

MONSANTO CO /NEW/
Form 10-K
October 24, 2008

Table of Contents

MONSANTO COMPANY

2008 FORM 10-K

**UNITED STATES
SECURITIES AND EXCHANGE COMMISSION
Washington, D.C. 20549**

**FORM 10-K
(MARK ONE)**

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

For the fiscal year ended Aug. 31, 2008

or

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

For the transition period from _____ to _____

Commission file number 001-16167

MONSANTO COMPANY

Exact name of registrant as specified in its charter

Delaware

*(State or other jurisdiction of incorporation or
organization)*

43-1878297

(I.R.S. Employer Identification No.)

800 North Lindbergh Blvd.,
St. Louis, Missouri

(Address of principal executive offices)

63167

(Zip Code)

Registrant's telephone number including area code:

(314) 694-1000

Securities registered pursuant to Section 12(b) of the Act:

Title of each class
Common Stock \$0.01 par value

Name of each exchange on which registered
New York Stock Exchange

Securities Registered Pursuant to Section 12(g) of the Act: None

Indicate by check mark if the registrant is a well-known seasoned issuer, as defined in Rule 405 of the Securities Act. Yes No

Indicate by check mark if the registrant is not required to file reports pursuant to Section 13 or Section 15(d) of the Act. Yes 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. Yes No

Indicate by check mark if disclosure of delinquent filers pursuant to Item 405 of Regulation S-K is not contained herein, and will not be contained, to the best of registrant's knowledge, in definitive proxy or information statements incorporated by reference in Part III of this Form 10-K or any amendment to this Form 10-K.

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

Non-Accelerated Filer Smaller Reporting Company

Indicate by check mark whether the registrant is a shell company (as defined in Rule 12b-2 of the Exchange Act). Yes No

State the aggregate market value of the voting and non-voting common equity held by non-affiliates computed by reference to the price at which the common equity was last sold, or the average bid and asked price of such common equity, as of the last business day of the registrant's most recently completed second fiscal quarter (Feb. 29, 2008): approximately \$64.0 billion.

Indicate the number of shares outstanding of each of the registrant's classes of common stock, as of the latest practicable date: 547,941,657 shares of common stock, \$0.01 par value, outstanding at Oct. 20, 2008.

Documents Incorporated by Reference

Portions of Monsanto Company's definitive proxy statement, which is expected to be filed with the Securities and Exchange Commission pursuant to Regulation 14A on or about Dec. 1, 2008, are incorporated herein by reference into Part III of this Annual Report on Form 10-K.

Table of Contents

MONSANTO COMPANY

2008 FORM 10-K

INTRODUCTION

This Annual Report on Form 10-K is a document that U.S. public companies file with the Securities and Exchange Commission every year. Part II of the Form 10-K contains the business information and financial statements that many companies include in the financial sections of their annual reports. The other sections of this Form 10-K include further information about our business that we believe will be of interest to investors. We hope investors will find it useful to have all of this information in a single document.

The SEC allows us to report information in the Form 10-K by incorporating by reference from another part of the Form 10-K or from the proxy statement. You will see that information is incorporated by reference in various parts of our Form 10-K. The proxy statement will be available on our Web site after it is filed with the SEC in December 2008.

Monsanto was incorporated in Delaware on Feb. 9, 2000, as a subsidiary of Pharmacia Corporation. Monsanto includes the operations, assets and liabilities that were previously the agricultural business of Pharmacia. Pharmacia is now a subsidiary of Pfizer Inc.

Monsanto, the company, we, our, and us are used interchangeably to refer to Monsanto Company or to Monsanto Company and its subsidiaries, as appropriate to the context. With respect to the time period prior to Sept. 1, 2000, these defined terms also refer to the agricultural business of Pharmacia.

Unless otherwise indicated, trademarks owned or licensed by Monsanto or its subsidiaries are shown in special type. Unless otherwise indicated, references to *Roundup* herbicides mean *Roundup* branded herbicides, excluding all lawn-and-garden herbicides, and references to *Roundup* and other glyphosate-based herbicides exclude all lawn-and-garden herbicides.

Information in this Form 10-K is current as of Oct. 23, 2008, unless otherwise specified.

CAUTION REGARDING FORWARD-LOOKING STATEMENTS

In this report, and from time to time throughout the year, we share our expectations for our company's future performance. These forward-looking statements include statements about our business plans; the potential development, regulatory approval, and public acceptance of our products; our expected financial performance, including sales performance, and the anticipated effect of our strategic actions; the anticipated benefits of recent acquisitions; the outcome of contingencies, such as litigation; domestic or international economic, political and market conditions; and other factors that could affect our future results of operations or financial position, including, without limitation, statements under the captions Legal Proceedings, Overview Executive Summary Outlook, Seeds and Genomics Segment, Agricultural Productivity Segment, Financial Condition, Liquidity, and Capital Resources, and Outlook. Any statements we make that are not matters of current reportage or historical fact should be considered forward-looking. Such statements often include words such as believe, expect, anticipate, intend, plan, estimate, and similar expressions. By their nature, these types of statements are uncertain and are not guarantees of our future performance.

Our forward-looking statements represent our estimates and expectations at the time that we make them. However, circumstances change constantly, often unpredictably, and investors should not place undue reliance on these statements. Many events beyond our control will determine whether our expectations will be realized. We disclaim any current intention or obligation to revise or update any forward-looking statements, or the factors that may affect their realization, whether in light of new information, future events or otherwise, and investors should not rely on us to do so. In the interests of our investors, and in accordance with the safe harbor provisions of the Private Securities Litigation Reform Act of 1995, Part I. Item 1A. Risk Factors below explains some of the important reasons that actual results may be materially different from those that we anticipate.

MONSANTO COMPANY

2008 FORM 10-K

TABLE OF CONTENTS FOR FORM 10-K

<u>PART I</u>		Page
<u>Item 1.</u>	<u>Business</u>	5
	<u>Seeds and Genomics Segment</u>	5
	<u>Agricultural Productivity Segment</u>	7
	<u>Research and Development</u>	9
	<u>Seasonality and Working Capital; Backlog</u>	9
	<u>Employee Relations</u>	9
	<u>Customers</u>	9
	<u>International Operations</u>	9
	<u>Segment and Geographic Data</u>	9
<u>Item 1A.</u>	<u>Risk Factors</u>	9
<u>Item 1B.</u>	<u>Unresolved Staff Comments</u>	13
<u>Item 2.</u>	<u>Properties</u>	13
<u>Item 3.</u>	<u>Legal Proceedings</u>	13
<u>Item 4.</u>	<u>Submission of Matters to a Vote of Security Holders</u>	15
<u>PART II</u>		
<u>Item 5.</u>	<u>Market for Registrant's Common Equity, Related Stockholder Matters, and Issuer Purchases of Equity Securities</u>	16
<u>Item 6.</u>	<u>Selected Financial Data</u>	18
<u>Item 7.</u>	<u>Management's Discussion and Analysis of Financial Condition and Results of Operations</u>	19
	<u>Overview</u>	19
	<u>Results of Operations</u>	22
	<u>Seeds and Genomics Segment</u>	25
	<u>Agricultural Productivity Segment</u>	27
	<u>Financial Condition, Liquidity, and Capital Resources</u>	29
	<u>Outlook</u>	35
	<u>Critical Accounting Policies and Estimates</u>	38
	<u>New Accounting Standards</u>	41
<u>Item 7A.</u>	<u>Quantitative and Qualitative Disclosures About Market Risk</u>	42
<u>Item 8.</u>	<u>Financial Statements and Supplementary Data</u>	44
	<u>Management Report</u>	44
	<u>Management's Annual Report on Internal Control over Financial Reporting</u>	45
	<u>Reports of Independent Registered Public Accounting Firm</u>	46
	<u>Statements of Consolidated Operations</u>	49
	<u>Statements of Consolidated Financial Position</u>	50
	<u>Statements of Consolidated Cash Flows</u>	51
	<u>Statements of Consolidated Shareowners' Equity</u>	52
	<u>Statements of Consolidated Comprehensive Income</u>	53
	<u>Notes to Consolidated Financial Statements</u>	54
<u>Item 9.</u>	<u>Changes in and Disagreements With Accountants on Accounting and Financial Disclosure</u>	101

<u>Item 9A.</u>	<u>Controls and Procedures</u>	101
<u>Item 9B.</u>	<u>Other Information</u>	101
<u>EX-10.20.5</u>		
<u>EX-10.25</u>		
<u>EX-10.27</u>		
<u>EX-10.29</u>		
<u>EX-12</u>		
<u>EX-21</u>		
<u>EX-23</u>		
<u>EX-31.1</u>		
<u>EX-31.2</u>		
<u>EX-32</u>		

Table of Contents

MONSANTO COMPANY

2008 FORM 10-K

PART III

<u>Item 10.</u>	<u>Directors, Executive Officers and Corporate Governance</u>	102
<u>Item 11.</u>	<u>Executive Compensation</u>	103
<u>Item 12.</u>	<u>Security Ownership of Certain Beneficial Owners and Management and Related Stockholder Matters</u>	103
<u>Item 13.</u>	<u>Certain Relationships and Related Transactions, and Director Independence</u>	103
<u>Item 14.</u>	<u>Principal Accounting Fees and Services</u>	104

PART IV

<u>Item 15.</u>	<u>Exhibits, Financial Statement Schedules</u>	105
-----------------	--	-----

<u>SIGNATURES</u>	106
--------------------------	-----

<u>EXHIBIT INDEX</u>	107
-----------------------------	-----

Table of Contents

MONSANTO COMPANY

2008 FORM 10-K

PART I**ITEM 1. BUSINESS**

Monsanto Company, along with its subsidiaries, is a leading global provider of agricultural products for farmers. Our seeds, biotechnology trait products, and herbicides provide farmers with solutions that improve productivity, reduce the costs of farming, and produce better foods for consumers and better feed for animals.

We manage our business in two segments: Seeds and Genomics, and Agricultural Productivity. We view our Seeds and Genomics segment as the driver for future growth for our company. In 2008, we acquired the seed businesses De Ruiter Seeds Group, B.V. (De Ruiter) and Semillas Cristiani Burkard (Cristiani) to further this growth. Our Agricultural Productivity segment has enjoyed significant growth in the past year. We have announced plans to increase our production of glyphosate, the major product in that segment. In 2008, we also entered into an agreement to divest our animal agricultural products business (the Dairy business), which focuses on dairy cow productivity. It was previously part of the Agricultural Productivity segment. We determined that the Dairy business was no longer consistent with our strategic business goals. See Note 4 Business Combinations for further details of these acquisitions and Note 27 Discontinued Operations for further details of these divestitures.

We provide information about our business, including analyses, significant news releases, news releases and other supplemental information, on our Web site: www.monsanto.com. In addition, we make available through our Web site, free of charge, our annual report on Form 10-K, quarterly reports on Form 10-Q, current reports on Form 8-K, and any amendments to those reports, as soon as reasonably practicable after they have been filed with or furnished to the SEC pursuant to Section 13(a) or 15(d) of the Securities Exchange Act of 1934. Forms 3, 4 and 5 filed with respect to our equity securities under Section 16(a) of the Exchange Act are also available on our site by the end of the business day after filing. All of these materials can be found under the Investors tab. Our Web site also includes the following corporate governance materials, under the tab Corporate Responsibility : our Code of Business Conduct, our Code of Ethics for Chief Executive and Senior Financial Officers, our Board of Directors Charter and Corporate Governance Guidelines, and charters of our Board committees. These materials are also available on paper. Any shareowner may request them by contacting the Office of the General Counsel, Monsanto Company, 800 N. Lindbergh Blvd., St. Louis, Missouri, 63167. Information on our Web site does not constitute part of this report.

A description of our business follows.

SEEDS AND GENOMICS SEGMENT

Through our Seeds and Genomics segment, we produce leading seed brands, including *DEKALB*, *Asgrow*, *Deltapine*, *Seminis*, and *De Ruiter* and we develop biotechnology traits that assist farmers in controlling insects and weeds. We also provide other seed companies with genetic material and biotechnology traits for their seed brands. Item 7 Management's Discussion and Analysis of Financial Condition and Results of Operations (MD&A) Seeds and Genomics Segment the tabular information about net sales of our seeds and traits, is incorporated herein by reference.

Major Products	Applications	Major Brands
Germplasm	Row crop seeds:	
	Corn hybrids and foundation seed	<i>DEKALB</i> , <i>Channel Bio</i> for corn
	Soybean varieties and foundation seed	<i>Asgrow</i> for soybeans
	Cotton varieties, hybrids and foundation seed	<i>Deltapine</i> for cotton
	Other row crop varieties and hybrids, such as canola	
	Vegetable seeds:	<i>Seminis</i> , <i>Royal Sluis</i> , <i>Asgrow</i> , <i>Petoseed</i> , and

Open-field and protected-culture seed for tomato, pepper, eggplant, melon, cucumber, pumpkin, squash, beans, broccoli, onions, and lettuce, among others

De Ruiter for vegetable seeds

Biotechnology traits⁽¹⁾

Enable crops to protect themselves from borers and rootworm in corn, bollgard in cotton, reducing the need for applications of insecticides
 Enable crops, such as corn, soybeans, cotton, and canola to be tolerant of *Roundup* and other glyphosate-based herbicides

YieldGard and *YieldGard VT* for corn; *Bollgard* and *Bollgard II* for cotton

Roundup Ready and *Roundup Ready 2 Yield* (soybeans only)

⁽¹⁾ Monsanto also offers farmers stacked-trait products, single-seed products in which two or more traits are combined.

Table of Contents

MONSANTO COMPANY

2008 FORM 10-K

Distribution of Products

We have a worldwide distribution and sales and marketing organization for our seeds and traits. We sell our products under Monsanto brands and license them to others for sale under their own brands. Through distributors, independent retailers and dealers, agricultural cooperatives, plant raisers, and agents, we market our *DEKALB*, *Asgrow* and *Deltapine* branded germplasm to farmers in every agricultural region of the world. In the United States, we market regional seed brands under our American Seeds, Inc. (ASI) business to farmers directly, as well as through dealers, agricultural cooperatives and agents. In countries where they are approved for sale, we market and sell our trait technologies with our branded germplasm, pursuant to license agreements with our farmer customers. In Brazil and Paraguay, we have implemented a point-of-delivery, grain-based payment system: We contract with grain handlers to collect applicable trait fees when farmers deliver their grain. In addition to selling our products under our own brands, we license a broad package of germplasm and trait technologies to large and small seed companies in the United States and certain international markets. Those seed companies in turn market our trait technologies in their branded germplasm; they may also market our germplasm under their own brand name. Our vegetable seeds are marketed in more than 100 countries through distributors, independent retailers and dealers, agricultural cooperatives, plant raisers and agents, as well as directly to farmers.

Competition

The global market for the products of our Seeds and Genomics segment is competitive. We expect the competition to intensify. Both our row crops and our vegetable seed businesses compete with numerous multinational agrichemical and seed marketers globally and with hundreds of smaller companies regionally. With the exception of competitors in our Seminis and De Ruiter vegetable seed business, most of our seed competitors are also licensees of our germplasm or biotechnology traits. In certain countries, we also compete with government-owned seed companies. Our biotechnology traits compete as a system with other practices, including the application of agricultural chemicals, and traits developed by other companies. Our weed- and insect-control systems compete with chemical and seed products produced by other agrichemical and seed marketers. Competition for the discovery of new traits based on biotechnology or genomics is likely to come from major global agrichemical companies, smaller biotechnology research companies and institutions, state-funded programs, and academic institutions. Enabling technologies to enhance biotechnology trait development may also come from academic researchers and biotechnology research companies. Farmers who save seed from one year to the next, in violation of license or other commercial terms, also affect competitive conditions.

Product performance (in particular, crop vigor and yield for our row crops and quality for our vegetable seeds), customer support and service, intellectual property protection, product availability and planning, and price are important elements of our market success in seeds. In addition, distributor, retailer and farmer relationships are important in the United States and many other countries. The primary factors underlying the competitive success of traits are performance and commercial viability; timeliness of introduction; value compared with other practices and products; market coverage; service provided to distributors, retailers and farmers; governmental approvals; value capture; public acceptance; and environmental characteristics.

Patents, Trademarks, and Licenses

In the United States and many foreign countries, we hold a broad portfolio of patents that provide intellectual property protection for our seeds and genomics-related products and processes. We routinely obtain patents and/or plant variety protection for our breeding technology, germplasm, commercial varietal seed products, and for the parents of our commercial hybrid seed products. We also routinely obtain registrations for our germplasm and commercial seed products in registration countries, such as Plant Variety Protection Act Certificates in the United States and equivalent plant breeders' rights in other countries. Our insect-protection traits (including *YieldGard* Corn Borer and *YieldGard* Corn Rootworm traits in corn seed and *Bollgard* trait in cotton seed) are protected by patents that extend at least until 2011. Having filed patent applications in 2002 and 2001, we anticipate that the *Bollgard II* insect-protection trait will be patent-protected in the United States, and in other areas in which patent protection was sought, through 2022. Our

herbicide-tolerant products (*Roundup Ready* traits in soybean, corn, canola and cotton seeds) are protected by U.S. patents that extend at least until 2014; our second-generation trait for cotton, *Roundup Ready Flex*, is protected by U.S. patents through 2025.

Monsanto broadly licenses technology and patents. We also hold licenses from other parties relating to certain products and processes. We have obtained licenses to protect certain technologies we use to produce *Roundup Ready* seeds and certain technologies relating to our pipeline products from claims that we are infringing the patents of others. These licenses last for the lifetimes of the applicable patents, after which the respective patented technologies will no longer be subject to the terms

Table of Contents

MONSANTO COMPANY

2008 FORM 10-K

of the license. We have also obtained perpetual licenses to certain technologies contained in certain pipeline products such as *SmartStax* corn, which combines insect control traits with herbicide resistant traits. We hold numerous licenses in connection with our genomics program. For example, we hold a perpetual license to certain genomics technologies for use in plant agriculture, perpetual licenses to patents expiring from 2018 to 2023 for classes of proprietary genes for the development of commercial traits in crops, perpetual licenses to functional characterizations of our proprietary genes, and perpetual licenses to certain genomics sequences and certain genomics technologies. We own trademark registrations, and we file trademark applications for the names and many of the designs we use on our branded products around the world. Important company trademarks include *Roundup Ready*, *Bollgard*, *Bollgard II*, *YieldGard*, *YieldGard VT*, *Roundup Ready 2 Yield* and *SmartStax* for traits; *DEKALB*, *Asgrow*, *Deltapine*, and *Vistive* for row crop seeds; and *Seminis*, *De Ruiter*, *Royal Sluis*, *Asgrow*, and *Petoseed* for vegetable seeds.

Raw Materials and Energy Resources

In growing locations throughout the world, we produce directly or contract with third-party growers for corn seed, soybean seed, vegetable seeds, cotton seed, canola seed and other seeds. The availability and cost of seed depends primarily on seed yields, weather conditions, farmer contract terms, commodity prices, and global supply and demand. We seek to manage commodity price fluctuations through the use of futures contracts and other hedging mechanisms. Where practicable, we attempt to minimize the weather risks by producing seed at multiple growing locations and under irrigated conditions. Our Seeds and Genomics segment also purchases the energy we need to produce our seed; these energy purchases are managed in conjunction with our Agricultural Productivity segment.

AGRICULTURAL PRODUCTIVITY SEGMENT

Through our Agricultural Productivity segment, we manufacture *Roundup* brand herbicides and other herbicides and provide lawn-and-garden herbicide products for the residential market. Item 7 Management's Discussion and Analysis of Financial Condition and Results of Operations (MD&A) Agricultural Productivity Segment the tabular information about net sales of *Roundup* and other glyphosate-based herbicides and other agricultural productivity products is incorporated by reference herein.

Major Products	Applications	Major Brands
Glyphosate-based herbicides	Nonselective agricultural, industrial, ornamental and turf applications for weed control	<i>Roundup</i>
Selective herbicides	Control of preemergent annual grass and small seeded broadleaf weeds in corn and other crops	<i>Harness</i> for corn
Lawn-and-garden herbicides	Residential lawn-and-garden applications for weed control	<i>Roundup</i>

Distribution of Products

We use the same worldwide distribution and sales and marketing organization for our crop protection products as for our seeds and traits. We sell our crop protection products through distributors, independent retailers and dealers and agricultural cooperatives. In some cases outside the United States, we sell such products directly to farmers. We also sell certain of the chemical intermediates of our crop protection products to other major agricultural chemical producers, who then market their own branded products to farmers. We market our lawn-and-garden herbicide products through The Scotts Miracle-Gro Company.

Competition

Our agricultural herbicide products have numerous major global competitors. Competition from local or regional companies may also be significant. Our lawn-and-garden business has fewer than five significant national competitors and a larger number of regional competitors in the United States. The largest market for our lawn-and-garden

herbicides in the United States.

Competitive success in crop protection products depends on price, product performance, the scope of solutions offered to farmers, market coverage, product availability and planning, and the service provided to distributors, retailers and farmers.

Table of Contents

MONSANTO COMPANY

2008 FORM 10-K

Our lawn-and-garden herbicides compete on product performance and the brand value associated with our trademark *Roundup*. For additional information on competition for our agricultural herbicides, see Item 7 MD&A Outlook Agricultural Productivity, which is incorporated by reference herein.

Patents, Trademarks, Licenses, Franchises and Concessions

The intellectual property protection portfolio for our Agricultural Productivity segment is less broad in scope than the portfolio for our Seeds and Genomics segment. Patents protecting glyphosate, an active ingredient in *Roundup* herbicides, have expired in the United States and all other countries. However, some of the patents on our glyphosate formulations and manufacturing processes in the United States and other countries extend beyond 2015. We have obtained perpetual licenses to chemicals used to make *Harness* herbicides, and we hold trademark registrations for the brands under which our chemistries are sold. The most significant trademark in this segment is *Roundup*.

We hold (directly or by assignment) numerous phosphate leases issued on behalf of or granted by the U.S. government, the state of Idaho, and private parties. None of these leases is material individually, but they are significant in the aggregate because elemental phosphorus is a key raw material for the production of glyphosate-based herbicides. The phosphate leases have varying terms. The leases obtained from the U.S. government are of indefinite duration, subject to the modification of lease terms at 20-year intervals.

Environmental Matters

Our operations are subject to environmental laws and regulations in the jurisdictions in which we operate. Some of these laws restrict the amount and type of emissions that our operations can release into the environment. Other laws, such as the Comprehensive Environmental Response, Compensation and Liability Act, 42 U.S.C. 9601 *et seq.* (Superfund), can impose liability for the entire cost of cleanup on any former or current site owners or operators or any parties who sent waste to these sites, without regard to fault or to the lawfulness of the original disposal. These laws and regulations may be amended from time to time; they may become more stringent. We are committed to long-term environmental protection and compliance programs that reduce and monitor emissions of hazardous materials into the environment, and to the remediation of identified existing environmental concerns. In accord with a consent order with the state of Idaho, we have embarked on a multiyear program to reduce certain air emissions from our facility at Soda Springs, Idaho. Although the costs of our compliance with environmental laws and regulations cannot be predicted with certainty, such costs are not expected to have a material adverse effect on our earnings or competitive position. In addition to compliance obligations at our own manufacturing locations and off-site disposal facilities, under the terms of our Sept. 1, 2000, Separation Agreement with Pharmacia (the Separation Agreement), we are required to indemnify Pharmacia for any liability it may have for environmental remediation or other environmental responsibilities that are primarily related to Pharmacia's former agricultural and chemicals businesses. For information regarding certain environmental proceedings, see Item 3 Legal Proceedings. See also information regarding remediation of waste disposal sites and reserves for remediation, appearing in Note 23 Commitments and Contingencies, which is incorporated herein by reference.

Raw Materials and Energy Resources

We are a significant purchaser of basic and intermediate raw materials. Typically, we purchase major raw materials and energy through long-term contracts. We buy our raw materials from a number of suppliers; only a few major suppliers provide us with certain important raw materials. The markets for our raw materials are balanced and are expected to remain so. Although some additional capacity does exist, pricing is substantially higher today than under existing contracts. Energy is available as required, but pricing is subject to market fluctuations.

At various sites globally, two major manufacturers use our proprietary technology to make the catalysts used in various intermediate steps in the production of glyphosate. These suppliers have additional capacity at other manufacturing locations. We manufacture and purchase disodium iminodiacetic acid, a key ingredient in the production of glyphosate. We manufacture most of our global supply of elemental phosphorus, a key raw material for the production of *Roundup* herbicides, and we purchase the remainder through a third-party supplier. We have multiple mineral rights which provide a long term feed stock of phosphate ore to meet our needs into the foreseeable

future, including numerous leases for phosphate ore reserves. As part of the ongoing course of operating our phosphorus production, we are required to periodically permit new mining leases. A new mine is currently in the process of being permitted with the U.S. Bureau of Land Management.

Table of Contents

MONSANTO COMPANY

2008 FORM 10-K

RESEARCH AND DEVELOPMENT

Monsanto's expenses for research and development were \$980 million in 2008, \$770 million in 2007, and \$700 million in 2006. In addition, we incurred charges of \$164 million in 2008 and \$193 million in 2007 for acquired in-process research and development (IPR&D) related to acquisitions. See Note 4 Business Combinations for additional information regarding these acquisitions.

SEASONALITY AND WORKING CAPITAL; BACKLOG

For information on seasonality and working capital and backlog practices, see information in Item 7 MD&A Financial Condition, Liquidity, and Capital Resources, which is incorporated herein by reference.

EMPLOYEE RELATIONS

As of Aug. 31, 2008, we employed about 21,700 regular employees worldwide and more than 4,700 temporary employees. The number of temporary employees varies greatly during the year because of the seasonal nature of our business. We believe that relations between Monsanto and its employees are satisfactory.

CUSTOMERS

Although no single customer (including affiliates) represented more than 10 percent of our consolidated worldwide net sales in 2008, our three largest U.S. agricultural distributors and their affiliates represented, in the aggregate, 16 percent of our worldwide net sales and 32 percent of our U.S. net sales. During 2008, one major U.S. distributor and its affiliates represented about 8 percent of the worldwide net sales for our Seeds and Genomics segment, and about 9 percent of the worldwide net sales for our Agricultural Productivity segment.

INTERNATIONAL OPERATIONS

See Item 1A under the heading *Our operations outside the United States are subject to special risks and restrictions, which could negatively affect our results of operations and profitability* and Note 24 Segment and Geographic Data, which are incorporated herein by reference. Approximately 50 percent of Monsanto's sales, including 40 percent of our Seeds and Genomics segment's sales and 63 percent of our Agricultural Productivity segment's sales, originated from our legal entities outside the United States during fiscal year 2008.

SEGMENT AND GEOGRAPHIC DATA

For information on segment and geographic data, see Item 8 Financial Statements and Supplementary Data Note 24 Segment and Geographic Data, which is incorporated by reference herein.

ITEM 1A. RISK FACTORS

Competition in seeds and traits and agricultural chemicals has significantly affected, and will continue to affect, our sales.

Many companies engage in plant biotechnology and breeding research and agricultural chemicals, and speed in getting a new product to market can be a significant competitive advantage. Our competitors' success could render our existing products less competitive, resulting in reduced sales compared to our expectations or past results. We expect to see increasing competition from agricultural biotechnology firms and from major agrichemical, seed and food companies. We also expect to face continued competition for our *Roundup* herbicides and selective herbicides product lines. The extent to which we can realize cash and gross profit from these products will depend on our ability to: control manufacturing and

Table of Contents

MONSANTO COMPANY

2008 FORM 10-K

marketing costs without adversely affecting sales; predict and respond effectively to competitor pricing and marketing; provide marketing programs meeting the needs of our customers and of the farmers who are our end users; maintain an efficient distribution system; and develop new products with features attractive to our end users.

Efforts to protect our intellectual property rights and to defend claims against us can increase our costs and will not always succeed; any failures could adversely affect sales and profitability or restrict our ability to do business.

Intellectual property rights are crucial to our business, particularly our Seeds and Genomics segment. We endeavor to obtain and protect our intellectual property rights in jurisdictions in which our products are produced or used and in jurisdictions into which our products are imported. However, we may be unable to obtain protection for our intellectual property in key jurisdictions. Even if protection is obtained, competitors, farmers, or others in the chain of commerce may raise legal challenges to our rights or illegally infringe on our rights, including through means that may be difficult to prevent or detect. For example, the practice by some farmers of saving seeds from non-hybrid crops (such as soybeans, canola and cotton) containing our biotechnology traits has prevented and may continue to prevent us from realizing the full value of our intellectual property, particularly outside the United States. In addition, because of the rapid pace of technological change, and the confidentiality of patent applications in some jurisdictions, competitors may be issued patents from applications that were unknown to us prior to issuance. These patents could reduce the value of our commercial or pipeline products or, to the extent they cover key technologies on which we have unknowingly relied, require that we seek to obtain licenses or cease using the technology, no matter how valuable to our business. We cannot assure we would be able to obtain such a license on acceptable terms. The extent to which we succeed or fail in our efforts to protect our intellectual property will affect our costs, sales and other results of operations.

We are subject to extensive regulation affecting our seed biotechnology and agricultural products and our research and manufacturing processes, which affects our sales and profitability.

Regulatory and legislative requirements affect the development, manufacture and distribution of our products, including the testing and planting of seeds containing our biotechnology traits and the import of crops grown from those seeds, and non-compliance can harm our sales and profitability. Obtaining permits for mining or production or testing, planting and import approvals for seeds or biotechnology traits can be time-consuming and costly, with no guarantee of success. The failure to receive necessary permits or approvals could have near-and long-term effects on our ability to sell some current and future products. Planting approvals may also include significant regulatory requirements that can limit our sales. Sales of our traits can be affected in jurisdictions where planting has been approved if we have not received approval for the import of crops containing biotechnology traits into key markets. Concern about unintended but unavoidable trace amounts (sometimes called "adventitious presence") of commercial biotechnology traits in conventional (non-biotechnology) seed, or in the grain or products produced from conventional or organic crops, among other things, could lead to increased regulation or legislation, which may include: liability transfer mechanisms that may include financial protection insurance; possible restrictions or moratoria on testing, planting or use of biotechnology traits; and requirements for labeling and traceability, which requirements may cause food processors and food companies to avoid biotechnology and select non-biotechnology crop sources and can affect farmer seed purchase decisions and the sale of our products. Further, the detection of adventitious presence of traits not approved in the importing country may result in the withdrawal of seed lots from sale or in compliance actions, such as crop destruction or product recalls. Legislation encouraging or discouraging the planting of specific crops can also harm our sales. In addition, claims that increased use of glyphosate-based herbicides or biotechnology traits increases the potential for the development of glyphosate-resistant weeds or pests resistant to our traits could result in restrictions on the use of glyphosate-based herbicides or seeds containing our traits or otherwise reduce our sales.

The degree of public acceptance or perceived public acceptance of our biotechnology products can affect our sales and results of operations by affecting planting approvals, regulatory requirements and customer purchase decisions.

Although all of our products go through rigorous testing, some opponents of our technology actively raise public concern about the potential for adverse effects of our products on human or animal health, other plants and the

environment. The potential for adventitious presence of commercial biotechnology traits in conventional seed, or in the grain or products produced from conventional or organic crops, is another factor that can affect general public acceptance of these traits. Public concern can affect the timing of, and whether we are able to obtain, government approvals. Even after approvals are granted, public concern may lead to increased regulation or legislation, which could affect our sales and profitability, and may adversely affect sales of our products to farmers, due to their concerns about available markets for the sale of

Table of Contents

MONSANTO COMPANY

2008 FORM 10-K

crops or other products derived from biotechnology. In addition, opponents of agricultural biotechnology have attacked farmers' fields and facilities used by agricultural biotechnology companies, and may launch future attacks against farmers' fields and our field testing sites and research, production, or other facilities, which could affect our sales and our costs.

The successful development and commercialization of our pipeline products will be necessary for our growth.

We use advanced breeding technologies to produce hybrids and varieties with superior performance in the farmer's field, and we use biotechnology to introduce traits that enhance specific characteristics of our crops. The processes of breeding, biotechnology trait discovery and development and trait integration are lengthy, and a very small percentage of the genes and germplasm we test is selected for commercialization. There are a number of reasons why a new product concept may be abandoned, including greater than anticipated development costs, technical difficulties, regulatory obstacles, competition, inability to prove the original concept, lack of demand, and the need to divert focus, from time to time, to other initiatives with perceived opportunities for better returns. The length of time and the risk associated with the breeding and biotech pipelines are similar and interlinked because both are required as a package for commercial success in markets where biotech traits are approved for growers. In countries where biotech traits are not approved for widespread use, our sales depend on our germplasm. Commercial success frequently depends on being the first company to the market, and many of our competitors are also making considerable investments in similar new biotechnology or improved germplasm products. Consequently, if we are not able to fund extensive research and development activities and deliver new products to the markets we serve on a timely basis, our growth and operations will be harmed.

Adverse outcomes in legal proceedings could subject us to substantial damages and adversely affect our results of operations and profitability.

We are involved in major lawsuits concerning intellectual property, biotechnology, torts, contracts, antitrust allegations, employee benefits, and other matters, as well as governmental inquiries and investigations, the outcomes of which may be significant to results of operations in the period recognized or limit our ability to engage in our business activities. While we have insurance related to our business operations, it may not apply to or fully cover any liabilities we incur as a result of these lawsuits. In addition, pursuant to the Separation Agreement, we are required to indemnify Pharmacia for certain liabilities related to its former chemical and agricultural businesses. We have recorded reserves for potential liabilities where we believe the liability to be probable and reasonably estimable. However, our actual costs may be materially different from this estimate. The degree to which we may ultimately be responsible for the particular matters reflected in the reserve is uncertain.

Our operations outside the United States are subject to special risks and restrictions, which could negatively affect our results of operations and profitability.

We engage in manufacturing, seed production, research and development, and sales in many parts of the world. Although we have operations in virtually every region, our sales outside the United States in fiscal year 2008 were principally to customers in Brazil, Argentina, Canada, Mexico and France. Accordingly, developments in those parts of the world generally have a more significant effect on our operations than developments in other places. Our operations outside the United States are subject to special risks and restrictions, including: fluctuations in currency values and foreign-currency exchange rates; exchange control regulations; changes in local political or economic conditions; governmental pricing directives; import and trade restrictions; import or export licensing requirements and trade policy; restrictions on the ability to repatriate funds; and other potentially detrimental domestic and foreign governmental practices or policies affecting U.S. companies doing business abroad. Acts of terror or war may impair our ability to operate in particular countries or regions, and may impede the flow of goods and services between countries. Customers in weakened economies may be unable to purchase our products, or it could become more expensive for them to purchase imported products in their local currency, or sell their commodity at prevailing international prices, and we may be unable to collect receivables from such customers. Further, changes in exchange rates may affect our net income, the book value of our assets outside the United States, and our shareholders' equity.

In the event of any diversion of management's attention to matters related to acquisitions or any delays or difficulties encountered in connection with integrating acquired operations, our business, and in particular our results of operations and financial condition, may be harmed.

Table of Contents

MONSANTO COMPANY

2008 FORM 10-K

We have recently completed the acquisitions of the De Ruiter and Cristiani seed businesses, and we expect to make additional acquisitions. We must fit such acquisitions into our long-term growth strategies to generate sufficient value to justify their cost. Acquisitions also present other challenges, including geographical coordination, personnel integration and retention of key management personnel, systems integration and the reconciliation of corporate cultures. Those operations could divert management's attention from our business or cause a temporary interruption of or loss of momentum in our business and the loss of key personnel from the acquired companies.

Fluctuations in commodity prices can increase our costs and decrease our sales.

We contract production with multiple growers at fair value and retain the seed in inventory until it is sold. These purchases constitute a significant portion of the manufacturing costs for our seeds. Additionally, our chemical manufacturing operations use chemical intermediates and energy, which are subject to increases in price as the costs of oil and natural gas increase. Accordingly, increases in commodity prices may negatively affect our cost of goods sold or cause us to increase seed or chemical prices, which could adversely affect our sales. We use hedging strategies, and most of our raw material supply agreements contain escalation factors, designed to mitigate the risk of short-term changes in commodity prices. However, we are unable to avoid the risk of medium- and long-term increases. Farmers incomes are also affected by commodity prices; as a result, commodity prices could have a negative effect on their ability to purchase our seed and chemical products.

Compliance with quality controls and regulations affecting our manufacturing may be costly, and failure to comply may result in decreased sales, penalties and remediation obligations.

Because we use hazardous and other regulated materials in our chemical manufacturing processes and engage in mining operations, we are subject to risks of accidental environmental contamination, and therefore to potential personal injury claims, remediation expenses and penalties. Should a catastrophic event occur at any of our facilities, we could face significant reconstruction or remediation costs, penalties, third party liability and loss of production capacity, which could affect our sales. In addition, lapses in quality or other manufacturing controls could affect our sales and result in claims for defective products. We perform extensive third party audits and maintain a rigorous Process Safety Management program to reduce this risk.

Our ability to match our production to the level of product demanded by farmers or our licensed customers has a significant effect on our sales, costs, and growth potential.

Farmers' decisions are affected by market, economic and weather conditions that are not known in advance. Failure to provide distributors with enough inventories of our products will reduce our current sales. However, product inventory levels at our distributors may reduce sales in future periods, as those distributor inventories are worked down. In addition, inadequate distributor liquidity could affect distributors' ability to pay for our products and, therefore, affect our sales or our ability to collect on our receivables. With demand for our glyphosate products increasing in recent years, we are producing near capacity and have low inventories. While we have implemented plans to increase our glyphosate production capacity, we also expect in future years to need additional sources of phosphorus.

Our ability to issue short-term debt to fund our cash flow requirements and the cost of such debt may affect our financial condition.

We regularly extend credit to our customers in certain areas of the world so that they can buy agricultural products at the beginning of their growing seasons. Because of these credit practices and the seasonality of our sales, we may need to issue short-term debt at certain times of the year to fund our cash flow requirements. The amount of short-term debt will be greater to the extent that we are unable to collect customer receivables when due, to repatriate funds from operations outside the United States, and to manage our costs and expenses. Any downgrade in our credit rating, or other limitation on our access to short-term financing or refinancing, such would increase our interest cost and adversely affect our profitability. In addition, under current market conditions, we may find our ability to access the commercial paper market limited in terms of amount or duration. However, given our current cash position and expectations for our business, we currently anticipate no need, or only a limited need, to access the commercial paper market during 2009.

Weather, natural disasters and accidents may significantly affect our results of operations and financial condition.

Table of Contents

MONSANTO COMPANY

2008 FORM 10-K

Weather conditions and natural disasters can affect the timing of planting and the acreage planted, as well as yields and commodity prices. In turn, the quality, cost and volumes of the seed that we are able to produce and sell will be affected, which will affect our sales and profitability. Natural disasters or industrial accidents could also affect our manufacturing facilities, or those of our major suppliers or major customers, which could affect our costs and our ability to meet supply. One of our major U.S. glyphosate manufacturing facilities is located in Luling, Louisiana, which is an area subject to hurricanes.

ITEM 1B. UNRESOLVED STAFF COMMENTS

At Aug. 31, 2008, there were no unresolved comments from the staff of the SEC related to our periodic or current reports under the Exchange Act.

ITEM 2. PROPERTIES

We and our subsidiaries own or lease manufacturing facilities, laboratories, seed production and other agricultural facilities, office space, warehouses, and other land parcels in North America, South America, Europe, Asia, Australia, and Africa. Our general offices, which we own, are located in St. Louis County, Missouri. We lease additional research facilities from Pfizer at Chesterfield Village in St. Louis County. These office and research facilities are principal properties.

Additional principal properties used by the Seeds and Genomics segment include seed conditioning plants at Boone, Iowa; Constantine, Michigan; Enkhuizen, Netherlands; Grinnell, Iowa; Illiopolis, Illinois; Kearney, Nebraska; Oxnard, California; Peyrehorade, France; Rojas, Argentina; Sinesti, Romania; Trèbes, France; Uberlândia, Brazil; and Waterman, Illinois; and research sites at Ankeny, Iowa; Maui, Hawaii; Middleton, Wisconsin; Mystic, Connecticut; and Woodland, California. We own all of these properties, except the one in Maui. The Seeds and Genomics segment also uses seed foundation and production facilities, breeding facilities, and genomics and other research laboratories at various locations worldwide.

The Agricultural Productivity segment has principal chemicals manufacturing facilities at Antwerp, Belgium; Camaçari, Brazil; Luling, Louisiana; Muscatine, Iowa; São José dos Campos, Brazil; Soda Springs, Idaho; and Zárate, Argentina. We own all of these properties, except the one in Antwerp, Belgium, which is subject to a lease for the land underlying the facility. In connection with Solutia's exit from bankruptcy protection in 2008, we agreed to transfer ownership of our manufacturing facility in Alvin, Texas, to Solutia, which owns the site and will continue to manufacture an intermediate we use in the production of glyphosate there. In connection with the sale of the Dairy business, we have sold the Augusta, Georgia, facility.

We believe that our principal properties are suitable and adequate for their use. Our facilities generally have sufficient capacity for our existing needs and expected near-term growth. Expansion projects are undertaken as necessary to meet future needs. In particular, we have undertaken significant multiyear projects to expand our corn production facilities in North America in anticipation of increased demand for our corn seed and to implement process improvements at our Luling, Louisiana, glyphosate facility to increase capacity there. We expect to complete these projects in 2010. Use of these facilities may vary with seasonal, economic and other business conditions, but none of the principal properties is substantially idle. In certain instances, we have leased to third parties portions of sites not required for current operations.

ITEM 3. LEGAL PROCEEDINGS

We are involved in various legal proceedings that arise in the ordinary course of our business, as well as proceedings that we have considered to be material under SEC regulations. These include proceedings to which we are party in our own name and proceedings to which our former parent Pharmacia Corporation or its former subsidiary Solutia Inc. is a party but that we manage and for which we are responsible. We believe we have meritorious legal arguments and

will continue to represent our interests vigorously in all of the proceedings that we are defending or prosecuting. Information regarding certain material proceedings and the possible effects on our business of proceedings we are defending is disclosed in Note 23 under the subheading Environmental and Litigation-related Contingent Liabilities Litigation and is incorporated by reference herein. Following is information regarding other material proceedings for which we are responsible.

Table of Contents

MONSANTO COMPANY

2008 FORM 10-K

Patent and Commercial Proceedings

Starting the week of March 7, 2004, a series of purported class action cases were filed in 14 different state courts against Pioneer Hi-Bred International, Inc. and us. The suits allege that we conspired with Pioneer to violate various state competition and consumer protection laws by fixing and artificially inflating the prices and fees for our various biotechnology traits and seeds containing those traits and imposing certain use restrictions. All of these cases have been transferred to the U.S. District Court for the Eastern District of Missouri and consolidated, except for one case that was pending in state court in Tennessee, which has been dismissed. On May 27, 2008, the Court entered a scheduling order setting dates for class related discovery and requiring the plaintiffs to file their motion for class certification by April 30, 2009. No date is set for the class certification hearing.

Two purported class action suits were filed against us on Sept. 26, 2006, supposedly on behalf of all farmers who purchased our *Roundup* brand herbicides in the United States for commercial agricultural purposes since Sept. 26, 2002. Plaintiffs essentially allege that we have monopolized the market for glyphosate for commercial agricultural purposes. Plaintiffs seek an unspecified amount of damages and injunctive relief. In late February 2007, three additional suits were filed, alleging similar claims. All of these suits were filed in the U.S. District Court for the District of Delaware. On July 18, 2007, the court ruled that any such suit had to be filed in federal or state court in Missouri; the court granted our motion to dismiss the two original cases. On Aug. 8, 2007, plaintiffs in the remaining three cases voluntarily dismissed their complaints, which have not been re-filed. On Aug. 10, 2007, the same set of counsel filed a parallel action in federal court in San Antonio, Texas, on behalf of a retailer of glyphosate named Texas Grain. Plaintiffs seek to certify a national class of all entities that purchased glyphosate directly from us since August 2003. In the most recent court scheduling order, the court has indicated it will set a hearing on plaintiff's motion to certify a class. We expect that this hearing will occur in March 2009.

Governmental Proceedings and Undertakings

On Oct. 20, 2004, the U.S. Environmental Protection Agency (EPA) issued a Notice of Violation to us, alleging violations of federal and state hazardous waste management regulations at our phosphorus manufacturing plant in Soda Springs, Idaho. The EPA has asserted that the alleged violations may subject us to civil penalties. We are working with the EPA to resolve this matter.

On Sept. 17, 2007, the EPA issued a Notice of Violation to us, alleging violations of the Clean Water Act at the South Rasmussen Mine near Soda Springs, Idaho. The EPA has asserted that the alleged violations may subject us to civil penalties. We are working with the EPA to reach a resolution of this matter.

On April 18, 2005, we received a subpoena from the Illinois Attorney General for the production of documents relating to the prices and terms upon which we license technology for genetically modified seeds, and upon which we sell or license genetically modified seeds to farmers. We are cooperating with the production of the requested materials.

On Sept. 4, 2007, we received a civil investigative demand from the Iowa Attorney General seeking information regarding the production and marketing of glyphosate and the development, production, marketing, or licensing of soybean, corn, or cotton germplasm containing transgenic traits. We are cooperating with the production of the requested materials. Iowa is coordinating with several other states that are also interested in receiving the requested materials.

We have reported to EPA that in prior years sales and planting of our *Bollgard* and *Bollgard II* cotton products occurred in ten Texas counties where the registrations had included relevant restrictions. The EPA has asserted that the resulting sales and planting may subject us to civil penalties. We are working with the EPA to reach a resolution of this matter.

On Dec. 2, 2005, the Federal Revenue Service of the Ministry of Finance of Brazil issued a tax assessment against our wholly owned subsidiary, Monsanto do Brasil Ltda., challenging the tax treatment of \$575 million of notes issued in 1998 on the basis that the transactions involving the notes represented contributions to the capital of Monsanto do Brasil rather than funding through issuance of notes. The assessment denies tax deductions for approximately \$879

million (subject to currency exchange rates) of interest expense and currency exchange losses that were claimed by Monsanto do Brasil under the notes. The assessment seeks payment of approximately \$158 million (subject to currency exchange rates) of tax, penalties and interest related to the notes, and would preclude Monsanto do Brasil from using a net operating loss carryforward of approximately \$767 million (subject to currency exchange rates). The issuance of the notes was properly registered with the Central Bank of Brazil and we believe that there is no basis in law for this tax assessment. On Dec. 29, 2005, Monsanto do Brasil filed an appeal of this assessment with the Federal Revenue Service. Under the terms of a tax sharing agreement

Table of Contents

MONSANTO COMPANY

2008 FORM 10-K

concluded with Pharmacia at the time of our separation from Pharmacia, Pharmacia would be responsible for a portion of any liability incurred by virtue of the tax assessment. As noted, certain dollar amounts have been calculated based on an exchange rate of 2.3 Brazilian reais per U.S. dollar, and will fluctuate with exchange rates in the future.

ITEM 4. SUBMISSION OF MATTERS TO A VOTE OF SECURITY HOLDERS

Not applicable.

Executive Officers

See Part III Item 10 of this Report on Form 10-K for information about our Executive Officers.

Table of Contents

MONSANTO COMPANY

2008 FORM 10-K

PART II**ITEM 5. MARKET FOR REGISTRANT'S COMMON EQUITY, RELATED STOCKHOLDER MATTERS, AND ISSUER PURCHASES OF EQUITY SECURITIES**

Monsanto's common stock is traded principally on the New York Stock Exchange, under the symbol MON. The number of shareowners of record as of Oct. 20, 2008, was 45,153.

On June 27, 2006, the board of directors approved a two-for-one split of the company's common shares. The additional shares resulting from the stock split were paid on July 28, 2006, to shareowners of record on July 7, 2006. All share and per share information herein reflects this stock split.

The original dividend rate adopted by the board of directors following the initial public offering (IPO) in October 2000 was \$0.06. The board of directors increased the company's quarterly dividend rate in April 2003 to \$0.065, in May 2004 to \$0.0725, in December 2004 to \$0.085, in December 2005 to \$0.10, in December 2006 to \$0.125, in August 2007 to \$0.175, and in June 2008 to \$0.24.

The following table sets forth dividend declarations, as well as the high and low sales prices for Monsanto's common stock, for the fiscal year 2008 and 2007 quarters indicated.

	1st	2nd	3rd	4th	Fiscal
Dividends per Share	Quarter	Quarter	Quarter	Quarter	Year
2008	\$	\$0.35 ⁽¹⁾	\$	\$0.48 ⁽¹⁾	\$0.83
2007	\$	\$0.25 ⁽²⁾	\$	\$0.30 ⁽²⁾	\$0.55

		1st	2nd	3rd	4th	Fiscal
Common	Stock Price	Quarter	Quarter	Quarter	Quarter	Year
2008	High	\$100.25	\$129.28	\$132.36	\$145.80	\$145.80
	Low	69.22	93.22	90.50	103.50	69.22
2007	High	\$ 49.44	\$ 57.08	\$ 63.90	\$ 70.88	\$ 70.88
	Low	42.75	47.12	50.01	58.50	42.75

(1) During the period from Dec. 1, 2007, through Feb. 29, 2008, Monsanto declared two

dividends,
\$0.175 per share
on Dec. 11,
2007, and
\$0.175 per share
on Jan. 16,
2008. During
the period from
June 1, 2008,
through Aug.
31, 2008,
Monsanto
declared two
dividends, \$0.24
per share on
June 18, 2008,
and \$0.24 per
share on Aug. 6,
2008.

- (2) During the
period from
Dec. 1, 2006,
through Feb. 28,
2007, Monsanto
declared two
dividends,
\$0.125 per share
on Dec. 12,
2006, and
\$0.125 per share
on Jan. 17,
2007. During
the period from
June 1, 2007,
through Aug.
31, 2007,
Monsanto
declared two
dividends,
\$0.125 per share
on June 15,
2007, and
\$0.175 per share
on Aug. 7,
2007.

Issuer Purchases of Equity Securities

The following table summarizes purchases of equity securities during the fourth quarter of fiscal year 2008 by Monsanto and affiliated purchasers, pursuant to SEC rules.

Period	(a) Total Number of Shares Purchased	(b) Average Price Paid per Share ⁽¹⁾	(c) Total Number of Shares Purchased as Part of Publicly Announced Plans or Programs	(d) Approximate Dollar Value of Shares That May Yet Be Purchased Under the Plans or Programs
June 2008: June 1, 2008, through June 30, 2008	91,958 ⁽²⁾	\$ 137.04	90,900	\$ 1,133,198,973
July 2008: July 1, 2008, through July 31, 2008				\$ 1,133,198,973
August 2008: Aug. 1, 2008, through Aug. 31, 2008	1,837,721 ⁽³⁾	\$ 111.10	1,834,800	\$ 929,340,118
Total	1,929,679	\$ 112.34	1,925,700	\$ 929,340,118

(1) The average price paid per share is calculated on a settlement basis and excludes commission.

(2) Includes 1,058 shares withheld to cover the withholding taxes upon the vesting of restricted stock.

(3) Includes 2,921 shares withheld to cover the withholding taxes upon the vesting of restricted stock.

Table of Contents

MONSANTO COMPANY

2008 FORM 10-K

On Oct. 25, 2005, the board of directors authorized the purchase of up to \$800 million of the company's common stock over a four-year period. The plan expires on Oct. 25, 2009. In April 2008, the board of directors authorized a new repurchase program of up to an additional \$800 million of the company's common stock over a three-year period. This repurchase program will commence at the time the company's current share repurchase program is completed or Oct. 25, 2009, whichever is earlier. The second plan expires on April 16, 2011. There were no other publicly announced plans outstanding as of Aug. 31, 2008.

Stock Price Performance Graph

The graph below compares the performance of Monsanto's common stock with the performance of the Standard & Poor's 500 Stock Index (a broad-based market index) and a peer group index over a 60-month period extending through the end of the 2008 fiscal year. The graph assumes that \$100 was invested on Sept. 1, 2003, in our common stock, in the Standard & Poor's 500 Stock Index and the peer group index, and that all dividends were reinvested. Because we are involved both in the agricultural products business and in the seeds and genomics business, no published peer group accurately mirrors our portfolio of businesses. Accordingly, we created a peer group index that includes Bayer AG ADR, Dow Chemical Company, DuPont (E.I.) de Nemours and Company, BASF AG and Syngenta AG. The Standard & Poor's 500 Stock Index and the peer group index are included for comparative purposes only. They do not necessarily reflect management's opinion that such indices are an appropriate measure of the relative performance of the stock involved, and they are not intended to forecast or be indicative of possible future performance of our common stock.

In accordance with the rules of the SEC, the information contained in the Stock Price Performance Graph on this page shall not be deemed to be soliciting material, or to be filed with the SEC or subject to the SEC's Regulation 14A, or to the liabilities of Section 18 of the Exchange Act, except to the extent that Monsanto specifically requests that the information be treated as soliciting material or specifically incorporates it by reference into a document filed under the Securities Act, or the Exchange Act.

Table of Contents

MONSANTO COMPANY

2008 FORM 10-K

ITEM 6. SELECTED FINANCIAL DATA**SELECTED FINANCIAL DATA**

Dollars in millions, except per share amounts)	Year Ended Aug. 31,				
	2008	2007	2006	2005	2004
Operating Results:					
Net sales ⁽¹⁾	\$ 11,365	\$ 8,349	\$ 7,065	\$ 6,085	\$ 5,239
Income from operations	2,721	1,409	1,139	746	530
Income from continuing operations	2,007	913	671	173	213
Income on discontinued operations ⁽²⁾	17	80	24	82	54
Accumulative effect of a change in accounting principle, net of tax benefit ⁽³⁾			(6)		
Net income	2,024	993	689	255	267
Basic Earnings (Loss) per Share⁽⁴⁾:					
Income from continuing operations	\$ 3.66	\$ 1.68	\$ 1.24	\$ 0.32	\$ 0.40
Income on discontinued operations ⁽²⁾	0.03	0.15	0.05	0.16	0.10
Accumulative effect of accounting change ⁽³⁾			(0.01)		
Net income	3.69	1.83	1.28	0.48	0.50
Diluted Earnings (Loss) per Share⁽⁴⁾:					
Income from continuing operations	\$ 3.59	\$ 1.65	\$ 1.22	\$ 0.32	\$ 0.40
Income on discontinued operations ⁽²⁾	0.03	0.14	0.04	0.15	0.10
Accumulative effect of accounting change ⁽³⁾			(0.01)		
Net income	3.62	1.79	1.25	0.47	0.50
Financial Position at end of Period:					
Total assets	\$ 17,991	\$ 12,983	\$ 11,728	\$ 10,579	\$ 9,164
Working capital ⁽⁵⁾	3,170	2,009	3,182	2,485	3,037
Current ratio ⁽⁵⁾	1.71:1	1.65:1	2.40:1	2.15:1	2.60:1
Long-term debt	1,792	1,150	1,639	1,458	1,075
Debt-to-capital ratio ⁽⁶⁾	16%	16%	20%	22%	21%
Other Data⁽⁴⁾:					
Dividends per share	\$ 0.83	\$ 0.55	\$ 0.40	\$ 0.34	\$ 0.34
Stock price per share:					
High	\$ 145.80	\$ 70.88	\$ 47.58	\$ 34.62	\$ 19.25
Low	\$ 69.22	\$ 42.75	\$ 27.80	\$ 17.08	\$ 11.54
End of period	\$ 114.25	\$ 69.74	\$ 47.44	\$ 31.92	\$ 18.30
Basic shares outstanding	548.1	544.1	540.0	533.6	528.8
Diluted shares outstanding	559.3	555.0	551.6	545.3	538.4

See Item 7 Management's Discussion and Analysis of Financial Condition and Results of Operations for information regarding the factors that have affected or may affect the comparability of our business results.

(1) In 2005, Monsanto acquired Channel Bio Corp., and the North

American canola seed businesses of Advanta Seeds. In 2005, Monsanto completed three acquisitions: Seminis Inc., Stoneville, and NC+ Hybrids Inc. In 2006 and 2007, ASI acquired several regional seed companies. In 2007, Monsanto acquired Delta and Pine Land Company (DPL) and divested the Stoneville[®] and NexGen[®] cotton seed brands and related business assets. In 2008, Monsanto acquired De Ruiters, Cristiani, and Agroeste and entered into an agreement to divest the Dairy business. See Note 4 Business Combinations for further details of these acquisitions and Note 27 Discontinued Operations for further details of these divestitures.

- (2) In 2008, we entered into an agreement to sell the Dairy business. In 2007, we sold the Stoneville and NexGen businesses as part of the U.S. Department of Justice (DOJ) approval for the acquisition of DPL. In 2005, Monsanto sold substantially all of the environmental technologies businesses. In 2004,

Monsanto discontinued the plant-made pharmaceuticals program and finalized the sale of assets associated with the company's European wheat and barley business. Accordingly, these businesses have been presented as discontinued operations in the Statements of Consolidated Operations for all periods presented above. In 2006, Monsanto recorded an additional write-down of \$3 million after tax related to the remaining assets associated with the environmental technologies businesses. See Note 27 Discontinued Operations for further details of these pending and completed dispositions.

- (3) In 2006, Monsanto adopted Financial Accounting Standards Board (FASB) Interpretation No. 47, *Accounting for Conditional Asset Retirement Obligations* an interpretation of FASB Statement No. 143. In connection with the adoption of this new accounting guidance, Monsanto recorded a cumulative effect of

accounting change of
\$6 million aftertax.

- (4) For all periods presented, the share and per share amounts (including stock price) reflect the effect of the two-for-one stock split (in the form of a 100 percent stock dividend) that was completed on July 28, 2006.
- (5) Working capital is total current assets less total current liabilities; current ratio represents total current assets divided by total current liabilities.
- (6) Debt-to-capital ratio is the sum of short-term and long-term debt, divided by the sum of short-term and long-term debt and shareowners equity.

Table of Contents

MONSANTO COMPANY

2008 FORM 10-K

ITEM 7. MANAGEMENT'S DISCUSSION AND ANALYSIS OF FINANCIAL CONDITION AND RESULTS OF OPERATIONS**OVERVIEW****Background**

Monsanto Company, along with its subsidiaries, is a leading global provider of agricultural products for farmers. Our seeds, biotechnology trait products, and herbicides provide farmers with solutions that improve productivity, reduce the costs of farming, and produce better foods for consumers and better feed for animals.

We manage our business in two segments: Seeds and Genomics and Agricultural Productivity. Through our Seeds and Genomics segment, we produce leading seed brands, including *DEKALB*, *Asgrow*, *Deltapine*, *Seminis* and *De Ruiter*, and we develop biotechnology traits that assist farmers in controlling insects and weeds. We also provide other seed companies with genetic material and biotechnology traits for their seed brands. Through our Agricultural Productivity segment, we manufacture *Roundup* brand herbicides and other herbicides and provide lawn-and-garden herbicide products for the residential market. Approximately 50 percent of our total company sales, 40 percent of our Seeds and Genomics segment sales, and 63 percent of our Agricultural Productivity segment sales originated from our legal entities outside the United States during fiscal year 2008.

In the fourth quarter of 2008, we entered into an agreement to divest the Dairy business. This transaction was consummated on Oct. 1, 2008. In the fourth quarter of 2007, we sold our U.S. Stoneville® and NexGen® cotton seed brands and related business assets (divested cotton businesses) as part of the U.S. Department of Justice (DOJ) approval for the acquisition of Delta and Pine Land Company (DPL). As a result, financial data for these businesses have been presented as discontinued operations as outlined below. The financial statements have been recast and prepared in compliance with the provisions of Statement of Financial Accounting Standards (SFAS) No. 144, *Accounting for the Impairment or Disposal of Long-Lived Assets* (SFAS 144). Accordingly, for all periods presented herein, the Statements of Consolidated Operations have been conformed to this presentation. Also, the 2008 Statement of Consolidated Financial Position has been conformed to this presentation. The Dairy business was previously reported as part of the Agricultural Productivity segment. The divested cotton businesses were previously reported as part of the Seeds and Genomics segment. See Note 27 *Discontinued Operations* for further details.

This MD&A should be read in conjunction with Monsanto's consolidated financial statements and the accompanying notes. The notes to the consolidated financial statements referred to throughout this MD&A are included in Part II Item 8 *Financial Statements and Supplementary Data* of this Report on Form 10-K. Unless otherwise indicated, earnings (loss) per share and per share mean diluted earnings (loss) per share. Unless otherwise noted, all amounts and analyses are based on continuing operations.

Non-GAAP Financial Measures

MD&A includes financial information prepared in accordance with U.S. generally accepted accounting principles (GAAP), as well as two other financial measures, EBIT and free cash flow, that are considered non-GAAP financial measures. Generally, a non-GAAP financial measure is a numerical measure of a company's financial performance, financial position or cash flows that excludes (or includes) amounts that are included in (or excluded from) the most directly comparable measure calculated and presented in accordance with GAAP. The presentation of EBIT and free cash flow information is intended to supplement investors' understanding of our operating performance and liquidity. Our EBIT and free cash flow measures may not be comparable to other companies' EBIT and free cash flow measures. Furthermore, these measures are not intended to replace net income (loss), cash flows, financial position, or comprehensive income (loss), as determined in accordance with U.S. GAAP.

EBIT is defined as earnings (loss) before interest and taxes. Earnings (loss) is intended to mean net income (loss) as presented in the Statements of Consolidated Operations under GAAP. EBIT is the primary operating performance

measure for our two business segments. We believe that EBIT is useful to investors and management to demonstrate the operational profitability of our segments by excluding interest and taxes, which are generally accounted for across the entire company on a consolidated basis. EBIT is also one of the measures used by Monsanto management to determine resource allocations

Table of Contents

MONSANTO COMPANY

2008 FORM 10-K

within the company. See Note 24 Segment and Geographic Data for a reconciliation of EBIT to net income (loss) for fiscal years 2008, 2007 and 2006.

We also provide information regarding free cash flow, an important liquidity measure for Monsanto. We define free cash flow as the total of net cash provided or required by operating activities and net cash provided or required by investing activities. We believe that free cash flow is useful to investors and management as a measure of the ability of our business to generate cash. This cash can be used to meet business needs and obligations, to reinvest in the company for future growth, or to return to our shareowners through dividend payments or share repurchases. Free cash flow is also used by management as one of the performance measures in determining incentive compensation. See the Financial Condition, Liquidity, and Capital Resources Cash Flow section of MD&A for a reconciliation of free cash flow to net cash provided by operating activities and net cash required by investing activities on the Statements of Consolidated Cash Flows.

Executive Summary

Discontinued Operations As discussed in Note 27 Discontinued Operations, we entered into an agreement to divest our Dairy business in 2008. The income on discontinued operations of \$17 million aftertax, or \$0.03 per share, in 2008 relates only to the Dairy business. In conjunction with the DOJ consent decree, we sold our cotton businesses for \$317 million during fourth quarter 2007. We recorded income of discontinued operations of \$80 million aftertax, or \$0.14 per share in 2007, primarily related to the gain on the sale of the divested cotton businesses which were part of the Seeds and Genomics segment.

Consolidated Operating Results Net sales in 2008 increased \$3 billion from 2007. This improvement was a result of increased sales of *Roundup* and other glyphosate-based herbicides globally combined with higher sales of corn seed and traits globally, as well as increased sales in the United States of soybean seed and traits and cotton seed and traits. Net income in 2008 was \$3.62 per share, compared with \$1.79 per share in 2007.

The following non-recurring factors affected the two-year comparison:

2008:

We recorded an after-tax gain of \$130 million (\$210 million pretax), or \$0.23 per share (Solutia-related gain), associated with the settlement of our claim on Feb. 28, 2008, in connection with Solutia's emergence from bankruptcy. See Note 25 Solutia-Related and Other Income and Expense for further discussion.

In 2008, we expensed non-tax-deductible acquired in-process research and development (IPR&D) of \$164 million, or \$0.29 per share, primarily related to the De Ruiter acquisition.

2007:

In 2007, we expensed non-tax-deductible acquired IPR&D of \$193 million, or \$0.35 per share, related to acquisitions.

We recorded income on discontinued operations of \$80 million aftertax, or \$0.14 per share, in 2007, primarily related to the gain on the sale of the divested cotton businesses.

Financial Condition, Liquidity, and Capital Resources In 2008, net cash provided by operating activities was \$2,799 million, compared with \$1,854 million in 2007. Net cash required by investing activities was \$2,027 million in 2008, compared with \$1,911 million in 2007. As a result, our free cash flow, as defined in the Overview Non-GAAP Financial Measures section of MD&A, was a source of cash of \$772 million in 2008, compared with a use of cash of \$57 million in 2007. We used cash of \$1,007 million in 2008 for acquisitions of businesses, compared with \$1,679 million in 2007. For a more detailed discussion of the factors affecting the free cash flow comparison, see the Cash Flow section of the Financial Condition, Liquidity, and Capital Resources section in this MD&A.

Outlook We aim to continue to improve our products in order to maintain market leadership and to support near-term performance. We are focused on applying innovation and technology to make our farmer customers more productive and profitable by protecting yields and improving the ways they can produce food, fiber and feed. We use the tools of

modern

Table of Contents

MONSANTO COMPANY

2008 FORM 10-K

biology to allow farmers to do more with fewer resources and to produce healthier foods for consumers. Our current research-and-development (R&D) strategy and commercial priorities are focused on bringing our farmer customers second-generation traits, on delivering multiple solutions in one seed (stacking), and on developing new pipeline products. Our capabilities in biotechnology and breeding research are generating a rich product pipeline that is expected to drive long-term growth. The commercial viability of our product pipeline depends in part on the speed of regulatory approvals globally, and on continued patent and legal rights to offer our products.

We plan to improve and to grow our vegetable seeds business. We are applying our molecular and marker-assisted breeding capabilities to our library of vegetable germplasm. Our purchase of the De Ruiter business, a leading protected-culture vegetable seeds company, will allow us to serve our vegetable seeds customers through three dedicated platforms: protected-culture, open field and regional vegetable seed businesses. Our purchase of DPL has expanded our cotton breeding operation. In the future, we will continue to focus on accelerating the potential growth of these new businesses and executing our business plans.

Roundup herbicides remain the market leader. We have increased our average selling prices and experienced increased demand in recent years. We are implementing strategies to meet the future demand for *Roundup*. We are focused on managing the costs associated with our agricultural chemistry business.

See the Outlook section of MD&A for a more detailed discussion of some of the opportunities and risks we have identified for our business. For additional information related to the outlook for Monsanto, see Caution Regarding Forward-Looking Statements above and Part I Item 1A Risk Factors of this Form 10-K.

Table of Contents

MONSANTO COMPANY

2008 FORM 10-K

RESULTS OF OPERATIONS

Dollars in millions, except per share amounts)	Year Ended Aug. 31,				
	2008	2007	2006	Change	
				2008 vs. 2007	2007 vs. 2006
Net Sales	\$11,365	\$8,349	\$7,065	36%	18%
Gross Profit	6,177	4,230	3,443	46%	23%
Operating Expenses:					
Selling, general and administrative expenses	2,312	1,858	1,604	24%	16%
Research and development expenses	980	770	700	27%	10%
Acquired in-process research and development (see Note 4)	164	193		(15)%	NM
Total Operating Expenses	3,456	2,821	2,304	23%	22%
Income from Operations	2,721	1,409	1,139	93%	24%
Interest expense	110	136	133	(19)%	2%
Interest income	(132)	(120)	(54)	10%	122%
Amortization-related (income) expense - net (see Note 25)	(187)	40	29	NM	38%
Other expense - net	4	25	13	(84)%	92%
Income from Continuing Operations Before Income Taxes and Minority Interest	2,926	1,328	1,018	120%	30%
Income tax provision	899	403	330	123%	22%
Minority interest expense	20	12	17	67%	(29)%
Income from Continuing Operations	2,007	913	671	120%	36%
Discontinued Operations (see Note 27):					
Income from operations of discontinued businesses	20	52	32	(62)%	63%
Income tax provision (benefit)	3	(28)	8	NM	NM
Income on Discontinued Operations	17	80	24	(79)%	233%
Income Before Cumulative Effect of Accounting Change	2,024	993	695	104%	43%
Cumulative Effect of a Change in Accounting Principle, Net of Tax Benefit (see Note 2)			(6)	NM	NM
Net Income	\$ 2,024	\$ 993	\$ 689	104%	44%
Adjusted Earnings (Loss) per Share:					
Income from continuing operations	\$ 3.59	\$ 1.65	\$ 1.22	118%	35%

Income on discontinued operations	0.03	0.14	0.04	(79)%	250%
Accumulative effect of accounting change			(0.01)	NM	NM
Net Income	\$ 3.62	\$ 1.79	\$ 1.25	102%	43%

NM = Not Meaningful

Effective Tax Rate (continuing operations)	31%	30%	32%
---	------------	-----	-----

Comparison as a Percent of Net Sales:

Gross profit	54%	51%	49%
Selling, general and administrative expenses	20%	22%	23%
Research and development expenses (excluding acquired IPR&D)	9%	9%	10%
Capital operating expenses	30%	34%	33%
Income from continuing operations before income taxes and minority interest expense	26%	16%	14%
Net income	18%	12%	10%

Overview of Financial Performance (2008 compared with 2007)

The following section discusses the significant components of our results of operations that affected the comparison of fiscal year 2008 with fiscal year 2007.

Table of Contents

MONSANTO COMPANY

2008 FORM 10-K

Net sales increased 36 percent in 2008 from 2007. Our Seeds and Genomics segment net sales improved 28 percent, and our Agricultural Productivity segment net sales improved 48 percent. The following table presents the percentage changes in 2008 worldwide net sales by segment compared with net sales in 2007, including the effect that volume, price, currency and acquisitions had on these percentage changes:

	2008 Percentage Change in Net Sales vs. 2007					Net Change
	Volume	Price	Currency	Subtotal	Impact of Acquisitions ⁽¹⁾	
Seeds and Genomics Segment	10%	9%	3%	22%	6%	28%
Agricultural Productivity Segment	5%	35%	8%	48%		48%
Total Monsanto Company	8%	20%	5%	33%	3%	36%

(1) See Note 4 Business Combinations and Financial Condition, Liquidity, and Capital Resources in MD&A for details of our acquisitions in fiscal years 2008 and 2007. In this presentation, acquisitions are segregated for one year from the acquisition date.

For a more detailed discussion of the factors affecting the net sales comparison, see the Seeds and Genomics Segment and the Agricultural Productivity Segment sections.

Gross profit increased 46 percent, or \$1,947 million. Total company gross profit as a percent of net sales increased 3 percentage points to 54 percent in 2008, driven by the increase in *Roundup* and other glyphosate-based herbicides average net selling prices. Gross profit as a percent of sales for the Seeds and Genomics segment remained at 61 percent. Gross profit as a percent of sales for the Agricultural Productivity segment increased 10 percentage points to 46 percent in the 12-month comparison. See the Seeds and Genomics Segment and Agricultural Productivity Segment sections of MD&A for details.

Operating expenses increased 23 percent, or \$635 million, in 2008 from 2007. Selling, general and administrative (SG&A) expenses increased 24 percent, and R&D expenses increased 27 percent, primarily because of the Seeds and Genomics business growth and acquisitions coupled with the increase in our investment in our product pipeline. In addition, we incurred higher incentive compensation expense and charitable and business donations in 2008. As a percent of net sales, SG&A expenses decreased 2 points to 20 percent, and R&D expenses remained at 9 percent of sales in 2008.

Interest expense decreased 19 percent, or \$26 million, in fiscal year 2008 from 2007. The decreased expense was primarily due to lower average commercial paper borrowings outstanding during 2008.

Interest income increased 10 percent, or \$12 million, in 2008 because of higher average cash balances.

We recorded **Solutia-related income** of \$187 million in 2008 and \$40 million of expense in 2007. This improvement was a result of our Solutia-related gain as described in Note 25 – Solutia-Related and Other Income and Expense.

Income tax provision for 2008 increased to \$899 million, an increase of \$496 million over 2007 primarily as a result of the growth in pre-tax income from continuing operations. The effective tax rate on continuing operations was 31 percent, an increase of 1 percentage point from fiscal year 2007. This difference was primarily the result of the following items:

The effective tax rate for 2008 was affected by our Solutia-related gain for which taxes were provided at a higher U.S.-based rate, a tax benefit of \$43 million for the reversal of our remaining net operating loss valuation allowance in Argentina and additional tax expense for a transfer pricing item. We also recorded a tax benefit of \$33 million in 2007 for the reversal of a portion of our valuation allowance in Argentina.

Nondeductible acquired IPR&D charges of \$164 million and \$193 million were recorded in 2008 and 2007, respectively.

A tax benefit of \$79 million was recorded in 2007 for several discrete tax adjustments. The majority of this benefit is the result of audit settlements, including the conclusion of an Internal Revenue Service (IRS) audit for tax years 2003 and 2004, an ex-U.S. audit, and the resolution of various state income tax matters and, to a lesser extent, a benefit related to the retroactive extension of the R&D tax credit that was enacted as part of the Tax Relief and Health Care Act of 2006 on Dec. 20, 2006.

Table of Contents

MONSANTO COMPANY

2008 FORM 10-K

Without these items, our effective tax rate for 2008 would have been lower than the 2007 rate, primarily driven by a shift in our earnings mix to lower tax-rate jurisdictions.

The factors noted above explain the change in income from continuing operations. In 2008, we recorded **income on discontinued operations** of \$17 million compared to \$80 million in 2007. As noted above and discussed in Note 27 Discontinued Operations, we realized a pre-tax gain of \$46 million, and a tax benefit of \$27 million, in 2007 related to the sale of the cotton business.

Overview of Financial Performance (2007 compared with 2006)

The following section discusses the significant components of our results of operations that affected the comparison of fiscal year 2007 with fiscal year 2006.

Net sales increased 18 percent in 2007 from 2006. Our Seeds and Genomics segment net sales improved 25 percent, and our Agricultural Productivity segment net sales improved 10 percent. The following table presents the percentage changes in 2007 worldwide net sales by segment compared with net sales in 2006, including the effect that volume, price, currency and acquisitions had on these percentage changes:

	2007 Percentage Change in Net Sales vs. 2006					
	Volume	Price	Currency	Subtotal	Impact of Acquisitions ⁽¹⁾	Net Change
Seeds and Genomics Segment	16%	3%	2%	21%	4%	25%
Agricultural Productivity Segment	6%	1%	3%	10%		10%
Total Monsanto Company	12%	2%	2%	16%	2%	18%

(1) See Note 4 Business Combinations and Financial Condition, Liquidity, and Capital Resources in MD&A for details of our acquisitions in fiscal years 2007 and 2006. In this presentation, acquisitions are segregated for one year from the acquisition date.

For a more detailed discussion of the factors affecting the net sales comparison, see the Seeds and Genomics Segment and the Agricultural Productivity Segment sections.

Gross profit increased 23 percent, or \$787 million. Total company gross profit as a percent of net sales increased 2 percentage points to 51 percent in 2007, driven by the increase in higher margin traits, particularly in U.S. corn, and an increase in the average selling price of *Roundup* and other glyphosate-based herbicides. Gross profit as a percent of sales for the Seeds and Genomics Segment remained at 61 percent. Gross profit as a percent of sales for the Agriculture Productivity segment increased 3 percentage points to 36 percent in the 12-month comparison. See the Seeds and Genomics Segment and Agricultural Productivity Segment sections of MD&A for details.

Operating expenses increased 22 percent, or \$517 million, in 2007 from 2006, primarily because of the \$193 million acquired IPR&D charge in 2007. SG&A expenses increased 16 percent, and R&D expenses increased 10 percent, primarily because of the Seeds and Genomics business growth and acquisitions in the United States and the increase in our investment in our product pipeline. Also, SG&A expenses increased because of higher charitable contribution expense in 2007 related to the donation of \$18 million of equity securities. As a percent of net sales, SG&A expenses decreased to 22, and R&D expenses decreased 1 point to 9 in 2007.

Interest expense increased 2 percent, or \$3 million, in fiscal year 2007 from 2006. The increased expense was primarily from higher average commercial paper borrowings outstanding during 2007.

Interest income increased 122 percent, or \$66 million, in 2007 because of interest earned on higher cash balances in Brazil and the United States and interest earned on past-due trade receivables in Brazil.

We recorded **Solutia-related expenses** of \$40 million in 2007 and \$29 million in 2006.

Income tax provision for 2007 increased to \$403 million, an increase of \$73 million over 2006, primarily as a result of the growth in pretax income from continuing operations. The effective tax rate on continuing operations was 30 percent, a decrease of 2 percentage points from fiscal year 2006. This difference was primarily the result of the following items:

A tax benefit of \$79 million was recorded in 2007 for several discrete tax adjustments. The majority of this benefit is the result of audit settlements, including the conclusion of an IRS audit for tax years 2003 and 2004, an ex-U.S. audit, and the

Table of Contents

MONSANTO COMPANY

2008 FORM 10-K

resolution of various state income tax matters and, to a lesser extent, a benefit related to the retroactive extension of the R&D tax credit that was enacted as part of the Tax Relief and Health Care Act of 2006 on Dec. 20, 2006. We also recorded an additional tax benefit of \$33 million in 2007 and \$15 million in 2006 for the reversal of a portion of our valuation allowance in Argentina.

Nondeductible acquired IPR&D charges of \$193 million were recorded in 2007.

A tax charge of \$21 million was recorded in 2006, in conjunction with the repatriation of \$437 million of foreign earnings under the American Jobs Creation Act of 2004 (see discussion in Note 12 – Income Taxes).

A tax benefit of \$32 million was recorded in 2006 as a result of the conclusion of an audit of Pharmacia for tax years 2000 to 2002 (when we were a member of Pharmacia's consolidated group) by the IRS and, to a lesser extent, favorable adjustments related to various state income tax issues.

Without these items, our effective tax rate for 2007 would have been lower than the 2006 rate, primarily driven by a full-year benefit of the R&D tax credit in 2007 and a shift in our earnings mix to lower tax-rate jurisdictions.

The factors noted above explain the change in income from continuing operations. In 2007, we recorded **income on discontinued operations** of \$80 million. As discussed in Note 27 – Discontinued Operations, in conjunction with the DOJ consent decree received in 2007, we agreed to sell our divested cotton businesses, which were part of the Seeds and Genomics segment. We completed our acquisition of DPL and sold our divested cotton businesses during the fourth quarter of 2007 for \$317 million. We also divested certain cotton germplasm that was acquired from DPL's cotton breeding program, as required by the consent decree. We have retained certain rights to this germplasm. The buyers of these assets are licensed to use our traits in their brands prospectively under a royalty bearing agreement. We realized a pre-tax gain of \$46 million, and a tax benefit of \$27 million, in 2007 related to these divestitures. The tax benefit was driven by a higher tax basis in the businesses sold, compared with the book basis.

SEEDS AND GENOMICS SEGMENT

(Dollars in millions)	Year Ended Aug. 31,			Change	
	2008	2007	2006	2008 vs. 2007	2007 vs. 2006
Net Sales					
Corn seed and traits	\$3,542	\$2,807	\$1,793	26%	57%
Soybean seed and traits	1,174	901	960	30%	(6)%
Cotton seed and traits	450	319	376	41%	(15)%
Vegetable seeds	744	612	569	22%	8%
All other crops seeds and traits	459	325	280	41%	16%
Total Net Sales	\$6,369	\$4,964	\$3,978	28%	25%
Gross Profit					
Corn seed and traits	\$2,174	\$1,721	\$1,019	26%	69%
Soybean seed and traits	725	588	667	23%	(12)%
Cotton seed and traits	313	267	305	17%	(12)%

Vegetable seeds	394	267	296	48%	(10)%
All other crops seeds and traits	251	171	146	47%	17%
Total Gross Profit	\$3,857	\$3,014	\$2,433	28%	24%
EBIT⁽¹⁾	\$1,200	\$ 905	\$ 794	33%	14%

- (1) EBIT is defined as earnings (loss) before interest and taxes. Interest and taxes are recorded on a total company basis. We do not record these items at the segment level. See Note 24 Segment and Geographic Data and the Overview Non-GAAP Financial Measures section of MD&A for further details.

Seeds and Genomics Financial Performance for Fiscal Year 2008

Net sales of corn seed and traits increased 26 percent, or \$735 million, in the 12-month comparison. In 2008, our U.S. corn seed and traits sales improved because of increased sales of U.S. corn seed and traits, increased trait penetration, growth in stacked traits, stronger customer demand and higher average selling prices, compared with 2007. Net sales of corn seed and traits also improved because of growth in corn seed sales volume in Brazil, Argentina and Mexico related to stronger customer demand. Net sales of corn seed in Brazil also improved because of revenues from a recently acquired subsidiary which was not part of the company's operations during 2007 and the favorable foreign currency translation of the Brazilian

Table of Contents

MONSANTO COMPANY

2008 FORM 10-K

real. Further, net sales of corn seed and traits increased in the Europe-Africa region in the 12-month comparison because of higher average selling prices and the favorable foreign currency translation rate of the European euro. Soybean seed and traits net sales increased 30 percent, or \$273 million, in 2008. This sales increase was driven by an increase in sales volume of U.S. soybean seed and traits driven by an increase in soybean acres and stronger customer demand in the United States. Also, soybean seed and traits revenues increased in the United States because of higher average net selling prices and in Brazil due to higher commodity prices.

Cotton seed and traits net sales increased 41 percent, or \$131 million, in 2008. This increase was primarily driven by incremental sales from the DPL acquisition. Further, cotton trait sales increased in India primarily due to higher trait penetration. These increases in cotton seed and traits revenue were partially offset by the decrease in cotton trait sales volume resulting from fewer U.S. cotton acres in 2008 than in 2007.

In 2008, vegetable seeds net sales increased 22 percent, or \$132 million, in the 12-month comparison because of the favorable foreign currency translation rate of the European euro, the De Ruiter acquisition and higher average net selling prices.

All other crops seeds and traits net sales increased 41 percent, or \$134 million, in 2008, primarily because of improved sales of canola seed and traits, sugarbeet traits, sunflower seeds and sorghum seeds. Sales volume of canola seed and traits improved because of an increase in canola acres in Europe and Canada. Sugarbeet trait volume increased because this product was launched in the United States during 2008. Other crops seeds and traits net sales increased because of favorable foreign currency translation rates, higher prices and improved volumes.

Gross profit increased 28 percent for this segment due to increased net sales. Gross profit as a percent of sales for this segment remained at 61 percent. The gross profit percentage declined in soybean seed and traits and cotton seed and traits, but were offset by vegetable seeds. Soybean seed and traits gross profit percentage decreased in 2008 because of the unfavorable impact of higher soybean commodity prices on our cost of production. Cotton seed and traits gross profit percentage declined because of an increase in lower-margin cotton seed sales as a percentage of total cotton seed and traits sales. Vegetable seeds gross profit percentage increased primarily because write downs of inventory experienced in 2007 were not repeated.

EBIT for the Seeds and Genomics segment increased \$295 million to \$1,200 million in 2008. In the 12-month comparison, incremental SG&A and R&D expenses related to the growth of the business and the 2008 acquisitions partially offset the gross profit improvement from higher net sales across all crops.

Seeds and Genomics Financial Performance for Fiscal Year 2007

Net sales of corn seed and traits increased 57 percent, or \$1,014 million, in the 12-month comparison. In 2007, our U.S. corn seed and traits sales volume and sales mix improved because of stronger customer demand, increased trait penetration, growth in stacked traits, and additional acres in 2007, compared with 2006. Our U.S. national branded corn business increased to 23 share points in 2007, a 4 percentage point improvement compared with 2006 results. Net sales of U.S. corn seed and traits also increased because of incremental revenues from the recently acquired American Seeds Inc. (ASI) subsidiaries, which were not part of the company's operations in 2006. Further, net sales of corn seed in Europe, Argentina and Brazil also increased because of growth in sales volumes related to stronger customer demand.

Soybean seed and traits net sales decreased 6 percent, or \$59 million, in 2007. This sales decrease was driven by a decrease in sales volumes of U.S. soybean seed and traits because fewer soybean acres were planted. This decrease was partially offset by the incremental soybean seed and traits revenue from the recently acquired ASI subsidiaries, which were not part of the company's operations in 2006. Further, this decrease was partially offset by the increase in net sales of soybean traits in Brazil, primarily resulting from a volume increase in the grain-based payment system related to saved and replanted *Roundup Ready* soybeans.

Cotton seed and traits net sales decreased 15 percent, or \$57 million, in 2007. This sales decrease was driven by lower cotton trait sales volumes in Australia resulting from a decline in cotton acres. Planted cotton acres declined 54 percent there in the 12-month comparison because of a severe drought in certain parts of Australia in first quarter 2007. In addition, there was a decline in net sales of cotton seed and traits related to the decline in cotton acres in the

United States.

Table of Contents

MONSANTO COMPANY

2008 FORM 10-K

In 2007, vegetable seeds net sales increased 8 percent, or \$43 million, in the 12-month comparison because of higher average net selling prices and the favorable effect of the exchange rate of the European euro.

All other crops seeds and traits net sales increased 16 percent, or \$45 million, in 2007, primarily because of higher canola seed volumes driven by stronger customer demand in Europe and higher canola trait volumes driven by an increase in acres planted to canola in Canada.

Gross profit increased 24 percent for this segment due to increased net sales. Gross profit as a percent of sales for this segment remained at 61 percent. The positive factor of increased penetration of higher margin traits, particularly in U.S. corn, was offset by declines in the gross profit percentage in vegetable seeds and soybean seed and traits.

Vegetable seeds gross profit percentage decreased in 2007 primarily because of certain charges to cost of goods sold for write downs of inventory to the lower of cost or market. The decrease in vegetable seeds gross profit percentage was partially offset by the effect on cost of goods sold associated with the inventory step-up for the Seminis acquisition, which was \$5 million in 2007 and \$50 million in 2006. Soybean seed and trait gross profit percentage decreased in the 12-month comparison, primarily because of the unfavorable impact of higher soybean commodity prices and lower soybean volumes on our cost of production.

EBIT for the Seeds and Genomics segment increased \$111 million to \$905 million in 2007. The acquired IPR&D write-offs that resulted from the DPL and Western Seed acquisitions negatively affected EBIT by \$193 million in 2007. In the 12-month comparison, incremental SG&A and R&D expenses related to the growth of the business and the 2007 acquisitions partially offset the gross profit improvement.

AGRICULTURAL PRODUCTIVITY SEGMENT

(Dollars in millions)	Year Ended Aug. 31,			Change	
	2008	2007	2006	2008 vs. 2007	2007 vs. 2006
Net Sales					
<i>Roundup</i> and other glyphosate-based herbicides	\$4,094	\$2,568	\$2,262	59%	14%
All other agricultural productivity products	902	817	825	10%	(1)%
Total Net Sales	\$4,996	\$3,385	\$3,087	48%	10%
Gross Profit					
<i>Roundup</i> and other glyphosate-based herbicides	\$1,976	\$ 854	\$ 648	131%	32%
All other agricultural productivity products	344	362	362	(5)%	NM
Total Gross Profit	\$2,320	\$1,216	\$1,010	91%	20%
EBIT⁽¹⁾	\$1,691	\$ 470	\$ 301	260%	56%

NM = Not Meaningful

(1) EBIT is defined as earnings (loss) before

interest and taxes. Interest and taxes are recorded on a total company basis. We do not record these items at the segment level. See Note 24 Segment and Geographic Data and the Overview Non-GAAP Financial Measures section of MD&A for further details.

Agricultural Productivity Financial Performance for Fiscal Year 2008

Net sales of *Roundup* and other glyphosate-based herbicides increased 59 percent, or \$1,526 million, in 2008. In the 12-month comparison, sales of *Roundup* and other glyphosate-based herbicides increased globally as the average net selling price increased in all regions. Net sales of *Roundup* and other glyphosate-based herbicides also increased in Europe in 2008 because of the favorable foreign currency translation rate of the European euro. Global sales volumes of *Roundup* and other glyphosate-based herbicides increased 2 percent in 2008 from 2007.

Sales volumes of *Roundup* and other glyphosate-based herbicides increased in Brazil because of the improvement in the market for *Roundup* and other glyphosate-based herbicides in Brazil. Key contributors to the increase in the herbicide market were an improvement in farmer liquidity resulting from higher soybean commodity prices and the increase in acres planted for *Roundup Ready* soybeans and sugarcane in 2008 over 2007. Further, net sales of *Roundup* and other glyphosate-based herbicides increased in the 12-month comparison because of the favorable effect of the exchange rate of the Brazilian real and, to a lesser extent, because of higher average net selling prices.

Table of Contents

MONSANTO COMPANY

2008 FORM 10-K

Sales of *Roundup* and other glyphosate-based herbicides improved in the United States because of an increase in the net selling price as well as an increase in volume due to customer demand resulting from an increase in *Roundup Ready* corn acres.

Gross profit as a percent of sales increased 10 percentage points for the Agricultural Productivity segment to 46 percent in 2008. This improvement was primarily because of an increase in the average net selling prices of *Roundup* and other glyphosate-based herbicides.

The sales increases discussed in this section resulted in \$1,104 million higher gross profit in 2008. EBIT for the Agricultural Productivity segment increased \$1,221 million, to \$1,691 million in 2008. Contributing to this increase was our Solutia-related gain recorded in second quarter 2008. See further discussion at Note 25 Solutia-Related and Other Income and Expense.

Agricultural Productivity Financial Performance for Fiscal Year 2007

Net sales of *Roundup* and other glyphosate-based herbicides increased 14 percent, or \$306 million, in 2007. In the 12-month comparison, sales of *Roundup* and other glyphosate-based herbicides increased globally, especially in Brazil, Europe and the United States. Sales volumes of *Roundup* and other glyphosate-based herbicides increased 6 percent in 2007 from 2006. The average net selling price remained relatively flat in the United States, but it increased moderately in most other regions.

Sales volumes of *Roundup* and other glyphosate-based herbicides increased in Brazil because of the improvement in the market for *Roundup* and other glyphosate-based herbicides in Brazil. Key contributors to the increase in the herbicide market there were an improvement in farmer liquidity resulting from higher soybean commodity prices and the increase in acres planted with *Roundup Ready* soybeans and sugarcane in 2007 over 2006. Further, net sales of *Roundup* and other glyphosate-based herbicides increased in the 12-month comparison because of the favorable effect of the exchange rate of the Brazilian real and, to a lesser extent, because of higher average net selling prices.

Sales of *Roundup* and other glyphosate-based herbicides increased in Europe because of the favorable effect of the exchange rate of the European euro. Sales volumes of *Roundup* and other glyphosate-based herbicides increased in Europe, primarily because of more favorable weather conditions in 2007 than in 2006.

Sales volumes of *Roundup* and other glyphosate-based herbicides improved in the United States because of an increase in customer demand resulting from an increase in *Roundup Ready* corn acres.

Gross profit as a percent of sales increased 3 percentage points for the Agricultural Productivity segment to 36 percent in 2007. The primary contributor to this increase was higher average selling prices.

The sales increases discussed in this section resulted in \$206 million higher gross profit in 2007. EBIT for the Agricultural Productivity segment increased \$169 million, to \$470 million in 2007.

Table of Contents

MONSANTO COMPANY

2008 FORM 10-K

FINANCIAL CONDITION, LIQUIDITY, AND CAPITAL RESOURCES**Working Capital and Financial Condition**

(Dollars in millions)	As of Aug. 31,	
	2008	2007
Cash and Cash Equivalents	\$ 1,613	\$ 866
Trade Receivables Net	2,067	1,499
Inventories	2,453	1,719
Other Current Assets ⁽¹⁾	1,476	1,000
Total Current Assets	\$ 7,609	\$ 5,084
Short-Term Debt	\$ 24	\$ 270
Accounts Payable	1,090	649
Accrued Liabilities ⁽²⁾	3,325	2,156
Total Current Liabilities	\$ 4,439	\$ 3,075
Working Capital⁽³⁾	\$ 3,170	\$ 2,009
Current Ratio⁽³⁾	1.71:1	1.65:1

(1) Includes miscellaneous receivables, deferred tax assets, assets of discontinued operations and other current assets.

(2) Includes income taxes payable, accrued compensation and benefits, accrued marketing programs, deferred revenues, grower

production
accruals,
dividends
payable,
liabilities of
discontinued
operations and
miscellaneous
short-term
accruals.

- (3) Working capital is total current assets less total current liabilities; current ratio represents total current assets divided by total current liabilities.

Working capital increased \$1.2 billion between Aug. 31, 2008, and Aug. 31, 2007, primarily because of the following factors:

Cash and cash equivalents increased \$747 million. For a more detailed discussion of the factors affecting the cash flow comparison, see the *Cash Flow* section in this section of MD&A.

Trade receivables net increased \$568 million, primarily because of increased sales and favorable foreign currency of \$62 million and partially offset by higher collections and lower days sales outstanding.

Inventories increased \$734 million, primarily because of increased corn production to support our market share growth in our global corn business as of Aug. 31, 2008. Further, our chemistry inventories increased because of cost increases in certain raw materials required for herbicide production. In addition, inventory increased \$59 million due to favorable foreign currency. Offsetting these increases was a recast of \$116 million of Dairy business inventory at Aug. 31, 2008, to discontinued operations.

Short-term debt decreased \$246 million, primarily because \$236 million of 4% Senior Notes, due May 15, 2008, were classified as short-term debt as of Aug. 31, 2007. See the *Capital Resources and Liquidity* section of the MD&A for further discussion of the retirement of the 4% Senior Notes.

Accrued liabilities and accounts payable increased \$1,169 million and \$441 million, respectively, primarily because deferred revenue increased related to increased customer prepayments, primarily in Brazil and the United States. In addition, higher activity levels in 2008 resulted from the increase in sales and the 2008 acquisitions. Further, favorable foreign currency increased accrued liabilities and accounts payable by \$83 million in 2008.

Backlog: Inventories of finished goods, goods in process, and raw materials and supplies are maintained to meet customer requirements and our scheduled production. As is consistent with the nature of the seed industry, we generally produce in one growing season the seed inventories we expect to sell the following season. In general, we do not manufacture our products against a backlog of firm orders; production is geared to projected demand.

Customer Financing Programs: We refer certain interested U.S. customers to a third-party specialty lender that makes loans directly to our customers. We established this revolving financing program of up to \$250 million, which allows

certain U.S. customers to finance their product purchases, royalties and licensing fee obligations. The funding availability may be less than \$250 million if certain program requirements are not met. It also allows us to reduce our reliance on commercial paper borrowings. We received \$66 million in 2008, \$305 million in 2007 and \$286 million in 2006 from the proceeds of loans made to our customers through this financing program. These proceeds are included in the net cash provided by operating activities in the Statements of Consolidated Cash Flows. We originate these customer loans on behalf of the third-party

Table of Contents

MONSANTO COMPANY

2008 FORM 10-K

specialty lender, a special purpose entity (SPE) that we consolidate, using our credit and other underwriting guidelines approved by the lender. We service the loans and provide a first-loss guarantee of up to \$130 million. Following origination, the lender transfers the loans to multi-seller commercial paper conduits through a nonconsolidated qualifying special purpose entity (QSPE). We have no ownership interest in the lender, in the QSPE, or in the loans. We account for this transaction as a sale, in accordance with SFAS No. 140, *Accounting for Transfers and Servicing of Financial Assets and Extinguishment of Liabilities* (SFAS 140).

As of Aug. 31, 2008, and Aug. 31, 2007, the customer loans held by the QSPE and the QSPE's liability to the conduits were \$66 million and \$301 million, respectively. The lender or the conduits may restrict or discontinue the facility at any time. If the facility were to terminate, existing loans would be collected by the QSPE over their remaining terms (generally 12 months or less), and we would revert to our past practice of providing these customers with direct credit purchase terms. Our servicing fee revenues from the program were not significant. As of Aug. 31, 2008, and Aug. 31, 2007, our recorded guarantee liability was less than \$1 million, primarily based on our historical collection experience with these customers and a current assessment of credit exposure. Adverse changes in the actual loss rate would increase the liability.

We entered into an agreement with a lender to establish a program to provide financing of up to \$40 million for selected customers in Brazil. The agreement qualified for sales treatment under SFAS 140. Proceeds from the transfer of the receivables are included in net cash provided by operating activities in the Statements of Consolidated Cash Flows. Total funds available under the program have increased to \$250 million under subsequent amendments. We received \$239 million, \$139 million and \$73 million of proceeds through these customer financing programs in 2008, 2007 and 2006, respectively. The amount of loans outstanding was \$187 million and \$86 million as of Aug. 31, 2008, and Aug. 31, 2007, respectively. In this program, we provide a full guarantee of the loans in the event of customer default. The maximum potential amount of future payments under the guarantees was \$187 million as of Aug. 31, 2008. The liability for the guarantee is recorded at an amount that approximates fair value and is primarily based on our historical collection experience with customers that participate in the program and a current assessment of credit exposure. Our guarantee liability was \$10 million and \$3 million as of Aug. 31, 2008, and Aug. 31, 2007, respectively. If performance is required under the guarantee, we may retain amounts that are subsequently collected from customers.

We also have similar agreements with banks that provide financing to our customers in Brazil through credit programs that are subsidized by the Brazilian government. In addition, there are similar financing programs in Europe and Argentina. All of these programs also qualify for sales treatment under SFAS 140. Accordingly, proceeds from the transfer of receivables through the programs described above are included in net cash provided by operating activities in the Statements of Consolidated Cash Flows. We received \$146 million, \$115 million and \$65 million of proceeds through these customer financing programs in 2008, 2007 and 2006, respectively. The amount of loans outstanding was \$92 million and \$66 million as of Aug. 31, 2008, and Aug. 31, 2007, respectively. For most programs, we provide a full guarantee of the loans in the event of customer default. The terms of guarantees are equivalent to the terms of the bank loans. The maximum potential amount of future payments under the guarantees was \$92 million as of Aug. 31, 2008. The liability for the guarantee is recorded at an amount that approximates fair value and is primarily based on our historical collection experience with customers that participate in the program and a current assessment of credit exposure. Our guarantee liability was \$11 million and \$2 million as of Aug. 31, 2008, and Aug. 31, 2007, respectively. If performance is required under the guarantee, we may retain amounts that are subsequently collected from customers.

We also sell accounts receivable, both with and without recourse. These sales qualify for sales treatment under SFAS 140 and, accordingly, the proceeds are included in net cash provided by operating activities in the Statements of Consolidated Cash Flows. The gross amounts of accounts receivable sold totaled \$48 million, \$46 million and \$49 million for 2008, 2007 and 2006, respectively. The liability for the guarantees for sales with recourse is recorded at an amount that approximates fair value and is based on the company's historical collection experience for the customers associated with the sale of the accounts receivable and a current assessment of credit exposure. Our

guarantee liability was less than \$1 million as of Aug. 31, 2008 and 2007. The maximum potential amount of future payments under the recourse provisions of the agreements was \$33 million as of Aug. 31, 2008. The outstanding balance of the receivables sold was \$33 million and \$28 million as of Aug. 31, 2008, and Aug. 31, 2007, respectively.

Table of Contents

MONSANTO COMPANY

2008 FORM 10-K

Cash Flow

(Dollars in millions)	Year Ended Aug. 31,		
	2008	2007	2006
Net Cash Provided by Operating Activities	\$ 2,799	\$ 1,854	\$1,674
Net Cash Required by Investing Activities	(2,027)	(1,911)	(625)
Free Cash Flow⁽¹⁾	772	(57)	1,049
Net Cash Required by Financing Activities	(102)	(583)	(117)
Effect of Exchange Rate Changes on Cash and Cash Equivalents	77	46	3
Net Increase (Decrease) in Cash and Cash Equivalents	747	(594)	935
Cash and Cash Equivalents at Beginning of Period	866	1,460	525
Cash and Cash Equivalents at End of Period	\$ 1,613	\$ 866	\$1,460

(1) Free cash flow represents the total of net cash provided or required by operating activities and provided or required by investing activities (see the Overview Non-GAAP Financial Measures section of MD&A for a further discussion).

2008 compared with 2007: In 2008, our free cash flow was a source of cash of \$772 million, compared with a use of cash of \$57 million in 2007. Cash provided by operating activities increased 51 percent, or \$945 million, in 2008, primarily because of the increase in sales, collections and earnings.

Cash required by investing activities was \$2,027 million in 2008 compared with \$1,911 million in 2007. This increase is primarily attributable to our capital expenditures, which increased \$409 million in 2008 because of the expansion of corn seed facilities and expenditures related to improvements at a glyphosate production facility. In addition, we used cash of \$78 million in 2008 for the purchase of long-term equity securities. Offsetting these increases, we used cash

for acquisitions of \$1,007 million in 2008 compared with \$1,679 million in 2007. Further, we received proceeds of \$317 million in 2007 related to the sale of the divested cotton businesses.

Cash required by financing activities was \$102 million in 2008, compared with \$583 million in 2007. The net change in short-term financing was a source of cash of \$82 million in 2008 compared with a use of \$5 million in 2007. Cash proceeds from long-term debt increased \$538 million in 2008 from 2007. Cash required for long-term debt reductions was \$254 million in 2008, compared with \$281 million in 2007. The 12-month comparison of long-term debt proceeds and reductions are affected because we issued \$550 million of long-term debt and \$238 million of short-term debt was repaid in 2008. We purchased shares under the four-year \$800 million share repurchase program authorized by our board of directors in October 2005. Our purchases under this plan required cash of \$361 million in 2008, compared with \$197 million in 2007.

2007 compared with 2006: In 2007, our free cash flow was a use of cash of \$57 million, compared with a source of cash of \$1,049 million in 2006. Cash provided by operating activities increased 11 percent, or \$180 million, in 2007, primarily because of the increase in earnings. This positive factor was partially offset by an unfavorable change in trade receivables because of the increase in sales activity in 2007 and the significant collections improvement made in 2006.

Cash required by investing activities was \$1,911 million in 2007 compared with \$625 million in 2006. In 2007, we used cash for acquisitions of businesses of \$1,679 million compared with \$258 million in 2006.

Cash required by financing activities was \$583 million in 2007, compared with \$117 million in 2006. The net change in short-term financing required cash of \$5 million in 2007 compared with \$139 million in 2006. Cash proceeds from long-term debt decreased \$248 million in 2007 from 2006. Cash required for long-term debt reductions was \$281 million in 2007, compared with \$118 million in 2006. The 12-month comparison of changes in long-term debt proceeds and reductions are affected because a \$251 million three-year term bank loan was obtained in 2006 and repaid in 2007. We purchased shares under the four-year \$800 million share repurchase program authorized by our board of directors in October 2005. Our purchases under this plan required cash of \$197 million in 2007, compared with \$114 million in 2006.

Table of Contents

MONSANTO COMPANY

2008 FORM 10-K

Capital Resources and Liquidity

(Dollars in millions, except debt-to-capital ratio)	As of Aug. 31,	
	2008	2007
Short-Term Debt	\$ 24	\$ 270
Long-Term Debt	1,792	1,150
Total Shareowners' Equity	9,374	7,503
Debt-to-Capital Ratio	16%	16%

A major source of our liquidity is operating cash flows, which are derived from net income. This cash-generating capability provides us with the financial flexibility we need to meet operating, investing and financing needs. To the extent that cash provided by operating activities is not sufficient to fund our cash needs, which generally occurs during the first and third quarters of the fiscal year because of the seasonal nature of our business, short-term commercial paper borrowings are used to finance these requirements. Currently, credit markets, including commercial paper markets, are not providing historical levels of liquidity nor length of maturity to the market. While we do not anticipate borrowing in commercial paper markets in 2009, if conditions change and we need to borrow commercial paper, we may find our options limited in terms of amount or duration and cost.

Total debt outstanding increased \$396 million between Aug. 31, 2008, and Aug. 31, 2007, primarily because we issued \$550 million of long-term debt and repaid \$238 million of short-term debt in third quarter 2008. See Note 13 Debt and Other Credit Arrangements for additional information on this debt.

Our August 2008 debt-to-capital ratio was flat compared with the August 2007 ratio, primarily because of the increase in shareowners' equity and the increase in total debt outstanding.

In June 2008, we assumed debt of \$73 million as part of the De Ruyter acquisition. The assumed debt is denominated in European euros and is due on Sept. 25, 2012. The interest rate is a variable rate based on the Euro Interbank Offered Rate (Euribor).

In connection with the acquisition of DPL, we borrowed \$1.5 billion pursuant to the terms of a 15-day term bank loan (Bank Loan), dated June 1, 2007. On June 5, 2007, we repaid the entire principal amount outstanding under the Bank Loan, together with all accrued and unpaid interest thereon. The repayment of the indebtedness outstanding under the Bank Loan was funded through borrowings under our existing commercial paper program. During the fourth quarter of 2007, this commercial paper was repaid with cash from operating activities and the \$317 million of proceeds from the sale of our divested cotton businesses on June 19, 2007.

In May 2002, we filed a shelf registration with the SEC for the issuance of up to \$2.0 billion of registered debt (2002 shelf registration). In August 2002, we issued \$800 million in 7³/₈% Senior Notes under the 2002 shelf registration (7³/₈% Senior Notes). As of Aug. 31, 2008, \$484 million of the 7³/₈% Senior Notes are due on Aug. 15, 2012 (see the discussion later in this section regarding a debt exchange for \$314 million of the 7³/₈% Senior Notes). In May 2003, we issued \$250 million of 4% Senior Notes (4% Senior Notes) under the 2002 shelf registration, which were repaid on May 15, 2008.

In May 2005, we filed a new shelf registration with the SEC (2005 shelf registration) that allowed us to issue up to \$2.0 billion of debt, equity and hybrid offerings (including debt securities of \$950 million that remained available under the 2002 shelf registration). In July 2005, we issued 5¹/₂% 2035 Senior Notes of \$400 million under the 2005 shelf registration. The net proceeds from the sale of the 5¹/₂% 2035 Senior Notes were used to reduce commercial paper borrowings. In April 2008, we issued 5¹/₈% 2018 Senior Notes of \$300 million. The net proceeds from the sale of 5¹/₈% 2018 Senior Notes were used to finance the expansion of corn seed production facilities. Also in April 2008, we issued 5⁷/₈% 2038 Senior Notes of \$250 million. The net proceeds from the sale of 5⁷/₈% 2038 Senior Notes were

used to repay \$238 million of 4% Senior Notes that were due on May 15, 2008. As of Aug. 31, 2008, \$1 billion remained available under the 2005 shelf registration.

In August 2005, we exchanged \$314 million of new 5¹/₂% Senior Notes due 2025 (5¹/₂% 2025 Senior Notes) for \$314 million of our outstanding 7³/₈% Senior Notes due 2012, which were issued in 2002. The exchange was conducted as a private transaction with holders of the outstanding 7³/₈% Senior Notes who certified to the company that they were qualified institutional buyers within the meaning of Rule 144A under the Securities Act of 1933. Under the terms of the exchange, the company paid a premium of \$53 million to holders participating in the exchange. The transaction has been accounted for as

Table of Contents

MONSANTO COMPANY

2008 FORM 10-K

an exchange of debt under Emerging Issues Task Force (EITF) 96-19, *Debtors Accounting for a Modification or Exchange of Debt Instruments*, and the \$53 million premium will be amortized over the life of the new 5¹/₂% 2025 Senior Notes. As a result of the debt premium, the effective interest rate on the 5¹/₂% 2025 Senior Notes will be 7.035% over the life of the debt. The exchange of debt allowed the company to adjust its debt-maturity schedule while also allowing it to take advantage of market conditions which the company considered favorable. In February 2006, we issued \$314 million aggregate principal amount of our 5¹/₂% Senior Notes due 2025 in exchange for the same principal amount of our 5¹/₂% Senior Notes due 2025, which had been issued in the private placement transaction in August 2005. The offering of the notes issued in February was registered under the Securities Act through a Form S-4 filing.

During February 2007, we finalized a new \$2 billion credit facility agreement with a group of banks. This agreement provides a five-year senior unsecured revolving credit facility, which replaced the \$1 billion credit facility established in 2004. This facility was initiated to be used for general corporate purposes, which may include working capital requirements, acquisitions, capital expenditures, refinancing and support of commercial paper borrowings. This facility, which was unused as of Aug. 31, 2008, gives us the financial flexibility to satisfy short- and medium-term funding requirements. As of Aug. 31, 2008, we were in compliance with all debt covenants under this credit facility.

Capital Expenditures: Our capital expenditures increased by 80 percent, or \$409 million, to \$918 million in 2008, compared with 2007. The largest drivers of this increase were the expansion of corn seed production facilities and a debottlenecking project at our U.S. *Roundup* production facility. We expect fiscal year 2009 capital expenditures to be in the range of \$1 billion. The primary drivers of this increase compared with 2008 are projects to increase glyphosate production as well as expand corn seed production facilities.

Pension Contributions: In addition to contributing amounts to our pension plans if required by pension plan regulations, we continue to also make discretionary contributions if we believe they are merited. Although contributions to the U.S. qualified plan were not required, we contributed \$120 million in 2008 and \$60 million in 2007 and 2006. For fiscal year 2009, quarterly contributions in the range of \$15 million are planned for the U.S. qualified pension plan. Although the level of required future contributions is unpredictable and depends heavily on plan asset experience and interest rates, we expect to continue to contribute to the plan on a regular basis in the near term.

Share Repurchases: In October 2005, the board of directors authorized the purchase of up to \$800 million of our common stock over a four-year period. In 2008 and 2007, we purchased \$361 million and \$191 million, respectively, of our common stock under the \$800 million authorization. A total of 9.5 million shares have been repurchased under this program. In April 2008, the board of directors authorized a new share repurchase program of up to \$800 million of our common stock over a three-year period. This repurchase program will commence at the time the company's current share repurchase program is completed or Oct. 25, 2009, whichever is earlier.

Dividends: We paid dividends totaling \$419 million in 2008, \$258 million in 2007, and \$207 million in 2006. In June 2008, we increased our dividend 37 percent to \$0.24 per share. We continue to review our options for returning additional value to shareowners, including the possibility of a dividend increase.

Recent Divestiture: In October 2008, we consummated the sale of the Dairy business after receiving approval from the appropriate regulatory agencies and received \$300 million in cash, and may receive additional contingent consideration. The contingent consideration is a 10-year earn-out with potential annual payments being earned by the company if certain revenue levels are exceeded. Based upon current revenue levels we expect the annual payment to be in the range of \$20 million to \$25 million per year.

2008 Acquisitions: In September 2007, we acquired 100 percent of the outstanding stock of Agroeste Sementes, a leading Brazilian corn seed company, for approximately \$91 million (net of cash acquired and debt assumed), inclusive of transaction costs of \$1 million. Agroeste focuses on hybrid corn seed production and serves farmers throughout Brazil. We consummated the transaction with cash. The financial results of this acquisition were included in the Monsanto's consolidated financial statements from the date of acquisition.

In June 2008, we acquired 100 percent of the outstanding stock of De Ruiters and a related company for approximately \$756 million (net of cash acquired and debt assumed), inclusive of transaction costs of \$3 million. De Ruiters is a leading protected-culture vegetable seeds company based in the Netherlands with operations worldwide. Monsanto consummated the transaction with existing cash after receiving approvals from the appropriate regulatory authorities.

Table of Contents

MONSANTO COMPANY

2008 FORM 10-K

In July 2008, we acquired Marmot, S.A., which operates Cristiani, a privately held seed company headquartered in Guatemala City, Guatemala, for \$135 million (net of cash acquired and debt assumed), inclusive of transaction costs of \$3 million. Monsanto consummated the transaction with existing cash.

2007 Acquisitions: On June 1, 2007, we completed the purchase of all the outstanding stock of DPL, the largest cotton seed breeder in the world, for a cash purchase price of \$42 per share, or approximately \$1.5 billion (net of cash acquired and debt assumed), inclusive of transaction costs of \$38 million.

During 2007, our ASI subsidiary acquired 10 regional U.S. seed companies in separate transactions for an aggregate purchase price of \$87 million (net of cash acquired), inclusive of transaction costs of \$3 million, with potential additional earn-out amounts of up to \$9 million. In conjunction with one of these acquisitions, we entered into a five-year global technology license agreement. See Note 9 *Goodwill and Other Intangible Assets* for further discussion of the agreement. Also during 2007, we acquired two European vegetable seeds businesses for \$61 million, inclusive of transaction costs of \$10 million. Additional contingent purchase price may be payable in the future if certain earnings targets are met. Such amounts are not expected to be material.

For all acquisitions described above, the business operations and employees of the acquired entities were added into the Seeds and Genomics segment results upon acquisition. These acquisitions were accounted for as purchase transactions. Accordingly, the assets and liabilities of the acquired entities were recorded at their estimated fair values at the dates of the acquisitions. See Note 4 *Business Combinations* for further discussion of this acquisition.

We have certain obligations and commitments to make future payments under contracts. The following table sets forth our estimates of future payments under contracts as of Aug. 31, 2008. See Note 23 *Commitments and Contingencies* for a further description of our contractual obligations.

Payments Due by Fiscal Year Ending Aug. 31,

(Dollars in millions)	Total	2009	2010	2011	2012	2013	2014 and beyond
Long-Term Debt, including Capital Lease Obligations	\$1,792	\$	\$ 18	\$ 15	\$499	\$ 35	\$1,225
Interest Payments Relating to Long-Term Debt and Capital Lease Obligations ⁽¹⁾	1,646	110	109	108	108	71	1,140
Operating Lease Obligations	412	166	73	52	42	31	48
Purchase Obligations:							
Uncompleted additions to property	346	287	56	3			
Commitments to purchase inventories	1,840	1,274	178	158	119	104	7
Commitments to purchase breeding research	219	45	45	45	45	3	36
R&D alliances and joint venture obligations	81	34	19	17	11		
Other purchase obligations	17	3	3	3	3	3	2
Other Liabilities:							
Postretirement and ESOP liabilities ⁽²⁾	148	104					44
Unrecognized tax benefits ⁽³⁾	317	11					
Other liabilities	267	45	20	19	23	16	144
Total Contractual Obligations	\$7,085	\$2,079	\$521	\$420	\$850	\$263	\$2,646

- (1) For variable rate debt, interest is calculated using the applicable rates as of Aug. 31, 2008.

- (2) Includes the company's planned pension and other post retirement benefit contributions for 2009. The actual amounts funded in 2009 may differ from the amounts listed above. Contributions in 2010 through 2014 and beyond are excluded as those amounts are unknown. Refer to Note 15 Postretirement Benefits Pensions and Note 16 Postretirement Benefits Healthcare and Other Post Employment Benefits for more information. The 2014 and beyond amount relates to the ESOP enhancement liability balance. Refer to Note 17 Employee Savings Plans for more information.

- (3) Unrecognized tax benefits relate to uncertain tax positions recorded under Financial Accounting Standards Board Interpretation No. 48, *Accounting for Uncertainty in Income Taxes* an interpretation of FASB Statement No. 109 (FIN 48), which we adopted on Sept. 1, 2007. We are unable to reasonably predict the timing of tax settlements, as tax audits can involve complex issues and the resolution of those issues may span multiple years, particularly if subject to negotiation or litigation. See Note 12 Income Taxes for more information.

Off-Balance Sheet Arrangements

Under our Separation Agreement with Pharmacia, we are required to indemnify Pharmacia for certain matters, such as environmental remediation obligations and litigation. To the extent we are currently managing any such matters, we evaluate them in the course of managing our own potential liabilities and establish reserves as appropriate. However, additional matters may arise in the future, and we may manage, settle or pay judgments or damages with respect to those matters in

Table of Contents

MONSANTO COMPANY

2008 FORM 10-K

order to mitigate contingent liability and protect Pharmacia and Monsanto. See Note 23 Commitments and Contingencies and Part I Item 3 Legal Proceedings for further information.

Other Information

As discussed in Note 23 Commitments and Contingencies and Item 3 Legal Proceedings, Monsanto is responsible for significant environmental remediation and is involved in a number of lawsuits and claims relating to a variety of issues. Many of these lawsuits relate to intellectual property disputes. We expect that such disputes will continue to occur as the agricultural biotechnology industry evolves.

Seasonality

Our fiscal year end of August 31 synchronizes our quarterly and annual results with the natural flow of the agricultural cycle in our major markets. It provides a more complete picture of the North American and South American growing seasons in the same fiscal year. Sales by our Seeds and Genomics segment, and to a lesser extent, by our Agricultural Productivity segment, are seasonal. In fiscal year 2008, approximately 72 percent of our Seeds and Genomics segment sales occurred in the second and third quarters. This segment's seasonality is primarily a function of the purchasing and growing patterns in North America. Agricultural Productivity segment sales were more evenly spread across our fiscal year quarters in 2008, with approximately 52 percent of these sales occurring in the second half of the year.

Seasonality varies by the world areas where our Agricultural Productivity businesses operate. For example, the United States, Europe and Brazil were the largest contributors to Agricultural Productivity sales in 2008. The United States and Europe experienced most of their sales in the second half of 2008. Brazil had a higher concentration of sales in the first half of 2008.

Net income is the highest in second and third quarters, which correlates with the sales of the Seeds and Genomics segment and its gross profit contribution. Sales and income may shift somewhat between quarters, depending on planting and growing conditions. Our inventory is at its lowest level at the end of our fiscal year, which is consistent with the agricultural cycles in our major markets. Additionally, our trade accounts receivable are at their lowest levels in our first quarter, primarily because of prepayments received on behalf of both segments in the United States, and the seasonality of our sales.

As is the practice in our industry, we regularly extend credit to enable our customers to acquire crop protection products and seeds at the beginning of the growing season. Because of the seasonality of our business and the need to extend credit to customers, we use short-term borrowings to finance working capital requirements. Our need for such financing is generally higher in the second and third quarters of the fiscal year and lower in the first and fourth quarters of the fiscal year. Our customer financing programs are expected to continue to reduce our reliance on commercial paper borrowings.

OUTLOOK

We have achieved an industry-leading position in the areas in which we compete in both of our business segments. However, the outlook for each part of our business is quite different. In the Seeds and Genomics segment, our seeds and traits business is expected to expand. In the Agricultural Productivity segment, our glyphosate business grew through increases in our average net selling prices, and our selective chemistry business is expected to decline. As a result, we are striving to expand our seeds and traits business and working to maintain our position in our chemistry business.

We believe that our company is positioned to sustain earnings growth and strong cash flow, and we remain committed to returning value to shareowners through vehicles such as investments that expand the business, dividends and share repurchases. We will remain focused on cost and cash management for each segment, both to support the progress we have made in managing our investment in working capital and to realize the full earnings potential of our businesses. We plan to continue to seek additional external financing opportunities for our customers as a way to manage receivables for each of our segments. In 2009, we also expect to see increased gross profit as our higher-margin seeds and traits business grows and we realize the full-year impact of improved average net selling prices in our *Roundup* business.

We expect to continue to implement locally responsive business strategies for our businesses in each world area. Outside of the United States, our businesses will continue to face additional challenges related to the risks inherent in operating in emerging markets. We have taken steps to reduce our credit exposure in those areas, which has the potential to affect sales negatively in the near term.

Table of Contents

MONSANTO COMPANY

2008 FORM 10-K

Seeds and Genomics

Our capabilities in plant breeding and biotechnology research are generating a rich and balanced product pipeline that we expect will drive long-term growth. We plan to continue to invest in the areas of seeds, genomics and biotechnology and to invest in technology arrangements that have the potential to increase the efficiency and effectiveness of our R&D efforts. We believe that our seeds and traits businesses will have significant near-term growth opportunities through a combination of improved breeding and continued growth of stacked and second-generation biotech traits.

We expect advanced breeding techniques combined with improved production practices and capital investments to continue to contribute to improved germplasm quality and yields for our seed offerings, leading to increased global demand for both our branded germplasm and our licensed germplasm. Our vegetable portfolio will focus on 25 crops. We plan to continue to apply our molecular breeding and marker capabilities to our vegetable seeds germplasm, and we expect that to lead to growth in that business. The acquisition of De Ruiter will broaden our focus to include the protected-culture vegetable seed market, which is a faster growing sector of the vegetable industry. We also plan to continue making strategic acquisitions by our seed businesses to grow our branded seed market share or expand our germplasm library and strengthen our global breeding programs. We expect to see continued competition in seeds and genomics in the near term. We believe we will have a competitive advantage because of our breeding capabilities and our three-channel sales approach for corn and soybean seeds.

Commercialization of second-generation traits and the stacking of multiple traits in corn and cotton are expected to increase penetration in approved markets, particularly as we continue to price our traits in line with the value growers have experienced. In 2009, we expect that higher-value, stacked-trait products will represent a larger share of our total U.S. corn seed sales than they did in 2008. Acquisitions may also present near-term opportunities to increase penetration of our traits. In particular, we expect that our acquisition of DPL will enable us to accelerate penetration of our second-generation cotton traits in 2009 and later years. We expect the competition in biotechnology to increase, as more competitors launch traits in the United States and internationally by the end of the decade. However, we believe we will have a competitive advantage because we will be poised to deliver second- and third-generation traits when our competitors are delivering their first-generation traits.

Regulatory approvals have been obtained in the United States, Canada, and various importing countries like China and Japan for *Roundup Ready 2 Yield* soybeans, our second-generation glyphosate-tolerant soybean product that is expected to have a controlled commercial release in 2009. In addition, regulatory submissions and reviews for *Roundup Ready 2 Yield* are proceeding in other key soybean-importing countries including the European Union. Significant progress has also been made for our second generation stacked Bt corn product, *YieldGard VT Triple Pro*. The EPA granted registration for *YieldGard VT Triple Pro* with a reduced corn borer refuge requirement for the dual Bt gene-containing product to 20 percent in the southern cotton growing areas from the current 50 percent requirement for single Bt gene corn borer products. In addition, we have submitted an amendment to the EPA for *YieldGard VT Triple Pro* requesting a refuge reduction from 20 percent to 5 percent in the Corn Belt for corn borers. The U.S. Department of Agriculture has also granted deregulation for *YieldGard VT Pro* completing the necessary U.S. approvals for a limited launch in 2009. In Canada *YieldGard VT Triple Pro* was granted food, feed, and environmental release approval from Health Canada and the Canadian Food Inspection Agency (CFIA), respectively. The CFIA was the first agency to grant commercialization approval for *YieldGard VT Pro* with a reduced 5 percent refuge requirement for corn borers. Regulatory submissions have also been initiated for *SmartStax* corn including a request to the EPA for a 5 percent refuge in the Corn Belt for this dual Bt gene product which will control above and below ground pests and is anticipated to launch in the United States in 2010, assuming regulatory approval. Global cultivation opportunities were expanded for corn, with Argentina and South Africa's regulatory approvals for *YieldGard* Corn Borer stacked with *Roundup Ready Corn 2* in 2007, and with Brazil's recent approval for *YieldGard* Corn Borer. *YieldGard* Corn Borer is our first biotech corn product to be commercialized in Brazil.

During 2007, we and BASF announced a long-term joint research and development and commercialization collaboration in plant biotechnology that will focus on high-yielding crops and crops that are tolerant to adverse

conditions such as drought. Over the long-term life of the collaboration, we and BASF will dedicate a joint budget of potentially \$1.5 billion to fund a dedicated pipeline of yield and stress tolerance traits for corn, soybeans, cotton and canola.

Our international traits businesses, in particular, will probably continue to face unpredictable regulatory environments that may be highly politicized. We operate in volatile, and often difficult, economic environments. Although we see growth potential in our India cotton business with the ongoing conversion to new hybrids and *Bollgard II*, this business is currently operating under state governmental pricing directives that we believe limit near-term earnings growth.

Table of Contents

MONSANTO COMPANY

2008 FORM 10-K

In Brazil, we expect to continue to operate our dual-track business model of certified seeds and our point-of-delivery payment system to ensure that we capture value on all our *Roundup Ready* soybeans and *Bollgard* cotton crops grown there. Income is expected to grow as farmers choose to plant more of these approved traits. However, full regulatory system approval of additional traits must be realized for us to see a step change in contributions from seeds and traits. As noted above, *YieldGard* Corn Borer corn was approved recently. The agricultural economy in Brazil is benefiting from relatively strong global commodity prices, particularly for corn and soybeans, however volatility on commodity prices and foreign exchange may impact future farmer profitability. Thus, we continue to maintain our strict credit policy, expand our grain-based collection system, and focus on cash collection and sales, as part of a continuous effort to manage our Brazilian risk against such volatility.

It is likely that rulings of patent infringement from several ongoing court cases in Europe will be required before we can expect to capture value from our *Roundup Ready* soybeans grown in Argentina. One Spanish case, which we have appealed, and a U.K. case have had adverse early results. We recently settled the U.K. case, and both we and the defendants have dismissed our appeals of that matter and agreed to work together to provide commercially-viable technological solutions for agriculture in Argentina. The first case in Holland has now been referred to the European Court of Justice (ECJ) for an interpretation of the EU patent law for biotech products. This will probably take up to two years. It is likely that all other cases on continental Europe will await the outcome of the ECJ ruling. We are continuing to discuss alternative arrangements with various stakeholders. However, we have no certainty that any of these discussions will lead to an income producing outcome in the near term. We do not plan to commercialize new soybean or cotton traits in Argentina until we can achieve more certainty that we would be compensated for the technology.

In March 2008, a judge of the French Supreme Administrative court (Conseil d Etat) rejected an application for interim relief by French farmers, French grower associations and various companies including us to overturn the French government's suspension of planting of *YieldGard* Corn Borer pending review and completion under a new regulatory regime. The outcome means that there will be no sales or planting of this product in France during the forthcoming growing season. The legality of the suspension will be decided after a full hearing before the court later this year.

Agricultural Productivity

We believe our *Roundup* herbicide business will continue to generate a sustainable source of cash and gross profit. Prices of generic formulations of glyphosate herbicides increased during 2008. The generic and private-label pricing can be somewhat unstable during the short-term, but we believe both the short- and long-term trends will be favorable relative to the previous three-year period. We have experienced increased demand in recent years, and we are increasing production capacity at our Luling, Louisiana, plant to meet the anticipated future demand for *Roundup*, as well as for our glyphosate supply business. To sustain the cash and income generation of our *Roundup* business, we will continue to actively manage our inventory and other costs and offer product innovations, superior customer service and logistics and marketing programs to support or allow us to maintain premium prices commensurate with our brands value. Further expansion of crops with our *Roundup Ready* traits may also incrementally increase sales of our *Roundup* products.

We have submitted a mine plan to the U.S. Bureau of Land Management regarding a new phosphate ore mine in Soda Springs, Idaho, that we intend to use to meet existing and future production demands for our *Roundup* herbicides and licensed glyphosate. We anticipate receiving regulatory approvals for our new mine in late 2009. However, we are aware that certain environmental groups have initiated litigation against other phosphate producers to disrupt and delay the permitting process.

Like most other selective herbicides, our selective acetochlor herbicide products face increasing competitive pressures and a declining market, in part because of the rapid penetration of *Roundup Ready* corn in the United States. We will continue to seek ways to optimize our selective herbicides business, as we believe it is important to offer fully integrated crop-protection solutions, particularly in *Roundup Ready* Corn 2. We anticipate a continued decline in this business in the near term, but the gross profit from the *Roundup Ready* traits and from the *Roundup* herbicides used on these acres is significantly higher than the gross profit from the lost selective herbicide sales.

The lawn-and-garden business should continue benefiting from the *Roundup* brand equity in the marketplace and remain a strong cash generator for Monsanto. Price increases and driving purchases to more profitable products will be used to offset higher production cost and increased commission expenses owed to The Scott's Miracle-Gro Company.

Table of Contents

MONSANTO COMPANY

2008 FORM 10-K

CRITICAL ACCOUNTING POLICIES AND ESTIMATES

In preparing our financial statements, we must select and apply various accounting policies. Our most significant policies are described in Note 2 – Significant Accounting Policies. In order to apply our accounting policies, we often need to make estimates based on judgments about future events. In making such estimates, we rely on historical experience, market and other conditions, and on assumptions that we believe to be reasonable. However, the estimation process is by its nature uncertain given that estimates depend on events over which we may not have control. If market and other conditions change from those that we anticipate, our results of operations, financial condition and changes in financial condition may be materially affected. In addition, if our assumptions change, we may need to revise our estimates, or to take other corrective actions, either of which may also have a material effect on our results of operations, financial condition or changes in financial condition. Members of our senior management have discussed the development and selection of our critical accounting estimates, and our disclosure regarding them, with the audit and finance committee of our board of directors, and do so on a regular basis.

We believe that the following estimates have a higher degree of inherent uncertainty and require our most significant judgments. In addition, had we used estimates different from any of these, our results of operations, financial condition or changes in financial condition for the current period could have been materially different from those presented.

Goodwill: The majority of our goodwill relates to our seed company acquisitions. We are required to assess whether any of our goodwill is impaired. In order to do this, we apply judgment in determining our reporting units, which represent component parts of our business. Our annual goodwill impairment assessment involves estimating the fair value of a reporting unit and comparing it with its carrying amount. If the carrying value of the reporting unit exceeds its fair value, additional steps are required to calculate a potential impairment loss. Calculating the fair value of the reporting units requires significant estimates and long-term assumptions. Any changes in key assumptions about the business and its prospects, or any changes in market conditions, interest rates or other externalities, could result in an impairment charge. We estimate the fair value of our reporting units by applying discounted cash flow methodologies. The annual goodwill impairment tests were performed as of March 1, 2008, and March 1, 2007. No indications of goodwill impairment existed as of either date. In 2008 and 2007, we recorded goodwill related to our acquisitions (see Note 4 – Business Combinations). Future declines in the fair value of our reporting units could result in an impairment of goodwill and reduce shareowners' equity.

Intangible Assets: In accordance with SFAS 144, all amortizable intangible assets are assessed for impairment whenever events indicate a possible loss. Such an assessment involves estimating undiscounted cash flows over the remaining useful life of the intangible. If the review indicates that undiscounted cash flows are less than the recorded value of the intangible asset, the carrying amount of the intangible is reduced by the estimated cash-flow shortfall on a discounted basis, and a corresponding loss is charged to the Statement of Consolidated Operations. Significant changes in key assumptions about the business, market conditions and prospects for which the intangible asset is currently utilized or expected to be utilized, could result in an impairment charge.

Litigation and Other Contingencies: We are involved in various intellectual property, tort, contract, antitrust, employee benefit, environmental and other claims and legal proceedings; environmental remediation; and government investigations. We routinely assess the likelihood of adverse judgments or outcomes to those matters, as well as ranges of probable losses, to the extent losses are reasonably estimable. We record accruals for such contingencies to the extent that we conclude their occurrence is probable and the financial impact, should an adverse outcome occur, is reasonably estimable. Disclosure for specific legal contingencies is provided if the likelihood of occurrence is at least reasonably possible and the exposure is considered material to the consolidated financial statements. In making determinations of likely outcomes of litigation matters, management considers many factors. These factors include, but are not limited to, past history, scientific and other evidence, and the specifics and status of each matter. If our assessment of the various factors changes, we may change our estimates. That may result in the recording of an accrual or a change in a previously recorded accrual. Predicting the outcome of claims and litigation, and estimating

related costs and exposure involves substantial uncertainties that could cause actual costs to vary materially from estimates and accruals.

Our environmental and litigation reserve at Aug. 31, 2008, was \$272 million. This reserve represents the discounted cost that we would expect to incur in connection with litigation and environmental matters. We expect to pay for these potential liabilities over time as the various legal proceedings are resolved and remediation is performed at the various environmental

Table of Contents

MONSANTO COMPANY

2008 FORM 10-K

sites. Actual costs to us may differ materially from this estimate. Further, additional litigation or environmental matters that are not reflected in this reserve may arise or become probable and reasonably estimable in the future, and we may also manage, settle or pay judgments or damages with respect to litigation or environmental matters in order to mitigate contingent potential liabilities.

Pensions and Other Postretirement Benefits: The actuarial valuations of our pension and other postretirement benefit costs, assets and obligations affect our financial position, results of operations and cash flows. These valuations require the use of assumptions and long-range estimates. These assumptions include, among others: assumptions regarding interest and discount rates, assumed long-term rates of return on pension plan assets, health care cost trends, and projected rates of salary increases. We regularly evaluate these assumptions and estimates as new information becomes available. Changes in assumptions (caused by conditions in the debt and equity markets, changes in asset mix, and plan experience, for example) could have a material effect on our pension obligations and expenses, and can affect our net income (loss), liabilities, and shareowners' equity. In addition, changes in assumptions such as rates of return, fixed income rates used to value liabilities or declines in the fair value of plan assets, may result in voluntary decisions or mandatory requirements to make additional contributions to our qualified pension plan. Because of the design of our postretirement health care plans, our liabilities associated with these plans are not highly sensitive to assumptions regarding health care cost trends.

In 2007, we adopted SFAS 158 and recognized the under funded status which resulted in a pre-tax charge of \$72 million to accumulated other comprehensive income. Prior to the adoption of SFAS 158, in fiscal years 2007 and 2006, we recorded a \$79 million decrease and a \$148 million increase, respectively, to adjust the additional minimum pension liability in our financial statements. These adjustments were necessary to keep the recorded pension liability at least equal to the unfunded accumulated benefit obligation for the plan. These noncash adjustments to adjust the additional minimum pension liability affected shareowners' equity, but did not affect our results of operations. Fiscal year 2009 pension expense, which will be determined using assumptions as of Aug. 31, 2008, is expected to increase compared with fiscal year 2008 because we decreased our expected rate of return on assets assumption as of Aug. 31, 2008, to 8 percent. This assumption was 8.25 percent in 2008, 8.5 in 2007, and 8.75 percent in 2006. To determine the rate of return, we consider the historical experience and expected future performance of the plan assets, as well as the current and expected allocation of the plan assets. The U.S. qualified pension plan's asset allocation as of Aug. 31, 2008, was approximately 62 percent equity securities, 32 percent debt securities and 6 percent other investments, in line with policy ranges. We periodically evaluate the allocation of plan assets among the different investment classes to ensure that they are within policy guidelines and ranges. While we do not currently expect to further reduce the assumed rate of return in the near term, holding all other assumptions constant, we estimate that a half-percent decrease in the expected return on plan assets would lower our fiscal year 2009 pre-tax income by approximately \$7 million.

Our discount rate assumption for the 2009 U.S. pension expense is 6.50 percent. This assumption was 6.05 percent, 5.9 percent and 5 percent in 2008, 2007 and 2006, respectively. In determining the discount rate, we use yields on high-quality fixed-income investments (including among other things, Moody's Aa corporate bond yields) that match the duration of the pension obligations. To the extent the discount rate increases or decreases, our pension obligation is decreased or increased accordingly. Holding all other assumptions constant, we estimate that a half-percent decrease in the discount rate will decrease our fiscal year 2009 pre-tax income by approximately \$5 million. Our salary rate assumption as of Aug. 31, 2008, was approximately 6 percent for the next year, 5 percent for the following year and then 4 percent prospectively on all plans. Holding all other assumptions constant, we estimate that a half-percent increase in the salary rate assumption would decrease our fiscal year 2009 pretax income \$1 million.

Income Taxes: Management regularly assesses the likelihood that deferred tax assets will be recovered from future taxable income. To the extent management believes that it is more likely than not that a deferred tax asset will not be realized, a valuation allowance is established. When a valuation allowance is established or increased, an income tax charge is included in the consolidated financial statements and net deferred tax assets are adjusted accordingly.

Changes in tax laws, statutory tax rates, and estimates of the company's future taxable income levels could result in

actual realization of the deferred tax assets being materially different from the amounts provided for in the consolidated financial statements. If the actual recovery amount of the deferred tax asset is less than anticipated, we would be required to write off the remaining deferred tax asset and increase the tax provision, resulting in a reduction of net income and shareowners' equity.

On Sept. 1, 2007, we adopted the provisions of FIN 48. Under FIN 48, in order to recognize an uncertain tax benefit, the taxpayer must be more likely than not of sustaining the position, and the measurement of the benefit is calculated as the

Table of Contents

MONSANTO COMPANY

2008 FORM 10-K

largest amount that is more than 50 percent likely to be realized upon resolution of the benefit. Tax authorities regularly examine the company's returns in the jurisdictions in which we do business. Management regularly assesses the tax risk of the company's return filing positions and believes its accruals for uncertain tax benefits are adequate as of Aug. 31, 2008.

As of Aug. 31, 2008, management has recorded a deferred tax asset of \$439 million in Brazil primarily related to net tax operating loss carryforwards (NOLs) that have no expiration date. We also had available approximately \$300 million of U.S. foreign tax credit carryforwards. Management continues to believe it is more likely than not that we will realize our deferred tax assets in Brazil and the United States.

As of Aug. 31, 2005, management had recorded a valuation allowance of \$103 million in Argentina related to NOLs. Monsanto Argentina generated taxable income in its 2007 and 2006 tax year (calendar 2007 and 2006) and, accordingly, reversed \$33 million and \$15 million of the valuation allowance as a favorable adjustment to our 2007 and 2006 tax provision, respectively. At the beginning of fiscal 2008, we had a valuation allowance of \$43 million related to the remaining NOLs. However, based upon improvements in Monsanto Argentina's operations, we now believe it is more likely than not that such deferred tax assets will be realized. Accordingly, the previously recorded \$43 million valuation allowance was reversed in third quarter 2008.

Marketing Programs: Accrued marketing program costs are recorded in accordance with EITF Issue No. 01-9, *Accounting for Consideration Given by a Vendor to a Customer*, based upon specific performance criteria met by our customers, such as purchase volumes, promptness of payment, and market share increases. The associated cost of marketing programs is recorded in net sales in the Statements of Consolidated Operations. As actual expenses are not known at the time of the sale, an estimate based on the best available information (such as historical experience) is used as a basis for the liability. Management analyzes and reviews the marketing program balances on a quarterly basis and adjustments are recorded as appropriate.

Allowance for Doubtful Trade Receivables: We maintain an allowance for doubtful trade receivables. This allowance represents our estimate of accounts receivable that, subsequent to the time of sale, we have estimated to be of doubtful collectibility because our customers may not be able to pay. In determining the adequacy of the allowance for doubtful accounts, we consider historical bad-debt experience, customer creditworthiness, market conditions, and economic conditions. We perform ongoing evaluations of our allowance for doubtful accounts, and we increase the allowance as required. Increases in this allowance will reduce the recorded amount of our net trade receivables, net income and shareowners' equity, and increase our bad-debt expense.

Allowances for Returns and Inventory Obsolescence: Where the right of return exists in our seed business, sales revenues are reduced at the time of sale to reflect expected returns. In order to estimate the expected returns, management analyzes historical returns, economic trends, market conditions, and changes in customer demand. In addition, we establish allowances for obsolescence of inventory equal to the difference between the cost of inventory and the estimated market value, based on assumptions about future demand and market conditions. We regularly evaluate the adequacy of our return allowances and inventory obsolescence reserves. If economic and market conditions are different from those we anticipated, actual returns and inventory obsolescence could be materially different from the amounts provided for in our consolidated financial statements. If seed returns are higher than anticipated, our net sales, net trade receivables, net income and shareowners' equity for future periods will be reduced. If inventory obsolescence is higher than expected, our cost of goods sold will be increased, and our inventory valuations, net income, and shareowners' equity will be reduced.

Stock-Based Compensation: SFAS No. 123 (revised 2004), *Share-Based Payment* (SFAS 123R) requires the measurement and recognition of compensation expense for all share-based payment awards made to employees and directors based on estimated fair value. Pre-tax stock-based compensation expense recognized under SFAS 123R was \$90 million and \$73 million in 2008 and 2007, respectively.

We estimate the value of employee stock options on the date of grant using a lattice-binomial model. The determination of fair value of share-based payment awards on the date of grant using an option-pricing model is affected by our stock price as well as assumptions regarding a number of highly complex and subjective variables.

These variables include, but are not limited to, the expected stock price volatility over the term of the awards, and actual and projected employee stock option exercise behaviors. The use of a lattice-binomial model requires extensive actual employee exercise behavior data and a number of complex assumptions including expected volatility, risk-free interest rate, and expected dividends. We based our estimate of future volatility on a combination of historical volatility on our stock and implied volatility on publicly traded

Table of Contents

MONSANTO COMPANY

2008 FORM 10-K

options on our stock. The risk-free interest rate assumption is based on observed interest rates appropriate for the term of our employee stock options. The dividend yield assumption is based on the history and expectation of dividend payouts. The weighted-average estimated value of employee stock options granted during 2008 was \$30.04 per share using the lattice-binomial model.

We estimate the value of restricted stock and restricted stock units based on the fair value of our stock on the date of grant. When dividends are not paid on outstanding restricted stock units, we value the award by reducing the grant-date price by the present value of the dividends expected to be paid, discounted at the appropriate risk-free interest rate. The risk-free interest rate assumption is based on observed interest rates appropriate for the term of our restricted stock units. The weighted-average value of restricted stock units granted during 2008 was \$128.13.

Pre-tax unrecognized compensation expense, net of estimated forfeitures, for stock options, nonvested restricted stock and nonvested restricted stock units was \$153 million as of Aug. 31, 2008, which will be recognized over weighted-average remaining vesting periods of two to four years. This increased during 2008 due primarily to 874,900 restricted stock units issued to certain eligible Monsanto employees under a one-time, broad-based award.

If factors change and we employ different assumptions in the application of SFAS 123R in future periods, or if employee exercise behavior or forfeiture rates of restricted stock units is significantly different from the assumptions in our model, the compensation expense that we record under SFAS 123R may differ significantly from what we have recorded in the current period.

NEW ACCOUNTING STANDARDS

In June 2008, the FASB issued FASB Staff Position (FSP) EITF Issue No. 03-6-1, *Determining Whether Instruments Granted in Share-Based Payment Transactions Are Participating Securities* (FSP EITF 03-6-1). FSP EITF 03-6-1 requires that unvested share-based payment awards that contain rights to receive non-forfeitable dividends or dividend equivalents to be included in the two-class method of computing earnings per share as described in SFAS No. 128, *Earnings per Share*. This FSP is effective for financial statements issued for fiscal years beginning after Dec. 15, 2008, and interim periods within those years. Accordingly, we will adopt FSP EITF 03-6-1 in fiscal year 2010. We are currently evaluating the impact of FSP EITF 03-6-1 on the consolidated financial statements.

In May 2008, the FASB issued SFAS No. 162, *The Hierarchy of Generally Accepted Accounting Principles* (SFAS 162). SFAS 162 identifies the sources of accounting principles and the framework for selecting principles to be used in the preparation and presentation of financial statements in accordance with generally accepted accounting principles. This statement will be effective for Monsanto in first quarter 2009. We do not anticipate the adoption of SFAS 162 will have an effect on the consolidated financial statements.

In April 2008, the FASB issued FSP SFAS No. 142-3, *Determining the Useful Life of Intangible Assets* (FSP SFAS 142-3). FSP SFAS 142-3 amends the factors that should be considered in developing renewal or extension assumptions used to determine the useful life of a recognized intangible asset under SFAS 142. This FSP must be applied prospectively to intangible assets acquired after the effective date. This FSP is effective for fiscal years beginning after Dec. 15, 2008, and interim periods within those years. Accordingly, we will adopt FSP SFAS 142-3 in fiscal year 2010. We are currently evaluating the impact of FSP SFAS 142-3 on the consolidated financial statements.

In March 2008, the FASB issued SFAS No. 161, *Disclosures about Derivative Instruments and Hedging Activities* (SFAS 161). SFAS 161 amends and expands the disclosure requirements of SFAS 133, *Accounting for Derivative Instruments and Hedging Activities* (SFAS 133). It requires qualitative disclosures about objectives and strategies for using derivatives, quantitative disclosures about fair value amounts of gains and losses on derivative instruments, and disclosures about credit-risk-related contingent features in derivative agreements. This statement is effective for financial statements issued for fiscal periods beginning after Nov. 15, 2008. Accordingly, we will adopt SFAS 161 in second quarter 2009. We are currently evaluating the impact of SFAS 161 on the consolidated financial statements.

In December 2007, the FASB issued SFAS No. 160, *Noncontrolling Interests in Consolidated Financial Statements an amendment of ARB No. 51* (SFAS 160). SFAS 160 requires an entity to clearly identify and present its ownership interests in subsidiaries held by parties other than the entity in the consolidated financial statements within the equity

section but separate from the entity's equity. It also requires the amount of consolidated net income attributable to the parent and to the

Table of Contents

MONSANTO COMPANY

2008 FORM 10-K

noncontrolling interest be clearly identified and presented on the face of the consolidated statement of income; changes in ownership interest be accounted for similarly, as equity transactions; and when a subsidiary is deconsolidated, any retained noncontrolling equity investment in the former subsidiary and the gain or loss on the deconsolidation of the subsidiary be measured at fair value. This statement is effective for financial statements issued for fiscal years beginning after Dec. 15, 2008. Accordingly, we will adopt SFAS 160 in fiscal year 2010. We are currently evaluating the impact of SFAS 160 on the consolidated financial statements.

In December 2007, the FASB issued SFAS No. 141 (revised 2007), *Business Combinations* (SFAS 141R). Under SFAS 141R, an entity is required to recognize the assets acquired, liabilities assumed, contractual contingencies and contingent consideration measured at their fair value at the acquisition date. It further requires that acquisition-related costs are to be recognized separately from the acquisition and expensed as incurred. In addition, acquired in-process research and development (IPR&D) is capitalized at fair value as an intangible asset and amortized over its estimated useful life. SFAS 141R is effective for business combinations for which the acquisition date is after the beginning of the first annual reporting period beginning after Dec. 15, 2008. Accordingly, we will adopt SFAS 141R in fiscal year 2010. We are currently evaluating the impact of SFAS 141R on the consolidated financial statements.

In February 2007, the FASB issued SFAS No. 159, *The Fair Value Option for Financial Assets and Financial Liabilities* (SFAS 159). SFAS 159 permits entities to choose to measure many financial instruments and certain other items at fair value. The objective is to improve financial reporting by providing entities with the opportunity to mitigate volatility in reported earnings caused by measuring related assets and liabilities using different measurement techniques. SFAS 159 requires additional disclosures related to the fair value measurements included in the entity's financial statements. This statement is effective for financial statements issued for fiscal years beginning after Nov. 15, 2007. Accordingly, we will adopt SFAS 159 in fiscal year 2009. We do not believe the adoption of SFAS 159 will have a material impact on the consolidated financial statements because we have not made any fair value measurement elections.

In September 2006, the FASB issued SFAS No. 157, *Fair Value Measurement* (SFAS 157). SFAS 157 defines fair value, establishes a framework for measuring fair value in generally accepted accounting principles, and expands disclosures about fair value measurements. This statement is effective for financial statements issued for fiscal years beginning after Nov. 15, 2007. Accordingly, we will adopt SFAS 157 in fiscal year 2009 for items that are recognized or disclosed at fair value in the financial statements on a recurring basis (at least annually). We have not completed our evaluation of the impact of adopting SFAS 157 on the consolidated financial statements. The adoption of SFAS 157 may require modification of our fair value measurements and will require expanded disclosures in the notes to the consolidated financial statements.

ITEM 7A. QUANTITATIVE AND QUALITATIVE DISCLOSURES ABOUT MARKET RISK

We are exposed to the effect of interest rate changes, foreign currency fluctuations, and changes in commodity and equity prices. Market risk represents the risk of a change in the value of a financial instrument, derivative or nonderivative, caused by fluctuations in interest rates, currency exchange rates, and commodity and equity prices. Monsanto handles market risk in accordance with established policies by engaging in various derivative transactions. Such transactions are not entered into for trading purposes.

See Notes 2 and 3 to the consolidated financial statements for further details regarding the accounting and disclosure of our derivative instruments and hedging activities.

The sensitivity analysis discussed below presents the hypothetical change in fair value of those financial instruments held by the company as of Aug. 31, 2008, that are sensitive to changes in interest rates, currency exchange rates, and commodity and equity prices. Actual changes may prove to be greater or less than those hypothesized.

Changes in Interest Rates: Because the company's short- and long-term debt exceeds cash and investments, Monsanto's interest-rate risk exposure pertains primarily to the debt portfolio. To the extent that we have cash available for investment to ensure liquidity, we will invest that cash only in short-term instruments. The majority of our debt as of Aug. 31, 2008, consisted of fixed-rate long-term obligations.

Table of Contents

MONSANTO COMPANY

2008 FORM 10-K

Market risk with respect to interest rates is estimated as the potential change in fair value resulting from an immediate hypothetical 1 percentage point parallel shift in the yield curve. The fair values of the company's investments and loans are based on quoted market prices or discounted future cash flows. We currently hold debt and investments that mature in less than 360 days, and variable rate medium-term notes. As the carrying amounts on short-term loans and investments maturing in less than 360 days and the carrying amounts of variable-rate medium-term notes approximate their respective fair values, a 1 percentage point change in the interest rates would not result in a material change in the fair value of our debt and investments portfolio.

On Aug. 14, 2002, Monsanto issued \$600 million of 7³/₈% Senior Notes, and on Aug. 23, 2002, the aggregate principal amount of the outstanding notes was increased to \$800 million. In August 2005, the company exchanged \$314 million of new 5¹/₂% Senior Notes due 2025 for \$314 million of the company's outstanding 7³/₈% Senior Notes. As of Aug. 31, 2008, the fair value of the 7³/₈% Senior Notes was \$533 million, and the fair value of the 5¹/₂% 2025 Senior Notes was \$286 million. A 1 percentage point change in the interest rates would change the fair value of the remaining 7³/₈% Senior Notes by approximately \$19 million, and the fair value of the 5¹/₂% 2025 Senior Notes by \$33 million.

In July 2005, Monsanto issued \$400 million of 5¹/₂% Senior Notes due 2035. As of Aug. 31, 2008, the fair value of the 5¹/₂% 2035 Senior Notes was \$353 million. A 1 percentage point change in the interest rates would change the fair value of the 5¹/₂% 2035 Senior Notes by \$51 million.

In April 2008, Monsanto issued \$300 million of 5¹/₈% Senior Notes due 2018. As of Aug. 31, 2008, the fair value of the 5¹/₈% 2018 Senior Notes was \$294 million. A 1 percentage point change in the interest rates would change the fair value of the 5¹/₈% 2018 Senior Notes by \$23 million.

In April 2008, Monsanto issued \$250 million of 5⁷/₈% Senior Notes due 2038. As of Aug. 31, 2008, the fair value of the 5⁷/₈% 2038 Senior Notes was \$243 million. A 1 percentage point change in the interest rates would change the fair value of the 5⁷/₈% 2038 Senior Notes by \$37 million.

Foreign Currency Fluctuations: In managing foreign currency risk, Monsanto focuses on reducing the volatility in consolidated cash flow and earnings caused by fluctuations in exchange rates. We use foreign-currency forward exchange contracts and foreign-currency options to manage the net currency exposure, in accordance with established hedging policies. Monsanto hedges recorded commercial transaction exposures, intercompany loans, net investments in foreign subsidiaries, and forecasted transactions. The company's significant hedged positions included the European euro, the Brazilian real, the Canadian dollar, the Romanian leu and the Argentine peso. Unfavorable currency movements of 10 percent would negatively affect the fair values of the derivatives held to hedge currency exposures by \$180 million.

Changes in Commodity Prices: Monsanto uses futures contracts to protect itself against commodity price increases and uses options contracts to limit the unfavorable effect that price changes could have on these purchases. The company's futures and options contracts are accounted for as cash flow hedges and are mainly in the Seeds and Genomics segment. The majority of these contracts hedge the committed or future purchases of, and the carrying value of payables to growers for, soybean and corn inventories. A 10 percent decrease in the prices would have a negative effect on the fair value of these instruments of \$41 million. We also use natural gas and diesel swaps and natural gas options to manage energy input costs. A 10 percent decrease in price of gas and diesel would have a negative effect on the fair value of these instruments of \$12 million.

Changes in Equity Prices: The company also has investments in marketable equity securities. All such investments are classified as long-term available-for-sale investments. The fair value of these investments is \$23 million. These securities are listed on a stock exchange or quoted in an over-the-counter market. If the market price of the traded securities should decrease by 10 percent, the fair value of the equities would decrease by \$2 million. See Note 10 Investments and Equity Affiliates for further details.

Table of Contents

MONSANTO COMPANY

2008 FORM 10-K

ITEM 8. FINANCIAL STATEMENTS AND SUPPLEMENTARY DATA**Management Report**

Monsanto Company's management is responsible for the fair presentation and consistency, in accordance with accounting principles generally accepted in the United States of America, of all the financial information included in this Form 10-K. Where necessary, the information reflects management's best estimates and judgments.

Management is also responsible for establishing and maintaining an effective system of internal control over financial reporting. The purpose of this system is to provide reasonable assurance that Monsanto's assets are safeguarded against material loss from unauthorized acquisition, use or disposition, that authorized transactions are properly recorded to permit the preparation of accurate financial information in accordance with generally accepted accounting principles, that records are maintained which accurately and fairly reflect the transactions and dispositions of the company, and that receipts and expenditures are being made only in accordance with authorizations of management and directors of the company. This system of internal control over financial reporting is supported by formal policies and procedures, including a Business Conduct program designed to encourage and assist employees in living up to high standards of integrity, as well as a Code of Ethics for Chief Executive and Senior Financial Officers. Management seeks to maintain the effectiveness of internal control over financial reporting by careful personnel selection and training, division of responsibilities, establishment and communication of policies, and ongoing internal reviews and audits. See Management's Annual Report on Internal Control over Financial Reporting for Management's conclusion of the effectiveness of Monsanto's internal control over financial reporting as of Aug. 31, 2008.

Monsanto's consolidated financial statements have been audited by Deloitte & Touche LLP, independent registered public accounting firm. Their audits were conducted in accordance with the standards of the Public Company Accounting Oversight Board (United States), and included a test of financial controls, tests of accounting records, and such other procedures as they considered necessary in the circumstances.

The Audit and Finance Committee, composed entirely of outside directors, meets regularly with management, with the internal auditors and with the independent registered public accounting firm to review accounting, financial reporting, auditing and internal control matters. The committee has direct and private access to the registered public accounting firm and internal auditors.

/s/ Hugh Grant

Hugh Grant

Chairman, President and Chief Executive Officer

/s/ Terrell K. Crews

Terrell K. Crews

Executive Vice President and Chief Financial Officer

Oct. 23, 2008

Table of Contents

MONSANTO COMPANY

2008 FORM 10-K

Management's Annual Report on Internal Control over Financial Reporting

Management of Monsanto Company is responsible for establishing and maintaining adequate internal control over financial reporting as defined in Rules 13a-15(f) and 15d-15(f) under the Exchange Act. Under the supervision and with the participation of our management, including the Chief Executive Officer and the Chief Financial Officer, we conducted an evaluation of the effectiveness of our internal control over financial reporting based on the framework and criteria established in *Internal Control - Integrated Framework*, issued by the Committee of Sponsoring Organizations of the Treadway Commission (COSO).

In conducting our evaluation of the effectiveness of our internal control over financial reporting as of Aug. 31, 2008, we have excluded the acquisitions of De Ruiter Seeds Group, B.V. and Semillas Cristiani Burkard, as permitted by the guidance issued by the Office of the Chief Accountant of the Securities and Exchange Commission. These acquisitions were completed in the fourth quarter of 2008 and in total constituted 5 percent of total assets as of Aug. 31, 2008, and less than 1 percent of total revenues for the fiscal year then ended. See Note 4 - Business Combinations for a further discussion of these acquisitions and their impact on Monsanto's Consolidated Financial Statements. Based on our evaluation under the COSO framework, management concluded that the company maintained effective internal control over financial reporting as of Aug. 31, 2008.

The company's independent registered public accounting firm, Deloitte & Touche LLP, was appointed by the Audit and Finance Committee of the company's Board of Directors, and ratified by the company's shareowners. Deloitte & Touche LLP has audited and reported on the Consolidated Financial Statements of Monsanto Company and subsidiaries and the effectiveness of the company's internal control over financial reporting. The reports of the independent registered public accounting firm are contained in Item 8 of this Annual Report.

/s/ Hugh Grant

Hugh Grant

Chairman, President and Chief Executive Officer

/s/ Terrell K. Crews

Terrell K. Crews

Executive Vice President and Chief Financial Officer

Oct. 23, 2008

Table of Contents

MONSANTO COMPANY

2008 FORM 10-K

Report of Independent Registered Public Accounting Firm

To the Shareowners of Monsanto Company:

We have audited the internal control over financial reporting of Monsanto Company and subsidiaries (the Company) as of August 31, 2008, based on criteria established in *Internal Control – Integrated Framework* issued by the Committee of Sponsoring Organizations of the Treadway Commission. As described in Management’s Annual Report on Internal Control over Financial Reporting, management excluded from its assessment the internal control over financial reporting at Semillas Cristiani Burkard (Cristiani) and De Ruiter Seeds Group B.V. (De Ruiter), which were acquired on July 1, 2008 and June 13, 2008, respectively. These acquisitions constitute 5% of total assets and less than 1% of total revenues of the consolidated financial statement amounts as of and for the year ended August 31, 2008. Accordingly, our audit did not include the internal control over financial reporting at Cristiani and De Ruiter. The Company’s management is responsible for maintaining effective internal control over financial reporting and for its assessment of the effectiveness of internal control over financial reporting, included in the accompanying Management’s Annual Report on Internal Control over Financial Reporting. Our responsibility is to express an opinion on the Company’s internal control over financial reporting based on our audit.

We conducted our audit in accordance with the standards of the Public Company Accounting Oversight Board (United States). Those standards require that we plan and perform the audit to obtain reasonable assurance about whether effective internal control over financial reporting was maintained in all material respects. Our audit included obtaining an understanding of internal control over financial reporting, assessing the risk that a material weakness exists, testing and evaluating the design and operating effectiveness of internal control based on the assessed risk, and performing such other procedures as we considered necessary in the circumstances. We believe that our audit provides a reasonable basis for our opinion.

A company’s internal control over financial reporting is a process designed by, or under the supervision of, the company’s principal executive and principal financial officers, or persons performing similar functions, and effected by the company’s board of directors, management, and other personnel to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles. A company’s internal control over financial reporting includes those policies and procedures that (1) pertain to the maintenance of records that, in reasonable detail, accurately and fairly reflect the transactions and dispositions of the assets of the company; (2) provide reasonable assurance that transactions are recorded as necessary to permit preparation of financial statements in accordance with generally accepted accounting principles, and that receipts and expenditures of the company are being made only in accordance with authorizations of management and directors of the company; and (3) provide reasonable assurance regarding prevention or timely detection of unauthorized acquisition, use, or disposition of the company’s assets that could have a material effect on the financial statements.

Because of the inherent limitations of internal control over financial reporting, including the possibility of collusion or improper management override of controls, material misstatements due to error or fraud may not be prevented or detected on a timely basis. Also, projections of any evaluation of the effectiveness of the internal control over financial reporting to future periods are subject to the risk that the controls may become inadequate because of changes in conditions, or that the degree of compliance with the policies or procedures may deteriorate.

In our opinion, the Company maintained, in all material respects, effective internal control over financial reporting as of August 31, 2008, based on the criteria established in *Internal Control – Integrated Framework* issued by the Committee of Sponsoring Organizations of the Treadway Commission.

Table of Contents

MONSANTO COMPANY

2008 FORM 10-K

We have also audited, in accordance with the standards of the Public Company Accounting Oversight Board (United States), the statement of consolidated financial position as of August 31, 2008 and the related statements of consolidated operations, cash flows, shareowners' equity, and comprehensive income for year ended August 31, 2008, of the Company and our report dated October 23, 2008 expressed an unqualified opinion on those financial statements and included an explanatory paragraph regarding the Company's adoption of Financial Accounting Standards Board Interpretation No. 48, *Accounting for Uncertainty in Income Taxes – an interpretation of FASB Statement No. 109*; Statement of Financial Accounting Standards No. 158, *Employers' Accounting for Defined Benefit Pension and Other Postretirement Plans – an amendment of FASB Statements No. 87, 88, 106, and 132(R)*; and Financial Accounting Standards Board Interpretation No. 47, *Accounting for Conditional Asset Retirement Obligations – an interpretation of FASB Statement No. 143*, effective September 1, 2007, August 31, 2007, and August 31, 2006, respectively.

/s/ DELOITTE & TOUCHE LLP

St. Louis, Missouri

October 23, 2008

Table of Contents

MONSANTO COMPANY

2008 FORM 10-K

Report of Independent Registered Public Accounting Firm

To the Shareowners of Monsanto Company:

We have audited the accompanying statements of consolidated financial position of Monsanto Company and subsidiaries (the Company) as of August 31, 2008 and 2007, and the related statements of consolidated operations, cash flows, shareowners' equity, and comprehensive income for each of the three years in the period ended August 31, 2008. These financial statements are the responsibility of the Company's management. Our responsibility is to express an opinion on these financial statements based on our audits.

We conducted our audits in accordance with the standards of the Public Company Accounting Oversight Board (United States). Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free of material misstatement. An audit includes examining, on a test basis, evidence supporting the amounts and disclosures in the financial statements. An audit also includes assessing the accounting principles used and significant estimates made by management, as well as evaluating the overall financial statement presentation. We believe that our audits provide a reasonable basis for our opinion.

In our opinion, such consolidated financial statements present fairly, in all material respects, the financial position of Monsanto Company and subsidiaries as of August 31, 2008 and 2007, and the results of their operations and their cash flows for each of the three years in the period ended August 31, 2008, in conformity with accounting principles generally accepted in the United States of America.

As discussed in Note 2 to the consolidated financial statements, the Company adopted Financial Accounting Standards Board Interpretation No. 48, *Accounting for Uncertainty in Income Taxes – an interpretation of FASB Statement No. 109*; Statement of Financial Accounting Standards No. 158, *Employers' Accounting for Defined Benefit Pension and Other Postretirement Plans – an amendment of FASB Statements No. 87, 88, 106, and 132(R)*; and Financial Accounting Standards Board Interpretation No. 47, *Accounting for Conditional Asset Retirement Obligations – an interpretation of FASB Statement No. 143*, effective September 1, 2007, August 31, 2007, and August 31, 2006, respectively.

We have also audited, in accordance with the standards of the Public Company Accounting Oversight Board (United States), the Company's internal control over financial reporting as of August 31, 2008, based on the criteria established in *Internal Control – Integrated Framework* issued by the Committee of Sponsoring Organizations of the Treadway Commission and our report dated October 23, 2008 expressed an unqualified opinion on the Company's internal control over financial reporting.

/s/ DELOITTE & TOUCHE LLP

St. Louis, Missouri

October 23, 2008

Table of Contents

MONSANTO COMPANY

2008 FORM 10-K

Statements of Consolidated Operations

(Dollars in millions, except per share amounts)	Year Ended Aug. 31,		
	2008	2007	2006
Net Sales	\$11,365	\$8,349	\$7,065
Cost of goods sold	5,188	4,119	3,622
Gross Profit	6,177	4,230	3,443
Operating Expenses:			
Selling, general and administrative expenses	2,312	1,858	1,604
Research and development expenses	980	770	700
Acquired in-process research and development (see Note 4)	164	193	
Total Operating Expenses	3,456	2,821	2,304
Income from Operations	2,721	1,409	1,139
Interest expense	110	136	133
Interest income	(132)	(120)	(54)
Solutia-related (income) expenses net (see Note 25)	(187)	40	29
Other expense net	4	25	13
Income from Continuing Operations Before Income Taxes and Minority Interest	2,926	1,328	1,018
Income tax provision	899	403	330
Minority interest expense	20	12	17
Income from Continuing Operations	2,007	913	671
Discontinued Operations (see Note 27):			
Income from operations of discontinued businesses	20	52	32
Income tax provision (benefit)	3	(28)	8
Income on Discontinued Operations	17	80	24
Income Before Cumulative Effect of Accounting Change	2,024	993	695
Cumulative Effect of a Change in Accounting Principle, Net of Tax Benefit (see Note 2)			(6)
Net Income	\$ 2,024	\$ 993	\$ 689
Basic Earnings (Loss) per Share:			
Income from continuing operations	\$ 3.66	\$ 1.68	\$ 1.24
Income on discontinued operations	0.03	0.15	0.05

Cumulative effect of accounting change			(0.01)
<hr/>			
Net Income	\$ 3.69	\$ 1.83	\$ 1.28
<hr/>			
Diluted Earnings (Loss) per Share:			
Income from continuing operations	\$ 3.59	\$ 1.65	\$ 1.22
Income on discontinued operations	0.03	0.14	0.04
Cumulative effect of accounting change			(0.01)
<hr/>			
Net Income	\$ 3.62	\$ 1.79	\$ 1.25
<hr/>			

The accompanying notes are an integral part of these consolidated financial statements.

Table of Contents

MONSANTO COMPANY

2008 FORM 10-K

Statements of Consolidated Financial Position

(Dollars in millions, except share amounts)	As of Aug. 31,	
	2008	2007
Assets		
Current Assets:		
Cash and cash equivalents	\$ 1,613	\$ 866
Trade receivables net (see Note 5)	2,067	1,499
Miscellaneous receivables	742	407
Deferred tax assets	338	449
Inventories (see Note 7)	2,453	1,719
Assets of discontinued operations (see Note 27)	153	
Other current assets	243	144
Total Current Assets	7,609	5,084
Total property, plant and equipment	6,725	5,916
Less accumulated depreciation	3,402	3,260
Property, Plant and Equipment Net (see Note 8)	3,323	2,656
Goodwill (see Note 9)	3,132	2,625
Other Intangible Assets Net (see Note 9)	1,531	1,415
Noncurrent Deferred Tax Assets	1,000	730
Long-Term Receivables Net (see Note 5)	636	79
Noncurrent Assets of Discontinued Operations (see Note 27)	236	
Other Assets	524	394
Total Assets	\$17,991	\$12,983
Liabilities and Shareowners Equity		
Current Liabilities:		
Short-term debt, including current portion of long-term debt	\$ 24	\$ 270
Accounts payable	1,090	649
Income taxes payable	161	150
Accrued compensation and benefits	441	349
Accrued marketing programs	754	517
Deferred revenues	867	260
Grower production accruals	172	86
Dividends payable	132	96
Liabilities of discontinued operations (see Note 27)	26	
Miscellaneous short-term accruals	772	698
Total Current Liabilities	4,439	3,075

Long-Term Debt	1,792	1,150
Postretirement Liabilities	590	542
Long-Term Deferred Revenue	566	
Noncurrent Deferred Tax Liabilities	204	83
Long-Term Portion of Environmental and Related Litigation Reserve (see Note 23)	168	135
Noncurrent Liabilities of Discontinued Operations (see Note 27)	52	
Other Liabilities	806	495
Commitments and Contingencies (see Note 23)		
Shareowners Equity:		
Common stock (authorized: 1,500,000,000 shares, par value \$0.01)		
Issued 583,581,984 and 577,244,601 shares, respectively;		
Outstanding 548,592,933 and 545,609,310 shares, respectively	6	6
Treasury stock 34,989,051 and 31,635,291 shares, respectively, at cost	(1,177)	(814)
Additional contributed capital	9,495	9,106
Retained earnings (deficit) (includes cumulative effect of adopting FIN 48 as of Sept. 1, 2007, of (\$25))	1,138	(405)
Accumulated other comprehensive loss	(78)	(377)
Reserve for ESOP debt retirement	(10)	(13)
Total Shareowners Equity	9,374	7,503
Total Liabilities and Shareowners Equity	\$17,991	\$12,983

The accompanying notes are an integral part of these consolidated financial statements.

Table of Contents

MONSANTO COMPANY

2008 FORM 10-K

Statements of Consolidated Cash Flows

(Dollars in millions)	Year Ended Aug. 31,		
	2008	2007	2006
Operating Activities:			
Net Income	\$ 2,024	\$ 993	\$ 689
Adjustments to reconcile cash provided by operating activities:			
Items that did not require (provide) cash:			
Pre-tax cumulative effect of change in accounting principle (see Note 2)			9
Depreciation and amortization expense	573	527	519
Bad-debt expense	57	70	47
Receipt of securities from Solutia settlement (see Notes 10 and 25)	(38)		
Stock-based compensation expense	90	73	63
Excess tax benefits from stock-based compensation	(198)	(83)	(98)
Deferred income taxes	47	(89)	39
Equity affiliate expense net	(2)	34	31
Acquired in-process research and development (see Note 4)	164	193	
Net gain on sale of Stoneville and NexGen businesses (see Note 27)		(73)	
Other items	7	15	26
Changes in assets and liabilities that provided (required) cash, net of acquisitions:			
Trade receivables	(318)	(2)	159
Inventories	(691)	60	(25)
Deferred revenues	492	129	59
Accounts payable and other accrued liabilities	889	147	135
Pension contributions	(120)	(60)	(60)
Net investment hedge settlement	(124)	(23)	(1)
Other items	(53)	(57)	82
Net Cash Provided by Operating Activities	2,799	1,854	1,674
Cash Flows Provided (Required) by Investing Activities:			
Purchases of short-term investments	(132)	(59)	(171)
Maturities of short-term investments	59	22	300
Capital expenditures	(918)	(509)	(370)
Acquisitions of businesses, net of cash acquired	(1,007)	(1,679)	(258)
Purchases of long-term equity securities	(78)		
Technology and other investments	(41)	(54)	(147)
Proceeds from sale of Stoneville and NexGen businesses (see Note 27)		317	
Other investments and property disposal proceeds	90	51	21
Net Cash Required by Investing Activities	(2,027)	(1,911)	(625)

Cash Flows Provided (Required) by Financing Activities:			
Net change in financing with less than 90-day maturities	92	(5)	(106)
Short-term debt proceeds		8	6
Short-term debt reductions	(10)	(8)	(39)
Long-term debt proceeds	546	8	256
Long-term debt reductions	(254)	(281)	(118)
Payments on other financing	(3)	(16)	(9)
Debt issuance costs	(5)		
Treasury stock purchases	(361)	(197)	(114)
Stock option exercises	114	83	116
Excess tax benefits from stock-based compensation	198	83	98
Dividend payments	(419)	(258)	(207)
Net Cash Required by Financing Activities	(102)	(583)	(117)
Effect of Exchange Rate Changes on Cash and Cash Equivalents	77	46	3
Net Increase (Decrease) in Cash and Cash Equivalents	747	(594)	935
Cash and Cash Equivalents at Beginning of Period	866	1,460	525
Cash and Cash Equivalents at End of Period	\$ 1,613	\$ 866	\$ 1,460

See Note 22 Supplemental Cash Flow Information for further details.
The accompanying notes are an integral part of these consolidated financial statements.

Table of Contents

MONSANTO COMPANY

2008 FORM 10-K

Statements of Consolidated Shareowners Equity

(Dollars in millions, except per share amounts)	Accumulated						
	Common Stock	Treasury Stock	Contributed Capital	Earnings (Deficit)	Comprehensive Income (Loss) ⁽¹⁾	Other Reserve for ESOP Debt	Total
Balance as of Sept. 1, 2005	\$ 3	\$ (500)	\$ 8,588	\$(1,572)	\$ (889)	\$ (17)	\$ 5,613
Net income				689			689
Treasury stock purchases		(120)					(120)
Restricted stock withholding		(3)					(3)
Grants of restricted stock (48,200 shares)			1				1
Issuance of shares under employee stock plans			116				116
Excess tax benefits from stock-based compensation			98				98
Stock-based compensation expense			64				64
Cash dividends of \$0.40 per common share				(216)			(216)
Foreign currency translation					191		191
Minimum pension liability, net of tax					90		90
Net unrealized gain on investments, net of tax					11		11
Accumulated derivative loss, net of tax					(26)		(26)
Allocation of ESOP shares, net of dividends received						2	2
Two-for-one stock split (see Note 1)	3		(3)				
Other adjustments ⁽²⁾			15				15
Balance as of Aug. 31, 2006	\$ 6	\$ (623)	\$ 8,879	\$(1,099)	\$ (623)	\$ (15)	\$ 6,525
Net income				993			993
Treasury stock purchases		(191)					(191)
Restricted stock withholding			(11)				(11)
Grants of restricted stock (83,500 shares)			1				1
Issuance of shares under employee stock plans			83				83
Excess tax benefits from stock-based compensation			83				83
Stock-based compensation expense			71				71
Cash dividends of \$0.55 per common share				(299)			(299)
Foreign currency translation					248		248
Minimum pension liability, net of tax					46		46
Realized and unrealized gain on investments, net of tax					(18)		(18)
Accumulated derivative gain, net of tax					14		14
Allocation of ESOP shares, net of dividends received						2	2

Adjustment to initially apply SFAS 158, net of tax ⁽³⁾					(44)		(44)
Balance as of Aug. 31, 2007	\$ 6	\$ (814)	\$ 9,106	\$ (405)	\$ (377)	\$ (13)	\$ 7,503
Net income				2,024			2,024
Treasury stock purchases		(363)					(363)
Restricted stock withholding			(11)				(11)
Issuance of shares under employee stock plans			114				114
Excess tax benefits from stock-based compensation			198				198
Stock-based compensation expense			88				88
Cash dividends of \$0.83 per common share				(456)			(456)
Foreign currency translation					346		346
Minimum pension liability, net of tax					(99)		(99)
Realized and unrealized gain on investments, net of tax					(5)		(5)
Accumulated derivative gain, net of tax					57		57
Allocation of ESOP shares, net of dividends received						3	3
Adjustment to initially apply FIN 48				(25)			(25)
Balance as of Aug. 31, 2008	\$ 6	\$ (1,177)	\$ 9,495	\$ 1,138	\$ (78)	\$ (10)	\$ 9,374

(1) See Note 20
Accumulated
Other
Comprehensive
Loss for further
details of the
components of
accumulated
other
comprehensive
loss.

(2) Includes
prior-year
balance
reclassifications
upon adoption
of SFAS
123(R). Also,
includes
adjustments to
deferred tax
assets associated
with the spinoff
from Pharmacia
in 2002.

- (3) Component of ending Accumulated Other Comprehensive Loss, and not a component of comprehensive income per SFAS 158. Refer to Statements of Consolidated Comprehensive Income.

The accompanying notes are an integral part of these consolidated financial statements.

Table of Contents

MONSANTO COMPANY

2008 FORM 10-K

Statements of Consolidated Comprehensive Income

(Dollars in millions)	Year Ended Aug. 31,		
	2008	2007	2006
Net Income	\$2,024	\$ 993	\$689
Other Comprehensive Income (Loss):			
Foreign currency translation adjustments	346	248	191
Unrealized net holding (losses) gains (net of tax of \$(4) in 2008, \$5 in 2007 and \$7 in 2006)	(5)	7	11
Reclassification for realized net holding losses (gains) included in income (net of tax of \$(16) in 2007)		(25)	
Unrealized net derivative gains (losses) (net of tax of \$31 in 2008, \$14 in 2007 and \$(17) in 2006)	53	5	(28)
Reclassification for realized net derivative losses included in income (net of tax of \$(3) in 2008, \$1 in 2007 and \$1 in 2006)	4	9	2
Postretirement benefit plan activity (net of tax of \$(44) in 2008, \$33 in 2007, and \$56 in 2006)	(99)	46	90
Total Other Comprehensive Income	299	290	266
Total Comprehensive Income	\$2,323	\$1,283	\$955

The accompanying notes are an integral part of these consolidated financial statements.

Table of Contents

MONSANTO COMPANY

2008 FORM 10-K

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS**NOTE 1. BACKGROUND AND BASIS OF PRESENTATION**

Monsanto Company, along with its subsidiaries, is a leading global provider of agricultural products for farmers. Monsanto's seeds, biotechnology trait products, and herbicides provide farmers with solutions that improve productivity, reduce the costs of farming, and produce better foods for consumers and better feed for animals. Monsanto manages its business in two segments: Seeds and Genomics, and Agricultural Productivity. Through the Seeds and Genomics segment, Monsanto produces leading seed brands, including *DEKALB*, *Asgrow*, *Deltapine*, *Seminis* and *De Ruiter*, and Monsanto develops biotechnology traits that assist farmers in controlling insects and weeds. Monsanto also provides other seed companies with genetic material and biotechnology traits for their seed brands. Through the Agricultural Productivity segment, the company manufactures *Roundup* brand herbicides and other herbicides and provides lawn-and-garden herbicide products for the residential market. See Note 24 Segment and Geographic Data for further details.

In the fourth quarter of 2008, the company announced plans to divest its animal agricultural products business, which focuses on dairy cow productivity (the Dairy business). This transaction was consummated on Oct. 1, 2008. In the fourth quarter of 2007, the company sold its U.S. Stoneville® and NexGen® cotton seed brands and related business assets (divested cotton businesses) as part of the U.S. Department of Justice (DOJ) approval for the acquisition of Delta and Pine Land Company (DPL). As a result, financial data for these businesses have been presented as discontinued operations as outlined below. The financial statements have been recast and prepared in compliance with the provisions of Statement of Financial Accounting Standards (SFAS) No. 144, *Accounting for the Impairment or Disposal of Long-Lived Assets* (SFAS 144). Accordingly, for all periods presented herein, the Statements of Consolidated Operations have been conformed to this presentation. Also, the 2008 Statement of Consolidated Financial Position has been conformed to this presentation. The Dairy business was previously reported as part of the Agricultural Productivity segment, and the Stoneville and NexGen businesses were previously reported as part of the Seeds and Genomics segment. See Note 27 Discontinued Operations for further details.

Monsanto includes the operations, assets and liabilities that were previously the agricultural business of Pharmacia Corporation (Pharmacia), which is now a subsidiary of Pfizer Inc. Monsanto was incorporated as a subsidiary of Pharmacia in February 2000. On Sept. 1, 2000, the assets and liabilities of the agricultural business were transferred from Pharmacia to Monsanto, pursuant to the terms of a separation agreement dated as of that date (the Separation Agreement), from which time the consolidated financial statements reflect the results of operations, financial position, and cash flows of the company as a separate entity responsible for procuring or providing the services and financing previously provided by Pharmacia. In October 2000, Monsanto sold approximately 15 percent of its common stock at \$10 per share in an initial public offering. On Aug. 13, 2002, Pharmacia completed a spinoff of Monsanto by distributing its entire ownership interest via a tax-free dividend to Pharmacia's shareowners.

Unless otherwise indicated, Monsanto and the company are used interchangeably to refer to Monsanto Company or to Monsanto Company and its consolidated subsidiaries, as appropriate to the context.

On June 27, 2006, the board of directors approved a two-for-one split of the company's common shares. The additional shares resulting from the stock split were paid on July 28, 2006, to shareowners of record on July 7, 2006. All share and per share information herein reflect this stock split.

Table of Contents

MONSANTO COMPANY

2008 FORM 10-K

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (continued)**NOTE 2. SIGNIFICANT ACCOUNTING POLICIES****Basis of Consolidation**

The consolidated financial statements are presented in accordance with accounting principles generally accepted in the United States. These statements pertain to Monsanto and its controlled subsidiaries. Intercompany accounts and transactions have been eliminated in consolidation. Investments in other companies in which Monsanto has the ability to exercise significant influence (generally through an ownership interest greater than 20 percent) are included in the other assets item in the Statements of Consolidated Financial Position. The company records minority interest expense in the Statements of Consolidated Operations for any non-owned portion of consolidated subsidiaries. Minority interest is recorded in other liabilities in the Statements of Consolidated Financial Position.

Arrangements with other business enterprises are also evaluated, and those in which Monsanto is determined to have controlling financial interest are consolidated. In January 2003, the Financial Accounting Standards Board (FASB) issued FASB Interpretation (FIN) No. 46, *Consolidation of Variable Interest Entities* (FIN 46), and amended it by issuing FIN 46R in December 2003. FIN 46R addresses the consolidation of business enterprises to which the usual condition of consolidation (ownership of a majority voting interest) does not apply. This interpretation focuses on controlling financial interests that may be achieved through arrangements that do not involve voting interests. It concludes that, in the absence of clear control through voting interests, a company's exposure (variable interest) to the economic risks and potential rewards from the variable interest entity's assets and activities is the best evidence of control. If an enterprise holds a majority of the variable interests of an entity, it would be considered the primary beneficiary. The primary beneficiary is required to consolidate the assets, liabilities and results of operations of the variable interest entity in its financial statements.

Monsanto has an arrangement with a special-purpose entity to provide a financing program for selected Monsanto customers. See Note 6 Customer Financing Programs for a description of this arrangement. This special-purpose entity was consolidated. For other types of variable interest entities, the company has evaluated its relationships with two entities and has determined that although the entities are variable interest entities and Monsanto holds variable interests in the entities, these entities are not required to be consolidated in the company's financial statements pursuant to FIN 46R because Monsanto is not the primary beneficiary. One entity is a biotechnology company focused on plant gene research, development and commercialization, in which the company had a 7 percent equity investment as of Aug. 31, 2008. Monsanto had an agreement in place under which Monsanto made payments for research services and receives rights to intellectual property developed within funded research. The entity reported total assets of \$68 million and total liabilities of \$4 million as of Aug. 31, 2008, and revenues of \$3 million for the 12 months ended Aug. 31, 2008. The second entity is a joint venture in which the company has a 49 percent equity investment. This joint venture packages and sells seeds, with a focus on corn and sunflower seeds, and also sells and distributes agricultural chemical products. The joint venture reported total assets of \$41 million and total liabilities of \$19 million as of Aug. 31, 2008, and revenues of \$40 million for the 12 months ended Aug. 31, 2008. As of Aug. 31, 2008, Monsanto's estimate of maximum exposure to loss as a result of its relationships with these entities was approximately \$8 million, which represents Monsanto's equity investments in these entities. There were no other commitments to these entities as of Aug. 31, 2008.

Use of Estimates

The preparation of financial statements in conformity with accounting principles generally accepted in the United States requires management to make certain estimates and assumptions that affect the amounts reported in the consolidated financial statements and accompanying notes. Estimates are adjusted to reflect actual experience when necessary. Significant estimates and assumptions affect many items in the financial statements, for example: allowance for doubtful trade receivables, sales returns and allowances, inventory obsolescence, income tax liabilities

and assets and related valuation allowances, asset impairments, valuations of goodwill and other intangible assets, employee benefit plan liabilities, value of equity-based awards, marketing program liabilities, grower accruals (an estimate of amounts payable to farmers who grow seed for Monsanto), restructuring reserves, self-insurance reserves, environmental reserves, deferred revenue, contingencies, litigation, incentives, and the allocation of corporate costs to segments. Significant estimates and assumptions are also used to

Table of Contents

MONSANTO COMPANY

2008 FORM 10-K

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (continued)

establish the fair value and useful lives of depreciable tangible and certain intangible assets. Actual results may differ from those estimates and assumptions, and such results may affect income, financial position, or cash flows.

Revenue Recognition

The company derives most of its revenue from three main sources: sales of branded conventional seed and branded seed with biotechnology traits; royalties and license revenues from licensed biotechnology traits and genetic material; and sales of agricultural chemical products.

Revenues from all branded seed sales are recognized when the title to the products is transferred. When the right of return exists in the company's seed business, sales revenues are reduced at the time of sale to reflect expected returns. In order to estimate the expected returns, management analyzes historical returns, economic trends, market conditions, and changes in customer demand.

Revenues for agricultural chemical products are recognized when title to the products is transferred. The company recognizes revenue on products it sells to distributors when, according to the terms of the sales agreements, delivery has occurred, performance is complete, no right of return exists, and pricing is fixed or determinable at the time of sale.

There are several additional conditions for recognition of revenue including that the collection of sales proceeds must be reasonably assured based on historical experience and current market conditions and that there must be no further performance obligations under the sale or the royalty or license agreement.

Monsanto follows Staff Accounting Bulletin (SAB) No. 104, *Revenue Recognition*, the SEC interpretation of accounting guidelines on revenue recognition. SAB 104 primarily affects Monsanto's recognition of license revenues from biotechnology traits sold through third-party seed companies. Trait royalties and license revenues are recorded when earned, usually when the third-party seed companies sell their seeds containing Monsanto traits to growers.

To reduce credit exposure in Latin America, Monsanto collects payments on certain customer accounts in grain. Monsanto does not take ownership of the grain or the associated inventory risk and therefore does not record revenue or the related cost of sales for the grain. Such payments in grain are negotiated at the time Monsanto's products are sold to the customers and are valued at the prevailing grain commodity prices on that day. By entering into forward sales contracts with grain merchants, Monsanto mitigates the commodity price exposure from the time a contract is signed with a customer until the time the grain is collected from the customer by a grain merchant on Monsanto's behalf. The grain merchant converts the grain to cash for Monsanto.

Shipping and Handling Costs

Following the guidance of Emerging Issues Task Force (EITF) Issue No. 00-10, *Accounting for Shipping and Handling Fees and Costs*, Monsanto records outward freight, purchasing and receiving costs, inspection costs, warehousing costs, internal transfer costs, and other costs of the company's distribution network in cost of goods sold.

Marketing and Advertising Costs

Promotional and advertising costs are expensed as incurred and are included in selling, general and administrative expenses in the Statements of Consolidated Operations. Accrued marketing program costs are recorded in accordance with EITF Issue No. 01-9, *Accounting for Consideration Given by a Vendor to a Customer*, based on specific performance criteria met by our customers, such as purchase volumes, promptness of payment, and market share increases. The associated cost of marketing programs is recorded in net sales in the Statements of Consolidated Operations. As actual expenses are not known at the time of the sale, an estimate based on the best available information (such as historical experience and market research) is used as a basis for the liability. Management analyzes and reviews the marketing program balances on a quarterly basis and adjustments are recorded as appropriate. Under certain marketing programs, product performance and variations in weather can result in free product to customers. The associated cost of this free product is recognized as cost of goods sold in the Statements of Consolidated Operations.

Table of Contents

MONSANTO COMPANY

2008 FORM 10-K

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (continued)**Research and Development Costs**

The company accounts for research and development (R&D) costs in accordance with SFAS No. 2, *Accounting for Research and Development Costs* (SFAS 2). Under SFAS 2, all R&D costs must be charged to expense as incurred. Accordingly, internal R&D costs are expensed as incurred. Third-party R&D costs are expensed when the contracted work has been performed or as milestone results have been achieved. Acquired in-process R&D costs with no alternative future uses are expensed in the period acquired. The costs of purchased in-process R&D that have alternative future uses are capitalized and amortized over the estimated useful life of the asset. The costs associated with equipment or facilities acquired or constructed for R&D activities that have alternative future uses are capitalized and depreciated on a straight-line basis over the estimated useful life of the asset. The amortization and depreciation for such capitalized assets are charged to R&D expenses. In fiscal year 2007, Monsanto and BASF announced a long-term joint R&D and commercialization collaboration in plant technology that will focus on high-yielding crops and crops that are tolerant to adverse conditions. The collaboration resulted in shared R&D costs. Only Monsanto's portion has been included in research and development expenses in the Statements of Consolidated Operations.

Income Taxes

Deferred tax assets and liabilities are recognized for the expected tax consequences of temporary differences between the tax bases of assets and liabilities and their reported amounts. Management regularly assesses the likelihood that deferred tax assets will be recovered from future taxable income, and to the extent management believes that it is more likely than not that a deferred tax asset will not be realized, a valuation allowance is established. When a valuation allowance is established, increased or decreased, an income tax charge or benefit is included in the consolidated financial statements and net deferred tax assets are adjusted accordingly. The net deferred tax assets as of Aug. 31, 2008, represent the estimated future tax benefits to be received from taxing authorities or future reductions of taxes payable.

On Sept. 1, 2007, Monsanto adopted the provisions of FIN No. 48, *Accounting for Uncertainty in Income Taxes, an Interpretation of FASB Statement No. 109*. Under this Interpretation, in order to recognize an uncertain tax benefit, the taxpayer must be more likely than not of sustaining the position, and the measurement of the benefit is calculated as the largest amount that is more than 50 percent likely to be realized upon resolution of the benefit. Tax authorities regularly examine the company's returns in the jurisdictions in which Monsanto does business. Management regularly assesses the tax risk of the company's return filing positions and believes its accruals for uncertain tax benefits are adequate as of Aug. 31, 2008.

Cash and Cash Equivalents

All highly liquid investments (defined as investments with a maturity of three months or less when purchased) are considered cash equivalents.

Accounts Receivable

The company provides an allowance for doubtful trade receivables equal to the estimated uncollectible amounts. That estimate is based on historical collection experience, current economic and market conditions, and a review of the current status of each customer's trade accounts receivable.

Long-Term Investments

Monsanto has long-term investments in equity securities, which are considered available-for-sale. They are classified as other assets in the Statements of Consolidated Financial Position, and they are carried at fair value, with unrealized gains and losses reported in the Statements of Consolidated Shareowners' Equity in accumulated other comprehensive income (loss). If Monsanto believes that an other-than-temporary impairment exists, the investment in question is written down to market value in accordance with EITF Issue No. 03-01, *The Meaning of Other-Than-Temporary Impairment and Its Application to Certain Investments*. The write-down is recorded in the Statements of Consolidated Operations as an impairment of securities. Monsanto has other long-term investments in equity securities for which

market values are not readily available. These other securities and investments are carried at cost, and they are reviewed regularly to evaluate whether they have experienced a decline in fair value.

Table of Contents

MONSANTO COMPANY

2008 FORM 10-K

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (continued)**Fair Values of Financial Instruments**

The recorded amounts of cash, trade receivables, investments in securities, miscellaneous receivables, third-party guarantees, commodity futures contracts, accounts payable, grower accruals, accrued marketing programs, miscellaneous short-term accruals, and short-term debt approximate their fair values. Fair values are based on quoted market prices, estimates from brokers, and other appropriate valuation techniques. The fair value estimates do not necessarily reflect the values that could be realized in the current market on any one day. See Note 14 Financial Instruments for further details.

Inventory Valuation

Inventories are stated at the lower of cost or market, and the inventory reserve reduces the cost basis of inventory. Inventories are valued as follows:

Seeds and Genomics: Actual cost is used to value raw materials such as treatment chemicals and packaging, as well as goods in process. Costs for substantially all finished goods, which include the cost of carryover crops from the previous year, are valued at weighted-average actual cost. Weighted-average actual cost includes field growing and harvesting costs, plant conditioning and packaging costs, and manufacturing overhead costs.

Agricultural Productivity: Actual cost is used to value raw materials and supplies. Standard cost, which approximates actual cost, is used to value finished goods and goods in process. Variances, exclusive of abnormally low volume and operating performance, are capitalized into inventory. Standard cost includes direct labor and raw materials, and manufacturing overhead based on normal capacity. The cost of the Agricultural Productivity segment inventories in the United States (approximately one-tenth and one-fourth of total inventories as of Aug. 31, 2008, and Aug. 31, 2007, respectively) is determined by using the last-in, first-out (LIFO) method, which generally reflects the effects of inflation or deflation on cost of goods sold sooner than other inventory cost methods. The cost of inventories outside of the United States, as well as supplies inventories in the United States, is determined by using the first-in, first-out (FIFO) method; FIFO is used outside of the United States because the requirements in the countries where Monsanto maintains inventories generally do not allow the use of the LIFO method. Inventories at FIFO approximate current cost.

In accordance with SFAS No. 151, *Inventory Costs – an amendment of ARB No. 43, Chapter 4*, Monsanto records abnormal amounts of idle facility expense, freight, handling costs and wasted material (spoilage) as current period charges and allocates fixed production overhead to the costs of conversion based on the normal capacity of the production facilities.

Goodwill

Monsanto follows the guidance of SFAS No. 141, *Business Combinations* (SFAS 141), in recording the goodwill arising from a business combination as the excess of purchase price and related costs over the fair value of identifiable assets acquired and liabilities assumed.

Under SFAS No. 142, *Goodwill and Other Intangible Assets* (SFAS 142), goodwill is not amortized and is subject to annual impairment tests. A fair-value-based test is applied at the reporting unit level, which is generally at or one level below the operating segment level. The test compares the fair value of the company's reporting units to the carrying value of those reporting units. This test requires various judgments and estimates. The fair value of goodwill is determined using an estimate of future cash flows of the reporting unit and a risk-adjusted discount rate to compute a net present value of future cash flows. An adjustment to goodwill will be recorded for any goodwill that is determined to be impaired. Impairment of goodwill is measured as the excess of the carrying amount of goodwill over the fair values of recognized and unrecognized assets and liabilities of the reporting unit. Goodwill is tested for impairment at least annually, or more frequently if events or circumstances indicate it might be impaired. Goodwill was last tested for impairment as of March 1, 2008. See Note 9 Goodwill and Other Intangible Assets for further discussion of the

annual impairment test.

Other Intangible Assets

Other intangible assets consist primarily of acquired seed germplasm, acquired biotechnology intellectual property, trademarks and customer relationships. Seed germplasm is the genetic material used in new seed varieties. Germplasm is

Table of Contents

MONSANTO COMPANY

2008 FORM 10-K

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (continued)

amortized on a straight-line basis over useful lives ranging from five years for completed technology germplasm to a maximum of 30 years for certain core technology germplasm. Completed technology germplasm consists of seed hybrids and varieties that are commercially available. Core technology germplasm is the collective germplasm of inbred and hybrid seeds and has a longer useful life as it is used to develop new seed hybrids and varieties. Acquired biotechnology intellectual property includes intangible assets related to acquisitions and licenses through which Monsanto has acquired the rights to various research and discovery technologies. These encompass intangible assets such as enabling processes and data libraries necessary to support the integrated genomics and biotechnology platforms. These intangible assets have alternative future uses and are amortized over useful lives ranging from four to 15 years. The useful lives of acquired germplasm and acquired biotechnology intellectual property are determined based on consideration of several factors including the nature of the asset, its expected use, length of licensing agreement or patent and the period over which benefits are expected to be received from the use of the asset. Monsanto has a broad portfolio of trademarks and patents, including trademarks for *Roundup* (for herbicide products); *Roundup Ready*, *Bollgard*, *Bollgard II*, *YieldGard*, *YieldGard VT* and *Roundup Ready 2 Yield* (for traits); *DEKALB*, *Asgrow*, *Deltapine* and *Vistive* (for agricultural seeds); *Seminis*, *De Ruiter*, *Royal Sluis*, *Asgrow* and *Petoseed* (for vegetable seeds); and patents for our insect-protection traits, formulations used to make our herbicides and various manufacturing processes. The amortization period for trademarks and patents ranges from two to 30 years. Trademarks are amortized on a straight-line basis over their useful lives. The useful life of a trademark is determined based on the estimated market-life of the associated company, brand or product. Patents are amortized on a straight-line basis over the period in which the patent is legally protected, the period over which benefits are expected to be received, or the estimated market-life of the product with which the patent is associated, whichever is less. In conjunction with acquisitions, Monsanto has access to the distribution channels and customer relationships of the acquired companies. These relationships are expected to provide economic benefits to Monsanto. The amortization period for customer relationships ranges from three to 20 years, and amortization is recognized on a straight-line basis over these periods. The amortization period of customer relationships represents management's best estimate of the expected usage or consumption of the economic benefits of the acquired assets, which is based on the company's historical experience of customer attrition rates. In accordance with SFAS 144, all amortizable intangible assets are assessed for impairment whenever events indicate a possible loss. Such an assessment involves estimating undiscounted cash flows over the remaining useful life of the intangible. If the review indicates that undiscounted cash flows are less than the recorded value of the intangible asset, the carrying amount of the intangible is reduced by the estimated cash-flow shortfall on a discounted basis, and a corresponding loss is charged to the Statement of Consolidated Operations. See Note 9 – Goodwill and Other Intangible Assets for further discussion of Monsanto's intangible assets.

Property, Plant and Equipment

Property, plant and equipment is recorded at cost. Additions and improvements are capitalized; these include all material, labor, and engineering costs to design, install or improve the asset and interest costs on construction projects. Such costs are not depreciated until they are placed in service. Routine repairs and maintenance are expensed as incurred. The cost of plant and equipment is depreciated using the straight-line method over the estimated useful life of the asset – weighted-average periods of approximately 25 years for buildings, 10 years for machinery and equipment and seven years for software. In compliance with SFAS 144, long-lived assets are reviewed for impairment whenever in management's judgment conditions indicate a possible loss. Such impairment tests compare estimated undiscounted cash flows to the recorded value of the asset. If an impairment is indicated, the asset is written down to its fair value or, if fair value is not readily determinable, to an estimated fair value based on discounted cash flows.

Monsanto follows SFAS No. 143, *Accounting for Asset Retirement Obligations* (SFAS 143), which addresses financial accounting for and reporting of costs and obligations associated with the retirement of tangible long-lived

assets. Monsanto has asset retirement obligations with carrying amounts totaling \$58 million and \$54 million as of Aug. 31, 2008, and Aug. 31, 2007, respectively, primarily relating to its manufacturing facilities. The change in carrying value as of Aug. 31, 2008, consisted of \$3 million for accretion expense and \$1 million related to increased costs.

Table of Contents

MONSANTO COMPANY

2008 FORM 10-K

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (continued)

As of Aug. 31, 2006, Monsanto adopted the provisions of FIN No. 47, *Accounting for Conditional Asset Retirement Obligations – an interpretation of FASB Statement No. 143* (FIN 47). FIN 47 clarifies that conditional obligations meet the definition of an asset retirement obligation in SFAS 143, and therefore should be recognized if their fair value is reasonably estimable. As a result of adopting FIN 47, Monsanto recorded a noncash pre-tax charge of \$9 million (\$6 million after tax). This charge is reported as a cumulative effect of a change in accounting principle in the fourth quarter of 2006.

Environmental Remediation Liabilities

Monsanto follows AICPA Statement of Position 96-1, *Environmental Remediation Liabilities*, which provides guidance for recognizing, measuring and disclosing environmental remediation liabilities. Monsanto accrues these costs in the period when responsibility is established and when such costs are probable and reasonably estimable based on current law and existing technology. Postclosure and remediation costs for hazardous waste sites and other waste facilities at operating locations are accrued over the estimated life of the facility, as part of its anticipated closure cost.

Litigation and Other Contingencies

Monsanto is involved in various intellectual property, biotechnology, tort, contract, antitrust, employee benefit, environmental and other litigation, claims and legal proceedings; environmental remediation; and government investigations (see Note 23 – Commitments and Contingencies). Management routinely assesses the likelihood of adverse judgments or outcomes to those matters, as well as ranges of probable losses, to the extent losses are reasonably estimable. In accordance with SFAS No. 5, *Accounting for Contingencies*, accruals for such contingencies are recorded to the extent that management concludes their occurrence is probable and the financial impact, should an adverse outcome occur, is reasonably estimable. Disclosure for specific legal contingencies is provided if the likelihood of occurrence is at least reasonably possible and the exposure is considered material to the consolidated financial statements. In making determinations of likely outcomes of litigation matters, management considers many factors. These factors include, but are not limited to, past experience, scientific and other evidence, interpretation of relevant laws or regulations and the specifics and status of each matter. If the assessment of the various factors changes, the estimates may change. That may result in the recording of an accrual or a change in a previously recorded accrual. Predicting the outcome of claims and litigation and estimating related costs and exposure involves substantial uncertainties that could cause actual costs to vary materially from estimates and accruals.

Guarantees

Monsanto is subject to various commitments under contractual and other commercial obligations. The company recognizes liabilities for contingencies and commitments under FIN No. 45, *Guarantors Accounting and Disclosure Requirements for Guarantees, Including Indirect Guarantees and Indebtedness of Others, an interpretation of SFAS No. 5, 57 and 107, and rescission of FIN No. 34* (FIN 45). For additional information on the company's commitments and other contractual and commercial obligations, see Note 23 – Commitments and Contingencies.

Foreign Currency Translation

The financial statements for most of Monsanto's ex-U.S. operations are translated to U.S. dollars at current exchange rates. For assets and liabilities, the year-end rate is used. For revenues, expenses, gains and losses, the average rate for the period is used. Unrealized currency adjustments in the Statements of Consolidated Financial Position are accumulated in equity as a component of accumulated other comprehensive income (loss).

Significant translation exposures include the Brazilian real, the European euro, the Canadian dollar and the Romanian leu. Currency restrictions are not expected to have a significant effect on Monsanto's cash flow, liquidity, or capital resources.

Derivatives and Other Financial Instruments

Monsanto uses financial derivative instruments to limit its exposure to changes in foreign currency exchange rates, commodity prices, and interest rates. Monsanto does not use financial derivative instruments for the purpose of speculating in foreign currencies, commodities or interest rates. Monsanto continually monitors its underlying market risk exposures and believes that it can modify or adapt its hedging strategies as needed.

Table of Contents

MONSANTO COMPANY

2008 FORM 10-K

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (continued)

In accordance with SFAS No. 133, *Accounting for Derivative Instruments and Hedging Activities* (SFAS 133), and SFAS No. 149, *Amendment of Statement 133 Derivative Instruments and Hedging Activities* (SFAS 149), all derivatives, whether designated for hedging relationships or not, are recognized in the Statements of Consolidated Financial Position at their fair value. At the time a derivative contract is entered into, Monsanto designates each derivative as: (1) a hedge of the fair value of a recognized asset or liability (a fair-value hedge), (2) a hedge of a forecasted transaction or of the variability of cash flows that are to be received or paid in connection with a recognized asset or liability (a cash-flow hedge), (3) a foreign-currency fair-value or cash-flow hedge (a foreign-currency hedge), (4) a foreign-currency hedge of the net investment in a foreign subsidiary, or (5) a derivative that does not qualify for hedge accounting treatment.

Changes in the fair value of a derivative that is highly effective, and that is designated as and qualifies as a fair-value hedge, along with changes in the fair value of the hedged asset or liability that are attributable to the hedged risk, are recorded currently in net income. Changes in the fair value of a derivative that is highly effective, and that is designated as and qualifies as a cash-flow hedge, to the extent that the hedge is effective, are recorded in accumulated other comprehensive income (loss), until net income is affected by the variability from cash flows of the hedged item. Any hedge ineffectiveness is included in current-period net income. Changes in the fair value of a derivative that is highly effective, and that is designated as and qualifies as a foreign-currency hedge, are recorded either in current-period earnings or in accumulated other comprehensive income (loss), depending on whether the hedging relationship satisfies the criteria for a fair-value or cash-flow hedge. Changes in the fair value of a derivative that is highly effective, and that is designated as a foreign-currency hedge of the net investment in a foreign subsidiary, are recorded in the accumulated foreign currency translation. Changes in the fair value of derivative instruments not designated as hedges are reported currently in earnings.

Monsanto formally and contemporaneously documents all relationships between hedging instruments and hedged items, as well as its risk-management objective and its strategy for undertaking various hedge transactions. This includes linking all derivatives that are designated as fair-value, cash-flow, or foreign-currency hedges either to specific assets and liabilities on the Statements of Consolidated Financial Position, or to firm commitments or forecasted transactions. Monsanto formally assesses a hedge at its inception and on an ongoing basis thereafter to determine whether the hedging relationship between the derivative and the hedged item is still highly effective, and whether it is expected to remain highly effective in future periods, in offsetting changes in fair value or cash flows. When derivatives cease to be highly effective hedges, Monsanto discontinues hedge accounting prospectively. Monsanto occasionally uses interest rate derivatives to reduce interest rate risk and to manage the interest rate sensitivity of its debt. By entering into these agreements, Monsanto changes the interest rate mix (fixed/variable) of its debt portfolio. The company also uses natural gas and diesel swaps to manage risk associated with energy input costs.

Pension and Postretirement Plans

Monsanto has various defined benefit and postretirement plans. Monsanto generally amortizes unrecognized actuarial gains and losses on a straight-line basis over the remaining estimated service life of participants. The measurement date for most plans is August 31. See Note 15 Postretirement Benefits Pensions and Note 16 Postretirement Benefits Health Care and Other Post Employment Benefits for a full description of these plans and the accounting and funding policies.

Adoption of SFAS 158

In September 2006, the FASB issued SFAS 158, *Employers Accounting for Defined Benefit Pension and Other Postretirement Benefit Plans* (SFAS 158). As required, the company adopted this statement effective Aug. 31, 2007. The initial recognition of the underfunded status resulted in a pre-tax charge of \$72 million (\$44 million after-tax) to accumulated other comprehensive loss.

Table of Contents

MONSANTO COMPANY

2008 FORM 10-K

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (continued)

The following table provides a breakdown of the incremental effect of applying this statement on individual line items in the Consolidated Statement of Financial Position as of Aug. 31, 2007:

(Dollars in millions)	Year Ended Aug. 31, 2007		
	Before Adoption of SFAS 158	Increase/(Decrease) Required by SFAS 158	After Adoption of SFAS 158
Other Intangible Assets Net	\$1,427	\$ (12)	\$ 1,415
Noncurrent Deferred Tax Assets	700	30	730
Other Assets	398	(4)	394
Miscellaneous Short-term Accruals	689	9	698
Postretirement Liabilities	496	46	542
Other Liabilities	492	3	495
Accumulated Other Comprehensive Loss	(333)	(44)	(377)

Stock-Based Compensation

In accordance with SFAS No. 123 (revised 2004), *Share-Based Payment* (SFAS 123R), Monsanto measures and recognizes compensation expense for all share-based payment awards made to employees and directors based on estimated fair values. See Note 18 *Stock-Based Compensation Plans* for further details.

NOTE 3. NEW ACCOUNTING STANDARDS

In June 2008, the FASB issued FASB Staff Position (FSP) EITF Issue No. 03-6-1, *Determining Whether Instruments Granted in Share-Based Payment Transactions Are Participating Securities* (FSP EITF 03-6-1). FSP EITF 03-6-1 requires unvested share-payment awards that contain rights to receive non-forfeitable dividends or dividend equivalents to be included in the two-class method of computing earnings per share as described in SFAS No. 128, *Earnings per Share*. This FSP is effective for financial statements issued for fiscal years beginning after Dec. 15, 2008, and interim periods within those years. Accordingly, Monsanto will adopt FSP EITF 03-6-1 in fiscal year 2010. The company is currently evaluating the impact of FSP EITF 03-6-1 on the consolidated financial statements.

In May 2008, the FASB issued SFAS No. 162, *The Hierarchy of Generally Accepted Accounting Principles* (SFAS 162). SFAS 162 identifies the sources of accounting principles and the framework for selecting principles to be used in the preparation and presentation of financial statements in accordance with generally accepted accounting principles. This statement will be effective for Monsanto in first quarter 2009. Monsanto does not anticipate the adoption of SFAS 162 will have an effect on the consolidated financial statements.

In April 2008, the FASB issued FSP SFAS No. 142-3, *Determining the Useful Life of Intangible Assets* (FSP SFAS 142-3). FSP SFAS 142-3 amends the factors that should be considered in developing renewal or extension assumptions used to determine the useful life of a recognized intangible asset under SFAS 142. This FSP must be applied prospectively to intangible assets acquired after the effective date. This FSP is effective for fiscal years beginning after Dec. 15, 2008, and interim periods within those years. Accordingly, Monsanto will adopt FSP SFAS 142-3 in fiscal year 2010. The company is currently evaluating the impact of FSP SFAS 142-3 on the consolidated

financial statements.

In March 2008, the FASB issued SFAS No. 161, *Disclosures about Derivative Instruments and Hedging Activities* (SFAS 161). SFAS 161 amends and expands the disclosure requirements of SFAS 133. It requires qualitative disclosures about objectives and strategies for using derivatives, quantitative disclosures about fair value amounts of gains and losses on derivative instruments, and disclosures about credit-risk-related contingent features in derivative agreements. This statement is effective for financial statements issued for fiscal periods beginning after Nov. 15, 2008. Accordingly, Monsanto will adopt SFAS 161 in second quarter 2009. The company is currently evaluating the impact of SFAS 161 on the consolidated financial statements.

In December 2007, the FASB issued SFAS No. 160, *Noncontrolling Interests in Consolidated Financial Statements an amendment of ARB No. 51* (SFAS 160). SFAS 160 requires an entity to clearly identify and present its ownership interests in subsidiaries held by parties other than the entity in the consolidated financial statements within the equity section but separate

Table of Contents

MONSANTO COMPANY

2008 FORM 10-K

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (continued)

from the entity's equity. It also requires the amount of consolidated net income attributable to the parent and to the noncontrolling interest be clearly identified and presented on the face of the consolidated statement of income; changes in ownership interest be accounted for similarly, as equity transactions; and when a subsidiary is deconsolidated, any retained noncontrolling equity investment in the former subsidiary and the gain or loss on the deconsolidation of the subsidiary be measured at fair value. This statement is effective for financial statements issued for fiscal years beginning after Dec. 15, 2008. Accordingly, Monsanto will adopt SFAS 160 in fiscal year 2010. The company is currently evaluating the impact of SFAS 160 on the consolidated financial statements.

In December 2007, the FASB issued SFAS No. 141 (revised 2007), *Business Combinations* (SFAS 141R). Under SFAS 141R, an entity is required to recognize the assets acquired, liabilities assumed, contractual contingencies and contingent consideration measured at their fair value at the acquisition date. It further requires that acquisition-related costs are to be recognized separately from the acquisition and expensed as incurred. In addition, acquired in-process research and development (IPR&D) is capitalized at fair value as an intangible asset and amortized over its estimated useful life. SFAS 141R is effective for business combinations for which the acquisition date is after the beginning of the first annual reporting period beginning after Dec. 15, 2008. Accordingly, Monsanto will adopt SFAS 141R in fiscal year 2010. The company is currently evaluating the impact of SFAS 141R on the consolidated financial statements.

In February 2007, the FASB issued SFAS No. 159, *The Fair Value Option for Financial Assets and Financial Liabilities* (SFAS 159). SFAS 159 permits entities to choose to measure many financial instruments and certain other items at fair value. The objective is to improve financial reporting by providing entities with the opportunity to mitigate volatility in reported earnings caused by measuring related assets and liabilities using different measurement techniques. SFAS 159 requires additional disclosures related to the fair value measurements included in the entity's financial statements. This statement is effective for financial statements issued for fiscal years beginning after Nov. 15, 2007. Accordingly, Monsanto will adopt SFAS 159 in fiscal year 2009. The company does not believe the adoption of SFAS 159 will have a material impact on the consolidated financial statements, because the company has not made any fair value measurement elections.

In September 2006, the FASB issued SFAS No. 157, *Fair Value Measurements* (SFAS 157). SFAS 157 defines fair value, establishes a framework for measuring fair value in generally accepted accounting principles, and expands disclosures about fair value measurements. This statement is effective for financial statements issued for fiscal years beginning after Nov. 15, 2007. Accordingly, Monsanto will adopt SFAS 157 in fiscal year 2009 for items that are recognized or disclosed at fair value in the financial statements on a recurring basis (at least annually). The company has not completed its evaluation of the impact of adopting SFAS 157 on the consolidated financial statements. The adoption of SFAS 157 may require modification of the company's fair value measurements and will require expanded disclosures in the notes to the consolidated financial statements.

NOTE 4. BUSINESS COMBINATIONS

2008 Acquisitions: In June 2008, Monsanto acquired 100 percent of the outstanding stock of De Ruiters Seeds Group, B.V., and a related company (De Ruiters) for approximately \$756 million (net of cash acquired and debt assumed), inclusive of transaction costs of \$3 million. De Ruiters is a leading protected-culture vegetable seeds company based in the Netherlands with operations worldwide. Monsanto consummated the transaction with existing cash after receiving approvals from the appropriate regulatory authorities.

In July 2008, Monsanto acquired Marmot, S.A., which operates Semillas Cristiani Burkard, a privately held seed company headquartered in Guatemala City, Guatemala, for \$135 million (net of cash acquired and debt assumed), inclusive of transaction costs of \$3 million. The acquisition will build on Monsanto's corn business leadership and enable it to offer farmers in Central America broader access to high-yielding corn seed varieties. Monsanto

consummated the transaction with existing cash.

In September 2007, Monsanto acquired 100 percent of the outstanding stock of Agroeste Sementes (Agroeste), a leading Brazilian corn seed company, for approximately \$91 million (net of cash acquired and debt assumed), inclusive of transaction costs of approximately \$1 million. Agroeste focuses on hybrid corn seed production and serves farmers throughout Brazil. Monsanto consummated the transaction with cash.

Table of Contents

MONSANTO COMPANY

2008 FORM 10-K

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (continued)

In fiscal year 2008, Monsanto completed other acquisitions for approximately \$18 million, inclusive of transaction costs of \$2 million, and the financial results of these businesses were included in the company's consolidated financial statements from the respective dates of acquisition.

For all fiscal year 2008 acquisitions described above, the business operations and employees of the acquired entities were added into the Seeds and Genomics segment results upon acquisition. These acquisitions were accounted for as purchase transactions. Accordingly, the assets and liabilities of the acquired entities were recorded at their estimated fair values at the dates of the acquisitions. The purchase price allocations for all fiscal year 2008 acquisitions as of Aug. 31, 2008, are preliminary and are summarized in the following table. These allocations are subject to adjustment pending further assessments, including the valuation of certain tangible and intangible assets. In addition, other assets and liabilities may be identified to which a portion of the purchase price could be allocated.

(Dollars in millions)	De Ruiter	All Other Acquisitions	Aggregate Acquisitions
Current Assets	\$ 166	\$ 85	\$ 251
Property, Plant and Equipment	100	43	143
Goodwill	285	206	491
Other Intangible Assets	299	70	369
Acquired In-process Research and Development	161	2	163
Other Assets	5	16	21
Total Assets Acquired	1,016	422	1,438
Current Liabilities	84	48	132
Other Liabilities	148	109	257
Total Liabilities Assumed	232	157	389
Net Assets Acquired	\$ 784	\$ 265	\$ 1,049
Supplemental Information:			
Net assets acquired	\$ 784	\$ 265	\$ 1,049
Cash acquired	28	21	49
Cash paid, net of cash acquired	\$ 756	\$ 244	\$ 1,000

The primary items that generated the goodwill were the premiums paid by Monsanto for the right to control the businesses acquired and the value of the acquired assembled work forces. The majority of the goodwill is not deductible for tax purposes. Pro forma information related to these acquisitions is not presented because the impact of these acquisitions, either individually or in the aggregate, on the company's consolidated results of operations is not considered to be significant.

As of the acquisition dates, management began to assess and formulate plans to restructure the acquired entities. These activities are accounted for in accordance with EITF 95-3, *Recognition of Liabilities in Connection with a Purchase Business Combination* (EITF 95-3), and primarily include the potential closure of certain subsidiaries. Through Aug. 31, 2008, estimated costs of \$3 million have been recognized as long-term liabilities in the purchase price allocations above. As management finalizes its plans to integrate or restructure certain activities of the acquired entities, further liabilities may be recorded as part of the purchase price allocation.

The following table presents details of the acquired identifiable intangible assets:

(Dollars in millions)	Weighted-Average Life (Years)	Useful Life (Years)	De Ruiter	All Other Acquisitions	Aggregate Acquisitions
Acquired Germplasm	9	9-25	\$ 146	\$ 7	\$ 153
Acquired Biotechnology Intellectual Property	15	2-15	74	1	75
Trademarks	27	20-30	55	28	83
Customer Relationships	14	10-15	24	32	56
Other	5	2-5		2	2
Other Intangible Assets			\$ 299	\$ 70	\$ 369

Table of Contents

MONSANTO COMPANY

2008 FORM 10-K

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (continued)

A charge of approximately \$164 million was recorded in research and development expenses in fiscal year 2008, for the write-off of acquired IPR&D related to 2008 acquisitions and finalizing the purchase price allocations for 2007 acquisitions. Of the \$164 million, \$161 million related to the write-off of acquired IPR&D associated with plant breeding acquired in the De Ruiter acquisition. The Income Approach valuation method was used to determine the fair value of the research projects. In developing assumptions for the valuation model, Monsanto used data from comparable commercialized hybrids from De Ruiter and hybrids marketed by Monsanto's previously owned protected-culture vegetable business to estimate expected pricing, margins and expense levels. Management believed that the technological feasibility of the IPR&D projects was not established and that the research had no alternative future uses. Accordingly, the amounts allocated to IPR&D were expensed immediately, in accordance with generally accepted accounting principles. The significant assumptions used to determine the fair value of IPR&D related to the De Ruiter acquisition were as follows:

(Dollars in millions)

Weighted-Average Discount Rate	12%
Expected Costs to Complete	\$142
Expected Years of Product Launches	2009 - 2014

2007 Acquisitions: On June 1, 2007, Monsanto completed the purchase of all the outstanding stock of DPL, the largest cotton seed breeder in the world, for a cash purchase price of \$42 per share, or approximately \$1.5 billion (net of cash acquired and debt assumed), inclusive of transaction costs of \$38 million. The company financed the transaction using cash reserves and a short-term loan, which was subsequently refinanced with commercial paper. All commercial paper was repaid during fourth quarter 2007. The transaction was reviewed by federal and state authorities, including the DOJ, pursuant to the Hart-Scott-Rodino Antitrust Improvements Act of 1976. In order to complete the transaction, Monsanto entered into an agreement with the DOJ. See Note 27 *Discontinued Operations* for further discussion of this agreement. Prior to the acquisition, Monsanto owned an investment in preferred stock of DPL in the amount of \$20 million, which was included in the purchase price allocation. After the acquisition of DPL, the legal proceedings related to DPL were terminated.

In December 2006, Monsanto's American Seeds, Inc. (ASI) subsidiary acquired Fielder's Choice Direct, a U.S. seed company, for \$50 million (net of cash acquired), inclusive of transaction costs of \$1 million. In conjunction with this acquisition, Monsanto entered into a five-year global technology license agreement. See Note 9 *Goodwill and Other Intangible Assets* for further discussion of the agreement. In January and May 2007, Monsanto acquired two European vegetable seed companies in separate transactions for an aggregate purchase price of \$61 million, inclusive of transaction costs of \$10 million. Also, in fiscal year 2007, ASI acquired nine regional U.S. seed companies in separate transactions for an aggregate purchase price of \$37 million, inclusive of transaction costs of \$2 million. In addition, three of these ASI acquisitions have contingent consideration of up to \$9 million, of which approximately \$1 million was paid in 2008.

In fiscal year 2007, charges of \$193 million were recorded in R&D expenses for the write-off of IPR&D. Of the \$193 million, \$186 million related to the write-off of acquired IPR&D associated with plant breeding acquired in the DPL acquisition. The Income Approach valuation method was used to determine the fair value of the research projects. In developing assumptions for the valuation model, Monsanto used data from comparable commercialized hybrids from DPL and hybrids marketed by Monsanto's previously owned cotton business to estimate expected pricing, margins and expense levels. Management believed that the technological feasibility of the IPR&D projects

was not established and that the research had no alternative future uses. Accordingly, the amounts allocated to IPR&D were expensed immediately, in accordance with generally accepted accounting principles. The significant assumptions used to determine the fair value of IPR&D related to the DPL acquisition were as follows:

(Dollars in millions)

Weighted-Average Discount Rate	17%
Expected Costs to Complete	\$157
Expected Years of Product Launches	2008-2017

As of the acquisition dates, management began to assess and formulate plans to restructure the acquired entities. These activities are accounted for in accordance with EITF 95-3 and primarily include the potential closure of acquired facilities, the abandonment or redeployment of equipment, and employee terminations or relocations of the acquired company.

Table of Contents

MONSANTO COMPANY

2008 FORM 10-K

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (continued)

Through Aug. 31, 2008, estimated costs of \$18 million have been recognized as current liabilities, and \$13 million has been charged against these liabilities.

All fiscal year 2007 acquisitions described above were included within the Seeds and Genomics segment from their respective dates of acquisition.

2006 Acquisitions: In fiscal year 2006, ASI acquired 12 regional U.S. seed companies for an aggregate purchase price of \$133 million (net of cash acquired), inclusive of transaction costs of \$4 million. The financial results of these acquisitions were included within the Seeds and Genomics segment from their respective dates of acquisition.

NOTE 5. RECEIVABLES

The following table displays a roll forward of the allowance for doubtful trade receivables for fiscal years 2006, 2007 and 2008.

(Dollars in millions)

Balance Sept. 1, 2005	\$ 275
Additions charged to expense	47
Deductions and other ⁽¹⁾	(24)
Balance Aug. 31, 2006	\$ 298
Additions charged to expense	70
Deductions and other ⁽¹⁾	(151)
Balance Aug. 31, 2007	\$ 217
Additions charged to expense	42
Deductions and other ⁽¹⁾	(41)
Balance Aug. 31, 2008	\$ 218

(1) Includes reclassifications to long-term and foreign currency translation adjustments.

The following table displays a roll forward of the allowance for doubtful long-term receivables for fiscal years 2007 and 2008. There was no allowance for doubtful long-term receivables in 2006.

(Dollars in millions)

Balance Sept. 1, 2006	\$
Additions charged to expense	
Other ⁽¹⁾	131

Balance Aug. 31, 2007	\$ 131
Additions charged to expense	15
Deductions and other ⁽¹⁾	33
<hr/>	
Balance Aug. 31, 2008	\$179

(1) Includes reclassifications from current and foreign currency translation adjustments.

NOTE 6. CUSTOMER FINANCING PROGRAMS

Monsanto has established a revolving financing program to provide financing of up to \$250 million for selected customers in the United States through a third-party specialty lender. Under the financing program, Monsanto originates customer loans on behalf of the lender, which is a special purpose entity (SPE) that Monsanto consolidates, pursuant to Monsanto's credit and other underwriting guidelines approved by the lender. Under the program as amended in August 2006, Monsanto services the loans and provides a first-loss guarantee of up to \$130 million. Following origination, the lender transfers the loans to multi-seller commercial paper conduits through a nonconsolidated qualifying special purpose entity (QSPE). Monsanto accounts for this transaction as a sale, in accordance with SFAS No. 140, *Accounting for Transfers and Servicing of Financial Assets and Extinguishment of Liabilities* (SFAS 140).

Monsanto has no ownership interest in the lender, the QSPE, or the loans. However, because Monsanto substantively originates the loans through the SPE (which it consolidates) and partially guarantees and services the loans, Monsanto

Table of Contents

MONSANTO COMPANY

2008 FORM 10-K

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (continued)

accounts for the program as if it were the originator of the loans and the transferor selling the loans to the QSPE. Because QSPEs are excluded from the scope of FIN 46R, and Monsanto does not have the unilateral right to liquidate the QSPE, FIN 46R does not have an effect on Monsanto's accounting for the U.S. customer financing program. Monsanto accounts for the guarantee in accordance with FIN No. 45, which requires that a guarantor recognize, at the inception of the guarantee, a liability for the fair value of the guarantee obligation undertaken. Monsanto records its guarantee liability at a value that approximates fair value (except that it does not discount credit losses because of the short-term nature of the loans), primarily driven by expected future credit losses. Monsanto does not recognize any servicing asset or liability because the servicing fee is considered adequate compensation for the servicing activities. Discounts on the sale of customer loans and servicing expenses were \$2 million, \$2 million and \$1 million during fiscal years 2008, 2007 and 2006, respectively.

Proceeds from customer loans sold through the financing program totaled \$66 million for fiscal year 2008, \$305 million for fiscal year 2007, and \$286 million for fiscal year 2006. These proceeds are included in net cash provided by operating activities in the Statements of Consolidated Cash Flows. The loan balance outstanding as of Aug. 31, 2008, and Aug. 31, 2007, was \$66 million and \$301 million, respectively. Loans are considered delinquent when payments are 31 days past due. If a customer fails to pay an obligation when due, Monsanto would incur a liability to perform under the first-loss guarantee. As of Aug. 31, 2008, and Aug. 31, 2007, less than \$1 million of loans sold through this financing program were delinquent, and Monsanto recorded its guarantee liability at less than \$1 million, based on the company's historical collection experience with these customers and a current assessment of credit exposure. Adverse changes in the actual loss rate would increase the liability. If Monsanto is called upon to make payments under the first-loss guarantee, it would have the benefit under the financing program of any amounts subsequently collected from the customer.

Monsanto has an agreement with a lender to establish a program that originally provided financing of up to \$40 million for selected customers in Brazil. The agreement qualifies for sales treatment under SFAS 140. Proceeds from the transfer of receivables are included in net cash provided by operating activities in the Statements of Consolidated Cash Flows. Total funds available under the program have increased to \$250 million under subsequent amendments. Proceeds from the transfer of receivables through the program totaled \$239 million, \$139 million and \$73 million for fiscal years 2008, 2007 and 2006, respectively. Monsanto provides a guarantee of the loans in the event of customer default. The term of the guarantee is equivalent to the term of the bank loans. The liability for the guarantees is recorded at an amount that approximates fair value and is based on the company's historical collection experience with customers that participate in the program and a current assessment of credit exposure. The guarantee liability recorded by Monsanto was \$10 million and \$3 million as of Aug. 31, 2008, and Aug. 31, 2007, respectively. If performance is required under the guarantee, Monsanto may retain amounts that are subsequently collected from customers. The maximum potential amount of future payments under the guarantee was \$187 million as of Aug. 31, 2008. The loan balance outstanding for these programs was \$187 million and \$86 million as of Aug. 31, 2008, and Aug. 31, 2007, respectively.

Monsanto also has similar agreements with banks that provide financing to its customers in Brazil through credit programs that are subsidized by the Brazilian government. In addition, there are similar financing programs in Europe and Argentina. All of these programs qualify for sales treatment under SFAS 140. Accordingly, proceeds from the transfer of receivables are included in net cash provided by operating activities in the Statements of Consolidated Cash Flows and totaled \$146 million, \$115 million and \$65 million for fiscal years 2008, 2007 and 2006, respectively. Under most of these programs, Monsanto provides a guarantee of the loans in the event of customer default. The terms of the guarantees are equivalent to the terms of the bank loans. The liability for the guarantees is recorded at an amount that approximates fair value and is based on the company's historical collection experience with customers that participate in the program and a current assessment of credit exposure. The guarantee liability recorded by Monsanto was \$11 million and \$2 million as of Aug. 31, 2008, and Aug. 31, 2007, respectively. If performance is required under

the guarantee, Monsanto may retain amounts that are subsequently collected from customers. The maximum potential amount of future payments under the guarantees was \$92 million as of Aug. 31, 2008. The loan balance outstanding for these programs was \$92 million and \$66 million as of Aug. 31, 2008, and Aug. 31, 2007, respectively.

Monsanto also sells accounts receivable, both with and without recourse. These sales qualify for sales treatment under SFAS 140 and accordingly, the proceeds are included in net cash provided by operating activities in the Statements of Consolidated Cash Flows. The gross amounts of receivables sold totaled \$48 million, \$46 million and \$49 million for fiscal

Table of Contents

MONSANTO COMPANY

2008 FORM 10-K

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (continued)

years 2008, 2007 and 2006, respectively. The liability for the guarantees for sales with recourse is recorded at an amount that approximates fair value and is based on the company's historical collection experience for the customers associated with the sale of the receivables and a current assessment of credit exposure. The liability recorded by Monsanto was less than \$1 million as of Aug. 31, 2008, and Aug. 31, 2007. The maximum potential amount of future payments under the recourse provisions of the agreements was \$33 million as of Aug. 31, 2008. The outstanding balance of the receivables sold was \$33 million and \$28 million as of Aug. 31, 2008, and Aug. 31, 2007, respectively.

NOTE 7. INVENTORIES

Components of inventories were as follows:

(Dollars in millions)	As of Aug. 31,	
	2008	2007
Finished Goods	\$1,023	\$ 635
Goods In Process	1,267	893
Raw Materials and Supplies	358	253
Inventories at FIFO Cost	2,648	1,781
Excess of FIFO over LIFO Cost	(195)	(62)
Total	\$2,453	\$1,719

Monsanto uses commodity futures and options contracts to hedge the price volatility of certain commodities, primarily soybeans and corn. This hedging activity is intended to manage the price paid to production growers for corn and soybean seeds.

The increase in the excess of FIFO over LIFO cost is primarily the result of cost increases in certain raw materials required for glyphosate and selective chemistry herbicide production.

Inventory obsolescence reserves are utilized as valuation accounts and effectively establish a new cost basis. The following table displays a roll forward of the inventory obsolescence reserve for fiscal years 2006, 2007 and 2008.

(Dollars in millions)

Balance Sept. 1, 2005	\$ 91
Additions charged to expense	107
Deductions and other ⁽¹⁾	(81)
Balance Aug. 31, 2006	\$117
Additions charged to expense	121
Deductions and other ⁽¹⁾	(69)
Balance Aug. 31, 2007	\$169

Additions charged to expense	135
Deductions and other ⁽¹⁾	(40)
<hr/>	
Balance Aug. 31, 2008	\$264
<hr/>	

(1) Includes foreign
 currency
 translation
 adjustments.

Table of Contents

MONSANTO COMPANY

2008 FORM 10-K

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (continued)**NOTE 8. PROPERTY, PLANT AND EQUIPMENT**

Components of property, plant and equipment were as follows:

(Dollars in millions)	As of Aug. 31,	
	2008	2007
Land and Improvements	\$ 353	\$ 259
Buildings and Improvements	1,275	1,206
Machinery and Equipment	3,704	3,525
Computer Software	446	384
Construction In Progress and Other	947	542
Total Property, Plant and Equipment	6,725	5,916
Less Accumulated Depreciation	(3,402)	(3,260)
Property, Plant and Equipment, Net	\$ 3,323	\$ 2,656

Gross assets acquired under capital leases of \$49 million and \$5 million are included primarily in machinery and equipment as of Aug. 31, 2008, and Aug. 31, 2007, respectively. See Note 13 Debt and Other Credit Arrangements and Note 23 Commitments and Contingencies for related capital lease obligations.

NOTE 9. GOODWILL AND OTHER INTANGIBLE ASSETS

The fiscal year 2008 and 2007 annual goodwill impairment tests were performed as of March 1, 2008 and 2007, and no indications of goodwill impairment existed as of either date. There were no events or changes in circumstances indicating that goodwill might be impaired as of Aug. 31, 2008.

Changes in the net carrying amount of goodwill for fiscal years 2007 and 2008, by segment, are as follows:

(Dollars in millions)	Seeds and Genomics	Agricultural Productivity	Total
Balance as of Sept. 1, 2006	\$1,457	\$ 65	\$1,522
Acquisition Activity (see Note 4)	1,130		1,130
Divested Cotton Businesses (see Note 27)	(67)		(67)
Foreign Currency Translation and Other	39	1	40
Balance as of Aug. 31, 2007	\$2,559	\$ 66	\$2,625
Acquisition Activity (see Note 4)	512		512
Divested Dairy Business (see Note 27)		(4)	(4)
Foreign Currency Translation and Other	(1)		(1)

Balance as of Aug. 31, 2008 **\$3,070** **\$ 62** **\$3,132**

In fiscal year 2008, goodwill increased by \$17 million related to the finalization of the purchase price allocations for 2007 acquisitions, including the resolution of contingent consideration. In fiscal year 2007, a \$78 million reduction in goodwill was recorded primarily related to the reversal of certain income tax liabilities.

Information regarding the company's other intangible assets is as follows:

(Dollars in millions)	As of Aug. 31, 2008			As of Aug. 31, 2007		
	Carrying Amount	Accumulated Amortization	Net	Carrying Amount	Accumulated Amortization	Net
Acquired Germplasm	\$1,174	\$ (578)	\$ 596	\$1,028	\$ (547)	\$ 481
Acquired Biotechnology Intellectual Property	847	(519)	328	900	(457)	443
Trademarks	398	(75)	323	320	(60)	260
Customer Relationships	305	(62)	243	250	(40)	210
Other	71	(30)	41	39	(18)	21
Total	\$2,795	\$ (1,264)	\$1,531	\$2,537	\$ (1,122)	\$1,415

Table of Contents

MONSANTO COMPANY

2008 FORM 10-K

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (continued)

In fiscal year 2007, Monsanto entered into a five-year global technology license for certain seed coating technology and received an option to purchase technology. Related to this agreement, Monsanto recorded intangible assets and a corresponding liability in the amount of \$15 million for discounted minimum future payments, of which \$2.5 million was paid in January 2007.

Monsanto entered a license agreement in fiscal year 2006 with the Regents of the University of California (UC) to sell bovine somatotropin under the brand name *Posilac*, which is used to improve dairy cow productivity. This license agreement is part of the divested Dairy business, and therefore as of Aug. 31, 2008, an intangible asset of \$137 million related to this agreement was included in noncurrent assets of discontinued operations.

The increases in other intangible assets as of Aug. 31, 2008, primarily resulted from the acquisitions described in Note 4 Business Combinations. These increases were partially offset by the divestiture of the Dairy business. See Note 27 Discontinued Operations for further discussion of the divested Dairy business.

Total amortization expense of other intangible assets was \$167 million in fiscal year 2008, \$150 million in fiscal year 2007 and \$149 million in fiscal year 2006.

The estimated intangible asset amortization expense for each of the five succeeding fiscal years is as follows:

(Dollars in millions)	Amount
2009	\$ 155
2010	150
2011	145
2012	125
2013	95

NOTE 10. INVESTMENTS AND EQUITY AFFILIATES**Investments**

Other current assets as of Aug. 31, 2008, and Aug. 31, 2007, included \$132 million and \$59 million, respectively, of short-term investments of fixed-term deposits and commercial paper with original maturities of one year or less, stated at fair value.

During second quarter 2008, Monsanto received \$38 million of Solutia common stock as part of the settlement of its claims against Solutia. During fourth quarter 2008, Monsanto sold the Solutia common stock and realized a loss of less than \$1 million. See Note 25 Solutia-Related and Other Income and Expense for discussion of the gain recorded in conjunction with Solutia's emergence from bankruptcy.

Long-Term Investments: In 2008, Monsanto invested in long-term equity securities with a cost of \$33 million, which are classified as available-for-sale. As of Aug. 31, 2008, these long-term equity securities are recorded in other assets in the Statement of Consolidated Financial Position at their fair value of \$23 million. The sale of \$16 million of these long-term equity securities is restricted through Oct. 31, 2008. Net unrealized losses (net of deferred taxes) of \$6 million are included in accumulated other comprehensive loss in shareowners' equity related to these investments as of Aug. 31, 2008.

As of Aug. 31, 2007, there were no long-term equity securities classified as available-for-sale and no unrealized gains or losses on long-term investments. Monsanto realized gains of \$11 million, net of \$6 million tax expense, in 2007 as a result of a donation of equity securities. There were no sales of equity securities in fiscal year 2006.

Equity Affiliates

During second quarter 2008, Monsanto purchased a 19 percent interest in a seed supplier that produces, conditions, and distributes corn and soybean seeds. Monsanto is accounting for this investment as an equity method investment as Monsanto has the ability to exercise significant influence over the seed supplier. As of Aug. 31, 2008, this investment is recorded in other assets in the Statement of Consolidated Financial Position at its carrying value of \$50 million. From the date of the

Table of Contents

MONSANTO COMPANY

2008 FORM 10-K

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (continued)

investment through Aug. 31, 2008, Monsanto purchased \$91 million of inventory from the seed supplier and sold \$4 million of inventory to the seed supplier. As of Aug. 31, 2008, the amount payable to the seed supplier is approximately \$1 million and is recorded in accounts payable in the Statement of Consolidated Financial Position. In fourth quarter 2008, Monsanto paid the seed supplier \$11 million for inventory that will be delivered in fiscal year 2009.

Renessen LLC, Monsanto's joint venture with Cargill, Inc. (Cargill), has developed and plans to commercialize a proprietary grain processing technology, marketed under the name Extrax. This technology separates corn into three high-value fractions: a high-starch fraction, ideal for ethanol fermentation; food-grade corn oil, valuable as a non-trans fat oil solution or for biodiesel; and a nutrient-rich meal that can be used as a corn replacement in animal feed rations. The Extrax technology will be licensed by Renessen to North American ethanol manufacturers interested in optimizing the operation of ethanol plants and diversifying the income streams generated by the traditional dry grind ethanol manufacturing process. Monsanto owns 50 percent of Renessen and has equal governance and funding rights and responsibilities with Cargill. Cargill has agreed to grant Renessen an exclusive right and license to Cargill's intellectual property related to this corn processing technology needed for Renessen to pursue its business plan and receive rights to use intellectual property developed by Renessen in other specified areas. Both Cargill and Monsanto provide specified services to Renessen for a fee.

In 2008, Monsanto and Cargill signed an agreement to narrow the scope of the Renessen joint venture to focus solely on the Extrax project. Other projects that were formerly under the joint venture and related intellectual property were transferred to, and are now owned by, Monsanto or Cargill. Monsanto agreed to pay \$20 million to Cargill to obtain full rights to intellectual property for products that Monsanto plans to develop and commercialize. As of Aug. 31, 2008, the amount payable to Cargill is \$10 million and is recorded in short-term miscellaneous accruals in the Statement of Consolidated Financial Position.

During fiscal years 2008, 2007 and 2006, Monsanto performed R&D services for Renessen of \$5 million, \$40 million and \$44 million, respectively, which was recovered at cost. The fair value of performing these services approximates the recovered costs. Monsanto's investment in Renessen, including outstanding advances, was \$2 million as of Aug. 31, 2008. Equity affiliate expense from Renessen was \$3 million in fiscal year 2008, \$36 million in fiscal year 2007, and \$34 million in fiscal year 2006, and represented substantially all of equity affiliate expense.

NOTE 11. DEFERRED REVENUE

In first quarter 2008, Monsanto entered into a corn herbicide tolerance and insect control trait technologies agreement with Pioneer Hi-Bred International, Inc., a wholly-owned subsidiary of E. I. du Pont de Nemours and Company. Among its provisions, the agreement modified certain existing corn license agreements between the parties, included provisions under which the parties agreed not to assert certain intellectual property rights against each other, and granted each party the right to use certain regulatory data of the other in order to develop additional products. As a result of the new agreement which requires fixed annual payments, the company recorded a receivable and deferred revenue of \$635 million in first quarter 2008. Cumulative cash receipts will be \$725 million over an eight-year period. Revenue of \$79 million related to this agreement was recorded in 2008. As of Aug. 31, 2008, the remaining receivable balance is \$629 million. The majority of this balance is included in long-term receivables, and the current portion is included in trade receivables. As of Aug. 31, 2008, the remaining deferred revenue balance is \$555 million. The majority of this balance is included in long-term deferred revenue, and the current portion is included in deferred revenues in the Statement of Consolidated Financial Position. The interest portion of this receivable is reported in interest income and totaled \$22 million for the fiscal year ended Aug. 31, 2008, in the Statement of Consolidated Operations.

In third quarter 2008, Monsanto and Syngenta entered into a Roundup Ready 2 Yield Soybean License Agreement. The agreement grants Syngenta access to Monsanto's Roundup Ready 2 Yield Soybean technology in consideration of

royalty payments from Syngenta, based on sales. Under this agreement Syngenta will fulfill the contractual sales volumes over a nine year period. The minimum obligation from Syngenta over this period is \$81 million. As of Aug. 31, 2008, \$67 million is included in long-term receivables and long-term deferred revenue on the Statement of Consolidated Financial Position related to the net present value of expected payments under this agreement. The interest portion of this receivable is reported in interest income in the Statement of Consolidated Operations and was \$1 million for the fiscal year ended Aug. 31, 2008.

Table of Contents

MONSANTO COMPANY

2008 FORM 10-K

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (continued)**NOTE 12. INCOME TAXES**

The components of income from continuing operations before income taxes and minority interest were:

(Dollars in millions)	Year Ended Aug. 31,		
	2008	2007	2006
United States	\$1,419	\$ 666	\$ 668
Outside United States	1,507	662	350
Total	\$2,926	\$1,328	\$1,018

The components of income tax provision from continuing operations were:

(Dollars in millions)	Year Ended Aug. 31,		
	2008	2007	2006
Current:			
U.S. federal	\$527	\$ 366	\$157
U.S. state	57	31	6
Outside United States	343	121	84
Total Current	927	518	247
Deferred:			
U.S. federal	(51)	(113)	65
U.S. state	25	(11)	14
Outside United States	(2)	9	4
Total Deferred	(28)	(115)	83
Total	\$899	\$ 403	\$330

Factors causing Monsanto's income tax provision from continuing operations to differ from the U.S. federal statutory rate were:

Year Ended Aug. 31,

(Dollars in millions)	2008	2007	2006
U.S. Federal Statutory Rate	\$1,024	\$465	\$356
U.S. R&D Tax Credit	(5)	(17)	(2)
Lower Ex-U.S. Rates	(201)	(46)	(15)
One-Time Dividend Repatriation			21
State Income Taxes	49	21	20
Valuation Allowances	(41)	(33)	(14)
Acquired IPR&D	57	67	
Tax Reserve	40	(38)	(25)
Other	(24)	(16)	(11)
Income Tax Provision	\$ 899	\$403	\$330

Deferred income tax balances are related to:

(Dollars in millions)	As of Aug. 31,	
	2008	2007
Net Operating Loss and Other Carryforwards	\$ 731	\$ 717
Employee Fringe Benefits	376	316
Intangible Assets	144	119
Allowance for Doubtful Accounts	99	130
Inventories	140	104
Litigation Reserves	72	137
Other	381	341
Valuation Allowance	(36)	(93)
Total Deferred Tax Assets	\$1,907	\$1,771
Property, Plant and Equipment	\$ 251	\$ 221
Intangibles	500	452
Other	50	8
Total Deferred Tax Liabilities	\$ 801	\$ 681
Net Deferred Tax Assets	\$1,106	\$1,090

Table of Contents

MONSANTO COMPANY

2008 FORM 10-K

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (continued)

As of Aug. 31, 2008, Monsanto had available approximately \$900 million in net operating loss carryforwards (NOLs), most of which related to Brazilian operations, which have an indefinite carryforward period. Monsanto also had available approximately \$300 million of U.S. foreign tax credit carryforwards, which expire from 2012 through 2018. Management regularly assesses the likelihood that deferred tax assets will be recovered from future taxable income. To the extent management believes that it is more likely than not that a deferred tax asset will not be realized, a valuation allowance is established. As of Aug. 31, 2008, management continues to believe it is more likely than not that the company will realize the deferred tax assets in Brazil and the United States. As of Aug. 31, 2005, management had recorded a valuation allowance of \$103 million related to Argentine NOLs. Monsanto Argentina generated taxable income in its 2007 and 2006 tax years (calendar 2007 and 2006) and, accordingly, management reversed \$33 million and \$15 million of the valuation allowance as a favorable adjustment to the 2007 and 2006 tax provision, respectively. Also, during 2007 and 2006, the valuation allowance changed slightly because of foreign currency fluctuations. At the beginning of fiscal 2008, Argentina had a valuation allowance of \$43 million for the deferred tax assets related to NOLs. However, based on improvements in Monsanto Argentina's operations and improvements in Argentina's overall economy, and in particular the agricultural sector, management now believes it is more likely than not that such deferred tax assets will be realized. Accordingly, the previously recorded \$43 million valuation allowance was reversed in the third quarter of fiscal 2008. Monsanto also continues to conclude that it is more likely than not that it will realize its deferred tax assets in Argentina that are not related to the NOLs noted above through future projected taxable income.

The American Jobs Creation Act of 2004 (AJCA) created a temporary incentive for U.S. multinationals to repatriate accumulated earnings outside the United States by providing an 85 percent dividends received deduction for certain dividends from controlled foreign corporations. In order to benefit from this incentive, the company must reinvest the qualifying dividends in the United States under a domestic reinvestment plan approved by the chief executive officer and board of directors. In fourth quarter 2006, after Monsanto's chief executive officer and board of directors approved the company's domestic reinvestment plan, the company repatriated \$437 million of foreign earnings under the AJCA. Accordingly, the company recorded income tax expense of \$21 million associated with this repatriation. The repatriated funds were used for research and development, capital expenditures, and other permitted activities. Income taxes and remittance taxes have not been recorded on approximately \$2.6 billion of undistributed earnings of foreign operations of Monsanto, either because any taxes on dividends would be substantially offset by foreign tax credits, or because Monsanto intends to reinvest those earnings indefinitely. It is not practicable to estimate the income tax liability that might be incurred if such earnings were remitted to the United States.

Tax authorities regularly examine the company's returns in the jurisdictions in which Monsanto does business. Due to the nature of the examinations, it may take several years before they are completed. Management regularly assesses the tax risk of the company's return filing positions for all open years. During fiscal year 2007, Monsanto recorded a favorable adjustment to the income tax reserve as a result of the conclusion of an IRS audit for tax years 2003 and 2004, an ex-U.S. audit and the resolution of various state income tax matters. During fiscal year 2006, the IRS completed an audit of Pharmacia for tax years 2000 to 2002 (for which period Monsanto was a member of Pharmacia's consolidated group). As a result of the conclusion of this audit, and to a lesser extent, the resolution of various state income tax issues, Monsanto recorded a favorable adjustment to the income tax reserve in fiscal year 2006.

In June 2006, the FASB issued FIN No. 48, *Accounting for Uncertainty in Income Taxes - an interpretation of FASB Statement No. 109* (FIN 48). As required, the company adopted the provisions of FIN 48 as of Sept. 1, 2007. As a result of the implementation of FIN 48, Monsanto recorded a charge to retained deficit of \$25 million, primarily attributable to liabilities related to interest and penalties on certain income tax matters. The total amount of unrecognized tax benefits as of the date of adoption on Sept. 1, 2007, was \$256 million. In addition, as of Sept. 1, 2007, liabilities for accrued interest and penalties relating to the unrecognized tax benefits totaled \$55 million.

As of Aug. 31, 2008, Monsanto had total unrecognized tax benefits of \$434 million, of which \$264 million would favorably impact the effective tax rate if recognized. Accrued interest and penalties included in the Statement of Consolidated Financial Position was \$79 million as of Aug. 31, 2008. Monsanto recognizes accrued interest and penalties related to unrecognized tax benefits as a component of income tax expense. For the 12 months ended Aug. 31, 2008, we recognized \$19 million of income tax expense for interest and penalties.

Table of Contents

MONSANTO COMPANY

2008 FORM 10-K

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (continued)

A reconciliation of the beginning and ending balance of unrecognized tax benefits related to continuing operations is as follows:

(Dollars in millions)

Balance Sept. 1, 2007	\$256
Increases for prior year tax positions	67
Decreases for prior year tax positions	(5)
Increases for current year tax positions	120
Settlements	(7)
Lapse of statute of limitations	(1)
Foreign currency translation	4
Balance Aug. 31, 2008	\$434

Monsanto operates in various countries throughout the world and, as a result, files income tax returns in numerous jurisdictions. These tax returns are subject to examination by various federal, state and local tax authorities. For Monsanto's major tax jurisdictions, the tax years that remain subject to examination are shown below:

Jurisdiction	Open Tax Years
Argentina	2000 2008
U.S. state and local income taxes	2000 2008
Brazil	2001 2008
Belgium	2002 2008
U.S. federal income tax	2005 2008

If our assessment of unrecognized tax benefits is not representative of actual outcomes, our financial statements could be significantly impacted in the period of settlement or when the statute of limitations expires. Management estimates that it is reasonably possible that the total amount of uncertain tax benefits could decrease by as much as \$75 million within the next 12 months primarily as a result of the resolution of audits currently in progress in several jurisdictions, involving issues common to large multinational corporations, and the lapsing of the statute of limitations in multiple jurisdictions.

NOTE 13. DEBT AND OTHER CREDIT ARRANGEMENTS

Effective Feb. 28, 2007, Monsanto finalized a new \$2 billion credit facility agreement with a group of banks. This agreement provides a five-year senior unsecured revolving credit facility, which replaces the existing \$1 billion credit facility established in 2004. This facility was initiated to be used for general corporate purposes, which may include working capital requirements, acquisitions, capital expenditures, refinancing and support of commercial paper borrowings. The new agreement also provides for European euro denominated loans, letters of credit, and swingline borrowings, and allows certain designated subsidiaries to borrow with a company guarantee. Covenants under this credit facility restrict maximum borrowings. There are no compensating balances, but the facility is subject to various

fees, which are based on the company's credit ratings. As of Aug. 31, 2008, Monsanto was in compliance with all debt covenants and there were no outstanding borrowings under this credit facility.

Short-Term Debt

(Dollars in millions)	As of Aug. 31,	
	2008	2007
Current Maturities of Long-Term Debt	\$13	\$236
Notes Payable to Banks	11	34
Total Short-Term Debt	\$24	\$270

	As of Aug. 31,	
	2008	2007
Weighted-Average Interest Rate on Notes Payable to Banks at End of Period	9.2%	9.3%

Table of Contents

MONSANTO COMPANY

2008 FORM 10-K

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (continued)

In May 2003, Monsanto issued \$250 million of 4% Senior Notes under the 2002 shelf registration, which were repaid on May 15, 2008. As of Aug. 31, 2007, \$236 million of these notes were outstanding and included in current maturities of long-term debt.

As of Aug. 31, 2008, the company did not have any outstanding commercial paper, but it had several short-term borrowings to support ex-U.S. operations, which had weighted-average interest rates as indicated above. Certain of these bank loans also act to limit exposure to changes in foreign-currency exchange rates.

Long-Term Debt

(Dollars in millions)	As of Aug. 31,	
	2008	2007
7 ³ / ₈ % Senior Notes, Due 2012 ⁽¹⁾	\$ 484	\$ 484
5 ¹ / ₂ % Senior Notes, Due 2035 ⁽¹⁾	394	394
5 ¹ / ₈ % Senior Notes, Due 2018 ⁽¹⁾	299	
5 ¹ / ₂ % Senior Notes, Due 2025 ⁽¹⁾	268	265
5 ⁷ / ₈ % Senior Notes, Due 2038 ⁽¹⁾	246	
Euro-Denominated Debt, Due 2013 ⁽²⁾	65	
Other (including Capital Leases)	36	7
Total Long-Term Debt	\$1,792	\$1,150

(1) Amounts are net of unamortized discounts. For the 5¹/₂% Senior Notes due 2025, amount is also net of the unamortized premium of \$45 million and \$48 million as of Aug. 31, 2008, and Aug. 31, 2007, respectively.

(2) The interest rate is a floating

rated based on
the Euro
Interbank
Offered Rate
(Euribor).

In 2002, Monsanto filed a shelf registration with the SEC for the issuance of up to \$2.0 billion of registered debt (2002 shelf registration) and issued \$800 million in 7³/₈% Senior Notes. As of Aug. 31, 2008, \$484 million of the 7³/₈% Senior Notes are due on Aug. 15, 2012 (see discussion below regarding a debt exchange for \$314 million of the 7³/₈% Senior Notes).

In May 2005, Monsanto filed a new shelf registration with the SEC (2005 shelf registration) that allowed the company to issue up to \$2.0 billion of debt, equity and hybrid offerings (including debt securities of \$950 million remaining available under the May 2002 shelf registration statement). In July 2005, Monsanto issued \$400 million of 5¹/₂% Senior Notes under the 2005 shelf registration, which are due on July 15, 2035 (5¹/₂% 2035 Senior Notes). In April 2008, Monsanto issued \$300 million of 5¹/₈% Senior Notes under the 2005 shelf registration, which are due on April 15, 2018 (5¹/₈% 2018 Senior Notes). The net proceeds from the issuance of the 5¹/₈% 2018 Senior Notes were used to finance the expansion of corn seed production facilities. Also in April 2008, Monsanto issued \$250 million of 5⁷/₈% Senior Notes under the 2005 shelf registration, which are due on April 15, 2038 (5⁷/₈% 2038 Senior Notes). The net proceeds from the sale of the 5⁷/₈% 2038 Senior Notes were used to repay \$238 million of 4% Senior Notes that were due on May 15, 2008. As of Aug. 31, 2008, \$1 billion remained available under the 2005 shelf registration. In September 2007, the company entered into forward starting interest rate swaps, and the swaps were terminated in April 2008 at the time of issuance of the 5¹/₈% 2018 Senior Notes and the 5⁷/₈% 2038 Senior Notes. For a more complete discussion of the forward starting interest rate swaps, see Note 14 Financial Instruments.

In August 2005, Monsanto exchanged \$314 million of new 5¹/₂% Senior Notes due 2025 (5¹/₂% 2025 Senior Notes) for \$314 million of its outstanding 7³/₈% Senior Notes due 2012, which were issued in 2002. The exchange was conducted as a private transaction with holders of the outstanding 7³/₈% Senior Notes who certified to the company that they were qualified institutional buyers within the meaning of Rule 144A under the Securities Act of 1933. The transaction has been accounted for as an exchange of debt under EITF Issue No. 96-19, *Debtor's Accounting for a Modification or Exchange of Debt Instruments*. Under the terms of the exchange, the company paid a premium of \$53 million to holders participating in the exchange, and the \$53 million premium will be amortized over the life of the new 5¹/₂% 2025 Senior Notes. As a result of the debt premium, the effective interest rate on the 5¹/₂% 2025 Senior Notes will be 7.035% over the life of the debt. The exchange of debt allowed the company to adjust its debt-maturity schedule while also allowing it to take advantage of market conditions which the company considered to be favorable.

In October 2005, the company filed a registration statement with the SEC on Form S-4 with the intention to commence a registered exchange offer during fiscal year 2006 to provide holders of the newly issued privately placed notes with the opportunity to exchange such notes for substantially identical notes registered under the Securities Act of 1933. In February

Table of Contents

MONSANTO COMPANY

2008 FORM 10-K

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (continued)

2006, Monsanto issued \$314 million aggregate principal amount of its 5¹/₂% Senior Notes due 2025, in exchange for the same principal amount of its 5¹/₂% Senior Notes due 2025 which had been issued in the private placement transaction in August 2005. The offering of the notes issued in February was registered under the Securities Act of 1933.

In June 2008, Monsanto assumed long-term debt as part of the De Ruiter acquisition. See Note 4 Business Combinations for additional discussion of the De Ruiter acquisition. The assumed debt is denominated in European euros and is due on Sept. 25, 2012. The interest rate is a variable rate based on the Euribor. As of Aug. 31, 2008, \$8 million is recorded in short-term debt, including current portion of long-term debt and \$65 million is recorded in long-term debt in the Statement of Consolidated Financial Position.

The information regarding interest expense below reflects Monsanto's interest expense on debt and amortization of debt issuance costs:

(Dollars in millions)	Year Ended Aug. 31,		
	2008	2007	2006
Interest Cost Incurred	\$132	\$150	\$142
Less: Capitalized on Construction	(22)	(14)	(9)
Interest Expense	\$110	\$136	\$133

NOTE 14. FINANCIAL INSTRUMENTS

The notional amounts, carrying amounts, and estimated fair values of the company's financial instruments were as follows as of Aug. 31, 2008, and Aug. 31, 2007:

(Dollars in millions)	As of Aug. 31,					
	2008			2007		
	Notional Amount	Carrying Amount	Fair Value	Notional Amount	Carrying Amount	Fair Value
Financial Assets:						
Foreign-currency contracts:						
Forward purchases	\$ 311	\$ (4)	\$ (4)	\$ 872	\$ 10	\$ 10
Forward sales	1,516	18	18	1,105	(16)	(16)
Options	416			510	5	5
Commodity futures:						
Futures purchased net	247	12	12	169	(2)	(2)
Options purchased	228	(3)	(3)	117	(1)	(1)
Swaps	127	(3)	(3)	98	(6)	(6)

Financial Liabilities:

Interest rate derivatives			250	2	2
Short-term debt	24	24		270	267
Long-term debt	1,792	1,751		1,150	1,138

Monsanto's business and activities expose it to a variety of market risks, including risks related to changes in commodity prices, foreign-currency exchange rates, interest rates and, to a lesser degree, security prices. These financial exposures are monitored and managed by the company as an integral part of its market risk management program. This program recognizes the unpredictability of financial markets and seeks to reduce the potentially adverse effects that market volatility could have on operating results.

As part of its market risk management strategy, Monsanto uses derivative instruments to protect fair values and cash flows from fluctuations caused by volatility in currency exchange rates, interest rates, and commodity prices. This volatility affects cross-border transactions that involve sales and inventory purchases denominated in foreign currencies. Monsanto is exposed to this risk both on an intercompany basis and on a third-party basis. Additionally, the company is exposed to foreign-currency exchange risks for recognized assets and liabilities, royalties, and net investments in subsidiaries that are denominated in currencies other than its functional currency, the U.S. dollar. Monsanto uses forward-currency exchange contracts, swaps, and options to manage these risks.

Table of Contents

MONSANTO COMPANY

2008 FORM 10-K

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (continued)

All foreign-currency contracts outstanding at Aug. 31, 2008, have maturities of less than 36 months, and the forward contracts require Monsanto to exchange currencies at agreed-upon rates at maturity. The company does not expect any losses from credit exposure related to these instruments because these are with financial institutions having a high credit rating.

Monsanto's commodity price risk management strategy is to use derivative instruments to minimize significant unanticipated earnings fluctuations that may arise from volatility in commodity prices. Price fluctuations in commodities, mainly in corn and soybeans, can cause the actual prices paid to production growers for corn and soybean seeds to differ from anticipated cash outlays. Monsanto uses commodity futures and options contracts to manage these risks. The company also uses commodity futures and options contracts to manage the value of its soybean inventories.

Monsanto's energy risk management strategy is to use derivative instruments to minimize significant unanticipated earnings fluctuations that may arise from volatility in natural gas prices and diesel prices.

Monsanto's interest rate risk management strategy is to use derivative instruments to minimize significant unanticipated earnings fluctuations that may arise from volatility in interest rates of the company's borrowings and to manage the interest rate sensitivity of its debt.

By using derivative financial instruments to manage exposures to changes in exchange rates, commodity prices, and interest rates, Monsanto exposes itself to the risk that the counterparty might fail to perform its obligations under the terms of the derivative contract. Monsanto minimizes this risk in derivative instruments by entering into transactions with high-quality counterparties and by limiting the amount of exposure in each instrument. Such financial instruments are neither held nor issued by the company for trading purposes.

Foreign-Currency Hedges

The company uses foreign-currency options and foreign-currency forward contracts as hedges against anticipated sales or purchases denominated in foreign currencies. The company enters into these contracts to protect itself against the risk that the eventual dollar-net-cash flows will be adversely affected by changes in exchange rates. The company also uses foreign-currency contracts to hedge the effects of fluctuations in exchange rates on foreign-currency-denominated third-party and intercompany receivables and payables.

The company hedges a portion of its net investment in Brazilian subsidiaries and recorded an after-tax loss of \$78 million, \$14 million and \$5 million in fiscal years 2008, 2007 and 2006, respectively, all of which are included in accumulated foreign currency translation.

Foreign currencies in which Monsanto has significant hedged exposures are the European euro, the Brazilian real, the Canadian dollar, the Romanian leu and the Argentine peso. The aggregate net transaction loss, net of related hedging gains and losses, included in net earnings for fiscal years 2008, 2007 and 2006, was \$6 million, \$14 million and \$9 million, respectively.

As of Aug. 31, 2008, \$16 million of after-tax deferred net gains on foreign-currency cash-flow hedges have been recorded in accumulated other comprehensive income, of which \$3 million net of tax will be reclassified into earnings within the next 12 months. These derivatives all expire or mature within the next 36 months, and any realized gain or loss will be reclassified to earnings as the underlying hedged transaction impacts income. During fiscal years 2008, 2007 and 2006, no ineffectiveness has been recorded in earnings related to foreign-currency cash-flow hedges.

Fair-Value Hedges

Monsanto uses futures and options contracts to manage the value of the soybean seed inventories that it buys from growers. Generally, the company hedges from 70 percent to 100 percent of the soybean inventory value.

Interest rate swap agreements are used to reduce interest rate risk and to manage the interest rate sensitivity of its debt. Monsanto may use interest rate swaps to convert its fixed-rate debt to variable-rate debt. The resulting cost of funds may be lower or higher than it would have been if variable-rate debt had been issued directly. Under the interest rate swap contracts, the company agrees with other parties to exchange, at specified intervals, the difference between

fixed-rate and floating-rate

Table of Contents

MONSANTO COMPANY

2008 FORM 10-K

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (continued)

interest amounts, which is calculated based on an agreed-upon notional amount. In connection with the 4% Senior Notes, Monsanto entered into a \$250 million notional amount interest rate swap that matured in May 2008. The fair value of Monsanto's interest rate swap agreement was a liability of \$2 million as of Aug. 31, 2007. The company estimates the fair value of its interest rate management derivative based on quoted market prices.

The difference between the carrying value and the fair value of hedged items classified as fair-value hedges was offset by the change in fair value of the related derivatives. Accordingly, hedge ineffectiveness for fair-value hedges, determined in accordance with SFAS 133 and SFAS 149, had an immaterial effect on earnings in fiscal years 2008, 2007 and 2006. No fair-value hedges were discontinued during fiscal years 2008, 2007 or 2006.

Cash-Flow Hedges

The company enters into contracts with a number of its seed growers to purchase their output at the market prices in effect when the individual growers elect to fix their contract prices. As a hedge against possible commodity price fluctuations, Monsanto purchases futures and options contracts for corn and soybeans. The futures contracts hedge the commodity prices paid, while the options contracts limit the unfavorable effect that price changes could have on these purchases.

Monsanto recognized net gains of \$2 million in fiscal year 2008, and less than \$1 million in each of fiscal years 2007 and 2006, in cost of goods sold, which represented the ineffectiveness of all commodity cash-flow hedges. These amounts represent the portion of the derivatives' fair value that was excluded from the assessment of hedge effectiveness. No cash-flow hedges were discontinued during fiscal years 2008, 2007 or 2006.

As of Aug. 31, 2008, \$67 million of after-tax deferred net gains on commodity cash-flow hedges, which have been offset with after-tax deferred net losses, have been recorded in accumulated other comprehensive income, of which \$50 million after tax will be reclassified into earnings within the next 12 months. The actual sales of the inventory will necessitate the reclassification of the derivative gains into earnings. The maximum term over which the company is hedging exposures to the variability of cash flow (for all forecasted transactions, excluding interest payments on variable-rate debt) is 60 months.

In September 2007, the company entered into forward starting interest rate swaps with a total notional amount of \$500 million, which were accounted for as derivatives under SFAS 133, as amended. The swaps were terminated in April 2008 at the time of issuance of the 5¹/₈% 2018 Senior Notes and the 5⁷/₈% 2038 Senior Notes. Ineffectiveness of less than \$1 million related to the swaps was recorded in other expense in fiscal year 2008. Realized losses, net of tax, of \$29 million were recorded in other comprehensive income to reflect the after-tax losses of the forward starting interest rate swaps. The realized losses will be recorded in the Statement of Consolidated Operations as the hedged interest costs are recorded over the life of the debt instruments. For a more complete discussion of the April 2008 debt issuance, see Note 13 Debt and Other Credit Arrangements.

As of Aug. 31, 2008, \$40 million of after-tax deferred net losses on all interest-related cash-flow hedges, including the September 2007 forward starting interest rate swaps discussed above, are recorded in accumulated other comprehensive income, of which \$4 million net of tax will be reclassified into earnings within the next 12 months.

Credit Risk Management

Monsanto invests its excess cash in deposits with major banks throughout the world and in high-quality short-term debt instruments. Such investments are made only in instruments issued or enhanced by high-quality institutions. As of Aug. 31, 2008, the company had no financial instruments that represented a significant concentration of credit risk. Limited amounts are invested in any single institution to minimize risk. The company has not incurred any credit risk losses related to those investments.

The company sells a broad range of agricultural products to a diverse group of customers throughout the world. In the United States, the company makes substantial sales to relatively few large wholesale customers. The company's agricultural products business is highly seasonal, and it is subject to weather conditions that affect commodity prices and seed yields. Credit limits, ongoing credit evaluation, and account monitoring procedures are used to minimize the

risk of loss. Collateral is secured when it is deemed appropriate by the company. For example, in Latin America, the company collects payments on certain customer accounts in grain.

78

Table of Contents

MONSANTO COMPANY

2008 FORM 10-K

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (continued)

Monsanto regularly evaluates its business practices to minimize its credit risk. During fiscal years 2008 and 2007, the company engaged multiple banks in Argentina and Brazil in the development of new customer financing options that involve direct bank financing of customer purchases. For further information on these programs, see Note 6 Customer Financing Programs.

NOTE 15. POSTRETIREMENT BENEFITS PENSIONS

Most of Monsanto's U.S. employees are covered by noncontributory pension plans sponsored by the company. Pension benefits are based on an employee's years of service and compensation level. Funded pension plans were funded in accordance with the company's long-range projections of the plans' financial condition. These projections took into account benefits earned and expected to be earned, anticipated returns on pension plan assets, and income tax and other regulations.

DPL provided a qualified defined benefit plan covering eligible employees. Effective Aug. 5, 2007, this plan was frozen. Effective Dec. 31, 2007, the DPL plan was merged with the Monsanto Pension Plan.

Components of Net Periodic Benefit Cost

Total pension cost for Monsanto employees included in the Statements of Consolidated Operations was \$68 million, \$62 million and \$73 million in fiscal years 2008, 2007 and 2006, respectively. The information that follows relates to all of the pension plans in which Monsanto employees participated. The components of pension cost for these plans were:

(Dollars in millions)	Year Ended Aug. 31,			Year Ended Aug. 31,			Year Ended Aug. 31,		
	2008			2007			2006		
	U.S.	Outside the U.S.	Total	U.S.	Outside the U.S.	Total	U.S.	Outside the U.S.	Total
Service Cost for Benefits Earned During the Year	\$ 39	\$ 6	\$ 45	\$ 34	\$ 6	\$ 40	\$ 36	\$ 7	\$ 43
Interest Cost on Benefit Obligation	94	15	109	89	11	100	83	10	93
Assumed Return on Plan Assets	(108)	(18)	(126)	(104)	(15)	(119)	(104)	(15)	(119)
Amortization of Unrecognized Amounts	37	3	40	38	3	41	50	5	55
SFAS 88 Settlement Charge ⁽¹⁾								1	1
Total Net Periodic Benefit Cost	\$ 62	\$ 6	\$ 68	\$ 57	\$ 5	\$ 62	\$ 65	\$ 8	\$ 73

(1) SFAS 88 refers to SFAS No. 88, *Employers Accounting for Settlements and*

*Curtailments of
Defined Benefit
Pension Plans
and for
Termination
Benefits.*

The other changes in plan assets and benefit obligations recognized in other comprehensive income for the year ended Aug. 31, 2008 were:

(Dollars in millions)	U.S.	Outside the U.S.	Total
Net Loss	\$163	\$ 45	\$208
Prior Service Credit		(2)	(2)
Amortization of Prior Service Cost	(3)		(3)
Amortization of Gain	(34)	(3)	(37)
Total Recognized in Other Comprehensive Income	\$126	\$ 40	\$166

The following assumptions, calculated on a weighted-average basis, were used to determine pension costs for the principal plans in which Monsanto employees participated:

	Year Ended Aug. 31,		Year Ended Aug. 31,		Year Ended Aug. 31,	
	2008		2007		2006	
	U.S.	Outside the U.S.	U.S.	Outside the U.S.	U.S.	Outside the U.S.
Discount Rate	6.05%	5.48%	5.90%	4.96%	5.00%	4.29%
Assumed Long-Term Rate of Return on Assets	8.25%	7.05%	8.50%	7.18%	8.75%	7.43%
Annual Rates of Salary Increase (for plans that base benefits on final compensation level)	4.30%	3.28%	4.00%	3.54%	4.00%	3.60%

Table of Contents

MONSANTO COMPANY

2008 FORM 10-K

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (continued)**Obligations and Funded Status**

Monsanto uses a measurement date of August 31 for its pension plans. The funded status of the pension plans as of Aug. 31, 2008, and Aug. 31, 2007, was as follows:

(Dollars in millions)	U.S.		Outside the U.S.		Total	
	Year Ended Aug. 31,		Year Ended Aug. 31,		Year Ended Aug. 31,	
	2008	2007	2008	2007	2008	2007
Change in Benefit Obligation:						
Benefit obligation at beginning of period	\$1,587	\$1,535	\$ 264	\$ 252	\$1,851	\$1,787
Service cost	39	34	6	5	45	39
Interest cost	94	89	15	11	109	100
Plan participants' contributions			2	1	2	1
Actuarial (gain) loss	(13)	33	25	(8)	12	25
Acquisitions ⁽¹⁾		23				23
Benefits paid	(137)	(129)	(16)	(11)	(153)	(140)
Settlements	(1)				(1)	
Plan amendments		2	(2)		(2)	2
Currency loss			15	14	15	14
Benefit Obligation at End of Period	\$1,569	\$1,587	\$ 309	\$ 264	\$1,878	\$1,851
Change in Plan Assets:						
Fair value of plan assets at beginning of period	\$1,398	\$1,271	\$ 233	\$ 204	\$1,631	\$1,475
Actual return on plan assets	(68)	168	(19)	17	(87)	185
Employer contribution ⁽²⁾	127	65	21	8	148	73
Plan participants' contributions			2	1	2	1
Acquisitions ⁽¹⁾		23				23
Fair value of benefits paid ⁽²⁾	(138)	(129)	(16)	(11)	(154)	(140)
Currency gain			20	14	20	14
Plan Assets at End of Period	\$1,319	\$1,398	\$ 241	\$ 233	\$1,560	\$1,631
Net Amount Recognized	\$ 250	\$ 189	\$ 68	\$ 31	\$ 318	\$ 220

(1) Includes DPL acquisition in 2007.

(2)

Employer contributions and benefits paid include \$7 million and \$6 million paid from employer assets for unfunded plans in each of fiscal years 2008 and 2007, respectively.

Weighted-average assumptions used to determine benefit obligations as of Aug. 31, 2008, and Aug. 31, 2007, were as follows:

	U.S.		Outside the U.S.	
	Year Ended Aug. 31,		Year Ended Aug. 31,	
	2008	2007	2008	2007
Discount Rate	6.50%	6.05%	5.76%	5.38%
Rate of Compensation Increase	4.25%	4.30%	4.11%	3.22%

Fiscal year 2009 pension expense, which will be determined using assumptions as of Aug. 31, 2008, is expected to increase compared with fiscal year 2008 expense. The company increased its discount rate assumption as of Aug. 31, 2008, to reflect current economic conditions of market interest rates.

The U.S. accumulated benefit obligation (ABO) as of Aug. 31, 2008, and Aug. 31, 2007, was \$1.5 billion. The ABO for plans outside of the United States was \$240 million and \$203 million as of Aug. 31, 2008, and Aug. 31, 2007, respectively.

The projected benefit obligation (PBO), ABO, and the fair value of the plan assets for pension plans with PBOs in excess of plan assets as of Aug. 31, 2008, and Aug. 31, 2007, were as follows:

(Dollars in millions)	U.S.		Outside the U.S.		Total	
	As of Aug. 31,		As of Aug. 31,		As of Aug. 31,	
	2008	2007	2008	2007	2008	2007
PBO	\$1,569	\$1,564	\$260	\$107	\$1,829	\$1,671
ABO	1,496	1,497	230	98	1,726	1,595
Fair Value of Plan Assets with PBOs in Excess of Plan Assets	1,319	1,374	214	82	1,533	1,456

Table of Contents

MONSANTO COMPANY

2008 FORM 10-K

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (continued)

The PBO, ABO, and the fair value of the plan assets for pension plans with ABOs in excess of plan assets as of Aug. 31, 2008, and Aug. 31, 2007, were as follows:

(Dollars in millions)	U.S.		Outside the U.S.		Total	
	As of Aug. 31,		As of Aug. 31,		As of Aug. 31,	
	2008	2007	2008	2007	2008	2007
PBO	\$1,569	\$1,564	\$128	\$27	\$1,697	\$1,591
ABO	1,496	1,497	114	23	1,610	1,520
Fair Value of Plan Assets with ABOs in Excess of Plan Assets	1,319	1,374	84	7	1,403	1,381

As of Aug. 31, 2008, and Aug. 31, 2007, amounts recognized in the Statements of Consolidated Financial Position were included in the following balance sheet accounts:

Net Amount Recognized

(Dollars in millions)	U.S.		Outside the U.S.		Total	
	As of Aug. 31,		As of Aug. 31,		As of Aug. 31,	
	2008	2007	2008	2007	2008	2007
Miscellaneous Short-Term Accruals	\$ 5	\$ 5	\$ 7	\$ 5	\$ 12	\$ 10
Postretirement Liabilities	245	185	72	49	317	234
Other Assets		(1)	(11)	(23)	(11)	(24)
Net Liability Recognized	\$250	\$189	\$ 68	\$ 31	\$318	\$220

As of Aug. 31, 2007, Monsanto adopted SFAS 158, which requires employers to recognize the underfunded or overfunded status of a pension plan as an asset or liability and recognize changes in the funded status in the year in which the changes occur through accumulated other comprehensive income (loss), which is a component of shareowners' equity. As a result of the implementation of SFAS 158, Monsanto recognized an after-tax increase in accumulated other comprehensive loss of \$44 million. Monsanto also follows SFAS No. 87, *Employers' Accounting for Pensions* (SFAS 87). In accordance with SFAS 87, Monsanto recorded an additional minimum pension liability adjustment during fiscal year 2007.

The following table provides a summary of the pre-tax components of the amount recognized in accumulated other comprehensive loss:

(Dollars in millions)	U.S.		Outside the U.S.		Total	
	As of Aug. 31,		As of Aug. 31,		As of Aug. 31,	
	2008	2007	2008	2007	2008	2007
Net Loss	\$454	\$325	\$54	\$13	\$508	\$338
Prior Service Cost (Credit)	8	11	(3)	(2)	5	9
Total	\$462	\$336	\$51	\$11	\$513	\$347

The estimated net loss and prior service cost for the defined benefit pension plans that will be amortized from accumulated other comprehensive loss into net periodic benefit cost over the next fiscal year are \$36 million and \$2 million, respectively.

Plan Assets

U.S. Plans: The asset allocations for Monsanto's U.S. pension plans as of Aug. 31, 2008, and Aug. 31, 2007, and the target allocation range for fiscal year 2009, by asset category, follow. The fair value of assets for these plans was \$1.3 billion and \$1.4 billion as of Aug. 31, 2008, and Aug. 31, 2007, respectively.

Asset Category	Target Allocation	Percentage of Plan Assets	
		As of Aug. 31,	
	2009	2008	2007
Equity Securities	60-70%	61.8%	66.8%
Debt Securities	25-35%	31.8%	28.5%
Real Estate	2-8%	4.5%	3.8%
Other	0-3%	1.9%	0.9%
Total		100.0%	100.0%

The expected long-term rate of return on these plan assets was 8.25 percent in fiscal year 2008, 8.50 percent in fiscal year 2007, and 8.75 in fiscal year 2006. The expected long-term rate of return on plan assets is based on historical and projected

Table of Contents

MONSANTO COMPANY

2008 FORM 10-K

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (continued)

rates of return for current and planned asset classes in the plan's investment portfolio. Assumed projected rates of return for each asset class were selected after analyzing historical experience and future expectations of the returns and volatility of the various asset classes. The overall expected rate of return for the portfolio is based on the target asset allocation for each asset class and is adjusted for historical and expected experience of active portfolio management results compared to benchmark returns and the effect of expenses paid for plan assets.

The general principles guiding investment of U.S. pension plan assets are embodied in the Employee Retirement Income Security Act of 1974 (ERISA). These principles include discharging the company's investment responsibilities for the exclusive benefit of plan participants and in accordance with the prudent expert standards and other ERISA rules and regulations. Investment objectives for the company's U.S. pension plan assets are to optimize the long-term return on plan assets while maintaining an acceptable level of risk, to diversify assets among asset classes and investment styles, and to maintain a long-term focus.

In 2007, the company conducted an asset/liability study to determine the optimal strategic asset allocation to meet the plan's projected long-term benefit obligations and desired funding status. The target asset allocation resulting from the asset/liability study is outlined in the previous table.

The plan's investment fiduciaries are responsible for selecting investment managers, commissioning periodic asset/liability studies, setting asset allocation targets, and monitoring asset allocation and investment performance.

The company's pension investment professionals have discretion to manage assets within established asset allocation ranges approved by the plan fiduciaries.

Plans Outside the United States: The weighted-average asset allocation for Monsanto's pension plans outside of the United States as of Aug. 31, 2008, and Aug. 31, 2007, and the weighted-average target allocation for fiscal year 2009, by asset category, follow. The fair value of plan assets for these plans was \$241 million and \$233 million as of Aug. 31, 2008, and Aug. 31, 2007, respectively.

Asset Category	Target Allocation ⁽¹⁾	Percentage of Plan Assets	
		As of Aug. 31,	
	2009	2008	2007
Equity Securities	38%	37.6%	44.6%
Debt Securities	53%	52.5%	52.2%
Other	9%	9.9%	3.2%
Total		100.0%	100.0%

(1) Monsanto's plans outside the U.S. have a wide range of target allocations, and therefore the 2009 target allocations shown above

reflect a weighted-average calculation of the target allocations of each of the plans.

The weighted-average expected long-term rate of return on the plans' assets was 7.1 percent in fiscal year 2008, 7.2 percent in fiscal year 2007, and 7.4 percent in fiscal year 2006. See the discussion in the U.S. Plans section of this note related to the determination of the expected long-term rate of return on plan assets.

Expected Cash Flows

Information about the expected cash flows for the pension plans follows:

(Dollars in millions)	U.S.	Outside the U.S.
Employer Contributions 2009	\$ 65	\$ 13
Benefit Payments		
2009	153	19
2010	145	18
2011	146	16
2012	150	18
2013	151	24
2014-2018	785	110

The company may contribute additional amounts to the plan depending on the level of future contributions required.

Table of Contents

MONSANTO COMPANY

2008 FORM 10-K

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (continued)**NOTE 16. POSTRETIREMENT BENEFITS HEALTH CARE AND OTHER POST EMPLOYMENT BENEFITS****Monsanto-Sponsored Plans**

Substantially all regular full-time U.S. employees hired prior to May 1, 2002, and certain employees in other countries become eligible for company-subsidized postretirement health care benefits if they reach retirement age while employed by Monsanto and have the requisite service history. Employees who retired from Monsanto prior to Jan. 1, 2003, were eligible for retiree life insurance benefits. These postretirement benefits are unfunded and are generally based on the employees' years of service or compensation levels, or both. The costs of postretirement benefits are accrued by the date the employees become eligible for the benefits. Total postretirement benefit costs for Monsanto employees and the former employees included in Monsanto's Statements of Consolidated Operations in fiscal years 2008, 2007 and 2006, were \$30 million, \$18 million and \$33 million, respectively.

The following information pertains to the postretirement benefit plans in which Monsanto employees and certain former employees of Pharmacia allocated to Monsanto participated, principally health care plans and life insurance plans. The cost components of these plans were:

(Dollars in millions)	Year Ended Aug. 31,		
	2008	2007	2006
Service Cost for Benefits Earned During the Year	\$12	\$ 11	\$13
Interest Cost on Benefit Obligation	17	17	16
Amortization of Unrecognized Net (Gain) Loss	(3)	(10)	4
SFAS 88 Settlement Charge	4		
Total	\$30	\$ 18	\$33

The other changes in plan assets and benefit obligations recognized in other comprehensive income for the year ended Aug. 31, 2008 were:

(Dollars in millions)	Total
Net Gain	\$(25)
Amortization of Prior Service Cost	1
Amortization of Loss	1
Total Recognized in Other Comprehensive Income	\$(23)

The following assumptions, calculated on a weighted-average basis, were used to determine the postretirement costs for the principal plans in which Monsanto employees participated:

	Year Ended Aug. 31,		
	2008	2007	2006
Discount Rate	6.05%	5.90%	5.00%
Initial Trend Rate for Health Care Costs	7.00%	7.00%	7.00%
Ultimate Trend Rate for Health Care Costs	5.00%	5.00%	5.00%

A 7.0 percent annual rate of increase in the per capita cost of covered health care benefits was assumed for 2008. This assumption is consistent with the plans' recent experience and expectations of future growth. It is assumed that the rate will decrease gradually to 5 percent for 2012 and remain at that level thereafter. Assumed health care cost trend rates have an effect on the amounts reported for the health care plans. A 1 percentage-point change in assumed health care cost trend rates would have the following effects:

(Dollars in millions)	1 Percentage-Point Increase	1 Percentage-Point Decrease
Effect on Total of Service and Interest Cost	\$1	\$ (1)
Effect on Postretirement Benefit Obligation	\$3	\$ (3)

Table of Contents

MONSANTO COMPANY

2008 FORM 10-K

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (continued)

Monsanto uses a measurement date of August 31 for its other postretirement benefit plans. The status of the postretirement health care, life insurance, and employee disability benefit plans in which Monsanto employees participated was as follows for the periods indicated:

(Dollars in millions)	Year Ended Aug. 31,	
	2008	2007
Change in Benefit Obligation:		
Benefit obligation at beginning of period	\$279	\$287
Service cost	12	11
Interest cost	17	17
Actuarial gain	(21)	(8)
Plan participant contributions	2	1
Medicare Part D subsidy receipts	2	1
Benefits paid ⁽¹⁾	(30)	(30)
Benefit Obligation at End of Period	\$261	\$279

(1) Benefits paid under the other postretirement benefit plans include \$30 million from employer assets in fiscal years 2008 and 2007.

Weighted-average assumptions used to determine benefit obligations as of Aug. 31, 2008, and Aug. 31, 2007, were as follows:

	Year Ended Aug. 31,	
	2008	2007
Discount Rate	6.50%	6.05%
Initial Trend Rate for Health Care Costs ⁽¹⁾	6.50%	7.00%
Ultimate Trend Rate for Health Care Costs	5.00%	5.00%

(1) As of Aug. 31, 2008, this rate is

assumed to decrease gradually to 5 percent for 2012 and remain at that level thereafter.

As of Aug. 31, 2008, and Aug. 31, 2007, amounts recognized in the Statements of Consolidated Financial Position were as follows:

(Dollars in millions)	As of Aug. 31,	
	2008	2007
Miscellaneous Short-Term Accruals	\$ 26	\$ 25
Postretirement Liabilities	235	254

Asset allocation is not applicable to the company's other postretirement benefit plans because these plans are unfunded.

The following table provides a summary of the pre-tax components of the amount recognized in accumulated other comprehensive loss:

(Dollars in millions)	Year Ended Aug. 31,	
	2008	2007
Net Gain	\$27	\$ 3
Prior Service Credit	6	7
Total	\$33	\$10

The estimated net gain and prior service credit for the defined benefit postretirement plans that will be amortized from accumulated other comprehensive loss into net periodic benefit cost over the next fiscal year are \$13 million and \$1 million, respectively.

Table of Contents

MONSANTO COMPANY

2008 FORM 10-K

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (continued)**Expected Cash Flows**

Information about the expected cash flows for the other postretirement benefit plans follows:

(Dollars in millions)	U.S.
Employer Contributions 2009	\$ 26
Benefit Payments ⁽¹⁾	
2009	26
2010	26
2011	26
2012	26
2013	25
2014-2018	116

(1) Benefit payments are net of expected federal subsidy receipts related to prescription drug benefits granted under the Medicare Prescription Drug, Improvement and Modernization Act of 2003, which are estimated to be \$2 million to \$3 million annually from 2009 through 2013, and \$7 million for the period 2014 through 2018.

Expected contributions include other postretirement benefits of \$26 million to be paid from employer assets in 2009. Total benefits expected to be paid include both the company's share of the benefit cost and the participants' share of the cost, which is funded by participant contributions to the plan.

Other Sponsored Plans

Other plans are offered to certain eligible employees. There is an accrual of \$39 million and \$35 million as of Aug. 31, 2008, and Aug. 31, 2007, respectively, in the Statements of Consolidated Financial Position for anticipated payments to employees who have retired or terminated their employment.

NOTE 17. EMPLOYEE SAVINGS PLANS

Monsanto-Sponsored Plans

The U.S. tax-qualified Monsanto Savings and Investment Plan (Monsanto SIP) was established in June 2001 as a successor to a portion of the Pharmacia Corporation Savings and Investment Plan. The Monsanto SIP is a defined contribution profit-sharing plan with an individual account for each participant. Employees who are 18 years of age or older are generally eligible to participate in the plan. The Monsanto SIP provides for voluntary contributions, generally ranging from 1 percent to 25 percent of an employee's eligible pay. Monsanto matches employee contributions to the plan with shares released from the leveraged employee stock ownership plan (Monsanto ESOP). The Monsanto ESOP is leveraged by debt due to Monsanto. The debt, which was \$9.5 million as of Aug. 31, 2008, is repaid primarily through company contributions and dividends paid on Monsanto common stock held in the ESOP. The Monsanto ESOP debt was restructured in December 2004 to level out the future allocation of stock in an impartial manner intended to ensure equitable treatment for and generally to be in the best interests of current and future plan participants consistent with the level of benefits that Monsanto intended for the plan to provide to participants. To that end, the terms of the restructuring were determined pursuant to an arm's length negotiation between Monsanto and an independent trust company as fiduciary for the plan. In this role, the independent fiduciary determined that the restructuring, including certain financial commitments and enhancements that were or will be made in the future by Monsanto to benefit participants and beneficiaries of the plan, including the increased diversification rights that were provided to certain participants, was completed in accordance with the best interests of plan participants. As a result of these enhancements related to the restructuring, a liability of \$44 million and \$41 million was included in other liabilities in the Statements of Consolidated Financial Position as of Aug. 31, 2008, and Aug. 31, 2007, respectively, to reflect the ESOP enhancement.

As of Aug. 31, 2008, the Monsanto ESOP held 9.3 million shares of Monsanto common stock (allocated and unallocated). The unallocated shares of Monsanto common stock held by the ESOP are allocated each year to employee savings accounts

Table of Contents

MONSANTO COMPANY

2008 FORM 10-K

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (continued)

as matching contributions in accordance with the terms of the Monsanto SIP. During fiscal year 2008, 0.8 million Monsanto shares were allocated specifically to Monsanto participants, leaving 2.9 million shares of Monsanto common stock remaining in the Monsanto ESOP and unallocated as of Aug. 31, 2008.

Contributions to the plan, representing compensation expense, are made annually in amounts sufficient to fund ESOP debt repayment. Monsanto contributed less than \$1 million, \$2 million and less than \$1 million to the plan in 2008, 2007 and 2006, respectively. Dividends paid on the shares held by the Monsanto ESOP were \$7 million in 2008, \$5 million in 2007 and \$4 million in 2006. These dividends were greater than the cost of the shares allocated to the participants and the Monsanto contributions resulting in total ESOP expense of less than \$1 million in 2008, 2007 and 2006.

Other Sponsored Plans

Seminis maintained a qualified company-sponsored defined contribution savings plan covering eligible employees. Effective Jan. 1, 2006, this plan was frozen. Effective Jan. 1, 2006, Seminis employees became eligible to participate in the Monsanto SIP. The assets of the Seminis Vegetable Seeds Retirement Plan that were allocated to the participants will be transferred to the Monsanto SIP.

DPL maintained a qualified company-sponsored defined contribution savings plan covering eligible employees. Effective Aug. 5, 2007, this plan was frozen. While the plan permitted annual discretionary employer matching contributions up to six percent of pay, no company contributions have been made to the plan. Effective Aug. 6, 2007, DPL employees became eligible to participate in the Monsanto SIP. The assets of the DPL Company Savings Plan that were allocated to the participants were transferred to the Monsanto SIP on Dec. 31, 2007.

NOTE 18. STOCK-BASED COMPENSATION PLANS

Stock-based compensation expense of \$90 million, \$73 million and \$63 million was recognized under SFAS 123R in fiscal years 2008, 2007 and 2006, respectively. Stock-based compensation expense recognized during the period is based on the value of the portion of share-based payment awards that are ultimately expected to vest. Compensation cost capitalized as part of inventory was \$5 million as of Aug. 31, 2008 and \$3 million as of Aug. 31, 2007. SFAS 123R requires that excess tax benefits be reported as a financing cash inflow rather than as a reduction of taxes paid, which is included within operating cash flows. Monsanto's income taxes currently payable have been reduced by the tax benefits from employee stock option exercises. The excess tax benefits were recorded as an increase to additional paid-in capital. The following table shows the components of stock-based compensation in the Statements of Consolidated Operations and Statements of Consolidated Cash Flows.

(Dollars in millions, except per share amounts)	Year Ended Aug. 31,		
	2008	2007	2006
Cost of Goods Sold	\$ (9)	\$ (7)	\$ (4)
Selling, General and Administrative Expenses	(63)	(52)	(47)
Research and Development Expenses	(18)	(14)	(12)
Total stock-based compensation expense included in operating expenses	(90)	(73)	(63)
Income From Continuing Operations Before Income Taxes	(90)	(73)	(63)
Income Tax Benefit	(32)	(26)	(23)

Net Loss	\$ (58)	\$ (47)	\$ (40)
Basic Loss per Share	\$ (0.11)	\$ (0.09)	\$ (0.07)
Diluted Loss per Share	\$ (0.10)	\$ (0.09)	\$ (0.07)
Net Cash Required by Operating Activities	\$ (198)	\$ (83)	\$ (98)
Net Cash Provided by Financing Activities	\$ 198	\$ 83	\$ 98

Plan Descriptions: Share-based awards are designed to reward employees for their long-term contributions to the company and provide incentives for them to remain with the company. Monsanto issues stock option awards, time-based restricted stock, restricted stock units and restricted stock units with performance conditions under three stock plans. Under the Monsanto Company Long-Term Incentive Plan, as amended (LTIP), formerly known as the Monsanto 2000 Management Incentive Plan, the company may grant awards to key officers, directors and employees of Monsanto, including stock

Table of Contents

MONSANTO COMPANY

2008 FORM 10-K

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (continued)

options, of up to 78.5 million shares of Monsanto common stock. Other employees may be granted options under the Monsanto Company Broad-Based Stock Option Plan (Broad-Based Plan), which permits the granting of a maximum of 5.4 million shares of Monsanto common stock to employees other than officers and other employees subject to special reporting requirements. In January 2005, shareowners approved the Monsanto Company 2005 Long-Term Incentive Plan (2005 LTIP), under which the company may grant awards to key officers, directors and employees of Monsanto, including stock options, of up to 24.0 million shares of Monsanto common stock. Under the LTIP, the option exercise price equals the fair value of the common stock on the date of grant.

The plans provide that the term of any option granted may not exceed 10 years and that each option may be exercised for such period as may be specified in the terms and conditions of the grant, as approved by the People and Compensation Committee of the board of directors. Generally, the options vest over three years, with one-third of the total award vesting each year. Grants of restricted stock or restricted stock units generally vest at the end of a three-year or five-year service period as specified in the terms and conditions of the grant, as approved by the Chairperson of the People and Compensation Committee of the board of directors. Restricted stock or restricted stock units represent the right to receive a number of shares of stock dependent upon vesting requirements. Vesting is subject to the employees' continued employment during the designated service period and may also be subject to Monsanto's attainment of specified performance criteria during the designated performance period. Shares related to restricted stock and restricted stock units are released to employees upon satisfaction of all vesting requirements. During fiscal year 2008, 874,900 restricted stock units were issued to certain Monsanto employees under a one-time, broad-based award, as approved by the People and Compensation Committee of the board of directors. Compensation expense for stock options, restricted stock and restricted stock units is measured at fair value on the date of grant, net of estimated forfeitures, and recognized over the vesting period of the award.

Certain Monsanto employees outside the United States may receive stock appreciation rights or cash settled restricted stock units as part of Monsanto's stock compensation plans. In addition, certain employees on international assignment may receive phantom stock awards that are based on the value of the company's stock, but paid in cash upon the occurrence of certain events. Stock appreciation rights entitle employees to receive a cash amount determined by the appreciation in the fair value of the company's common stock between the grant date of the award and the date of exercise. Cash settled restricted stock units and phantom stock awards entitle employees to receive a cash amount determined by the fair value of the company's common stock on the vesting date. As of Aug. 31, 2008, the fair value of stock appreciation rights, restricted stock units and phantom stock accounted for as liability awards was \$2 million, less than \$1 million and \$4 million, respectively. The fair value is remeasured at the end of each reporting period until exercised, and compensation expense is recognized over the requisite service period in accordance with SFAS 123R. Share-based liabilities paid related to stock appreciation rights was less than \$1 million in fiscal years 2008 and 2007 and \$2 million during fiscal year 2006. Additionally, \$1 million was paid related to phantom stock in fiscal years 2008 and 2007 and less than \$1 million was paid in fiscal year 2006.

Monsanto also issues share-based awards under the Monsanto Non-Employee Director Equity Incentive Compensation Plan (Director Plan) for directors who are not employees of Monsanto or its affiliates. Under the Director Plan, half of the annual retainer for each nonemployee director is paid in the form of deferred stock—shares of common stock to be delivered at a specified future time. The remainder is payable, at the election of each director, in the form of restricted common stock, deferred common stock, current cash and/or deferred cash. The Director Plan also provides that a nonemployee director will receive a restricted stock grant as a member of Monsanto's board of directors which is equivalent to the annual retainer divided by the closing stock price on the service commencement date. The restricted stock grant will vest on the third anniversary of the grant date. Awards of deferred stock and restricted stock under the Director Plan are automatically granted under the LTIP as provided for in the Director Plan. The grant date fair value of awards outstanding under the Director Plan was \$10 million as of Aug. 31, 2008. Compensation expense for most awards under the Director Plan is measured at fair value at the date of grant, net of

estimated forfeitures, and recognized over the vesting period of the award. There were no share-based liabilities paid under the Director Plan in 2008, 2007 or 2006. Additionally, 265,941 shares of directors' deferred stock related to grants and dividend equivalents received in prior years were vested and outstanding at Aug. 31, 2008.

Table of Contents

MONSANTO COMPANY

2008 FORM 10-K

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (continued)

A summary of the status of Monsanto's stock options for the periods from Sept. 1, 2005, through Aug. 31, 2008, follows:

	Options	Outstanding Weighted-Average Exercise Price
Balance Outstanding Sept. 1, 2005	29,365,592	\$ 13.86
Granted	5,994,560	29.60
Exercised	(9,468,690)	12.15
Forfeited	(448,686)	24.83
Balance Outstanding Aug. 31, 2006	25,442,776	18.01
Granted	4,326,010	44.35
Exercised	(5,623,543)	14.90
Forfeited	(343,749)	36.46
Balance Outstanding Aug. 31, 2007	23,801,494	23.27
Granted	2,500,920	87.96
Exercised	(6,190,876)	18.28
Forfeited	(201,162)	68.00
Balance Outstanding Aug. 31, 2008	19,910,376	\$ 32.49

Monsanto stock options outstanding as of Aug. 31, 2008, are summarized as follows:

Range of Exercise Price	Options Outstanding				Options Exercisable			
	Options	Weighted-Average Remaining Contractual Life (Years)	Weighted- Average Exercise Price	Aggregate Intrinsic Value ⁽¹⁾ (dollars in millions)	Options	Weighted- Average Remaining Contractual Life (Years)	Weighted- Average Exercise Price	Aggregate Intrinsic Value ⁽¹⁾ (dollars in millions)
\$7.32 - \$10.00	3,532,417	3.57	\$ 8.78	\$ 373	3,532,417	3.57	\$ 8.78	\$ 373
\$10.01-\$20.00	2,382,432	4.68	\$ 16.17	\$ 234	2,382,432	4.68	\$ 16.17	\$ 234
\$20.01-\$30.00	7,650,120	6.43	\$ 25.34	\$ 680	6,054,065	6.26	\$ 24.32	\$ 544
\$30.01-\$141.50	6,345,407	8.34	\$ 60.44	\$ 341	1,326,560	7.52	\$ 43.85	\$ 93
	19,910,376	6.32	\$ 32.49	\$ 1,628	13,295,474	5.39	\$ 20.68	\$ 1,244

- (1) The aggregate intrinsic value represents the total pre-tax intrinsic value, based on Monsanto's closing stock price of \$114.25 as of Aug. 31, 2008, which would have been received by the option holders had all option holders exercised their options as of that date.

At Aug. 31, 2008, 19,419,896 non-qualified stock options were vested or expected to vest. The weighted-average remaining contractual life of these stock options was 6.27 years and the weighted-average exercise price was \$31.81 per share. The aggregate intrinsic value of these stock options was \$1.6 billion at Aug. 31, 2008.

The weighted-average grant-date fair value of non-qualified stock options granted during fiscal 2008, 2007 and 2006 was \$30.04, \$13.63 and \$9.59, respectively, per share. The total pre-tax intrinsic value of options exercised during the fiscal years ended 2008, 2007 and 2006 was \$562 million, \$238 million and \$270 million, respectively. Pre-tax unrecognized compensation expense for stock options, net of estimated forfeitures, was \$44 million as of Aug. 31, 2008, and will be recognized as expense over a weighted-average remaining vesting period of 1.8 years.

A summary of the status of Monsanto's restricted stock, restricted stock units, and directors' deferred stock compensation plans for fiscal year 2008 follows:

	Restricted	Weighted-Average Grant Date Fair Values	Restricted	Weighted- Average Grant Date Fair Values	Directors Deferred Stock	Weighted-Average Grant Date Fair Value
	Stock		Stock Units			
Nonvested as of Aug. 31, 2007	167,500	\$ 39.05	542,232	\$ 39.83		
Granted	1,254	\$ 131.54	1,144,685	\$ 128.13	15,042	\$ 71.64
Vested	42,566	\$ 36.82	234,150	\$ 29.24	13,967	\$ 71.79
Forfeitures	1,550	\$ 48.22	14,552	\$ 118.34	1,075	\$ 69.74
Nonvested as of Aug. 31, 2008	124,638	\$ 40.63	1,438,215	\$ 110.04		

Table of Contents

MONSANTO COMPANY

2008 FORM 10-K

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (continued)

The weighted-average grant-date fair value of restricted stock granted during fiscal years 2008, 2007 and 2006 was \$131.54, \$50.13 and \$30.09, respectively, per share. The weighted-average fair value for restricted stock units was \$128.13, \$48.00 and \$29.44 on the grant date for those granted during fiscal years 2008, 2007 and 2006, respectively, per share. The weighted-average grant-date fair value of directors' deferred stock granted during fiscal years 2008, 2007 and 2006 was \$71.64, \$46.90 and \$31.46, respectively, per share. The total fair value of restricted stock that vested during fiscal years 2008, 2007 and 2006 was \$2 million, \$1 million and \$3 million, respectively. The total fair value of restricted stock units that vested during fiscal years 2008, 2007 and 2006 was \$7 million, \$10 million and \$7 million, respectively. The total fair value of directors' deferred stock vested during fiscal years 2008, 2007 and 2006 was \$1 million per year.

Pre-tax unrecognized compensation expense, net of estimated forfeitures, for nonvested restricted stock and restricted stock units was \$2 million and \$107 million, respectively, as of Aug. 31, 2008, which will be recognized as expense over the weighted-average remaining requisite service periods. At Aug. 31, 2008, there was no unrecognized compensation expense related to directors' deferred stock. The weighted-average remaining requisite service periods for nonvested restricted stock and restricted stock units were 2.0 years and 3.4 years, respectively, as of Aug. 31, 2008.

Valuation and Expense Information under SFAS 123R: Monsanto estimates the value of employee stock options on the date of grant using a lattice-binomial model. A lattice-binomial model requires the use of extensive actual employee exercise behavior data and a number of complex assumptions including volatility, risk-free interest rate and expected dividends. Expected volatilities used in the model are based on implied volatilities from traded options on Monsanto's stock and historical volatility of Monsanto's stock price. The expected life represents the weighted-average period the stock options are expected to remain outstanding and is a derived output of the model. The lattice-binomial model incorporates exercise and post-vesting forfeiture assumptions based on an analysis of historical data. The following assumptions were used to calculate the estimated value of employee stock options:

	2008	2007	2006
Assumptions	Lattice-binomial		
Expected Dividend Yield	1.2%	1.0%	1.1%
Expected Volatility	30%-54%	28%-33%	32%-36%
Weighted-Average Volatility	35.9%	29.5%	33.2%
Risk-Free Interest Rates	2.77%-4.18%	4.42%-5.05%	4.22%-5.02%
Weighted-Average Risk-Free Interest Rate	4.2%	4.6%	4.4%
Expected Option Life (in years)	6.0	5.8	5.9

Monsanto estimates the value of restricted stock units using the fair value on the date of grant. When dividends are not paid on outstanding restricted stock units, the award is valued by reducing the grant-date price by the present value of the dividends expected to be paid, discounted at the appropriate risk-free interest rate. The fair value of restricted stock units granted were calculated using the same expected dividend yield and weighted-average risk-free interest rate assumptions as those used for stock options.

NOTE 19. CAPITAL STOCK

Monsanto is authorized to issue 1.5 billion shares of common stock, \$0.01 par value, and 20 million shares of

undesignated preferred stock, \$0.01 par value. The board of directors has the authority, without action by the shareowners, to designate and issue preferred stock in one or more series and to designate the rights, preferences and privileges of each series, which may be greater than the rights of the company's common stock. It is not possible to state the actual effect of the issuance of any shares of preferred stock upon the rights of holders of common stock until the board of directors determines the specific rights of the holders of preferred stock.

The authorization of undesignated preferred stock makes it possible for Monsanto's board of directors to issue preferred stock with voting or other rights or preferences that could impede the success of any attempt to change control of the company. These and other provisions may deter hostile takeovers or delay attempts to change management control.

Table of Contents

MONSANTO COMPANY

2008 FORM 10-K

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (continued)

There were no shares of preferred stock outstanding as of Aug. 31, 2008, or Aug. 31, 2007. As of Aug. 31, 2008, and Aug. 31, 2007, 548.6 and 545.6 million shares of common stock were outstanding, respectively. In addition, 108 million shares of common stock were approved for employee and director stock options, of which 19 million and 22 million were remaining in reserve at Aug. 31, 2008, and Aug. 31, 2007, respectively.

In October 2005, the board of directors authorized the purchase of up to \$800 million of the company's common stock over a four-year period. Through Aug. 31, 2008, a total of 9.5 million shares for \$672 million, excluding commissions, had been repurchased under the \$800 million authorization. In April 2008, the board of directors authorized the purchase of up to an additional \$800 million of the company's common stock over a three-year period. This repurchase program will commence at the time the company's current share repurchase program is completed or on Oct. 25, 2009, whichever is earlier.

NOTE 20. ACCUMULATED OTHER COMPREHENSIVE LOSS

Comprehensive income (loss) includes all nonshareowner changes in equity and consists of net income, foreign currency translation adjustments, net unrealized gains and losses on available-for-sale securities, additional minimum pension liability adjustments, and net accumulated derivative gains or losses on cash flow hedges not yet realized. Information regarding accumulated other comprehensive income (loss) is as follows:

(Dollars in millions)	As of Aug. 31,		
	2008	2007	2006
Accumulated Foreign Currency Translation Adjustments	\$ 192	\$(154)	\$(402)
Net Unrealized (Loss) Gains on Investments, Net of Tax	(5)		18
Net Accumulated Derivative Income (Loss), Net of Tax	43	(14)	(28)
Postretirement Benefit Plan Activity, Net of Tax	(308)	(209)	(211)
Accumulated Other Comprehensive Loss	\$ (78)	\$(377)	\$(623)

NOTE 21. EARNINGS PER SHARE

Basic earnings per share (EPS) was computed using the weighted-average number of common shares outstanding during the period shown in the table below. The diluted EPS computation takes into account the effect of dilutive potential common shares, as shown in the table below. Potential common shares consist of stock options, restricted stock, restricted stock units and directors' deferred shares calculated using the treasury stock method and are excluded if their effect is antidilutive. These dilutive potential common shares consisted of 11 million, 11 million and 12 million, in fiscal years 2008, 2007 and 2006, respectively. Less than 0.1 million stock options were excluded from the computations of dilutive potential common shares for the years ended Aug. 31, 2008, 2007 and 2006. Of those antidilutive options, less than 0.1 million stock options were excluded from the computations of dilutive potential common shares for the fiscal years ended Aug. 31, 2008, 2007 and 2006, as their exercise prices were greater than the average market price of common shares for the period.

Year Ended Aug. 31,

(Shares in millions)	2008	2007	2006
Weighted-Average Number of Common Shares	548.1	544.1	540.0
Dilutive Potential Common Shares	11.2	10.9	11.6

NOTE 22. SUPPLEMENTAL CASH FLOW INFORMATION

Cash payments for interest and taxes during fiscal years 2008, 2007 and 2006 were as follows:

(Dollars in millions)	Year Ended Aug. 31,		
	2008	2007	2006
Interest	\$105	\$111	\$118
Taxes	596	482	180

Table of Contents

MONSANTO COMPANY

2008 FORM 10-K

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (continued)

During fiscal years 2008, 2007 and 2006, the company recorded the following noncash investing and financing transactions:

In fourth quarter 2008, 2007 and 2006, the board of directors declared a dividend payable in first quarter 2009, 2008 and 2007, respectively. As of Aug. 31, 2008, 2007 and 2006, a dividend payable of \$132 million, \$96 million and \$55 million, respectively, was recorded.

During fiscal years 2008, 2007 and 2006, the company recognized noncash transactions related to acquisitions. See Note 4 Business Combinations for details of adjustments to goodwill.

In 2008, intangible assets of \$16 million, long-term investments of \$7 million and a liability of \$23 million were recorded as a result of payment provisions under a collaboration and license agreement. See Note 10 Investments and Equity Affiliates for further discussion of the investment.

In 2008, intangible assets in the amount of \$20 million and a liability in the amount of \$10 million were recorded as a result of payment provisions under a joint venture agreement. See Note 10 Investments and Equity Affiliates for further discussion of the agreement.

In 2007, intangible assets and a liability in the amount of \$15 million were recorded as a result of minimum payment provisions under a license agreement. See Note 9 Goodwill and Other Intangible Assets for further discussion of the agreement.

In 2006, an intangible asset and a liability in the amount of \$61 million were recorded as a result of minimum annual royalty provisions in the UC license agreement described in Note 9 Goodwill and Other Intangible Assets.

During fiscal year 2006, the company purchased 2.8 million treasury shares for \$120 million, \$6 million of which was included in accrued liabilities as of Aug. 31, 2006.

Table of Contents

MONSANTO COMPANY

2008 FORM 10-K

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (continued)**NOTE 23. COMMITMENTS AND CONTINGENCIES**

Contractual obligations: The following table sets forth the company's estimates of future payments under contracts as of Aug. 31, 2008.

(Dollars in millions)	Payments Due by Fiscal Year Ending Aug. 31,						
	Total	2009	2010	2011	2012	2013	2014 and beyond
Long-Term Debt, including Capital Lease Obligations	\$1,792	\$	\$ 18	\$ 15	\$499	\$ 35	\$1,225
Interest Payments Relating to Long-Term Debt and Capital Lease Obligations ⁽¹⁾	1,646	110	109	108	108	71	1,140
Operating Lease Obligations	412	166	73	52	42	31	48
Purchase Obligations: Uncompleted additions to property	346	287	56	3			
Commitments to purchase inventories	1,840	1,274	178	158	119	104	7
Commitments to purchase breeding research	219	45	45	45	45	3	36
R&D alliances and joint venture obligations	81	34	19	17	11		
Other purchase obligations	17	3	3	3	3	3	2
Other Liabilities: Postretirement and ESOP liabilities ⁽²⁾	148	104					44
Unrecognized tax benefits ⁽³⁾	317	11					
Other liabilities	267	45	20	19	23	16	144
Total Contractual Obligations	\$7,085	\$2,079	\$521	\$420	\$850	\$263	\$2,646

⁽¹⁾ For variable rate debt, interest is

calculated using the applicable rates as of Aug. 31, 2008.

- (2) Includes the company's planned pension and other post retirement benefit contributions for 2009. The actual amounts funded in 2009 may differ from the amounts listed above. Contributions in 2010 through 2014 and beyond are excluded as those amounts are unknown. Refer to Note 15 Postretirement Benefits Pensions and Note 16 Postretirement Benefits Healthcare and Other Post Employment Benefits for more information. The 2014 and beyond amount relates to the ESOP enhancement liability balance. Refer to Note 17 Employee Savings Plans for more information.

(3)

Unrecognized tax benefits relate to uncertain tax positions recorded under Financial Accounting Standards Board Interpretation No. 48 (FIN 48), which the company adopted on Sept. 1, 2007. The company is unable to reasonably predict the timing of tax settlements, as tax audits can involve complex issues and the resolution of those issues may span multiple years, particularly if subject to negotiation or litigation. See Note 12 Income Taxes for more information.

Leases: The company routinely leases buildings for use as administrative offices or warehousing, land for research facilities, company aircraft, railcars, motor vehicles, and equipment. Assets held under capital leases are included in property, plant and equipment. Certain operating leases contain renewal options which may be exercised at Monsanto's discretion. The expected lease term is considered in the decision as to whether a lease should be recorded as capital or operating.

Certain operating leases contain escalation provisions for an annual inflation adjustment factor and some are based on the Consumer Price Index (CPI) published by the Bureau of Labor Statistics. Additionally, certain leases require Monsanto to pay for property taxes, insurance, maintenance, and other operating expenses called rent adjustments, which are subject to change over the life of the lease. These adjustments were not determinable at the time the lease agreements were executed. Therefore, Monsanto recognizes the expenses for rent and rent adjustments when they become known and payable, which is more representative of the time pattern in which the company derives the related benefit in accordance with SFAS No. 13, *Accounting for Leases, as amended* (SFAS 13).

Other lease agreements provide for base rent to be adjusted based on Monsanto's utilization of the leased space. These adjustments are contingent on changes in Monsanto's usage in the future. At the inception of these leases, Monsanto does not have the right to control more than the percentage defined in the lease agreement of the leased property. Therefore, as the company's utilization of the leased space increases, the company recognizes rent expense for the

additional leased property during the period during which the company has the right to control the use of additional property in accordance with FASB Technical Bulletin 88-1, *Issues Relating to Accounting for Leases*.

Rent expense was \$165 million for fiscal year 2008, \$133 million for fiscal year 2007, and \$99 million for fiscal year 2006.

Guarantees: Monsanto provides guarantees on behalf of certain suppliers. As of Aug. 31, 2008, a guarantee is outstanding to a bank that financed construction of a supplier's plant. This plant supplies certain raw materials to a Monsanto facility in Brazil. The term of this guarantee is equivalent to the term of the financing agreements, which are to be paid during calendar

Table of Contents

MONSANTO COMPANY

2008 FORM 10-K

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (continued)

year 2008. If the supplier fails to pay the obligations when due, Monsanto would incur a liability to make these payments. As of Aug. 31, 2008, the maximum potential amount of future payments under this guarantee was \$3 million with respect to principal, plus additional amounts with respect to interest and related expenses. Monsanto believes that it is not likely to incur a loss under this guarantee, and it has therefore not recorded any liability related to its obligation under this guarantee. If Monsanto were to incur a loss under this guarantee, Monsanto would have recourse against the supplier and the shareowners of the supplier's parent company pursuant to an agreement entered into by the parties.

Monsanto may provide and has provided guarantees on behalf of its consolidated subsidiaries for obligations incurred in the normal course of business. Because these are guarantees of obligations of consolidated subsidiaries, Monsanto's consolidated financial position is not affected by the issuance of these guarantees.

In fiscal year 2005, Monsanto established a 100 percent owned finance subsidiary in Canada. The new subsidiary issued debt securities of \$150 million, which are outstanding as of Aug. 31, 2008, and which are fully and unconditionally guaranteed by Monsanto.

Monsanto warrants the performance of certain products through standard product warranties. In addition, Monsanto provides extensive marketing programs to increase sales and enhance customer satisfaction. These programs may include performance warranty features and indemnification for risks not related to performance, both of which are provided to qualifying customers on a contractual basis. The cost of payments for claims based on performance warranties has been, and is expected to continue to be, insignificant. It is not possible to predict the maximum potential amount of future payments for indemnification for losses not related to the performance of our products (for example, replanting due to extreme weather conditions), because it is not possible to predict whether the specified contingencies will occur and if so, to what extent.

In various circumstances, Monsanto has agreed to indemnify or reimburse other parties for various losses or expenses. For example, like many other companies, Monsanto has agreed to indemnify its officers and directors for liabilities incurred by reason of their position with Monsanto. Contracts for the sale or purchase of a business or line of business may require indemnification for various events, including certain events that arose before the sale, or tax liabilities that arise before, after or in connection with the sale. Certain seed licensee arrangements indemnify the licensee against liability and damages, including legal defense costs, arising from any claims of patent, copyright, trademark, or trade secret infringement related to Monsanto's trait technology. Germplasm licenses generally indemnify the licensee against claims related to the source or ownership of the licensed germplasm. Litigation settlement agreements may contain indemnification provisions covering future issues associated with the settled matter. Credit agreements and other financial agreements frequently require reimbursement for certain unanticipated costs resulting from changes in legal or regulatory requirements or guidelines. These agreements may also require reimbursement of withheld taxes, and additional payments that provide recipients amounts equal to the sums they would have received had no such withholding been made. Indemnities like those in this paragraph may be found in many types of agreements, including, for example, operating agreements, leases, purchase or sale agreements, and other licenses. Leases may require indemnification for liabilities Monsanto's operations may potentially create for the lessor or lessee. It is not possible to predict the maximum future payments possible under these or similar provisions because it is not possible to predict whether any of these contingencies will come to pass and if so, to what extent. Historically, these types of provisions did not have a material effect on Monsanto's financial position, profitability or liquidity. Monsanto believes that if it were to incur a loss in any of these matters, it would not have a material effect on its financial position, profitability or liquidity. Based on the company's current assessment of exposure, Monsanto has recorded a liability of \$3 million as of fiscal years 2008 and 2007, related to these indemnifications.

Monsanto provides guarantees for certain customer loans in the United States, Brazil, Europe and Argentina. See Note 6 Customer Financing Programs for additional information.

Information regarding Monsanto's indemnification obligations to Pharmacia under the Separation Agreement can be found below in the Litigation and Indemnification section of this note.

93

Table of Contents

MONSANTO COMPANY

2008 FORM 10-K

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (continued)

Customer Concentrations in Gross Trade Receivables: The following table sets forth Monsanto's gross trade receivables as of Aug. 31, 2008, and Aug. 31, 2007, by significant customer concentrations:

(Dollars in millions)	As of Aug. 31,	
	2008	2007
U.S. Agricultural Product Distributors	\$ 892	\$ 654
Europe-Africa ⁽¹⁾	664	475
Asia-Pacific ⁽¹⁾	203	149
Argentina ⁽¹⁾	174	132
Brazil ⁽¹⁾	101	65
Mexico ⁽¹⁾	66	53
Canada ⁽¹⁾	66	70
Other	119	118
Gross Trade Receivables	2,285	1,716
Less: Allowance for Doubtful Accounts	(218)	(217)
Net Trade Receivables	\$2,067	\$1,499

⁽¹⁾ Represents customer receivables within the specified geography.

In fiscal year 2008, trade receivables increased primarily because of higher sales.

Environmental and Litigation-related Contingent Liabilities: Monsanto is involved in environmental remediation and legal proceedings related to its current business and, pursuant to its indemnification obligations, related to Pharmacia's former chemical and agricultural businesses. With respect to certain of these proceedings, Monsanto has established a reserve for the estimated liabilities. Following is a summary of these accrued liabilities:

Balance at Sept. 1, 2005	\$ 290
Payments	(74)
Accretion	4
Additional charge recognized in fiscal year 2006	80
Balance at Aug. 31, 2006	\$ 300
Payments	(50)
Accretion	7
Additional charge recognized in fiscal year 2007	21

Balance at Aug. 31, 2007	\$ 278
Payments	(48)
Accretion	6
Additional charge recognized in fiscal year 2008	36

Total Environmental and Litigation Reserve as of Aug. 31, 2008	\$ 272
--	---------------

Environmental: Included in the liability are amounts related to environmental remediation of sites associated with Pharmacia's former chemicals and agricultural businesses, with no single site representing the majority of the environmental liability. These sites are in various stages of environmental management: at some sites work is in the early stages of assessment and investigation while at others the cleanup remedies have been implemented and the remaining work consists of monitoring the integrity of that remedy. The extent of Monsanto's involvement at the various sites ranges from less than one percent to 100 percent of the costs currently anticipated. At some sites, Monsanto is acting under court or agency order, while at others it is acting with very minimal government involvement.

Monsanto does not currently anticipate any material loss in excess of the amount recorded for the environmental sites reflected in the liability. However, it is possible that new information about these sites for which the accrual has been established, such as results of investigations by regulatory agencies, Monsanto, or other parties, could require Monsanto to reassess its potential exposure related to environmental matters. Monsanto's future remediation expenses at these sites may be affected by a number of uncertainties. These uncertainties include, but are not limited to, the method and extent of remediation, the percentage of material attributable to Monsanto at the sites relative to that attributable to other parties, and the financial capabilities of the other potentially responsible parties. Monsanto does not expect the resolution of such uncertainties, or environmental matters not reflected in the liability, to have a material adverse effect on its consolidated financial position or liquidity.

Table of Contents

MONSANTO COMPANY

2008 FORM 10-K

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (continued)

Litigation: The above liability includes amounts related to certain third-party litigation with respect to Monsanto's business, as well as tort litigation related to Pharmacia's former chemical business, including lawsuits involving polychlorinated biphenyls (PCBs), dioxins, and other chemical and premises liability litigation. Following is a description of one of the more significant litigation matters reflected in the liability.

On Dec. 17, 2004, 15 plaintiffs filed a purported class action lawsuit, styled *Virddie Allen, et al. v. Monsanto, et al.*, in the Putnam County, West Virginia, state court against Monsanto, Pharmacia and seven other defendants. Monsanto is named as the successor in interest to the liabilities of Pharmacia. The alleged class consists of all current and former residents, workers, and students who, between 1949 and the present, were allegedly exposed to dioxins/furans contamination in counties surrounding Nitro, West Virginia. The complaint alleges that the source of the contamination is a chemical plant in Nitro, formerly owned and operated by Pharmacia and later by Flexsys, a joint venture between Solutia and Akzo Nobel Chemicals, Inc. (Akzo Nobel). Akzo Nobel and Flexsys were named defendants in the case but Solutia was not, due to its then pending bankruptcy proceeding. The suit seeks damages for property cleanup costs, loss of real estate value, funds to test property for contamination levels, funds to test for human exposure, and future medical monitoring costs. The complaint also seeks an injunction against further contamination and punitive damages. Monsanto has agreed to indemnify and defend Akzo Nobel and the Flexsys defendant group. The class action certification hearing was held on Oct. 29, 2007. On Jan. 8, 2008, the trial court issued an order certifying the Carter and Allen (now Zina G. Bibb et al. v. Monsanto et al., because Bibb replaced Allen as class representative) cases as class actions matters. The court has not set a trial date for these cases.

On Oct. 1, 2007, 78 separate, single plaintiff civil actions were filed in Putnam County, West Virginia, against Monsanto, Pharmacia, Akzo Nobel (and several of its affiliates), Flexsys America Co. (and several of its affiliates), Solutia, and Apogee Coal Company, LLC. Except for the name of the plaintiff, each complaint is identical and each alleges personal injury occasioned by exposure to dioxin generated by the Nitro Plant during production of 2,4,5 T (1949-1969) and thereafter. These cases are related to, and were filed in the same court as, the Allen action described above. Monsanto has agreed to accept the tenders of defense in the matters by Akzo Nobel and Flexsys America. These 78 personal injury cases have not been certified for class action status. Including litigation reflected in the liability, Monsanto is involved in various legal proceedings that arise in the ordinary course of its business or pursuant to Monsanto's indemnification obligations to Pharmacia, as well as proceedings that management has considered to be material under SEC regulations. Some of the lawsuits seek damages in very large amounts, or seek to restrict the company's business activities. Monsanto believes that it has meritorious legal arguments and will continue to represent its interests vigorously in all of the proceedings that it is defending or prosecuting. Although the ultimate liabilities resulting from such proceedings, or the proceedings reflected in the above liability, may be significant to profitability in the period recognized, management does not anticipate they will have a material adverse effect on Monsanto's consolidated financial position or liquidity. Specific information with respect to these proceedings appears below and in Part I Item 3 Legal Proceedings of Monsanto's Report on Form 10-K.

On June 23, 2004, two former employees of Monsanto and Pharmacia filed a purported class action lawsuit in the U.S. District Court for the Southern District of Illinois against Monsanto and the Monsanto Company Pension Plan, which is referred to as the Pension Plan. The suit claims that the Pension Plan has violated the age discrimination and other rules under the Employee Retirement Income Security Act of 1974 from Jan. 1, 1997 (when the Pension Plan was sponsored by Pharmacia, then known as Monsanto Company) and continuing to the present. In January 2006, a separate group of former employees of Pharmacia filed a similar purported class action lawsuit in the U.S. District Court for the Southern District of Illinois against Pharmacia, the Pharmacia Cash Balance Plan, and other defendants. On July 7, 2006, the plaintiffs amended their lawsuit to add Monsanto

and the Pension Plan as additional defendants. On Sept. 1, 2006, the Court consolidated these lawsuits with two purported class action lawsuits also pending in the same Court against the Solutia Company Pension Plan, under Walker v. Monsanto, the first filed case. The court conducted a class certification hearing on Sept. 12, 2007. Prior to the hearing, all parties agreed the case should proceed as a class action and also agreed on a definition of the respective classes. The classes were certified by court order on May 22, 2008. On July 11, 2008, all parties filed dispositive motions on the issue of liability. Briefing is completed, but oral argument (if there is to be one) has not yet been scheduled. In the interim, on August 4, 2008, the parties filed a joint motion to bifurcate the liability and remedies phases of the case. The parties jointly proposed order allows for expert discovery and further briefing on the issue of remedies to take place, if necessary, after the court renders a judgment on liability. The case is

Table of Contents

MONSANTO COMPANY

2008 FORM 10-K

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (continued)

scheduled for a bench trial beginning on Oct. 27, 2008, but the parties have advised the court that, at a minimum, the liability aspect of the case should be resolved by dispositive motion, without the need for trial. The amount of a potential loss, if any, is not currently determinable.

NOTE 24. SEGMENT AND GEOGRAPHIC DATA

Monsanto conducts its worldwide operations through global businesses, which are aggregated into reportable segments based on similarity of products, production processes, customers, distribution methods and economic characteristics. The operating segments are aggregated into two reportable segments: Seeds and Genomics, and Agricultural Productivity. The Seeds and Genomics segment consists of the global seeds and related traits businesses and biotechnology platforms. Within the Seeds and Genomics segment, Monsanto's significant operating segments are corn seed and traits, soybean seed and traits, vegetable seeds and all other crops seeds and traits. After the acquisition of DPL in 2007, Monsanto identified cotton seed and traits as an additional significant operating segment within the Seeds and Genomics segment. The Agricultural Productivity segment consists of the crop protection products and lawn-and-garden herbicide products. The animal agriculture business, which was previously included in the Agricultural Productivity segment, was divested in 2009 and is included in discontinued operations. Within the Agricultural Productivity segment, the significant operating segments are *Roundup* and other glyphosate-based products and all other agricultural products. EBIT is defined as earnings (loss) before interest and taxes and is the primary operating performance measure for the two business segments. EBIT is useful to management in demonstrating the operational profitability of the segments by excluding interest and taxes, which are generally accounted for across the entire company on a consolidated basis. Sales between segments were not significant. Certain selling, general and administrative expenses are allocated between segments primarily by the ratio of segment sales to total Monsanto sales, consistent with the company's historical practice. Based on the Seeds and Genomics segment's increasing contribution to total Monsanto operations, the allocation percentages were changed at the beginning of fiscal year 2008.

Table of Contents

MONSANTO COMPANY

2008 FORM 10-K

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (continued)

Data for the Seeds and Genomics and Agricultural Productivity reportable segments, as well as for Monsanto's significant operating segments, is presented in the table that follows.

(Dollars in millions)	Year Ended Aug. 31,		
	2008	2007	2006
Net Sales⁽¹⁾			
Corn seed and traits	\$ 3,542	\$ 2,807	\$ 1,793
Soybean seed and traits	1,174	901	960
Cotton seed and traits	450	319	376
Vegetable seeds	744	612	569
All other crops seeds and traits	459	325	280
Total Seeds and Genomics	\$ 6,369	\$ 4,964	\$ 3,978
<i>Roundup</i> and other glyphosate-based herbicides	\$ 4,094	\$ 2,568	\$ 2,262
All other agricultural products	902	817	825
Total Agricultural Productivity	\$ 4,996	\$ 3,385	\$ 3,087
Total	\$ 11,365	\$ 8,349	\$ 7,065
EBIT⁽²⁾⁽³⁾			
Seeds and Genomics	\$ 1,200	\$ 905	\$ 794
Agricultural Productivity	1,691	470	301
Total	\$ 2,891	\$ 1,375	\$ 1,095
Depreciation and Amortization Expense⁽⁴⁾			
Seeds and Genomics	\$ 399	\$ 347	\$ 328
Agricultural Productivity	174	180	191
Total	\$ 573	\$ 527	\$ 519
Equity Affiliate (Income) Expense			
Seeds and Genomics	\$ (2)	\$ 34	\$ 31
Agricultural Productivity			
Total	\$ (2)	\$ 34	\$ 31

Total Assets⁽⁵⁾

Seeds and Genomics	\$ 13,165	\$ 8,872	\$ 7,499
Agricultural Productivity	4,826	4,111	4,229
Total	\$ 17,991	\$ 12,983	\$ 11,728

Property, Plant and Equipment Purchases

Seeds and Genomics	\$ 779	\$ 427	\$ 294
Agricultural Productivity	139	82	76
Total	\$ 918	\$ 509	\$ 370

Investment in Equity Affiliates

Seeds and Genomics	\$ 104	\$ 51	\$ 49
Agricultural Productivity			
Total	\$ 104	\$ 51	\$ 49

(1) Represents net sales from continuing operations.

(2) EBIT is defined as earnings (loss) before interest and taxes; see the following table for reconciliation. Earnings (loss) is intended to mean net income as presented in the Statements of Consolidated Operations under generally accepted accounting principles. EBIT is the primary operating

performance
measure for the
two business
segments.

- (3) Seeds and Genomics EBIT includes income of \$45 million and \$6 million from discontinued operations for fiscal years 2007 and 2006, respectively. Agricultural Productivity EBIT includes income of \$22 million, \$8 million and \$27 million from discontinued operations for fiscal years 2008, 2007 and 2006, respectively.
- (4) Seeds and Genomics depreciation and amortization expense includes \$10 million from discontinued operations for fiscal years 2007 and 2006. Agricultural Productivity depreciation and amortization includes \$37 million, \$36 million and \$30 million

from discontinued operations for fiscal years 2008, 2007 and 2006, respectively.

- (5) Includes assets recorded in continuing operations and discontinued operations.

Table of Contents

MONSANTO COMPANY

2008 FORM 10-K

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (continued)

A reconciliation of EBIT to net income for each year follows:

(Dollars in millions)	Year Ended Aug. 31,		
	2008	2007	2006
EBIT ⁽¹⁾	\$2,891	\$1,375	\$1,095
Interest (Income) Expense Net	(22)	16	79
Income Tax Provision ⁽²⁾	889	366	327
Net Income	\$2,024	\$ 993	\$ 689

(1) Includes the income from operations of discontinued businesses, the pre-tax cumulative effect of accounting change and pre-tax minority interest.

(2) Includes the income tax provision from continuing operations, the income tax benefit on minority interest, the income tax provision (benefit) on discontinued operations, and the income tax benefit on the cumulative effect of a

change in
accounting
principle.

Net sales and long-lived assets are attributed to the geographic areas of the relevant Monsanto legal entities. For example, a sale from the United States to a customer in Brazil is reported as a U.S. export sale.

(Dollars in millions)	Net Sales to Unaffiliated Customers			Long-Lived Assets	
	Year Ended Aug. 31,			As of Aug. 31,	
	2008	2007	2006	2008	2007
United States	\$ 5,693	\$4,640	\$3,924	\$5,391	\$4,805
Europe-Africa	1,919	1,253	1,059	1,962	1,003
Brazil	1,260	722	547	792	545
Asia-Pacific	811	552	528	645	409
Argentina	783	498	412	186	196
Canada	432	324	273	69	81
Mexico	301	254	227	85	67
Other	166	106	95	252	63
Total	\$11,365	\$8,349	\$7,065	\$9,382	\$7,169

NOTE 25. SOLUTIA-RELATED AND OTHER INCOME AND EXPENSE

On Dec. 17, 2003, Solutia, Inc. (Solutia) and 14 of its U.S. subsidiaries filed voluntary petitions for reorganization under Chapter 11 of the U.S. Bankruptcy Code in the U.S. Bankruptcy Court for the Southern District of New York. In accordance with a plan of reorganization approved by the Bankruptcy Court on Nov. 29, 2007, Solutia emerged from bankruptcy protection on Feb. 28, 2008. Upon Solutia's emergence from bankruptcy, in satisfaction of Monsanto's claims against Solutia, Monsanto received from Solutia: (1) approximately \$163 million in cash (which represents proceeds from a rights offering from Solutia's equity holders, third-party reimbursements and Monsanto's administrative claim for environmental remediation payments it made in Anniston and Sauget during Solutia's Chapter 11 proceeding in excess of \$50 million); (2) approximately 2.5 million shares of common stock of Solutia, representing that portion of the equity of reorganized Solutia allocated to Monsanto under the plan which was not purchased by Solutia's equity holders; (3) a credit in an amount in excess of \$30 million against certain future payments by Monsanto to Solutia under supply contracts used in the production of an intermediate for glyphosate at Monsanto's facility at Chocolate Bayou, Texas; (4) a release for Monsanto and Pharmacia from certain legacy liabilities associated with Pharmacia's chemical business that arose prior to Sept. 1, 1997, including liabilities related to retiree medical, retiree life insurance, and disability benefits for individuals who retired or became disabled prior to Sept. 1, 1997; and (5) a release for Monsanto and Pharmacia for the litigation filed by Solutia, the Official Committee of Retirees, and the Official Committee of Equity Holders of Solutia against Monsanto and Pharmacia. Since Monsanto had previously recognized the expenses for the amounts incurred, the settlement amounts resulted in an after-tax gain of approximately \$130 million (\$210 million pretax), or \$0.23 per share. Also, included in the Consolidated Statement of Operations for 2008 are expenses of \$23 million related to Solutia-related environmental and legal matters prior to Solutia's emergence from bankruptcy.

The significant components of other expense (income) were foreign currency transaction losses, equity affiliate income, and in 2007 a donation of long-term equity securities. See Note 10 Investments and Equity Affiliates for information regarding equity affiliate income.

Table of Contents

MONSANTO COMPANY

2008 FORM 10-K

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (continued)**NOTE 26. SELLING, GENERAL AND ADMINISTRATIVE EXPENSES**

Advertising Costs: Costs for producing and communicating advertising for the various brands and products were charged to selling, general and administrative (SG&A) expenses as they were incurred. Advertising costs were \$95 million, \$84 million and \$84 million in 2008, 2007 and 2006, respectively.

Agency Fee and Marketing Agreement: In 1998, Pharmacia (f/k/a Monsanto Company) entered into an agency and marketing agreement with The Scotts Miracle-Gro Company (f/k/a The Scotts Company) (Scotts) with respect to the lawn-and-garden herbicide business, which was transferred to Monsanto in connection with its separation from Pharmacia. Scotts acts as Monsanto's principal agent to market and distribute its lawn-and-garden herbicide products. The agreement has an indefinite term, except in certain countries in the European Union. The agreement related to those countries terminates on Sept. 30, 2011, with an option to extend to 2015. Under the agreement, beginning in fourth quarter 1998, Scotts was obligated to pay Monsanto a \$20 million fixed fee each year for the length of the contract to defray costs associated with the lawn-and-garden herbicide business (the annual payment). Monsanto records the annual payment from Scotts as a reduction of SG&A expenses ratably over the year to which the payment relates.

Monsanto is obligated to pay Scotts an annual commission based on the earnings of the lawn-and-garden herbicide business (before interest and income taxes). The amount of the commission due to Scotts varies depending on whether or not the earnings of the lawn-and-garden herbicide business exceed certain thresholds that vary by program year. The commission due to Scotts is accrued monthly and is included in SG&A expenses. The commission expense included in SG&A expenses was \$64 million in fiscal year 2008, \$63 million in fiscal year 2007 and \$61 million in fiscal year 2006 (the commission expense presented herein is not netted with any payments received from Scotts).

NOTE 27. DISCONTINUED OPERATIONS

Dairy Business Divestiture: On Aug. 6, 2008, Monsanto announced plans to divest the Dairy business. The company determined that the business was no longer consistent with its strategic business objectives. On Aug. 20, 2008, Monsanto entered into an agreement to sell the majority of the Dairy business assets (excluding cash, trade receivables and certain property) to Eli Lilly and Company for \$300 million, plus additional contingent consideration. The contingent consideration is a 10 year earn-out with potential annual payments being earned by Monsanto if certain revenue levels are exceeded. On Oct. 1, 2008, Monsanto consummated the sale to Eli Lilly after receiving approval from the appropriate regulatory agencies. As a result, the Dairy business has been segregated from continuing operations and presented as discontinued operations. The Dairy business was previously reported as a part of the Agricultural Productivity segment.

Divested Cotton Businesses: In conjunction with the DOJ consent decree received on May 31, 2007, Monsanto agreed to divest its U.S. Stoneville and NexGen Branded Cotton Seed businesses. Monsanto completed its acquisition of DPL as of June 1, 2007. The U.S. Stoneville and NexGen businesses were reported as part of the Seeds and Genomics segment. Monsanto sold its Stoneville and NexGen cotton seed brands and related business assets on June 19, 2007, for \$310 million and \$7 million, respectively. Monsanto also divested certain cotton germplasm that was acquired from DPL's cotton breeding program, as required by the consent decree. Monsanto has retained certain rights to this germplasm. The buyers of these assets are licensed to use our traits in their brands prospectively under a royalty bearing agreement. Monsanto realized a pre-tax gain of \$46 million and a tax benefit of \$27 million in 2007 related to these divestitures.

As a result of the plans to sell the businesses discussed above, certain financial data for these businesses has been presented as discontinued operations in accordance with SFAS 144. Accordingly, for fiscal years 2008, 2007 and 2006, the Statements of Consolidated Operations have been conformed to this presentation.

Table of Contents

MONSANTO COMPANY

2008 FORM 10-K

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (continued)

As of Aug. 31, 2008, the remaining assets and liabilities of the Dairy business are shown in the table below.

(Dollars in millions)	As of Aug. 31, 2008
Assets of discontinued operations:	
Current Assets	
Accounts receivable	\$ 37
Inventories	116
Total Current Assets	153
Noncurrent Assets	
Property, plant and equipment net	96
Other ⁽¹⁾	140
Total Noncurrent Assets	236
Total assets of discontinued operations	\$ 389
Liabilities of discontinued operations:	
Current liabilities	
Long-term liabilities	52
Total liabilities of discontinued operations	\$ 78

(1) Primarily includes the technology intangible acquired from the University of California. See Note 9 Goodwill and Other Intangible Assets for further information.

The following amounts related to the Dairy business and the divested cotton businesses have been segregated from continuing operations and reflected as discontinued operations:

(Dollars in millions)	Year Ended Aug. 31,		
	2008	2007	2006
Net Sales	\$ 214	\$ 258	\$ 280
Income from Operations of Discontinued Businesses (including gain on disposal of \$46 million in 2007)	20	52	32
Income Tax Provision (Benefit) (including tax benefit on disposal of \$27 million in 2007)	3	(28)	8
Net Income of Discontinued Operations	\$ 17	\$ 80	\$ 24

NOTE 28. QUARTERLY DATA (UNAUDITED)

The following table includes financial data for the fiscal year quarters in 2008 and 2007, which have been adjusted for discontinued operations. See Note 27 Discontinued Operations for further discussion of the divested Dairy and cotton businesses.

	(Dollars in millions, except per share amounts)					Diluted Earnings (Loss) per Share ⁽¹⁾		
	Net	Gross	Income	Income	Net	Income	Income	Net Income
			(Loss)	(Loss)		(Loss)	(Loss) on	
	Sales	Profit	From Operations	on Discontinued Operations	(Loss)	From Operations	Discontinued Operations	(Loss)
2008								
1st Quarter	\$ 2,049	\$ 1,039	\$ 250	\$ 6	\$ 256	\$ 0.45	\$ 0.01	\$ 0.46
2nd Quarter	3,727	2,211	1,121	8	1,129	2.00	0.02	2.02
3rd Quarter	3,538	1,967	815	(4)	811	1.46	(0.01)	1.45
4th Quarter	2,051	960	(179)	7	(172)	(0.32)	0.01	(0.31)
Total Fiscal Year	\$ 11,365	\$ 6,177	\$ 2,007	\$ 17	\$ 2,024	\$ 3.59	\$ 0.03	\$ 3.62
2007								
1st Quarter	\$ 1,489	\$ 662	\$ 90	\$	\$ 90	\$ 0.16	\$	\$ 0.16
2nd Quarter	2,557	1,439	545	(2)	543	0.98		0.98
3rd Quarter	2,785	1,486	563	7	570	1.02	0.01	1.03
4th Quarter	1,518	643	(285)	75	(210)	(0.52)	0.13	(0.39)
Total Fiscal Year	\$ 8,349	\$ 4,230	\$ 913	\$ 80	\$ 993	\$ 1.65	\$ 0.14	\$ 1.79

(1)

Because
Monsanto
reported a loss
from continuing
operations in the
fourth quarters of
2008 and 2007,
generally
accepted
accounting
principles
required diluted
loss per share to
be calculated
using
weighted-average
common shares
outstanding,
excluding
common stock
equivalents. As a
result, the
quarterly earnings
(loss) per share do
not total to the
full-year amount.

Table of Contents

MONSANTO COMPANY

2008 FORM 10-K

ITEM 9. CHANGES IN AND DISAGREEMENTS WITH ACCOUNTANTS ON ACCOUNTING AND FINANCIAL DISCLOSURE

None.

ITEM 9A. CONTROLS AND PROCEDURES

We maintain a comprehensive set of disclosure controls and procedures (as defined in Rules 13a-15(e) and 15d-15(e) under the Exchange Act) designed to ensure that information required to be disclosed in our filings under the Exchange Act is recorded, processed, summarized and reported accurately and within the time periods specified in the SEC's rules and forms, and that such information is accumulated and communicated to Monsanto's management, including its Chief Executive Officer and Chief Financial Officer, as appropriate, to allow timely decisions regarding required disclosures. As of Aug. 31, 2008 (the Evaluation Date), an evaluation was carried out under the supervision and with the participation of our management, including our Chief Executive Officer and Chief Financial Officer, of the effectiveness of the design and operation of our disclosure controls and procedures. Based on that evaluation, the Chief Executive Officer and Chief Financial Officer concluded that, as of the Evaluation Date, the design and operation of these disclosure controls and procedures were effective to provide reasonable assurance of the achievement of the objectives described above.

The report called for by Item 308(a) of Regulation S-K is incorporated herein by reference to Management's Annual Report on Internal Control over Financial Reporting, included in Part II Item 8 of this Form 10-K. The attestation report called for by Item 308(b) of Regulation S-K is incorporated herein by reference to the attestation report of Deloitte & Touche LLP, the company's independent registered public accounting firm, on internal control over financial reporting, included in Part II Item 8 of this Form 10-K.

During the quarter that ended on the Evaluation Date, there was one change in internal control over financial reporting (as defined in Rules 13a-15(f) and 15d-15(f) under the Exchange Act) that has materially affected, or is reasonably likely to materially affect, our internal control over financial reporting. We consider the inclusion of the acquisitions of De Ruiter and Cristiani significant to our results of operations, financial position and cash flows from the date of acquisitions through Aug. 31, 2008, and consider their integration to have materially affected our internal control over financial reporting. We believe we have taken the necessary steps to establish and maintain effective internal controls over financial reporting during the period of change.

ITEM 9B. OTHER INFORMATION

On Oct. 20, 2008, the People and Compensation Committee of Monsanto's Board of Directors approved base salaries to become effective as of Jan. 12, 2009, and annual incentive awards for the 2008 fiscal year, which will be paid on Nov. 7, 2008, for the named executive officers included in Monsanto's proxy statement dated Dec. 5, 2007. A summary of these cash compensation arrangements is included in Exhibit 10.30 to this Form 10-K and incorporated herein by reference.

Table of Contents

MONSANTO COMPANY

2008 FORM 10-K

PART III**ITEM 10. DIRECTORS, EXECUTIVE OFFICERS AND CORPORATE GOVERNANCE**

The following information appearing in Monsanto Company's definitive proxy statement, which is expected to be filed with the SEC pursuant to Regulation 14A on or about Dec. 1, 2008 (Proxy Statement), is incorporated herein by reference:

Information appearing under the heading Information Regarding Board of Directors and Committees including biographical information regarding nominees for election to, and members of, the Board of Directors;

Information appearing under the heading Section 16(a) Beneficial Ownership Reporting Compliance; and

Information appearing under the heading Audit and Finance Committee, regarding the membership and function of the Audit and Finance Committee, and the financial expertise of its members.

Monsanto has adopted a Code of Ethics for Chief Executive and Senior Financial Officers (Code), which applies to its Chief Executive Officer and the senior leadership of its finance department, including its Chief Financial Officer and Controller. This Code is available on our Web site at www.monsanto.com, at the tab Corporate Responsibility. Any amendments to, or waivers from, the provisions of the Code will be posted to that same location within four business days, and will remain on the Web site for at least a 12-month period.

The following information with respect to the executive officers of the Company on Oct. 23, 2008, is included pursuant to Instruction 3 of Item 401(b) of Regulation S-K:

Name	Age	Present Position with Registrant	Year First Became an Executive Officer	Other Business Experience since Sept. 1, 2003*
Brett D. Begemann, 47		Executive Vice President, Global Commercial	2003	Executive Vice President, International Commercial Monsanto Company, 6/03-10/07; present position, 10/07
Carl M. Casale, 47		Executive Vice President, Strategy and Operations	2000	Executive Vice President, North America Commercial Monsanto Company, 6/03-10/07; present position, 10/07
Richard B. Clark, 56		Vice President and Controller	2001	Present position, 2001
Terrell K. Crews, 53		Executive Vice	2000	Executive Vice President and Chief Financial Officer

Edgar Filing: MONSANTO CO /NEW/ - Form 10-K

President, Chief Financial Officer and Vegetable Business CEO	Monsanto Company, 8/00-10/07; Executive Vice President, Chief Financial Officer and Seminis CEO Monsanto Company, 8/00-10-07; present position, 8/08
--	--

Scarlett Lee Foster, 51	Vice President, Investor Relations	2005	Director, Investor Relations Monsanto Company, 1/01-8/05; present position, 8/05
--------------------------------	---------------------------------------	------	---

Robert T. Fraley, 55	Executive Vice President and Chief Technology Officer	2000	Present position, 8/00
-----------------------------	---	------	------------------------

Hugh Grant, 50	Chairman of the Board, President and Chief Executive Officer	2000	Director, President and Chief Executive Officer Monsanto Company, 5/03-10/03; present position, 10/03
-----------------------	---	------	--

Janet M. Holloway, 54	Senior Vice President, Chief of Staff and Community Relations	2000	Vice President and Chief Information Officer, Responsible for Human Resources Monsanto Company, 7/03-4/04; Vice President and Chief Information Officer Monsanto Company, 4/04-4/05; Vice President and Chief of Staff Monsanto Company, 4/05-10/07; present position, 10/07
------------------------------	---	------	---

Table of Contents

MONSANTO COMPANY

2008 FORM 10-K

Name	Age	Present Position with Registrant	Year First Became an Executive Officer	Other Business Experience since Sept. 1, 2003*
Mark J. Leidy, 52		Executive Vice President, Manufacturing	2001	Present position, 6/03
Steven C. Mizell, 48		Executive Vice President, Human Resources	2004	Senior Vice President and Chief Corporate Resources Officer Advance PCS, 8/01-3/04; Senior Vice President, Human Resources Monsanto Company, 4/04-8/07; present position, 8/07
Cheryl P. Morley, 54		Senior Vice President, Corporate Strategy	2000	Present position, 6/03
Robert A. Paley, 60		Vice President and Treasurer	2002	Present position, 9/02
Kerry J. Preete, 48		Vice President, International Commercial	2008	U.S. Markets Lead Monsanto Company, 2001-2003; Vice President Monsanto Company, 2003-2005; President Seminis Vegetable Seeds, 2005-6/08; present position, 6/08
Nicole M. Ringenberg, 47		Vice President, Finance and Operations, Global Commercial	2007	International Finance Lead Monsanto Company, 07/03-07/04; Asia Pacific Business Lead Monsanto Company, 08/04 - 12/06; Vice President, Finance Monsanto Company, 1/07-10/07; present position, 10/07
David F. Snively, 54		Senior Vice President, Secretary and General Counsel	2006	Associate General Counsel, Litigation - Monsanto Company, 2000-2004; Deputy General Counsel, Core Functions Monsanto Company, 2004-9/06; present position, 9/06

Gerald A. Steiner, 48	Executive Vice President, Commercial Acceptance	2001	Present position, 6/03
------------------------------	--	------	------------------------

* Prior to Sept. 1, 2000, the businesses of the current Monsanto Company were the agricultural division of Pharmacia Corporation.

ITEM 11. EXECUTIVE COMPENSATION

Information appearing under the following headings of the Proxy Statement is incorporated herein by reference:

Compensation of Directors ; Compensation Discussion and Analysis ; Report of the People and Compensation Committee ; Compensation Committee Interlocks and Insider Participation ; Summary Compensation Table and Narrative Disclosure including associated compensation tables, Grants of Plan-Based Awards, Outstanding Equity Awards at Fiscal Year-End Table, Option Exercises and Stock Vested Table, Pension Benefits, Non-qualified Deferred Compensation, and Potential Payments Upon Termination or Change of Control.

The information contained in Report of the People and Compensation Committee shall not be deemed to be filed with the Securities and Exchange Commission or subject to the liabilities of the Exchange Act, except to the extent that the company specifically incorporates such information into a document filed under the Securities Act or the Exchange Act.

ITEM 12. SECURITY OWNERSHIP OF CERTAIN BENEFICIAL OWNERS AND MANAGEMENT AND RELATED STOCKHOLDER MATTERS

Information appearing in the Proxy Statement under the headings Stock Ownership of Management and Certain Beneficial Owners and Equity Compensation Plan Table is incorporated herein by reference.

ITEM 13. CERTAIN RELATIONSHIPS AND RELATED TRANSACTIONS, AND DIRECTOR INDEPENDENCE

Information appearing in the Proxy Statement under the headings Related Person Policy and Transactions and Director Independence are incorporated herein by reference.

Table of Contents

MONSANTO COMPANY

2008 FORM 10-K

ITEM 14. PRINCIPAL ACCOUNTING FEES AND SERVICES

Information regarding fees paid to our independent registered public accounting firm and approval of services by our audit and finance committee that appears in the Proxy Statement under the heading Ratification of Independent Registered Public Accounting Firm (Proxy Item No. 2) is incorporated herein by reference.

104

Table of Contents

MONSANTO COMPANY

2008 FORM 10-K

PART IV

ITEM 15. EXHIBITS, FINANCIAL STATEMENT SCHEDULES

- (a) Documents filed as part of this Report:
- (1) The following financial statements appearing in Item 8: Statements of Consolidated Operations; Statements of Consolidated Financial Position; Statements of Consolidated Cash Flows; Statements of Consolidated Shareowners Equity; and Statements of Consolidated Comprehensive Income.
 - (2) Exhibits: The list of exhibits in the Exhibit Index to this Report is incorporated herein by reference. The exhibits will be filed with the SEC but will not be included in the printed version of the Annual Report to Shareowners.

Table of Contents

MONSANTO COMPANY

2008 FORM 10-K

SIGNATURES

Pursuant to the requirements of Section 13 or 15(d) of the Securities Exchange Act of 1934, the registrant has duly caused this Report to be signed on its behalf by the undersigned, thereunto duly authorized.

MONSANTO COMPANY
(Registrant)

By: /s/ RICHARD B. CLARK

Richard B. Clark
Vice President and Controller (Principal
Accounting Officer)

Date: Oct. 23, 2008

Pursuant to the requirements of the Securities Exchange Act of 1934, this Report has been signed below by the following persons on behalf of the registrant and in the capacities and on the dates indicated.

Signature	Title	Date
<u>/s/ FRANK V. ATLEE III</u> (Frank V. AtLee III)	Director	Oct. 23, 2008
<u>/s/ JOHN W. BACHMANN</u> (John W. Bachmann)	Director	Oct. 23, 2008
<u>/s/ JANICE L. FIELDS</u> (Janice L. Fields)	Director	Oct. 23, 2008
<u>/s/ HUGH GRANT</u> (Hugh Grant)	Chairman of the Board, President and Chief Executive Officer, Director (Principal Executive Officer)	Oct. 23, 2008
<u>/s/ ARTHUR H. HARPER</u> (Arthur H. Harper)	Director	Oct. 23, 2008
<u>/s/ GWENDOLYN S. KING</u> (Gwendolyn S. King)	Director	Oct. 23, 2008

Edgar Filing: MONSANTO CO /NEW/ - Form 10-K

/s/ C. STEVEN MCMILLAN	Director	Oct. 23, 2008
(C. Steven McMillan)		
/s/ WILLIAM U. PARFET	Director	Oct. 23, 2008
(William U. Parfet)		
/s/ GEORGE POSTE	Director	Oct. 23, 2008
(George Poste)		
/s/ ROBERT J. STEVENS	Director	Oct. 23, 2008
(Robert J. Stevens)		
/s/ TERRELL K. CREWS	Executive Vice President, Chief Financial Officer (Principal Financial Officer)	Oct. 23, 2008
(Terrell K. Crews)		
/s/ RICHARD B. CLARK	Vice President and Controller (Principal Accounting Officer)	Oct. 23, 2008
(Richard B. Clark)		

Table of Contents

MONSANTO COMPANY

2008 FORM 10-K

EXHIBIT INDEX

These Exhibits are numbered in accordance with the Exhibit Table of Item 601 of Regulation S-K.

Exhibit No.	Description
2	<ol style="list-style-type: none"> 1. Separation Agreement, dated as of Sept. 1, 2000, between the company and Pharmacia (incorporated by reference to Exhibit 2.1 of Amendment No. 2 to Registration Statement on Form S-1, filed Sept. 22, 2000, File No. 333-36956).* 2. First Amendment to Separation Agreement, dated July 1, 2002, between Pharmacia and the company (incorporated by reference to Exhibit 99.2 of Form 8-K, filed July 30, 2002, File No. 1-16167).* 3. Agreement and Plan of Merger, dated as of Aug. 14, 2006, by and among Delta and Pine Land Company, Monsanto Sub, Inc. and the company (incorporated by reference to Exhibit 2.1 of Form 8-K, filed Aug. 18, 2006, File No. 1-16167).* 4. Stock Purchase Agreement by and between Bayer CropScience L.P. and the company dated May 31, 2007, relating to the shares of Stoneville Pedigreed Seed Company (incorporated by reference to Exhibit 2 of Form 10-Q for the period ended May 31, 2007, File No. 1-16167).* 5. Sale and Purchase Agreement, dated March 31, 2008, by and between Monsanto Company and Delhi B.V. (incorporated by reference to Exhibit 2.1 of Form 8-K, filed April 1, 2008, File No. 1-16167).*
3	<ol style="list-style-type: none"> 1. Amended and Restated Certificate of Incorporation (incorporated by reference to Exhibit 3.1 of Amendment No. 1 to Registration Statement on Form S-1, filed Aug. 30, 2000, File No. 333-36956). 2. Monsanto Company Bylaws, as amended effective June 18, 2008 (incorporated by reference to Exhibit 3.2(i) of Form 8-K, filed June 24, 2008, File No. 1-16167).
4	<ol style="list-style-type: none"> 1. Indenture, dated as of Aug. 1, 2002, between the company and The Bank of New York Trust Company, N.A., as Trustee (incorporated by reference to Exhibit 4.2 of Form 8-K, filed Aug. 31, 2005, File No. 1-16167). 2. Form of Registration Rights Agreement, dated Aug. 25, 2005, relating to 5 1/2 % Senior Notes due 2025 of the company (incorporated by reference to Exhibit 4.3 of Form 8-K, filed Aug. 31, 2005, File No. 1-16167).
9	Omitted
10	<ol style="list-style-type: none"> 1. Tax Sharing Agreement, dated July 19, 2002, between the company and Pharmacia (incorporated by reference to Exhibit 10.4 of Form 10-Q for the period ended June 30, 2002, File No. 1-16167). 2. Employee Benefits and Compensation Allocation Agreement between Pharmacia and the company, dated as of Sept. 1, 2000 (incorporated by reference to Exhibit 10.7 of Amendment No. 2 to

Edgar Filing: MONSANTO CO /NEW/ - Form 10-K

Registration Statement on Form S-1, filed Sept. 22, 2000, File No. 333-36956).

- 2.1.** Amendment to Employee Benefits and Compensation Allocation Agreement between Pharmacia and the company, dated Sept. 1, 2000 (incorporated by reference to Exhibit 2.1 of Form 10-K for the period ended Dec. 31, 2001, File No. 1-16167).
- 3.** Intellectual Property Transfer Agreement, dated Sept. 1, 2000, between the company and Pharmacia (incorporated by reference to Exhibit 10.8 of Amendment No. 2 to Registration Statement on Form S-1, filed Sept. 22, 2000, File No. 333-36956).
- 4.** Services Agreement, dated Sept. 1, 2000, between the company and Pharmacia (incorporated by reference to Exhibit 10.9 of Amendment No. 2 to Registration Statement on Form S-1, filed Sept. 22, 2000, File No. 333-36956).
- 5.** Corporate Agreement, dated Sept. 1, 2000, between the company and Pharmacia (incorporated by reference to Exhibit 10.10 of Amendment No. 2 to Registration Statement on Form S-1, filed Sept. 22, 2000, File No. 333-36956).
- 6.** Agreement among Solutia, Pharmacia and the company, relating to settlement of certain litigation (incorporated by reference to Exhibit 10.25 of Form 10-K for the transition period ended Aug. 31, 2003, File No. 1-16167).
- 7.** Global Settlement Agreement, executed Sept. 9, 2003, in the U.S. District Court for the Northern District of Alabama, and in the Circuit Court of Etowah County, Alabama (incorporated by reference to Exhibit 10.25 of Form 10-K for the transition period ended Aug. 31, 2003, File No. 1-16167).
- 8.** Solutia's Fifth Amended Joint Plan of Reorganization Pursuant to Chapter 11 of the Bankruptcy Code (As Modified) (incorporated by reference to Exhibit 2.1 of Solutia's Form 8-K filed December 5, 2007, SEC File No. 001-13255).
- 9.** Amended and Restated Settlement Agreement dated February 28, 2008 by and among Solutia Inc., Monsanto Company and SFC LLC (incorporated by reference to Exhibit 10.1 of Solutia's Form 8-K filed March 5, 2008, SEC File No. 001-13255).
- 10.** First Amended and Restated Retiree Settlement Agreement dated as of July 10, 2007, among Solutia Inc., the Company and the claimants set forth therein (incorporated by reference to Exhibit 10.3 of Solutia's Form 8-K filed March 5, 2008, SEC File No. 001-13255).
- 11.** Letter Agreement between the company and Pharmacia, effective Aug. 13, 2002 (incorporated by reference to Exhibit 10.6 of Form 10-Q for the period ended June 30, 2002, File No. 1-16167).
- 12.** Creve Coeur Campus Lease between the company and Pharmacia, dated Sept. 1, 2000 (incorporated by reference to Exhibit 10.22 of Form 10-K for the period ended Dec. 31, 2001, File No. 1-16167).
- 13.** Chesterfield Village Campus Lease between Pharmacia and the company, dated Sept. 1, 2000 (incorporated by reference to Exhibit 10.23 of Form 10-K for the period ended Dec. 31, 2001, File No. 1-16167).
- 15.** Five-Year Credit Agreement, dated Feb. 28, 2007 (incorporated by reference to Exhibit 10.1 to Form 8-K, filed March 1, 2007, File No. 1-16167).

- 16.** 364-Day Credit Agreement, dated as of March 11, 2005 (incorporated by reference to Exhibit 10.15 of Form 8-K, filed March 17, 2005, File No. 1-16167).
- 17.** 200,000,000 Three-Year Credit Agreement, dated as of July 13, 2006 (incorporated by reference to Exhibit 10.15 of Form 8-K, filed July 19, 2006, File No. 1-16167).
- 18.** Monsanto Non-Employee Director Equity Incentive Compensation Plan, as amended and restated, effective Sept. 1, 2007 (incorporated by reference to Exhibit 10.18 of Form 10-K for the period ended Aug. 31, 2007, File No. 1-16167).
- 18.1.** First Amendment, effective Dec. 1, 2007, to Monsanto Non-Employee Director Equity Incentive Compensation Plan, as amended and restated as of Sept. 1, 2007 (incorporated by reference to Exhibit 10 of Form 10-Q for the period ended Nov. 30, 2007, File No. 1-16167).
- 18.2.** Second Amendment, dated June 18, 2008, to Monsanto Non-Employee Director Equity Incentive Compensation Plan, as amended and restated as of Sept. 1, 2007. (incorporated by reference to Exhibit 10 of the Form 10-Q for the period ended May 31, 2008, File No. 1-16167).

Table of Contents

MONSANTO COMPANY

2008 FORM 10-K

Exhibit No.	Description
19.	Monsanto Company Long-Term Incentive Plan, as amended and restated, effective April 24, 2003 (formerly known as Monsanto 2000 Management Incentive Plan) (incorporated by reference to Appendix C to Notice of Annual Meeting and Proxy Statement dated March 13, 2003, File No. 1-16167).
19.1.	First Amendment, effective Jan. 29, 2004, to the Monsanto Company Long-Term Incentive Plan, as amended and restated (incorporated by reference to Exhibit 10.16.1 of the Form 10-Q for the period ended Feb. 29, 2004, File No. 1-16167).
19.2.	Second Amendment, effective Oct. 23, 2006, to the Monsanto Company Long-Term Incentive Plan, as amended and restated (incorporated by reference to Exhibit 10.18.2 of the Form 10-K for the period ended Aug. 31, 2006, File No. 1-16167).
19.3.	Third Amendment, effective June 14, 2007, to the Monsanto Company Long-Term Incentive Plan, as amended and restated (incorporated by reference to Exhibit 10.19.3 of Form 10-K for the period ended Aug. 31, 2007, File No. 1-16167).
19.4.	Fourth Amendment, effective June 14, 2007, to the Monsanto Company Long-Term Incentive Plan, as amended and restated (incorporated by reference to Exhibit 10.19.4 of Form 10-K for the period ended Aug. 31, 2007, File No. 1-16167).
19.5.	Form of Terms and Conditions of Option Grant Under the Monsanto Company Long-Term Incentive Plan, as amended and restated, as of Oct. 2004 (incorporated by reference to Exhibit 10.16.2 of Form 10-K for the period ended Aug. 31, 2004, File No. 1-16167).
19.6.	Form of Terms and Conditions of Option Grant Under the Monsanto Company Long-Term Incentive Plan and the Monsanto Company 2005 Long-Term Incentive Plan, as approved by the People and Compensation Committee of the Board of Directors on Aug. 6, 2007 (incorporated by reference to Exhibit 10.3 to Form 8-K, filed Aug. 10, 2007, File No. 1-16167).
19.7.	Form of Terms and Conditions of Restricted Stock Grant Under the Monsanto Company Long-Term Incentive Plan (incorporated by reference to Exhibit 10.17.3 of Form 10-K for the period ended Aug. 31, 2005, File No. 1-16167).
19.8.	Form of Terms and Conditions of Restricted Stock Unit Grant Under the Monsanto Company Long-Term Incentive Plan, as of Oct. 2006 (incorporated by reference to Exhibit 10.18.5 of the Form 10-K for the period ended Aug. 31, 2006, File No. 1-16167).
19.9.	Form of Terms and Conditions of Restricted Stock Unit Grant Under the Monsanto Company Long-Term Incentive Plan, as of Oct. 2005 (incorporated by reference to Exhibit 10.17.4 of Form 10-K for the period ended Aug. 31, 2005, File No. 1-16167).
19.10.	

Form of Terms and Conditions of Restricted Stock Unit Grant Under the Monsanto Company Long-Term Incentive Plan, as amended and restated, as of Oct. 2004 (incorporated by reference to Exhibit 10.16.4 of Form 10-K for the period ended Aug. 31, 2004, File No. 1-16167).

- 19.11.** Form of Terms and Conditions of Restricted Stock Unit Grant Under the Monsanto Company Long-Term Incentive Plan, as amended and restated, as of Feb. 2004 (incorporated by reference to Exhibit 10.16.5 of Form 10-K for the period ended Aug. 31, 2004, File No. 1-16167).
- 19.12.** Form of Terms and Conditions of Restricted Stock Unit Grant Under the Monsanto Company Long-Term Incentive Plan and the Monsanto Company 2005 Long-Term Incentive Plan, as approved by the People and Compensation Committee of the Board of Directors on Aug. 6, 2007 (incorporated by reference to Exhibit 10.4 to Form 8-K, filed August 10, 2007, File No. 1-16167).
- 19.13.** Form of Non-Employee Director Restricted Share Grant Terms and Conditions Under the Monsanto Company Long-Term Incentive Plan, as amended and restated (incorporated by reference to Exhibit 10.16.2 of the Form 10-Q for the period ended May 31, 2004, File No. 1-16167).
- 20.** Monsanto Company 2005 Long-Term Incentive Plan, effective Jan. 20, 2005 (incorporated by reference to Exhibit 10.1 of Form 8-K, filed Jan. 26, 2005, File No. 1-16167).
- 20.1.** First Amendment, effective Oct. 23, 2006, to the Monsanto Company 2005 Long-Term Incentive Plan (incorporated by reference to Exhibit 10.18.2 of the Form 10-K for the period ended Aug. 31, 2006, File No. 1-16167).
- 20.2.** Second Amendment, effective June 14, 2007, to the Monsanto Company 2005 Long-Term Incentive Plan (incorporated by reference to Exhibit 10.20.2 of Form 10-K for the period ended Aug. 31, 2007, File No. 1-16167).
- 20.3.** Third Amendment, effective June 14, 2007, to the Monsanto Company 2005 Long-Term Incentive Plan (incorporated by reference to Exhibit 10.20.3 of Form 10-K for the period ended Aug. 31, 2007, File No. 1-16167).
- 20.4.** Form of Terms and Conditions of Restricted Stock Units Grant Under the Monsanto Company 2005 Long-Term Incentive Plan, as approved by the People and Compensation Committee of the Board of Directors by executed unanimous written consent on Oct. 11, 2007 (incorporated by reference to Exhibit 10.1 of Form 8-K, filed Oct. 17, 2007, File No. 1-16167).
- 20.5.** Form of Terms and Conditions of Restricted Stock Units Grant Under the Monsanto Company 2005 Long-Term Incentive Plan, as approved by the People and Compensation Committee of the Board of Directors on Oct. 20, 2008.
- 21.** Amended and Restated Deferred Payment Plan, effective Jan. 1, 2004 (incorporated by reference to Exhibit 10.17 of Form 10-K for the period ended Aug. 31, 2004, File No. 1-16167).
- 22.** Annual Incentive Program for Certain Executive Officers (incorporated by reference to the description appearing under the sub-heading Approval of Performance Goal Under §162(m) of the Internal Revenue Code on pages 12 through 13 of the Proxy Statement dated Dec. 14, 2005).
- 23.** Fiscal Year 2008 Annual Incentive Plan Summary, as approved by the People and Compensation Committee of the Board of Directors on Aug. 6, 2007 (incorporated by reference to Exhibit 10.2 to Form 8-K, filed Aug. 10, 2007, File No. 1-16167).

- 24.** Fiscal Year 2009 Annual Incentive Plan Summary, as approved by the People and Compensation Committee of the Board of Directors on Aug. 5, 2008 (incorporated by reference to Exhibit 10.1 to Form 8-K, filed Aug. 11, 2008, File No. 1-16167).
 - 25.** Amended and Restated Form of Change-of-Control Employment Security Agreement, as approved by the Board of Directors on Oct. 21, 2008, and applicable to Messrs. Grant, Begemann, Casale, Crews and Fraley and certain other executive officers and members of management.
 - 26.** Monsanto Company Executive Health Management Program, as amended and restated as of Oct. 23, 2006 (incorporated by reference to Exhibit 10.28 of the Form 10-K for the period ended Aug. 31, 2006, File No. 1-16167).
 - 27.** Amended and Restated Monsanto Company Recoupment Policy, as approved by the Board of Directors on Oct. 21, 2008.
 - 28.** Monsanto Benefits Plan for Third Country Nationals (incorporated by reference to Exhibit 10.2 to Form 8-K, filed Aug. 11, 2008, File No. 1-16167).
 - 28.1.** Amendment to Monsanto Benefits Plan for Third Country Nationals, effective Aug. 5, 2008 (incorporated by reference to Exhibit 10.3 to Form 8-K, filed Aug. 11, 2008, File No. 1-16167).
 - 29.** Annual Cash Compensation of Named Executive Officers dated Oct. 2008.
- 11** Omitted see Item 8 Note 21 Earnings (Loss) per Share.
 - 12** Computation of Ratio of Earnings to Fixed Charges.
 - 13** Omitted

Table of Contents

MONSANTO COMPANY

2008 FORM 10-K

Exhibit No.	Description
14	Omitted Monsanto's Code of Ethics for Chief Executive and Senior Financial Officers is available on our Web site at www.monsanto.com .
16	Omitted
18	Omitted
21	Subsidiaries of the Registrant.
22	Omitted
23	Consent of Independent Registered Public Accounting Firm
24	Omitted
31.	<ol style="list-style-type: none"> 1. Rule 13a-14(a)/15d-14(a) Certification (pursuant to Section 302 of the Sarbanes-Oxley Act of 2002, executed by Chief Executive Officer). 2. Rule 13a-14(a)/15d-14(a) Certification (pursuant to Section 302 of the Sarbanes-Oxley Act of 2002, executed by Chief Financial Officer).
32	Rule 13a-14(b) Certifications (pursuant to Section 906 of the Sarbanes-Oxley Act of 2002, executed by the Chief Executive Officer and the Chief Financial Officer).
*	<p>Schedules and similar attachments to this Agreement have been omitted pursuant to Item 601(b)(2) of Regulation S-K. The registrant will furnish supplementally a copy of any omitted schedule or similar attachment to the SEC upon request.</p> <p>Represents management contract or compensatory plan or arrangement.</p>