials and securities issued;

vii. annual individual liquidity adequacy assessment (ILAA) by operating entity; and

viii. during 2016, we will also introduce a minimum operating entity LCR requirement by currency.

The new internal LFRF and the risk tolerance (limits) were approved by the RMM and the Board on the basis of recommendations made by the Group Risk Committee.

Our ILAA process has been designed to identify risks that are not reflected in the Group framework and where additional limits are assessed to be required locally, and to validate the risk tolerance at the operating entity level.

The decision to create an internal framework modelled around the external regulatory framework was driven by the need to ensure that the external and internal frameworks are directionally aligned and that the Group s internal funds transfer pricing framework incentivises the global businesses within each operating entity to collectively comply with both the external (regulatory) and the internal risk tolerance.

Current framework

The 2015, LFRF employed two key measures to define, monitor and control the liquidity and funding risk of each of our operating entities. The ACF ratio was used to monitor the structural long-term funding position, and the stressed coverage ratio, incorporating Group-defined stress scenarios, was used to monitor the resilience to severe liquidity stresses. Although in place before and during 2015, this framework and its accompanying metrics will be demised as the new framework outlined above is implemented.

The three principal entities listed in the tables below represented 65% (2014: 66%) of the Group s customer accounts. Including the other principal entities, the percentage was 88% (2014: 88%).

Advances to core funding ratio

The table overleaf shows the extent to which loans and advances to customers in our principal banking entities were financed by reliable and stable sources of funding.

ACF limits set for principal operating entities at 31 December 2015 ranged between 80% and 120%.

Core funding represents the core component of customer deposits and any term professional funding with a residual contractual maturity beyond one year. Capital is excluded from our definition of core funding.

Advances to core funding ratios[23]

	At 31 December	
	2015	2014
	%	%
HSBC UK liquidity group[19]		
Year-end	**101**	97
Maximum	**101**	102
Minimum	**96**	97
Average	**98**	100
The Hongkong and Shanghai Banking Corporation[20]		
Year-end	**69**	75
Maximum	**75**	75
Minimum	**69**	72
Average	**72**	74
HSBC USA[21]		
Year-end	**89**	100
Maximum	**100**	100
Minimum	**89**	85
Average	**94**	95
Total of HSBC s other principal entities[24]		
Year-end	**91**	92
Maximum	**95**	94
Minimum	**91**	92
Average	**93**	93

For footnotes, see page 191.

Stressed coverage ratios

The ratios tabulated below express stressed cash inflows as a percentage of stressed cash outflows over both one-month and three-month time horizons. Operating entities are required to maintain a ratio of 100% or more out to three months.

Inflows included in the numerator of the stressed coverage ratio are generated from liquid assets (net of assumed haircuts) and cash inflows relating to assets contractually maturing within the time period.

In general, customer loans and advances are assumed to be renewed on maturity and as a result do not generate a cash inflow.

The stressed coverage ratios for The Hongkong and Shanghai Banking Corporation increased due to higher deposits and lower advances year-on-year. The ratios for HSBC USA increased due to a growth in core funding.

The stressed coverage ratios for the other entities remained broadly unchanged.

Stressed one-month and three-month coverage ratios[23]

	Stressed one-month coverage ratios at 31 December		Stressed three-month coverage ratios at 31 December	
	2015	2014	**2015**	2014
	%	%	**%**	%
HSBC UK liquidity group[19]				
Year-end	**113**	117	**105**	109
Maximum	**127**	117	**114**	109
Minimum	**112**	102	**105**	103
Average	**117**	107	**108**	104
The Hongkong and Shanghai Banking Corporation[20]				
Year-end	**129**	117	**120**	112
Maximum	**129**	119	**120**	114
Minimum	**113**	114	**111**	111
Average	**119**	116	**115**	112
HSBC USA[21]				
Year-end	**126**	111	**116**	104
Maximum	**126**	122	**116**	111
Minimum	**109**	108	**101**	104
Average	**117**	115	**108**	107
Total of HSBC s other principal entities[24]				
Year-end	**126**	122	**111**	108
Maximum	**126**	126	**111**	120
Minimum	**110**	114	**105**	108
Average	**116**	118	**108**	111

For footnotes, see page 191.

Liquid assets of HSBC s principal operating entities

The table below shows the estimated liquidity value (before assumed haircuts) of assets categorised as liquid and used for the purposes of calculating the three-month stressed coverage ratios, as defined under the LFRF.

The level of liquid assets reported reflects the stock of unencumbered liquid assets at the reporting date adjusted for the effect of reverse repo, repo and collateral swaps maturing within three months as the liquidity value of these transactions is reflected as a contractual cash flow reported in the net contractual cash flow table. Repos are sale and repurchase transactions while reverse repos are transactions under which securities are purchased under commitments to sell.

Like reverse repo transactions with residual contractual maturities within three months, unsecured interbank loans

maturing within three months are not included in liquid assets, but are treated as contractual cash inflows.

Liquid assets are held and managed on a stand-alone operating entity basis. Most of the liquid assets shown are held directly by each operating entity s Balance Sheet Management (BSM) department, primarily for the purpose of managing liquidity risk, in line with the LFRF.

The liquid asset buffer may also include securities held in held-to-maturity portfolios. In order to qualify as part of the liquid asset buffer, all held-to-maturity portfolios must have a deep and liquid repo market in the underlying security.

Report of the Directors: Risk (continued)

Liquidity and funding

Liquid assets also include any unencumbered liquid assets held outside BSM for any other purpose. The LFRF gives ultimate control of all unencumbered assets and sources of liquidity to BSM.

For a summary of our liquid asset policy and definitions of the classifications shown in the table below, see the Appendix to Risk on page 206.

Liquid assets of HSBC s principal entities

	Estimated liquidity value[25]	
	31 December 2015	31 December 2014
	$m	$m
HSBC UK liquidity group[19]		
Level 1	**118,193**	131,756
Level 2	**4,722**	4,688
Level 3	**59,378**	66,011
	182,293	202,455
The Hongkong and Shanghai Banking Corporation[20]		
Level 1	**132,870**	109,683
Level 2	**6,029**	4,854
Level 3	**7,346**	7,043
	146,245	121,580
HSBC USA[21]		
Level 1	**42,596**	51,969
Level 2	**11,798**	15,184
Level 3	**9**	197
Other	**5,557**	9,492
	59,960	76,842

Total of HSBC s other principal entities[24]		
Level 1	**108,789**	115,770
Level 2	**10,764**	7,940
Level 3	**5,486**	9,360
	125,039	133,070

For footnotes, see page 191.

All assets held within the liquid asset portfolio are unencumbered.

The quantum of liquid assets held by the HSBC UK liquidity group on a constant currency basis was broadly unchanged.

Liquid assets held by The Hongkong and Shanghai Banking Corporation increased due to added holdings of government securities and higher regulatory reserves. This was driven by the investment of surplus deposits.

Liquid assets held by HSBC USA decreased, mainly due to a switch from regulatory reserves to reverse repo placements. A corresponding improvement can be seen in HSBC USA s net repo cash flow shown in the net contractual cash flow table.

Net contractual cash flows

The following table quantifies the contractual cash flows from interbank and intra-Group loans and deposits, and reverse repo, repo (including intra-Group transactions) and short positions for the principal entities shown. These contractual cash inflows and outflows are reflected gross in the numerator and denominator, respectively, of the one and three-month stressed coverage ratios and should be considered alongside the level of liquid assets.

Outflows included in the denominator of the stressed coverage ratios include the principal outflows associated with the contractual maturity of wholesale debt securities reported in the table headed Wholesale funding cash flows payable by HSBC under financial liabilities by remaining contractual maturities on page 161.

For a summary of our policy and definitions of the classifications shown in the table on page 159, see the Appendix to Risk on page 206.

Net cash inflows/(outflows) for interbank and intra-Group loans and deposits and reverse repo, repo and short positions

	At 31 December 2015		At 31 December 2014	
	Cash flows within 1 month	**Cash flows from 1 to 3 months**	Cash flows within 1 month	Cash flows from 1 to 3 months
	$m	**$m**	$m	$m
Interbank and intra-Group loans and deposits				
HSBC UK liquidity group[19]	**(18,534)**	**(3,712)**	(14,110)	(2,846)
The Hongkong and Shanghai Banking Corporation[20]	**3,702**	**6,027**	(1,277)	6,862
HSBC USA[21]	**(12,432)**	**937**	(18,353)	1,648
Total of HSBC s other principal entities[24]	**2,875**	**6,123**	(1,522)	7,310
Reverse repo, repo, stock borrowing, stock lending and outright short positions (including intra-Group)				
HSBC UK liquidity group[19]	**(16,861)**	**1,313**	(16,070)	11,551
The Hongkong and Shanghai Banking Corporation[20]	**15,068**	**12,326**	8,139	8,189
HSBC USA[21]	**19,431**		(4,928)	
Total of HSBC s other principal entities[24]	**(22,571)**	**5,240**	(33,235)	(11,528)

For footnotes, see page 191.

Contingent liquidity risk arising from committed lending facilities

The Group s operating entities provide commitments to various counterparties. The most significant liquidity risk relates to committed lending facilities which, whilst undrawn, give rise to contingent liquidity risk as they could be drawn during a period of liquidity stress. Commitments are given to customers and committed lending facilities are provided to consolidated multi-seller conduits established to enable clients to access flexible market-based sources of finance (see page 442), consolidated securities investment conduits and third-party sponsored conduits.

The consolidated securities investment conduits include Solitaire Funding Limited (Solitaire) and Mazarin Funding

Limited (Mazarin). They issue asset-backed commercial paper secured against the portfolio of securities held by them. At 31 December 2015, the HSBC UK liquidity group had undrawn committed lending facilities to these conduits of $8.2bn (2014: $11bn), of which Solitaire represented $7.7bn (2014: $9.5bn) and the remaining $0.5bn (2014: $1.6bn) pertained to Mazarin. Although the HSBC UK liquidity

group provides a liquidity facility, Solitaire and Mazarin have no need to draw on it so long as HSBC purchases the commercial paper issued, which it intends to do for the foreseeable future. At 31 December 2015, the commercial paper issued by Solitaire and Mazarin was entirely held by the HSBC UK liquidity group. Since HSBC controls the size of the portfolio of securities held by these conduits, no contingent liquidity risk exposure arises as a result of these undrawn committed lending facilities.

The table below shows the level of undrawn commitments to customers outstanding for the five largest single facilities and the largest market sector, and the extent to which they are undrawn.

The Group s contractual undrawn exposures at 31 December monitored under the contingent liquidity risk limit structure

(Audited)

	HSBC UK liquidity group[19]		HSBC USA[21]		HSBC Canada[22]		The Hongkong and Shanghai Banking Corporation[20]	
	2015	2014	**2015**	2014	**2015**	2014	**2015**	2014
	$bn	$bn	**$bn**	$bn	**$bn**	$bn	**$bn**	$bn
Commitments to conduits								
Consolidated multi-seller conduits								
total lines	**13.4**	9.8	**3.3**	2.3	**0.2**	0.2		
largest individual lines	**0.4**	0.9	**0.5**	0.5	**0.1**	0.2		
Consolidated securities investment conduits total lines	**8.2**	11.1						
Third-party conduits total lines			**0.1**	0.1				
Commitments to customers								
five largest[26]	**4.9**	2.6	**6.4**	7.1	**1.4**	1.7	**1.7**	1.5
largest market sector[27]	**17.9**	16.6	**9.7**	10.0	**3.4**	3.5	**3.4**	3.2

For footnotes, see page 191.

Sources of funding

(Audited)

Our primary sources of funding are customer current accounts and customer savings deposits payable on demand or at short notice. We issue wholesale securities (secured and unsecured) to supplement our customer deposits and change the currency mix, maturity profile or location of our liabilities.

The Funding sources and uses table below, which provides a consolidated view of how our balance sheet is funded, should be read in light of the LFRF, which requires operating entities to manage liquidity and funding risk on a stand-alone basis.

The table analyses our consolidated balance sheet according to the assets that primarily arise from operating activities and the sources of funding primarily supporting these activities. The assets and liabilities that do not arise from operating activities are presented as a net balancing source or deployment of funds.

Report of the Directors: Risk (continued)

Liquidity and funding

The level of customer accounts continued to exceed the level of loans and advances to customers. The positive funding gap was predominantly deployed in liquid assets (cash and balances with central banks and financial investments) as required by the LFRF.

Loans and other receivables due from banks continued to exceed deposits taken from banks. The Group remained a net unsecured lender to the banking sector.

For a summary of sources and utilisation of repos and stock lending, see the Appendix to Risk on page 208.

Funding sources and uses[28]

	2015	2014
	$m	$m
Sources		
Customer accounts	**1,289,586**	1,350,642
Deposits by banks	**54,371**	77,426
Repurchase agreements non-trading	**80,400**	107,432
Debt securities issued	**88,949**	95,947
Liabilities of disposal groups held for sale	**36,840**	6,934
Subordinated liabilities	**22,702**	26,664
Financial liabilities designated at fair value	**66,408**	76,153
Liabilities under insurance contracts	**69,938**	73,861
Trading liabilities	**141,614**	190,572
repos	**442**	3,798
stock lending	**8,859**	12,032
settlement accounts	**10,530**	17,454
other trading liabilities	**121,783**	157,288
Total equity	**197,518**	199,978
At 31 December	**2,048,326**	2,205,609
Uses		
Loans and advances to customers	**924,454**	974,660
Loans and advances to banks	**90,401**	112,149
Repurchase agreements non-trading	**146,255**	161,713

Assets held for sale	**43,900**	7,647
Trading assets	**224,837**	304,193
reverse repos	**438**	1,297
stock borrowing	**7,118**	7,969
settlement accounts	**12,127**	21,327
other trading assets	**205,154**	273,600
Financial investments	**428,955**	415,467
Cash and balances with central banks	**98,934**	129,957
Net deployment in other balance sheet assets and liabilities	**90,590**	99,823
At 31 December	**2,048,326**	2,205,609

For footnote, see page 191.

Cross-border, intra-Group and cross-currency liquidity and funding risk

The stand-alone operating entity approach to liquidity and funding mandated by the LFRF restricts the exposure of our operating entities to the risks that can arise from extensive reliance on cross-border funding. Operating entities manage their funding sources locally, focusing predominantly on the local customer deposit base. The RBWM, CMB and GPB customer relationships that give rise to core deposits within an operating entity generally reflect a local customer relationship with that operating entity. Access to public debt markets is coordinated globally by the Global Head of Balance Sheet Management and the Group Treasurer with

Group ALCO monitoring all planned public debt issuance on a monthly basis. As a general principle, operating entities are only permitted to issue in their local currency and are encouraged to focus on local private placements. The public issuance of debt instruments in foreign currency is tightly controlled and generally restricted to HSBC Holdings plc and HSBC Bank plc.

A central principle of our stand-alone approach to LFRF is that operating entities place no future reliance on other Group entities. However, operating entities may, at their discretion, utilise their respective committed facilities from other Group entities if necessary. In addition, intra-Group large exposure limits are applied by national regulators to individual legal entities locally, which restricts the unsecured exposures of legal entities to the rest of the Group to a percentage of the lender s regulatory capital.

Our LFRF also considers the ability of each entity to continue to access foreign exchange markets under stress when a surplus in one currency is used to meet a deficit in another currency, for example, by using the foreign currency swap markets. Where appropriate, operating entities are required to monitor stressed coverage ratios and ACF ratios for non-local currencies and set limits for them. Foreign currency swap markets in currency pairs settled through the Continuous Link Settlement Bank are considered to be extremely deep and liquid and it is assumed that capacity to access these markets is not exposed to idiosyncratic risks. The table below shows the ACF ratios by material currencies for the year ended 31 December 2015.

Advances to core funding ratios by material currency[23]

	At 31 December 2015 %
HSBC UK liquidity group[19]	

Local currency (sterling)	**98**
US dollars	**128**
Euros	**111**
Consolidated	**101**
The Hongkong and Shanghai Banking Corporation[20]	
Local currency (Hong Kong dollars)	**76**
US dollars	**60**
Consolidated	**69**
HSBC USA[21]	
Local currency (US dollars)	**89**
Consolidated	**89**
Total of HSBC s other principal entities[24]	
Local currency	**96**
US dollars	**89**
Consolidated	**91**

For footnotes, see page 191.

For all HSBC s operating entities, the only material currencies (those that exceed 5% of Group balance sheet liabilities) are the Hong Kong dollar, euro, sterling and US dollar.

Table of Contents

Wholesale funding cash flows payable by HSBC under financial liabilities by remaining contractual maturities

Due not more than 1 month $m	Due over 1 month but not more than 3 months $m	Due over 3 months but not more than 6 months $m	Due over 6 months but not more than 9 months $m	Due over 9 months but not more than 1 year $m	Due over 1 year but not more than 2 years $m	Due over 2 years but not more than 5 years $m	Due over 5 years $m
19,447	11,803	20,565	6,712	5,274	20,150	43,463	27,398
5,830	8,426	11,250	2,944	1,224	955	108	10
4,229	2,240	7,130	2,687	1,711	10,850	27,239	18,407
883	964	1,544	875	2,166	4,158	9,741	5,262
					2,074	1,619	2,577
8,414							
20	173	195	206	173	313	1,554	114
71		446			1,800	3,202	1,028
	816			34	648	6,826	34,423
				34	648	6,338	32,494
	816					488	1,929

19,447	**12,619**	**20,565**	**6,712**	**5,308**	**20,798**	**50,289**	**61,821**
17,336	17,161	19,030	9,352	9,055	27,312	40,855	31,928
5,637	9,337	9,237	4,793	3,010	3,506	4,158	185
1,300	5,679	7,684	2,922	4,794	17,676	23,523	20,715
1,363	1,082	2,049	1,149	979	4,757	8,444	6,789
			205			2,765	2,942
8,602							
212	1,063	60	283	272	915	1,562	
222					458	403	1,297
	150		3	185	113	5,556	40,487
	150		3	185	113	5,556	34,750
							5,737
17,336	17,311	19,030	9,355	9,240	27,425	46,411	72,415

Report of the Directors: Risk (continued)

Liquidity and funding

Wholesale term debt maturity profile

The maturity profile of our wholesale term debt obligations is set out in the table on page 161, Wholesale funding principal cash flows payable by HSBC under financial liabilities by remaining contractual maturities .

The balances in the table do not agree directly with those in the consolidated balance sheet as the table presents gross cash flows relating to principal payments and not the balance sheet carrying value, which includes debt securities and subordinated liabilities measured at fair value.

Analysis of on-balance sheet encumbered and unencumbered assets and off-balance sheet collateral

On-balance sheet encumbered and unencumbered assets

The table on page 163, Analysis of on-balance sheet encumbered and unencumbered assets , summarises the total on-balance sheet assets that are capable of supporting future funding and collateral needs and shows the extent to which these assets are currently pledged for this purpose. The objective of this disclosure is to facilitate an understanding of available and unrestricted assets that could be used to support potential future funding and collateral needs.

Under Off-balance sheet collateral below we discuss the off-balance sheet collateral received and re-pledged, and the level of available unencumbered off-balance sheet collateral.

The disclosure is not designed to identify assets which would be available to meet the claims of creditors or to predict assets that would be available to creditors in the event of a resolution or bankruptcy.

The table has been significantly updated since 2014 following the issuance of a Dear CFO letter by the PRA, and acknowledgement by the Enhanced Disclosure Task Force that its Recommendation 19 and Figure 5 could be met without providing disclosure that has the potential to reveal the use or non-use of emergency liquidity assistance provided by central banks on a confidential basis. There are two key changes. The first is to segregate out any assets

positioned with central banks for the specific purpose of emergency liquidity provision irrespective of whether any liquidity has actually been drawn and assets encumbered. The second is to include an analysis of the source of encumbrance for those assets reported as encumbered.

An asset is defined as encumbered if it has been pledged as collateral against an existing liability and, as a result, is no longer available to the Group to secure funding, satisfy collateral needs or be sold to reduce our funding

requirement. An asset is therefore categorised as unencumbered if it has not been pledged against an existing liability. Unencumbered assets are further analysed into four separate sub-categories: Readily realisable assets , Other realisable assets , Reverse repo/stock borrowing receivables and derivative assets and Cannot be pledged as collateral .

For a summary of our policy on collateral management and definition of encumbrance, see the Appendix to Risk on page 209.

Off-balance sheet collateral

Off-balance sheet collateral received and pledged for reverse repo, stock borrowing and derivative transactions

The fair value of assets accepted as collateral that we are permitted to sell or repledge in the absence of default was $228bn at 31 December 2015 (2014: $257bn). The fair value of any such collateral actually sold or repledged was $150bn (2014: $176bn). We are obliged to return equivalent securities. These transactions are conducted under terms that are usual and customary to standard reverse repo, stock borrowing and derivative transactions.

The fair value of collateral received and repledged in relation to reverse repos, stock borrowing and derivatives is reported on a gross basis. The related balance sheet receivables and payables are reported on a net basis where required under IFRSs offset criteria.

As a consequence of reverse repo, stock borrowing and derivative transactions where the collateral received could be but had not been sold or repledged, we held $78bn (2014: $81bn) of unencumbered collateral available to support potential future funding and collateral needs at 31 December 2015.

Table of Contents

Analysis of on-balance sheet encumbered and unencumbered assets

	Assets encumbered as a result of transactions with counterparties other than central banks				Unencumbered assets not positioned at central banks				
	As a result of covered bonds $m	As a result of securitisations $m	Other $m	Assets positioned at central banks (i.e. pre-positioned plus encumbered) $m	Assets readily available for encumbrance $m	Other assets capable of being encumbered $m	Reverse repos/stock borrowing receivables and derivative assets $m	Assets that cannot be encumbered $m	Total $m
Cash and balances at central banks				98	95,545	350		2,941	98,934
Items in the course of collection from other banks								5,768	5,768
Hong Kong Government certificates of indebtedness								28,410	28,410
Trading assets			31,605	1,573	138,070	8,269	7,520	37,800	224,837
Treasury and other eligible			1,099	984	5,618	128			7,829

bills									
Debt securities			**25,890**	**492**	**72,377**	**233**		**46**	**99,038**
Equity securities			**4,616**		**59,430**	**2,445**			**66,491**
Loans and advances to banks					**456**	**2,890**	**2,763**	**16,194**	**22,303**
Loans and advances to customers				**97**	**189**	**2,573**	**4,757**	**21,560**	**29,176**
Financial assets designated at fair value					**1,775**	**1,244**		**20,833**	**23,852**
Treasury and other eligible bills					**258**			**138**	**396**
Debt securities					**1,327**	**265**		**2,749**	**4,341**
Equity securities					**178**	**979**		**17,838**	**18,995**
Loans and advances to banks and customers					**12**			**108**	**120**
Derivatives							**288,476**		**288,476**
Loans and advances to banks		**1,329**		**1,702**	**2,054**	**61,992**	**815**	**22,509**	**90,401**
Loans and advances to customers	**6,947**	**15,288**	**6,848**	**20,683**	**60,031**	**792,650**	**1,531**	**20,476**	**924,454**
Reverse repurchase agreements - non-trading							**146,255**		**146,255**
Financial investments			**25,078**	**8,150**	**325,101**	**14,753**		**55,873**	**428,955**
Treasury and other eligible bills			**509**	**3,675**	**98,866**	**1,177**		**324**	**104,551**
Debt securities			**24,561**	**4,475**	**224,355**	**11,124**		**54,054**	**318,569**
Equity securities			**8**		**1,880**	**2,452**		**1,495**	**5,835**
Prepayments, accrued income and other assets			**63**		**4,685**	**65,190**		**28,360**	**98,298**

Current tax assets								**1,221**	**1,221**
Interest in associates and joint ventures					**51**	**18,794**		**294**	**19,139**
Goodwill and intangible assets								**24,605**	**24,605**
Deferred tax								**6,051**	**6,051**
At 31 December 2015	**6,947**	**16,617**	**63,594**	**32,206**	**627,312**	**963,242**	**444,597**	**255,141**	**2,409,656**

Table of Contents

Report of the Directors: Risk (continued)

Liquidity and funding

Additional contractual obligations

Under the terms of our current collateral obligations under derivative contracts (which are ISDA compliant CSA contracts and contracts entered into for pension obligations and exclude the contracts entered for special purpose vehicles and additional termination events), and based on the positions at 31 December 2015, we estimate that we could be required to post additional collateral of up to $0.4bn (2014: $0.5bn) in the event of a one-notch downgrade in credit ratings, which would increase to $0.7bn (2014: $1.2bn) in the event of a two-notch downgrade.

Contractual maturity of financial liabilities

The balances in the table below do not agree directly with those in our consolidated balance sheet as the table incorporates, on an undiscounted basis, all cash flows relating to principal and future coupon payments (except

for trading liabilities and derivatives not treated as hedging derivatives). Undiscounted cash flows payable in relation to hedging derivative liabilities are classified according to their contractual maturities. Trading liabilities and derivatives not treated as hedging derivatives are included in the On demand time bucket and not by contractual maturity.

A maturity analysis of repos and debt securities in issue included in trading liabilities is presented in Note 31 on the Financial Statements.

In addition, loans and other credit-related commitments and financial guarantees and similar contracts are generally not recognised on our balance sheet. The undiscounted cash flows potentially payable under financial guarantees and similar contracts are classified on the basis of the earliest date they can be called.

Cash flows payable by HSBC under financial liabilities by remaining contractual maturities

(Audited)

	On	Due within	Due between 3	Due between	Due after

	demand	3 months and 12 months	1 and 5 years		5 years
	$m	$m	$m	$m	$m
Deposits by banks	**42,182**	**6,643**	**1,452**	**4,029**	**107**
Customer accounts	**1,076,595**	**160,368**	**43,289**	**10,964**	**263**
Repurchase agreements non-trading	**13,181**	**64,109**	**2,144**	**535**	**543**
Trading liabilities	**141,614**				
Financial liabilities designated at fair value	**327**	**4,077**	**6,149**	**24,642**	**41,365**
Derivatives	**276,141**	**255**	**970**	**1,721**	**1,652**
Debt securities in issue	**377**	**25,910**	**23,886**	**35,499**	**6,993**
Subordinated liabilities		**803**	**971**	**10,151**	**28,132**
Other financial liabilities	**59,298**	**17,476**	**7,226**	**10,188**	**1,014**
	1,609,715	**279,641**	**86,087**	**97,729**	**80,069**
Loan and other credit-related commitments	**425,000**	**93,149**	**73,115**	**60,078**	**15,089**
Financial guarantees and similar contracts	**12,579**	**5,727**	**15,091**	**9,915**	**2,805**
At 31 December 2015	**2,047,294**	**378,517**	**174,293**	**167,722**	**97,963**
Deposits by banks	52,682	17,337	3,600	3,580	390
Customer accounts	1,088,769	187,207	61,687	15,826	390
Repurchase agreements non-trading	8,727	91,542	6,180	23	1,057
Trading liabilities	190,572				
Financial liabilities designated at fair value	365	2,201	9,192	28,260	39,397
Derivatives	335,168	375	1,257	4,231	1,517
Debt securities in issue	9	32,513	30,194	37,842	7,710
Subordinated liabilities		737	1,256	10,003	42,328
Other financial liabilities	41,517	23,228	4,740	1,893	988
	1,717,809	355,140	118,106	101,658	93,777
Loan and other credit-related commitments	406,561	101,156	64,582	62,312	16,769
Financial guarantees and similar contracts	13,166	6,306	13,753	9,575	4,278
At 31 December 2014	2,137,536	462,602	196,441	173,545	114,824

Table of Contents

HSBC Holdings

Liquidity risk in HSBC Holdings is overseen by Holdings ALCO (HALCO). Liquidity risk arises because of HSBC Holdings obligation to make payments to debt holders as they fall due. The liquidity risk related to these cash flows is managed by matching external debt obligations with internal loan cash flows and by maintaining an appropriate liquidity buffer that is monitored by HALCO.

At 31 December 2015, the Group had new issuance of $6.8bn of CRD IV compliant non-common equity capital instruments, of which $3.2bn were classified as tier 2 and $3.6bn were classified as additional tier 1 (for details on tier 2 and additional tier 1 instruments see Notes 30 and 35 on the Financial Statements).

The balances in the table below do not agree directly with those on the balance sheet of HSBC Holdings as the table incorporates, on an undiscounted basis, all cash flows relating to principal and future coupon payments (except for derivatives not treated as hedging derivatives). Undiscounted cash flows payable in relation to hedging derivative liabilities are classified according to their contractual maturities. Derivatives not treated as hedging derivatives are included in the On demand time bucket.

In addition, loan commitments and financial guarantees and similar contracts are generally not recognised on our balance sheet. The undiscounted cash flows potentially payable under financial guarantees and similar contracts are classified on the basis of the earliest date on which they can be called.

Cash flows payable by HSBC Holdings under financial liabilities by remaining contractual maturities

(Audited)

	On demand $m	Due within 3 months $m	Due between 3 and 12 months $m	Due between 1 and 5 years $m	Due after 5 years $m
Amounts owed to HSBC undertakings	257	1,375	424	110	
Financial liabilities designated at fair value		1,145	655	5,202	20,779

Derivatives	**2,065**			**213**	
Debt securities in issue		**15**	**47**	**250**	**1,176**
Subordinated liabilities		**229**	**699**	**5,149**	**25,474**
Other financial liabilities		**1,426**	**152**		
	2,322	**4,190**	**1,977**	**10,924**	**47,429**
Loan commitments					
Financial guarantees and similar contracts	**68,333**				
At 31 December 2015	**70,655**	**4,190**	**1,977**	**10,924**	**47,429**
Amounts owed to HSBC undertakings	1,441	985	42	449	
Financial liabilities designated at fair value		210	642	6,345	19,005
Derivatives	1,066			103	
Debt securities in issue		16	50	263	1,303
Subordinated liabilities		252	770	5,815	28,961
Other financial liabilities		1,132	158		
	2,507	2,595	1,662	12,975	49,269
Loan commitments	16				
Financial guarantees and similar contracts	52,023				
At 31 December 2014	54,546	2,595	1,662	12,975	49,269

Table of Contents

Report of the Directors: Risk (continued)

Market risk

Market risk

	Page	App[1]	Tables	Page
Market risk in 2015	167			
Market risk in global businesses		211	*Types of risk by global business*	211
Market risk governance		211		
Market risk measures		212		
Monitoring and limiting market risk exposures	167	212		
Sensitivity analysis	167	212		
Value at risk	167	212		
Stress testing	167	213	*Market risk stress testing*	213
Trading portfolios	167	213		
Volcker Rule		213		
Value at risk of the trading portfolios	167		*Daily VaR (trading portfolios)*	168
			Trading VaR	168
Back-testing	168	214	*Back-testing of trading VaR against hypothetical profit and loss for the Group*	168
Gap risk		214		
De-peg risk		214		
ABS/MBS exposures		214		
Non-trading portfolios	169	214		
Value at risk of the non-trading portfolios	169		*Daily VaR (non-trading portfolios)*	169
			Non-trading VaR	169
Equity securities classified as available for sale	169	215	*Fair value of equity securities*	169
Market risk balance sheet linkages	170		*Balances included and not included in trading VaR*	170
			Market risk linkages to the accounting balance sheet	171

Structural foreign exchange exposures	171	215		
Non-trading interest rate risk	171	215		
Interest rate risk behaviouralisation	172	215		
Balance Sheet Management		216		
Third-party assets in Balance Sheet Management	172		*Third-party assets in Balance Sheet Management*	172
Sensitivity of net interest income	172	216	*Sensitivity of projected net interest income*	173
			Sensitivity of cash flow hedging reported reserves to interest rate movements	173
Sensitivity of capital and reserves	173			
Defined benefit pension schemes	174	216		
Additional market risk measures applicable only to the parent company	174	216		
Foreign exchange risk	174		*HSBC Holdings foreign exchange VaR*	174
Sensitivity of net interest income	174		*Sensitivity of HSBC Holdings net interest income to interest rate movements*	174
Interest rate repricing gap table	175		*Repricing gap analysis of HSBC Holdings*	175

1 Appendix to Risk risk policies and practices.

HSBC HOLDINGS PLC

166

Table of Contents

Market risk is the risk that movements in market factors, such as foreign exchange rates, interest rates, credit spreads, equity prices and commodity prices, will reduce our income or the value of our portfolios.

There were no material changes to our policies and practices for the management of market risk in 2015.

Exposure to market risk

Exposure to market risk is separated into two portfolios:

Trading portfolios comprise positions arising from market-making and warehousing of customer-derived positions. The interest rate risk on fixed-rate securities issued by HSBC Holdings is not included in Group VaR. The management of this risk is described on page 171.

Non-trading portfolios comprise positions that primarily arise from the interest rate management of our retail and commercial banking assets and liabilities, financial investments designated as available for sale and held to maturity, and exposures arising from our insurance operations (see page 180).

Monitoring and limiting market risk exposures

Our objective is to manage and control market risk exposures while maintaining a market profile consistent with our risk appetite.

We use a range of tools to monitor and limit market risk exposures, including:

Sensitivity analysis includes the sensitivity of net interest income and the sensitivity of structural foreign exchange, which are used to monitor the market risk positions within each risk type;

Value at risk (VaR) is a technique that estimates the potential losses that could occur on risk positions as a result of movements in market rates and prices over a specified time horizon and to a given level of confidence; and

Stress testing: in recognition of VaR s limitations we augment VaR with stress testing to evaluate the potential impact on portfolio values of more extreme, though plausible, events or movements in a set of financial variables. Examples of scenarios reflecting current market concerns are the slowdown in mainland China and the potential effects of a sovereign debt default, including its wider contagion effects.

A summary of our market risk management framework including current policies is provided in the Appendix to Risk on page 210.

Market risk in 2015

Global economic growth remained subdued in 2015, with a number of headwinds present. The slowdown of the mainland Chinese economy dampened global trade flows and caused volatility in currency and global stock markets. Market concerns persist as to the scale of the slowdown and the potential for further depreciation of the renminbi.

Performance among developed markets was uneven, with the US and UK performing better than the eurozone, where the risk of a Greek exit faded in the second half of the year and ECB monetary policy remained supportive. Emerging market economies were affected by falling commodity prices as mainland Chinese demand slowed along with the prospect of monetary policy normalisation in the US. This led to capital outflows from emerging markets and a significant depreciation in several key currencies against the US dollar.

Against this backdrop, we maintained an overall defensive risk profile in our trading businesses. Defensive positions are characterised by low net open positions or the purchase of volatility protection via options trades. Non-trading VaR increased during the year as higher interest rates, especially in US dollars, caused the duration of non-trading assets to increase.

Trading portfolios

Value at risk of the trading portfolios

Trading VaR predominantly resides within Global Markets. This was lower at 31 December 2015 than at 31 December 2014 due to a decrease in interest rate trading VaR. During the year, trading VaR remained relatively stable trading in a tight range, with the effects of increased market volatility on VaR offset by reduced positions.

The daily levels of total trading VaR over the last year are set out in the graph below.

Report of the Directors: Risk (continued)

Market risk

Daily VaR (trading portfolios), 99% 1 day ($m)

The Group trading VaR for the year is shown in the table below.

Trading VaR, 99% 1 day[29]

(Audited)

	Foreign exchange (FX) and commodity $m	Interest rate (IR) $m	Equity (EQ) $m	Credit spread (CS) $m	Portfolio diversification[30] $m	Total[31] $m
At 31 December 2015	**8.0**	**34.9**	**21.4**	**13.9**	**(24.9)**	**53.3**
Average	**14.7**	**46.0**	**19.6**	**15.5**	**(35.7)**	**60.1**
Maximum	**25.4**	**57.0**	**29.0**	**23.3**		**77.9**
Minimum	**6.3**	**32.6**	**11.9**	**9.8**		**47.5**
At 31 December 2014	9.8	45.4	7.3	12.5	(14.3)	60.7
Average	16.9	39.5	6.9	13.7	(17.8)	59.2
Maximum	34.2	50.6	15.6	20.9		77.8
Minimum	8.7	26.9	3.2	8.8		38.5

For footnotes, see page 192.

The Risk not in VaR (RNIV) framework captures risks from exposures in the HSBC trading book which are not captured well by the VaR model. For 2015, the VaR-based RNIVs are included within metrics for each asset class whereas in 2014 they were included within portfolio diversification. Adjusting for the impact of the RNIV reclassification, portfolio diversification reduced in comparison to 2014.

Back-testing

In 2015, the Group experienced one profit exception, due primarily to profits from increased volatility in foreign exchange currencies arising from the sharp fall in the Chinese stock market and its effect on global markets.

There was no evidence of model errors or control failures.

The graph below shows the daily trading VaR against hypothetical profit and loss for the Group during 2015. The back-testing result excludes exceptions due from changes in fair value adjustments.

Back-testing of trading VaR against hypothetical profit and loss for the Group ($m)

Table of Contents

Non-trading portfolios

Value at risk of the non-trading portfolios

Non-trading VaR of the Group includes contributions from all global businesses. There is no commodity risk in the non-trading portfolios. The increase of non-trading VaR during 2015 was due primarily to the lengthening of the duration in the non-trading book from higher interest rates, especially US rates. There was no overall trend in the non-trading VaR during the year and no significant movements. The increase in non-trading interest rate and credit spread VaR components were offset by an increase in portfolio diversification effects.

Non-trading VaR also includes the interest rate risk of non-trading financial instruments held in portfolios managed by Balance Sheet Management (BSM). The management of interest rate risk in the banking book is described further in Non-trading interest rate risk below, including the role of BSM.

Non-trading VaR excludes the insurance operations which are discussed further on page 180.

The daily levels of total non-trading VaR over the last year are set out in the graph below.

Daily VaR (non-trading portfolios), 99% 1 day ($m)

The Group non-trading VaR for the year is shown in the table below.

Non-trading VaR, 99% 1 day

(Audited)

	Interest	Credit	Portfolio	Total

	Rate (IR) $m	Spread (CS) $m	diversification $m	$m
At 31 December 2015	**114.1**	**72.7**	**(54.0)**	**132.8**
Average	**97.5**	**65.7**	**(42.0)**	**121.2**
Maximum	**131.5**	**89.4**		**156.8**
Minimum	**70.5**	**52.1**		**91.5**
At 31 December 2014	88.2	62.5	(28.5)	122.2
Average	103.3	73.3	(37.4)	139.2
Maximum	147.7	91.9		189.0
Minimum	83.3	49.6		92.3

Non-trading VaR excludes equity risk on available-for-sale securities, structural foreign exchange risk and interest rate risk on fixed-rate securities issued by HSBC Holdings. This section and the sections below describe the scope of HSBC s management of market risks in non-trading books.

Equity securities classified as available for sale

Fair value of equity securities

(Audited)

	2015 $bn	2014 $bn
Private equity holdings[32]	**1.9**	2.0
Investment to facilitate ongoing business[33]	**1.9**	1.2
Other strategic investments	**2.1**	7.5
At 31 December	**5.9**	10.7

For footnotes, see page 192.

Table of Contents

Report of the Directors: Risk (continued)

Market risk

The table above sets out the maximum possible loss on shareholders equity from available-for-sale equity securities. The fair value of equity securities classified as available for sale reduced from $10.7bn to $5.9bn. The decrease in Other strategic investments was largely due to the disposal of the Industrial Bank investment.

Market risk balance sheet linkages

The information below and on page 171 aims to facilitate an understanding of linkages between line items in the balance sheet and positions included in our market risk disclosures, in line with recommendations made by the Enhanced Disclosure Task Force.

Balances included and not included in trading VaR

	Balance sheet $m	Balances included in trading VaR $m	Balances not included in trading VaR $m	Primary market risk sensitivities
At 31 December 2015				
Assets				
Cash and balances at central banks	98,934		98,934	B
Trading assets	224,837	203,194	21,643	A
Financial assets designated at fair value	23,852		23,852	A
Derivatives	288,476	282,972	5,504	A
Loans and advances to banks	90,401		90,401	B
Loans and advances to customers	924,454		924,454	B
Reverse repurchase agreements non-trading	146,255		146,255	C
Financial investments	428,955		428,955	A
Liabilities				

Deposits by banks	**54,371**		**54,371**	**B**
Customer accounts	**1,289,586**		**1,289,586**	**B**
Repurchase agreements non-trading	**80,400**		**80,400**	**C**
Trading liabilities	**141,614**	**130,427**	**11,187**	**A**
Financial liabilities designated at fair value	**66,408**		**66,408**	**A**
Derivatives	**281,071**	**275,007**	**6,064**	**A**
Debt securities in issue	**88,949**		**88,949**	**C**

The table represents account lines where there is some exposure to market risk according to the following asset classes:

A *Foreign exchange, interest rate, equity and credit spread.*
B *Foreign exchange and interest rate.*
C *Foreign exchange, interest rate and credit spread.*

The table above splits the assets and liabilities into two categories:

those that are included in the trading book and are measured by VaR; and

those that are not in the trading book and/or are not measured by VaR.

The breakdown of financial instruments included and not included in trading VaR provides a linkage with market risk to the extent that it is reflected in our risk framework.

However, it is important to highlight that the table does not reflect how we manage market risk, since we do not discriminate between assets and liabilities in our VaR model.

The assets and liabilities included in trading VaR give rise to a large proportion of the income included in net trading income. As set out on page 54, HSBC s net trading income in 2015 was $8,723m (2014: $6,760m). Adjustments to trading income such as valuation adjustments do not feed the trading VaR model.

Market risk linkages to the accounting balance sheet

Trading assets and liabilities

The Group s trading assets and liabilities are in almost all cases originated by GB&M. The assets and liabilities are classified as held for trading if they have been acquired or incurred principally for the purpose of selling or repurchasing in the near term, or form part of a portfolio of identified financial instruments that are managed together and for which there is evidence of a recent pattern of short-term profit-taking. These assets and liabilities are treated as traded risk for the purposes of market risk management, other than a limited number of exceptions, primarily in Global Banking where the short-term acquisition and disposal of the assets are linked to other non-trading related activities such as loan origination.

Financial assets designated at fair value

Financial assets designated at fair value within HSBC are predominantly held within the Insurance entities. The majority of these assets are linked to policyholder liabilities for either unit-linked or insurance and investment contracts with DPF. The risks of these assets largely offset the market risk on the liabilities under the policyholder contracts, and are risk managed on a non-trading basis.

purposes. These arise when the derivative was entered into in order to manage risk arising from non-traded exposures. They include non-qualifying hedging derivatives and derivatives qualifying for fair value and cash flow hedge accounting. The use of non-qualifying hedges whose primary risks relate to interest rate and foreign exchange exposure is described on page 171. Details of derivatives in fair value and cash flow hedge accounting relationships are given in Note 16 on the Financial Statements. Our primary risks in respect of these instruments relate to interest rate and foreign exchange risks.

Loans and advances to customers

The primary risk on assets within loans and advances to customers is the credit risk of the borrower. The risk of these assets is treated as non-trading risk for market risk management purposes.

Financial investments

Financial liabilities designated at fair value

Financial liabilities designated at fair value within HSBC are primarily fixed-rate securities issued by HSBC entities for funding purposes. An accounting mismatch would arise if the debt securities were accounted for at amortised cost because the derivatives which economically hedge market risks on the securities would be accounted for at fair value with changes recognised in the income statement. The market risks of these liabilities are treated as non-traded risk, the principal risks being interest rate and/or foreign exchange risks. We also incur liabilities to customers under investment contracts, where the liabilities on unit-linked contracts are based on the fair value of assets within the unit-linked funds. The exposures on these funds are treated as non-traded risk and the principal risks are those of the underlying assets in the funds.

Derivative assets and liabilities

We undertake derivative activity for three primary purposes; to create risk management solutions for clients, to manage the portfolio risks arising from client business and to manage and hedge our own risks. Most of our derivative exposures arise from sales and trading activities within GB&M and are treated as traded risk for market risk management purposes.

Within derivative assets and liabilities there are portfolios of derivatives which are not risk managed on a trading intent basis and are treated as non-traded risk for VaR measurement

Financial investments include assets held on an available-for-sale and held-to-maturity basis. An analysis of the Group s holdings of these securities by accounting classification and issuer type is provided in Note 17 on the Financial Statements and by business activity on page 398. The majority of these securities are mainly held within Balance Sheet Management in GB&M. The positions which are originated in order to manage structural interest rate and liquidity risk are treated as non-trading risk for the purposes of market risk management. Available-for-sale security holdings within insurance entities are treated as non-trading risk and are largely held to back non-linked insurance policyholder liabilities.

The other main holdings of available-for-sale assets are the ABSs within GB&M s legacy credit business, which are treated as non-trading risk for market risk management purposes, the principal risk being the credit risk of the obligor.

The Group s held-to-maturity securities are principally held within the Insurance business. Risks of held-to-maturity assets are treated as non-trading for risk management purposes.

Repurchase (repo) and reverse repurchase (reverse repo) agreements non-trading

Reverse repo agreements, classified as assets, are a form of collateralised lending. HSBC lends cash for the term of the reverse repo in exchange for receiving collateral (normally in the form of bonds).

Repo agreements, classified as liabilities, are the opposite of reverse repos, allowing HSBC to obtain funding by providing collateral to the lender.

Both transaction types are treated as non-trading risk for market risk management and the primary risk is counterparty credit risk.

For information on the accounting policies applied to financial instruments at fair value, see Note 13 on the Financial Statements.

Structural foreign exchange exposures

For our policies and procedures for managing structural foreign exchange exposures, see page 215 of the Appendix to Risk.

For details of structural foreign exchange exposures see Note 33 on the Financial Statements.

Non-trading interest rate risk

For our policies regarding the funds transfer pricing process for non-trading interest rate risk and liquidity and funding risk, see page 207 of the Appendix to Risk.

Asset, Liability and Capital Management (ALCM) is responsible for measuring and controlling non-trading interest rate risk under the supervision of the RMM. Its primary responsibilities are:

- to define the rules governing the transfer of non-trading interest rate risk from the global businesses to BSM;
- to define the rules governing the interest rate risk behaviouralisation applied to non-trading assets/ liabilities (see below);
- to ensure that all market interest rate risk that can be neutralised is transferred from the global businesses to BSM; and

Table of Contents

Report of the Directors: Risk (continued)

Market risk

to define the rules and metrics for monitoring the residual interest rate risk in the global businesses, including any market risk that cannot be neutralised.

The different types of non-trading interest rate risk and the controls which we use to quantify and limit exposure to these risks can be categorised as follows:

risk which is transferred to BSM and managed by BSM within a defined market risk mandate, predominantly through the use of fixed-rate liquid assets (government bonds) held in held to maturity or available-for-sale portfolios and/or interest rate derivatives which are part of fair value hedging or cash flow hedging relationships. This non-trading interest rate risk is reflected in non-trading VaR, as well as in our net interest income (see below) or economic value of equity (EVE) sensitivity;

risk which remains outside BSM because it cannot be hedged or which arises due to our behaviouralised transfer pricing assumptions. This risk is not reflected in non-trading VaR, but is captured by our net interest income or EVE sensitivity and corresponding limits are part of our global and regional risk appetite statements for non-trading interest rate risk. A typical example would be margin compression created by unusually low rates in key currencies;

basis risk which is transferred to BSM when it can be hedged. Any residual basis risk remaining in the global businesses is reported to ALCO. This risk is not reflected in non-trading VaR, but is captured by our net interest income or EVE sensitivity. A typical example would be a managed rate savings product transfer-priced using a Libor-based interest rate curve; and

model risks which cannot be captured by non-trading VaR, net interest income or EVE sensitivity, but are controlled by our stress testing framework. A typical example would be prepayment risk on residential mortgages or pipeline risk.

Interest rate risk behaviouralisation

For our policies regarding interest risk behaviouralisation, see page 215 of the Appendix to Risk.

Third-party assets in Balance Sheet Management

For our BSM governance framework, see page 216 of the Appendix to Risk.

Third-party assets in BSM decreased by 9% during 2015. Deposits with central banks reduced by $32bn, predominantly in North America and Europe, in line with reduced repo and reverse repo activity. This reduced activity is also reflected in a reduction of $29bn in non-trading reverse repurchase agreements. Financial investments increased by $29bn mainly due to increased deployment of funds into securities in Asia.

Third-party assets in Balance Sheet Management

	2015	2014
	$m	$m
Cash and balances at central banks	**71,116**	103,008
Trading assets	**639**	4,610
Loans and advances:		
to banks	**42,059**	53,842
to customers	**2,773**	1,931
Reverse repurchase agreements	**29,760**	59,172
Financial investments	**335,543**	306,763
Other	**4,277**	2,470
At 31 December	**486,167**	531,796

Sensitivity of net interest income

The table on the next page sets out the effect on our accounting net interest income (excluding insurance) projections of a series of four quarterly parallel shocks of 25 basis points to the current market-implied path of interest rates worldwide at the beginning of each quarter from 1 January 2016. The sensitivities shown represent the change in the expected base case net interest income that would be expected under the two rate scenarios assuming that all other non-interest rate risk variables remain constant, and there are no management actions. In deriving our base case net interest income projections, the re-pricing rates of assets and liabilities used are derived from current yield curves, thereby reflecting current market expectations of the future path of interest rates. The scenarios therefore represent interest rate shocks which occur to the current market implied path of rates. The interest rate sensitivities are indicative and based on simplified scenarios. The limitations of this analysis are discussed in the Appendix to Risk on page 216.

Assuming no management response, a sequence of such rises (up-shock) would increase expected net interest income for 2016 by $1,251m (2015: $885m), while a sequence of such falls (down-shock) would decrease planned net interest income by $2,258m (2015: $2,089m).

The net interest income (NII) sensitivity of the Group can be split into three key components; the structural sensitivity arising from the four global businesses excluding BSM and Markets, the sensitivity of the funding of the trading book (Markets) and the sensitivity of BSM.

The structural sensitivity is positive in a rising rate environment and negative in a falling rate environment. The sensitivity of the funding of the trading book is negative in a rising rate environment and positive in a falling rate environment, and in terms of the impact on profit the change in NII would be expected to be offset by a similar change in net trading income. The sensitivity of BSM will depend on its position. Typically, assuming no management response, the sensitivity of BSM is negative in a rising rate environment and positive in a falling rate environment.

The NII sensitivity figures on the next page also incorporate the effect of any interest rate behaviouralisation applied and the effect of any assumed repricing across products under the specific interest rate scenario. They do not incorporate the effect of any management decision to change the HSBC balance sheet composition.

HSBC HOLDINGS PLC

172

Table of Contents

See page 215 in the Risk Appendix for more information about interest rate behaviouralisation and the role of BSM.

The NII sensitivity in BSM arises from a combination of the techniques that BSM use to mitigate the transferred interest rate risk and the methods they use to optimise net revenues in line with their defined risk mandate. The figures in the table below do not incorporate the effect of any management decisions within BSM, but in reality it is likely that there would be some short-term adjustment in BSM positioning to offset the NII effects of the specific interest rate scenario where necessary.

The NII sensitivity arising from the funding of the trading book is comprised of the expense of funding trading assets, while the revenue from these trading assets is reported in net trading income. This leads to an asymmetry in the NII sensitivity figures which is cancelled out in our global business results, where we include both net interest income and net trading income. It is likely, therefore, that the overall effect on profit before tax of the funding of the trading book will be much less pronounced than shown in the figures below.

Sensitivity of net interest income[34]

(Audited)

	US dollar bloc $m	Rest of Americas bloc $m	Hong Kong dollar bloc $m	Rest of Asia bloc $m	Sterling bloc $m	Euro bloc $m	Total $m
Change in 2015 net interest income arising from a shift in yield curves of:							
+25 basis points at the beginning of each	**410**	**72**	**217**	**369**	**135**	**49**	**1,251**

quarter							
25 basis points at the beginning of each quarter	**(691)**	**(74)**	**(645)**	**(290)**	**(528)**	**(30)**	**(2,258)**
Change in 2014 net interest income arising from a shift in yield curves of:							
+25 basis points at the beginning of each quarter	209	(9)	245	265	321	(146)	885
25 basis points at the beginning of each quarter	(521)	(1)	(494)	(259)	(783)	(31)	(2,089)

For footnote, see page 191.

These estimates are based on certain assumptions, principally:

all non-interest rate risk variables remain constant; and

the size and composition of HSBC s balance sheet remains as it was at 31 December 2015.

We expect NII to rise in the rising rate scenario and fall in the falling rate scenario. This is due to a structural mismatch between our assets and liabilities (on balance we would expect our assets to reprice more quickly, and to a greater extent, than our liabilities).

We are more sensitive to both up and down shocks relative to 31 December 2014. In the up-shock we benefit from BSM positioning in US dollars. In the down-shock we lose due to larger rate decreases on deployment of US and HK dollar deposits given the higher rate environment.

Sensitivity of capital and reserves

Under CRD IV, available-for-sale (AFS) reserves are

included as part of CET1 capital. We measure the potential downside risk to the CET1 ratio due to interest rate and credit spread risk in the AFS portfolio by the portfolio s stressed VaR, using a 99% confidence level and an assumed holding period of one quarter. At December 2015, the stressed VaR of the portfolio was $2.8bn.

We monitor the sensitivity of reported cash flow hedging reserves to interest rate movements on a monthly basis by assessing the expected reduction in valuation of cash flow hedges due to parallel movements of plus or minus 100bps in all yield curves. These particular exposures form only a part of our overall interest rate exposures.

The table below describes the sensitivity of our cash flow hedge reported reserves to the stipulated movements in yield curves and the maximum and minimum month-end figures during the year. The sensitivities are indicative and based on simplified scenarios.

Sensitivity of cash flow hedging reported reserves to interest rate movements

	$m	Maximum impact $m	Minimum impact $m
At 31 December 2015			
+ 100 basis point parallel move in all yield curves	**(1,235)**	**(1,259)**	**(1,137)**
As a percentage of total shareholders equity	**(0.66%)**	**(0.67%)**	**(0.60%)**
100 basis point parallel move in all yield curves	**1,224**	**1,232**	**1,133**
As a percentage of total shareholders equity	**0.65%**	**0.65%**	**0.60%**
At 31 December 2014			
+ 100 basis point parallel move in all yield curves	(1,260)	(1,478)	(1,131)
As a percentage of total shareholders equity	(0.66%)	(0.78%)	(0.60%)
100 basis point parallel move in all yield curves	1,232	1,463	1,126
As a percentage of total shareholders equity	0.65%	0.77%	0.59%

Report of the Directors: Risk (continued)

Market risk

Defined benefit pension schemes

Market risk arises within our defined benefit pension schemes to the extent that the obligations of the schemes are not fully matched by assets with determinable cash flows.

For details of our defined benefit schemes, including asset allocation, see Note 6 on the Financial Statements, and for pension risk management see page 189.

Additional market risk measures applicable only to the parent company

The principal tools used in the management of market risk are VaR for foreign exchange rate risk and the projected sensitivity of HSBC Holdings net interest income to future changes in yield curves and interest rate gap repricing tables for interest rate risk.

Foreign exchange risk

Total foreign exchange VaR arising within HSBC Holdings in 2015 was as follows:

HSBC Holdings foreign exchange VaR

	2015	2014
	$m	$m
At 31 December	**45.6**	29.3
Average	**42.3**	42.1
Minimum	**32.9**	29.3
Maximum	**47.1**	50.0

The foreign exchange risk largely arises from loans to subsidiaries of a capital nature that are not denominated in the functional currency of either the provider or the recipient and which are accounted for as financial assets. Changes in the carrying amount of these loans due to foreign exchange rate differences are taken directly to HSBC Holdings income statement. These loans, and most of the associated foreign exchange exposures, are eliminated on consolidation.

Sensitivity of net interest income

HSBC Holdings monitors NII sensitivity over a five-year time horizon reflecting the longer-term perspective on interest rate risk management appropriate to a financial services holding company. These sensitivities assume that any issuance where HSBC Holdings has an option to reimburse at a future call date is called at this date. The table below sets out the effect on HSBC Holdings future NII over a five-year time horizon of incremental 25 basis point parallel falls or rises in all yield curves worldwide at the beginning of each quarter during the 12 months from 1 January 2015.

Assuming no management actions, a sequence of such rises would increase planned NII for the next five years by $247m (2014: increase of $600m), while a sequence of such falls would decrease planned NII by $266m (2014: decrease of $539m).

Sensitivity of HSBC Holdings net interest income to interest rate movements[34]

	US dollar bloc $m	Sterling bloc $m	Euro bloc $m	Total $m
Change in projected net interest income as at 31 December arising from a shift in yield curves				
2015				
of + 25 basis points at the beginning of each quarter				
0-1 year	**57**	**15**		**72**
2-3 years	**118**	**43**	**7**	**168**
4-5 years	**(23)**	**43**	**(12)**	**8**
of 25 basis points at the beginning of each quarter				
0-1 year	**(57)**	**(14)**	**(6)**	**(77)**
2-3 years	**(118)**	**(43)**	**(22)**	**(183)**
4-5 years	**23**	**(43)**	**15**	**(5)**
2014				
of + 25 basis points at the beginning of each quarter				
0-1 year	78	9	2	89
2-3 years	281	17	34	332
4-5 years	138	17	24	179
of 25 basis points at the beginning of each quarter				
0-1 year	(58)	(9)	(1)	(68)
2-3 years	(276)	(16)	(12)	(304)
4-5 years	(138)	(17)	(12)	(167)

For footnote, see page 191.

The interest rate sensitivities tabulated above are indicative and based on simplified scenarios. The figures represent hypothetical movements in NII based on our projected yield curve scenarios, HSBC Holdings current interest rate risk profile and assumed changes to that profile during the

next five years. Changes to assumptions concerning the risk profile over the next five years can have a significant impact on the NII sensitivity for that period. However, the figures do not take into account the effect of actions that could be taken to mitigate this interest rate risk.

Table of Contents

Interest rate repricing gap table

The interest rate risk on the fixed-rate securities issued by HSBC Holdings is not included within the Group VaR but is managed on a

re-pricing gap basis. The interest rate re-pricing gap table below analyses the full-term structure of interest rate mismatches within HSBC Holdings balance sheet.

Repricing gap analysis of HSBC Holdings

	Total $m	Up to 1 year $m	From over 1 to 5 years $m	From over 5 to 10 years $m	More than 10 years $m	Non-interest bearing $m
Cash at bank and in hand:						
balances with HSBC undertakings	242	242				
Derivatives	2,467					2,467
Loans and advances to HSBC undertakings	44,350	42,661	279	405		1,005
Financial investments in HSBC undertakings	4,285	2,985		731		569
Investments in subsidiaries	97,770					97,770
Other assets	1,080		109			971
Total assets	150,194	45,888	388	1,136		102,782
Amounts owed to HSBC undertakings	(2,152)	(781)				(1,371)
Financial liabilities designated at fair values	(19,853)	(1,741)	(3,239)	(7,032)	(4,312)	(3,628)

Derivatives	**(2,278)**					**(2,278)**
Debt securities in issue	**(960)**			**(963)**		**3**
Other liabilities	**(15,895)**		**(3,374)**	**(3,500)**	**(9,119)**	**98**
Subordinated liabilities	**(1,642)**					**(1,642)**
Total equity	**(107,414)**					**(107,414)**
Total liabilities and equity	**(150,194)**	**(2,522)**	**(6,613)**	**(11,495)**	**(13,332)**	**(116,232)**
Off-balance sheet items attracting interest rate sensitivity		**(22,748)**	**5,351**	**10,722**	**5,763**	**912**
Net interest rate risk gap at 31 December 2015		**20,618**	**(874)**	**363**	**(7,569)**	**(12,538)**
Cumulative interest rate gap		**20,618**	**19,744**	**20,107**	**12,538**	
Cash at bank and in hand: balances with HSBC undertakings	249					249
Derivatives	2,771					2,771
Loans and advances to HSBC undertakings	43,910	41,603	290	1,093		924
Financial investments in HSBC undertakings	4,073	3,010		731		332
Investments in subsidiaries	96,264					96,264
Other assets	597					597
Total assets	147,864	44,613	290	1,824		101,137
Amounts owed to HSBC undertakings	(2,892)	(1,877)				(1,015)
Financial liabilities designated at fair values	(18,679)	(850)	(5,472)	(5,400)	(4,263)	(2,694)
Derivatives	(1,169)					(1,169)
Debt securities in issue	(1,009)			(1,013)		4
Other liabilities	(1,415)					(1,415)
Subordinated liabilities	(17,255)	(779)	(3,766)	(2,000)	(10,195)	(515)
Total equity	(105,445)					(105,445)
Total liabilities and equity	(147,864)	(3,506)	(9,238)	(8,413)	(14,458)	(112,249)
Off-balance sheet items attracting interest rate sensitivity		(21,525)	7,295	7,400	5,763	1,067
Net interest rate risk gap at 31 December 2014		19,582	(1,653)	811	(8,695)	(10,045)
Cumulative interest rate gap		19,582	17,929	18,740	10,045	

Table of Contents

Report of the Directors: Risk (continued)

Operational risk

Operational risk

	Page	App[1]	Tables	Page
Operational risk	176	217		
Operational risk management framework	176		*Key components of HSBC s ORMF*	176
Three lines of defence	177			
Operational risk in 2015	177			
Frequency and amount of operational risk losses	177		*Frequency of operational risk incidents by risk category*	178
			Distribution of operational risk losses in US dollars by risk category	178
Compliance risk	178	217		
Legal risk		218		
Global security and fraud risk		218		
Systems risk		219		
Vendor risk management		219		

1 Appendix to Risk risk policies and practices.

Operational risk is the risk to achieving our strategy or objectives as a result of inadequate or failed internal processes, people and systems or from external events.

Responsibility for minimising operational risk lies with HSBC s management and staff. All regional, global business, country, and functional staff are required to manage the operational risks of the business and operational activities for which they are responsible.

A summary of our current policies and practices regarding operational risk is provided in the Appendix to Risk on page 217.

Operational risk management framework

HSBC s Operational Risk Management Framework (ORMF) is our overarching approach for managing operational risk. The purpose of the ORMF is to make sure we fully identify and manage our operational risks in an effective manner

and remain within our targeted levels of operational risk within the Group s risk appetite, as defined by the Board. Articulating our risk appetite for material operational risks helps the organisation understand the level of risk HSBC is willing to accept. Monitoring operational risk exposure against risk appetite on a regular basis and implementing our risk acceptance process drives risk awareness in a forward-looking manner and assists management in determining whether further action is required.

Activities to strengthen our risk culture and better embed the use of the ORMF continued in 2015. In particular, we continued to streamline our operational risk management processes, procedures and tool sets to provide more forward-looking risk insights and more effective operation of the ORMF. The ORMF comprises the 14 key components set below.

Key components of HSBC s ORMF

Three lines of defence

HSBC has implemented an activity-based three lines of defence model (an industry best practice approach) to underpin our approach to managing operational risk using the ORMF. It makes clear who does what within HSBC to manage operational risks on a daily basis.

The first line of defence owns the risks and is responsible for identifying, recording, reporting and managing them and ensuring that the right controls and assessments are in pace to mitigate these risks.

The second line of defence sets the policy and guidelines for managing the risks and provides advice, guidance and challenge to the first line of defence on effective risk management.

The third line of defence is Internal Audit which helps the Board and Executive Management to protect the assets, reputation and sustainability of the Group.

Operational risk in 2015

During 2015, our operational risk profile continued to be dominated by compliance risk (mainly conduct-related) and we continued to incur losses relating to events from previous years. Conduct-related costs included in significant items are outlined in section 21. A range of mitigating actions are being taken to prevent future conduct-related incidents.

For further information see Compliance risk on page 178 and for details of the investigations and legal proceedings see Note 40 on the Financial Statements.

Other operational risks included:

compliance with regulatory agreements and orders: failure to implement our obligations under the US DPA could have a material adverse effect on our results and operations. The work of the Monitor is discussed on page 116, with compliance risk described below;

- *level of change creating operational complexity*: the Global Risk function is engaged with business management in business transformation initiatives to ensure robust internal controls are maintained as we execute our change agenda;

- *fraud risks*: our loss prevention performance remains strong in most markets, but the introduction of new technologies and ways of banking mean that we continue to be subject to fraud attacks as new attack vectors are developed. We continue to increase monitoring and enhance detective controls to mitigate these risks in accordance with our risk appetite;
- *information security*: the security of our information and technology infrastructure is crucial for maintaining our banking services and protecting our customers and the HSBC brand. As with other financial institutions and multinational organisations, we continue to be exposed to cyber threats, and the focus of attacks such as distribution of denial of service which can affect the availability of customer-facing websites. Programmes of work are ongoing to strengthen internal security controls to prevent unauthorised access to our systems and network, as well as improvements to the controls and security applied to protect our customers utilising digital channels. Strong engagement and support within the industry, government agencies and intelligence providers helps to ensure we keep abreast of the current developments; and

- *third-party risk management*: we are strengthening our core third-party risk management capability particularly related to the management of vendor risks. A supplier performance management programme has been implemented with our most material suppliers and screening of suppliers is in place to help enable us to identify if any are on a sanctions list and if we should therefore exit the relationship.

Other operational risks are also monitored and managed through the use of the ORMF.

Further information on the nature of these risks is provided in Top and emerging risks on page 110.

Frequency and amount of operational risk losses

The profile of operational risk incidents and associated losses is summarised below, showing the distribution of operational incidents in terms of their frequency of occurrence and total loss amount in US dollars.

Operational losses were lower in 2015 than in 2014, reflecting a reduction in losses incurred relating to large legacy conduct-related events. Our total loss was driven primarily by provisions raised in respect of the mis-selling of the PPI policies, foreign exchange rate investigations and litigation.

As in previous years, the operational risk incident profile in 2015 comprised high frequency low impact events and high impact events that occurred much less frequently.

Losses due to external fraud, such as card fraud, occurred more often than other types of incident, but the amounts involved were often small in value. The value of fraud incidents in 2015 was lower than in 2014, due to the strengthened control environment.

Table of Contents

Report of the Directors: Risk (continued)

Operational risk

Frequency of operational risk incidents by risk category

(individual loss ³$10k)

Distribution of operational risk losses in US dollars by risk category

Compliance risk

Compliance risk arises from activities subject to rules, regulations, Group policies and other formal standards, including those relating to AML, counter-terrorist and proliferation financing, sanctions compliance, anti-bribery and corruption, conduct of business and other regulations.

Anti-money laundering and sanctions

Revised global AML and sanctions policies were approved in 2014. During 2015, global businesses and countries introduced new AML and sanctions procedures arising from the new policies and focused on embedding the procedures required to effect these policies in our day to day business operations globally. This supported our ongoing effort to address the US DPA requirements. These actions were in line with our strategic target to implement the highest or most effective standards globally. The work of the Monitor, who was appointed to assess the effectiveness of our AML and sanctions compliance programme is discussed on page 116 and our progress on implementing Global Standards is detailed on page 21.

Anti-bribery and corruption

It is unethical, illegal, and contrary to good corporate governance to bribe or corrupt others. The Group is committed to preventing bribery and corruption, and to consistently applying the letter and spirit of applicable anti-bribery legislation in all markets and jurisdictions in which we operate. We have implemented a strategic programme to address bribery and corruption risks and are embedding a new global suite of policies that make it clear to all staff that Group members, employees or other associated persons or entities must not engage in, or otherwise facilitate, any form of bribery, whether direct or indirect.

The anti-bribery and corruption programme, from training to risk assessment, emphasises the importance of consistent and standardised procedures to drive the principles of detect, deter and protect and ensure that they are incorporated into every aspect of business-as- usual activities.

Conduct of business

We recognise that delivering fair outcomes for our customers and upholding financial market integrity is critical to a sustainable business model. We have taken a number of steps to raise our standards and deal with historical incidents, including the following:

- we published a new Global Conduct Policy in 2015 (following the approval and implementation of the global conduct approach and framework in 2014) for the management of conduct designed to ensure that we meet our strategic commitment to deliver fair outcomes for our customers, and not disrupt the orderly and transparent operation of financial markets;

- we launched communications programmes and global mandatory training in respect of conduct and the Group s required values and behaviours;

- we enhanced the product governance process to further ensure products are designed to meet customers needs and are sold to suitable customer groupings. Post implementation and regular reviews are undertaken to help ensure products remain appropriate;

- we reviewed sales processes and sales incentive schemes, focusing on activity and rewards linked to values-based behaviour and good conduct;

- we enhanced our surveillance capabilities and tested new technologies to strengthen our capabilities to detect suspicious trading activity and misconduct;

- we undertook proactive reviews of our involvement in the benchmarking processes for rates and commodities; and

- we reviewed our insights into customer experience, our analysis of the root cause of complaints and our complaint handling to ensure we continually improve and deliver better outcomes for our customers.

The global businesses use a broad range of measures appropriate to their specific customer base and markets to assess ongoing effectiveness of the management of conduct, and enable action to be taken where potential conduct issues arise. The measures include information relating to sales quality, customer experience and market behaviour.

The CVC provides Board oversight of the Group s multiple efforts to raise standards of conduct and embed the behavioural values the Group stands for.

For further information on the CVC, see page 272.

Further information on our conduct is provided in the Strategic Report on page 40 and for conduct-related costs relating to significant items, see page 97.

Whistleblowing

We actively encourage our employees to raise concerns and escalate issues so they can be dealt with effectively. In most cases, individuals will raise their concerns with line management or Global Human Resources. However, where

an individual believes that their normal reporting channels are unavailable or inappropriate, it is important that they have alternative channels available to them to raise concerns confidentially without fear of personal repercussions. This is referred to as whistleblowing .

To make whistleblowing simpler for our employees, we launched HSBC Confidential across the Group in August 2015 to provide a global platform offering telephone, email, web and mail options for whistleblowers to bring together all our existing whistleblowing channels. We also maintain an external email address for complaints regarding accounting and internal financial controls or auditing matters (accountingdisclosures@hsbc.com). Matters raised are independently investigated by appropriate subject matter teams and details of investigations and outcomes including remedial action taken are reported to the CVC. Matters raised in respect of audit, accounting and internal control over financial reporting are reported to the Group Audit Committee.

179

Table of Contents

Report of the Directors: Risk (continued)

Risk management of insurance operations

Risk management of insurance operations

	Page	App[1]	Tables	Page
HSBC s bancassurance model	180			
Overview of insurance products		219		
Nature and extent of risks		220		
Risk management of insurance manufacturing operations in 2015	181			
Asset and liability matching	181		*Balance sheet of insurance manufacturing subsidiaries by:*	
			type of contract	181
			geographical region	182
			Movement in total equity of insurance operations	183
Financial risks	183	220	*Financial assets held by insurance manufacturing subsidiaries*	184
Market risk	184	220	*Financial return guarantees*	185
			Sensitivity of HSBC s insurance manufacturing subsidiaries to market risk factors	185
Credit risk	185	222	*Treasury bills, other eligible bills and debt securities in HSBC s insurance manufacturing subsidiaries*	186
			Reinsurers share of liabilities under insurance contracts	187
Liquidity risk	187	222	*Expected maturity of insurance contract liabilities*	187
			Remaining contractual maturity of investment contract liabilities	187

Insurance risk	188	223	*Analysis of insurance risk liabilities under insurance contracts*	188
Sensitivities to non-economic assumptions	188		*Sensitivity analysis*	188

1 *Appendix to Risk policies and practices.*

The majority of the risk in our insurance business derives from manufacturing activities and can be categorised as financial risk and insurance risk. Financial risks include market risk, credit risk and liquidity risk. Insurance risk is the risk, other than financial risk, of loss transferred from the holder of the insurance contract to the issuer (HSBC).

There were no material changes to our policies and practices for the management of risks arising in the insurance operations in 2015.

A summary of HSBC s policies and practice regarding the risk management of insurance operations and the main contracts we manufacture is provided in the Appendix to Risk on page 219.

HSBC s bancassurance model

We operate an integrated bancassurance model which provides insurance products principally for customers with whom we have a banking relationship. Insurance products are sold through all global businesses, but predominantly by RBWM and CMB through our branches and direct channels worldwide.

The insurance contracts we sell relate to the underlying needs of our banking customers, which we can identify from our point-of-sale contacts and customer knowledge. The majority of sales are of savings and investment products and term and credit life contracts.

By focusing largely on personal and SME lines of business we are able to optimise volumes and diversify individual insurance risks.

We choose to manufacture these insurance products in HSBC subsidiaries based on an assessment of operational scale and risk appetite. Manufacturing insurance allows us to retain the risks and rewards associated with writing insurance contracts by keeping part of the underwriting profit and investment income within the Group.

Where we do not have the risk appetite or operational scale to be an effective insurance manufacturer, we engage with a handful of leading external insurance companies in order to provide insurance products to our customers through our banking network and direct channels. These arrangements are generally structured with our exclusive strategic partners and earn the Group a combination of commissions, fees and a share of profits.

We distribute insurance products in all of our geographical regions. We have life insurance manufacturing subsidiaries in nine countries (Argentina, mainland China, France, Hong Kong, Malaysia, Malta, Mexico, Singapore and the UK). We also have a life insurance manufacturing associate in Saudi Arabia and a joint venture in India.

The life insurance manufacturing entities in Brazil were classified as held for sale during the period, following the announcement of our plan to sell our operations in the country.

The disposal of HSBC Life (UK) s pensions business, which was agreed during 2014, was completed in August 2015.

Table of Contents

Risk management of insurance manufacturing operations in 2015

We measure the risk profile of our insurance manufacturing businesses using an economic capital approach, where assets and liabilities are measured on a market value basis and a capital requirement is held to ensure that there is less than a 1 in 200 chance of insolvency over the next year, given the risks that the businesses are exposed to. The methodology for the economic capital calculation is largely aligned to the new pan-European Solvency II insurance capital regulations, which are applicable from 2016.

The risk profile of our life insurance manufacturing businesses did not change materially during 2015, however there was a decrease in liabilities under insurance contracts to $70bn (2014: $74bn) arising from the transfer to Liabilities of disposal groups held for sale in respect of the planned disposal of our operations in Brazil.

Asset and liability matching

(Audited)

A principal tool used to manage exposures to both financial and insurance risk, in particular for life insurance contracts, is asset and liability matching. In many markets in which we operate it is neither possible nor appropriate to follow a close asset and liability matching strategy. For long-dated non-linked contracts, in particular, this results in a duration mismatch between assets and liabilities. Portfolios are

structured to support these projected liabilities, with limits set to control the duration mismatch.

The tables below show the composition of assets and liabilities by contract and by geographical region and demonstrate that there were sufficient assets to cover the liabilities to policyholders in each case at the end of 2015.

The Brazilian insurance operations are reported as a disposal group held for sale at 31 December 2015. The assets and liabilities of this disposal group are included within Other assets and liabilities in the table below. The UK pensions business was reported as a disposal group held for sale at 31 December 2014 and the sale of this business was completed during August 2015. As a result, $6.8bn of total assets and $6.7bn of total liabilities were derecognised.

Our most significant life insurance products are investment contracts with DPF issued in France and insurance contracts with DPF issued in Hong Kong.

Our exposure to financial risks arising in the balance sheet below varies depending on the type of contract issued. For unit-linked contracts, the policyholder bears the majority of the exposure to financial risks whereas for contracts with

DPF, the shareholder (i.e. HSBC) is exposed to financial risks to the extent that the exposure cannot be managed by utilising any discretionary participation.

The majority of financial risks are borne by the shareholder for all other contract types.

Balance sheet of insurance manufacturing subsidiaries by type of contract

(Audited)

	Insurance contracts				Investment contracts				
	With DPF $m	Unit-linked $m	Annuities $m	Other[35] $m	With DPF[36] $m	Unit-linked $m	Other $m	Other assets and liabilities[37] $m	T
cial	31,801	6,569	1,138	6,618	21,720	2,271	3,935	5,531	79
ing assets			2						
ncial									
nated at alue	4,698	6,435	296	563	6,421	2,000	1,859	1,015	23
vatives	49			4	111	1	29	62	
ncial ments 38	22,840		468	2,334			1,387	3,050	30
ncial ments 3	1,743		312	3,685	13,334		23	1,233	20
er ial 39	2,471	134	60	32	1,854	270	637	171	5
urance	202	264		951					1
40								5,685	5
assets									
ment rties	838	1	11	105	888	6	23	4,576	6
assets	**32,841**	**6,834**	**1,149**	**7,674**	**22,608**	**2,277**	**3,958**	**15,792**	**93**
ities									
ment cts						2,256	3,771		6
						2,256	3,771		6

gnated at alue ied at ised cost ities									
nce cts	**32,414**	**6,791**	**1,082**	**7,042**	**22,609**				**69**
red tax[41]	**11**		**11**	**3**				**1,056**	**1**
ties								**5,553**	**5**
ties	**32,425**	**6,791**	**1,093**	**7,045**	**22,609**	**2,256**	**3,771**	**6,609**	**82**
equity								**10,534**	**10**
ties and y at cember [2]	**32,425**	**6,791**	**1,093**	**7,045**	**22,609**	**2,256**	**3,771**	**17,143**	**93**

Table of Contents

Report of the Directors: Risk (continued)

Risk management of insurance operations

Balance sheet of insurance manufacturing subsidiaries by type of contract (continued)

	Insurance contracts				Investment contracts				
	With DPF $m	Unit-linked $m	Annuities $m	Other[35] $m	With DPF[36] $m	Unit-linked $m	Other $m	Other assets and liabilities[37] $m	
al	29,040	11,278	1,517	6,253	24,238	2,561	4,322	5,732	8
ng assets			3						
cial ted at ue	4,304	11,111	533	782	6,346	2,223	1,684	1,713	2
atives	12	1		1	101	1	10	73	
cial nents	18,784		542	1,019			1,444	2,494	2
cial nents	2,368		344	4,148	15,677		363	1,318	2
al 9	3,572	166	95	303	2,114	337	821	134	
rance	190	262		617				2	
								5,307	
ssets									
nent ies	698	328	23	107	831	7	26	7,383	

ssets	29,928	11,868	1,540	6,977	25,069	2,568	4,348	18,424	10
ies									
nent ts						2,542	4,155		
nated at ue						2,542	3,770		
ed at sed							385		
ies									
ce ts	29,479	11,820	1,473	6,021	25,068				7
ed	12		11	18				1,180	
es								8,577	
es	29,491	11,820	1,484	6,039	25,068	2,542	4,155	9,757	9
quity								10,366	1
es and at ember	29,491	11,820	1,484	6,039	25,068	2,542	4,155	20,123	10

For footnotes, see page 191.

Balance sheet of insurance manufacturing subsidiaries by geographical region[43]

(Audited)

	Europe $m	Asia $m	Latin America $m	Total $m
Financial assets	**26,897**	**51,087**	**1,599**	**79,583**
trading assets			**2**	**2**
financial assets designated at fair value	**9,987**	**12,668**	**632**	**23,287**
derivatives	**163**	**93**		**256**
financial investments – HTM[38]		**29,496**	**583**	**30,079**
financial investments – AFS[38]	**14,525**	**5,503**	**302**	**20,330**
other financial assets[39]	**2,222**	**3,327**	**80**	**5,629**
Reinsurance assets	**287**	**1,122**	**8**	**1,417**
PVIF[40]	**807**	**4,761**	**117**	**5,685**
Other assets and investment properties	**919**	**1,358**	**4,171**	**6,448**
Total assets	**28,910**	**58,328**	**5,895**	**93,133**

Liabilities under investment contracts:				
designated at fair value	**1,376**	**4,651**		**6,027**
carried at amortised cost				
Liabilities under insurance contracts	**24,699**	**43,975**	**1,264**	**69,938**
Deferred tax[41]	**274**	**767**	**40**	**1,081**
Other liabilities	**832**	**974**	**3,747**	**5,553**
Total liabilities	**27,181**	**50,367**	**5,051**	**82,599**
Total equity	**1,729**	**7,961**	**844**	**10,534**
Total liabilities and equity at 31 December 2015[42]	**28,910**	**58,328**	**5,895**	**93,133**

Table of Contents

	Europe $m	Asia $m	Latin America $m	Total $m
Financial assets	30,178	47,443	7,320	84,941
trading assets			3	3
financial assets designated at fair value	10,610	12,497	5,589	28,696
derivatives	172	27		199
financial investments HTM[38]		23,546	737	24,283
financial investments AFS[38]	16,947	6,464	807	24,218
other financial assets[39]	2,449	4,909	184	7,542
Reinsurance assets	308	748	15	1,071
PVIF[40]	711	4,175	421	5,307
Other assets and investment properties	7,650	1,145	608	9,403
Total assets	38,847	53,511	8,364	100,722
Liabilities under investment contracts:				
designated at fair value	1,585	4,727		6,312
carried at amortised cost			385	385
Liabilities under insurance contracts	27,312	39,990	6,559	73,861
Deferred tax[41]	273	806	142	1,221
Other liabilities	7,932	460	185	8,577
Total liabilities	37,102	45,983	7,271	90,356
Total equity	1,745	7,528	1,093	10,366
Total liabilities and equity at 31 December 2014[42]	38,847	53,511	8,364	100,722

For footnotes, see page 191.

Movement in total equity of insurance operations

(Audited)

	Total equity	
	2015	2014

	$m	$m
At 1 January	**10,366**	9,700
Movements in PVIF[40]	**799**	261
Return on net assets	**410**	1,835
Capital transactions	**(468)**	(673)
Disposals of subsidiaries/portfolios	**(13)**	1
Exchange differences and other	**(560)**	(758)
At 31 December	**10,534**	10,366

For footnotes, see page 191.

Financial risks

(Audited)

Details on the nature of financial risks and how they are managed are provided in the Appendix to Risk on page 220.

Financial risks can be categorised into:

- *market risk* risk arising from changes in the fair values of financial assets or their future cash flows from fluctuations in variables such as interest rates, credit spreads, foreign exchange rates and equity prices;
- *credit risk* the risk of financial loss following the failure of third parties to meet their obligations; and
- *liquidity risk* the risk of not being able to make payments to policyholders as they fall due as there are insufficient assets that can be realised as cash.

The following table analyses the assets held in our insurance manufacturing subsidiaries at 31 December 2015 by type of contract, and provides a view of the exposure to financial risk. For unit-linked contracts, which pay benefits to policyholders determined by reference to the value of the investments supporting the policies, we typically designate assets at fair value; for non-linked contracts, the classification of the assets is driven by the nature of the underlying contract.

Table of Contents

Report of the Directors: Risk (continued)

Risk management of insurance operations

Financial assets held by insurance manufacturing subsidiaries

(Audited)

	Unit-linked contracts[44] $m	Non-linked contracts[45] $m	Other assets[39] $m	Total $m
Trading assets				
Debt securities		**2**		**2**
Financial assets designated at fair value	**8,435**	**13,837**	**1,015**	**23,287**
Treasury bills		**146**	**56**	**202**
Debt securities	**448**	**3,547**	**228**	**4,223**
Equity securities	**7,987**	**10,144**	**731**	**18,862**
Financial investments				
Held-to-maturity: debt securities		**27,029**	**3,050**	**30,079**
Available-for-sale:		**19,097**	**1,233**	**20,330**
debt securities		**19,097**	**1,177**	**20,274**
equity securities			**56**	**56**
Derivatives	**1**	**193**	**62**	**256**
Other financial assets[39]	**404**	**5,054**	**171**	**5,629**
Total financial assets at 31 December 2015[42]	**8,840**	**65,212**	**5,531**	**79,583**
Trading assets				
Debt securities		3		3
Financial assets designated at fair value	13,334	13,649	1,713	28,696
Treasury bills		40	16	56
Debt securities	4,589	3,507	618	8,714
Equity securities	8,745	10,102	1,079	19,926
Financial investments				
Held-to-maturity: debt securities		21,789	2,494	24,283

Available-for-sale:		22,899	1,319	24,218
debt securities		22,899	1,290	24,189
equity securities			29	29
Derivatives	2	124	73	199
Other financial assets[39]	503	6,905	134	7,542
Total financial assets at 31 December 2014[42]	13,839	65,369	5,733	84,941

For footnotes, see page 191.

Approximately 69% of financial assets were invested in debt securities at 31 December 2015 (2014: 67%) with 24% (2014: 24%) invested in equity securities.

Under unit-linked contracts, premium income less charges levied is invested in a portfolio of assets. We manage the financial risks of this product on behalf of the policyholders by holding appropriate assets in segregated funds or portfolios to which the liabilities are linked. These assets represented 11% (2014: 16%) of the total financial assets of our insurance manufacturing subsidiaries at the end of 2015.

The remaining assets of $71bn (2014: $71bn) are where financial risks are managed either solely on behalf of the shareholder, or jointly on behalf of the shareholder and policyholders where DPF exist. These assets relate primarily to operations in Asia and France.

Market risk

(Audited)

Market risk arises when mismatches occur between product liabilities and the investment assets which back them. For example, mismatches between asset and liability yields and maturities give rise to interest rate risk.

The proceeds from insurance and investment products are primarily invested in bonds. A proportion is also allocated to other asset classes, such as equities, property, private equity and hedge funds to provide customers with the

potential for enhanced returns. Portfolios of such assets are exposed to the risk of changes in market prices and where not fully reflected in bonuses paid to policyholders, will affect shareholder funds.

Long-term insurance or investment products may incorporate benefits that are guaranteed. Fixed guaranteed benefits, for example for annuities in payment, are reserved for as part of the calculation of liabilities under insurance contracts.

The risk of shareholder capital being required to meet liabilities to policyholders increases in products that offer guaranteed financial returns where current yields fall below guaranteed levels for a prolonged period. Reserves are held against the cost of guarantees, calculated by stochastic modelling. Where local rules require, these reserves are held as part of liabilities under insurance contracts. Any remainder is accounted for as a deduction to PVIF on the relevant product. The table below shows the total reserve held for the cost of guarantees, the range of investment returns on assets supporting these products and the implied investment return that would enable the business to meet the guarantees.

The financial guarantees offered on some portfolios exceeded the current yield on the assets that back them. The cost of guarantees decreased to $748m (2014: $777m) primarily because of rising yields and updates to interest rate parameters in France during 2015. Following these

HSBC HOLDINGS PLC

Table of Contents

changes, the cost of guarantees on closed portfolios reported in the 2.0% to 4.0% and 4.1% to 5.0% categories decreased, driven principally by the increased reinvestment

yield assumptions. In addition, there was a closed portfolio in Hong Kong with a guaranteed rate of 5.0% compared with the current yield of 4.1%.

Financial return guarantees[42]

(Audited)

	2015					2014				
	Investment returns implied by guarantee		**Current yields**		**Cost of guarantees**	Investment returns implied by guarantee		Current yields		Cost of guarantees
		%		**%**	**$m**		%		%	$m
Capital		**0.0**	**0.0**	**3.8**	**85**		0.0	0.0	3.5	81
Nominal annual return	**0.1**	**1.9**	**3.9**	**3.9**	**4**	0.1	2.0	3.6	3.6	6
Nominal annual return[46]	**2.0**	**4.0**	**3.8**	**4.0**	**603**	2.1	4.0	3.5	4.1	646
Nominal annual return	**4.1**	**5.0**	**3.8**	**4.1**	**28**	4.1	5.0	3.5	4.1	30
Real annual return[47]	**0.0**	**6.0**	**5.9**	**6.1**	**28**	0.0	6.0	4.7	7.5	14
At 31 December					**748**					777

For footnotes, see page 191.

The following table illustrates the effects of selected interest rate, equity price and foreign exchange rate scenarios on our profit for the year and the total equity of our insurance manufacturing subsidiaries.

Where appropriate, the effects of the sensitivity tests on profit after tax and equity incorporate the impact of the stress on the PVIF. The relationship between the profit and total equity and the risk factors is non-linear and, therefore, the results disclosed should not be extrapolated to measure sensitivities to different levels of stress. For the same reason, the impact of the stress is not symmetrical on the upside and downside. The sensitivities are stated before allowance for management actions which may

mitigate the effect of changes in the market environment. The sensitivities presented allow for adverse changes in policyholder behaviour that may arise in response to changes in market rates.

The effects on profit after tax of +/ 100 basis points parallel shifts in yield curves have decreased from 2014 to 2015, driven mainly by rising yields and updates to interest rate parameters in France. In a low yield environment the projected cost of options and guarantees described above is particularly sensitive to yield curve movements. The market value of available-for-sale bonds is also sensitive to yield curve movements hence the larger opposite stresses on equity.

Sensitivity of HSBC s insurance manufacturing subsidiaries to market risk factors

(Audited)

	2015		**2014**	
	Effect on profit after tax	**Effect on total equity**	Effect on profit after tax	Effect on total equity
	$m	**$m**	$m	$m
+100 basis points parallel shift in yield curves	**39**	**(474)**	290	(345)
100 basis points parallel shift in yield curves[48]	**(213)**	**404**	(549)	214
10% increase in equity prices	**176**	**176**	180	180
10% decrease in equity prices	**(158)**	**(158)**	(153)	(153)
10% increase in US dollar exchange rate compared to all currencies	**16**	**16**	54	54
10% decrease in US dollar exchange rate compared to all currencies	**(16)**	**(16)**	(54)	(54)

Credit risk

(Audited)

Credit risk can give rise to losses through default and can lead to volatility in our income statement and balance sheet figures through movements in credit spreads, principally on the $54bn (2014: $53bn) bond portfolio supporting non-linked contracts and shareholders funds.

The sensitivity of the profit after tax of our insurance subsidiaries to the effects on asset values of increases in credit spreads (as modelled in line with the methodology described below) was a reduction of $2m (2014: $7m). The sensitivity of total equity was a reduction of $10m (2014: $9m). The sensitivities are relatively small because the vast majority of the debt securities held by our insurance subsidiaries are classified as either held to maturity or available for sale, and consequently any changes in the fair value of these financial investments, absent impairment,

would have no effect on the profit after tax (or to total equity in the case of the held-to-maturity securities). We calculate the sensitivity based on a one-day movement in credit spreads over a two-year period. A confidence level of 99%, consistent with our Group VaR, is applied.

Credit quality

(Audited)

The following table presents an analysis of treasury bills, other eligible bills and debt securities within our insurance business by internal measures of credit quality.

Only assets supporting liabilities under non-linked insurance and investment contracts and shareholders funds are included in the table as financial risk on assets supporting unit-linked liabilities is predominantly borne by the policyholder. 85.4% (2014: 84.8%) of the assets

Table of Contents

Report of the Directors: Risk (continued)

Risk management of insurance operations

included in the table are invested in investments rated as strong .

For a definition of the five credit quality classifications, see page 197.

Treasury bills, other eligible bills and debt securities in HSBC s insurance manufacturing subsidiaries

(Audited)

	Neither past due nor impaired				
	Strong $m	Good $m	Satisfactory $m	Sub-standard $m	Total $m
Supporting liabilities under non-linked insurance and investment contracts					
Trading assets debt securities			2		2
Financial assets designated at fair value	2,719	406	300	268	3,693
treasury and other eligible bills	130			16	146
debt securities	2,589	406	300	252	3,547
Financial investments debt securities	39,741	4,333	1,886	166	46,126
	42,460	4,739	2,188	434	49,821
Supporting shareholders funds[49]					
Financial assets designated at fair value	138	22	20	104	284
treasury and other eligible bills	8			48	56
debt securities	130	22	20	56	228
Financial investments debt securities	3,827	201	199		4,227
	3,965	223	219	104	4,511
Total[42]					
Trading assets debt securities			2		2
Financial assets designated at fair value	2,857	428	320	372	3,977
treasury and other eligible bills	138			64	202

debt securities	**2,719**	**428**	**320**	**308**	**3,775**
Financial investments debt securities	**43,568**	**4,534**	**2,085**	**166**	**50,353**
At 31 December 2015	**46,425**	**4,962**	**2,407**	**538**	**54,332**
Supporting liabilities under non-linked insurance and investment contracts					
Trading assets debt securities	3				3
Financial assets designated at fair value	2,550	530	214	255	3,549
treasury and other eligible bills	5			35	40
debt securities	2,545	530	214	220	3,509
Financial investments debt securities	38,515	4,312	1,662	200	44,689
	41,068	4,842	1,876	455	48,241
Supporting shareholders funds[49]					
Financial assets designated at fair value	214	322	30	69	635
treasury and other eligible bills				16	16
debt securities	214	322	30	53	619
Financial investments debt securities	3,378	196	154	54	3,782
	3,592	518	184	123	4,417
Total[42]					
Trading assets debt securities	3				3
Financial assets designated at fair value	2,764	852	244	324	4,184
treasury and other eligible bills	5			51	56
debt securities	2,759	852	244	273	4,128
Financial investments debt securities	41,893	4,508	1,816	254	48,471
At 31 December 2014	44,660	5,360	2,060	578	52,658

For footnotes, see page 191.

Credit risk also arises when assumed insurance risk is ceded to reinsurers. The split of liabilities ceded to reinsurers and outstanding reinsurance recoveries, analysed by credit quality, is shown below. Our exposure to third parties

under the reinsurance agreements described in the Appendix to Risk on page 223 is included in this table.

Table of Contents

Reinsurers share of liabilities under insurance contracts[42]

(Audited)

	Neither past due nor impaired				Past due but	
	Strong	Good	Satisfactory	Sub-standard	not impaired	Total
	$m	$m	$m	$m	$m	$m
Unit-linked insurance	**84**	**179**				**263**
Non-linked insurance[50]	**1,102**	**4**	**9**			**1,115**
At 31 December 2015	**1,186**	**183**	**9**			**1,378**
Reinsurance debtors	**19**	**3**			**17**	**39**
Unit-linked insurance	75	185				260
Non-linked insurance[50]	751	11	10			772
At 31 December 2014	826	196	10			1,032
Reinsurance debtors	11	6			21	38

For footnotes, see page 191.

Liquidity risk

(Audited)

The following tables show the expected undiscounted cash flows for insurance contract liabilities and the remaining contractual maturity of investment contract liabilities at 31 December 2015. The liquidity risk exposure is borne in conjunction with policyholders for the majority of our

business, and wholly borne by the policyholder in the case of unit-linked business.

The classification of Brazilian insurance operations as held for sale has reduced the undiscounted expected cash flows relating to insurance liabilities by $(5.1)bn. However, the profile of the expected maturity of the insurance contracts at

31 December 2015 remained comparable with 2014.

Expected maturity of insurance contract liabilities[42]

(Audited)

	Expected cash flows (undiscounted)				
	Within 1 year	1-5 years	5-15 years	Over 15 years	Total
	$m	$m	$m	$m	$m
Unit-linked insurance	**549**	**2,164**	**5,945**	**11,080**	**19,738**
Non-linked insurance[50]	**3,715**	**15,131**	**30,596**	**32,336**	**81,778**
At 31 December 2015	**4,264**	**17,295**	**36,541**	**43,416**	**101,516**
Unit-linked insurance	709	3,280	9,243	14,544	27,776
Non-linked insurance[50]	3,504	12,718	29,905	33,108	79,235
At 31 December 2014	4,213	15,998	39,148	47,652	107,011

For footnotes, see page 191.

Remaining contractual maturity of investment contract liabilities

(Audited)

	Liabilities under investment contracts issued by insurance manufacturing subsidiaries			
	Unit-linked investment contracts	Investment contracts with DPF	Other investment contracts	Total
	$m	$m	$m	$m
Remaining contractual maturity:				
undated[51]	**1,160**	**22,609**	**3,747**	**27,516**
due within 1 year	**136**		**24**	**160**
due over 1 year to 5 years	**117**			**117**
due over 5 years to 10 years	**170**			**170**
due after 10 years	**673**			**673**
At 31 December 2015	**2,256**	**22,609**	**3,771**	**28,636**
Remaining contractual maturity:				
undated[51]	1,298	25,068	3,765	30,131
due within 1 year	151		389	540
due over 1 year to 5 years	133			133
due over 5 years to 10 years	194			194

due after 10 years	766			766
At 31 December 2014	2,542	25,068	4,154	31,764

In most cases, policyholders have the option to terminate their contracts at any time and receive the surrender values of their policies. These may be significantly lower than the amounts shown.

Table of Contents

Report of the Directors: Risk (continued)

Risk management of insurance operations / Other material risks

Insurance risk

Insurance risk is the risk, other than financial risk, of loss transferred from the holder of the insurance contract to the issuer (i.e. HSBC). It is principally measured in terms of liabilities under the contracts in force.

The principal risk we face is that, over time, the cost of the contract, including claims and benefits may exceed the

total amount of premiums and investment income received. The cost of claims and benefits can be influenced by many factors, including mortality and morbidity experience, lapse and surrender rates. The following table analyses our life insurance risk exposures by geographical region and by type of business. The insurance risk profile and related exposures remain largely consistent with those observed at 31 December 2014.

Analysis of insurance risk liabilities under insurance contracts[43]

(Audited)

	Europe $m	Asia $m	Latin America $m	Total $m
Non-linked insurance[50]	**749**	**38,525**	**1,264**	**40,538**
insurance contracts with DPF[52]	**343**	**32,071**		**32,414**
credit life	**49**	**80**		**129**
annuities	**69**	**108**	**905**	**1,082**
other[53]	**288**	**6,266**	**359**	**6,913**
Unit-linked insurance	**1,341**	**5,450**		**6,791**
Investment contracts with DPF[36,52]	**22,609**			**22,609**
Liabilities under insurance contracts at 31 December 2015	**24,699**	**43,975**	**1,264**	**69,938**
Non-linked insurance[50]	829	34,261	1,883	36,973

insurance contracts with DPF[52]	367	29,112		29,479
credit life	56	87		143
annuities	71	127	1,275	1,473
other[53]	335	4,935	608	5,878
Unit-linked insurance	1,415	5,729	4,676	11,820
Investment contracts with DPF[36,52]	25,068			25,068
Liabilities under insurance contracts at 31 December 2014	27,312	39,990	6,559	73,861

For footnotes, see page 191.

Our most significant life insurance products are insurance contracts with DPF issued in Hong Kong, investment contracts with DPF issued in France and unit-linked contracts issued in Latin America, Hong Kong and the UK.

Sensitivities to non-economic assumptions

(Audited)

Policyholder liabilities and PVIF for life manufacturers are determined by reference to non-economic assumptions including mortality and/or morbidity, lapse rates and expense rates. The table below shows the sensitivity of profit and total equity to reasonably possible changes in these non-economic assumptions at that date across all our insurance manufacturing subsidiaries.

Mortality and morbidity risk is typically associated with life insurance contracts. The effect on profit of an increase in mortality or morbidity depends on the type of business being written. Our largest exposures to mortality and morbidity risk exist in France and Hong Kong.

Sensitivity to lapse rates depends on the type of contracts being written. For insurance contracts, claims are funded by premiums received and income earned on the investment portfolio supporting the liabilities. For a portfolio of term assurance, an increase in lapse rates typically has a negative effect on profit due to the loss

of future income on the lapsed policies. However, some contract lapses have a positive effect on profit due to the existence of policy surrender charges. France, Hong Kong and Singapore are where we are most sensitive to a change in lapse rates.

Expense rate risk is the exposure to a change in the cost of administering insurance contracts. To the extent that increased expenses cannot be passed on to policyholders, an increase in expense rates will have a negative effect on our profits.

Sensitivity analysis

(Audited)

	2015	2014
	$m	$m
Effect on profit after tax and total equity at 31 December		
10% increase in mortality and/or morbidity rates	**(70)**	(65)

10% decrease in mortality and/or morbidity rates	**75**	72
10% increase in lapse rates	**(90)**	(108)
10% decrease in lapse rates	**102**	122
10% increase in expense rates	**(85)**	(106)
10% decrease in expense rates	**83**	106

For footnote, see page 191.

Other material risks

A summary of our current policies and practices regarding reputational risk, fiduciary risk, pension risk and sustainability risk is provided in the Appendix to Risk on pages 224 to 226.

Reputational risk

Reputational risk is the risk of failure to meet stakeholder expectations as a result of any event, behaviour, action or inaction, either by HSBC itself, our employees or those with whom we are associated, that might cause stakeholders to form a negative view of the Group. This may have financial or non-financial effects, resulting in a loss of confidence, or have other consequences.

Reputational risk relates to stakeholders perceptions, whether based on fact or otherwise. Stakeholders expectations are constantly changing and thus reputational risk is dynamic and varies between geographical regions, groups and individuals. As a global bank, HSBC has an unwavering commitment to operating to the high standards we have set for ourselves in every jurisdiction. Any lapse in standards of integrity, compliance, customer service or operating efficiency represents a potential reputational risk.

A number of measures to address the requirements of the US DPA and otherwise to enhance our AML, sanctions and other regulatory compliance frameworks have been taken and/or are ongoing. These measures should also serve over time to enhance our reputational risk management. For further details on the implementation of the Global Standards, see Strategic Report on page 21 and Compliance risk on page 178.

We have a zero tolerance for knowingly engaging in any business, activity or association where foreseeable reputational risk or damage has not been considered and mitigated. There must be no barriers to open discussion and the escalation of issues that could affect the Group negatively. While there is a level of risk in every aspect of business activity, appropriate consideration of potential harm to HSBC s good name must be a part of all business decisions.

In 2015, we restructured our Reputational Risk sub-function to increase our focus on the management of reputational risk. With an expanded mandate, the unit is better positioned to provide bespoke advisory services to the business on reputational risks to the Group and to work with the Financial Crime and Regulatory Compliance teams to mitigate such risks where possible.

Fiduciary risk

Fiduciary risk is the risk to the Group of breaching our fiduciary duties when we act in a fiduciary capacity as trustee or investment manager or as mandated by law or regulation.

A fiduciary duty is one where HSBC holds, manages, oversees or has responsibility for assets on behalf of a third party that involves a legal and/or regulatory duty to act with a high standard of care and with good faith. A fiduciary must make decisions and act in the interests of

the third party and must place the wants and needs of the client first, above the needs of the Group.

We may be held liable for damages or other penalties caused by failure to act in accordance with these duties. Fiduciary duties may also arise in other circumstances, such as when we act as an agent for a principal, unless the fiduciary duties are specifically excluded (e.g. under the agency appointment contract).

Our principal fiduciary businesses (the designated businesses) have developed fiduciary limits, key risk indicators and key performance indicators to monitor their related risks.

Pension risk

We operate a number of defined benefit and defined contribution pension plans throughout the world. Most of our pension risk arises from defined benefit plans. The largest of these is the HSBC Bank (UK) Pension Scheme (the principal plan).

At 31 December 2015, the Group s aggregate defined benefit pension obligation was $38bn and the net asset on the balance sheet was $3.1bn (2014: $42bn and $2.7bn, respectively). The principal plan is the largest contributor to pension risk in the Group: it contributed $28bn to the Group s defined benefit obligation and $5.0bn to the Group s net asset.

The principal plan

The principal plan has a defined benefit section and a defined contribution section and is overseen by a corporate trustee. This trustee has a fiduciary responsibility to run the plan. Unless stated otherwise, this section relates to the defined benefit section.

The investment strategy of the principal plan is to hold the majority of assets in bonds, with the remainder in a diverse range of investments. It also includes some interest rate and inflation swaps to reduce the level of interest rate risk and inflation risk (see Note 41 in the Financial Statements). The target asset allocation of the principal plan at the year-end is shown in the table below.

The principal plan target asset allocation

	2015	2014
	%	%
Equities[54]	**19.4**	19.4
Bonds	**64.5**	64.5
Alternative assets[55]	**10.6**	10.6
Property	**5.5**	5.5
Cash[56]		
At 31 December	**100.0**	**100.0**

For footnotes, see page 191.

The latest actuarial valuation of the principal plan was made as at 31 December 2011 by C G Singer, Fellow of the Institute and Faculty of Actuaries, of Willis Towers Watson Limited. At that date, the market value of the plan s assets was £18bn ($28bn) (including assets relating to both the defined benefit and defined contribution sections, and additional voluntary contributions). This asset value was the same amount as the actuary said was needed to meet all future expected benefit payments, based on pensions earned to that date and

Table of Contents

Report of the Directors: Risk (continued)

Other material risks / Footnotes

allowing for expected future salary increases. As there was no resulting surplus or deficit, there was no need for the Bank to pay any additional contributions.

In carrying out this assessment, the future expected pension payments out of the plan were valued with the following assumptions:

- future inflation was assumed to be in line with the Retail Price Index (RPI) swap break-even curve at 31 December 2011;
- salary increases were assumed to be 0.5% above the RPI each year;
- pensions were assumed to increase in line with the RPI;
- the projected cash flows were discounted at the Libor swap curve at 31 December 2011 plus a margin for the expected return on the investment strategy of 1.6% a year;
- the mortality assumptions were set based on the SAPS S1 series of tables adjusted to reflect the plan s actual mortality experience over the prior six years (2006 to 2011); and
- mortality rates were also assumed to improve further in the future in line with standard tables of improvements, the Continuous Mortality Investigation core projections, but with the additional assumption that the long run improvement rate would not fall below 2% a year for men and 1.5% a year for women.

The benefits expected to be paid from the defined benefit section from 2016 are shown in the chart below.

Future benefit payments ($m)

As part of the 31 December 2011 valuation, the actuary also assessed the amount needed to meet the obligations of the principal plan if the plan was stopped and an insurance company was asked to guarantee all future payments. Because the plan is large, it is unlikely that an insurance company would be able to do this for the whole plan, so in practice the Trustee would continue to manage the plan without further support from HSBC. The amount of assets needed under this approach was estimated to be £26bn ($41bn). This is larger than the previous amount because it assumes that people will live for even longer and that the Trustee would adopt a much less risky investment strategy, investing mainly in UK government bonds, which would have a lower expected investment return. It also included an explicit allowance for the future administrative expenses of the plan.

HSBC and the Trustee have developed a general framework which will see the principal plan s investment strategy become less risky over time. This is referred to as the Target Matching Portfolio (TMP), as it would contain investments that closely match the expected benefit payment profile. Progress towards the TMP can be achieved by investment returns or additional funding from HSBC. In 2013, HSBC agreed to make general framework contributions of £64m ($95m) in each of the calendar years 2013, 2014 and 2015 and £128m ($190m) in 2016. Further contributions had been agreed to be made in future years, which were linked to the continued implementation of the general framework.

The 31 December 2014 valuation has been agreed in principle with the Trustee, and is expected to be finalised by its statutory deadline of 31 March 2016. The final agreement should result in a surplus of circa £500m ($741m) as at the valuation date of 31 December 2014 and on the Trustee s prudent actuarial assumptions. The general framework implementation has also continued such that the conditions on the future contributions would be removed. As a result the following payments would be payable in the future: £64m ($95m) in each of 2017, 2018, 2019, and £160m ($237m) in each of 2020 and 2021, which in addition to the amounts agreed before would give a total of £640m ($949m) payable from 2016 to 2021.

The principal plan changed in 2015 and from 30 June members stopped accruing future defined benefits. Defined benefit pensions accrued up to 30 June 2015 will retain their link to employee salaries, underpinned by the Consumer Price Index (CPI), while members are still employees of the bank. To support the establishment of the ServCo group and to ensure that employees transferred retained existing pension benefits, a new section of the principal plan was created with segregated assets and liabilities. The new section provides ServCo group employees with their defined contribution pension and, where relevant, defined benefit pension benefits arising from future salary increases above CPI.

Defined contribution plans

Our global strategy is to move from defined benefit to defined contribution plans, where local law allows and it is considered competitive to do so. In defined contribution pension plans, the sponsor contributions are known, while the ultimate pension benefit will vary, typically with investment returns achieved by investment choices made by the employee. While the market risk of defined contribution plans is significantly less than that of defined benefit plans, the Bank is still exposed to operational and reputational risk.

Sustainability risk

Assessing the environmental and social impacts of providing finance to our customers is integral to our overall risk management processes.

In 2015, we continued to implement all of our sustainability risk policies. Our training for risk and relationship managers during the year focused on the new policies on agricultural commodities, forestry and World Heritage Sites and Ramsar Wetlands, issued in 2014. Following a recommendation by Internal Audit in 2015, we took steps to integrate the management of sustainability risk more fully into the Risk

HSBC HOLDINGS PLC

190

Table of Contents

Function. For example, we raised standards of risk analysis and policy implementation; updated internal instruction manuals; and improved the way sustainability risk is recorded in our information management system.

Footnotes to Risk

Managing risk

1 *The sum of balances presented does not agree to consolidated amounts because inter-company eliminations are not presented here.*

Credit risk

2 *The amount of the loan commitments reflects, where relevant, the expected level of take-up of pre-approved loan offers made by mailshots to personal customers. In addition to those amounts, there is a further maximum possible exposure to credit risk of $59bn (2014: $71bn), reflecting the full take-up of loan commitments. The take-up of such offers is generally at low levels. At 31 December 2015, the credit quality of loan and other credit-related commitments was: $348bn strong, $180bn good, $129bn satisfactory, $9bn sub-standard and $1bn impaired.*
3 *Other personal lending includes second lien mortgages and other property-related lending.*
4 *Other commercial loans and advances includes advances in respect of agriculture, transport, energy utilities and ABS reclassified to Loans and advances .*
5 *Impairment allowances are not reported for financial instruments, for which the carrying amount is reduced directly for impairment and not through the use of an allowance account.*
6 *Impairment is not measured for assets held in trading portfolios or designated at fair value as assets in such portfolios are managed according to movements in fair value, and the fair value movement is taken directly to the income statement. Consequently, we report all such balances under Neither past due nor impaired .*
7 *Loans and advances to customers includes asset-backed securities that have been externally rated as strong (2015: $504m; 2014: $1.2bn), good (2015: $95m; 2014: $256m), satisfactory (2015: $107m; 2014: $332m), sub-standard (2015: $19m; 2014: $94m) and impaired (2015: $73m; 2014: $128m).*
8

Collection re-age includes loans that are reset to current and any arrears are reset but does not involve any changes to the original terms and conditions of the loan, where the account is brought up-to-date without fully paying the outstanding arrears but after the demonstration of ongoing payment ability.

9 *Modification re-age includes loans where there are changes to the original terms and conditions of the loan, either temporarily or permanently, and also resets the contractual delinquency status of an account to current.*

10 *Collectively assessed impairment allowances are allocated to geographical segments based on the location of the office booking the allowances or provisions.*

11 *Included within Exchange and other movements is $2.1bn of impairment allowances reclassified to held for sale (2014: $0.4bn).*

12 *Of the $2,134m (2014: $2,724m) of renegotiated loans, $477m (2014: $608m) were neither past due nor impaired, $1m (2014: $1m) was past due but not impaired and $1,656m (2014: $2,115m) were impaired.*

13 *Includes balances in Middle East and North Africa that are impaired and past due and therefore considered due on demand.*

14 *French Banking Federation Master Agreement Relating to Transactions on Forward Financial Instruments plus CSA equivalent.*

15 *The German Master Agreement for Financial Derivative Transactions.*

16 *HSBC Finance lending is on a management basis and includes loans transferred to HSBC USA Inc. which are managed by HSBC Finance.*

17 *Included in this category are loans of $1.2bn (2014: $1.5bn) that have been re-aged once and were less than 60 days past due at the point of re-age. These loans are not classified as impaired following re-age due to the overall expectation that these customers will perform on the original contractual terms of their borrowing in the future.*

18 *Currency translation is the effect of translating the results of subsidiaries and associates for the previous year at the average rates of exchange applicable in the current year.*

Liquidity and funding

19 *The HSBC UK Liquidity Group shown comprises four legal entities; HSBC Bank plc (including all overseas branches, and SPEs consolidated by HSBC Bank plc for Financial Statement purposes), Marks and Spencer Financial Services plc, HSBC Private Bank (UK) Ltd and HSBC Trust Company (UK) Limited, managed as a single operating entity, in line with the application of UK liquidity regulation as agreed with the UK PRA.*

20 *The Hongkong and Shanghai Banking Corporation Hong Kong branch and The Hongkong and Shanghai Banking Corporation Singapore branch represent the material activities of the Hongkong and Shanghai Banking Corporation. Each branch is monitored and controlled for liquidity and funding risk purposes as a stand-alone operating entity.*

21 *The HSBC USA principal entity shown represents the HSBC USA Inc consolidated group; predominantly HSBC USA Inc and HSBC Bank USA, NA. The HSBC USA Inc consolidated group is managed as a single operating entity.*

22 *HSBC France and HSBC Canada represent the consolidated banking operations of the Group in France and Canada respectively. HSBC France and HSBC Canada are each managed as single distinct operating entities for liquidity purposes.*

23 *The most favourable metrics are smaller advances to core funding and larger stressed one-month and three-month coverage ratios.*

24 *The total shown for other principal HSBC operating entities represents the combined position of all the other operating entities overseen directly by the Risk Management Meeting of the GMB. This coverage changed during 2015 and so comparative figures for 2014 have been re-stated to enable a like-for-like comparison.*

25 *Estimated liquidity value represents the expected realisable value of assets prior to management assumed haircuts.*

26 *The undrawn balance for the five largest committed liquidity facilities provided to customers other than facilities to conduits.*

27 *The undrawn balance for the total of all committed liquidity facilities provided to the largest market sector, other than facilities to conduits.*

28 *The residual contractual maturity profile of the balance sheet is set out on in Note 31 on the Financial Statements.*

Table of Contents

Report of the Directors: Risk (continued)

Footnotes / Appendix to Risk Policies and practices

Market risk

29 *Trading portfolios comprise positions arising from the market-making and warehousing of customer-derived positions.*

30 *Portfolio diversification is the market risk dispersion effect of holding a portfolio containing different risk types. It represents the reduction in unsystematic market risk that occurs when combining a number of different risk types, for example, interest rate, equity and foreign exchange, together in one portfolio. It is measured as the difference between the sum of the VaR by individual risk type and the combined total VaR. A negative number represents the benefit of portfolio diversification. As the maximum and minimum occurs on different days for different risk types, it is not meaningful to calculate a portfolio diversification benefit for these measures.*

31 *The total VaR is non-additive across risk types due to diversification effects.*

32 *Investments in private equity are primarily made through managed funds that are subject to limits on the amount of investment. Potential new commitments are subject to risk appraisal to ensure that industry and geographical concentrations remain within acceptable levels for the portfolio as a whole. Regular reviews are performed to substantiate the valuation of the investments within the portfolio.*

33 *Investments held to facilitate ongoing business include holdings in government-sponsored enterprises and local stock exchanges.*

34 *Instead of assuming that all interest rates move together, we group our interest rate exposures into currency blocs whose rates are considered likely to move together. See Cautionary statement regarding forward-looking statements .*

Risk management of insurance operations

35 *Other includes term assurance, credit life insurance, universal life insurance and remaining non-life insurance.*

36 *Although investment contracts with discretionary participation features (DPF) are financial investments, HSBC continues to account for them as insurance contracts as required by IFRS 4 Insurance Contracts . The corresponding liabilities are therefore recorded as liabilities under insurance contracts .*

37 *Other assets and liabilities shows shareholder assets as well as assets and liabilities classified as held for sale. The majority of the assets for insurance businesses classified as held for sale are reported as Other assets and investment properties and totalled $4.1bn at 31 December 2015 (2014: $6.8bn). The majority of these assets were debt and equity securities and PVIF. All liabilities for insurance businesses classified as held for sale are reported in Other liabilities and totalled $3.7bn at 31 December 2015 (2014: $6.8bn). The majority of these liabilities were liabilities under insurance contracts and liabilities under investment contracts.*

38 *Financial investments held to maturity (HTM) and available for sale (AFS).*
39 *Comprise mainly loans and advances to banks, cash and intercompany balances with other non-insurance legal entities.*
40 *Present value of in-force long-term insurance contracts and investment contracts with DPF.*
41 *Deferred tax includes the deferred tax liabilities arising on recognition of PVIF.*
42 *Does not include associated insurance company SABB Takaful Company or joint venture insurance company Canara HSBC Oriental Bank of Commerce Life Insurance Company Limited.*
43 *HSBC has no insurance manufacturing subsidiaries in Middle East and North Africa or North America.*
44 *Comprise unit-linked life insurance contracts and linked long-term investment contracts.*
45 *Comprise all insurance and long-term investment contracts other than those classified as unit-linked.*
46 *A block of contracts in France with guaranteed nominal annual returns in the range 1.25%-3.72% are reported entirely in the 2.0%-4.0% category in line with the average guaranteed return of 2.7% offered to policyholders by these contracts.*
47 *Real annual return guarantees provide the policyholder a guaranteed return in excess of the rate of inflation, and are supported by inflation-linked debt securities with yields that are also expressed in real terms.*
48 *Where a 100 basis point parallel shift in the yield curve would result in a negative interest rate, the effects on profit after tax and total equity have been calculated using a minimum rate of 0%.*
49 *Shareholders funds comprise solvency and unencumbered assets.*
50 *Non-linked insurance comprises all insurance contracts other than unit-linked, including remaining non-life business.*
51 *In most cases, policyholders have the option to terminate their contracts at any time and receive the surrender values of their policies. These may be significantly lower than the amounts shown.*
52 *Insurance contracts and investment contracts with DPF can give policyholders the contractual right to receive, as a supplement to their guaranteed benefits, additional benefits that may be a significant portion of the total contractual benefits, but whose amount and timing are determined by HSBC. These additional benefits are contractually based on the performance of a specified pool of contracts or assets, or the profit of the company issuing the contracts.*
53 *Other includes term assurance, universal life assurance and remaining non-life insurance.*

Pension risk

54 *In 2014, option overlay strategies which are expected to improve the risk/return profile of the equity allocation were implemented.*
55 *Alternative assets include ABSs, MBSs and infrastructure assets.*
56 *Whilst there is no target cash allocation, the amount of cash is expected to vary between 0%-5% depending upon the liquidity requirements of the scheme, which will affect the actual allocation of bonds correspondingly.*

Table of Contents

Report of the Directors: Financial Review (continued)

Risk elements in the loan portfolio

57 *In addition to the numbers presented there were $2.1bn of impaired loans (2014: $0.5bn); nil unimpaired loans contractually more than 90 days past due as to principal or interest (2014: $1m); and $8m of troubled debt restructurings (not included in the classifications above) (2014: nil), all relating to assets held for sale at 31 December 2015.*

58 *Assets held for resale represent assets obtained by taking possession of collateral held as security for financial assets.*

59 *Ratio excludes trading loans classified as in default.*

Country distribution of outstandings and cross-border exposures

60 *These balances were between 0.75% and 1% of total assets. All other balances were above 1%.*

Table of Contents

Appendix to Risk

Risk policies and practices

This appendix describes the significant policies and practices employed by HSBC in managing our credit risk, liquidity and funding, market risk, operational risk (including compliance risk, legal risk and fiduciary risk), insurance risk, reputational risk, pension risk and sustainability risk.

Risk governance

Our strong risk governance reflects the importance placed by the Board and the Group Risk Committee (GRC) on shaping the Group s risk strategy and managing risks effectively. It is supported by a clear policy framework of risk ownership, a risk appetite process through which the types and levels of risk that we are prepared to accept in executing our strategy are articulated and monitored, performance scorecards cascaded from the Group Management Board (GMB) that align business and risk objectives, and the accountability of all staff for identifying, assessing and managing risks within the scope of their assigned responsibilities. This personal accountability, reinforced by the governance structure, mandatory learning and our approach to remuneration, helps to foster a disciplined and constructive culture of risk management and control throughout HSBC.

The executive and non-executive risk governance structures and their interactions are set out in the following table. Each major operating subsidiary has established a board committee with non-executive responsibility for oversight of risk-related matters and an executive meeting with responsibility for risk-related matters.

Governance structure for the management of risk

Authority	Membership	Responsibilities include:
Board	Executive and non-executive Directors	Approving risk appetite, strategy and performance targets for the Group

		Approving appointment of chief risk officers of subsidiary companies Encouraging a strong risk governance culture which shapes the Group s attitude to risk
Group Risk Committee (GRC)	Independent non-executive Directors	Advising the Board on: risk appetite and alignment with strategy alignment of remuneration with risk appetite (through advice to the Group Remuneration Committee) risks associated with proposed strategic acquisitions and disposals Overseeing high-level risk related matters Reviewing the effectiveness of the Group s systems of risk management and internal controls (other than over financial reporting) Overseeing the maintenance and development of a supportive culture in relation to the management of risk

Financial System Vulnerabilities Committee	Non-executive Directors, including the Chairman of the Group Remuneration Committee, and co-opted non-director members	Overseeing controls and procedures designed to identify areas of exposure to financial crime or system abuse
		Overseeing matters relating to anti-money laundering, sanctions, terrorist financing and proliferation financing
		Reviewing policies and procedures to ensure continuing obligations to regulatory and law enforcement agencies are met
Conduct & Values Committee	Independent non-executive Directors	Ensuring that in the conduct of its business, HSBC treats all stakeholders fairly
		Advising the Board on HSBC policies, procedures and standards to ensure that the Group conducts business responsibly and consistently adheres to the HSBC Values

Table of Contents

Report of the Directors: Risk (continued)

Appendix to Risk Policies and practices

Authority	Membership	Responsibilities include:
Risk Management Meeting of the GMB (RMM)	Group Chief Risk Officer Chief Legal Officer Group Chief Executive Group Finance Director All other Group Managing Directors	Formulating high-level global risk policy Supporting the Group Chief Risk Officer in exercising delegated risk management authority Overseeing implementation of risk appetite and controls Monitoring all categories of risk and determining appropriate mitigating action Promoting a supportive Group culture in relation to risk management and conduct Implementing Global Standards throughout the Group

Global Risk Management Board	Group Chief Risk Officer Chief Risk Officers of HSBC s global businesses and regions Heads of Global Risk sub-functions	Supporting the RMM and the Group Chief Risk Officer in providing strategic direction for the Global Risk function, setting priorities and overseeing their execution Overseeing consistent approach to accountability for, and mitigation of, risk across the Global Risk function
Global Business Risk Management Committees	Global Business Chief Risk Officer Global Business Chief Executive Global Business Chief Financial Officer Heads of Global Risk sub-functions, as appropriate	Forward looking assessment of changes in global business activities or the markets in which it operates, analysing the possible risk impact and taking appropriate action Overseeing the implementation of global business risk appetite and controls Monitoring all categories of risk and determining appropriate mitigating actions Promoting a strong risk culture
Regional Risk Management Committees	Regional Chief Risk Officer Regional Chief Executive Officer Regional Chief Financial Officer Regional Global Business Chief	Formulating regional specific risk policy Overseeing the implementation of regional risk appetite and controls Monitoring all categories of risk and determining appropriate mitigating actions Promoting a strong risk culture

	Heads of Global Risk sub-functions, as appropriate	
Subsidiary board committees responsible for risk-related matters and global business risk committees	Independent non-executive directors and/or HSBC employees with no line or functional responsibility for the activities of the relevant subsidiary or global business, as appropriate	Providing reports to the GRC or intermediate risk committee on risk-related matters and internal controls (other than over financial reporting) of relevant subsidiaries or businesses, as requested

The governance framework also defines the required structure for Risk sub-functions, stress testing and other key areas at Group, global business, regional and country level.

Risk appetite

The Group s Qualitative Risk Appetite Statement (RAS) formally articulates our overarching risk appetite principles, serves as a guide in embedding our risk appetite framework and supports strategic and operational decision-making across the Group.

Strong capital position: we are to have a strong capital position defined by robust regulatory and internal capital ratios. The progression of dividends should be consistent with the growth of the Group s profitability and is predicated on the ability to meet all capital requirements in a timely manner. Both the Group and its individual legal entities must self-capitalise with capital generation, net of dividends, exceeding the capital needed to support organic growth in the entity s risk-weighted assets;

Liquidity and funding management: operating entities are required to manage liquidity risk on a stand-alone basis with no implicit reliance on the Group or central banks and be able to withstand a Group-defined remote liquidity stress scenario. Customer assets and other illiquid assets must be funded with reliable and stable sources of funding;

Risk return relationship: we aim to generate returns in line with the risk taken and in alignment with strategic plans, strategic business outlooks and risk management policies;

Table of Contents

Sustainable and diversified earnings mix: global businesses and regions must support sustainable, well diversified and non-volatile earning streams, delivering consistent returns for shareholders;

Reputation risk: we tolerate a limited degree of reputational risk arising from business activities or associations where the risk has been escalated to the appropriate level of management. We have zero tolerance for knowingly engaging in any business, activity or association where foreseeable reputational risk/damage has not been considered and/or mitigated;

Financial crime compliance: we will operate with integrity to the most effective financial crime risk management standards, address financial system vulnerability through a robust financial crime risk management framework, and ensure appropriate mitigating systems and controls are in place to prevent and detect financial crime. We have no appetite for deliberately or knowingly facilitating business that gives rise to illicit activity; and

Regulatory compliance: we have no appetite for deliberately or knowingly causing detriment to consumers arising from our products and services, or incurring a breach of the letter or spirit of regulatory requirements. We have no appetite for inappropriate market conduct by a member of staff or by any Group business.

Credit risk

Credit risk management

(Audited)

The role of independent credit control unit is fulfilled by the Global Risk function. Credit approval authorities are delegated by the Board to the Chief Executive Officer of HSBC Holdings together with the authority to sub-delegate them. Similar credit approval authorities are delegated by the boards of subsidiary companies to their respective executive officers. In each major subsidiary, a Chief Risk Officer reports to the local Chief Executive Officer on credit-related issues, while maintaining a direct functional reporting line to the Group Chief Risk Officer in Global Risk. Details of the roles and responsibilities of the credit risk management function and the policies and procedures for managing credit risk are set out below. There were no significant changes in 2015.

The high-level oversight and management of credit risk provided globally by the Credit Risk sub-function in Global Risk

to formulate Group credit policy. Compliance, subject to approved dispensations, is mandatory for all operating companies which must develop local credit policies consistent with Group policies;

to guide operating companies on the Group s appetite for credit risk exposure to specified market sectors, activities and banking products and controlling exposures to certain higher-risk sectors;

to undertake an independent review and objective assessment of risk. Global Risk assesses all commercial non-bank credit facilities and exposures over designated limits, prior to the facilities being committed to customers or transactions being undertaken;

to monitor the performance and management of portfolios across the Group;

to control exposure to sovereign entities, banks and other financial institutions, and debt securities which are not held solely for the purpose of trading;

to set Group policy on large credit exposures, ensuring that concentrations of exposure by counterparty, sector or geography do not become excessive in relation to our capital base, and remain within internal and regulatory limits;

to control our cross-border exposures;

to maintain and develop our risk rating framework and systems, the governance of which is under the general oversight of the Group Model Oversight Committee (MOC). The Group MOC meets bi-monthly and reports to the RMM. It is chaired by the Global Risk function and its membership is drawn from Global Risk and relevant global functions or businesses;

to report to the RMM, the GRC and the Board on high risk portfolios, risk concentrations, country limits and cross-border exposures, large impaired accounts, impairment allowances, stress testing results and recommendations and retail portfolio performance; and

to act on behalf of HSBC Holdings as the primary interface, for credit-related issues, with the Bank of England, the PRA, local regulators, rating agencies, analysts and counterparts in major banks and non-bank financial institutions.

Principal objectives of our credit risk management

- to maintain across HSBC a strong culture of responsible lending and a robust risk policy and control framework;
- to both partner and challenge our businesses in defining, implementing and continually re-evaluating our risk appetite under actual and scenario conditions; and
- to ensure there is independent, expert scrutiny of credit risks, their costs and their mitigation.

Table of Contents

Report of the Directors: Risk (continued)

Appendix to Risk Policies and practices

Concentration of exposure

(Audited)

Concentrations of credit risk arise when a number of counterparties or exposures have comparable economic characteristics or such counterparties are engaged in similar activities or operate in the same geographical areas or industry sectors so that their collective ability to meet contractual obligations is uniformly affected by changes in economic, political or other conditions. We use a number of controls and measures to minimise undue concentration of exposure in our portfolios across industry, country and global business. These include portfolio and counterparty limits, approval and review controls, and stress testing.

Wrong-way risk occurs when a counterparty s exposures are adversely correlated with its credit quality. There are two types of wrong-way risk:

- general wrong-way risk occurs when the probability of counterparty default is positively correlated with general risk factors such as, for example, where the counterparty is resident and/or incorporated in a higher-risk country and seeks to sell a non-domestic currency in exchange for its home currency; and

- specific wrong-way risk occurs when the exposure to a particular counterparty is positively correlated with the probability of counterparty default, such as a reverse repo on the counterparty s own bonds. It is our policy that specific wrong-way transactions are approved on a case-by-case basis.

We use a range of tools to monitor and control wrong-way risk, including requiring the business to obtain prior approval before undertaking wrong-way risk transactions outside pre-agreed guidelines.

Credit quality of financial instruments

(Audited)

Our credit risk rating systems and processes differentiate exposures in order to highlight those with greater risk factors and higher potential severity of loss. In the case of individually significant accounts that are predominantly within our wholesale businesses, risk ratings are reviewed regularly and any amendments are implemented promptly. In our retail businesses, risk is assessed and managed using a wide range of risk and pricing models to generate portfolio data.

Our risk rating system facilitates the internal ratings-based approach under the Basel framework adopted by the Group to support calculation of our minimum credit regulatory capital requirement. Our credit quality classifications are defined below.

Special attention is paid to problem exposures in order to accelerate remedial action. When appropriate, our operating companies use specialist units to provide customers with support to help them avoid default if possible.

Group and regional Credit Review and Risk Identification teams regularly review exposures and processes in order to provide an independent, rigorous assessment of credit risk across the Group, reinforce secondary risk management controls and share best practice. Internal audit, as a third line control function, focuses on risks with a global perspective and on the design and effectiveness of primary and secondary controls, carrying out oversight audits via the sampling of global and regional control frameworks, themed audits of key or emerging risks and project audits to assess major change initiatives.

The five credit quality classifications defined below each encompass a range of granular internal credit rating grades assigned to wholesale and retail lending businesses and the external ratings attributed by external agencies to debt securities.

Credit quality classification

	Debt securities and other bills	Wholesale lending and derivatives		Retail lending	
	External credit rating	Internal credit rating	12 month probability of default %	Internal credit rating[1]	Expected loss %
Quality classification					
Strong	A and above	CRR[2]1 to CRR2	0 0.169	EL[3]1 to EL2	0 0.999
Good	BBB+ to BBB	CRR3	0.170 0.740	EL3	1.000 4.999
Satisfactory	BB+ to B and unrated	CRR4 to CRR5	0.741 4.914	EL4 to EL5	5.000 19.999
Sub-standard	B to C	CRR6 to CRR8	4.915 99.999	EL6 to EL8	20.000 99.999
Impaired	Default	CRR9 to CRR10	100	EL9 to EL10	100+ or defaulted[4]

1 *We observe the disclosure convention that, in addition to those classified as EL9 to EL10, retail accounts classified EL1 to EL8 that are delinquent by 90 days or more are considered impaired, unless individually they have been assessed as not impaired (see page 127, Past due but not impaired gross financial instruments).*
2 *Customer risk rating.*
3 *Expected loss.*
4 *The EL percentage is derived through a combination of PD and LGD, and may exceed 100% in circumstances where the LGD is above 100% reflecting the cost of recoveries.*

Table of Contents

Quality classification definitions

Strong exposures demonstrate a strong capacity to meet financial commitments, with negligible or low probability of default and/or low levels of expected loss. Retail accounts operate within product parameters and only exceptionally show any period of delinquency.

Good exposures require closer monitoring and demonstrate a good capacity to meet financial commitments, with low default risk. Retail accounts typically show only short periods of delinquency, with any losses expected to be minimal following the adoption of recovery processes.

Satisfactory exposures require closer monitoring and demonstrate an average to fair capacity to meet financial commitments, with moderate default risk. Retail accounts typically show only short periods of delinquency, with any losses expected to be minor following the adoption of recovery processes.

Sub-standard exposures require varying degrees of special attention and default risk is of greater concern. Retail portfolio segments show longer delinquency periods of generally up to 90 days past due and/or expected losses are higher due to a reduced ability to mitigate these through security realisation or other recovery processes.

Impaired exposures have been assessed as impaired. These include wholesale exposures where the bank considers that either the customer is unlikely to pay its credit obligations in full, without recourse by the bank to the actions such as realising security if held, or the customer is past due more than 90 days on any material credit obligation; retail accounts include loans and advances classified as EL9 to EL10, and for those classified EL1 to EL8 they are greater than 90 days past due unless individually they have been assessed as not impaired; and renegotiated loans that have met the requirements to be disclosed as impaired and have not yet met the criteria to be returned to the unimpaired

portfolio (see below).

The customer risk rating (CRR) 10-grade scale summarises a more granular underlying 23-grade scale of obligor probability of default (PD). All HSBC customers are rated using the 10- or 23-grade scale, depending on the degree of sophistication of the Basel II approach adopted for the exposure.

Each CRR band is associated with an external rating grade by reference to long-run default rates for that grade, represented by the average of issuer-weighted historical default rates. This mapping between internal and external ratings is indicative and may vary over time.

The expected loss (EL) 10-grade scale for retail business summarises a more granular underlying EL scale for this customer segment; this combines obligor and facility/product risk factors in a composite measure.

For debt securities and certain other financial instruments, external ratings have been aligned to the five quality classifications based upon the mapping of related CRR to external credit grade.

Renegotiated loans and forbearance

(Audited)

A range of forbearance strategies is employed in order to improve the management of customer relationships, maximise collection opportunities and, if possible, avoid default, foreclosure or repossession. They include extended payment terms, a reduction in interest or principal repayments, approved external debt management plans, debt consolidations, the deferral of foreclosures and other forms of loan modifications and re-ageing.

Our policies and practices are based on criteria which enable local management to judge whether repayment is likely to continue. These typically provide a customer with terms and conditions that are more favourable than those provided initially. Loan forbearance is only granted in situations where the customer has showed a willingness to repay their loan and is expected to be able to meet the revised obligations.

Identifying renegotiated loans

The contractual terms of a loan may be modified for a number of reasons including changing market conditions, customer retention and other factors not related to the current or potential credit deterioration of a customer. When the contractual payment terms of a loan are modified because we have significant concerns about the borrower s ability to meet contractual payments when due, these loans are classified as renegotiated loans .

For retail lending our credit risk management policy sets out restrictions on the number and frequency of renegotiations, the minimum period an account must have been opened before any renegotiation can be considered and the number of qualifying payments that must be received. The application of this policy varies according to the nature of the market, the product and the management of customer relationships through the occurrence of exceptional events. When considering whether there is significant concern regarding a customer s ability to meet contractual loan repayments when due, we assess the customer s delinquency status, account behaviour, repayment history, current financial situation and continued ability to repay. If the customer is not meeting contractual repayments or it is evident that they will be unable to do so without the renegotiation, there will be a significant concern regarding their ability to meet contractual payments, and the loan will be disclosed as impaired, unless the concession granted is insignificant as discussed below.

HSBC HOLDINGS PLC

197

Table of Contents

Report of the Directors: Risk (continued)

Appendix to Risk Policies and practices

For loan restructurings in wholesale lending, indicators of significant concerns regarding a borrower s ability to pay include:

- the debtor is currently in default on any of its debt;
- the debtor has declared or is in the process of declaring bankruptcy or entering into a similar process;
- there is significant doubt as to whether the debtor will continue to be a going concern;
- currently, the debtor has securities that have been delisted, are in the process of being delisted, or are under threat of being delisted from an exchange as a result of trading or financial difficulties;
- based on estimates and projections that only encompass current business capabilities, the Group forecasts that the debtor s entity-specific cash flows will be insufficient to service the debt (both interest and principal) in accordance with the contractual terms of the existing agreement through maturity. In this instance, actual payment default may not yet have occurred; and
- absent the modification, the debtor cannot obtain funds from sources other than its existing creditors at an effective interest rate equal to the current market interest rate for similar debt for a non-distressed debtor.

Where the modification of a loan s contractual payment terms represents a concession for economic or legal reasons relating to the borrower s financial difficulty, and is a concession that we would not otherwise consider, then the renegotiated loan is disclosed as impaired in accordance with our impaired loan disclosure convention described in more detail on page 354, unless the concession is insignificant and there are no other indicators of impairment. Insignificant concessions are primarily restricted to our CML portfolio in HSBC Finance, where loans which are in the early stages of delinquency (less than 60 days delinquent) and typically have the equivalent of two payments deferred for the first time, are excluded from our impaired loan classification, as the contractual payment deferrals are deemed to be insignificant compared with payments due on the loan as a whole. For details of HSBC Finance s loan renegotiation programmes and portfolios, see pages 129 and 145.

Credit quality classification of renegotiated loans

(Audited)

Under IFRSs, an entity is required to assess whether there is objective evidence that financial assets are impaired at the end of each reporting period. A loan is impaired and an impairment allowance is recognised when there is objective evidence of a loss event that has an effect on the cash flows of the loan which can be reliably estimated. Granting a concession to a customer that we would not otherwise consider, as a result of their financial difficulty, is objective evidence of impairment and impairment losses are measured accordingly.

A renegotiated loan is presented as impaired when:

- there has been a change in contractual cash flows as a result of a concession which the lender would otherwise not consider, and

- it is probable that without the concession, the borrower would be unable to meet contractual payment obligations in full.

This presentation applies unless the concession is insignificant and there are no other indicators of impairment.

The renegotiated loan will continue to be disclosed as impaired until there is sufficient evidence to demonstrate a significant reduction in the risk of non-payment of future cash flows, and there are no other indicators of impairment. For loans that are assessed for impairment on a collective basis, the evidence typically comprises a history of payment performance against the original or revised terms, as appropriate to the circumstances. For loans that are assessed for impairment on an individual basis, all available evidence is assessed on a case-by-case basis.

For corporate and commercial loans, which are individually assessed for impairment and where non-monthly payments are more commonly agreed, the history of payment performance will depend on the underlying structure of payments agreed as part of the restructuring.

For retail lending the minimum period of payment performance required depends on the nature of loans in the portfolio, but is typically between six and twelve months. Where portfolios have more significant levels of forbearance activity, such as that undertaken by HSBC Finance, the minimum repayment performance period required may be substantially more (for further details on HSBC Finance see page 145). Payment performance periods are monitored to ensure they remain appropriate to the levels of recidivism observed within the portfolio. These performance periods are in addition to a minimum of two payments which must be received within a 60-day period (in the case of HSBC Finance, in certain circumstances, for example where debt has been restructured in bankruptcy proceedings, fewer or no qualifying payments may be required). The qualifying payments are required in order to demonstrate that the renegotiated terms are sustainable for the borrower.

Renegotiated loans are classified as unimpaired where the renegotiation has resulted from significant concern about a borrower s ability to meet their contractual payment terms but the concession is not significant and the contractual cash flows are expected to be collected in full following the renegotiation.

Table of Contents

Derecognition of renegotiated loans

(Audited)

Loans that have been identified as renegotiated retain this designation until maturity or derecognition. When a loan is restructured as part of a forbearance strategy and the restructuring results in derecognition of the existing loan, the new loan is disclosed as renegotiated.

When determining whether a loan that is restructured should be derecognised and a new loan recognised, we consider the extent to which the changes to the original contractual terms result in the renegotiated loan, considered as a whole, being a substantially different financial instrument. The following are examples of circumstances that individually are likely to result in this test being met and derecognition accounting being applied:

- an uncollateralised loan becomes fully collateralised or vice versa;
- removal or addition of debt-to-equity conversion features attached to the loan agreement that have substance;
- a change in the currency in which the principal or interest is denominated, other than a conversion at a current market rate; or
- a change in the obligor.

The following are examples of factors that we consider may indicate that the revised loan is a substantially different financial instrument, but are unlikely to be conclusive in themselves:

- conditions added to the contract that substantially alter the credit risk of the loan (e.g. conditions on how the customer s business will be conducted in order to meet the revised terms of the loan);

guarantees are put in place that are expected to substantially change the source of repayment and it is fully expected that the guarantees have value;

rate structure changes (that are not existing contractual features) or debt consolidation where these changes are not purely a concession to allow the obligor to pay a monthly amount that is affordable given its credit distressed circumstances;

a change in the liquidation preference or ranking of the instrument that is not a debt-to-equity conversion; or

the collateral level (as a % of the loan) has doubled and the resulting coverage is more than 50%.

Renegotiated loans and recognition of impairment allowances

(Audited)

For retail lending, renegotiated loans are segregated from other parts of the loan portfolio for collective impairment assessment to reflect the higher rates of losses often encountered in these segments. When empirical evidence indicates an increased propensity to default and higher losses on such accounts, such as for re-aged loans in the US, the use of roll-rate (or discounted cash flow) methodology ensures these factors are taken into account when calculating impairment allowances by applying roll rates specifically calculated on the pool of loans subject to forbearance. When the portfolio size is small or when information is insufficient or not reliable enough to adopt a roll-rate (or discounted cash flow) methodology, a basic formulaic approach based on historical loss rate experience is used. As a result of our collective impairment methodology, we recognise collective impairment allowances on homogeneous groups of loans, including renegotiated loans, where there is historical evidence that there is a likelihood that loans in these groups will progress through the various stages of delinquency, and ultimately prove irrecoverable as a result of events occurring before the balance sheet date. This treatment applies irrespective of whether or not those loans are presented as impaired in accordance with our impaired loans disclosure convention.

In the corporate and commercial sectors, renegotiated loans are typically assessed individually. Credit risk ratings are intrinsic to the impairment assessment. A distressed restructuring is classified as an impaired loan. The individual impairment assessment takes into account the higher risk of the non-payment of future cash flows inherent in renegotiated loans.

Corporate and commercial forbearance

In the corporate and commercial sectors, forbearance activity is undertaken selectively where it has been identified that repayment difficulties against the original terms have already materialised, or are very likely to materialise. These cases are treated as impaired loans where:

the customer is experiencing, or is very likely to experience, difficulty in meeting a payment obligation to the Group (i.e. due to current credit distress); and

the Group is offering to the customer revised payment arrangements which constitute a concession (i.e. it is offering terms it would not normally be prepared to offer).

These cases are described as distressed restructurings. The agreement of a restructuring which meets the criteria above requires all loans, advances and counterparty exposures to the customer to be treated as impaired. Against the

background of this requirement, as a customer approaches the point at which it becomes clear that there is an increasing risk that a restructuring of this kind might be necessary, the exposures will typically be regarded as sub-standard to reflect the

Table of Contents

Report of the Directors: Risk (continued)

Appendix to Risk Policies and practices

deteriorating credit risk profile and will be graded as impaired when the restructure is proposed for approval, or sooner if there is sufficient concern regarding the customer s likeliness to pay.

For the purposes of determining whether changes to a customer s agreement should be treated as a distressed restructuring the following types of modification are regarded as concessionary:

- transfers from the customer of receivables from third parties, real estate, or other assets to satisfy fully or partially a debt;
- issuance or other granting of an equity interest to satisfy fully or partially a debt unless the equity interest is granted pursuant to existing terms for converting the debt into an equity interest; and
- modification of the terms of a debt, such as one or more of the following:
  - reduction (absolute or contingent) of the stated interest rate for the remaining original life of the debt;
  - extension of the maturity date or dates at a stated interest rate lower than the current market rate for new debt with similar risk;
  - reduction (absolute or contingent) of the face amount or maturity amount of the debt; and
  - reduction (absolute or contingent) of accrued interest.

Modifications that are unrelated to payment arrangements, such as the restructuring of collateral or security arrangements or the waiver of rights under covenants within documentation, are not regarded by themselves to be evidence of credit distress affecting payment capacity. Typically, covenants are in place to give the Group rights of repricing or acceleration, but they are frequently set at levels where payment capacity has yet to be affected, providing rights of action at earlier stages of credit deterioration. Such concessions do not directly affect the customer s ability to service the original contractual debt and are not reported as renegotiated loans. However, where a customer requests a

non-payment related covenant waiver, the significance of the underlying breach of covenant will be considered together with any other indicators of impairment, and where there is a degree of severity of credit distress indicating uncertainty of payment, all available evidence will be considered in determining whether a loss event has occurred. The waiver will not, however, trigger classification as a renegotiated loan as payment terms have not been modified.

When both payment-related and non-payment related modifications are made together as a result of significant concerns regarding the payment of contractual cash flows, the loan is treated as a distressed restructuring and disclosed as a renegotiated loan.

Where clauses are built into the contract in advance which allow for payment-related modifications, and are exercised under conditions of credit distress at a point where the modification provides a concession to the customer, these cases are treated as meeting the definition of a distressed restructuring.

In assessing whether payment-related forbearance is a satisfactory and sustainable strategy, the customer s entire exposure and facilities will be reviewed and their ability to meet the terms of both the revised obligation and other credit facilities not amended in the renegotiation is assessed. Should this assessment identify that a renegotiation will not deal with a customer s payment capacity issues satisfactorily, other special management options may be applied. This process may identify the need to provide assistance to a customer specifically to restructure their business operations and activities so as to restore satisfactory payment capacity.

When considering acceptable restructuring terms we consider the ability of the customer to be able to service the revised interest payments as a necessity. When principal payment modifications are considered, again we require the customer to be able to comply with the revised terms as a necessary pre-condition for the restructuring to proceed. When principal payments are modified resulting in permanent forgiveness, or when it is otherwise considered that there is no longer a realistic prospect of recovery of outstanding principal, the affected balances are written off. When principal repayments are postponed, it is expected that the customer will be capable of paying in line with the renegotiated terms, including instances when the postponed principal repayment is expected from refinancing. In all cases, a loan renegotiation is only granted when the customer is expected to be able to meet the revised terms.

Modifications may be made on a temporary basis when time is needed for the customer to make arrangements for payment, when deterioration in payment capacity is expected to be acute but short lived, or when more time is needed to accommodate discussions regarding a more permanent accommodation with other bankers, for example in syndicated facilities where multilateral negotiation commonly features.

If a restructuring proceeds and the customer demonstrates satisfactory performance over a period of time, the case may be returned to a non-impaired grade (CRR1-8) provided no other indicators of impairment remain. Such a case cannot be returned to a non-impaired grade when a specific impairment allowance remains against any of the customer s credit facilities. The period of performance will vary depending on the underlying structure of payments to be made by the customer under the amended agreement and the extent to which the customer s financial position is considered to have improved.

Impairment assessment

(Audited)

It is our policy that each operating company in HSBC creates impairment allowances for impaired loans promptly and appropriately, when there is objective evidence that impairment of a loan or portfolio of loans has occurred.

For details of our impairment policies on loans and advances and financial investments, see Note 1j on the Financial Statements.

Impairment and credit risk mitigation

The existence of collateral has an effect when calculating impairment on individually assessed impaired loans. When we no longer expect to recover the principal and interest due on a loan in full or in accordance with the original terms and conditions, it is assessed for impairment. If exposures are secured, the current net realisable value of the collateral is taken into account when assessing the need for an impairment allowance. No impairment allowance is recognised in cases where all amounts due are expected to be settled in full on realisation of the security.

Personal lending portfolios are generally assessed for impairment on a collective basis as the portfolios typically consist of large groups of homogeneous loans. Two methods are used to calculate allowances on a collective basis: a roll-rate methodology or a more basic formulaic approach based on historical losses. On a yearly basis, we review the impairment allowance methodology used for retail banking and small business portfolios across the Group to ensure that the assumptions used in our collective assessment models continued to appropriately reflect the period of time between a loss event occurring and the account proceeding to delinquency and eventual write-off.

The historical loss methodology is typically used to calculate collective impairment allowances for secured or low default portfolios such as mortgages until the point at which they are individually identified and assessed as impaired. For loans that are collectively assessed using historical loss methodology, the historical loss rate is derived from the average contractual write-off net of recoveries over a defined period. The net contractual write-off rate is the actual amount of loss experienced after the realisation of collateral and receipt of recoveries.

A roll-rate methodology is more commonly adopted for unsecured portfolios when there are sufficient volumes of empirical data to develop robust statistical models. In certain circumstances mortgage portfolios have a statistically

significant number of defaults and losses available, enabling reliable roll rates to be generated. In these cases a roll-rate methodology is applied until the point at which the loans are individually identified and assessed as impaired, and the average gross loss rates by delinquency bucket are adjusted to reflect the future expected cash flows after collateral and other recovery realisation.

The nature of the collective allowance assessment prevents individual collateral values or loan-to-value (LTV) ratios from being included within the calculation. However, the loss rates used in the collective assessment are adjusted for the collateral realisation experiences which will vary depending on the LTV composition of the portfolio. For example, mortgage portfolios under a historical loss rate methodology with lower LTV ratios will typically experience lower loss history and consequently a lesser net contractual write-off rate.

For wholesale collectively assessed loans, historical loss methodologies are applied to measure loss event impairments which have been incurred but not reported. Loss rates are derived from the historical impairment charges or losses recognised on impaired loans net of recoveries over a defined period, typically no less than 60 months. These historical loss rates are adjusted by an economic factor which amends the historical averages to better represent current economic conditions affecting the portfolio. In order to reflect the likelihood of a loss event not being identified and assessed an emergence period assumption is applied which reflects the period between a loss occurring and its identification. The emergence period is estimated by management for each identified portfolio. The factors that may influence this estimation include economic and market conditions, customer behaviour, portfolio management information, credit management techniques and collection and recovery experiences in the market. The emergence period is assessed empirically on a periodic basis and may vary over time as these factors change.

Write-off of loans and advances

(Audited)

For details of our policy on the write-off of loans and advances, see Note 1j on the Financial Statements.

In HSBC Finance, the carrying amounts of residential mortgage and second lien loans in excess of net realisable value are written off at or before the time foreclosure is completed or settlement is reached with the borrower. If there is no reasonable expectation of recovery, and foreclosure is pursued, the loan is normally written off no later than the end of the month in which the loan becomes 180 days contractually past due. We regularly obtain new appraisals for these collateral dependent loans (every 180 days) and adjust carrying values to the most recent appraisal if they have improved or deteriorated as the best estimate of the cash flows that will be received on the disposal of the collateral.

Unsecured personal facilities, including credit cards, are generally written off at between 150 and 210 days past due, the standard period being the end of the month in which the account becomes 180 days contractually delinquent. Write-off periods may be extended, generally to no more than 360 days past due but, in very exceptional circumstances, to longer than that figure in a few countries where local regulation or legislation constrain earlier write-off or where the realisation of

Table of Contents

Report of the Directors: Risk (continued)

Appendix to Risk Policies and practices

collateral for secured real estate lending takes this time.

For secured personal facilities, final write-off should generally occur within 60 months of the default at the latest.

In the event of bankruptcy or analogous proceedings, write-off may occur earlier than at the periods stated above. Collections procedures may continue after write-off.

Impairment methodologies

(Audited)

To identify objective evidence of impairment for available-for-sale ABSs, an industry standard valuation model is normally applied which uses data with reference to the underlying asset pools and models their projected future cash flows. The estimated future cash flows of the securities are assessed at the specific financial asset level to determine whether any of them are unlikely to be recovered as a result of loss events occurring on or before the reporting date.

The principal assumptions and inputs to the models are typically the delinquency status of the underlying loans, the probability of delinquent loans progressing to default, the prepayment profiles of the underlying assets and the loss severity in the event of default. However, the models utilise other variables relevant to specific classes of collateral to forecast future defaults and recovery rates. Management uses externally available data and applies judgement when determining the appropriate assumptions in respect of these factors. We use a modelling approach which incorporates historically observed progression rates to default to determine if the decline in aggregate projected cash flows from the underlying collateral will lead to a shortfall in contractual cash flows. In such cases, the security is considered to be impaired.

In respect of collateralised debt obligations (CDO s), expected future cash flows for the underlying collateral are assessed to determine whether there is likely to be a shortfall in the contractual cash flows of the CDO.

When a security benefits from a contract provided by a monoline insurer that insures payments of principal and interest, the expected recovery on the contract is assessed in determining the total expected credit support available to the ABS.

Loan management unit

The HSBC Loan Management Unit (LMU) is a front line customer contact department within Wholesale Credit and Market Risk that assumes responsibility for managing business customer relationships requiring intensive and close

control where the bank s lending is at risk. LMU operates on a regional basis across the Group and is independent of the originating business management units. It reports locally to the Regional Head of Wholesale Credit and Market Risk. Customers are identified and transferred to LMU by business management or the Wholesale Credit and Market Risk approval teams.

Customers managed by LMU are normally operating outside the Group s risk appetite. They typically show symptoms of significant financial difficulty, the management team displays limited experience of managing a business in distress and the management and financial information provided to the Group is insufficient and unreliable.

The levels of customer exposure under management and the size of the LMU team varies between countries depending on the breadth of business undertaken locally but LMU will always manage highly distressed situations where individual customer exposure exceeds $1.5m.

The primary focus of LMU is to protect the bank s capital and minimise losses by working consensually with customers to promote and support viable recovery strategies wherever achievable, with the ultimate intention of returning the customer to front line relationship management. In some cases, rehabilitation is not possible and LMU will consider a range of options to protect the bank s exposure and solvency of the customer. On occasion, it is not possible to find a satisfactory solution and the customer may file for insolvency or local equivalent. In all outcomes, LMU seeks to treat customers fairly, sympathetically and positively, in a professional way with transparent processes and procedures.

Remediation and restructuring strategies available in the business and LMU include granting a customer various types of concessions while seeking to enhance the ability of the customer to ultimately repay the Group which could include enhancing the overall security available to the Group. Any decision to approve a concession will be a function of the regions specific country and sector appetite, the key metrics of the customer, the market environment, the loan structure and security. Internal reviews on customers managed directly by LMU are performed on a scheduled basis in accordance with relevant accounting guidelines, credit policies and national banking regulations. Under certain circumstances, concessions granted may result in the loan being classified as a renegotiated loan.

Collateral and other credit enhancements held

(Audited)

Loans and advances held at amortised cost

The Group s practice is to lend on the basis of customers ability to meet their obligations out of cash flow resources rather than rely on the value of security offered. Depending on a customer s standing and the type of product, facilities may be provided without security. For other lending, a charge over collateral is obtained and considered in determining the credit decision and pricing. In the event of default, the bank may utilise the collateral as a source of repayment. Depending on its form, collateral can have a significant financial effect in mitigating our exposure to credit risk.

Additionally, risk may be managed by employing other types of collateral and credit risk enhancements such as second charges, other liens and unsupported guarantees, but the valuation of such mitigants is less certain and their financial effect has not been quantified.

Refinance risk

Many types of lending require the repayment of a significant proportion of the principal at maturity. Typically, the mechanism of repayment for the customer is through the acquisition of a new loan to settle the existing debt. Refinance risk arises where a customer is unable to repay such term debt on maturity, or to refinance debt at commercial rates. When there is evidence that this risk may apply to a specific contract, HSBC may need to refinance the loan on concessionary terms that we would not otherwise have considered, in order to recoup the maximum possible cash flows from the contract and potentially avoid the customer defaulting on the repayment of principal. When there is sufficient evidence that borrowers, based on their current financial capabilities, may fail at maturity to repay or refinance their loans, these loans are disclosed as impaired with recognition of a corresponding impairment allowance where appropriate.

Nature of HSBC s securitisation and other structured exposures

Mortgage-backed securities (MBS s) are securities that represent interests in groups of mortgages and provide investors with the right to receive cash from future mortgage payments (interest and/or principal). An MBS which references mortgages with different risk profiles is classified according to the highest risk class.

Collateralised debt obligations (CDO s) are securities backed by a pool of bonds, loans or other assets such as asset-backed securities (ABS s). CDOs may include exposure to sub-prime or Alt-A mortgage assets where these are part of the underlying assets or reference assets. As there is often uncertainty surrounding the precise nature of the underlying collateral supporting CDOs, all CDOs supported by residential mortgage-related assets are classified as sub-prime. Our holdings of ABSs and CDOs and direct lending positions, and the categories of mortgage collateral and lending activity, are described below.

Our exposure to non-residential mortgage-related ABSs includes securities with collateral relating to commercial property mortgages, leveraged finance loans, student loans, and other assets such as securities with other receivable-related collateral.

Definitions and classifications of ABSs and CDOs

Categories of ABSs and CDOs	Definition	Classification
Sub-prime	Loans to customers who have limited credit histories, modest incomes or high debt-to-income ratios or have experienced credit problems caused by occasional delinquencies, prior charge-offs, bankruptcy or other credit-related actions.	For US mortgages, a FICO score of 620 or less has primarily been used to determine whether a loan is sub-prime. For non-US mortgages, management judgement is used.
US Home Equity Lines of Credit (HELoC s) (categorised within Sub-prime)	A form of revolving credit facility provided to customers, which is supported in the majority of circumstances by a second lien or lower ranking charge over residential property.	Holdings of HELoCs are classified as sub-prime.
US Alt-A	Lower risk loans than sub-prime, but they share higher risk characteristics than lending under fully conforming standard criteria.	US credit scores and the completeness of documentation held (such as proof of income), are considered when determining whether an Alt-A classification is appropriate. Non sub-prime mortgages in the US are classified as Alt-A if they are not eligible for sale to the major US Government mortgage agencies or sponsored entities.
US Government agency and sponsored enterprises mortgage-related assets	Securities that are guaranteed by US Government agencies such as the Government National Mortgage Association (Ginnie Mae), or by US Government sponsored entities including Fannie Mae and Freddie Mac.	Holdings of US Government agency and US Government sponsored enterprises mortgage-related assets are classified as prime exposures.

Table of Contents

Report of the Directors: Risk (continued)

Appendix to Risk Policies and practices

Categories of ABSs and CDOs	Definition	Classification
UK non-conforming mortgages (categorised within Sub-prime)	UK mortgages that do not meet normal lending criteria. Examples include mortgages where the expected level of documentation is not provided (such as income with self-certification), or where poor credit history increases risk and results in pricing at a higher than normal lending rate.	UK non-conforming mortgages are treated as sub-prime exposures.
Other residential mortgages	Residential mortgages, including prime mortgages, that do not meet any of the classifications described above.	Prime residential mortgage-related assets are included in this category.

Liquidity and funding

The management of liquidity and funding is primarily undertaken locally (by country) in our operating entities in compliance with the Group s Liquidity and Funding Risk Management Framework (the LFRF), and with practices and limits set by the GMB through the RMM and approved by the Board. These limits vary according to the depth and the liquidity of the markets in which the entities operate. Our general policy is that each defined operating entity should be self-sufficient in funding its own activities. Where transactions exist between operating entities, they are reflected symmetrically in both entities.

As part of our Asset, Liability and Capital Management (ALCM) structure, we have established ALCOs at Group level, in the regions and in operating entities. The terms of reference of all ALCOs include the monitoring and control of liquidity and funding.

The primary responsibility for managing liquidity and funding within the Group s framework and risk appetite resides with the local operating entities ALCOs. Our most significant operating entities are overseen by regional ALCOs, Group ALCO and the RMM. The remaining smaller operating entities are overseen by regional ALCOs, with appropriate escalation of significant issues to Group ALCO and the RMM.

Operating entities are predominately defined on a country basis to reflect our local management of liquidity and funding. Typically, an operating entity will be defined as a single legal entity. However, to take account of the situation where operations in a country are booked across multiple subsidiaries or branches:

- an operating entity may be defined as a wider sub-consolidated group of legal entities if they are incorporated in the same country, liquidity and funding are freely fungible between the entities and permitted by local regulation, and the definition reflects how liquidity and funding are managed locally; or

- an operating entity may be defined more narrowly as a principal office (branch) of a wider legal entity operating in multiple countries, reflecting the local country management of liquidity and funding.

The RMM reviews and agrees annually the list of entities it directly oversees and the composition of these entities.

Primary sources of funding

Customer deposits in the form of current accounts and savings deposits payable on demand or at short notice form a significant part of our funding, and we place considerable importance on maintaining their stability. For deposits, stability depends upon maintaining depositor confidence in our capital strength and liquidity, and on competitive and transparent pricing.

We also access wholesale funding markets by issuing senior secured and unsecured debt securities (publically and privately) and borrowing from the secured repo markets against high quality collateral, in order to obtain funding for non-banking subsidiaries that do not accept deposits, to align asset and liability maturities and currencies and to maintain a presence in local wholesale markets.

The management of liquidity and funding risk

Inherent liquidity risk categorisation

We place our operating entities into one of two categories (low and medium) to reflect our assessment of their inherent liquidity risk considering political, economic and regulatory factors within the host country and factors specific to the operating entities themselves, such as their local market, market share and balance sheet strength. The categorisation involves management judgement and is based on the perceived liquidity risk of an operating entity relative to other entities in the Group. The categorisation is intended to reflect the possible impact of a liquidity event, not the probability of an event, and forms part of our risk appetite. It is used to determine the prescribed stress scenario that we require our operating entities to be able to withstand and manage to.

Core deposits

A key element of our internal framework is the classification of customer deposits into core and non-core based on our expectation of their behaviour during periods of liquidity stress. This characterisation takes into account the inherent liquidity

risk categorisation of the operating entity originating the deposit, the nature of the customer and the size and pricing of the deposit. No deposit is considered to be core in its entirety unless it is contractually collateralising a loan. The core deposit base in each operating entity is considered to be a long-term source of funding and therefore is assumed not to be withdrawn in the liquidity stress scenario that we use to calculate our principal liquidity risk metrics.

The three filters considered in assessing whether a deposit in any operating entity is core are:

- *price:* any deposit priced significantly above market or benchmark rates is generally treated as entirely non-core;

- *size:* depositors with total funds above certain monetary thresholds are excluded. Thresholds are established by considering the business line and inherent liquidity risk categorisation; and

- *line of business:* the element of any deposit remaining after the application of the price and size filters is assessed on the basis of the line of business with which the deposit is associated. The proportion of any customer deposit that can be considered core under this filter is between 35% and 90%.

Repo transactions and bank deposits cannot be classified as core deposits.

Advances to core funding ratio

Core customer deposits are an important source of funding to finance lending to customers, and mitigate against reliance on short-term wholesale funding. Limits are placed on operating entities to restrict their ability to increase loans and advances to customers without corresponding growth in core customer deposits or long-term debt funding with a residual maturity beyond one year; this measure is referred to as the advances to core funding ratio.

Advances to core funding ratio limits are set by the RMM for the most significant operating entities, and by regional ALCOs for smaller operating entities, and are monitored by ALCM teams. The ratio describes loans and advances to customers as a percentage of the total of core customer deposits and term funding with a remaining term to maturity in excess of one year. In general, customer loans are assumed to be renewed and are included in the numerator of the ratio, irrespective of the contractual maturity date. Reverse repo arrangements are excluded from the advances to core funding ratio.

Stressed coverage ratios

Stressed coverage ratios are derived from stressed cash flow scenario analyses and express stressed cash inflows as a percentage of stressed cash outflows over one-month and three-month time horizons.

The stressed cash inflows include:

- inflows (net of assumed haircuts) expected to be generated from the realisation of liquid assets; and
- contractual cash inflows from maturing assets that are not already reflected as a utilisation of liquid assets.

In line with the approach adopted for the advances to core funding ratio, customer loans are generally assumed not to generate any cash inflows under stress scenarios and are therefore excluded from the numerator of the stressed coverage ratio, irrespective of the contractual maturity date.

A stressed coverage ratio of 100% or higher reflects a positive cumulative cash flow under the stress scenario being monitored. Group operating entities are required to maintain a ratio of 100% or more out to three months under the combined market-wide and HSBC-specific stress scenario defined by the inherent liquidity risk categorisation of the operating entity concerned.

Compliance with operating entity limits is monitored by ALCM teams and reported monthly to the RMM for the main operating entities and to regional ALCOs for the smaller operating entities.

Stressed scenario analysis

We use a number of standard Group stress scenarios designed to model:

- combined market-wide and HSBC-specific liquidity crisis scenarios; and
- market-wide liquidity crisis scenario.

These scenarios are modelled by all operating entities. The appropriateness of the assumptions for each scenario is reviewed by ALCM regularly and formally approved by the RMM and the Board annually as part of the liquidity and funding risk appetite approval process.

Stressed cash outflows are determined by applying a standard set of prescribed stress assumptions to the Group s cash flow model. Our framework prescribes the use of two market-wide scenarios and two further combined market-wide and HSBC-specific stress scenarios of increasing severity. In addition to our standard stress scenarios, individual operating entities are required to design their own scenarios to reflect specific local market conditions, products and funding bases.

The two combined market-wide and HSBC-specific scenarios model a more severe scenario than the market-wide scenario. The relevant combined market-wide and HSBC-specific stress scenario that an operating entity manages to is based upon its inherent liquidity risk categorisation. The key assumptions factored into the two combined market-wide and HSBC-specific stress scenarios are summarised as follows:

all non-core deposits are deemed to be withdrawn within three months (80% within one month), with the level of non-core deposits dependent on the operating entity s inherent liquidity risk categorisation;

Table of Contents

Report of the Directors: Risk (continued)

Appendix to Risk Policies and practices

- the ability to access interbank funding and unsecured term debt markets ceases for the duration of the scenario;
- the ability to generate funds from illiquid asset portfolios (securitisation and secured borrowing) is restricted to 25-75% of the lower of issues in the last six months or expected issues in the next six months. The restriction is based on current market conditions and is dependent on the operating entity s inherent liquidity risk categorisation;
- the ability to access repo funding ceases for any asset not classified as liquid under our liquid asset policy for the duration of the scenario;
- drawdowns on committed lending facilities must be consistent with the severity of the market stress being modelled and dependent on the inherent liquidity risk categorisation of the operating entity;
- outflows are triggered by a defined downgrade in long-term ratings. We maintain an ongoing assessment of the appropriate number of notches to reflect;
- customer loans are assumed to be renewed at contractual maturity;
- interbank loans and reverse repos are assumed to run off contractually; and
- assets defined as liquid assets are assumed to be realised in cash ahead of their contractual maturity, after applying a defined stressed haircut of up to 20%.

Liquid assets of HSBC s principal operating entities

Stressed scenario analysis and the numerator of the coverage ratio include the assumed cash inflows that would be generated from the realisation of liquid assets, after applying the appropriate stressed haircut. These assumptions are made on the basis of management s expectation of when an asset is deemed to be realisable.

Liquid assets are unencumbered assets that meet the Group s definition of liquid assets and are either held outright or as a consequence of a reverse repo transaction with a residual contractual maturity beyond the time horizon of the

stressed coverage ratio being monitored. Any unencumbered asset held as a result of reverse repo transactions with a contractual maturity within the time horizon of the stressed coverage ratio being monitored is excluded from the stock of liquid assets and is instead reflected as a contractual cash inflow.

Our framework defines the asset classes that can be assessed locally as high quality and realisable within one month and between one month and three months. Each local ALCO has to be satisfied that any asset which may be treated as liquid in accordance with the Group s liquid asset policy will remain liquid under the stress scenario being managed to.

Inflows from the utilisation of liquid assets within one month can generally only be based on confirmed withdrawable central bank deposits or the sale or repo of government and quasi-government exposures generally restricted to those denominated in the sovereign s domestic currency. High quality ABSs (predominantly US MBSs) and covered bonds are also included but inflows assumed for these assets are capped.

Inflows after one month are also reflected for high quality non-financial and non-structured corporate bonds and equities within the most liquid indices.

Internal categorisation	Cash inflow recognised	Asset classes
Level 1	Within one month	Central government Central bank (including confirmed withdrawable reserves) Supranationals Multilateral development banks Coins and banknotes
Level 2	Within one month but capped	Local and regional government Public sector entities

		Secured covered bonds and pass-through ABSs Gold
Level 3	From one to three months	Unsecured non-financial entity securities Equities listed on recognised exchanges and within liquid indices

Any entity owned and controlled by central or local/regional government but not explicitly guaranteed is treated as a public sector entity.

Any exposure explicitly guaranteed is reflected as an exposure to the ultimate guarantor.

In terms of the criteria used to ensure liquid assets are of a high quality, the Group s liquid asset policy sets out the following additional criteria:

1. Central bank and central government exposures:

denominated in the domestic currency of the related sovereign and held:

onshore in the domestic banking system, qualify as Level 1 liquid assets.

offshore, must be risk weighted 20% or lower under the Basel standardised risk weighting methodology to qualify as Level 1 liquid assets.

denominated in a currency other than the currency of the related sovereign (i.e. foreign currency) must be risk weighted 20% or lower under the Basel standardised risk weighting methodology and issued in a limited number of major currencies to qualify as Level 1 liquid assets.

The treatment of eurozone countries using the euro as their domestic currency depends on whether the exposures are held onshore in the domestic banking system or offshore. Central bank and central government exposures held onshore in the domestic banking system qualify as Level 1 liquid assets under criteria 1, but central bank and central government exposures held offshore are considered to be denominated in a foreign currency under criteria 3.

2. Local/regional government exposures held onshore and considered by the local regulator to be the same risk as central government exposures can be considered central government exposures.

3. Supranationals and multilateral development banks must be 0% risk weighted under the Basel standardised risk-weighting methodology to qualify as Level 1 liquid assets.

4. To qualify as a level 2 liquid asset, the exposure must be risk weighted 20% or lower under the Basel standardised risk-weighting methodology.

5. To qualify as a Level 3 liquid asset, an unsecured non-financial corporate debt exposure must satisfy a minimum internal rating requirement.

On a case-by-case basis, operating entities are permitted to treat other assets as liquid if these assets are realistically assessed to be liquid under stress. These liquid assets are reported as Other , separately from Level 1, Level 2 and Level 3 liquid assets.

Net cash flow arising from interbank and intragroup loans and deposits

Under the LFRF, a net cash inflow within three months arising from interbank and intra-Group loans and deposits will give rise to a lower liquid asset requirement. Conversely, a net cash outflow within three months arising from

interbank and intra-Group loans and deposits will give rise to a higher liquid assets requirement.

Net cash flow arising from reverse repo, repo, stock borrowing, stock lending and outright short positions (including intra-Group)

A net cash inflow represents liquid resources in addition to liquid assets because any unencumbered asset held as a consequence of a reverse repo transaction with a residual contractual maturity within the stressed coverage ratio time period is not reflected as a liquid asset.

The impact of net cash outflow depends on whether the underlying collateral encumbered as a result will qualify as a liquid asset when released at the maturity of the repo. The majority of the Group s repo transactions are collateralised by liquid assets and, as such, any net cash outflow shown is offset by the return of liquid assets, which are excluded from the liquid asset table above.

Wholesale debt monitoring

Where wholesale debt term markets are accessed to raise funding, ALCO is required to establish cumulative rolling three-month and 12-month debt maturity limits to ensure no concentration of maturities within these timeframes.

Liquidity behaviouralisation

Liquidity behaviouralisation is applied to reflect our assessment of the expected period for which we are confident that we will have access to our liabilities, even under a severe liquidity stress scenario, and the expected period for which we must assume that we will need to fund our assets. Behaviouralisation is applied when the contractual terms do not reflect the expected behaviour. Liquidity behaviouralisation is reviewed and approved by local ALCO in compliance with policies set by the RMM. Our approach to liquidity risk management will often mean different approaches are applied to assets and liabilities. For example, management may assume a shorter life for liabilities and a longer-term funding requirement for assets. All core deposits are assumed under the Group s core/non-core and advances to core funding frameworks to have a liquidity behaviouralised life beyond one year and to represent a homogeneous source of core funding. The behaviouralisation of assets is far more granular and seeks to differentiate the period for which we must assume that we will need to fund the asset.

Funds transfer pricing

Our funds transfer pricing policies give rise to a two-stage funds transfer pricing approach, reflecting the fact that we separately manage interest rate risk and liquidity and funding risk under different assumptions. They have been developed to be consistent with our risk management frameworks. Each operating entity is required to apply the Group s transfer pricing policy framework to determine for each material currency the most appropriate interest rate risk transfer pricing curve, a liquidity premium curve (which is the spread over the interest rate risk transfer pricing curve) and a liquidity recharge assessment (which is the spread under or over the interest rate risk transfer pricing curve).

Table of Contents

Report of the Directors: Risk (continued)

Appendix to Risk   Policies and practices

The interest rate risk transfer pricing policy seeks to ensure that all market interest rate risk arising structurally from non-trading (banking book) assets and liabilities which is capable of being neutralised externally in the market or neutralised internally by off-setting transfers, is transferred to BSM to be managed centrally as non-trading market risk. For each material currency each operating entity employs a single interest rate risk transfer pricing curve. The transfer price curve used for this purpose reflects how BSM in each operating entity is best able to neutralise the interest rate risk in the market at the point of transfer. Where basis risk can be identified between the re-pricing basis of an external asset or external liability and the re-pricing basis of the interest rate risk transfer pricing curve, this basis risk may be transferred to BSM provided it can neutralise the basis risk in the market.

Liquidity and funding risk is transfer priced independently from interest rate risk because the liquidity and funding risk of an operating entity is transferred to ALCO to be managed centrally. ALCO monitors and manages the advances to core funding ratio and delegates the management of the liquid asset portfolio and execution of the wholesale term debt funding plan to BSM. This assists ALCO in ensuring the Group s stressed coverage ratios remain above 100% out to three months.

The liquidity and funding risk transfer price consists of two components:

- Liquidity recharge: the cost of holding the benchmark liquid asset (the yield under the transfer price) to meet stressed cash outflows. The benchmark liquid asset is decided by ALCO and based on the weighted average duration that can be achieved by investing in level 1 liquid assets, with a residual duration of up to one year.

- Liquidity premium: the assessed cost/value of term funding (the yield over the transfer price) to pay for term debt and core deposits.

The assessed cost of holding liquid assets is allocated to the outflows modelled by the Group s internal stressed coverage ratio framework.

Liquidity premium is charged to any asset that affects our three-month stressed coverage ratios based on the assessed behaviouralised liquidity life of the asset, with any asset affecting the Group s advances to core funding metric required to have a minimum behaviouralised life of at least one year, and the prevailing liquidity premium curve rate set by ALCO and calibrated in line with Group s calibration principles. Core deposits therefore share equally in the liquidity premiums charged to the assets they support, after deducting the cost of any term funding.

Repos and stock lending

GB&M provides collateralised security financing services to its clients, providing them with cash financing or specific securities. When cash is provided to clients against collateral in the form of securities, the cash provided is recognised on the balance sheet as a reverse repo. When securities are provided to clients against cash collateral the cash received is recognised on the balance sheet as a repo or, if the securities are equity securities, as stock lending.

Each operating entity manages its collateral through a central collateral pool, in line with the LFRF. When specific securities need to be delivered and the entity does not have them currently available within the central collateral pool, the securities are borrowed on a collateralised basis. When securities are borrowed against cash collateral the cash provided is recognised on the balance sheet as a reverse repo or, if the securities are equity securities, as stock borrowing.

Operating entities may also borrow cash against collateral in the form of securities, using the securities available in the central collateral pool. Repos and stock lending can be used in this way to fund the cash requirement arising from securities owned outright by Markets to facilitate client business, and the net cash requirement arising from financing client securities activity.

Reverse repos, stock borrowing, repos and stock lending are reported net when the IFRSs offsetting criteria are met. In some cases transactions to borrow or lend securities are collateralised using securities. These transactions are off-balance sheet.

Any security accepted as collateral for a reverse repo or stock borrowing transaction must be of very high quality and its value subject to an appropriate haircut. Securities borrowed under reverse repo or stock borrowing transactions can only be recognised as part of the liquidity asset buffer for the duration of the transactions and only if the security received is eligible under the liquid asset policy within the LFRF.

Credit controls are in place to ensure that the fair value of any collateral received remains appropriate to collateralise the cash or fair value of securities given.

Table of Contents

The effect of active collateral management

Collateral is managed on an operating entity basis, consistent with the approach adopted in managing liquidity and funding. Available collateral held by each operating entity is managed as a single collateral pool. In deciding which collateral to pledge, each operating entity seeks to optimise the use of the available collateral pool within the confines of the LFRF, irrespective of whether the collateral pledged is recognised on-balance sheet or was received in respect of reverse repo, stock borrowing or derivative transactions.

Managing collateral in this manner affects the presentation of asset encumbrance in that we may encumber on-balance sheet holdings while maintaining available unencumbered off-balance sheet holdings, even though we are not seeking to directly finance the on-balance sheet holdings pledged.

In quantifying the level of encumbrance of negotiable securities, the encumbrance is analysed by individual security. When a particular security is encumbered and we hold the security both on-balance sheet and off-balance sheet with the right to repledge, we assume for the purpose of this disclosure that the off-balance sheet holding received from the third party is encumbered ahead of the on-balance sheet holding.

An on-balance sheet encumbered and off-balance sheet unencumbered asset will occur, for example, if we receive a specific security as a result of a reverse repo/stock borrowing transaction, but finance the cash lent by pledging a generic collateral basket, even if the security received is eligible for the collateral basket pledged. It will also occur if we receive a generic collateral basket as a result of a reverse repo transaction but finance the cash lent by pledging specific securities, even if the securities pledged are eligible for the collateral basket.

Encumbered and unencumbered assets

Definitions of the categories included in the table Analysis of on-balance sheet encumbered and unencumbered assets :

Assets encumbered as a result of transactions with counterparties other than central banks as a result of covered bonds are any assets on our balance sheet pledged against our covered bonds issuance with a counterparty which is not

central bank and as a result the assets are unavailable to the bank to secure funding, satisfy collateral needs or be sold to reduce potential future funding requirements.

Assets encumbered as a result of transactions with counterparties other than central banks as a result of securitisation are any assets on our balance sheet pledged against securitisations with a counterparty which is not central bank including asset-backed commercial paper, CDOs, residential mortgage-backed securities, or structured investment vehicles paper and as a result the assets are unavailable to the bank to secure funding, satisfy collateral needs or be sold to reduce potential future funding requirements.

Assets encumbered as a result of transactions with counterparties other than central banks Other are assets on our balance sheet (other than covered bonds and securitisation above) which have been pledged with a counterparty which is not central bank as a collateral against an existing liability, and as a result are assets which are unavailable to the bank to secure funding, satisfy collateral needs or be sold to reduce potential future funding requirements. Examples include assets pledged for sale and repurchase and stock lending transactions and certain property assets.

Assets positioned at central banks (i.e. pre-positioned plus encumbered) are any assets that are eligible for emergency central bank liquidity/funding or under central bank pre-existing arrangements for funding without further due diligence work required. Any transferable customer loan that is central bank eligible such as pre-positioned central bank UK mortgages and US mortgages accepted by FHLB and assets on our balance sheet which have been pledged with central bank as collateral against an existing liability, and as a result are assets which are unavailable to the bank to secure funding, satisfy collateral needs or be sold to reduce potential future funding requirements.

Unencumbered readily available assets are assets regarded by the bank to be readily available in the normal course of business to secure funding, meet collateral needs, or be sold to reduce potential future funding requirements, and are not subject to any restrictions on their use for these purposes.

Unencumbered other assets capable of being encumbered are assets where there are no restrictions on their use to secure funding, meet collateral needs, or be sold to reduce potential future funding requirements, but they are not readily realisable in the normal course of business in their current form.

Unencumbered reverse repo/stock borrowing receivables and derivative assets are assets related specifically to reverse repo, stock borrowing and derivative transactions. They are shown separately as these on-balance sheet assets cannot be pledged but often give rise to the receipt of non-cash assets which are not recognised on the balance sheet, and can additionally be used to raise secured funding, meet additional collateral requirements or be sold.

Unencumbered cannot be encumbered are assets that have not been pledged and which we have assessed could not be pledged and therefore could not be used to secure funding, meet collateral needs, or be sold to reduce potential

future funding requirements. An example is assets held by the Group s insurance subsidiaries that back liabilities to policyholders and support the solvency of these entities.

Historically, the Group has not recognised any contingent liquidity value for assets other than those assets defined under the LFRF as being liquid assets, and any other negotiable instruments that under stress are assumed to be realisable after three months, even though they may currently be realisable. This approach has generally been driven by our risk appetite not to place any reliance on central banks. In a few cases, we have recognised the contingent value of discrete pools of assets, but the amounts involved are insignificant. As a result, we have reported the majority of our loans and advances to customers and banks in the category Other realisable assets as management would need to perform additional actions in order to make the assets transferable and readily realisable.

Report of the Directors: Risk (continued)

Appendix to Risk Policies and practices

Additional information

The amount of assets pledged to secure liabilities reported in Note 18 on the Financial Statements may be greater than the book value of assets reported as being encumbered in the table on page 163. Examples of where such differences occur are:

- ABSs and covered bonds, where the amount of liabilities issued plus the required mandatory over-collateralisation is lower than the book value of assets pledged to the pool. Any difference is categorised in the table above as Unencumbered readily realisable assets ;

- negotiable securities held by custodians or settlement agents, where a floating charge has been given over the entire holding to secure intra-day settlement liabilities, are only reported as encumbered to the extent that we have a liability to the custodian or settlement agent at the reporting date, with the balance reported as Unencumbered readily realisable assets ; and

- assets pre-positioned with central banks or government agencies are only reported as encumbered to the extent that we have secured funding with the collateral. The unutilised pre-positioned collateral is reported as Unencumbered readily realisable assets .

Securities reflected on the balance sheet that are pledged as collateral against an existing liability or lent are reflected as encumbered for the duration of the transaction. When securities are received as collateral or borrowed, and when we have the right to sell or re-pledge these securities, they are reflected as available and unencumbered for the duration of the transaction, unless re-pledged or sold. Further analysis regarding the encumbrance of securities resulting from repos and stock lending and available unencumbered assets arising from reverse repos and stock borrowing is provided under the heading Encumbered and unencumbered assets on page 162.

In the normal course of business we do not seek to utilise repo financing as a source of funding to finance customer assets, beyond the collateralised security financing activities within Markets described above.

The original contractual maturity of reverse repo, stock borrowing, repo and stock lending is short term with the vast majority of transactions being for less than 90 days.

Management of cross-currency liquidity and funding risk

Our liquidity and funding risk framework also considers the ability of each entity to continue to access foreign exchange markets under stress when a surplus in one currency is used to meet a deficit in another currency, for example, by the use of the foreign currency swap markets. Where appropriate, operating entities are required to monitor stressed coverage ratios and advances to core funding ratios for non-local currencies.

HSBC Holdings

HSBC Holdings primary sources of cash are dividends received from subsidiaries, interest on and repayment of intra-group loans and securities with interest earned on its own liquid funds. HSBC Holdings also raises ancillary funds in the debt capital markets through subordinated and senior debt issuance. Cash is primarily used for the provision of capital and TLAC funding to subsidiaries, interest payments to debt holders and dividend payments to shareholders.

HSBC Holdings is also subject to contingent liquidity risk by virtue of credit-related commitments and guarantees and similar contracts issued. Such commitments and guarantees are only issued after due consideration of HSBC Holdings ability to finance the commitments and guarantees and the likelihood of the need arising.

HSBC Holdings actively manages the cash flows from its subsidiaries to optimise the amount of cash held at the holding company level. The ability of subsidiaries to pay dividends or advance monies to HSBC Holdings depends on, among other things, their respective local regulatory capital and banking requirements, exchange controls, statutory reserves, and financial and operating performance. During 2015, none of the Group s subsidiaries experienced significant restrictions on paying dividends or repaying loans and advances. Also, there are no foreseen restrictions envisaged by our subsidiaries on paying dividends or repaying loans and advances, with the exception of HSBC North America Holdings Inc. None of the subsidiaries which are excluded from our regulatory consolidation has capital resources below its minimum regulatory requirement.

Market risk

Market risk is the risk that movements in market factors, such as foreign exchange rates, interest rates, credit spreads, equity prices and commodity prices, will reduce our income or the value of our portfolios.

Market risk in global businesses

The diagram below summarises the main business areas where trading and non-trading market risks reside and the market risk measures used to monitor and limit exposures.

1 The interest rate risk on the fixed-rate securities issued by HSBC Holdings is not included in the Group VaR. The management of this risk is described on page 171.

Where appropriate, we apply similar risk management policies and measurement techniques to both trading and non-trading portfolios. Our objective is to manage and control market risk exposures in order to optimise return on risk while maintaining a market profile consistent with our status as one of the world s largest banking and financial services organisations.

The nature of the hedging and risk mitigation strategies performed across the Group corresponds to the market risk management instruments available within each operating jurisdiction. These strategies range from the use of traditional market instruments, such as interest rate swaps, to more sophisticated hedging strategies to address a combination of risk factors arising at portfolio level.

Market risk governance

(Audited)

Market risk is managed and controlled through limits approved by the RMM for HSBC Holdings and our various global businesses. These limits are allocated across business lines and to the Group s legal entities.

The management of market risk is principally undertaken in GB&M, where 94% of the total value at risk of HSBC (excluding insurance) and almost all trading VaR resides, using risk limits approved by the GMB. VaR limits are set for portfolios, products and risk types, with market liquidity being a primary factor in determining

the level of limits set.

Global Risk is responsible for setting market risk management policies and measurement techniques. Each major operating entity has an independent market risk management and control sub-function which is responsible for measuring market risk exposures in accordance with the policies defined by Global Risk, and monitoring and reporting these exposures against the prescribed limits on a daily basis. The market risk limits are governed according to the framework illustrated to the left.

Each operating entity is required to assess the market risks arising on each product in its business and to transfer them to either its local GB&M unit for management, or to separate books managed under the supervision of the local ALCO.

Our aim is to ensure that all market risks are consolidated within operations that have the necessary skills, tools, management and governance to manage them. In certain cases where the market risks cannot be fully transferred, we identify the effect of varying scenarios on valuations or on net interest income resulting from any residual risk positions. Further details on the control and management process for residual risks are provided on page 212.

Model risk is governed through Model Oversight Committees (MOC s) at the regional and global Wholesale Credit and Market Risk levels. They have direct oversight and approval responsibility for all traded risk models utilised for risk measurement and management and stress testing. The MOCs prioritise the development of models, methodologies and practices used for traded risk management within the Group and ensure that they remain within our risk appetite and business plans. The Markets MOC reports into the Group MOC, which oversees all model risk types at Group level. Group MOC informs the RMM about material issues at least on a bi-annual basis. The RMM is the Group s Designated Committee according to regulatory rules and has delegated day-to-day governance of all traded risk models to the Markets MOC.

Our control of market risk in the trading and non-trading portfolios is based on a policy of restricting individual operations to trading within a list of permissible instruments authorised for each site by Global Risk, of enforcing new product approval

Table of Contents

Report of the Directors: Risk (continued)

Appendix to Risk Policies and practices

procedures, and of restricting trading in the more complex derivative products only to offices with appropriate levels of product expertise and robust control systems.

Market risk measures

Monitoring and limiting market risk exposures

Our objective is to manage and control market risk exposures while maintaining a market profile consistent with our risk appetite.

We use a range of tools to monitor and limit market risk exposures including sensitivity analysis, value at risk and stress testing.

Sensitivity analysis

Sensitivity analysis measures the impact of individual market factor movements on specific instruments or portfolios, including interest rates, foreign exchange rates and equity prices, such as the effect of a one basis point change in yield. We use sensitivity measures to monitor the market risk positions within each risk type. Sensitivity limits are set for portfolios, products and risk types, with the depth of the market being one of the principal factors in determining the level of limits set.

Value at risk

(Audited)

Value at risk (VaR) is a technique that estimates the potential losses on risk positions as a result of movements in market rates and prices over a specified time horizon and to a given level of confidence. The use of VaR is integrated into market risk management and is calculated for all trading positions regardless of how we capitalise those exposures. Where there is not an approved internal model, we use the appropriate local rules to capitalise exposures.

In addition, we calculate VaR for non-trading portfolios to have a complete picture of risk. Our models are predominantly based on historical simulation. VaR is calculated at a 99% confidence level for a one-day holding period. Where we do not calculate VaR explicitly, we use alternative tools as summarised in the Market Risk Stress Testing table on page 213.

Our VaR models derive plausible future scenarios from past series of recorded market rates and prices, taking into account inter-relationships between different markets and rates such as interest rates and foreign exchange rates. The models also incorporate the effect of option features on the underlying exposures.

The historical simulation models used incorporate the following features:

- historical market rates and prices are calculated with reference to foreign exchange rates and commodity prices, interest rates, equity prices and the associated volatilities;
- potential market movements utilised for VaR are calculated with reference to data from the past two years; and
- VaR measures are calculated to a 99% confidence level and use a one-day holding period.

The nature of the VaR models means that an increase in observed market volatility will lead to an increase in VaR without any changes in the underlying positions.

We are committed to the ongoing development of our in-house risk models.

VaR model limitations

Although a valuable guide to risk, VaR should always be viewed in the context of its limitations. For example:

- the use of historical data as a proxy for estimating future events may not encompass all potential events, particularly those which are extreme in nature;
- the use of a holding period assumes that all positions can be liquidated or the risks offset during that period. This may not fully reflect the market risk arising at times of severe illiquidity, when the holding period may be insufficient to liquidate or hedge all positions fully;
- the use of a 99% confidence level, by definition, does not take into account losses that might occur beyond this level of confidence;
- VaR is calculated on the basis of exposures outstanding at the close of business and therefore does not necessarily reflect intra-day exposures; and
- VaR is unlikely to reflect loss potential on exposures that only arise under conditions of significant market movement.

Risk not in VaR framework

Our VaR model is designed to capture significant basis risks such as CDS versus bond, asset swap spreads and cross-currency basis. Other basis risks which are not completely covered in VaR, such as the Libor tenor basis, are complemented by our risk not in VaR (RNIV) calculations, and are integrated into our capital framework.

HSBC HOLDINGS PLC

212

Table of Contents

The RNIV framework therefore aims to capture and capitalise material market risks that are not adequately covered in the VaR model. An example of this is Libor-overnight index swap basis risk for minor currencies. In such instances the RNIV framework uses stress tests to quantify the capital requirement. On average in 2015, the capital requirement derived from these stress tests represented 2.3% of the total internal model-based market risk requirement.

Risks covered by RNIV represented 19% of market risk RWAs for models with regulatory approval and included those resulting from underlying risk factors which are not observable on a daily basis across asset classes and products, such as dividend risk and implied correlation risks.

Risk factors are reviewed on a regular basis and either incorporated directly in the VaR models, where possible, or quantified through the VaR-based RNIV approach or a stress test approach within the RNIV framework. The severity of the scenarios is calibrated to be in line with the capital adequacy requirements. The outcome of the VaR-based RNIV is included in the VaR calculation and back-testing; a stressed VaR RNIV is also computed for the risk factors considered in the VaR-based RNIV approach.

Level 3 assets

The fair values of Level 3 assets and liabilities in trading portfolios are disclosed on page 382, and represent only a small proportion of the overall trading portfolio. Market risk arising from Level 3 instruments is managed by various market risk techniques such as stress testing and notional limits. The table on page 384 shows the movement in Level 3 financial instruments.

Stress testing

Stress testing is an important procedure that is integrated into our market risk management tool to evaluate the potential impact on portfolio values of more extreme, although plausible, events or movements in a set of financial variables. In such scenarios, losses can be much greater than those predicted by VaR modelling.

Stress testing is implemented at legal entity, regional and overall Group levels. A standard set of scenarios is utilised consistently across all regions within the Group. Scenarios are tailored to capture the relevant events or market movements at each level. The risk appetite around potential stress losses for the Group is set and monitored against referral limits.

Market risk reverse stress tests are undertaken on the premise that there is a fixed loss. The stress testing process identifies which scenarios lead to this loss. The rationale behind the reverse stress test is to understand scenarios which are beyond normal business settings that could have contagion and systemic implications.

Stressed VaR and stress testing, together with reverse stress testing and the management of gap risk, provide management with insights regarding the tail risk beyond VaR for which HSBC s appetite is limited.

Trading portfolios

Volcker Rule

In 2013, US regulators finalised the Volcker Rule. Section 619 of the Dodd-Frank Wall Street Reform and Consumer Protection Act and its final implementing rules (collectively referred to as the Volcker Rule) imposes broad restrictions on HSBC s ability to engage in proprietary trading or to own, sponsor, or have certain relationships with hedge funds, private equity funds, and certain other collective investment vehicles (broadly defined as covered funds). These restrictions are subject to a number of exemptions or exclusions, including market making, underwriting and risk-mitigating hedging, organising covered funds for customers and issuers of asset-backed securities, and underwriting or market making in covered fund interests.

The Volcker Rule broadly went into effect on 22 July 2015, with the exception of certain legacy fund activities that are able to rely on an extension of the conformance date.

HSBC has implemented a programme to comply with the Volcker Rule, including policies and procedures, internal controls, corporate governance, independent testing, training, and record keeping and, eventually, calculation and reporting of quantitative metrics for certain trading activities.

HSBC has completed training for all affected front office and control personnel, has conformance plans for those covered funds to which the extension applies, and believes that it is compliant in all material respects with the Volcker Rule.

Report of the Directors: Risk (continued)

Appendix to Risk Policies and practices

Back-testing

We routinely validate the accuracy of our VaR models by back-testing them against both actual, which replaced clean profit and loss from 1 August 2015, and hypothetical profit and loss against the corresponding VaR numbers. Hypothetical profit and loss excludes non-modelled items such as fees, commissions and revenues of intra-day transactions.

We would expect on average to see two or three profits and two or three losses in excess of VaR at the 99% confidence level over a one-year period. The actual number of profits or losses in excess of VaR over this period can therefore be used to gauge how well the models are performing.

We back-test our Group VaR at various levels which reflect a full legal entity scope of HSBC, including entities that do not have local permission to use VaR for regulatory purposes.

Gap risk

Certain products, such as non-recourse margin loans, are not exposed to small day-to-day moves in market rates or prices, but are exposed large discontinuous moves. Such movements may occur, for example, when, in reaction to an adverse event or unexpected news announcement, some parts of the market move far beyond their normal volatility range and become temporarily illiquid. Products which exhibit exposure only to large discontinuous moves (gap risk) are not well captured by VaR measures or traditional market risk sensitivity measures. HSBC has implemented additional stress measurement and controls over such products.

In 2015, gap risk exposure was primarily due to non-recourse loan transactions, mostly for corporate clients, where the collateral against the loan is limited to the posted assets. Upon occurrence of a gap event, the value of the collateral could fall below the outstanding loan amount.

We did not incur any notable gap loss in 2015.

De-peg risk

For certain currencies (pegged or managed) the spot exchange rate is pegged at a fixed-rate (typically to US dollars or euros), or managed within a predefined band around a pegged rate. De-peg risk is the risk of the peg or managed band changing or being abolished, and moving to a floating regime.

HSBC has extensive experience in managing fixed and managed currency regimes. Using stressed scenarios on spot rates, we are able to analyse how de-peg events would affect the positions held by HSBC. We monitor such scenarios to pegged or managed currencies, such as the Hong Kong dollar, renminbi and Middle Eastern currencies, and limit any potential losses that would occur. This historical VaR measures, which may not fully capture the risk involved in holding positions in pegged or managed currencies, as such currencies may not have experienced a de-peg event during the historical timeframe being considered.

ABS/MBS exposures

The ABS/MBS (asset and mortgage-backed securities) exposures within the trading portfolios are managed within sensitivity and VaR limits as described on page 167, and are included within the stress testing scenarios described above.

Non-trading portfolios

(Audited)

Most of the Group s non-trading VaR relates to Balance Sheet Management (BSM) or local treasury management functions. Contributions to Group non-trading VaR are driven by interest rates and credit spread risks arising from all global businesses. There is no commodity market risk in the non-trading portfolios.

Non-trading VaR also includes the interest rate risk of non-trading financial instruments held by the global businesses and transferred into portfolios managed by BSM or local treasuries. In measuring, monitoring and managing risk in our non-trading portfolios, VaR is just one of the tools used. The management of interest rate risk in the banking book is described further in Non-trading interest rate risk below, including the role of BSM.

Non-trading VaR excludes equity risk on available-for-sale securities, structural foreign exchange risk, and interest rate risk on fixed-rate securities issued by HSBC Holdings, the scope and management of which are described in the relevant sections below.

Our control of market risk in the non-trading portfolios is based on transferring the assessed market risk of non-trading assets and liabilities created outside BSM or Markets, to the books managed by BSM, provided the market risk can be neutralised. The net exposure is typically managed by BSM through the use of fixed-rate government bonds (liquid assets held in available-for-sale books) and interest rate swaps. The interest rate risk arising from fixed-rate government bonds held within available-for-sale portfolios is reflected within the Group s non-traded VaR. Interest rate swaps used by BSM are typically classified as either a fair value hedge or a cash flow hedge and are included within the Group s non-traded VaR. Any market risk that cannot be neutralised in the market is managed by local ALCOs in segregated ALCO books.

Table of Contents

Equity securities classified as available for sale

Potential new commitments are subject to risk appraisal to ensure that industry and geographical concentrations remain within acceptable levels for the portfolio. Regular reviews are performed to substantiate the valuation of the investments within the portfolio and investments held to facilitate ongoing business, such as holdings in government-sponsored enterprises and local stock exchanges.

Structural foreign exchange exposures

Structural foreign exchange exposures represent net investments in subsidiaries, branches and associates, the functional currencies of which are currencies other than the US dollar. An entity s functional currency is that of the primary economic environment in which the entity operates.

Exchange differences on structural exposures are recognised in Other comprehensive income . We use the US dollar as our presentation currency in our consolidated financial statements because the US dollar and currencies linked to it form the major currency bloc in which we transact and fund our business. Our consolidated balance sheet is, therefore, affected by exchange differences between the US dollar and all the non-US dollar functional currencies of underlying subsidiaries.

We hedge structural foreign exchange exposures only in limited circumstances. Our structural foreign exchange exposures are managed with the primary objective of ensuring, where practical, that our consolidated capital ratios and the capital ratios of individual banking subsidiaries are largely protected from the effect of changes in exchange rates. This is usually achieved by ensuring that, for each subsidiary bank, the ratio of structural exposures in a given currency to RWAs denominated in that currency is broadly equal to the capital ratio of the subsidiary in question.

We may also transact hedges where a currency in which we have structural exposures is considered likely to revalue adversely, and it is possible in practice to transact a hedge. Any hedging is undertaken using forward foreign exchange contracts which are accounted for under IFRSs as hedges of a net investment in a foreign operation, or by financing with borrowings in the same currencies as the functional currencies involved. We evaluate residual structural foreign exchange exposures using an expected shortfall method.

Non-trading interest rate risk

Non-trading book interest rate risk arises principally from mismatches between the future yield on assets and their funding cost, as a result of interest rate changes. Analysis of this risk is complicated by making assumptions on embedded optionality within certain product areas such as the incidence of mortgage prepayments, and from

behavioural assumptions regarding the economic duration of liabilities which are contractually repayable on demand such as current accounts, and the re-pricing behaviour of managed rate products. These assumptions around behavioural features are captured in our interest rate risk behaviouralisation framework, which is described below.

We aim, through our management of market risk in non-trading portfolios, to mitigate the effect of prospective interest rate movements which could reduce future net interest income, while balancing the cost of such hedging activities on the current net revenue stream.

Our funds transfer pricing policies give rise to a two stage funds transfer pricing approach. For details see page 207.

Interest rate risk behaviouralisation

Unlike liquidity risk, which is assessed on the basis of a very severe stress scenario, non-trading interest rate risk is assessed and managed according to business-as-usual conditions. In many cases the contractual profile of non-trading assets/liabilities arising from assets/liabilities created outside Markets or BSM does not reflect the behaviour observed.

Behaviouralisation is therefore used to assess the market interest rate risk of non-trading assets/liabilities and this assessed market risk is transferred to BSM, in accordance with the rules governing the transfer of interest rate risk from the global businesses to BSM.

Behaviouralisation is applied in three key areas:

- the assessed re-pricing frequency of managed rate balances;
- the assessed duration of non-interest bearing balances, typically capital and current accounts; and
- the base case expected prepayment behaviour or pipeline take-up rate for fixed-rate balances with embedded optionality.

Interest rate behaviouralisation policies have to be formulated in line with the Group s behaviouralisation policies and approved at least annually by local ALCOs and regional ALCMs, in conjunction with local, regional and Group market risk monitoring teams.

The extent to which balances can be behaviouralised is driven by:

- the amount of the current balance that can be assessed as stable under business-as-usual conditions; and
- for managed rate balances, the historical market interest rate re-pricing behaviour observed; or

215

Table of Contents

Report of the Directors: Risk (continued)

Appendix to Risk   Policies and practices

for non-interest bearing balances, the duration for which the balance is expected to remain under business-as-usual conditions. This assessment is often driven by the re-investment tenors available to BSM to neutralise the risk through the use of fixed-rate government bonds or interest rate derivatives, and for derivatives the availability of cash flow hedging capacity.

Balance Sheet Management

Effective governance across BSM is supported by the dual reporting lines it has to the CEO of GB&M and to the Group Treasurer. In each operating entity, BSM is responsible for managing liquidity and funding under the supervision of the local ALCO (which usually meets on a monthly basis). It also manages the non-trading interest rate positions transferred to it within a Markets limit structure.

In executing the management of the liquidity risk on behalf of ALCO, and managing the non-trading interest rate positions transferred to it, BSM invests in highly-rated liquid assets in line with the Group s liquid asset policy. The majority of the liquidity is invested in central bank deposits and government, supranational and agency securities with most of the remainder held in short-term interbank and central bank loans.

Withdrawable central bank deposits are accounted for as cash balances. Interbank loans, statutory central bank reserves and loans to central banks are accounted for as loans and advances to banks. BSM s holdings of securities are accounted for as available-for-sale or, to a lesser extent, held-to-maturity assets.

Statutory central bank reserves are not recognised as liquid assets. The statutory reserves that would be released in line with the Group s stressed customer deposit outflow assumptions are reflected as stressed inflows.

BSM is permitted to use derivatives as part of its mandate to manage interest rate risk. Derivative activity is predominantly through the use of vanilla interest rate swaps which are part of cash flow hedging and fair value hedging relationships.

Credit risk in BSM is predominantly limited to short-term bank exposure created by interbank lending, exposure to central banks and high quality sovereigns, supranationals or agencies which constitute the majority of BSM s liquidity portfolio. BSM does not manage the structural credit risk of any Group entity balance sheets.

BSM is permitted to enter into single name and index credit derivatives activity, but it does so to manage credit risk on the exposure specific to its securities portfolio in limited circumstances only. The risk limits are extremely limited and closely monitored. At 31 December 2015, BSM had no open credit derivative index risk.

VaR is calculated on both trading and non-trading positions held in BSM. It is calculated by applying the same methodology used for the Markets business and utilised as a tool for market risk control purposes.

BSM holds trading portfolio instruments in only very limited circumstances. Positions and the associated VaR were not significant during 2015.

Sensitivity of net interest income

A principal part of our management of market risk in non-trading portfolios is to monitor the sensitivity of expected net interest income under varying interest rate scenarios (simulation modelling). This monitoring is undertaken at an entity level by local ALCOs.

Entities apply a combination of scenarios and assumptions relevant to their local businesses, and standard scenarios which are required throughout HSBC. The latter are consolidated to illustrate the combined pro forma effect on our consolidated net interest income.

Projected net interest income sensitivity figures represent the effect of the pro forma movements in net interest income based on the projected yield curve scenarios and the Group s current interest rate risk profile. This effect, however, does not incorporate actions which would probably be taken by BSM or in the business units to mitigate the effect of interest rate risk. In reality, BSM seeks proactively to change the interest rate risk profile to minimise losses and optimise net revenues. The net interest income sensitivity calculations assume that interest rates of all maturities move by the same amount in the up-shock scenario. Rates are not assumed to become negative in the down-shock scenario which may, in certain currencies, effectively result in non-parallel shock. In addition, the net interest income sensitivity calculations take account of the effect on net interest income of anticipated differences in changes between interbank interest rates and interest rates over which the entity has discretion in terms of the timing and extent of rate changes.

Defined benefit pension schemes

Market risk arises within our defined benefit pension schemes to the extent that the obligations of the schemes are not fully matched by assets with determinable cash flows. See Pension risk on page 225 for additional information.

HSBC Holdings

As a financial services holding company, HSBC Holdings has limited market risk activity. Its activities predominantly involve maintaining sufficient capital resources to support the Group s diverse activities; allocating these capital resources across our businesses; earning dividend and interest income on its investments in our businesses; providing dividend payments to its

Table of Contents

equity shareholders and interest payments to providers of debt capital; and maintaining a supply of short-term capital resources for deployment under extraordinary circumstances. It does not take proprietary trading positions.

The main market risks to which HSBC Holdings is exposed are non-trading interest rate risk and foreign currency risk. Exposure to these risks arises from short-term cash balances, funding positions held, loans to subsidiaries, investments in long-term financial assets and financial liabilities including debt capital issued. The objective of HSBC Holdings market risk management strategy is to reduce exposure to these risks and minimise volatility in capital resources, cash flows and distributable reserves. Market risk for HSBC Holdings is monitored by HSBC Holdings ALCO in accordance with its risk appetite statement.

HSBC Holdings uses interest rate swaps and cross currency interest rate swaps to manage the interest rate risk and foreign currency risk arising from its long-term debt issues.

Operational risk

The objective of our operational risk management is to manage and control operational risk in a cost effective manner within targeted levels of operational risk consistent with our risk appetite, as defined by the GMB.

Operational risk is organised as a specific risk discipline within Global Risk, and a formal governance structure provides oversight over its management. The Global Operational Risk sub-function supports the Group Chief Risk Officer and the Global Operational Risk Committee. It is responsible for establishing and maintaining the Operational Risk Management Framework (ORMF) and monitoring the level of operational losses and the effectiveness of the control environment. It is also responsible for operational risk reporting at Group level, including the preparation of reports for consideration by the RMM and the Group Risk Committee. The Global Operational Risk Committee meets at least quarterly to discuss key risk issues and review the effective implementation of the ORMF.

The ORMF defines minimum standards and processes and the governance structure for the management of operational risk and internal control in our geographical regions, global businesses and global functions. The ORMF has been codified in a high level standards manual supplemented with detailed policies which describes our approach to identifying, assessing, monitoring and controlling operational risk and gives guidance on mitigating action to be taken when weaknesses are identified.

Business managers throughout the Group are responsible for maintaining an acceptable level of internal control commensurate with the scale and nature of operations, and for identifying and assessing risks, designing controls and monitoring the effectiveness of these controls. The ORMF helps managers to fulfil these responsibilities by defining a standard risk assessment methodology and providing a tool for the systematic reporting of operational loss data.

A centralised database is used to record the results of the operational risk management process. Operational risk and control self-assessments are input and maintained by business units. Business and functional management and business risk and control managers monitor the progress of documented action plans to address shortcomings. To ensure that operational risk losses are consistently reported and monitored at Group level, all Group companies are required to report individual losses when the net loss is expected to exceed $10,000, and to aggregate all other operational risk losses under $10,000. Losses are entered into the Group Operational Risk database and are reported to the RMM on a monthly basis.

For further details, see the *Pillar 3 Disclosures 2015* report.

Compliance risk

Compliance risk falls within the definition of operational risk. All Group companies are required to observe the letter and spirit of all relevant laws, codes, rules, regulations and standards of good market practice. These rules, regulations, Group policies and formal standards include those relating to AML, counter-terrorist and proliferation financing, sanctions compliance, anti-bribery and corruption, conduct of business and other regulations.

The two Compliance sub-functions: Financial Crime Compliance (FCC) and Regulatory Compliance (RC), are appropriately supported by a shared Compliance Operating Office and Reputational Risk Management teams. The Global Head of Financial Crime Compliance and the Global Head of Regulatory Compliance both report to the Group Chief Risk Officer.

There are compliance teams in each of the countries where we operate and in all global businesses. These compliance teams are principally overseen by Heads of Financial Crime Compliance and Regulatory Compliance located in Europe, the US, Canada, Latin America, Asia and the Middle East and North Africa. The effectiveness of the regional and global business compliance teams are reviewed by the respective FCC and RC Assurance teams.

Global policies and procedures require the prompt identification and escalation to Financial Crime Compliance or Regulatory Compliance of all actual or suspected breaches of any law, rule, regulation, policy or other relevant requirement. Reportable events are reported to the relevant Risk Management Committees and those of Group significance are escalated to the RMM, the Group Risk Committee and the Board, as appropriate. They are disclosed in the *Annual Report and Accounts* and *Interim Report*, as appropriate.

We published a new Global Conduct Policy in 2015 (following the approval and implementation of the global conduct approach and framework in 2014) for the management of conduct designed to ensure that we meet our strategic commitment to deliver fair outcomes for our customers, and not to disrupt the orderly and transparent operation of financial markets. It defines

Table of Contents

Report of the Directors: Risk (continued)

Appendix to Risk Policies and practices

responsibilities and ensures that business activity and decisions are underpinned by a robust consideration and management of associated risks supporting delivery of the required fair outcomes for customers and maintenance of market integrity. Our focus on compliance and conduct issues is further reinforced by the Financial System Vulnerabilities Committee, which reports to the Board on matters relating to financial crime and financial system abuse and provides a forward-looking perspective on financial crime risk. In addition, the Conduct & Values Committee reports to the Board on matters relating to delivery of the required global conduct outcomes for customers and the orderly and transparent operation of financial markets, together with adherence to HSBC s Values.

Legal risk

Each legal department is required to have processes and procedures in place to manage legal risk that conform to Group standards.

Legal risk falls within the definition of operational risk and includes:

- contractual risk, which is the risk of a member of HSBC suffering financial loss, legal or regulatory action or reputational damage because its rights and/or obligations under a contract to which it is a party are technically defective;
- dispute adjudication risk, which is the risk of a member of HSBC suffering financial loss or reputational damage due to an adverse dispute environment or a failure to take appropriate steps to defend, prosecute and/or resolve actual or threatened legal claims brought against or by a Group member, including for the avoidance of doubt, regulatory matters;
- legislative risk, which is the risk that a Group member fails to or is unable to identify, analyse, track, assess or correctly interpret applicable legislation, case law or regulation, or new regulatory, legislative or doctrinal interpretations of existing laws or regulations, or decisions in the Courts or regulatory bodies; and

non-contractual rights risk, which is the risk that a Group member s assets are not properly owned or protected or are infringed by others, or a Group member infringes another party s rights.

There are legal departments in 47 of the countries in which we operate. In addition to the Group Legal function, there are regional legal sub-functions in each of Europe, North America, Latin America, the Middle East and North Africa and Asia headed by Regional General Counsels, and a Global General Counsel responsible for each of the global businesses.

Global security and fraud risk

Security and fraud risk issues are managed at Group level by Global Security and Fraud Risk. This unit, which has responsibility for information, fraud, contingency, financial intelligence, physical and geopolitical risks is fully integrated within the central Global Risk function. This enables management to identify and mitigate the permutations of these and other non-financial risks to its business lines across the jurisdictions in which we operate.

The Information Security Risk sub-function is responsible for defining the strategy and policy by which the organisation protects its information assets and services from compromise, corruption or loss, whether caused deliberately or inadvertently by internal or external parties. It provides independent advice, guidance and oversight to the business about the effectiveness of information security controls and practices in place or being proposed.

The Fraud Risk sub-function is responsible for ensuring that effective prevention, detection and investigation measures are in place against all forms of fraudulent activity, whether initiated internally or externally, and is available to support any part of the business. To achieve that and to attain the level of integration needed to face the threat, the management of all types of fraud (e.g. card fraud, non-card fraud and internal fraud, including investigations) is established within one management structure and is part of the Global Risk function. We use technology extensively to prevent and detect fraud. For example, customers credit and debit card spending is monitored continuously and suspicious transactions are highlighted for verification, internet banking sessions are reviewed and transactions monitored in a similar way and all new account applications are screened for fraud. We have a fraud systems strategy which is designed to provide minimum standards and allow easier sharing of best practices to detect fraud and minimise false alerts. We have developed a holistic and effective anti-fraud strategy which, in addition to the use of advanced technology, includes fraud prevention policies and practices, the implementation of strong internal controls, investigations response teams and liaison with law enforcement where appropriate.

The Contingency Risk sub-function is responsible for ensuring that the group s critical systems, processes and functions have the resilience to maintain continuity in the face of major disruptive events. Within this wider risk, business continuity management covers the pre-planning for recovery, seeking to minimise the adverse effects of major business disruption, either globally, regionally or within country, against a range of actual or emerging risks. The pre-planning concentrates on the protection of customer services, our staff, revenue generation, the integrity of data and documents and meeting regulatory requirements. Each business has its own recovery plan, which is developed following the completion of a business impact analysis. This determines how much time the business could sustain an outage before the level of losses becomes unacceptable, i.e. its criticality. These plans are reviewed and tested every year. The planning is undertaken against Group policy and standards and each business confirms in an annual compliance certificate that all have been met. Should there be exceptions, these are raised and their

short-term resolution is overseen by Group and regional business

continuity teams. It is important that plans are dynamic and meet all risks, particularly those of an emerging nature such as possible pandemics and cyber attacks. The ORMF is used to measure our resilience to these risks, and is confirmed to Group and regional risk committees. Resilience is managed through various risk mitigation measures. These include agreeing with IT acceptable recovery times of systems, ensuring our critical buildings have the correct infrastructure to enable ongoing operations, requiring critical vendors to have their own recovery plans and arranging with Group Insurance appropriate cover for business interruption costs.

The Financial Intelligence Unit is jointly administered by Security and Fraud Risk and Financial Crime Compliance. It uses advanced analytics and subject matter expertise to detect indicators of financial crime in the Group s clients and counter-parties.

The Physical Security sub-function develops practical physical, electronic and operational counter-measures to ensure that the people, property and assets managed by the Group are protected from crime, theft, attack and groups hostile to HSBC s interests.

The Geopolitical Risk Unit provides both regular and ad hoc reporting to business executives and senior security and fraud risk management on geopolitical risk profiles and evolving threats in countries in which the Group operates. This both enhances strategic business planning and provides an early view into developing security risks. Security travel controls and guidance are also maintained.

Systems risk

Systems risk is the risk of failure or malfunction in the automated platforms that support the Group s daily execution (application systems) and the systems infrastructure on which they reside (data centres, networks and distributed computers).

The management of systems risk is overseen globally by the HSBC Operations, Services and Technology (HOST) organisation. Oversight is provided through monthly risk management committee meetings that provide a comprehensive overview of existing and emerging top risks.

HOST manages the control environment over systems risks using risk and control assessments and scenario analysis. Material risks are monitored through the periodic testing of associated key controls.

Business-critical services have been identified. Quantitative scorecards called risk appetite statements are used for monitoring performance, and have been established for each of these services.

Global availability monitoring (24x7) is in place to assist in determining systems health. Our incident management processes are linked to business and geographical major incident groups for recovery decision-making and communication to customers and regulators.

Vendor risk management

Our vendor risk management (VRM) programme is a global framework for managing risk with third party vendors, especially where we are reliant on outsourced agreements to provide critical services to our customers. VRM contains a rigorous process to identify material contracts and their key risks and ensure controls are in place to manage and mitigate these risks. Global and regional governance structures have been implemented to oversee vendor third party service providers.

Risk management of insurance operations

Overview of insurance products

(Audited)

HSBC manufactures the following main classes of contract:

- life insurance contracts with discretionary participation features (DPF);
- credit life insurance business;
- annuities;
- term assurance and critical illness policies;
- linked life insurance;

- investment contracts with DPF;
- unit-linked investment contracts; and
- other investment contracts (including pension contracts written in Hong Kong).

We additionally write a small amount of non-life insurance business primarily covering personal and commercial property.

Nature and extent of risks

(Audited)

The majority of the risks in our Insurance business derive from manufacturing activities and can be categorised between financial risks and insurance risk; financial risks include market risk, credit risk and liquidity risk. Operational and sustainability risks are also present and are covered by the Group s respective overall risk management processes.

The following sections describe how financial risks and insurance risk are managed.

Table of Contents

Report of the Directors: Risk (continued)

Appendix to Risk Policies and practices

HSBC subsidiaries that manufacture insurance products establish control procedures complying with the guidelines and requirements issued by Group Insurance and local regulatory requirements. Country level oversight is exercised by local insurance risk management committees. Country Chief Risk Officers (CRO s) have reporting lines locally and functional reporting lines into the Group Insurance CRO, who has overall accountability for risk management in insurance operations globally. The Group Insurance Risk Management Committee oversees the control framework globally and is accountable to the RBWM Risk Management Committee on risk matters.

In addition, local ALCOs monitor and review the duration and cash flow matching of insurance assets and liabilities.

All insurance products, whether manufactured internally or by a third party, are subjected to a product approval process prior to introduction.

Financial risks

(Audited)

Our insurance businesses are exposed to a range of financial risks, including market risk, credit risk and liquidity risk. Market risk includes interest rate, equity and foreign exchange risks. The nature and management of these risks is described below.

Manufacturing subsidiaries are exposed to financial risks when, for example, the proceeds from financial assets are not sufficient to fund the obligations arising from insurance and investment contracts. In many jurisdictions, local regulatory requirements prescribe the type, quality and concentration of assets that these subsidiaries must maintain to meet insurance liabilities. These requirements complement Group-wide policies.

Market risk

(Audited)

Market risk is managed through limits approved by the RMM for HSBC Holdings. An allocation of the Group-wide market risk appetite is provided to the Insurance business by Group Traded Risk. These limits are then apportioned between different Insurance entities to support the strategic aims of the business.

The market risk team supporting insurance within Wholesale Market Risk and the Group Insurance CRO are responsible for setting market risk management policies and measurement techniques applied to the Insurance activities of HSBC.

At entity level the appetite for market risk is expressed through detailed market risk mandates. Investment Officers hold day-to-day responsibility for managing assets so as to remain within the mandates and are answerable to the local ALCOs. ALCOs hold wider responsibility over longer-term actions related to liabilities that are necessary to remain within the agreed mandates.

ALCOs act to implement the strategy of the Executive Committee which, in turn, is answerable to the Board. The Board holds ultimate accountability over the risk profile held and targeted within each company.

Description of market risk

The main features and exposures of products manufactured by our insurance manufacturing subsidiaries which generate market risk, and the market risk to which these features expose the Group, are discussed below.
Interest rate risk arises from a mismatch between asset yields and the investment returns implied by the guarantees payable to policyholders by insurance manufacturing subsidiaries. When asset yields are below guaranteed yields, products may be closed to new business, repriced or restructured. A list of the different types of guarantees within our insurance contracts is outlined below.

Categories of guaranteed benefits

- implicit interest rate guarantees: when future policyholder benefits are defined as fixed monetary amounts, e.g. annuities in payment and endowment savings contracts;

- annual return: the annual return is guaranteed to be no lower than a specified rate. This may be the return credited to the policyholder every year, or the average annual return credited to the policyholder over the life of the policy, which may occur on the maturity date or the surrender date of the contract; and

- capital: policyholders are guaranteed to receive no less than the premiums paid plus declared bonuses less expenses.

The proceeds from insurance and investment products with DPF are primarily invested in bonds with a proportion allocated to other asset classes in order to provide customers with the potential for enhanced returns. Subsidiaries with portfolios of such products are exposed to the risk of falls in market prices which cannot be fully reflected in the discretionary bonuses. An increase in market volatility could also result in an increase in the value of the guarantee to the policyholder.

Long-term insurance and investment products typically permit the policyholder to surrender the policy or let it lapse at any time. When the surrender value is not linked to the value realised from the sale of the associated supporting assets, the subsidiary is exposed to market risk. In particular, when customers seek to surrender their policies when asset values are falling, assets may have to be sold at a loss to fund redemptions.

A subsidiary holding a portfolio of long-term insurance and investment products, especially with DPF, may attempt to reduce exposure to its local market by investing in assets in countries other than that in which it is based. These assets may be denominated in currencies other than the subsidiary s local currency. Where the foreign exchange exposure associated with these assets is not hedged, for example because it is not cost effective to do so, this exposes the subsidiary to the risk of its local currency strengthening against the currency of the related assets.

For unit-linked contracts, market risk is substantially borne by the policyholder, but market risk exposure typically remains as fees earned for management are related to the market value of the linked assets.

Asset and liability matching

It is not always possible to match asset and liability durations, partly because there is uncertainty over policyholder behaviour which introduces uncertainty over the receipt of all future premiums and the timing of claims, and partly because the forecast payment dates of liabilities may exceed the duration of the longest dated investments available.

We use models to assess the effect of a range of future scenarios on the values of financial assets and associated liabilities, and ALCOs employ the outcomes in determining how to best structure asset holdings to support liabilities. The scenarios include stresses applied to factors which affect insurance risk such as mortality and lapse rates. Of particular importance is assessing the expected pattern of cash inflows against the benefits payable on the underlying contracts, which can extend for many years.

How market risk is managed

All our insurance manufacturing subsidiaries have market risk mandates which specify the investment instruments in which they are permitted to invest and the maximum quantum of market risk which they may retain. They manage market risk by using some or all of the techniques listed below, depending on the nature of the contracts they write.

Techniques for managing market risk

for products with DPF, adjusting bonus rates to manage the liabilities to policyholders. The effect is that a significant portion of the market risk is borne by the policyholder;

structuring asset portfolios to support projected liability cash flows;

using derivatives to protect against adverse market movements or better match liability cash flows;

for new products with investment guarantees, considering the cost when determining the level of premiums or the price structure;

periodically reviewing products identified as higher risk, which contain investment guarantees and embedded optionality features linked to savings and investment products;

designing new products to mitigate market risk, such as changing the investment return sharing portion between policyholders and the shareholder;

exiting, to the extent possible, investment portfolios whose risk is considered unacceptable; and

repricing premiums charged to policyholders.

In the product approval process, the risks embedded in new products are identified and assessed. When, for example, options and guarantees are embedded in new products, the due diligence process ensures that complete and appropriate risk management procedures are in place. Management reviews certain exposures more frequently when markets are more volatile to ensure that any matters arising are dealt with in a timely fashion.

Table of Contents

Report of the Directors: Risk (continued)

Appendix to Risk Policies and practices

How the exposure to market risk is measured

Our insurance manufacturing subsidiaries monitor exposures against mandated limits regularly and report them to Group Insurance.

In addition, large insurance manufacturing subsidiaries perform a high-level monthly assessment of market risk exposure against risk appetite. This is submitted to Group Insurance and a global assessment presented to the RBWM Risk Management Committee. Risk measures include statistics relating to IFRSs, regulatory solvency and economic capital.

Standard measures for quantifying market risks

- for interest rate risk, the sensitivities of the net present values of asset and expected liability cash flows, in total and by currency, to a one basis point parallel shift in the discount curves used to calculate the net present values;
- for equity price risk, the total market value of equity holdings and the market value of equity holdings by region and country; and
- for foreign exchange risk, the total net short foreign exchange position and the net foreign exchange positions by currency.

The standard measures are relatively straightforward to calculate and aggregate, but they have limitations. The most significant one is that a parallel shift in yield curves of one basis point does not capture the non-linear relationships between the values of certain assets and liabilities and interest rates. Non-linearity arises, for example, from investment guarantees and product features which enable policyholders to surrender their policies. We bear the

shortfall if the yields on investments held to support contracts with guaranteed benefits are less than the investment returns implied by the guaranteed benefits.

We recognise these limitations and augment our standard measures with stress tests which examine the effect of a range of market rate scenarios on the aggregate annual profits and total equity of our insurance manufacturing subsidiaries, after taking into consideration tax and accounting treatments where material and relevant. The results of these tests are reported to Group Insurance and risk committees every quarter.

Similarly economic capital statistics are produced monthly, with a more detailed exercise undertaken on a quarterly basis. Economic capital measures estimate, on a market consistent economic value basis, the quantum of capital required given the exposures in the Insurance operation. Total exposures, a breakdown by risk class, and movement analysis are presented to the Insurance Risk Management Committee on a quarterly basis.

Credit risk

(Audited)

Description of credit risk

Credit risk arises in two main areas for our insurance manufacturers:

(i) risk of default by debt security counterparties after investing premiums to generate a return for policyholders and shareholders; and

(ii) risk of default by reinsurance counterparties and non-reimbursement for claims made after ceding insurance risk.

How credit risk is managed

Our insurance manufacturing subsidiaries are responsible for the credit risk, quality and performance of their investment portfolios. Our assessment of the creditworthiness of issuers and counterparties is based primarily upon internationally recognised credit ratings and other publicly available information.

Investment credit exposures are monitored against limits by our local insurance manufacturing subsidiaries, and are aggregated and reported to Group Insurance Credit Risk and Group Credit Risk. Stress testing is performed by Group Insurance on the investment credit exposures using credit spread sensitivities and default probabilities.

We use a number of tools to manage and monitor credit risk. These include a credit report which contains a watch-list of investments with current credit concerns and is circulated monthly to senior management in Group Insurance and the individual country CROs to identify investments which may be at risk of future impairment.

Liquidity risk

(Audited)

Description of liquidity risk

It is an inherent characteristic of almost all insurance contracts that there is uncertainty over the amount of claims liabilities that may arise and the timing of their settlement, and this creates liquidity risk.

There are three aspects to liquidity risk. The first arises in normal market conditions and is referred to as funding liquidity risk; specifically, the capacity to raise sufficient cash when needed to meet payment obligations. Secondly,

market liquidity risk arises when the size of a particular holding may be so large that a sale cannot be completed around the market price. Finally, standby liquidity risk refers to the capacity to meet payment terms in abnormal conditions.

Table of Contents

How liquidity risk is managed

Our insurance manufacturing subsidiaries primarily fund cash outflows arising from claim liabilities from the following sources of cash inflows:

- premiums from new business, policy renewals and recurring premium products;
- interest and dividends on investments and principal repayments of maturing debt investments;
- cash resources; and
- the sale of investments.

They manage liquidity risk by utilising some or all of the following techniques:

- matching cash inflows with expected cash outflows using specific cash flow projections or more general asset and liability matching techniques such as duration matching;
- maintaining sufficient cash resources;
- investing in good credit-quality investments with deep and liquid markets to the degree to which they exist;
- monitoring investment concentrations and restricting them where appropriate, for example, by debt issues or issuers; and
- establishing committed contingency borrowing facilities.

Each of these techniques contributes to mitigating the three types of liquidity risk described above.

Every quarter, our insurance manufacturing subsidiaries are required to complete and submit liquidity risk reports to Group Insurance for collation and review. Liquidity risk is assessed in these reports by measuring changes in expected cumulative net cash flows under a series of stress scenarios designed to determine the effect of reducing expected available liquidity and accelerating cash outflows. This is achieved, for example, by assuming new business or renewals are lower, and surrenders or lapses are greater, than expected.

Insurance risk

(Audited)

Insurance risk is the risk, other than financial risk, of loss transferred from the holder of the insurance contract to the issuer (i.e. HSBC). The principal risk we face is that, over time, the cost of the contract, including claims and benefits may exceed the total amount of premiums and investment income received.

The cost of claims and benefits can be influenced by many factors, including mortality and morbidity experience, lapse and surrender rates.

Insurance risks are controlled by high-level policies and procedures set both centrally and locally, taking into account where appropriate local market conditions and regulatory requirements. Formal underwriting, reinsurance and claims-handling procedures designed to ensure compliance with regulations are applied, supplemented with stress testing.

As well as exercising underwriting controls, we use reinsurance as a means of mitigating exposure to insurance risk. Where we manage our exposure to insurance risk through the use of third-party reinsurers, the associated revenue and manufacturing profit is ceded to the reinsurers. Although reinsurance provides a means of managing insurance risk, such contracts expose us to credit risk, the risk of default by the reinsurer.

The principal drivers of our insurance risk are described below. The liabilities for long-term contracts are set by reference to a range of assumptions around these drivers. These typically reflect the issuers own experiences. The type and quantum of insurance risk arising from life insurance depends on the type of business, and varies considerably.

- *mortality and morbidity*: the main contracts which generate exposure to these risks are term assurance, whole life products, critical illness and income protection contracts and annuities. The risks are monitored on a regular basis, and are primarily mitigated by underwriting controls and reinsurance and by retaining the ability in certain cases to amend premiums in the light of experience;

- *lapses and surrenders*: the risks associated with this are generally mitigated by product design, the application of surrender charges and management actions, for example, managing the level of bonus payments to policyholders. A detailed persistency analysis at a product level is carried out at least on an annual basis; and

- *expense risk* is mitigated by pricing, for example, retaining the ability in certain cases to amend premiums and/or policyholder charges based on experience, and cost management discipline.

Liabilities are affected by changes in assumptions (see Sensitivity analysis on page 188).

HSBC HOLDINGS PLC

Report of the Directors: Risk (continued)

Appendix to Risk Policies and practices

Reputational risk

The Global Head of Financial Crime Compliance and the Global Head of Regulatory Compliance are the risk stewards for reputational risk. The development of policies and an effective control environment for the identification, assessment, management and mitigation of reputational risk are co-ordinated through the Group Reputational Risk Policy Committee (GRRPC), which is chaired by the Group Chairman. In parallel, the Global Risk Resolution Committee (GRRC), chaired by the Chief Risk Officer, is the highest decision-making forum in the Group for dealing with matters arising from clients or transactions that either present a serious potential reputational risk to the Group or merit a Group-led decision to ensure a consistent risk management approach across the regions and global businesses. Both committees are responsible for keeping the RMM apprised of areas and activities presenting significant reputational risk and, where appropriate, for making recommendations to the RMM to mitigate such risk. Significant issues posing reputational risk are also reported to the Board and the Conduct & Values Committee, where appropriate.

Overseeing all reputational risk matters, the Reputational Risk sub-function is responsible for setting policies to guide the Group s management of reputational risk, devising strategies to protect against reputational risk and advising the global businesses and global functions in helping them identify, assess and mitigate such risks, where possible. This sub-function is led by a central headquarters-based team and supported by teams within each business line and region who help to ensure that issues are directed to the appropriate forums, that decisions are made and implemented effectively, and that management information is generated to aid senior management in the businesses and regions in understanding where reputational risk exists within the Group. Each global business has established a governance process that empowers the Reputational Risk and Client Selection committees to address reputational risk issues at the appropriate level, escalating decisions where appropriate. The global functions manage and escalate reputational risks within established operational risk frameworks.

Standards for all major aspects of business are set for the Group and for individual subsidiaries, businesses and functions. Reputational risks, including environmental, social and governance matters, are considered and assessed by the Board, the GMB, the RMM, subsidiary company boards, Board committees and senior management during the formulation of policy and the establishment of our standards. These policies, which form an integral part of the internal control system (see page 275), are communicated through manuals and statements of policy and are promulgated through internal communications and training. The policies set out our risk appetite and operational procedures for all areas of reputational risk, including financial crime prevention (money laundering, terrorist and proliferation financing, sanctions-breaking and bribery and corruption deterrence), regulatory compliance, conduct-related concerns, environmental impacts, human rights matters and employee relations. The policy manuals address risk issues in detail and co-operation between Group departments and businesses is required to ensure a strong adherence to our risk management system and our sustainability practices.

Fiduciary risk

Business activities in which fiduciary risk is inherent are only permitted within designated lines of business. Fiduciary risk is managed within the designated businesses via a comprehensive policy framework and monitoring of key indicators. The Group s principal fiduciary businesses and activities (designated businesses and activities) are:

- HSBC Securities Services, which is exposed to fiduciary risk through its funds services and corporate trust and loan agency activities;

- HSBC Global Asset Management, which is exposed to fiduciary risks through its investment management activities on behalf of clients;

- HSBC Global Private Banking, which is exposed to fiduciary risks through its private trust division and discretionary investment management;

- HSBC Insurance, which is exposed to fiduciary risks through the investment management activities it undertakes when providing insurance products and services;

- RBWM Trust Investment Wrappers, required by regulation for the provision of normal RBWM Wealth Management products and services; and

- HSBC Employee Pension Scheme activities, where fiduciary duties may arise as part of carrying out a function of discretion or control over an HSBC employee pension scheme s operations.

The Group s requirements for the management of fiduciary risk are laid down in the fiduciary section of the Global Risk Functional Instruction Manual, which is owned by Global Operational Risk. No business other than the designated businesses may undertake fiduciary activities without notifying Global Operational Risk and receiving specific dispensations from the relevant fiduciary policy requirements.

Other policies around the provision of advice, including investment advice and corporate advisory, and the management of potential conflicts of interest, also mitigate our fiduciary risks.

Table of Contents

Pension risk

(Audited)

We operate a number of pension plans throughout the world, as described in the Pension risk section on page 189 and below. A global pension risk framework and accompanying global policies on the management of risks related to defined benefit and defined contribution plans is in place. The Global Pensions Oversight Committee is responsible for the governance and oversight of all pension plans sponsored by HSBC around the world.

In order to fund the benefits associated with defined benefit plans, sponsoring Group companies (and, in some instances, employees) make regular contributions in accordance with advice from actuaries and in consultation with the schemes trustees (where relevant). The defined benefit plans invest these contributions in a range of investments designed to meet their long-term liabilities.

The level of these contributions has a direct impact on HSBC s cash flow and would normally be set to ensure that there are sufficient funds to meet the cost of the accruing benefits for the future service of active members. However, higher contributions are required when plan assets are considered insufficient to cover the existing pension liabilities. Contribution rates are typically revised annually or triennially, depending on the plan. The agreed contributions to the principal plan are revised triennially.

A deficit in a defined benefit plan may arise from a number of factors, including:

investments delivering a return below that required to provide the projected plan benefits. This could arise, for example, when there is a fall in the market value of equities, or when increases in long-term interest rates cause a fall in the value of fixed income securities held;

the prevailing economic environment leading to corporate failures, thus triggering write-downs in asset values (both equity and debt);

a change in either interest rates or inflation which causes an increase in the value of the scheme liabilities; and

scheme members living longer than expected (known as longevity risk).

A plan s investment strategy is determined after taking into consideration the market risk inherent in the investments and its consequential impact on potential future contributions. The long-term investment objectives of both HSBC and, where relevant and appropriate, the trustees are:

to limit the risk of the assets failing to meet the liabilities of the plans over the long term; and

to maximise returns consistent with an acceptable level of risk so as to control the long-term costs of the defined benefit plans.

In pursuit of these long-term objectives, a benchmark is established for the allocation of the defined benefit plan assets between asset classes. In addition, each permitted asset class has its own benchmarks, such as stock market or property valuation indices and, where relevant, desired levels of out-performance. The benchmarks are reviewed at least triennially within 18 months of the date at which an actuarial valuation is made, or more frequently if required by local legislation or circumstances. The process generally involves an extensive asset and liability review.

Ultimate responsibility for investment strategy rests with either the trustees or, in certain circumstances, a management committee. The degree of independence of the trustees from HSBC varies in different jurisdictions, however all fiduciaries are required to put the plan members needs above all others.

Defined contribution plans result in far less exposure to market risk for the Group, but remain exposed to operational and reputational risks as they place the responsibility and flexibility more directly with employees. To manage these risks, the performance of defined contribution investment funds is monitored and local engagement with employees is actively promoted to ensure they are provided with sufficient information about the options available to them.

Pension plans in the UK

The HSBC Bank (UK) Pension Scheme (the principal plan) has both defined benefit and defined contribution sections. The defined benefit section accounts for approximately 72% of our total defined benefit obligations around the world. All new employees have joined the defined contribution section since 1996 and from 1 July 2015 the defined benefit section was fully closed to future accrual so that all future pension provision for all employees is provided by the defined contribution section. The principal plan is overseen by an independent corporate trustee who has a fiduciary responsibility for the operation of the pension plan. The trustee is responsible for monitoring and managing the investment strategy and administration of scheme benefits. The principal plan holds a diversified portfolio of investments to meet future cash flow liabilities arising from accrued benefits as they fall due to be paid. The trustee of the principal plan is required to produce a written Statement of Investment Principles which governs decision-making about how investments are made and the need for adequate diversification is taken into account in the choice of asset allocation and manager structure in the defined benefit section. Longevity risk in the principal plan is assessed as part of the measurement of the pension liability and managed through the funding process of the plan.

Table of Contents

Report of the Directors: Risk / Capital

Appendix to Risk   Policies and practices / Capital

Sustainability risk

Sustainability risks arise from the provision of financial services to companies or projects which indirectly result in unacceptable impacts on people or on the environment. The Risk Function, with input from Global Corporate Sustainability, is mandated to manage these risks globally working through local offices as appropriate. Sustainability Risk Managers have regional or national responsibilities for advising on and managing environmental and social risks. The Risk Function s responsibilities in relation to sustainability risk include:

- formulating sustainability risk policies. This includes overseeing our sustainability risk standards, our application of the Equator Principles and our sustainability policies (covering agricultural commodities, chemicals, defence, energy, forestry, freshwater infrastructure, mining and metals, and World Heritage Sites and Ramsar Wetlands); undertaking an independent review of transactions where sustainability risks are assessed to be high; and supporting our operating companies to assess similar risks of a lower magnitude;

- building and implementing systems-based processes to ensure consistent application of policies, reduce the costs of sustainability risk reviews and capture management information to measure and report on the effect of our lending and investment activities on sustainable development; and

- providing training and capacity building within our operating companies to ensure sustainability risks are identified and mitigated consistently to either our own standards, international standards or local regulations, whichever is higher.

Table of Contents

Capital	Page	App[1]	Tables	Page
Capital overview	228		*Capital ratios*	228
Capital management		243	*Total regulatory capital and risk-weighted assets*	228
Approach and policy		243		
Stress testing		243		
Risks to capital		243		
Risk-weighted asset plans		244		
Capital generation		244		
Capital measurement and allocation		244		
Regulatory capital		244		
Pillar 1 capital requirements		244		
Pillar 2 capital requirements		245		
Pillar 3 disclosure requirements		246		
Movements by major drivers	228		*Capital and RWA movements by major driver CRD IV end point basis*	228
Risk-weighted assets	229		*RWAs by risk type*	229
			RWAs by global businesses	229
			RWAs by geographical regions	229
Credit risk RWAs	229		*Credit risk exposure RWAs by geographical region*	229
			Credit risk exposure RWAs by global businesses	230
			RWA movement by geographical regions by key driver credit risk IRB only	230
			RWA movement by global businesses by key driver credit risk IRB only	231
Counterparty credit risk and market risk RWAs	232		*Counterparty credit risk RWAs*	232
			RWA movement by key driver counterparty credit risk advanced approach	232
			Market risk RWAs	232

RWA movement by key driver market risk internal model based 232

Operational risk RWAs 232

RWA movement by key driver basis of preparation and supporting notes 247

Credit risk drivers definitions and quantifications 247

Counterparty risk drivers definitions and quantifications 248

Market risk drivers definitions and quantifications 248

Capital 233

Source and application of total regulatory capital 233

Composition of regulatory capital 234

Reconciliation of regulatory capital from transitional basis to an estimated CRD IV end point basis 235

Regulatory balance sheet 236

Regulatory and accounting consolidations 236

Reconciliation of balance sheets financial accounting to regulatory scope of consolidation 236

Leverage ratio 239

Leverage ratio 239

Regulatory developments 239

Regulatory capital requirements 239

Capital requirements framework 240

Regulatory stress testing 241

RWA developments 241

UK leverage ratio framework 241

Total loss absorbing capacity proposals 242

Structural reform and recovery and resolution planning 242

1 *Appendix to Capital.*

Table of Contents

Report of the Directors: Capital (continued)

Capital overview / Movements by major drivers / RWAs

Our objective in the management of Group capital is to maintain appropriate levels of capital to support our business strategy and meet our regulatory and stress testing related requirements.

Capital highlights

Our end point common equity tier 1 (CET1) ratio of 11.9% was up from 11.1% at the end of 2014.

We continue to generate capital from profit and our progress to achieve targeted RWA initiatives strengthened our CET1 ratio, creating capacity for growth.

Our leverage ratio remained strong at 5.0%.

Capital overview

Capital ratios

	At 31 December	
	2015	2014
	%	%
CRD IV end point		
Common equity tier 1 ratio[1]	**11.9**	11.1
CRD IV transitional		

Common equity tier 1 ratio[1]	**11.9**	10.9
Tier 1 ratio	**13.9**	12.5
Total capital ratio	**17.2**	15.6

Total regulatory capital and risk-weighted assets

	At 31 December	
	2015	2014
	$m	$m
CRD IV end point		
Common equity tier 1 capital[1]	**130,863**	135,953
CRD IV transitional		
Common equity tier 1 capital[1]	**130,863**	133,200
Additional tier 1 capital	**22,440**	19,539
Tier 2 capital	**36,530**	37,991
Total regulatory capital	**189,833**	190,730
Risk-weighted assets	**1,102,995**	1,219,765

For footnote, see page 243.

We manage Group capital to ensure that we exceed current regulatory requirements and that we respect the payment priority of our capital providers. Throughout 2015, we complied with the Prudential Regulation Authority s (PRAs) regulatory capital adequacy requirements, including those relating to stress testing. We are also well placed to meet our expected future capital requirements.

We continue to manage Group capital to meet a medium-term target for return on equity of more than 10% by 2017. This is modelled on a CET1 ratio on an end point basis in the range of 12% to 13%, which takes into account known and quantifiable end-point CET1 requirements and includes a regulatory and management buffer in the range of 1% to 2%, based on our estimate of the additional CET1 we will need to hold to cover the new time-varying buffers and other factors. The CET1 regulatory and management buffer will be kept under review until the details of the regulatory framework are finalised.

Capital and RWAs are calculated and presented according to the Group s interpretation of CRD IV legislation and the PRA s rules as set out in the PRA Rulebook.

Despite the rules published to date, there remains continued uncertainty around the amount of capital that UK banks will be required to hold. In December 2015, the Financial Policy Committee (FPC) published its view of the capital framework as applicable to UK banks, which set out expectations in relation to CET1 and tier 1 capital across the industry. However, requirements applicable to individual banks are subject to the PRA s determination. While there is emerging clarity around the interaction of the capital buffers and the PRA s Pillar 2 framework, uncertainty remains around the broader capital framework, including revisions to the RWA requirements, capital floors, and global systemically important bank (G-SIB) developments. Furthermore, there remain a number of draft and unpublished European Banking Authority (EBA) technical and implementation standards due in 2016.

A summary of our policies and practices regarding capital management, measurement and allocation is provided in the Appendix to Capital on page 243.

Movements by major drivers

Capital and RWA movements by major driver CRD IV end point basis

	CET1 capital $bn	RWAs $bn
CRD IV end point basis at 1 January 2015	**136.0**	**1,219.8**
Capital generation from profit	**3.4**	
consolidated profits attributable to shareholders of the parent company (including regulatory adjustments)	**11.3**	
dividends net of scrip[2]	**(7.9)**	
RWA initiatives		**(123.8)**
Business growth including associates		**48.7**
Foreign currency translation differences[3]	**(7.9)**	**(52.2)**
Other movements	**(0.6)**	**10.5**
CRD IV end point basis at 31 December 2015	**130.9**	**1,103.0**

For footnotes, see page 243.

Our CET1 capital was reduced by foreign currency translation differences of $7.9bn. This was partly offset by capital of $3.4bn generated from profits net of dividends (including the fourth interim dividend after planned scrip).

Included in profits was a $1.4bn gain on the partial sale of our shareholding in Industrial Bank. This included fair value gains reclassified to the income statement that has already been included in CET1 capital, resulting in no further impact. An additional impact on CET1 capital from the partial sale of our shareholding in Industrial Bank was lower allowable non-controlling interest.

Substantial progress has been made in achieving the Group s 2017 RWA target. After foreign currency translation differences, RWAs reduced by $65bn in 2015, primarily driven by specific initiatives that saved $124bn of RWAs. The saving was partially offset by business growth of $49bn.

Table of Contents

The following comments describe the key RWA movements excluding foreign currency translation differences.

RWA initiatives

The main drivers were:

- $38bn from reduced exposures, the partial disposal of our investment in Industrial Bank, a decrease in trading positions subject to the Incremental Risk Charge, client facility reductions and trade compressions;
- $30bn from refining our calculations, including the further application of the small and medium-sized enterprise (SME) supporting factor, a more refined application of credit conversion factors (CCFs), increased usage of internal ratings-based (IRB) models and the move of certain exposures from residual to cash flow weighted maturity;
- $25bn from process improvements such as better linking of collateral and guarantees to facilities, enhanced risk parameters and the use of more granular data resulting in lower CCFs for off-balance sheet items; and
- $30bn through the continued reduction in the GB&M legacy credit and US run-off portfolios.

Business growth

Business growth increased RWAs by $49bn, principally in:

- CMB, from higher term lending to corporate customers, principally in Europe, North America and Asia, $23bn;
- our associates, Bank of Communications and The Saudi British Bank, $14bn; and
- GB&M, from higher general lending to corporates which increased RWAs by $10bn, mainly in Europe.

Risk-weighted assets

RWAs by risk type

	2015	2014
	$bn	$bn
Credit risk	**875.9**	955.3
standardised approach	**332.7**	356.9
IRB foundation approach	**27.4**	16.8
IRB advanced approach	**515.8**	581.6
Counterparty credit risk	**69.2**	90.7
standardised approach	**19.1**	25.2
advanced approach	**50.1**	65.5
Market risk	**42.5**	56.0
internal model based	**34.9**	44.6
standardised approach	**7.6**	11.4
Operational risk	**115.4**	117.8
At 31 December 2015	**1,103.0**	1,219.8
Of which:		
Run-off portfolios	**69.3**	99.2
legacy credit in GB&M	**29.8**	44.1
US CML and Other	**39.5**	55.1

RWAs by global businesses

	2015	2014
	$bn	$bn
Retail Banking and Wealth Management[4]	**189.5**	207.2
Commercial Banking[4]	**421.0**	430.3
Global Banking and Markets	**440.6**	516.1
Global Private Banking	**19.3**	20.8
Other	**32.6**	45.4
At 31 December 2015	**1,103.0**	1,219.8

RWAs by geographical regions[5]

	2015	2014
	$bn	$bn
Europe	**337.4**	375.4
Asia	**459.7**	499.8
Middle East and North Africa	**60.4**	63.0
North America	**191.6**	221.4
Latin America	**73.4**	88.8
At 31 December 2015	**1,103.0**	1,219.8

For footnotes, see page 243

Credit risk RWAs

Credit risk exposure RWAs by geographical region

	Europe $bn	Asia $bn	MENA $bn	North America $bn	Latin America $bn	Total $bn
IRB approach	**192.6**	**195.9**	**19.4**	**122.5**	**12.8**	**543.2**
IRB advanced approach	**175.1**	**195.9**	**9.5**	**122.5**	**12.8**	**515.8**
IRB foundation approach	**17.5**		**9.9**			**27.4**
Standardised approach	**46.8**	**177.7**	**32.0**	**33.9**	**42.3**	**332.7**
RWAs at 31 December 2015	**239.4**	**373.6**	**51.4**	**156.4**	**55.1**	**875.9**
IRB approach	216.1	213.1	15.6	142.0	11.6	598.4
IRB advanced approach	203.3	213.1	11.6	142.0	11.6	581.6
IRB foundation approach	12.8		4.0			16.8
Standardised approach	47.1	186.0	39.0	29.6	55.2	356.9
RWAs at 31 December 2014	263.2	399.1	54.6	171.6	66.8	955.3

Table of Contents

Report of the Directors: Capital (continued)

RWAs

Credit risk exposure RWAs by global businesses

	Principal[4] RBWM $bn	RBWM (US run-off portfolio) $bn	Total RBWM $bn	CMB[4] $bn	GB&M $bn	GPB $bn	Other $bn	T
pproach	**59.0**	**33.2**	**92.2**	**218.0**	**214.8**	**8.5**	**9.7**	**5**
ced ch	**59.0**	**33.2**	**92.2**	**199.0**	**207.5**	**8.4**	**8.7**	**5**
tion ch				**19.0**	**7.3**	**0.1**	**1.0**	
rdised ch	**57.6**	**3.8**	**61.4**	**172.0**	**69.7**	**7.2**	**22.4**	**3**
s at cember	**116.6**	**37.0**	**153.6**	**390.0**	**284.5**	**15.7**	**32.1**	**8**
pproach	56.1	47.3	103.4	217.2	255.6	10.2	12.0	5
ced ch	56.1	47.3	103.4	209.2	248.1	10.0	10.9	5
tion ch				8.0	7.5	0.2	1.1	
rdised ch	61.2	4.8	66.0	181.0	70.1	6.6	33.2	3
at cember	117.3	52.1	169.4	398.2	325.7	16.8	45.2	9

For footnotes, see page 243.

Credit risk RWAs are calculated using three approaches, as permitted by the PRA. For consolidated Group reporting, we have adopted the advanced IRB approach for the

majority of our business, with a small proportion being on the foundation IRB approach and the remaining portfolios on the standardised approach.

RWA movement by geographical regions by key driver credit risk IRB only[6]

	Europe $bn	Asia $bn	MENA $bn	North America $bn	Latin America $bn	Total $bn
RWAs at 1 January 2015	**216.1**	**213.1**	**15.6**	**142.0**	**11.6**	**598.4**
Foreign exchange movement	**(10.4)**	**(7.2)**	**(0.6)**	**(4.7)**	**(3.4)**	**(26.3)**
Acquisitions and disposals	**(14.1)**		**(0.1)**	**(4.9)**		**(19.1)**
Book size	**11.4**	**2.9**	**(0.5)**	**(2.8)**	**0.4**	**11.4**
Book quality	**(8.0)**	**(6.9)**	**(1.4)**	**0.7**	**3.9**	**(11.7)**
Model updates	**1.2**	**(2.6)**	**4.7**	**0.2**	**0.1**	**3.6**
portfolios moving onto IRB approach	**(0.1)**		**4.7**	**0.2**	**0.1**	**4.9**
new/updated models	**1.3**	**(2.6)**				**(1.3)**
Methodology and policy	**(3.6)**	**(3.4)**	**1.7**	**(8.0)**	**0.2**	**(13.1)**
internal updates	**(6.2)**	**(5.4)**	**1.6**	**(8.0)**	**0.2**	**(17.8)**
external updates regulatory	**2.6**	**2.0**	**0.1**			**4.7**
Total RWA movement	**(23.5)**	**(17.2)**	**3.8**	**(19.5)**	**1.2**	**(55.2)**
RWAs at 31 December 2015	**192.6**	**195.9**	**19.4**	**122.5**	**12.8**	**543.2**
RWAs at 1 January 2014 on Basel 2.5 basis	166.9	182.9	15.0	161.5	8.5	534.8
Foreign exchange movement	(11.6)	(4.0)	(0.2)	(2.4)	(1.9)	(20.1)

Acquisitions and disposals	(3.5)		(0.7)	(4.2)	(0.1)	(8.5)
Book size	11.4	19.5	1.8	2.9	2.0	37.6
Book quality	(1.5)		(0.8)	(10.3)	1.4	(11.2)
Model updates	19.4	0.3		(6.1)		13.6
Methodology and policy	35.0	14.4	0.5	0.6	1.7	52.2
internal updates	(11.7)	(5.2)	(0.2)	(6.4)	(0.1)	(23.6)
external updates regulatory	2.2	8.5	(0.2)	0.7	0.1	11.3
CRD IV impact	37.0	5.7	0.4	4.9	0.2	48.2
NCOA moving from STD to IRB	7.5	5.4	0.5	1.4	1.5	16.3
Total RWA movement	49.2	30.2	0.6	(19.5)	3.1	63.6
RWAs at 31 December 2014 on CRD IV basis	216.1	213.1	15.6	142.0	11.6	598.4

For footnote, see page 243.

Table of Contents

RWA movement by global businesses by key driver credit risk IRB only[6]

	Principal[4] RBWM $bn	RBWM (US run-off) $bn	Total RBWM $bn	CMB[4] $bn	GB&M $bn	GPB $bn	Other $bn
	56.1	47.3	103.4	217.2	255.6	10.2	12.0
	(2.9)		(2.9)	(11.7)	(11.0)	(0.3)	(0.4)
s ls		(4.9)	(4.9)		(14.2)		
	3.7	(5.6)	(1.9)	15.8	(0.8)	(0.5)	(1.2)
y	(2.8)	(3.7)	(6.5)	6.0	(10.5)	(0.1)	(0.6)
ates	0.4		0.4	5.6	(2.3)	(0.1)	
o ch				4.1	0.9	(0.1)	
ted	0.4		0.4	1.5	(3.2)		
gy	4.5	0.1	4.6	(14.9)	(2.0)	(0.7)	(0.1)
	2.5	0.1	2.6	(14.9)	(4.7)	(0.7)	(0.1)
	2.0		2.0		2.7		
	2.9	(14.1)	(11.2)	0.8	(40.8)	(1.7)	(2.3)
er	59.0	33.2	92.2	218.0	214.8	8.5	9.7

	58.5	72.6	131.1	189.4	198.5	10.6	5.2
	(2.6)		(2.6)	(8.7)	(8.1)	(0.2)	(0.5)
s ls					(8.2)		(0.3)
	1.9	(6.9)	(5.0)	23.1	21.1	(0.5)	(1.1)
y	(5.7)	(8.6)	(14.3)	2.8	(0.2)	(0.3)	0.8
ates	0.6	(6.2)	(5.6)	12.2	7.0		
gy	3.4	(3.6)	(0.2)	(1.6)	45.5	0.6	7.9
	(3.0)	(3.9)	(6.9)	(5.0)	(11.2)	(0.5)	
	1.8		1.8	2.5	6.3	0.5	0.2
				(0.7)	48.6	0.2	0.1
m 3	4.6	0.3	4.9	1.6	1.8	0.4	7.6
	(2.4)	(25.3)	(27.7)	27.8	57.1	(0.4)	6.8
er RD	56.1	47.3	103.4	217.2	255.6	10.2	12.0

For footnotes, see page 243.

Internal ratings-based approach

For portfolios treated under the IRB approach, credit risk RWAs decreased by $55bn, which included a reduction of $26bn due to foreign exchange movements.

Acquisitions and disposals

The disposal of US mortgage portfolios reduced RWAs by $4.9bn; and

the sale of securitisation positions in the GB&M legacy credit portfolio resulted in a RWA decrease of $14bn.

Book size

The book size grew from higher corporate lending, including term and trade-related lending which increased RWAs by $16bn, mainly in Europe and Asia for CMB.

In North America, in RBWM, the continued run-off of the US CML retail mortgage portfolios resulted in an RWA reduction of $5.6bn.

Book quality

RWAs reduced by $3.7bn in the US run-off portfolio, primarily due to continued run-off which led to an improvement in the book quality of the residual portfolio;
book quality improvements in the Principal RBWM business of $2.8bn mainly related to credit quality improvements in Europe;

in CMB, RWAs increased by $6.0bn, primarily as a result of corporate downgrades in Europe;

in GB&M, a decrease in RWAs of $10bn was mainly due to the implementation of netting agreements to new corporate counterparties in Europe, the securitisation of corporate loans and rating upgrades of institutions in Asia; and

the downgrade of Brazil s rating increased RWAs by $3.7bn across businesses.

Methodology and policy changes

RWA initiatives were the main driver for the reduction of RWAs driven by changes in internal updates . Further details are provided on page 229.

They were offset by the change in RWA calculation on defaulted exposures in RBWM increasing RWAs by $2.0bn, the implementation of a risk-weight floor on mortgages in Hong Kong with an RWA impact of $2.0bn,

Table of Contents

Report of the Directors: Capital (continued)

RWAs / Capital

and the implementation of a 1.06 scaling factor on securitisation positions risk-weighted at 1,250% which increased RWAs by $2.1bn.

Standardised approach

For portfolios treated under the standardised approach, credit risk RWAs decreased by $24bn, which included a reduction of $27bn due to foreign exchange movements.

RWAs increased by $23bn across all regions as a result of higher lending. Growth in our associate, BoCom, accounted for $15bn.

This was offset by RWA initiatives reducing RWAs by $29bn, mainly comprising portfolios moving to an IRB approach (reducing the standardised approach by $10.2bn and increasing the IRB approach by $7.2bn) and partial disposal of our investment in Industrial Bank reducing RWAs by $12.4bn.

Counterparty credit risk and market risk RWAs

Counterparty credit risk RWAs

	2015 $bn	2014 $bn
Advanced approach	**50.1**	65.5
CCR IRB approach	**46.8**	62.0
credit valuation adjustment	**3.3**	3.5
Standardised approach	**19.1**	25.2
CCR standardised approach	**4.7**	4.4
credit valuation adjustment	**12.2**	18.0
central counterparty	**2.2**	2.8
At 31 December	**69.2**	90.7

RWA movement by key driver counterparty credit risk advanced approach

	2015 $bn	2014 $bn
RWAs at 1 January	**65.5**	42.2
Book size	**(10.2)**	1.6
Book quality	**(0.8)**	(0.6)
Model updates		0.1
Methodology and policy	**(4.4)**	22.2
internal updates	**(4.4)**	(3.8)
external updates regulatory		9.0
CRD IV impact		17.0
Total RWA movement	**(15.4)**	23.3
RWAs at 31 December	**50.1**	65.5

Market risk RWAs

	2015 $bn	2014 $bn
Internal model based	**34.9**	44.6
VaR	**7.7**	7.3
stressed VaR	**9.8**	10.4
incremental risk charge	**11.4**	20.1
other VaR and stressed VaR	**6.0**	6.8
Standardised approach	**7.6**	11.4
At 31 December	**42.5**	56.0

RWA movement by key driver market risk internal model based

	2015 $bn	2014 $bn
RWAs at 1 January	**44.6**	52.2
Acquisitions and disposals		(2.2)
Movement in risk levels	**(5.5)**	(4.2)
Methodology and policy	**(4.2)**	(1.2)
internal updates	**(4.2)**	(3.8)
external updates regulatory		2.6
Total RWA movement	**(9.7)**	(7.6)
RWAs at 31 December	**34.9**	44.6

Counterparty credit risk RWAs

Counterparty credit risk RWAs reduced by $21bn during 2015.

Standardised approach

A reduction of $6.1bn in RWAs in the standardised portfolio was mostly due to the impact of market movements and position reductions for derivatives held with counterparties eligible for the standardised credit value adjustment (CVA) charge.

Advanced approach

The book size reduced by $10bn, mainly driven by market movements, particularly in foreign exchange derivatives, trade compression and portfolio management activities.

Further reductions in Methodology and policy were mainly driven by savings from RWA initiatives.

Market risk RWAs

Total market risk RWAs decreased by $13bn in 2015.

Standardised approach

The market risk RWAs in the standardised portfolio fell by $3.8bn, mainly driven by the reduction in the legacy credit portfolio.

Internal model based

The reduction in RWAs due to movements in risk levels of $5.5bn was driven by a combination of active management of the book and market movements, in particular within the incremental risk charge. In addition to these movements, there were savings of $4.2bn in Methodology and policy due to the refinement of models used for the calculation of the incremental risk charge and risks not in VaR.

Operational risk RWAs

The reduction in operational risk RWAs of $2.4bn was mainly the result of currency exchange differences and a decline in income in Latin America.

Table of Contents

Capital

Source and application of total regulatory capital

	Year to 31 December	
	2015	2014
	$m	$m
Movement in total regulatory capital		
Opening common equity tier 1 capital on a transitional basis[7]	**133,200**	131,233
Transitional adjustments	**2,753**	
unrealised gains arising from revaluation of property	**1,375**	
unrealised gains in available-for-sale debt and equities	**1,378**	
Opening common equity tier 1 capital on an end point basis[1]	**135,953**	
Contribution to common equity tier 1 capital from profit for the period	**11,302**	12,678
consolidated profits attributable to shareholders of the parent company	**13,522**	13,688
removal of own credit spread net of tax	**(912)**	(328)
debit valuation adjustment	**(139)**	254
deconsolidation of insurance entities and SPEs	**(1,169)**	(936)
Net dividends including foreseeable net dividends[2]	**(7,853)**	(7,541)
dividends net of scrip	**(4,136)**	(4,179)
fourth interim dividend net of planned scrip	**(3,717)**	(3,362)
Increase in goodwill and intangible assets deducted[3]	**(227)**	2,424
Ordinary shares issued	**147**	267
Foreign currency translation differences[3]	**(7,887)**	(8,356)
Other, including regulatory adjustments	**(572)**	2,495
Closing common equity tier 1 capital	**130,863**	133,200
Opening additional tier 1 capital on a transitional basis[7]	**19,539**	14,408
Movement in additional tier 1 securities	**2,272**	4,961
new issuance	**3,580**	5,681
grandfathering adjustments	**(1,308)**	(720)

Other, including regulatory adjustments	**629**	170
Closing tier 1 capital on a transitional basis	**153,303**	152,739
Opening other tier 2 capital on a transitional basis[7]	**37,991**	35,538
Movement in tier 2 securities	**(1,276)**	2,414
new issuance	**3,180**	3,500
grandfathering adjustments	**(2,996)**	
foreign currency transitional differences	**(887)**	(1,066)
other movements	**(573)**	(20)
Other, including regulatory adjustments	**(185)**	39
Closing total regulatory capital on a transitional basis	**189,833**	190,730

For footnotes, see page 243.

Table of Contents

Report of the Directors: Capital (continued)

Capital

Composition of regulatory capital

(Audited)

		At 31 December	
		2015	2014
	Ref	**$m**	$m
Common equity tier 1 capital			
Shareholders equity		**160,664**	166,617
shareholders equity per balance sheet[8]	*a*	**188,460**	190,447
foreseeable interim dividend[2]		**(3,717)**	(3,362)
preference share premium	*b*	**(1,405)**	(1,405)
other equity instruments	*c*	**(15,112)**	(11,532)
deconsolidation of special purpose entities[9]	*a*	**(91)**	(323)
deconsolidation of insurance entities	*a, h*	**(7,471)**	(7,208)
Non-controlling interests		**3,519**	4,640
non-controlling interests per balance sheet	*d*	**9,058**	9,531
preference share non-controlling interests	*e*	**(2,077)**	(2,127)
non-controlling interests transferred to tier 2 capital	*f*		(473)
non-controlling interests in deconsolidated subsidiaries	*d*	**(933)**	(851)
surplus non-controlling interests disallowed in CET1		**(2,529)**	(1,440)
Regulatory adjustments to the accounting basis		**(4,556)**	(3,556)
own credit spread[10]		**(159)**	767
debit valuation adjustment		**(336)**	(197)
defined benefit pension fund adjustment	*g*	**(4,009)**	(4,069)
cash flow hedging reserve		**(52)**	(57)
Deductions		**(28,764)**	(31,748)
goodwill and intangible assets	*h*	**(20,650)**	(22,475)
deferred tax assets that rely on future profitability (excludes those arising from temporary differences)	*n*	**(1,204)**	(1,036)
additional valuation adjustment (referred to as PVA)		**(1,151)**	(1,341)
investments in own shares through the holding of composite products of which HSBC is a component (exchange traded funds, derivatives		**(839)**	(1,083)

and index stock)			
negative amounts resulting from the calculation of expected loss amounts	*i*	**(4,920)**	(5,813)
Common equity tier 1 capital on an end point basis		**130,863**	135,953
Tier 1 and tier 2 capital on a transitional basis			
Common equity tier 1 capital on an end point basis		**130,863**	135,953
Transitional adjustments			(2,753)
unrealised gains arising from revaluation of property			(1,375)
unrealised gains in available-for-sale debt and equities			(1,378)
Common equity tier 1 capital on a transitional basis		**130,863**	133,200
Additional tier 1 capital on a transitional basis			
Other tier 1 capital before deductions		**22,621**	19,687
preference share premium	*b*	**1,015**	1,160
preference share non-controlling interests	*e*	**1,711**	1,955
allowable non-controlling interest in AT1	*d*	**1,546**	884
Hybrid capital securities	*j*	**18,349**	15,688
Deductions		**(181)**	(148)
unconsolidated investments[1]		**(121)**	(148)
holding of own additional tier 1 instruments		**(60)**	
Tier 1 capital on a transitional basis		**153,303**	**152,739**
Tier 2 capital on a transitional basis			
Total qualifying tier 2 capital before deductions		**36,852**	38,213
allowable non-controlling interest in tier 2	*d*	**14**	99
perpetual subordinated debt	*l*	**1,941**	2,218
term subordinated debt	*m*	**34,897**	35,656
non-controlling interests in tier 2 capital	*f*		240
Total deductions other than from tier 1 capital		**(322)**	(222)
unconsolidated investments[1]		**(282)**	(222)
holding of own tier 2 instruments		**(40)**	
Total regulatory capital on a transitional basis		**189,833**	**190,730**

For footnotes, see page 243.

The references (a) (n) identify balance sheet components on page 236 which are used in the calculation of regulatory capital.

Table of Contents

Reconciliation of regulatory capital from transitional basis to an estimated CRD IV end point basis

	At 31 December	
	2015	2014
	$m	$m
Common equity tier 1 capital on a transitional basis	**130,863**	133,200
Unrealised gains arising from revaluation of property		1,375
Unrealised gains in available-for-sale debt and equities		1,378
Common equity tier 1 capital on an end point basis	**130,863**	&n