

PPG INDUSTRIES INC  
Form 10-K  
February 19, 2009  
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**UNITED STATES**  
**SECURITIES AND EXCHANGE COMMISSION**

WASHINGTON, D.C. 20549

**FORM 10-K**

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

For the fiscal year ended December 31, 2008

Commission File Number 1-1687

**PPG INDUSTRIES, INC.**

(Exact name of registrant as specified in its charter)

Pennsylvania (State or other jurisdiction of incorporation or organization)	25-0730780 (I.R.S. Employer Identification No.)
One PPG Place, Pittsburgh, Pennsylvania (Address of principal executive offices)	15272 (Zip code)
Registrant's telephone number, including area code:	412-434-3131

**Securities Registered Pursuant to Section 12(b) of the Act:**

<u>Title of each class</u>	<u>Name of each exchange on which registered</u>
Common Stock Par Value \$1.66 <sup>2</sup> / <sub>3</sub>	New York Stock Exchange

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

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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, 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 the definitions of large accelerated filer, accelerated filer and smaller reporting company in Rule 12b-2 of the Exchange Act. (Check one):

Large accelerated filer <input checked="" type="checkbox"/>	Accelerated filer <input type="checkbox"/>
Non-accelerated filer <input type="checkbox"/> (Do not check if a smaller reporting company)	Smaller reporting company <input type="checkbox"/>

Indicate by check mark whether the Registrant is a shell company (as defined by Rule 12b-2 of the Act). YES  NO

The aggregate market value of common stock held by non-affiliates as of June 30, 2008, was \$9,400 million.

As of January 31, 2009, 164,233,391 shares of the Registrant's common stock, with a par value of \$1.66<sup>2</sup>/<sub>3</sub> per share, were outstanding. As of that date, the aggregate market value of common stock held by non-affiliates was \$6,160 million.

## DOCUMENTS INCORPORATED BY REFERENCE

<u>Document</u>	<u>Incorporated By Reference In Part No.</u>
Portions of PPG Industries, Inc. Proxy Statement for its 2009 Annual Meeting of Shareholders	III



**Table of Contents****PPG INDUSTRIES, INC.****AND CONSOLIDATED SUBSIDIARIES**

As used in this report, the terms PPG, Company, Registrant, we, us and our refer to PPG Industries, Inc., and its subsidiaries, taken as a whole, unless the context indicates otherwise.

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**Note on Incorporation by Reference**

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Throughout this report, various information and data are incorporated by reference to the Company's 2008 Annual Report (hereinafter referred to as the Annual Report). Any reference in this report to disclosures in the Annual Report shall constitute incorporation by reference only of that specific information and data into this Form 10-K.

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**Part I**

**Item 1. Business**

PPG Industries, Inc., incorporated in Pennsylvania in 1883, is comprised of six reportable business segments: Performance Coatings, Industrial Coatings, Architectural Coatings EMEA (Europe, Middle East and Africa), Optical and Specialty Materials, Commodity Chemicals and Glass. Each of the business segments in which PPG is engaged is highly competitive. However, the diversification of product lines and worldwide markets served tend to minimize the impact on PPG's total sales and earnings from changes in demand for a particular product line or in a particular geographic area. Refer to Note 24, Reportable Business Segment Information under Item 8 of this Form 10-K for financial information relating to our reportable business segments and Note 2, Acquisitions under Item 8 for information regarding acquisition activity.

***Performance Coatings, Industrial Coatings and Architectural Coatings - EMEA***

PPG is a major global supplier of protective and decorative coatings. The Performance Coatings, Industrial Coatings and Architectural Coatings EMEA reportable segments supply protective and decorative finishes for customers in a wide array of end use markets including industrial equipment, appliances and packaging; factory-finished aluminum extrusions and steel and aluminum coils; marine and aircraft equipment; automotive original equipment; and other industrial and consumer products. In addition to supplying finishes to the automotive original equipment market, PPG supplies refinishes to the automotive aftermarket. PPG also supplies coatings to painting and maintenance contractors and directly to consumers for decoration and maintenance. The coatings industry is highly competitive and consists of a few large firms with global presence and many smaller firms serving local or regional markets. PPG competes in its primary markets with the world's largest coatings companies, most of which have global operations, and many smaller regional coatings companies. Product development, innovation, quality and technical and customer service have been stressed by PPG and have been significant factors in developing an important supplier position by PPG's coatings businesses comprising the Performance Coatings, Industrial Coatings and Architectural Coatings EMEA reportable segments.

On January 2, 2008, PPG completed the acquisition of SigmaKalon Group (SigmaKalon), a worldwide coatings producer based in Uithoorn, Netherlands. The results of operations of SigmaKalon are included in PPG's consolidated financial statements from the acquisition date onward. The businesses acquired from SigmaKalon produce architectural, protective and marine and industrial coatings. The protective and marine and industrial coatings businesses of SigmaKalon are managed as part of PPG's previously existing coatings businesses. The SigmaKalon architectural coatings business in Europe, the Middle East and Africa is reported in 2008 as a new separate reportable business segment known as Architectural Coatings EMEA. This business represents about 70% of SigmaKalon's sales.

The Performance Coatings reportable segment is comprised of the refinish, aerospace, protective and marine and architectural Americas and Asia Pacific coatings businesses.

The refinish coatings business supplies coatings products for automotive and commercial transport/fleet repair and refurbishing, light industrial coatings for a wide array of markets and specialty coatings for signs. These products are sold primarily through distributors.

The aerospace coatings business supplies sealants, coatings, technical cleaners and transparencies for commercial, military, regional jet and general aviation aircraft and transparent armor for military land vehicles. PPG supplies products to aircraft manufacturers, maintenance and

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aftermarket customers around the world both on a direct basis and through a company-owned distribution network.

The protective and marine coatings business supplies coatings and finishes for the protection of metals and structures to metal fabricators, heavy duty maintenance contractors and manufacturers of ships, bridges, rail cars and shipping containers. These products are sold through the architectural coatings company-owned stores, independent distributors and directly to customers.

Product performance, technology, quality, distribution and technical and customer service are major competitive factors in these three coatings businesses.

The architectural coatings-Americas and Asia Pacific business primarily produces coatings used by painting and maintenance contractors and by consumers for decoration and maintenance. These coatings are sold under a number of brands. Architectural coatings Americas and Asia Pacific products are sold through a combination of company-owned stores, home centers, paint dealers, independent distributors, and directly to customers. Price, product performance, quality, distribution and brand recognition are key competitive factors for the architectural coatings business. The architectural coatings-Americas and Asia Pacific business operates approximately 410 company-owned stores in North America and approximately 50 company-owned stores in Australia.

The major global competitors of the Performance Coatings reportable segment are Akzo Nobel NV, BASF Corporation, the DuPont Company, the Sherwin-Williams Company and Valspar Corporation. The average number of persons employed by the Performance Coatings reportable segment during 2008 was 13,400.

The Industrial Coatings reportable segment is comprised of the automotive, industrial and packaging

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coatings businesses. Industrial, automotive and packaging coatings are formulated specifically for the customers' needs and application methods.

The industrial and automotive coatings businesses sell directly to a variety of manufacturing companies. PPG also supplies adhesives and sealants for the automotive industry and metal pretreatments and related chemicals for industrial and automotive applications. PPG maintains an alliance with Kansai Paint. The venture, known as PPG Kansai Automotive Finishes, is owned 60% by PPG and 40% by Kansai Paint. The focus of the venture is Japanese based automotive original equipment manufacturers in North America and Europe. In addition, PPG and Kansai Paint are developing technology jointly, potentially benefiting customers worldwide.

The packaging coatings business supplies coatings and inks for aerosol, food and beverage containers for consumer products to the manufacturers of those containers.

Product performance, technology, quality and technical and customer service are major competitive factors in the industrial coatings businesses. The major global competitors of the Industrial Coatings reportable segment are Akzo Nobel NV, BASF Corporation, the DuPont Company and Valspar Corporation. The average number of persons employed by the Industrial Coatings reportable segment during 2008 was 9,700.

The Architectural Coatings EMEA business supplies a variety of coatings under a number of brands and purchased sundries to painting contractors and consumers in Europe, the Middle East and Africa. Architectural Coatings EMEA products are sold through a combination of approximately 500 company-owned stores, home centers, paint dealers, independent distributors, and directly to customers. Price, product performance, quality, distribution and brand recognition are key competitive factors for this business. The major competitors of the Architectural Coatings EMEA reportable segment are Akzo Nobel NV and Materis Paints. The average number of persons employed by the Architectural Coatings EMEA reportable segment during 2008 was 8,500.

### *Optical and Specialty Materials*

PPG's Optical and Specialty Materials reportable segment is comprised of the optical products and silicas businesses. The primary Optical and Specialty Materials products are *Transitions*<sup>®</sup> lenses, sunlenses, optical materials and polarized film; amorphous precipitated silicas for tire, battery separator and other end-use markets; and *Teslin*<sup>®</sup> synthetic printing sheet used in such applications as waterproof labels, e-passports, drivers' licenses and identification cards. *Transition*<sup>®</sup> lenses are processed and distributed by PPG's 51%-owned joint venture with Essilor International. In the Optical and Specialty Materials businesses, product quality and performance and technical service are the most critical competitive factors. The average number of persons employed by the Optical and Specialty Materials reportable business segment during 2008 was 3,200.

Historically, the Optical and Specialty Materials reportable segment included the fine chemicals business. PPG sold the fine chemicals business in the fourth quarter of 2007. As such, the results of operations and cash flows of this business have been classified as discontinued operations in the consolidated financial statements under Item 8 of this Form 10-K. Refer to Note 1, Summary of Significant Accounting Policies under Item 8 for further information.

### *Commodity Chemicals*



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PPG is a producer and supplier of basic chemicals. The Commodity Chemicals reportable segment produces chlor-alkali and derivative products including chlorine, caustic soda, vinyl chloride monomer, chlorinated solvents, calcium hypochlorite, ethylene dichloride and phosgene derivatives. Most of these products are sold directly to manufacturing companies in the chemical processing, rubber and plastics, paper, minerals, metals and water treatment industries. PPG competes with five other major producers of chlor-alkali products including The Dow Chemical Company; Formosa Plastics Corporation, U.S.A.; Georgia Gulf Corporation; Olin Corporation and Occidental Chemical Corporation. Price, product availability, product quality and customer service are the key competitive factors. The average number of persons employed by the Commodity Chemicals reportable business segment during 2008 was 2,100.

### *Glass*

PPG is a producer of flat glass in North America and a global producer of continuous-strand fiber glass. The Glass reportable business segment is comprised of the performance glazings and fiber glass businesses. PPG's major markets are commercial and residential construction and the wind energy, energy infrastructure, transportation and electronics industries. Most glass products are sold directly to manufacturing companies. PPG manufactures flat glass by the float process and fiber glass by the continuous-strand process.

The bases for competition in the Glass businesses are price, quality, technology and customer service. The Company competes with four major producers of flat glass including Asahi Glass Company, Cardinal Glass Industries, Guardian Industries and NSG Pilkington, and five major producers of fiber glass throughout the world including Owens Corning-Vetrotex, Jushi Group, Johns Manville Corporation, CPIC Fiberglass and AGY. The average number of persons employed by the Glass reportable business segment during 2008 was 3,700, excluding the automotive glass and services business.

Historically, the Glass reportable segment has included the automotive glass and services business. In

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September 2008, PPG completed a transaction by which it divested a majority interest in the automotive glass and services business. The results of this business through September 30, 2008 are reported as part of the Glass reportable segment in the consolidated financial statements under Item 8 of this Form 10-K. See Note 3, *Divestiture of Automotive Glass and Services Business* under Item 8 for additional information.

### ***Raw Materials and Energy***

The effective management of raw materials and energy is important to PPG's continued success. Our primary energy cost is natural gas used in our Commodity Chemicals and Glass businesses. In 2008, our natural gas costs were volatile and on average increased almost 25 percent in the U.S. compared to 2007 levels. The increase can be linked to year-over-year strong pricing for energy commodities, including the run up in the price of crude oil by mid-year.

During 2008, our average coatings raw material costs increased about 5 percent, with differing results by region. Coatings raw material costs rose 1 percent and 3 percent in 2007 and 2006, respectively. Many of our coatings raw materials are petroleum based, and changes in pricing for these raw materials traditionally lags oil price fluctuations by about six months. Our costs are also dependent on global supply and demand for these materials. Escalating crude oil prices and global economic growth rates, especially in emerging regions, in the first two quarters of 2008 resulted in higher inflation impacts to PPG's coatings raw materials in the third and most of the fourth quarter of 2008. This inflation was more acute and volatile in North America, Asia and other emerging regions. However, rapid second half 2008 oil price declines, along with the sudden drop in global industrial demand late in the year, resulted in a decline in the price of certain raw materials in these same regions as we were exiting the year.

The Company's most significant raw materials are titanium dioxide and epoxy and other resins in the Coatings businesses; lenses, photochromic dye, sand and soda ash in the Optical and Specialty Materials businesses; brine and ethylene in the Commodity Chemicals business; and sand and soda ash in the Glass businesses. Energy is a significant production cost in the Commodity Chemicals and Glass businesses. Most of the raw materials and energy used in production are purchased from outside sources, and the Company has made, and plans to continue to make, supply arrangements to meet the planned operating requirements for the future. Supply of critical raw materials and energy is managed by establishing contracts, multiple sources, and identifying alternative materials or technology, whenever possible. The Company has aggressive sourcing initiatives underway to support its continuous efforts to find the lowest total material costs. These initiatives include reformulation of certain of our products using both petroleum derived and bio-based materials as part of a product renewal strategy. Another initiative is to qualify multiple sources of supply, including supplies from Asia and other lower cost regions of the world.

We are subject to existing and evolving standards relating to the registration of chemicals that impact or could potentially impact the availability and viability of some of the raw materials we use in our production processes. Our ongoing global product stewardship efforts are directed at maintaining our compliance with these standards. In December 2006, the environment ministers of the European Union (EU) member states gave final approval to comprehensive chemical management legislation known as REACH (Registration, Evaluation, and Authorization of Chemicals). REACH applies to all chemical substances manufactured or imported into the EU in quantities of one metric ton or more annually and will require the registration of approximately 30,000 chemical substances with the European Chemicals Agency. The pre-registration period for such chemicals ended on December 1, 2008. Additionally, REACH requires the registration of these materials, entailing the filing of extensive data on their potential risks to human health and the environment. Registration activities will be phased over an 11-year period, based on tonnage and level of concern, with the first registration deadline set for December 1, 2010. In the case of chemicals with a high level of concern, the regulation calls for progressive substitution unless no alternative can be found; in these cases, authorization of the chemicals will be required.

PPG has established a dedicated organization to manage REACH implementation. We have reviewed our product portfolio, worked closely with our suppliers to assure their commitment to pre-register our key raw materials and completed pre-registrations of PPG manufactured or imported

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raw materials. We will continue to work with our suppliers to understand the future availability and viability of the raw materials we use in our production processes.

PPG anticipates that some current raw materials and products will be subject to the REACH authorization process and believes that PPG will be able to demonstrate adequate risk management for the use and application of the majority of such substances. Compliance with the REACH legislation will result in increased costs due to registration costs, product testing and reformulation, risk characterization, participation in Substance Information Exchange Forums and Consortia and dossier preparation. The REACH legislation has prompted a growing number of initiatives in other regions, the most notable of which is the ChAMP (Chemical Assessment and Management Program) that has been initiated in the U.S. Under ChAMP, chemicals imported or manufactured in the U.S. above 25,000 pounds annually will undergo hazard and risk characterization by the U.S. Environmental Protection Agency ( USEPA ). Chemicals identified by

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the USEPA as high risk or of special concern will be subject to further data development and/or regulatory control. At this time it is not possible to quantify the financial impact of these regulatory initiatives on PPG's businesses.

### ***Research and Development***

Technology innovation has been a hallmark of PPG's success throughout its history. Research and development costs, including depreciation of research facilities, were \$468 million, \$363 million and \$330 million during 2008, 2007 and 2006, respectively. These costs totaled approximately 3% of sales in each of these years, representing a level of expenditure that is expected to continue in 2009. PPG owns and operates several facilities to conduct research and development relating to new and improved products and processes. Additional process and product research and development work is also undertaken at many of the Company's manufacturing plants. As part of our ongoing efforts to manage our costs effectively, we operate a laboratory in China, have outsourcing arrangements with several laboratories and have been actively pursuing government funding of a small, but growing portion of the Company's research efforts. Because of the Company's broad array of products and customers, PPG is not materially dependent upon any single technology platform.

### ***Patents***

PPG considers patent protection to be important. The Company's reportable business segments are not materially dependent upon any single patent or group of related patents. PPG received \$52 million in 2008, \$48 million in 2007 and \$44 million in 2006 from royalties and the sale of technical know-how.

### ***Backlog***

In general, PPG does not manufacture its products against a backlog of orders. Production and inventory levels are geared primarily to projections of future demand and the level of incoming orders.

### ***Non-U.S. Operations***

PPG has a significant investment in non-U.S. operations, and as a result we are subject to certain inherent risks, including economic and political conditions in international markets and fluctuations in foreign currency exchange rates. While approximately 75% of sales and operating income is generated by products sold in the United States, Canada and Western Europe, our remaining sales and operating income are generated in developing regions, such as Asia, Eastern Europe and Latin America. With the acquisition of SigmaKalon in January 2008, we have increased our international operations as substantially all of its sales are outside the United States.

### ***Employee Relations***

The average number of persons employed worldwide by PPG during 2008 was 44,900. The Company has numerous collective bargaining agreements throughout the world. While we have experienced occasional work stoppages as a result of the collective bargaining process and may experience some work stoppages in the future, we believe we will be able to negotiate all labor agreements on satisfactory terms. To date, these work stoppages have not had a significant impact on PPG's operating results. Overall, the Company believes it has good relationships with its employees.

*Environmental Matters*

PPG is subject to existing and evolving standards relating to protection of the environment. Capital expenditures for environmental control projects were \$15 million, \$16 million and \$14 million in 2008, 2007 and 2006, respectively. It is expected that expenditures for such projects in 2009 will be in the range of \$15-\$25 million. Although future capital expenditures are difficult to estimate accurately because of constantly changing regulatory standards and policies, it can be anticipated that environmental control standards will become increasingly stringent and the cost of compliance will increase.

Prior to 2007, about 20% of our chlor-alkali production capacity used mercury cell technology. PPG strives to operate these cells in accordance with applicable laws and regulations, and these cells are reviewed at least annually by state authorities. The USEPA has issued new regulations imposing significantly more stringent requirements on mercury emissions. These new rules took effect in December 2006. In order to meet the USEPA's new air quality standards, a decision was made in July 2005 to replace the existing mercury cell production unit at the Lake Charles, La., chlor-alkali plant with newer membrane cell technology. The Louisiana Department of Environmental Quality granted the Company a one year extension to meet the new requirements on mercury emissions. This capital project began in 2005 and was completed in 2007. With the completion of this project in 2007, 4% of PPG's chlor-alkali production uses mercury cell technology.

PPG is negotiating with various government agencies concerning 105 current and former manufacturing sites and offsite waste disposal locations, including 23 sites on the National Priority List. The number of sites has increased when compared to the prior year, primarily as a result of sites that were assumed as a result of the SigmaKalon acquisition. While PPG is not generally a major contributor of wastes to these offsite waste disposal locations, each potentially responsible party may face governmental agency assertions of joint and several liability. Generally, however, a final allocation of costs is made based on relative contributions of wastes to the site. There is a wide range of cost estimates for cleanup of these sites, due largely to uncertainties as to the nature

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and extent of their condition and the methods that may have to be employed for their remediation. The Company has established reserves for onsite and offsite remediation of those sites where it is probable that a liability has been incurred and the amount can be reasonably estimated. As of December 31, 2008 and 2007, PPG had reserves for environmental contingencies totaling \$299 million and \$276 million, respectively, of which \$44 million and \$57 million, respectively, were classified as current liabilities. Pretax charges against income for environmental remediation costs in 2008, 2007 and 2006 totaled \$15 million, \$12 million and \$207 million, respectively. Cash outlays related to such environmental remediation aggregated \$24 million, \$19 million and \$22 million in 2008, 2007 and 2006, respectively. As part of the allocation of the SigmaKalon purchase price to the assets acquired and liabilities assumed, the reserve for environmental contingencies was increased by \$37 million in 2008. The impact of foreign currency translation decreased the liability by \$5 million in 2008. Environmental remediation of a former chromium manufacturing plant site and associated sites in Jersey City, N.J., represented the major part of our 2006 environmental charges and our existing reserves. Included in the amounts mentioned above were \$185 million of 2006 charges against income and \$193 million and \$195 million in reserves at December 31, 2008 and 2007, respectively, associated with all New Jersey chromium sites.

The Company's experience to date regarding environmental matters leads PPG to believe that it will have continuing expenditures for compliance with provisions regulating the protection of the environment and for present and future remediation efforts at waste and plant sites. Management anticipates that such expenditures will occur over an extended period of time.

Charges for estimated environmental remediation costs in 2006 were significantly higher than our historical range. Our continuing efforts to analyze and assess the environmental issues associated with a former chromium manufacturing plant site located in Jersey City, N.J., and the Calcasieu River Estuary located near our Lake Charles, La., chlor-alkali plant resulted in a pre-tax charge of \$173 million in the third quarter of 2006 for the estimated costs of remediating these sites. Excluding 2006, pre-tax charges against income have ranged between \$10 million and \$49 million per year for the past 15 years. We anticipate that charges against income in 2009 for environmental remediation costs will be within this historical range.

In management's opinion, the Company operates in an environmentally sound manner, is well positioned, relative to environmental matters, within the industries in which it operates, and the outcome of these environmental contingencies will not have a material adverse effect on PPG's financial position or liquidity; however, any such outcome may be material to the results of operations of any particular period in which costs, if any, are recognized. See Note 15, Commitments and Contingent Liabilities, under Item 8 of this Form 10-K for additional information related to environmental matters.

There are growing public and governmental concerns related to climate change, which have led to efforts to limit greenhouse gas ( GHG ) emissions. These concerns were reflected in the 2005 framework for GHG reduction under the Kyoto Protocol to the United Nations Framework Convention on Climate Change. The Kyoto Protocol has been adopted by many countries where PPG operates, including the EU and Canada, though not in the U.S. The EU has implemented a cap and trade approach with a mandatory emissions trading scheme for GHGs. In December 2007, delegates to the United Nations Framework Convention on Climate Change reached agreement on development of a plan for the second phase of Kyoto, scheduled to start in 2013. This could potentially lead to further reduction requirements. A substantial portion of PPG's GHG emissions are generated by locations in the U.S.; however, at this time it is uncertain whether the U.S. will set GHG reduction goals under the Kyoto Protocol or by some other mechanism. PPG has joined the U.S.-based Climate Registry to assist in verification of future GHG reduction achievements in preparation for potential imposition in the U.S. of GHG reduction goals.

Energy prices and availability of supply continue to be a concern for major energy users. Since PPG's GHG emissions arise principally from combustion of fossil fuels, PPG has for some time recognized the desirability of reducing energy consumption and GHG generation. We committed under the Business Roundtable's Climate RESOLVE program to reduce our GHG intensity (GHGs produced per million dollars of revenue) by 18% between 2002 and 2012. PPG achieved this target in 2006, six years ahead of schedule. Recognizing the continuing importance of this matter, PPG has appointed an Energy Security and Climate Change Steering Group to guide the Company's progress in this area.

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Additionally, in 2007 PPG announced new corporate targets, namely (i) a reduction in energy intensity by 25% from 2006 to 2016 and (ii) a 10% absolute reduction in GHG emissions from 2006 to 2011. PPG's public disclosure on energy security and climate change can be viewed at the Carbon Disclosure Project [www.cdproject.net](http://www.cdproject.net).

### *Available Information*

The Company's website address is [www.ppg.com](http://www.ppg.com). The Company posts, and shareholders may access without charge, the Company's recent filings and any amendments thereto of its annual reports on Form 10-K, quarterly reports on Form 10-Q and its proxy statements as soon as reasonably practicable after such reports are filed with the Securities and Exchange Commission (SEC). The

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Company also posts all financial press releases and earnings releases to its website. All other reports filed or furnished to the SEC, including reports on Form 8-K, are available via direct link on PPG's website to the SEC's website, [www.sec.gov](http://www.sec.gov). Reference to the Company's and SEC's websites herein does not incorporate by reference any information contained on those websites and such information should not be considered part of this Form 10-K.

### **Item 1a. Risk Factors**

As a global manufacturer of coatings, glass and chemicals products, we operate in a business environment that includes risks. These risks are not unlike the risks we have faced in the recent past. Each of the risks described in this section could adversely affect our operating results, financial position and liquidity. While the factors listed here are considered to be the more significant factors, no such list should be considered to be a complete statement of all potential risks and uncertainties. Unlisted factors may present significant additional obstacles which may adversely affect our business.

*The current U.S. and worldwide recession and credit crisis could have a continuing negative impact on our results of operations and cash flows.*

During the fourth quarter of 2008, the demand for many of our products in Europe, Asia and Latin America declined significantly as the impact of the recession in the U.S. economy, which had impacted demand throughout 2008, spread globally. The impact of the recession was felt most noticeably by our businesses serving the automotive original equipment, construction and general industrial markets. Entering 2009, the global economic outlook in terms of GDP and industrial production is for weak conditions to prevail. Many economists are forecasting that the recession will persist through at least the first half of 2009. Continued weakness in the global economy would be expected to result in lower demand for many of our products and increase our exposure to credit risk from customers in the industries most impacted by the weak economy. How deep and how long the recession will last is not known.

*We sell products to global and regional automotive original equipment manufacturers and their suppliers.*

Global production of automobiles and light trucks declined by 2% in 2008 reflecting declines of 19% in the U.S. and Canada and 7% in Western Europe that were substantially offset by growth in production in Eastern Europe, Asia and Latin America. The industry forecast for 2009 projects a global decline of nearly 10%, with declines in production in all regions of the world led by the U.S. and Canada, where vehicle production is forecast to be down approximately 25%. Declines in the global production of automobiles and light trucks of this magnitude would adversely impact our sales volume.

The North American automotive industry continues to experience structural change, including the loss of U.S. market share by General Motors, Ford and Chrysler. Further deterioration of market conditions could cause certain of our customers and suppliers to experience liquidity problems, potentially resulting in the write-off of amounts due from these customers and cost impacts of changing suppliers. Our worldwide sales to General Motors, Ford and Chrysler are made under normal credit terms and we expect to collect substantially all of the approximately \$45 million due from these customers at December 31, 2008 in the first quarter of 2009; however, we remain focused on the continual management of this credit risk.

*Increases in prices and declines in the availability of raw materials could negatively impact our financial results.*

Our operating results are significantly affected by the cost of raw materials and energy, including natural gas. Changes in natural gas prices have a significant impact on the operating performance of our Commodity Chemicals and Glass businesses. Each one-dollar change in our unit price of natural gas per million British Thermal Units ( mmbtu ) has a direct impact of approximately \$60 million to \$70 million on our annual



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operating costs. In 2008, our natural gas costs were volatile and, on average increased almost 25% in the U.S. compared to 2007 levels. Year-over-year coatings raw material costs rose by \$150 million in 2008 following a rise of \$40 million in 2007. This inflation, which was partially linked to increased oil prices, occurred in all regions of the world, with the most significant impact in the U.S. The impact was most significant in the automotive, industrial, architectural coatings Americas and Asia Pacific and automotive refinish businesses.

We also import raw materials, particularly for use at our manufacturing facilities in the emerging regions of the world. In most cases, those imports are priced in the currency of the supplier and, therefore, our margins are at risk of being lowered if those foreign currencies strengthen against the local currencies of our manufacturing facilities.

Additionally, certain raw materials are critical to our production processes. These include titanium dioxide and epoxy and other resins in the Coatings businesses; lenses, photochromic dye, sand and soda ash in the Optical and Specialty Materials businesses; brine and ethylene in the Commodity Chemicals business; and sand and soda ash in the Glass businesses. We have made, and plan to continue to make, supply arrangements to meet the planned operating requirements for the future. However, an inability to obtain these critical raw materials would adversely impact our ability to produce products.

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### *We experience substantial competition from certain low-cost regions.*

Growing competition from companies in certain regions of the world, including Asia, Eastern Europe and Latin America, where energy and labor costs are lower than those in the U.S., could result in lower selling prices or reduced demand for some of our glass and fiber glass products.

### *We are subject to existing and evolving standards relating to the protection of the environment.*

Excluding 2006, pretax charges against income for environmental remediation ranged between \$10 million and \$49 million per year over the past 15 years. In 2006 those charges totaled \$207 million. We have accrued \$299 million for estimated remediation costs that are probable at December 31, 2008. Our assessment of the potential impact of these environmental contingencies is subject to considerable uncertainty due to the complex, ongoing and evolving process of investigation and remediation, if necessary, of such environmental contingencies, and the potential for technological and regulatory developments. As such, in addition to the amounts currently reserved, we may be subject to loss contingencies related to environmental matters estimated to be as much as \$200 million to \$300 million. Such unreserved losses are reasonably possible but are not currently considered to be probable of occurrence.

### *We are involved in a number of lawsuits and claims, both actual and potential, in which substantial monetary damages are sought.*

The results of any future litigation or settlement of such lawsuits and claims are inherently unpredictable, but such outcomes could be adverse and material in amount.

### *For over 30 years, we have been a defendant in lawsuits involving claims alleging personal injury from exposure to asbestos.*

Most of our potential exposure relates to allegations by plaintiffs that PPG should be liable for injuries involving asbestos containing thermal insulation products manufactured by Pittsburgh Corning Corporation ( PC ). PPG is a 50% shareholder of PC. Although we have entered into a settlement arrangement with several parties concerning these asbestos claims as discussed in Note 15, Commitments and Contingent Liabilities, under Item 8 of this Form 10-K, the arrangement remains subject to court proceedings and, if not approved, the outcome could be material to the results of operations of any particular period.

### *Our products are subject to existing and evolving regulations.*

Regulations concerning the composition and use of chemical products continue to evolve. Developments concerning these regulations could potentially impact the availability or viability of some of the raw materials we use in our product formulations and/or our ability to supply certain products to some customers or markets.

### *Our international operations expose us to additional risks and uncertainties that could affect our financial results.*

Because we are a global company, our results are subject to certain inherent risks, including economic and political conditions in international markets and fluctuations in foreign currency exchange rates. While approximately 75% of sales and operating income in 2008 was generated by products sold in the United States, Canada and Western Europe, our remaining sales and operating income are generated in developing regions, such as Asia, Eastern Europe and Latin America.

*As a producer of chemicals, we manufacture and transport certain materials that are inherently hazardous due to their toxic nature.*

We have significant experience in handling these materials and take precautions to handle and transport them in a safe manner. However, these materials, if mishandled or released into the environment, could cause substantial property damage or personal injuries resulting in significant legal claims against us. In addition, evolving regulations concerning the security of chemical production facilities and the transportation of hazardous chemicals could result in increased future capital or operating costs.

*Business disruptions could have a negative impact on our results of operations and financial condition.*

Unexpected events, including supply disruptions, temporary plant and/or power outages, natural disasters and severe weather events, fires, or war or terrorist activities, could increase the cost of doing business or otherwise harm the operations of PPG, our customers and our suppliers. It is not possible for us to predict the occurrence or consequence of any such events. However, such events could reduce demand for our products or make it difficult or impossible for us to receive raw materials from suppliers and to deliver products to customers.

#### **Item 1b. Unresolved Staff Comments**

None.

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**Item 2. Properties**

The Company's corporate headquarters is located in Pittsburgh, Pa. The Company's manufacturing facilities, sales offices, research and development centers and distribution centers are located throughout the world. The Company operates 133 manufacturing facilities in 44 countries. The Company's principal manufacturing and distribution facilities are as follows:

Performance Coatings:	Clayton, Australia; Delaware, Ohio; Dover, Del.; Huntsville, Ala.; Kunshan, China; Stowmarket, United Kingdom; Sylmar, Calif.; approximately 410 company-owned stores in the United States and 50 company-owned stores in Australia
Industrial Coatings:	Cieszyn, Poland; Cleveland, Ohio; Oak Creek, Wis.; Tianjin, China; Quattordio, Italy; San Juan del Rio, Mexico and Busan, South Korea
Architectural Coatings EMEA:	Ruitz, France; Budapest, Hungary; Amsterdam, Netherlands; Wroclaw, Poland; Birstall, United Kingdom and approximately 500 company-owned stores, including 175 stores each in France and the United Kingdom
Optical and Specialty Materials:	Barberton, Ohio; Bangkok, Thailand; Lake Charles, La.; and Manila, Philippines
Commodity Chemicals:	Lake Charles, La. and Natrium, W. Va.
Glass:	Carlisle, Pa.; Hoogezaand, Netherlands; Shelby, N.C. and Wichita Falls, Texas

Including the principal manufacturing facilities noted above, the Company has manufacturing facilities in the following geographic areas:

United States:	40 manufacturing facilities in 23 states.
Other Americas:	13 manufacturing facilities in 6 countries.
EMEA:	55 manufacturing facilities in 27 countries.
Asia:	25 manufacturing facilities in 10 countries.

The Company's principal research and development centers are located in Allison Park, Pa.; Harmarville, Pa.; and Monroeville, Pa.

The Company's headquarters and company-owned paint stores are located in facilities that are leased while, the Company's other facilities are generally owned. Our facilities are considered to be suitable and adequate for the purposes for which they are intended, and overall have sufficient capacity to conduct business in the upcoming year.

**Item 3. Legal Proceedings**

PPG is involved in a number of lawsuits and claims, both actual and potential, including some that it has asserted against others, in which substantial monetary damages are sought. These lawsuits and claims, the most significant of which are described below, relate to contract, patent, environmental, product liability, antitrust and other matters arising out of the conduct of PPG's current and past business activities. To the extent that these lawsuits and claims involve personal injury and property damage, PPG believes it has adequate insurance; however, certain of PPG's insurers are contesting coverage with respect to some of these claims, and other insurers, as they had prior to the asbestos settlement described below, may contest coverage with respect to some of the asbestos claims if the settlement is not implemented. PPG's lawsuits and claims against others include claims against insurers and other third parties with respect to actual and contingent losses related to environmental, asbestos and other matters.

The result of any future litigation of such lawsuits and claims is inherently unpredictable. However, management believes that, in the aggregate, the outcome of all lawsuits and claims involving PPG, including asbestos-related claims in the event the settlement described below does not

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become effective, will not have a material effect on PPG's consolidated financial position or liquidity; however, such outcome may be material to the results of operations of any particular period in which costs, if any, are recognized.

For over 30 years, PPG has been a defendant in lawsuits involving claims alleging personal injury from exposure to asbestos. For a description of asbestos litigation affecting the Company and the terms and status of the proposed asbestos settlement, see Note 15, Commitments and Contingent Liabilities, under Item 8 of this Form 10-K.

Over the past several years, the Company and others have been named as defendants in several cases in various jurisdictions claiming damages related to exposure to lead and remediation of lead-based coatings applications. PPG has been dismissed as a defendant from most of these lawsuits and has never been found liable in any of these cases.

### **Item 4. Submission of Matters to a Vote of Security Holders**

None.

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**Table of Contents****Executive Officers of the Company**

Set forth below is information related to the Company's executive officers as of February 19, 2009.

<i>Name</i>	<i>Age</i>	<i>Title</i>
Charles E. Bunch (a)	59	Chairman of the Board and Chief Executive Officer since July 2005
James C. Diggs	60	Senior Vice President and General Counsel since July 1997 and Secretary since September 2004
William H. Hernandez (b)	60	Senior Vice President, Finance and Chief Financial Officer since January 1995
J. Rich Alexander (c)	53	Senior Vice President, Performance Coatings since May 2005
Pierre-Marie De Leener (d)	51	Senior Vice President, Architectural Coatings, Europe, Middle East and Africa since January 2008 and President, PPG Europe since July 2008
Richard C. Elias (e)	55	Senior Vice President, Optical and Specialty Materials since July 2008
Victoria M. Holt (f)	51	Senior Vice President, Glass and Fiber Glass since May 2005
Michael H. McGarry (g)	50	Senior Vice President, Commodity Chemicals since July 2008
William A. Wulfsohn (h)	46	Senior Vice President, Industrial Coatings since May 2005

(a) Mr. Bunch held the position of President and Chief Operating Officer from July 2002 until July 2005.

(b) Mr. Hernandez also held the position of Treasurer from April 2007 until January 2008.

(c) Mr. Alexander held the position of Vice President, Industrial Coatings from July 2002 until April 2005.

(d) Mr. De Leener was appointed to Senior Vice President, Architectural Coatings, Europe, Middle East and Africa upon PPG's acquisition of SigmaKalon Group on January 2, 2008. He previously served as Chief Executive Officer of SigmaKalon Group from 1999 until January 2008.

(e) Mr. Elias held the position of Vice President, Optical Products from April 2000 until June 2008.

(f) Ms. Holt held the position of Vice President, Fiber Glass from February 2003 until April 2005.

(g) Mr. McGarry held the positions of Vice President, Coatings, Europe and Managing Director, PPG Europe from July 2006 through June 2008; Vice President, Chlor-Alkali and Derivatives from March 2004 through June 2006; and General Manager, Fine Chemicals from October 2000 through February 2004.

(h) Mr. Wulfsohn also held the position of Managing Director, PPG Europe from May 2005 until June 2006; and the position of Vice President, Coatings, Europe, and Managing Director, PPG Europe from February 2003 until April 2005.

**Part II****Item 5. Market for the Registrant's Common Equity, Related Stockholder Matters and Issuer Purchases of Equity Securities**

The information required by Item 5 regarding market information, including stock exchange listings and quarterly stock market prices, dividends and holders of common stock is included in Exhibit 13.1 filed with this Form 10-K and is incorporated herein by reference. This information is also included in the PPG Shareholder Information on page 79 of the Annual Report to shareholders.

Directors who are not also officers of the Company receive common stock equivalents pursuant to the PPG Industries, Inc., Deferred Compensation Plan for Directors ( PPG Deferred Compensation Plan for Directors ). Common stock equivalents are hypothetical shares of common stock having a value on any given date equal to the value of a share of common stock. Common stock equivalents earn dividend equivalents that are converted into additional common stock equivalents but carry no voting rights or other rights afforded to a holder of common stock. The common stock equivalents credited to directors under this plan are exempt from registration under Section 4(2) of the Securities Act of 1933 as private offerings made only to directors of the Company in accordance with the provisions of the plan.

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Under the PPG Deferred Compensation Plan for Directors, each director may elect to defer the receipt of all or any portion of the compensation paid to such director for serving as a PPG director. All deferred payments are held in the form of common stock equivalents. Payments out of the deferred accounts are made in the form of common stock of the Company (and cash as to any fractional common stock equivalent). The directors, as a group, were credited with 9,751; 9,742; and 2,886 common stock equivalents in 2008, 2007 and 2006, respectively, under this plan. The values of the common stock equivalents, when credited, ranged from \$43.89 to \$67.77 in 2008, \$68.71 to \$75.50 in 2007 and \$61.32 to \$65.84 in 2006.

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*Issuer Purchases of Equity Securities*

The following table summarizes the Company's stock repurchase activity for the three months ended December 31, 2008:

<i>Month</i>		<i>Total Number of Shares Purchased</i>	<i>Average Price Paid per Share</i>	<i>Total</i>	<i>that May Yet Be Purchased Under the Program</i>
				<i>Number of Shares Purchased as Part of Publicly Announced Program<sup>(1)</sup></i>	
October 2008	Repurchase program		\$		3,868,609
	Other transactions <sup>(2)</sup>				
November 2008	Repurchase program	18,600	37.77		3,850,009
	Other transactions <sup>(2)</sup>				
December 2008	Repurchase program				3,850,009
	Other transactions <sup>(2)</sup>				
<i>Total quarter ended</i>					
<i>December 31, 2008</i>					
	<b>Repurchase program</b>	18,600	\$ 37.77		3,850,009
	<b>Other transactions<sup>(2)</sup></b>				

(1) These shares were repurchased under a 10 million share repurchase program approved by PPG's Board of Directors in October 2005. This program does not have an expiration date.

(2) Includes shares withheld or certified to in satisfaction of the exercise price and/or tax withholding obligation by holders of employee stock options who exercised options granted under the Company's equity compensation plans.

*Equity Compensation Plan Information*

The equity compensation plan documents described in the footnotes below are included as Exhibits to this Form 10-K, and are incorporated herein by reference in their entirety. The following table provides information as of December 31, 2008 regarding the number of shares of PPG common stock that may be issued under PPG's equity compensation plans. For additional information on the Company's equity compensation program, see Note 20, Stock-Based Compensation, under Item 8 of this Form 10-K.

<i>Plan category</i>	<i>Number of securities to be issued upon exercise of outstanding options,</i>	<i>Weighted-average exercise price of outstanding options, warrants</i>	<i>Number of securities remaining available for future issuance under equity</i>
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	<i>warrants and rights</i>	<i>and rights</i>	<i>compensation plans (excluding securities reflected in column (a))</i>
	<i>(a)</i>	<i>(b)</i>	
Equity compensation plans approved by security holders <sup>(1)</sup>	8,289,946	\$60.28	7,772,483
Equity compensation plans not approved by security holders <sup>(2)</sup>			<i>(c)</i>
<b>Total</b>	<b>8,289,946</b>	<b>\$60.28</b>	<b>7,772,483</b>

(1) Equity compensation plans approved by security holders include the PPG Industries, Inc., Stock Plan, the PPG Industries, Inc., Omnibus Incentive Plan, the PPG Industries, Inc., Executive Officers Long Term Incentive Plan and the PPG Industries Inc., Long Term Incentive Plan.

(2) Excluded from the information presented here are common stock equivalents held under the PPG Industries, Inc., Deferred Compensation Plan and the PPG Industries, Inc., Deferred Compensation Plan for Directors, neither of which are equity compensation plans. As supplemental information, there were 526,569 common stock equivalents held under such plans as of December 31, 2008.

### Item 6. Selected Financial Data

The information required by Item 6 regarding the selected financial data for the five years ended December 31, 2008 is included in Exhibit 13.2 filed with this Form 10-K and is incorporated herein by reference. This information is also reported in the Five-Year Digest on page 78 of the Annual Report to shareholders.

### Item 7. Management's Discussion and Analysis of Financial Condition and Results of Operations

#### *Divestiture of Automotive Glass and Services Business*

During the third quarter of 2007, the Company entered into an agreement to sell its automotive glass and services business to Platinum Equity ( Platinum ) for approximately \$500 million. Accordingly, the assets and liabilities of this business were classified as held for sale and the results of operations and cash flows of this business were classified as discontinued operations. In the fourth quarter of 2007, PPG was notified that affiliates of Platinum had filed suit in the Supreme Court of the State

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## Management's Discussion and Analysis

of New York, County of New York, alleging that Platinum was not obligated to consummate the agreement. Platinum also terminated the agreement. PPG has sued Platinum and certain of its affiliates for damages, including the \$25 million breakup fee stipulated by the terms of the agreement, based on various alleged actions of the Platinum parties. While the transaction with Platinum was terminated, PPG management remained committed to a sale of the automotive glass and services business and continued to classify its assets and liabilities as held for sale and report its results of operations and cash flows as discontinued operations through the first quarter of 2008.

In July 2008, PPG entered into an agreement with affiliates of Kohlberg & Company, LLC, under which PPG would divest the automotive glass and services business to a new company formed by affiliates of Kohlberg. Under the agreement, PPG would receive a minority interest in the new company, and, as such, the accounting requirements of Statement of Financial Accounting Standards, ( SFAS ) No. 144, Accounting for the Impairment or Disposal of Long-Lived Assets for classifying the business as assets held for sale and reporting its results of operations and cash flows as discontinued operations had no longer been met. The assets and liabilities of the business have been classified as held for use in the consolidated balance sheet as of December 31, 2007, and the results of operations and cash flows of the business through September 30, 2008 have been classified as continuing operations in the Glass reportable segment in the consolidated statements of income and cash flows under Item 8 of this Form 10-K for the three years ended December 31, 2008.

In the second quarter of 2008, as a result of the reclassification of the automotive glass and services business to continuing operations, PPG recorded a one-time, non-cash charge of \$17 million (\$11 million aftertax) to reflect a catch-up of depreciation expense, which was suspended when the business was classified as a discontinued operation. Additionally, in the second quarter of 2008, PPG recorded a charge of \$19 million (\$12 million aftertax) for special termination benefits and a pension curtailment loss relating to the impact of benefit changes, including accelerated vesting, negotiated as part of the sale.

The transaction with affiliates of Kohlberg was completed on September 30, 2008, with PPG receiving total proceeds of \$315 million, including \$225 million in cash and two 6-year notes totaling \$90 million (\$60 million at 8.5% interest and \$30 million at 10% interest). Both notes, which may be prepaid at any time without penalty, are senior to the equity of the new company. In addition, PPG has received a minority interest of approximately 40 percent in the new company, Pittsburgh Glass Works LLC. This transaction resulted in a third quarter 2008 gain of \$15 million pretax, net of transaction costs, and is included in Other income in the consolidated statement of income for the year ended December 31, 2008 under Item 8. The aftertax gain on the transaction was \$3 million, reflective of tax expense of \$12 million. Tax expense on the gain includes the tax cost of repatriating certain transaction proceeds from Canada to the U.S. and the impact of certain permanent book/tax differences which resulted in a larger taxable gain. PPG will account for its interest in Pittsburgh Glass Works LLC under the equity method of accounting from October 1, 2008 onward. PPG has retained certain liabilities for pension and post-employment benefits earned for service up to September 30, 2008.

### *Divestiture of Fine Chemicals Business*

In the third quarter of 2007, PPG entered into an agreement to sell its fine chemicals business to ZaCh System S.p.A., a subsidiary of Zambon Company S.p.A., for approximately \$65 million. The sale of this business was completed in November 2007. The results of operations and cash flows of this business, which had previously been included in the Optical and Specialty Materials reportable segment, have been classified as discontinued operations in the consolidated statements of income and cash flows under Item 8 for the years ended December 31, 2007 and 2006. PPG recorded a pretax loss on sale of the fine chemicals business of \$25 million (\$19 million aftertax) in 2007.

**Performance in 2008 compared with 2007**

*Performance Overview*

Our sales increased 30% to \$15.8 billion in 2008 compared to \$12.2 billion in 2007. Sales increased 28% due to the impact of acquisitions, 4% due to increased selling prices and 2% due to the positive effects of foreign currency translation. These sales increases were offset by a 2% decline due to lower sales volumes and by a 2% decline related to the automotive glass and services business divestiture.

Cost of sales, exclusive of depreciation and amortization, increased by \$2,327 million in 2008 to \$10,155 million compared to \$7,828 million in 2007. This increase corresponds with the increase in sales. Cost of sales as a percentage of sales was 64.1% in both 2008 and 2007. Cost of sales in 2008 includes \$94 million for the flow through cost of sales of the step up to fair value of acquired inventory related to the SigmaKalon acquisition.

Selling, general and administrative expenses increased by \$1,122 million in 2008 due principally to the impact of the acquisition of SigmaKalon. Selling, general and administrative expenses as a percentage of sales were 21.7% for 2008 compared to 18.9% for 2007. The increase

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in selling, general and administrative expenses as a percentage of sales was due largely to the addition of SigmaKalon and reflects the distribution nature of these businesses, which requires higher selling, distribution, advertising and regional management costs to serve their broad customer profile. Selling, general and administrative expenses as a percent of sales in the Architectural Coatings - EMEA reportable segment are in line with PPG's other architectural coatings businesses. Other factors causing the increase in these expenses were higher levels of cost to support growth in our coatings and optical businesses, higher bad debt expense associated with the impact of the weakening economy on our customers, a second quarter charge of \$19 million for special termination benefits and foreign currency translation.

Depreciation expense increased by \$83 million due primarily to the acquisition of SigmaKalon. Research and development costs increased by \$103 million and amortization increased by \$77 million compared to 2007. These increases were primarily due to the acquisition of SigmaKalon. Interest expense increased by \$161 million in 2008 due to debt incurred to finance the acquisition of SigmaKalon.

During the third quarter of 2008, the Company finalized a restructuring plan that is part of implementing PPG's global transformation strategy and the integration of its acquisition of SigmaKalon. The Company recorded a charge of \$163 million for the cost of this restructuring.

The effective tax rate on pretax earnings from continuing operations in 2008 was 31.3% compared to 29.1% in 2007. The 2008 rate includes a tax benefit of \$14 million related to the settlement with the Internal Revenue Service of our U.S. tax returns for tax years 2004, 2005 and 2006. The 2008 rate also includes a total net tax benefit of 26.5% on costs related to the acquisition of SigmaKalon, the charges for the catch-up of depreciation expense and the impact of benefit changes related to the divestiture of the automotive glass and services business, the business restructuring charge, the adjustment to increase the current value of the Company's obligation under the proposed asbestos settlement, as discussed in Note 15, Commitments and Contingent Liabilities under Item 8 of this Form 10-K, and the gain on divestiture of the automotive glass and services business. The tax rate was 31.3% on the remaining pretax earnings in 2008.

The rate in 2007 includes the benefit of \$15 million for the reversal of a valuation allowance previously recorded against the benefit of a tax net operating loss carryforward, the benefit associated with an enacted reduction in the Canadian federal corporate income tax rate and a tax benefit of 39% on the adjustment to increase the current value of the Company's obligation under the proposed asbestos settlement. The tax rate was 30.5% on the remaining pretax earnings from continuing operations in 2007.

The effective tax rate on pretax earnings from discontinued operations in 2007 was 25.2%. This rate includes a tax benefit of 24% on the loss on the sale of the fine chemicals business. The tax rate was 36.5% on the remaining pretax earnings from discontinued operations in 2007.

Net income and earnings per share assuming dilution for 2008 and 2007 are summarized below:

(Millions, except per share amounts)  
Year ended December 31, 2008

	<i>Net Income</i>	
	\$	EPS
Net income	\$ 538	\$ 3.25
Net income includes:		

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Charges related to:		
Business restructuring	110	0.67
Acquisition-related costs <sup>(1)</sup>	89	0.54
Depreciation catch-up <sup>(2)</sup>	11	0.07
Divestiture-related benefit costs <sup>(3)</sup>	12	0.07
Asbestos settlement <del>net</del>	2	0.01
Gain on divestiture of automotive glass and services business	(3)	(0.02)

(Millions, except per share amounts)  
Year ended December 31, 2007

	Net Income	
	\$	EPS
Net income	\$ 834	\$ 5.03
Net income includes:		
Charges related to:		
Asbestos settlement <del>net</del>	15	0.09
Acquisition-related costs <sup>(5)</sup>	4	0.03
Divestiture-related benefit costs <sup>(6)</sup>	11	0.06
Loss on divestiture of fine chemicals business	19	0.11

- (1) Costs related to SigmaKalon acquisition, including \$66 million aftertax for the flow-through cost of sales of the step up to fair value of acquired inventory and \$23 million aftertax for the write-off of in-process research and development.
- (2) Represents the catch-up of depreciation expense, which was suspended when the automotive glass and services business was classified previously as a discontinued operation.
- (3) Represents special termination benefits and a pension curtailment loss relating to the impact of benefit changes, including accelerated vesting, negotiated as part of the sale of the automotive glass and services business.
- (4) Net increase in the current value of the Company's obligation under the proposed asbestos settlement.
- (5) Costs related to Barloworld Coatings Australia acquisition for the flow-through cost of sales of the step up to fair value of acquired inventory.
- (6) Represents curtailment losses on certain defined benefit plans of the automotive glass and services business.

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<i>(Millions)</i>	<i>Net sales</i>		<i>Segment income</i>	
	<b>2008</b>	<b>2007</b>	<b>2008</b>	<b>2007</b>
Performance Coatings	\$ 4,716	\$ 3,811	\$ 582	\$ 563
Industrial Coatings	3,999	3,646	212	370
Architectural Coatings - EMEA	2,249		141	
Optical and Specialty Materials	1,134	1,029	244	235
Commodity Chemicals	1,837	1,539	340	243
Glass	1,914	2,195	70	138

Performance Coatings sales increased \$905 million or 24% in 2008. Sales increased 21% due to acquisitions, largely due to the impact of the SigmaKalon protective and marine coatings business. Sales also grew by 3% due to higher selling prices and 2% due to the positive impact of foreign currency translation. Sales volumes declined 2% as reduced volumes in architectural coatings - Americas and Asia Pacific and automotive refinish were not fully offset by improved volumes in the aerospace and protective and marine businesses. Volume growth in the aerospace businesses occurred throughout the world, while the volume growth in protective and marine coatings occurred primarily in Asia. Segment income increased \$19 million in 2008. Factors increasing segment income were the positive impact of acquisitions, lower overhead costs and the positive impact of foreign currency translation. The benefit of higher selling prices more than offset the negative impact of inflation, including higher raw materials and benefit costs. Segment income was reduced by the impact of the lower sales volumes in architectural coatings and automotive refinish, which more than offset the benefit of volume gains in the aerospace and protective and marine coatings businesses.

Industrial Coatings sales increased \$353 million or 10% in 2008. Sales increased 11% due to acquisitions, including the impact of the SigmaKalon industrial coatings business. Sales also grew 3% due to the positive impact of foreign currency translation, and 1% from higher selling prices. Sales volumes declined 5% as reduced volumes were experienced in all three businesses, reflecting the substantial declines in global demand. Volume declines in the automotive and industrial businesses were primarily in the U.S. and Canada. Additional volume declines in the European and Asian regions were experienced by the industrial coatings business. In packaging coatings, volume declines in Europe were only partially offset by gains in Asia and North America. Segment income declined \$158 million in 2008 due to the lower volumes and inflation, including higher raw material and freight costs, the impact of which was only partially mitigated by the increased selling prices. Segment income also declined due to higher selling and distribution costs, including higher bad debt expense. Factors increasing segment income were the earnings of acquired businesses, the positive impact of foreign currency translation and lower manufacturing costs.

Architectural Coatings - EMEA sales for the year were \$2,249 million. This business was acquired in the SigmaKalon acquisition. Segment income was \$141 million, which included amortization expense of \$63 million related to acquired intangible assets and depreciation expense of \$58 million.

Optical and Specialty Materials sales increased \$105 million or 10% in 2008. Sales increased 5% due to higher volumes in our optical products business resulting from the launch of Transitions Optical's next generation lens product, 3% due to the positive impact of foreign currency translation and 2% due to increased selling prices. Segment income increased \$9 million in 2008. The increase in segment income was the result of increased sales volumes and the favorable impact of currency partially offset by increased selling and marketing costs in the optical products business related to the Transitions Optical product launch mentioned above. Increased selling prices only partially offset higher raw material costs, primarily in our silicas business.

Commodity Chemicals sales increased \$298 million or 19% in 2008. Sales increased 18% due to higher selling prices and 1% due to improved sales volumes. Segment income increased \$97 million in 2008. Segment income increased in large part due to higher selling prices, which more than offset the negative impact of inflation, primarily higher raw material and energy costs. Segment income also improved due to lower manufacturing costs, while lower margin mix and equity earnings reduced segment income.

Glass sales decreased \$281 million or 13% in 2008. Sales decreased 11% due to the divestiture of the automotive glass and services business in September 2008 and 4% due to lower sales volumes. Sales increased 2% due to higher selling prices. Segment income decreased \$68 million in 2008. Segment income decreased due to the divestiture of the automotive glass and services business, lower volumes, the negative impact of inflation and lower equity earnings from our Asian fiber glass joint ventures. Factors increasing segment income were lower manufacturing costs, higher selling prices and stronger foreign currency.

### *Outlook*

Overall global economic activity was volatile in 2008 with an overall downward trend. The North American economy continued a slowing trend which began during the second half of 2006 and continued all of 2007. The impact of the weakening U.S. economy was particularly

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## Management's Discussion and Analysis

evident in lower automotive production, housing starts and consumer confidence. Many economies in other regions were stable early in 2008 but then began to slow during the year, with nearly all global economies slowing rapidly in the fourth quarter. The significance of access to credit and overall liquidity concerns increased as the year progressed, triggering intervention by many governments to provide interim financial aid to the global banking system and to lower interest rates and implement other measures intended to stimulate economic activity. Industrial end-markets experienced rapid declines in the fourth quarter, as global demand dropped reflecting a deepening U.S. recession and the spread of the banking crisis and recessionary conditions to many European, Asian and Latin American economies.

Early in 2008, global inflation intensified as oil prices accelerated to all-time highs. These inflationary trends continued well into the third quarter, driving up costs of other energy sources and many of the products that are dependent upon energy as a feedstock. Then, in recognition of the global economic slowing, prices of energy and many related commodities declined in the latter part of the year.

The North American economy continued to slow during the year. Residential construction continued to decline, while rising unemployment, high levels of mortgage foreclosures and real estate pricing declines were among the primary causal factors of the ongoing banking crisis. Industrial output sagged, with the U.S. automotive OEM market declining the most of any of the major industrial markets. By year-end, declines in many industrial end-markets exceeded 10 percent, with several declining 20-30 percent. The declining economic environment resulted in a continued upward shift of the U.S. unemployment rate and a decline in consumer confidence to all-time lows.

The European economy was more stable early in the year, with softness beginning to appear in a few countries such as Spain, Italy and the United Kingdom. Most of the remaining parts of Western Europe began to experience similar declines to the U.S. later in the year. Eastern European growth once again outpaced growth in Western Europe, with most countries continuing to grow throughout the year, albeit at declining rates. However, several countries, including Hungary, Poland and Russia began to experience economic decline stemming from either the spread of the banking crisis or the drop in commodity pricing.

The Asian economies continued to post very high growth rates well into the year, but the impact of the decline in the U.S. and European economies eventually led to declines in the Asian growth rates late in the year. Overall, China GDP grew to the point that China now represents the third largest economy globally, but even this growth rate fell below 10 percent for the first time in over five years.

Entering 2009, the overall economic outlook is uncertain and extremely bearish. Many economists believe the U.S. will experience its worst recession in at least 50 years, with other major regional economies possibly following suit. As a result, we expect the 2008 inflationary pressures on our input cost to, at least in part, reverse. The Company is anticipating a generally stronger U.S. dollar in 2009 resulting in negative sales and earnings impacts relating to translation of the sales and earnings from our foreign affiliates compared to 2008.

Pension and postretirement benefit costs will increase in 2009 due largely to the significant declines in plan assets due to 2008 investment performance. Our pension and postretirement benefit costs totaled \$258 million in 2008, including charges of \$34 million related to plan changes stemming from the divestiture of the automotive glass and services business and our 2008 restructuring actions. Based on our current estimates, we expect our ongoing pension and other postretirement benefits costs to increase by approximately \$100-\$125 million in 2009.



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Our natural gas costs in 2008 were volatile and on average increased by almost 25 percent in the U.S. as compared to 2007. Changes in natural gas prices have a significant impact on the operating performance of our Commodity Chemicals and Glass businesses. Each one dollar change in our price of natural gas per million British thermal units ( mmbtu ) has a direct impact of \$60 million to \$70 million on our annual operating costs. Our 2008 natural gas costs averaged over \$9.00 per mmbtu for the year, while our 2007 costs averaged about \$7.25. While it remains difficult to predict future natural gas prices, in order to reduce the risks associated with volatile prices, we use a variety of techniques, which include reducing consumption through improved manufacturing processes, switching to alternative fuels and hedging. We currently estimate our cost for natural gas in the first quarter of 2009 will be lower than the first quarter of 2008. We currently have about 50% of our first quarter 2009 U.S. natural gas purchases hedged at a price of about \$8.50, and approximately 50% of our 2009 U.S. annual requirements hedged at about \$8.00. The current spot price for natural gas is about \$5.00.

In the past year, we experienced increases in the prices we pay for raw materials used in many of our businesses, particularly in our coatings businesses. The increases have resulted from global industrial expansion, supply/demand imbalance and increases in supplier feedstock costs. We have and plan to continue to combat the impact of these rising costs by seeking alternate and global supply sources for our raw materials, reformulating our products,

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improving our production processes and raising our selling prices. Year-over-year coatings raw material costs rose by about \$150 million in 2008, or about a 5 percent increase, up notably from 2007 which increased by about \$40 million or 1 percent. Our current forecast for the early portion of 2009 is for the cost of certain raw materials to decline, resulting from the delayed impact of lower oil prices and lower global demand for the materials we purchase. We also expect a negative impact on our margins in the United Kingdom, Eastern Europe, and Latin America, where raw materials are purchased in currencies that are expected to be stronger than the local currencies. About 30% of our coatings sales in Europe are made outside the Eurozone. Given the dynamic supply/demand, energy cost and currency environment, it is not feasible to project full year raw material pricing, but the main drivers will continue to be overall economic conditions and resulting supply and demand factors.

The combination of a tight supply position for caustic and high energy costs resulted in chlor-alkali pricing that ended 2008 at an all-time record high and pricing for the fourth quarter that was up 20% over the prior year. Chlor-alkali demand was strong at the beginning of the fourth quarter following the adverse impact of third quarter hurricanes on industrial activity in the U.S. Gulf Coast. Demand softened in November and December and we are anticipating that early 2009 demand levels will be less than in the fourth quarter.

We completed significant portfolio changes in 2008 that have been crucial in the transformation of the Company. We completed the acquisition of SigmaKalon. The total transaction value was approximately \$3.2 billion, consisting of cash paid of \$1,673 million and debt assumed of \$1,517 million. We also completed a few other targeted acquisitions at a cost totaling nearly \$140 million. As in past years, these acquisitions are intended to strengthen our coatings businesses by extending their geographic breadth and/or product offering. The sales for businesses held for less than one year added approximately \$3.4 billion to PPG's 2008 sales with mid-single digit operating margins, excluding certain one-time acquisition related costs and including amortization expense stemming from the acquisitions, which amortization totaled \$79 million. Interim financing from the SigmaKalon acquisition was replaced with permanent financing in March 2008, as PPG placed term debt with five, ten and thirty year maturities at a cost of 5.75%, 6.65% and 7.70% respectively, which we believe is favorable to the cost of placing that debt today.

Also in 2008, we completed the divestiture of a majority interest in the automotive glass and services business. We retained about a 40 percent interest in the business and will account for this interest using the equity method of accounting. The weak economic conditions that are adversely impacting our continuing businesses that serve the automotive OEM market are also significantly impacting this divested business.

The Company announced restructuring actions in the third quarter of 2008 focused on reducing its cost structure, including actions associated with achieving the synergies from the integration of the acquired SigmaKalon business and in reflection of the lower demand levels. We are considering additional cost-reduction actions which may result in additional restructuring charges and related cost savings in 2009.

Global economic conditions entering 2009 are extremely challenging due to continued lack of industrial demand and global credit issues. The transformation of the Company, including the 2008 portfolio changes, has enhanced our geographic sales mix, as now only about 45 percent of sales are derived in the U.S. and Canada, and emerging regions account for nearly 25 percent of sales. Additionally, we have broadened our end-markets served resulting in lower exposure to any individual end-market. Entering the year, we have \$1 billion of cash on hand following record cash generation in 2008. We anticipate that our increased diversification and our cash and existing borrowing capacity will provide the Company with the liquidity it needs to finance operations and reward shareholders in 2009, even in the face of today's weakened global economy and the possibility that the recovery does not begin until 2010.

### *Accounting Standards Adopted in 2008*

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Note 1, Summary of Significant Accounting Policies, under Item 8 describes the Company's adoption of the Emerging Issues Task Force, ( EITF ) Issue No. 06-10, Accounting for Collateral Assignment Split-Dollar Life Insurance Arrangements, Statement of Financial Accounting Standards, ( SFAS ) No. 157, Fair Value Measurements and SFAS No. 159, The Fair Value Option for Financial Assets and Financial Liabilities Including an Amendment of Financial Accounting Standards Board, ( FASB ) Statement No. 115 as of January 1, 2008.

### *Accounting Standards to be Adopted in Future Years*

Note 1, Summary of Significant Accounting Policies, under Item 8 describes the potential impact on PPG of accounting standards that are not yet effective, including SFAS No. 141 (revised 2007), Business Combinations, SFAS No. 160, Noncontrolling Interests in Consolidated Financial Statements - an amendment of ARB No. 51, EITF Issue No. 07-1, Accounting for Collaborative Arrangements and SFAS No. 161, Disclosures about Derivative Instruments and Hedging Activities.

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### Performance in 2007 compared with 2006

#### *Performance Overview*

Our sales increased 12% to \$12.2 billion in 2007 compared to \$10.9 billion in 2006. Sales increased 6% due to the impact of acquisitions, 3% due to increased volumes and 3% due to the positive effects of foreign currency translation.

Cost of sales as a percentage of sales increased slightly to 64.1% compared to 63.6% in 2006 due to the adverse impact of inflation net of selling price changes. Selling, general and administrative expense increased slightly as a percentage of sales to 18.9% compared to 18.1% in 2006. These costs increased primarily due to higher expenses related to growth, including increased advertising costs and the impact of inflation.

Business restructuring expense decreased \$37 million in 2007. In 2006, the Company finalized plans for certain actions to reduce its workforce and consolidate facilities and recorded a charge of \$37 million.

Other charges decreased \$195 million in 2007. The reduction was primarily due to a reduction in environmental expenses, which were \$195 million lower in 2007 as compared to 2006.

Other earnings increased \$18 million in 2007 due to higher royalty income, higher interest income and gains from asset sales.

The effective tax rate on pretax earnings from continuing operations in 2007 was 29.1% compared to 26.1% in 2006. The rate in 2007 included the benefit of \$15 million for the reversal of a valuation allowance previously recorded against the benefit of a tax net operating loss carryforward, the benefit associated with an enacted reduction in the Canadian federal corporate income tax rate and a tax benefit of 39% on the adjustment to increase the current value of the Company's obligation under the proposed asbestos settlement. The tax rate was 30.5% on the remaining pretax earnings from continuing operations in 2007. The effective tax rate on earnings from continuing operations in 2006 included the benefit of a tax refund from Canada resulting from the favorable resolution of a tax dispute dating back to 1998 and a tax benefit related to the settlement with the Internal Revenue Service of our tax returns for the years 2001-2003. In the aggregate, these benefits reduced 2006 income tax expense by \$39 million. The 2006 effective tax rate also included a tax benefit of 36% on the charge for business restructuring and a tax benefit of 39% on the third quarter environmental remediation charge for sites in New Jersey and Louisiana, on the charges for legal settlements, and on the adjustment to increase the current value of the Company's obligation under the proposed asbestos settlement. Income tax expense of 39% was recognized on certain insurance recoveries, and income tax expense of 29.4% was recognized on the remaining pretax earnings from continuing operations in 2006.

The effective tax rate on pretax earnings from discontinued operations in 2007 was 25.2% compared to 39% in 2006. The rate in 2007 included a tax benefit of 24% on the loss on the sale of the fine chemicals business. The tax rate was 36.5% on the remaining pretax earnings from discontinued operations in 2007.

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Net income and earnings per share assuming dilution for 2007 and 2006 are summarized below:

(\$ in Millions, except per share amounts)  
Year ended December 31, 2007

	Net Income	
	\$	EPS
Net income	\$ 834	\$ 5.03
Net income includes:		
Charges related to:		
Acquisition related costs <sup>(1)</sup>	4	0.03
Asbestos settlement net <sup>(2)</sup>	15	0.09
Divestiture-related benefit costs <sup>(3)</sup>	11	0.06
Loss on divestiture of fine chemicals business	19	0.11

(\$ in Millions, except per share amounts)  
Year ended December 31, 2006

	Net Income	
	\$	EPS
Net income	\$ 711	\$ 4.27
Net income includes:		
Charges related to:		
Environmental remediation <sup>(4)</sup>	106	0.64
Legal settlements	26	0.15
Business restructuring	23	0.14
Asbestos settlement net <sup>(2)</sup>	17	0.10
Earnings from insurance recoveries	(24)	(0.14)

(1) Costs related to Barloworld Coatings Australia acquisition for the flow-through cost of sales of the step up to fair value of acquired inventory.

(2) Net increase in the current value of the Company's obligation under the proposed asbestos settlement.

(3) Represents curtailment losses on certain defined benefit plans of the automotive glass and services business.

(4) Charge for estimated environmental remediation costs at our former chromium manufacturing plant in Jersey City, N.J. and at the Calcasieu River estuary near our Lake Charles, La. facility.

### Results of Reportable Business Segments

(Millions)	Net sales		Segment income	
	2007	2006	2007	2006
Performance Coatings	\$ 3,811	\$ 3,088	\$ 563	\$ 514
Industrial Coatings	3,646	3,236	370	349
Optical and Specialty Materials	1,029	904	235	217
Commodity Chemicals	1,539	1,483	243	285
Glass	2,195	2,227	138	148

Performance Coatings sales increased \$723 million or 23% in 2007. Sales increased 15% due to sales from acquisitions in all Performance Coatings businesses, 4% due to the positive impact of foreign currency translation

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and 3% due to improved sales volumes in our aerospace and automotive refinish businesses, which more than offset slightly lower volumes in architectural coatings. The volume growth in the aerospace and refinish businesses occurred throughout the world, while the volume decline in architectural coatings was in North America. Sales also increased 1% due to higher selling prices. Segment income increased \$49 million to a total of \$563 million in 2007. Factors increasing segment income were improved sales volumes, earnings from acquisitions and the positive impact of foreign currency translation. Additionally, the benefit of higher selling prices more than offset the impact of inflation. Segment income decreased due to higher overhead costs to support growth initiatives in this segment.

Industrial Coatings sales increased \$410 million or 13% in 2007. Sales increased 6% due to the positive impact of foreign currency translation, 4% due to acquisitions in our automotive and industrial coatings businesses and 3% from improved sales volumes as volume increases in automotive coatings and packaging coatings more than offset declines in the volume of the industrial coatings business in the U.S. and Canada. Volume growth in the automotive coatings business occurred in all regions of the world, while the volume growth in packaging coatings was experienced mainly in Asia and Europe. The decline in industrial coatings North American volumes overshadowed solid growth for this business in Europe, Asia and Latin America. Segment income increased \$21 million in 2007 due to improved sales volumes, the impact of acquisitions, lower manufacturing costs and the positive impact of foreign currency translation. Factors decreasing segment income were inflation, including higher raw material costs, which more than offset a slight improvement in selling prices, and increased overhead costs to support growth initiatives.

Optical and Specialty Materials sales increased \$125 million or 14% in 2007. Sales increased 8% due to higher volumes primarily in the optical products business, 4% due to the positive impact of foreign currency translation, 1% as the result of sales from acquisitions in the optical products business and 1% due to higher selling prices. Segment income increased \$18 million in 2007. The increase in segment income was primarily the result of the increased sales volumes partially offset by higher advertising expense related to optical products volume growth initiatives in all regions and to the impending launch of Transitions Optical's next generation lens product in the first quarter of 2008.

Commodity Chemicals sales increased \$56 million or 4% in 2007. Sales increased 9% due to higher sales volumes of caustic and derivatives, which was partially offset by a 5% decrease in selling prices in part due to lower natural gas input costs. Segment income decreased \$42 million in 2007. Segment income was lower in large part due to lower selling prices, higher manufacturing costs, including maintenance costs and higher raw material costs. Segment income also decreased as a result of the absence of an insurance recovery received in 2006 for damage caused by Hurricane Rita in 2005. The benefit of lower energy and environmental costs and improved sales volumes were factors that increased segment income in 2007.

Glass sales decreased by \$32 million or 1% in 2007. Sales decreased 1% due to lower sales volumes in our automotive glass and services business and 1% due to the negative impact of lower selling prices primarily in our performance glazings business. Pricing in the performance glazings business includes a surcharge related to the cost of energy lagged by one quarter. The surcharge in 2006 exceeded the 2007 surcharge due to higher energy costs during the comparable periods. Sales increased by 1% due to the positive impact of foreign currency translation. Segment income decreased \$10 million in 2007. Segment income decreased due to the negative impact of inflation and lower pricing, including the lower energy surcharge in performance glazings. These factors were only partially offset by the benefit from lower manufacturing and selling costs.

See Note 24, Reportable Business Segment Information, under Item 8 of this Form 10-K for further information related to the Company's operating segments and reportable business segments.

### **Commitments and Contingent Liabilities, including Environmental Matters**

PPG is involved in a number of lawsuits and claims, both actual and potential, including some that it has asserted against others, in which substantial monetary damages are sought. See Item 3, *Legal Proceedings* and Note 15, *Commitments and Contingent Liabilities*, under Item 8 of this Form 10-K for a description of certain of these lawsuits, including a description of the proposed asbestos settlement and a description of the antitrust suits against PPG related to the flat glass and automotive refinish industries. As discussed in Item 3 and Note 15, although the result of any future litigation of such lawsuits and claims is inherently unpredictable, management believes that, in the aggregate, the outcome of all lawsuits and claims involving PPG, including asbestos-related claims in the event the proposed asbestos settlement described in Note 15 does not become effective, will not have a material effect on PPG's consolidated financial position or liquidity; however, any such outcome may be material to the results of operations of any particular period in which costs, if any, are recognized.

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It is PPG's policy to accrue expenses for environmental contingencies when it is probable that a liability has been incurred and the amount of loss can be reasonably estimated. Reserves for environmental contingencies are exclusive of claims against third parties and are generally not discounted. Management anticipates that the resolution of the Company's environmental contingencies will occur over an extended period of time. As of December 31, 2008 and 2007, PPG had reserves for environmental contingencies totaling \$299 million and \$276 million, respectively, of which \$44 million and \$57 million, respectively, were classified as current liabilities. Pretax charges against income for environmental remediation costs in 2008, 2007 and 2006 totaled \$15 million, \$12 million and \$207 million, respectively, and are included in Other charges in the consolidated statement of income. Cash outlays related to such environmental remediation aggregated \$24 million, \$19 million and \$22 million, in 2008, 2007 and 2006, respectively. As part of the allocation of the SigmaKalon purchase price to the assets acquired and liabilities assumed, the reserve for environmental contingencies was increased by \$37 million in 2008. The impact of foreign currency translation decreased the liability by \$5 million in 2008.

In addition to the amounts currently reserved for environmental remediation, the Company may be subject to loss contingencies related to environmental matters estimated to be as much as \$200 million to \$300 million, which range is unchanged since December 31, 2007. Such unreserved losses are reasonably possible but are not currently considered to be probable of occurrence.

Charges for estimated environmental remediation costs in 2006 were significantly higher than our historical range. Our continuing efforts to analyze and assess the environmental issues associated with a former chromium manufacturing plant site located in Jersey City, N.J., and at the Calcasieu River Estuary located near our Lake Charles, La., chlor-alkali plant resulted in a pre-tax charge of \$173 million in the third quarter of 2006 for the estimated costs of remediating these sites. Excluding 2006, pretax charges against income have ranged between \$10 million and \$49 million per year for the past 15 years. We anticipate that charges against income in 2009 for environmental remediation costs will be within this historical range.

Management expects cash outlays for environmental remediation costs to be approximately \$50 million in 2009 and to range from \$45 million to \$75 million annually through 2013. It is possible that technological, regulatory and enforcement developments, the results of environmental studies and other factors could alter our expectations with respect to charges against income and future cash outlays. Specifically, the level of expected cash outlays is highly dependent upon activity related to the former chromium manufacturing plant site in New Jersey, as PPG awaits approval of workplans that have been submitted to the applicable regulatory agencies.

### Impact of Inflation

In 2008, PPG was able to more than offset the increase in our costs due to the negative effects of inflation, including the impact of higher raw materials and energy costs, with increased selling prices. In our Commodity Chemicals reportable segment, the increase in our costs due to inflation was more than offset by higher selling prices. In our Performance Coatings and Optical and Specialty Materials reportable segments, the increase in our costs due to the negative effects of inflation was offset by higher selling prices. However, in our Industrial Coatings and Glass reportable segments, the increase in our costs due to the negative effects of inflation was not offset by higher selling prices.

In 2007, the increase in our costs due to the negative effects of inflation, including the impact of higher raw material costs in our Industrial Coatings, Commodity Chemicals and Glass reportable segments, were not offset by higher selling prices. Higher selling prices did offset the negative impact of inflation in our Performance Coatings and Optical and Specialty Materials reportable segments.



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In 2006, the increase in our costs due to the negative effects of inflation, including the impact of higher raw material costs in our coatings businesses, was offset by higher selling prices in our Industrial Coatings, Performance Coatings and Commodity Chemicals reportable segments and by reduced manufacturing costs in our Glass and Optical and Specialty Materials reportable segments.

In 2009, we expect that the combined impact of productivity improvements, lower manufacturing costs and higher selling prices will offset any negative impact of inflation on raw materials, energy and other costs. We expect erosion in the cost of certain raw materials in some regions of the world in the beginning of 2009, resulting from the delayed impact of lower oil prices and lower global demand for these raw materials. However, our forecast for raw material inflation remains uncertain for the full year 2009 given the current economic uncertainty and the volatility in commodity and raw material costs we experienced in 2008.

### Liquidity and Capital Resources

During the past three years, we had sufficient financial resources to meet our operating requirements, to fund our capital spending, share repurchases and pension plans and to pay increasing dividends to our shareholders.

Cash from operating activities was \$1,358 million, \$996 million and \$1,115 million in 2008, 2007 and 2006,

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respectively. The increase in cash from operations in 2008 compared to 2007 of \$362 million was due in large part to an increase in earnings after adjustment for non-cash charges for amortization, depreciation, SigmaKalon acquired inventory step-up and in-process research and development costs and business restructuring and to less growth in working capital. The major factors contributing to these higher year-over-year earnings were the earnings from the acquired SigmaKalon business and higher Commodity Chemicals earnings. Our strong 2008 performance in terms of cash from operating activities has enabled us to repay \$681 million of debt during the year and still have over \$1 billion of cash on hand at December 31, 2008. Our debt reduction activity has lowered our U.S. commercial paper outstanding at December 31, 2008 to \$222 million. The credit crisis in the U.S. drove up our cost of borrowing in the commercial paper market late in 2008 by about 300 basis points compared to our cost earlier in 2008, shortened the term of our commercial paper borrowings and effectively reduced the amount of credit available to us in this market from time to time; however, our strong cash position and other available credit facilities were sufficient to fund the shortfall we experienced in terms of commercial paper availability in 2008. In the early part of 2009, our cost of borrowing in the commercial paper market has declined by about 400 basis points, and the amount of credit available to us in this market has returned to a more normal level.

Total current assets less total current liabilities (net working capital) decreased \$171 million to \$2,138 million at December 31, 2008 from \$2,309 million at December 31, 2007. The decrease in net working capital is principally related to the change in net short-term borrowings and the growth in accounts payable and accrued liabilities, offset with increases in accounts receivable and inventory driven by acquisitions and an increase in cash due to our cash flow focus in the fourth quarter of 2008. Accounts receivable as a percent of annual sales for 2008 decreased to 17.7 percent from 20.6 percent in 2007. Days sales outstanding decreased to 65 days in 2008 from 75 days in 2007. Inventories as a percent of annual sales decreased to 10.7 percent from 12.5 percent in 2007. Inventory turnover was 5 times in 2008 and 2007.

Total capital spending was \$2,056 million, \$597 million and \$771 million in 2008, 2007 and 2006, respectively. Spending related to modernization and productivity improvements, expansion of existing businesses and environmental control projects was \$383 million, \$364 million and \$369 million in 2008, 2007 and 2006, respectively, and is expected to be approximately \$200 million during 2009. Capital spending related to business acquisitions amounted to \$1,673 million, \$233 million and \$402 million in 2008, 2007 and 2006, respectively.

On January 2, 2008, PPG completed the acquisition of SigmaKalon, a worldwide coatings producer based in Uithoorn, Netherlands, from global private investment firm Bain Capital (the seller). SigmaKalon produces architectural, protective and marine and industrial coatings and is a leading coatings supplier in Europe and other key markets across the globe, with an increasing presence in Africa and Asia. The total transaction value was approximately \$3.2 billion, consisting of cash paid to the seller of \$1,673 million and debt assumed of \$1,517 million.

In order to provide financing for the SigmaKalon acquisition, in December 2007, PPG and certain of its subsidiaries entered into a three year \$650 million revolving credit facility with several banks and financial institutions and Societe Generale, as facility agent for the lenders. The facility has an annual fee of 7 basis points. In addition, PPG and a subsidiary entered into two bridge loan agreements, one in the amount of \$1 billion with multiple lenders and Credit Suisse as administrative agent for those lenders and the other in the amount of \$500 million with Credit Suisse as the lender.

In December 2007, PPG issued \$617 million of commercial paper and borrowed \$1,056 million (\$717 million) under the \$1 billion bridge loan agreement. The proceeds from these borrowings were deposited into escrow in December 2007. Upon closing of the acquisition on January 2, 2008, these amounts were released from escrow and paid to the seller. Also, in January 2008, PPG borrowed \$1,143 million, representing the remaining \$417 million (\$283 million) available under the \$1 billion bridge loan agreement and \$726 million (\$493 million) under the \$650 million revolving credit facility. The proceeds from these borrowings and cash on hand of \$116 million were used to refinance \$1,259 million of the \$1,517 million of SigmaKalon debt outstanding on the date of acquisition. No amounts were borrowed under the \$500 million bridge loan agreement and, due to the passage of time and the specific purpose of this agreement, PPG can no longer make borrowings under this agreement.

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On March 18, 2008, PPG completed a public offering of \$600 million in aggregate principal amount of its 5.75% Notes due 2013 (the 2013 Notes ), \$700 million in aggregate principal amount of its 6.65% Notes due 2018 (the 2018 Notes ) and \$250 million in aggregate principal amount of its 7.70% Notes due 2038 (the 2038 Notes and, together with the 2013 Notes and the 2018 Notes, the Notes ). The Notes were offered by the Company pursuant to its existing shelf registration. The proceeds of this offering of \$1,538 million (net of discount and issuance costs) and additional borrowings of \$195 million under the 650 million revolving credit

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facility were used to repay existing debt, including certain short-term debt and the amounts outstanding under the \$1 billion bridge loan. No further amounts can be borrowed under the \$1 billion bridge loan. The discount and issuance costs related to the Notes, which totaled \$12 million, will be amortized to interest expense over the respective lives of the Notes.

In the fourth quarter 2008, the Company monetized certain cross currency foreign exchange swap contracts, which had been designated as hedges of our Euro denominated net investment in SigmaKalon, and replaced them with new swap contracts. As a result of these swap monetizations, the Company received \$208 million in cash proceeds. See Item 7a of this Form 10-K for further information regarding these instruments.

In July 2008, the Company entered into an agreement to divest its automotive OEM glass and automotive replacement glass and services businesses (automotive glass and services business). Under the agreement, PPG received a minority ownership interest in the new company formed by the buyer. The transaction was completed on September 30, 2008. The Company received proceeds of \$225 million from this transaction.

Dividends paid to shareholders totaled \$343 million, \$335 million and \$316 million in 2008, 2007 and 2006, respectively. PPG has paid uninterrupted dividends since 1899, and 2008 marked the 37th consecutive year of increased annual dividend payments to shareholders. Over time, our goal is to sustain our dividends at approximately one-third of our earnings per share.

During 2008, the Company repurchased 0.1 million shares of PPG common stock at a cost of \$7 million under a previously authorized share repurchase program. In 2007, the Company purchased 3.7 million shares of PPG common stock at a cost of \$274 million, and during 2006, the Company repurchased 2.3 million shares of PPG common stock at a cost of \$153 million.

On August 17, 2006, the Pension Protection Act of 2006 (the PPA) was signed into law, changing the funding requirements for our U.S. defined benefit pension plans beginning in 2008. Under the requirements of PPA, we did not have a mandatory contribution to these plans in 2008; however, we made a voluntary contribution of \$50 million to our U.S. defined benefit pension plans in 2008. We do not currently expect to have a mandatory contribution to these plans in 2009; however, due in large part to the negative investment return on pension plan assets in 2008, we made a voluntary contribution in the amount of \$160 million to these plans in January 2009 and we may make additional voluntary contributions to these plans in 2009 in an amount up to \$140 million. In both 2007 and 2006, we made voluntary contributions to our U.S. defined benefit pension plans of \$100 million. Contributions were made to our non-U.S. defined benefit pension plans of \$69 million, \$49 million and \$24 million for 2008, 2007 and 2006, respectively, some of which were required by local funding requirements. We expect to make contributions to our non-U.S. plans in 2009 of approximately \$60 million, all of which are mandatory.

The ratio of total debt, including capital leases, to total debt and equity was 54% at December 31, 2008 and 42% at December 31, 2007. The increase in 2008 is primarily due to the additional debt borrowed to finance the acquisition of SigmaKalon combined with a reduction in equity driven by currency and pension adjustments to other comprehensive income (loss).

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We continue to believe that our cash on hand, cash from operations and the Company's available debt capacity will continue to be sufficient to fund operating activities, capital spending, including acquisitions, dividend payments, debt service, amounts due under the proposed asbestos settlement, share repurchases, contributions to pension plans, and PPG's significant contractual obligations. These significant contractual obligations, along with amounts due under the proposed asbestos settlement are presented in the following table.

(Millions)	Total	Obligations Due In:			
		2009	2010- 2011	2012- 2013	Thereafter
<b>Contractual Obligations</b>					
Long-term debt	\$ 3,122	\$ 117	\$ 378	\$ 676	\$ 1,951
Short-term debt	784	784			
Capital lease obligations	6	2	1	1	2
Operating leases	633	126	189	116	202
Interest payments <sup>(1)</sup>	1,776	188	331	306	951
Pension contributions <sup>(2)</sup>	220	220			
<b>Unconditional</b>					
purchase obligations	1,220	374	403	101	342
<b>Total</b>	<b>\$ 7,761</b>	<b>\$ 1,811</b>	<b>\$ 1,302</b>	<b>\$ 1,200</b>	<b>\$ 3,448</b>
<b>Asbestos Settlement<sup>(3)</sup></b>					
Aggregate cash payments	\$ 825	\$ 417	\$ 29	\$ 33	\$ 346
PPG stock and other	74	74			
<b>Total</b>	<b>\$ 899</b>	<b>\$ 491</b>	<b>\$ 29</b>	<b>\$ 33</b>	<b>\$ 346</b>

(1) Includes interest on all outstanding debt. Interest for variable-rate debt instruments is based on effective rates at December 31, 2008. Interest for fixed-rate debt instruments have been adjusted for the impact of interest rate swaps using the effective rate at December 31, 2008.

(2) Includes the estimated pension contribution for 2009 only, as PPG is unable to estimate the pension contributions beyond 2009.

(3) We have recorded an obligation equal to the net present value of the aggregate cash payments, along with the PPG stock and other assets to be contributed to a trust under the proposed asbestos settlement. However, PPG has no obligation to pay any amounts under this settlement until the Funding Effective Date, as more fully discussed in Note 15, Commitments and Contingent Liabilities, under Item 8 of this Form 10-K.

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## Management's Discussion and Analysis

The unconditional purchase commitments are principally take-or-pay obligations related to the purchase of certain materials, including industrial gases, natural gas, coal and electricity, consistent with customary industry practice. These amounts also include PPG's commitment to purchase electricity and steam from the RS Cogen joint venture discussed in Note 6, Investments, under Item 8 of this Form 10-K.

See Note 9, Debt and Bank Credit Agreements and Leases, under Item 8 of this Form 10-K for details regarding the use and availability of committed and uncommitted lines of credit, letters of credit, guarantees and debt covenants.

In addition to the amounts available under the lines of credit, the Company has an automatic shelf registration on file with the SEC pursuant to which it may issue, offer and sell from time to time on a continuous or delayed basis any combination of securities in one or more offerings.

### Off-Balance Sheet Arrangements

The Company's off-balance sheet arrangements include the operating leases and unconditional purchase obligations disclosed in the Liquidity and Capital Resources section in the contractual obligations table as well as letters of credit and guarantees as discussed in Note 9, Debt and Bank Credit Agreements and Leases, under Item 8 of this Form 10-K.

### Critical Accounting Estimates

Management has evaluated the accounting policies used in the preparation of the financial statements and related notes presented under Item 8 of this Form 10-K and believes those policies to be reasonable and appropriate. We believe that the most critical accounting estimates made in the preparation of our financial statements are those related to accounting for contingencies, under which we accrue a loss when it is probable that a liability has been incurred and the amount can be reasonably estimated, and to accounting for pensions, other postretirement benefits, goodwill and other identifiable intangible assets with indefinite lives because of the importance of management judgment in making the estimates necessary to apply these policies.

Contingencies, by their nature, relate to uncertainties that require management to exercise judgment both in assessing the likelihood that a liability has been incurred as well as in estimating the amount of potential loss. The most important contingencies impacting our financial statements are those related to the collectibility of accounts receivable, to environmental remediation, to pending, impending or overtly threatened litigation against the Company and to the resolution of matters related to open tax years. For more information on these matters, see Note 4, Working Capital Detail, Note 13, Income Taxes and Note 15, Commitments and Contingent Liabilities under Item 8 of this Form 10-K.

Accounting for pensions and other postretirement benefits involves estimating the cost of benefits to be provided well into the future and attributing that cost over the time period each employee works. To accomplish this, extensive use is made of assumptions about inflation, investment returns, mortality, turnover, medical costs and discount rates. These assumptions are reviewed annually. See Note 14, Pensions and Other Postretirement Benefits, under Item 8 for information on these plans and the assumptions used.

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The discount rate used in accounting for pensions and other postretirement benefits is determined by reference to a current yield curve and by considering the timing and amount of projected future benefit payments. The discount rate assumption for 2009 is 6.15% for our U.S. defined benefit pension and other postretirement benefit plans. A reduction in the discount rate of 50 basis points, with all other assumptions held constant, would increase 2009 net periodic benefit expense for our defined benefit pension and other postretirement benefit plans by approximately \$9 million and \$5 million, respectively.

The expected return on plan assets assumption used in accounting for our pension plans is determined by evaluating the mix of investments that comprise plan assets and external forecasts of future long-term investment returns. For 2008, the return on plan assets assumption for our U.S. defined benefit pension plans was 8.5%. We will use the same assumption for 2009. A reduction in the rate of return of 50 basis points, with other assumptions held constant, would increase 2009 net periodic pension expense by approximately \$10 million.

As discussed in Note 1, Summary of Significant Accounting Policies, under Item 8 of this Form 10-K, the Company tests goodwill and identifiable intangible assets with indefinite lives for impairment at least annually by comparing the fair value of the reporting units to their carrying values. Fair values are estimated using discounted cash flow methodologies that are based on projections of the amounts and timing of future revenues and cash flows. Based on this testing, none of our goodwill or identifiable intangible assets with indefinite lives was impaired as of December 31, 2008.

As part of our ongoing financial reporting process, a collaborative effort is undertaken involving PPG managers with functional responsibility for financial, credit, environmental, legal, tax and benefit matters. The results of this effort provide management with the necessary information on which to base their judgments on these contingencies and to develop the estimates and assumptions used to prepare the financial statements.

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## Management's Discussion and Analysis

We believe that the amounts recorded in the financial statements under Item 8 of this Form 10-K related to these contingencies, pensions, other postretirement benefits, goodwill and other identifiable intangible assets with indefinite lives are based on the best estimates and judgments of the appropriate PPG management, although actual outcomes could differ from our estimates.

### Currency

From December 31, 2007 to December 31, 2008, the U.S. dollar strengthened against the currencies of most of the countries in which PPG operates, most notably against the euro, the British pound sterling, the Polish zloty, the Brazilian real, the South Korean won and the Australian dollar. As a result, the effects of translating the net assets of PPG's operations denominated in non-U.S. currencies to the U.S. dollar decreased consolidated net assets at December 31, 2008 by \$499 million compared to December 31, 2007. During much of the year, the U.S. dollar was weaker against the currencies of many countries in which PPG operates than it was in 2007, which had a favorable impact on 2008 pretax earnings of \$45 million from the translation of these foreign earnings into U.S. dollars.

During 2007, the U.S. dollar weakened against certain of the currencies in the countries in which PPG operates, most notably against the euro, the Canadian dollar and the Brazilian real. The effects of translating the net assets of PPG's operations denominated in non-U.S. currencies to the U.S. dollar increased consolidated net assets at December 31, 2007 by \$260 million compared to December 31, 2006. In addition, the weaker U.S. dollar had a favorable impact on 2007 pretax earnings of \$47 million.

During 2006, the U.S. dollar weakened against the currencies of most of the countries in which PPG operates, most notably against the euro, the British pound sterling and the Australian dollar. The effects of translating the net assets of PPG's operations denominated in non-U.S. currencies to the U.S. dollar increased consolidated net assets by \$179 million for the year ended December 31, 2006. In addition, the weaker U.S. dollar had a favorable impact on 2006 pretax earnings of \$9 million.

### Forward-Looking Statements

The Private Securities Litigation Reform Act of 1995 provides a safe harbor for forward-looking statements made by or on behalf of the Company. Management's Discussion and Analysis and other sections of this Annual Report contain forward-looking statements that reflect the Company's current views with respect to future events and financial performance.

Forward-looking statements are identified by the use of the words "aim," "believe," "expect," "anticipate," "estimate" and other expressions that indicate future events and trends. Any forward-looking statement speaks only as of the date on which such statement is made and the Company undertakes no obligation to update any forward looking statement, whether as a result of new information, future events or otherwise. You are advised, however, to consult any further disclosures we make on related subjects in our reports to the Securities and Exchange Commission. Also, note the following cautionary statements.



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Many factors could cause actual results to differ materially from the Company's forward-looking statements. Such factors include increasing price and product competition by foreign and domestic competitors, fluctuations in cost and availability of raw materials, the ability to maintain favorable supplier relationships and arrangements, difficulties in integrating acquired businesses and achieving expected synergies therefrom, economic and political conditions in international markets, the ability to penetrate existing, developing and emerging foreign and domestic markets, which also depends on economic and political conditions, foreign exchange rates and fluctuations in such rates, the impact of environmental regulations, unexpected business disruptions and the unpredictability of existing and possible future litigation, including litigation that could result if the proposed asbestos settlement does not become effective. However, it is not possible to predict or identify all such factors. Consequently, while the list of factors presented here and under Item 1a is considered representative, no such list should be considered to be a complete statement of all potential risks and uncertainties. Unlisted factors may present significant additional obstacles to the realization of forward-looking statements.

Consequences of material differences in the results compared with those anticipated in the forward-looking statements could include, among other things, business disruption, operational problems, financial loss, legal liability to third parties, other factors set forth in Item 1a of this Form 10-K and similar risks, any of which could have a material adverse effect on the Company's consolidated financial condition, results of operations or liquidity.

### **Item 7a. Quantitative and Qualitative Disclosures About Market Risk**

PPG is exposed to market risks related to changes in foreign currency exchange rates, interest rates, and natural gas prices and to changes in PPG's stock price. The Company may enter into derivative financial instrument transactions in order to manage or reduce these market risks. A detailed description of these exposures and the Company's risk management policies are provided in Note 11, Derivative Financial Instruments and Hedge Activities, under Item 8 of this Form 10-K.

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## Management's Discussion and Analysis

The following disclosures summarize PPG's exposure to market risks and information regarding the use of and fair value of derivatives employed to manage its exposure to such risks. Quantitative sensitivity analyses have been provided to reflect how reasonably possible, unfavorable changes in market rates can impact PPG's consolidated results of operations, cash flows and financial position.

Foreign currency forward and option contracts outstanding during 2008 and 2007 were used to hedge PPG's exposure to foreign currency transaction risk. The fair value of these contracts as of December 31, 2008 and 2007 were liabilities of \$17 million and assets of \$0.4 million, respectively. The potential reduction in PPG's earnings resulting from the impact of adverse changes in exchange rates on the fair value of its outstanding foreign currency hedge contracts of 10% for European currencies and 20% for Asian and South American currencies for the years ended December 31, 2008 and 2007 would have been \$27 million and \$0.3 million, respectively.

Concurrent with the March 18, 2008 completion of the \$1.55 billion public debt offering, PPG entered into ten U.S. dollar to euro cross currency swap contracts with a total notional amount of \$1.3 billion, of which \$600 million were to settle on March 15, 2013 and \$700 million were to settle on March 15, 2018. On March 18, 2008, PPG paid the counterparties to the contracts a total of \$1.3 billion and received euros, which were used to repay most of the \$1 billion bridge loan, which the Company employed to finance the acquisition of SigmaKalon. During the fourth quarter of 2008, PPG converted \$1.16 billion of these contracts to \$208 million of cash and replaced them with new cross currency swap contracts. On settlement of the contracts, PPG will receive \$1.3 billion U.S. dollars and pay euros to the counterparties to the contracts of which \$600 million will settle on March 15, 2013 and \$700 million will settle on March 15, 2018. The Company has designated these swaps as hedges of its net investment in SigmaKalon and, as a result, mark to fair value adjustments of the swaps have been and will be recorded as a component of other comprehensive income. As of December 31, 2008, the aggregate fair value of these swaps was a liability of \$130 million. A 10% increase in the value of the euro to the U.S. dollar would have had an unfavorable effect on the fair value of these swap contracts and increased the liability by \$181 million at December 31, 2008.

PPG had non-U.S. dollar denominated debt outstanding of \$1,373 million as of December 31, 2008 and \$1,636 million as of December 31, 2007. A weakening of the U.S. dollar by 10% against European currencies and by 20% against Asian and South American currencies would have resulted in unrealized translation losses of approximately \$118 million and \$203 million as of December 31, 2008 and 2007, respectively.

Interest rate swaps are used to manage a portion of PPG's interest rate risk. The fair value of the interest rate swaps was an asset of \$3 million and \$6 million as of December 31, 2008 and 2007, respectively. The fair value of these swaps would have decreased by \$0.5 million and \$8 million as of December 31, 2008 and 2007, respectively, if variable interest rates increased by 10%. A 10% increase in interest rates in the U.S., Canada, Mexico and Europe and a 20% increase in interest rates in Asia and South America would have affected PPG's variable rate debt obligations by increasing interest expense approximately \$3 million as of December 31, 2008 and \$10 million as of December 31, 2007. Further, a 10% reduction in interest rates would have increased the present value of the Company's fixed rate debt by approximately \$118 million and \$48 million as of December 31, 2008 and 2007, respectively; however, such changes would not have had an effect on PPG's annual earnings or cash flows.

The fair value of natural gas swap contracts in place as of December 31, 2008 and 2007 was a liability of \$85 million and \$8 million, respectively. These contracts were entered into to reduce PPG's exposure to higher prices of natural gas. A 10% reduction in the price of natural gas would have had an unfavorable effect on the fair value of these contracts and increased the liability by \$27 million and \$26 million at December 31, 2008 and 2007, respectively.

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An equity forward arrangement was entered into to hedge the Company's exposure to changes in fair value of its future obligation to contribute PPG stock into an asbestos settlement trust (see Note 11 "Derivative Financial Instruments and Hedge Activities" and Note 15, "Commitments and Contingent Liabilities," under Item 8 of this Form 10-K). The fair value of this instrument as of December 31, 2008 and 2007 was a liability of \$6 million and an asset of \$18 million, respectively. A 10% decrease in PPG's stock price would have had an unfavorable effect on the fair value of this instrument and increased the liability by \$6 million at December 31, 2008 and reduced the asset by \$6 million at December 31, 2007.

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**Item 8. Financial Statements and Supplementary Data**

**Internal Controls Report of Independent Registered Public Accounting Firm**

*To the Board of Directors and Shareholders of PPG Industries, Inc.*

We have audited the internal control over financial reporting of PPG Industries, Inc. and subsidiaries (the Company) as of December 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 the Management Report, management excluded from its assessment the internal control over financial reporting at the SigmaKalon Group, which was acquired on January 2, 2008 and whose financial statements constitute approximately 33% of assets and 20% of sales of the consolidated financial statement amounts as of and for the year ended December 31, 2008. Accordingly, our audit did not include the internal control over financial reporting at the SigmaKalon Group. 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 Report. 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 December 31, 2008, based on the criteria established in *Internal Control – Integrated Framework* issued by the Committee of Sponsoring Organizations of the Treadway Commission.

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We have also audited, in accordance with the standards of the Public Company Accounting Oversight Board (United States), the consolidated financial statements and financial statement schedule as of and for the year ended December 31, 2008 of the Company and our report dated February 19, 2009 expressed an unqualified opinion on those financial statements and financial statement schedule and included an explanatory paragraph relating to the Company's adoption of FASB Interpretation No. 48, Accounting for Uncertainty in Income Taxes, an interpretation of FASB Statement No. 109.

**/s/ Deloitte & Touche LLP**

**Deloitte & Touche LLP**

Pittsburgh, Pennsylvania

February 19, 2009

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**Management Report**

*Responsibility for Preparation of the Financial Statements and Establishing and Maintaining Adequate Internal Control Over Financial Reporting*

We are responsible for the preparation of the financial statements included in this Annual Report. The financial statements were prepared in accordance with accounting principles generally accepted in the United States of America and include amounts that are based on the best estimates and judgments of management.

We are also responsible for establishing and maintaining adequate internal control over financial reporting. Our internal control system is designed to provide reasonable assurance concerning the reliability of the financial data used in the preparation of PPG's financial statements, as well as to safeguard the Company's assets from unauthorized use or disposition.

All internal control systems, no matter how well designed, have inherent limitations. Therefore, a system of internal control over financial reporting can provide only reasonable assurance and may not prevent or detect misstatements. In addition, because of changing conditions, there is risk in projecting any evaluation of internal controls to future periods.

We conducted an evaluation of the effectiveness of the Company's internal control over financial reporting as of December 31, 2008. In making this evaluation, we used the criteria set forth by the Committee of Sponsoring Organizations of the Treadway Commission (COSO) in *Internal Control - Integrated Framework*. Our evaluation included reviewing the documentation of our controls, evaluating the design effectiveness of our controls and testing their operating effectiveness. Our evaluation, however, excluded the internal control over financial reporting related to the SigmaKalon Group, which was acquired by the Company in January of 2008 and whose financial statements constituted approximately 33% of our consolidated assets and 20% of our consolidated sales as of and for the year ended December 31, 2008. This acquired business will be included in management's assessment of the effectiveness of our internal controls over financial reporting as of December 31, 2009. Based on this evaluation we believe that, as of December 31, 2008, the Company's internal controls over financial reporting were effective and provide reasonable assurance that the accompanying financial statements do not contain any material misstatement.

Deloitte & Touche LLP, an independent registered public accounting firm, has issued their report, included on page 28 of this Form 10-K, regarding the Company's internal control over financial reporting.

/s/ **Charles E. Bunch**

**Charles E. Bunch**

Chairman of the Board

and Chief Executive Officer

February 19, 2009

/s/ **William H. Hernandez**

**William H. Hernandez**

Senior Vice President, Finance and

Chief Financial Officer

**Consolidated Financial Statements Report of Independent Registered Public Accounting Firm**

*To the Board of Directors and Shareholders of PPG Industries, Inc.*

We have audited the accompanying consolidated balance sheets of PPG Industries, Inc. and subsidiaries (the Company) as of December 31, 2008 and 2007, and the related consolidated statements of income, shareholders' equity, comprehensive income and cash flows for each of the three years in the period ended December 31, 2008. Our audits also included the financial statement schedule listed in Item 15(b). These financial statements and the financial statement schedule are the responsibility of the Company's management. Our responsibility is to express an

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opinion on the financial statements and financial statement schedule 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 PPG Industries, Inc. and subsidiaries as of December 31, 2008 and 2007, and the results of their operations and their cash flows for each of the three years in the period ended December 31, 2008, in conformity with accounting principles generally accepted in the United States of America. Also, in our opinion, such financial statement schedule, when considered in relation to the basic consolidated financial statements taken as a whole, presents fairly, in all material respects, the information set forth therein.

As discussed in Note 1 to the consolidated financial statements, on January 1, 2007 the Company adopted the provisions of FASB Interpretation No. 48, Accounting for Uncertainty in Income Taxes, an interpretation of FASB Statement No. 109.

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 December 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 February 19, 2009 expressed an unqualified opinion on the Company's internal control over financial reporting.

**/s/ Deloitte & Touche LLP**

**Deloitte & Touche LLP**

Pittsburgh, Pennsylvania

February 19, 2009

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**Table of Contents****Consolidated Statement of Income**

<i>(Millions, except per share amounts)</i>	<i>For the Year</i>		
	2008	2007	2006
Net sales	\$ 15,849	\$ 12,220	\$ 10,938
Cost of sales, exclusive of depreciation and amortization (See Note 2)	10,155	7,828	6,957
Selling, general and administrative (See Note 3)	3,432	2,310	1,979
Depreciation (See Note 3)	428	345	332
Research and development net (See Note 22)	451	348	314
Interest	254	93	83
Amortization (See Note 7)	135	58	43
Asbestos settlement net (See Notes 11 and 15)	4	24	28
In-process research and development (See Note 2)	23		
Business restructuring (See Note 8)	163		37
Other charges (See Note 15)	61	59	254
Other earnings (See Note 19)	(165)	(160)	(142)
<b><i>Income from continuing operations before income taxes and minority interest</i></b>	<b>908</b>	<b>1,315</b>	<b>1,053</b>
Income tax expense (See Note 13)	284	383	275
Minority interest	86	76	71
Income from continuing operations, net of tax	538	856	707
(Loss) income from discontinued operations, net of tax (See Note 3)		(22)	4
<b><i>Net income</i></b>	<b>\$ 538</b>	<b>\$ 834</b>	<b>\$ 711</b>
<b><i>Earnings per common share (See Note 12)</i></b>			
Income from continuing operations	\$ 3.27	\$ 5.20	\$ 4.27
(Loss) income from discontinued operations (See Note 3)		(0.13)	0.02
<b><i>Net income</i></b>	<b>\$ 3.27</b>	<b>\$ 5.07</b>	<b>\$ 4.29</b>
<b><i>Earnings per common share assuming dilution (See Note 12)</i></b>			
Income from continuing operations	\$ 3.25	\$ 5.16	\$ 4.25
(Loss) income from discontinued operations (See Note 3)		(0.13)	0.02
<b><i>Net Income</i></b>	<b>\$ 3.25</b>	<b>\$ 5.03</b>	<b>\$ 4.27</b>

*The accompanying notes to the consolidated financial statements are an integral part of this consolidated statement.*



**Table of Contents****Consolidated Balance Sheet**

<i>(Millions)</i>	<i>December 31</i>	
	2008	2007
<b>Assets</b>		
Current assets		
Cash and cash equivalents	\$ 1,021	\$ 526
Cash held in escrow (See Note 2)	24	1,706
Receivables (See Note 4)	2,804	2,522
Inventories (See Note 4)	1,702	1,532
Deferred income taxes (See Note 13)	515	418
Other	282	237
<b>Total current assets</b>	<b>6,348</b>	<b>6,941</b>
Property (See Note 5)	8,043	8,694
Less accumulated depreciation	5,245	6,116
<b>Property net</b>	<b>2,798</b>	<b>2,578</b>
Investments (See Note 6)	509	370
Goodwill (See Note 7)	2,641	1,507
Identifiable intangible assets net (See Note 7)	1,472	614
Other assets (See Note 13)	930	619
<b>Total</b>	<b>\$ 14,698</b>	<b>\$ 12,629</b>
<b>Liabilities and Shareholders Equity</b>		
Current liabilities		
Short-term debt and current portion of long-term debt (See Note 9)	\$ 903	\$ 1,819
Asbestos settlement (See Note 15)	491	593
Accounts payable and accrued liabilities (See Note 4)	2,816	2,220
<b>Total current liabilities</b>	<b>4,210</b>	<b>4,632</b>
Long-term debt (See Note 9)	3,009	1,201

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Asbestos settlement (See Note 15)	244	324
Deferred income taxes (See Note 13)	425	164
Accrued pensions (See Note 14)	1,250	396
Other postretirement benefits (See Note 14)	1,072	997
Other liabilities (See Note 14)	999	603
<b>Total liabilities</b>	<b>11,209</b>	<b>8,317</b>
Commitments and contingent liabilities (See Note 15)		
Minority interest	156	161
Shareholders' equity (See Note 16)		
Common stock	484	484
Additional paid-in capital	580	553
Retained earnings	8,156	7,963
Treasury stock, at cost	(4,259)	(4,267)
Accumulated other comprehensive loss (See Note 17)	(1,628)	(582)
<b>Total shareholders' equity</b>	<b>3,333</b>	<b>4,151</b>
<b>Total</b>	<b>\$ 14,698</b>	<b>\$ 12,629</b>

Shares outstanding were 164,198,633 and 163,800,668 as of December 31, 2008 and 2007, respectively.

The accompanying notes to the consolidated financial statements are an integral part of this consolidated statement.

**Table of Contents****Consolidated Statement of Shareholders Equity**

<i>(Millions)</i>	<i>Common Stock</i>	<i>Additional Paid-In Capital</i>	<i>Retained Earnings</i>	<i>Treasury Stock</i>	<i>Unearned Compensation (See Note 1)</i>	<i>Accumulated Other Comprehensive (Loss) Income (See Note 17)</i>	<i>Total</i>
Balance, January 1, 2006	\$ 484	\$ 352	\$ 7,057	\$ (3,984)	\$ (37)	\$ (819)	\$ 3,053
Net income			711				711
Other comprehensive income, net of tax						339	339
Transition adjustment for adoption of SFAS No. 158 (See Note 1)						(459)	(459)
Cash dividends			(316)				(316)
Purchase of treasury stock				(153)			(153)
Issuance of treasury stock		25		36			61
Stock option activity		31					31
Repayment of loans by ESOP					12		12
Other			1				1
<i>Balance, December 31, 2006</i>	<i>\$ 484</i>	<i>\$ 408</i>	<i>\$ 7,453</i>	<i>\$ (4,101)</i>	<i>\$ (25)</i>	<i>\$ (939)</i>	<i>\$ 3,280</i>
Net income			834				834
Other comprehensive income, net of tax						357	357
Cash dividends			(335)				(335)
Purchase of treasury stock				(274)			(274)
Issuance of treasury stock		102		108			210
Stock option activity		43					43
Repayment of loans by ESOP					25		25
Transition adjustment for adoption of FASB Interpretation No. 48 (See Note 1)			11				11
<i>Balance, December 31, 2007</i>	<i>\$ 484</i>	<i>\$ 553</i>	<i>\$ 7,963</i>	<i>\$ (4,267)</i>	<i>\$</i>	<i>\$ (582)</i>	<i>\$ 4,151</i>
Net income			538				538

Other comprehensive (loss), net of tax						(1,046)	(1,046)
Cash dividends						(343)	(343)
Purchase of treasury stock						(7)	(7)
Issuance of treasury stock	18	15					33
Stock option activity	9						9
Transition adjustment for adoption of EITF No. 06-10 (See Note 1)					(2)		(2)
<b>Balance, December 31, 2008</b>	\$ 484	\$ 580	\$ 8,156	\$ (4,259)	\$	(1,628)	\$ 3,333

## Consolidated Statement of Comprehensive Income

<i>(Millions)</i>	<i>For the Year</i>		
	2008	2007	2006
Net income	\$ 538	\$ 834	\$ 711
Other comprehensive (loss) income, net of tax (See Note 17)			
Unrealized currency translation adjustment	(499)	260	179
Defined benefit pension and other postretirement benefit adjustments (See Note 14)	(494)	90	170
Unrealized (losses) gains on marketable equity securities	(4)		3
Net change derivatives (See Note 11)	(49)	7	(13)
Other comprehensive (loss) income, net of tax	(1,046)	357	339
<b>Comprehensive (loss) income</b>	<b>\$ (508)</b>	<b>\$ 1,191</b>	<b>\$ 1,050</b>

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

**Table of Contents****Consolidated Statement of Cash Flows**

<i>(Millions)</i>	2008	<i>For the Year</i> 2007	2006
<b>Operating activities</b>			
Net income	\$ 538	\$ 834	\$ 711
Loss (income) from discontinued operations, net of tax		22	(4)
Income from continuing operations, net of tax	538	856	707
<b>Adjustments to reconcile to cash from operations</b>			
Depreciation and amortization	563	403	375
Asbestos settlement, net of tax	2	15	17
Business restructuring	163		37
Write-off of in-process research and development	23		
Restructuring cash spending	(27)	(15)	(33)
Bad debt expense	52	16	14
Equity affiliate loss (earnings) net of dividends	15	(11)	(18)
Increase (decrease) in net accrued pension benefit costs	78	(7)	21
Increase in receivables	(4)	(224)	(92)
Decrease (increase) in inventories	79	(49)	(80)
Increase in other current assets	(123)	(24)	(11)
Increase in accounts payable and accrued liabilities	15	72	61
Decrease (increase) in noncurrent assets	21	(100)	(99)
(Decrease) increase in noncurrent liabilities	(132)	3	167
Other	95	60	50
<i>Cash from operating activities - continuing operations</i>	1,358	995	1,116
<i>Cash from (used for) operating activities - discontinued operations</i>		1	(1)
<i>Cash from operating activities</i>	1,358	996	1,115
<b>Investing activities</b>			
Capital spending			
Additions to property and investments	(383)	(364)	(369)
Business acquisitions, net of cash balances acquired (See Note 2)	(1,673)	(233)	(402)
Deposits held in escrow (See Note 2)	(37)	(1,718)	(3)
Release of deposits held in escrow (See Note 2)	1,740	2	67
Proceeds from sale of automotive glass and services business (See Note 3)	225		

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Proceeds from termination of currency swap contracts (See Note 11)	208		
Reductions of other property and investments	45	68	48
Purchases of short-term investments (See Note 1)			(963)
Proceeds from sales of short-term investments (See Note 1)			963
<hr/>			
<i>Cash from (used for) investing activities continuing operations</i>	125	(2,245)	(659)
<i>Cash from (used for) investing activities discontinued operations</i>		38	(3)
<i>Cash from (used for) investing activities</i>	125	(2,207)	(662)
<hr/>			
<b>Financing activities</b>			
Debt:			
Borrowings to refinance acquired SigmaKalon debt (See Note 9)	1,143		
<hr/>			
Repayment of acquired SigmaKalon debt (See Note 9)	(1,259)		
<hr/>			
Proceeds from issuance of notes (net of discount and issuance costs) (See Note 9)	1,538		
<hr/>			
Repayment of bridge loan (See Note 9)	(1,557)		
<hr/>			
Net change in borrowings with maturities of three months or less	(392)	698	(4)
<hr/>			
Proceeds from other short-term debt	329	1,129	143
<hr/>			
Repayment of other short-term debt	(442)	(83)	(212)
<hr/>			
Repayment of other long-term debt	(41)	(71)	(26)
<hr/>			
Net change in cash related to debt transactions	(681)	1,673	(99)
<hr/>			
Other financing activities:			
Proceeds from termination of interest rate swaps	40		
<hr/>			
Repayment of loans by employee stock ownership plan		25	12
<hr/>			
Purchase of treasury stock	(7)	(274)	(153)
<hr/>			
Issuance of treasury stock	13	194	55
<hr/>			
Dividends paid	(343)	(335)	(316)
<hr/>			
<i>Cash (used for) from financing activities continuing operations</i>	(978)	1,283	(501)
<i>Cash (used for) from financing activities discontinued operations</i>			
<i>Cash (used for) from financing activities</i>	(978)	1,283	(501)
<hr/>			
Effect of currency exchange rate changes on cash and cash equivalents	(10)	11	22
<hr/>			
Net increase (decrease) in cash and cash equivalents	495	83	(26)
<hr/>			
Cash and cash equivalents, beginning of year	526	443	469
<hr/>			
<i>Cash and cash equivalents, end of year</i>	\$ 1,021	\$ 526	\$ 443

The accompanying notes to the consolidated financial statements are an integral part of this consolidated statement.

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## Notes to the Consolidated Financial Statements

### 1. Summary of Significant Accounting Policies

#### *Principles of Consolidation*

The accompanying consolidated financial statements include the accounts of PPG Industries, Inc. ( PPG or the Company ), and all subsidiaries, both U.S. and non-U.S., that it controls. PPG owns more than 50% of the voting stock of the subsidiaries that it controls. Investments in companies in which PPG owns 20% to 50% of the voting stock and has the ability to exercise significant influence over operating and financial policies of the investee are accounted for using the equity method of accounting. As a result, PPG's share of the earnings or losses of such equity affiliates is included in the accompanying consolidated statement of income and PPG's share of these companies' shareholders' equity is included in investments in the accompanying consolidated balance sheet. Transactions between PPG and its subsidiaries are eliminated in consolidation.

#### *Use of Estimates in the Preparation of Financial Statements*

The preparation of financial statements in conformity with U.S. generally accepted accounting principles requires management to make estimates and assumptions that affect the reported amounts of assets and liabilities and the disclosure of contingent assets and liabilities at the date of the financial statements, as well as the reported amounts of income and expenses during the reporting period. Actual outcomes could differ from those estimates.

#### *Basis of Presentation*

In July 2008, the Company entered into an agreement to divest its automotive OEM glass and automotive replacement glass and services businesses ( automotive glass and services business ). Under the agreement, PPG would receive a minority ownership interest in the new company formed by the buyer. In accordance with the requirements of Statement of Financial Accounting Standards, ( SFAS ) No. 144, Accounting for the Impairment or Disposal of Long-Lived Assets, the results of the automotive glass and services business were reported as discontinued operations beginning in September 2007, and in the second quarter of 2008 the business was reclassified into continuing operations because of PPG's continuing involvement arising from the approximate 40% retained equity interest. The transaction was completed on September 30, 2008. The results of the automotive glass and services business through September 30, 2008 are reported as part of the Glass reportable segment in the accompanying financial statements. See Note 3, Divestiture of Automotive Glass and Services Business for additional information.

In the third quarter of 2007, PPG entered into an agreement to sell its fine chemicals business to ZaCh System S.p.A., a subsidiary of Zambon Company S.p.A., for approximately \$65 million. The sale of this business was completed in November 2007. The results of operations and cash flows of this business, which had previously been included in the Optical and Specialty Materials reportable segment, have been classified as discontinued operations in the accompanying consolidated statements of income and of cash flows for the years ended December 31, 2007 and 2006. Sales of the fine chemicals business were \$79 million and \$99 million for the years ended December 31, 2007 and 2006, respectively. For the year ended December 31, 2007 the fine chemicals business had a loss from discontinued operations of \$22 million, which included a pretax charge of \$25 million (\$19 million aftertax) related to the divestiture of the fine chemicals business. For the year ended December 31, 2006, income from discontinued operations was \$4 million.

#### *Revenue Recognition*

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Revenue from sales is recognized by all operating segments when goods are shipped and title to inventory and risk of loss passes to the customer or when services have been rendered.

### *Shipping and Handling Costs*

Amounts billed to customers for shipping and handling are reported in *Net sales* in the accompanying consolidated statement of income. Shipping and handling costs incurred by the Company for the delivery of goods to customers are included in *Cost of sales*, exclusive of depreciation and amortization in the accompanying consolidated statement of income.

### *Selling, General and Administrative Costs*

Amounts presented as *Selling, general and administrative* in the accompanying consolidated statement of income are comprised of selling, customer service, distribution and advertising costs, as well as the costs of providing corporate-wide functional support in such areas as finance, law, human resources and planning. Distribution costs pertain to the movement and storage of finished goods inventory at company-owned and leased warehouses, terminals and other distribution facilities. Certain of these costs may be included in cost of sales by other companies, resulting in a lack of comparability with other companies.

### *Legal Costs*

Legal costs are expensed as incurred.

### *Foreign Currency Translation*

For all significant non-U.S. operations, their functional currency is their local currency. Assets and liabilities of those operations are translated into U.S. dollars using year-end exchange rates; income and



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## Notes to the Consolidated Financial Statements

expenses are translated using the average exchange rates for the reporting period. Unrealized currency translation adjustments are deferred in accumulated other comprehensive (loss) income, a separate component of shareholders' equity.

### *Cash Equivalents*

Cash equivalents are highly liquid investments (valued at cost, which approximates fair value) acquired with an original maturity of three months or less.

### *Cash Held in Escrow*

Cash held in escrow is restricted cash and consists of amounts deposited into third-party escrow accounts to comply with contractual stipulations or legal requirements. Cash deposited into escrow or released from escrow is classified as an investing activity in the consolidated statement of cash flows.

### *Short-term Investments*

Short-term investments are highly liquid investments that have stated maturities of three months to one year. The purchases and sales of these investments are classified as investing activities in the consolidated statement of cash flows.

### *Inventories*

Most U.S. inventories are stated at cost, using the last-in, first-out ( LIFO ) method of accounting, which does not exceed market. All other inventories are stated at cost, using the first-in, first-out ( FIFO ) method of accounting, which does not exceed market. PPG determines cost using either average or standard factory costs, which approximate actual costs, excluding certain fixed costs such as depreciation and property taxes.

### *Marketable Equity Securities*

The Company's investment in marketable equity securities is recorded at fair market value and reported in Other current assets and Investments in the accompanying consolidated balance sheet with changes in fair market value recorded in income for those securities designated as trading securities and in other comprehensive (loss) income, net of tax, for those designated as available for sale securities.

### *Property*

Property is recorded at cost. PPG computes depreciation by the straight-line method based on the estimated useful lives of depreciable assets. Additional expense is recorded when facilities or equipment are subject to abnormal economic conditions or obsolescence. Significant improvements that add to productive capacity or extend the lives of properties are capitalized. Costs for repairs and maintenance are charged to expense as incurred. When property is retired or otherwise disposed of, the original cost and related accumulated depreciation balance are removed from the accounts and any related gain or loss is included in income. Amortization of the cost of capitalized leased assets is included in

depreciation expense. Property and other long-lived assets are reviewed for impairment whenever events or circumstances indicate that their carrying amounts may not be recoverable.

### *Goodwill and Identifiable Intangible Assets*

Goodwill represents the excess of the cost over the fair value of acquired identifiable tangible and intangible assets less liabilities assumed from acquired businesses. Identifiable intangible assets acquired in business combinations are recorded based upon their fair value at the date of acquisition.

The Company tests goodwill of each reporting unit for impairment at least annually in connection with PPG's strategic planning process in the third quarter. The goodwill impairment test is performed by comparing the fair value of the associated reporting unit to its carrying value. The Company's reporting units are its operating segments. (See Note 24, *Reportable Business Segment Information* for further information concerning the Company's operating segments.) Fair value is estimated using discounted cash flow methodologies and market comparable information.

The Company has determined that certain acquired trademarks have indefinite useful lives. The Company tests the carrying value of these trademarks for impairment at least annually in the third quarter by comparing the fair value of each trademark to its carrying value. Fair value is estimated by using the relief from royalty method (a discounted cash flow methodology).

Identifiable intangible assets with finite lives are amortized on a straight-line basis over their estimated useful lives (2 to 25 years) and are reviewed for impairment whenever events or circumstances indicate that their carrying amount may not be recoverable.

### *Employee Stock Ownership Plan*

Compensation expense related to the employee stock ownership plan (ESOP) was equal to the Company's matching contribution in 2008.

PPG accounted for its ESOP in accordance with Statement of Position (SOP) No. 93-6 for PPG common stock purchased after December 31, 1992 (new ESOP shares). As permitted by SOP No. 93-6, shares purchased prior to December 31, 1992 (old ESOP shares) were accounted for in accordance with SOP No. 76-3. ESOP shares were released for future allocation to participants

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## Notes to the Consolidated Financial Statements

based on the ratio of debt service paid during the year on loans used by the ESOP to purchase the shares to the remaining debt service on these loans. These loans were a combination of borrowings guaranteed by PPG and borrowings by the ESOP directly from PPG. No loan balances remained outstanding as of December 31, 2007. Unearned compensation was reflected as a reduction of shareholders' equity as of December 31, 2006, which principally represented the unpaid balance of all of the ESOP's loans. Dividends received by the ESOP were primarily used to pay debt service.

When old ESOP shares were released, compensation expense was equal to cash contributed to the ESOP by the Company less the appreciation on the allocated old ESOP shares. Cash contributions to the ESOP were reduced by \$30 million in 2007 and \$18 million in 2006 for the appreciation on the old shares allocated to participants' accounts in each of those years. Dividends paid on old ESOP shares were deducted from retained earnings. Old ESOP shares were considered to be outstanding in computing earnings per common share. For new ESOP shares, compensation expense was equal to the Company's matching contribution (see Note 18, "Employee Stock Ownership Plan"). Dividends paid on released new ESOP shares were deducted from retained earnings, and dividends on unreleased shares were reported as a reduction of debt or accrued interest. New ESOP shares that were released were considered outstanding in computing earnings per common share. Unreleased new ESOP shares were not considered to be outstanding.

### *Derivative Financial Instruments and Hedge Activities*

The Company recognizes all derivative instruments as either assets or liabilities at fair value on the balance sheet. The accounting for changes in the fair value of a derivative depends on the use of the derivative. To the extent that a derivative is effective as a cash flow hedge of an exposure to future changes in value, the change in fair value of the derivative is deferred in accumulated other comprehensive (loss) income. Any portion considered to be ineffective is reported in earnings immediately, including changes in value related to credit risk. To the extent that a derivative is effective as a hedge of an exposure to future changes in fair value, the change in the derivative's fair value, to the extent effective, is offset in the consolidated statement of income by the change in fair value of the item being hedged. To the extent that a derivative or a financial instrument is effective as a hedge of a net investment in a foreign operation, the change in the derivative's fair value is deferred as an unrealized currency translation adjustment in accumulated other comprehensive (loss) income.

### *Product Warranties*

The Company accrues for product warranties at the time the associated products are sold based on historical claims experience. As of December 31, 2008 and 2007, the reserve for product warranties was \$10 million and \$9 million, respectively. Pretax charges against income for product warranties in 2008, 2007 and 2006 totaled \$7 million, \$5 million and \$4 million, respectively. Cash outlays related to product warranties were \$7 million, \$6 million and \$5 million in 2008, 2007 and 2006, respectively. In addition, \$1 million of warranty obligations were assumed as part of the Company's 2008 business acquisitions.

### *Asset Retirement Obligations*

An asset retirement obligation represents a legal obligation associated with the retirement of a tangible long-lived asset that is incurred upon the acquisition, construction, development or normal operation of that long-lived asset. PPG recognizes asset retirement obligations in the period in which they are incurred, if a reasonable estimate of fair value can be made. The asset retirement obligation is subsequently adjusted for changes in fair value. The associated estimated asset retirement costs are capitalized as part of the carrying amount of the long-lived asset and depreciated over its useful life. PPG's asset retirement obligations are primarily associated with closure of certain assets used in the chemicals manufacturing process.

The accrued asset retirement obligation was \$14 million and \$11 million as of December 31, 2008 and 2007, respectively.

PPG's only conditional asset retirement obligation relates to the possible future abatement of asbestos contained in certain PPG production facilities. The asbestos in PPG's production facilities arises from the application of normal and customary building practices in the past when the facilities were constructed. This asbestos is encapsulated in place and, as a result, there is no current legal requirement to abate it. Inasmuch as there is no requirement to abate, the Company does not have any current plans or an intention to abate and therefore the timing, method and cost of future abatement, if any, are not known. The Company has not recorded an asset retirement obligation associated with asbestos abatement, given the uncertainty concerning the timing of future abatement, if any.

#### *Pensions and Other Postretirement Benefits*

In September 2006, the Financial Accounting Standards Board, ( FASB ) issued SFAS No. 158, Employers' Accounting for Defined Benefit Pension and Other Postretirement Plans, an amendment of FASB Statements No. 87, 88, 106, and 132(R). Under this

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standard, a company must recognize a net liability or asset to report the funded status of its defined benefit pension and other postretirement benefit plans on its consolidated balance sheet as well as recognize changes in that funded status in the year in which the changes occur, through charges or credits to comprehensive income. SFAS No. 158 does not change how pensions and other postretirement benefits are accounted for and reported in the income statement. As a result of the adoption of SFAS No. 158 on December 31, 2006, the Company increased its net pension and other postretirement benefit liabilities by \$459 million by recording a direct adjustment to accumulated other comprehensive loss. See Note 14, Pensions and Other Postretirement Benefits, for additional information.

***Uncertain Tax Positions***

In June 2006, the FASB issued FASB Interpretation (FIN) No. 48, Accounting for Uncertainty in Income Taxes, an interpretation of FASB Statement No. 109 (FIN No. 48). FIN No. 48 clarifies the accounting for uncertainty in income taxes recognized in an enterprise's financial statements and prescribes a recognition threshold and measurement attribute for the financial statement recognition and measurement of a tax position taken or expected to be taken in a tax return. The Company adopted the provisions of FIN No. 48 as of January 1, 2007. As a result of the implementation of FIN No. 48, the Company reduced its liability for unrecognized tax benefits by \$11 million, which was recorded as a direct increase in retained earnings. Refer to Note 13, Income Taxes for additional information.

***Accounting Standards Adopted in 2008***

In September 2006, the FASB issued SFAS No. 157, Fair Value Measurements (SFAS No. 157), which defines fair value, establishes a framework in generally accepted accounting principles for measuring fair value and expands disclosures about fair value measurements. This standard only applies when other standards require or permit the fair value measurement of assets and liabilities. It does not increase the use of fair value measurement. SFAS No. 157 is effective for fiscal years beginning after November 15, 2007, except as it relates to nonrecurring fair value measurements of nonfinancial assets and liabilities for which the standard is effective for fiscal years beginning after November 15, 2008, as mandated by FASB Staff Position No. 157-2, Effective Date of FASB Statement No. 157. The adoption of SFAS No. 157 with respect to financial assets and liabilities in the first quarter of 2008 did not have a significant effect on PPG's consolidated results of operations or financial position. The standard did not have a significant impact on PPG's 2008 results of operations or PPG's financial position as of December 31, 2008. The Company is evaluating the impact of SFAS No. 157 for measuring nonfinancial assets and liabilities on future results of operations and financial position, which is not expected to be significant.

SFAS No. 157 defines fair value as the price that would be received to sell an asset or paid to transfer a liability in an orderly transaction between market participants, as of the measurement date. The standard establishes a hierarchy of inputs employed to determine fair value measurements, with three levels. Level 1 inputs are quoted prices in active markets for identical assets and liabilities, are considered to be the most reliable evidence of fair value, and should be used whenever available. Level 2 inputs are observable prices that are not quoted on active exchanges. Level 3 inputs are unobservable inputs employed for measuring the fair value of assets or liabilities.

The Company's financial assets and liabilities that are reported at fair value in the accompanying consolidated balance sheet, as of December 31, 2008, were as follows:

<i>(Millions)</i>	<i>Level 1</i>	<i>Level 2</i>	<i>Level 3</i>	<i>Total</i>
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Other current assets:			
Foreign currency contracts	\$	\$ 7	\$ 7
Marketable equity securities	4		4
Investments:			
Marketable equity securities	48	2	50
Other assets:			
Natural gas swap contracts		1	1
Interest rate swaps		3	3
Cross currency swaps		21	21
Accounts payable and accrued liabilities:			
Foreign currency contracts		16	16
Equity forward arrangement		6	6
Natural gas swap contracts		62	62
Other liabilities:			
Foreign currency contracts		6	6
Natural gas swap contracts		24	24
Cross currency swaps		151	151

In February 2007, the FASB issued SFAS No. 159, *The Fair Value Option for Financial Assets and Financial Liabilities – Including an Amendment of FASB Statement No. 115* ( SFAS No. 159 ). SFAS No. 159 permits entities to choose to measure eligible items at fair value at specified election dates and report unrealized gains and losses on items, for which the fair value option has been elected, in earnings at each subsequent reporting date. SFAS No. 159 is effective for fiscal years beginning after November 15, 2007. The adoption of SFAS No. 159 in the first quarter of 2008 did not have an impact on PPG’s consolidated results of operations or financial position.

In March 2007, the Emerging Issues Task Force ( EITF ) issued EITF No. 06-10, *Accounting for Collateral Assignment Split-Dollar Life Insurance Arrangements* ( EITF 06-10 ). Under the provisions of EITF 06-10, an employer is required to recognize a liability for the postretirement benefit related to a collateral assignment split-dollar life insurance arrangement in accordance with

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either SFAS No. 106, *Employers' Accounting for Postretirement Benefits Other Than Pensions*, or Accounting Principles Board Opinion No. 12, *Omnibus Opinion 1967*, if the employer has agreed to maintain a life insurance policy during the employee's retirement or provide the employee with a death benefit based on the substantive arrangement with the employee. The provisions of EITF 06-10 also require an employer to recognize and measure the asset in a collateral assignment split-dollar life insurance arrangement based on the nature and substance of the arrangement. EITF 06-10 was effective as of January 1, 2008. PPG has collateral assignment split-dollar life insurance arrangements within the scope of EITF 06-10. The Company adopted the provisions of EITF 06-10 as of January 1, 2008. As a result of the adoption, the Company recognized a liability of \$2 million, representing the present value of the future premium payments to be made under the existing policies. In accordance with the transition provisions of EITF 06-10, this amount was recorded as a direct decrease to retained earnings. No adjustment to the recorded asset value was required upon adoption.

***Accounting Standards to be Adopted in Future Years***

In December 2007, the FASB issued SFAS No. 141 (revised 2007), *Business Combinations* (SFAS No. 141(R)), which replaces SFAS No. 141, *Business Combinations*. SFAS No. 141(R) retains the underlying concepts of SFAS No. 141 in that all business combinations are still required to be accounted for at fair value under the acquisition method of accounting (formerly known as the purchase method of accounting), but SFAS No. 141(R) changes the method of applying the acquisition method in a number of significant aspects. Acquisition costs will generally be expensed as incurred; noncontrolling interests will be valued at fair value at the acquisition date; in-process research and development will be recorded at fair value as an indefinite-lived intangible asset at the acquisition date; restructuring costs associated with a business combination will generally be expensed subsequent to the acquisition date; and changes in deferred tax asset valuation allowances and income tax uncertainties after the acquisition date generally will affect income tax expense. SFAS No. 141(R) is effective on a prospective basis for all business combinations for which the acquisition date is on or after the beginning of the first annual period subsequent to December 15, 2008, with an exception related to the accounting for valuation allowances on deferred taxes and acquired tax contingencies related to acquisitions completed before the effective date. SFAS No. 141(R) amends SFAS No. 109 to require adjustments, made after the effective date of this statement, to valuation allowances for acquired deferred tax assets and uncertain income tax positions to be recognized as income tax expense. Beginning January 1, 2009, PPG will apply the provisions of SFAS No. 141(R) to its accounting for applicable business combinations.

In December 2007, the FASB issued SFAS No. 160, *Noncontrolling Interests in Consolidated Financial Statements* an amendment of ARB No. 51 (SFAS No. 160). This statement is effective for fiscal years, and interim periods within those fiscal years, beginning on or after December 15, 2008. SFAS No. 160 requires the recognition of a noncontrolling interest (minority interest) as equity in the consolidated financial statements and separate from the parent's equity. The amount of net income attributable to the noncontrolling interest will be included in consolidated net income on the face of the income statement. SFAS No. 160 amends certain of ARB No. 51's consolidation procedures for consistency with the requirements of SFAS No. 141(R). This statement requires changes in the parent's ownership interest in consolidated subsidiaries to be accounted for as equity transactions. This statement also includes expanded disclosure requirements regarding the interests of the parent and related noncontrolling interests. Beginning January 1, 2009, PPG will apply the provisions of SFAS No. 160 to its accounting for noncontrolling interests and its financial statement disclosures.

In November 2007, EITF Issue No. 07-1, *Accounting for Collaborative Arrangements* (EITF 07-1), which defines collaborative arrangements and establishes reporting and disclosure requirements for such arrangements, was issued. EITF 07-1 is effective for fiscal years beginning after December 15, 2008. The Company is continuing to evaluate the impact of adopting the provisions of EITF 07-1; however, it does not anticipate that adoption will have a material effect on its consolidated results of operations or financial position.

In March 2008, the FASB issued SFAS No. 161, *Disclosures about Derivative Instruments and Hedging Activities*, (SFAS No. 161) which changes the disclosure requirements for derivative instruments and hedging activities. This statement's disclosure requirements are effective for

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fiscal years and interim periods beginning after November 15, 2008. SFAS No. 161 requires enhanced disclosures about (a) how and why an entity uses derivative instruments, (b) how derivative instruments and related hedged items are accounted for under SFAS No. 133, *Accounting for Derivative Instruments and Hedging Activities* and its related interpretations, and (c) how derivative instruments and related hedged items affect an entity's financial position, financial performance, and cash flows. PPG will apply the provisions of SFAS No. 161 to its financial statement disclosures beginning in 2009.

### 2. Acquisitions

The Company spent \$1,673 million on acquisitions (net of cash acquired of \$136 million) in 2008, including



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purchase price adjustments related to 2007 acquisitions. Most of this spending was related to the January 2, 2008 acquisition of SigmaKalon, a worldwide coatings producer based in Uithoorn, Netherlands, from global private investment firm Bain Capital (the seller). The acquired SigmaKalon business produces architectural, protective and marine and industrial coatings and is a leading coatings supplier in Europe and other key markets across the globe, with an increasing presence in Africa and Asia. The results of these businesses have been included in PPG's consolidated results of operations from January 2, 2008 onward. The 2008 sales of the acquired SigmaKalon businesses were \$3.2 billion.

The total transaction value was approximately \$3.2 billion, consisting of cash paid to the seller of \$1,673 million and debt assumed of \$1,517 million. The cash paid to the seller consisted of 717 million (\$1,056 million) and \$617 million. In 2007, PPG issued \$617 million of commercial paper and borrowed \$1,056 million (717 million) under the 1 billion bridge loan agreement established in December 2007 in anticipation of completing the SigmaKalon acquisition. The proceeds from these borrowings were deposited into escrow in December 2007. Upon closing of the transaction on January 2, 2008, these amounts were released from escrow and paid to the seller. The funds held in escrow were reported as Cash held in escrow in the accompanying consolidated balance sheet as of December 31, 2007.

The following table summarizes the final purchase price allocation for the SigmaKalon acquisition.

(Millions)

Current assets (including cash of \$136)	\$ 1,415
Property, plant, and equipment	635
Customer-related intangibles	685
Trade names	277
Acquired technology	122
Goodwill (non-deductible)	1,353
Other	172
<b>Total assets</b>	<b>4,659</b>
Short-term debt	(1,507)
Current liabilities	(798)
Long-term debt	(10)
Deferred taxes	(389)
Other long-term liabilities	(305)
<b>Net assets</b>	<b>1,650</b>

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In-process research and development	23
<i>Total purchase price</i>	\$ 1,673

Identifiable intangible assets with finite lives are subject to amortization over their estimated useful lives. The identifiable intangible assets acquired in the SigmaKalon transaction will be amortized over an estimated weighted-average amortization period of 11 years. Customer-related intangibles will be amortized over an estimated weighted-average amortization period of 12 years, acquired technology will be amortized over an estimated weighted-average amortization period of seven years and trade names will be amortized over an estimated weighted-average amortization period of 15 years. Estimated future amortization expense related to these identifiable intangible assets is approximately \$75 million in each of the next five years.

Goodwill related to the SigmaKalon acquisition has been recorded by PPG's reportable segments as follows: \$1,045 million by Architectural Coatings - EMEA, \$112 million by Performance Coatings (protective and marine operating segment) and \$196 million by Industrial Coatings (industrial operating segment).

The step up to fair value of acquired inventory as part of the purchase price allocation totaled \$94 million. This amount was included in cost of sales, exclusive of depreciation and amortization, in the accompanying consolidated statement of income for the year ended December 31, 2008 as the related inventory was sold to customers in the first quarter of 2008. The amount allocated to in-process research and development was charged to expense in the first quarter of 2008.

The following information reflects the results of PPG's operations for the year ended December 31, 2007 on a pro forma basis as if the acquisition of SigmaKalon had been completed on January 1, 2007. The unaudited pro forma financial information was prepared to give pro forma effect to events that are 1) directly attributable to the acquisition, 2) factually supportable and 3) expected to have a continuing impact on the combined results. Pro forma adjustments have been made to illustrate the incremental impact on earnings of interest costs on the borrowings to acquire SigmaKalon, amortization expense related to acquired intangible assets of SigmaKalon, and the tax benefit associated with the incremental interest costs and amortization expense. The following unaudited pro forma information does not include certain cost savings or operating synergies (or costs associated with realizing such savings or synergies) that may result from the acquisition.

*(Millions, except per share amounts)*

<i>Condensed Consolidated Pro Forma Information (unaudited)</i>	<i>Year Ended Dec. 31, 2007</i>
Net sales	\$ 15,140
Net income	\$ 795
Earnings per common share	\$ 4.83
Earnings per common share assuming dilution	\$ 4.79

The unaudited pro forma information is provided for illustrative purposes only and does not purport to represent what PPG's consolidated results of operations would have been had the transaction actually occurred as



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of January 1, 2007, and does not purport to project PPG's future consolidated results of operations.

During 2008, the Company made several other acquisitions in the coatings businesses. The following table summarizes the estimated fair value of assets acquired and liabilities assumed as a result of these acquisitions and reflected in the preliminary purchase price allocations and adjustments recorded as of December 31, 2008. No significant adjustments to these preliminary allocations are expected.

<i>(Millions)</i>	
Current assets	\$ 38
Property, plant, and equipment	6
Goodwill	21
Other current assets	38
Other non-current assets	34
<b>Total assets</b>	<b>137</b>
Long-term liabilities	(1)
<b>Net assets</b>	<b>\$ 136</b>

The Company spent \$233 million on several acquisitions in 2007, including purchase price adjustments related to 2006 acquisitions. The 2007 results of the acquired businesses have been included in PPG's consolidated results of operations for the period since the acquisitions were completed. Sales in 2007 increased by approximately \$592 million due to acquisitions and the acquired businesses were accretive to earnings in 2007. The largest of the transactions completed in 2007 were the acquisition of Barloworld Coatings Australia and the acquisition of the architectural and industrial coatings businesses of Renner Sayerlack, S.A.

In the third quarter of 2007, PPG acquired Barloworld Coatings Australia, the architectural paint unit of South African-based Barloworld, Ltd., a multinational industrial brand management company. Barloworld Coatings Australia, a leading Australian architectural paint manufacturer, produces Taubmans, Bristol and White Knight brands of architectural coatings. The acquisition includes a production facility in Villawood, New South Wales. Barloworld Coatings Australia distributes products through approximately 50 company-owned stores, a network of sole-brand distributors and numerous independent dealers. In addition, the company's paints are sold through Bunnings, Australia's largest home-improvement retailer, and exported to New Zealand. Barloworld Coatings Australia sales in 2006 were approximately \$150 million.

During the first quarter of 2007, the Company acquired the architectural and industrial coatings businesses of Renner Sayerlack, S.A., Gravatai, Brazil, to expand its coatings businesses in Latin America. The acquired business operates manufacturing plants in Brazil, Chile, and Uruguay and each plant also serves as a distribution center. The purchase price allocation resulted in an excess of purchase price over the fair value of net

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assets acquired, which has been reflected as an addition to goodwill.

The following table summarizes the estimated fair value of assets acquired and liabilities assumed as a result of the acquisitions completed in 2007 and reflected in the purchase price allocations and adjustments recorded as of December 31, 2007. There were no significant adjustments to these amounts subsequent to December 31, 2007.

<i>(Millions)</i>	
Current assets	\$ 124
Property, plant, and equipment	38
Goodwill	59
Other non-current assets	67
<b><i>Total assets</i></b>	<b>288</b>
Current liabilities	(48)
Long-term liabilities	(7)
<b><i>Net assets</i></b>	<b>\$ 233</b>

During 2006, the Company made several acquisitions, primarily in the coatings and optical products businesses. The total cost of these acquisitions was \$482 million, consisting of \$402 million of cash and the assumption of \$80 million of debt. In addition, certain of these acquisitions also provide for contingent payments and/or escrowed holdbacks that could result in future adjustments to the cost of the acquisitions.

The largest of the transactions completed during 2006 were the acquisition of the performance coatings and finishes businesses of Ameron International Corporation, the acquisitions of Sierracin Corporation and Intercast Europe, S.p.A., and the acquisition of the remaining 50% share of Dongju Industrial Co., Ltd.

The following table summarizes the estimated fair value of assets acquired and liabilities assumed as a result of the acquisitions completed in 2006 and reflected in the purchase price allocations and adjustments recorded as of December 31, 2006. There were no significant adjustments to these amounts subsequent to December 31, 2006.

<i>(Millions)</i>	
Current assets	\$ 296
Property, plant, and equipment	150
Goodwill	158
Other non-current assets	102

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<i>Total assets</i>	706
Short-term debt	(69)
Current liabilities	(153)
Long-term debt	(11)
Long-term liabilities	(71)
<i>Net assets</i>	\$ 402

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**Table of Contents****Notes to the Consolidated Financial Statements****3. Divestiture of Automotive Glass and Services Business**

During the third quarter of 2007, the Company entered into an agreement to sell its automotive glass and services business to Platinum Equity ( Platinum ) for approximately \$500 million. Accordingly, the assets and liabilities of this business were classified as held for sale and the results of operations and cash flows of this business were classified as discontinued operations. In the fourth quarter of 2007, PPG was notified that affiliates of Platinum had filed suit in the Supreme Court of the State of New York, County of New York, alleging that Platinum was not obligated to consummate the agreement. Platinum also terminated the agreement. PPG has sued Platinum and certain of its affiliates for damages, including the \$25 million breakup fee stipulated by the terms of the agreement, based on various alleged actions of the Platinum parties. While the transaction with Platinum was terminated, PPG management remained committed to a sale of the automotive glass and services business and continued to classify its assets and liabilities as held for sale and report its results of operations and cash flows as discontinued operations through the first quarter of 2008.

In July 2008, PPG entered into an agreement with affiliates of Kohlberg & Company, LLC, under which PPG would divest the automotive glass and services business to a new company formed by affiliates of Kohlberg. Under the agreement, PPG would receive a minority interest in the new company, and, as such, the accounting requirements of SFAS No. 144 for classifying the business as assets held for sale and reporting its results of operations and cash flows as discontinued operations had no longer been met. The assets and liabilities of the business have been classified as held for use in the consolidated balance sheet as of December 31, 2007, and the results of operations and cash flows of the business through September 30, 2008 have been classified as continuing operations in the Glass reportable segment in the accompanying consolidated statements of income and cash flows for the three years ended December 31, 2008.

In the second quarter of 2008, as a result of the reclassification of the automotive glass and services business to continuing operations, PPG recorded a one-time, non-cash charge of \$17 million (\$11 million aftertax) to reflect a catch-up of depreciation expense, which was suspended during the period the business was classified as a discontinued operation. Additionally, in the second quarter of 2008, PPG recorded a charge of \$19 million (\$12 million aftertax) for special termination benefits and a pension curtailment loss relating to the impact of benefit changes, including accelerated vesting, negotiated as part of the sale. This charge is included in selling, general and administrative expenses in the accompanying consolidated statement of income for the year ended December 31, 2008.

The transaction with affiliates of Kohlberg was completed on September 30, 2008, with PPG receiving total proceeds of \$315 million, including \$225 million in cash and two 6-year notes totaling \$90 million (\$60 million at 8.5% interest and \$30 million at 10% interest). Both notes, which may be prepaid at any time without penalty, are senior to the equity of the new company. In addition, PPG received a minority interest of approximately 40 percent in the new company, Pittsburgh Glass Works LLC. This transaction resulted in a third quarter 2008 gain of \$15 million pretax, net of transaction costs, and is included in Other income in the accompanying consolidated statement of income for the year ended December 31, 2008. The aftertax gain on the transaction was \$3 million, reflective of tax expense of \$12 million. Tax expense on the gain includes the tax cost of repatriating certain transaction proceeds from Canada to the U.S. and the impact of certain permanent book/tax differences which resulted in a larger taxable gain. PPG will account for its interest in Pittsburgh Glass Works LLC under the equity method of accounting from October 1, 2008 onward. PPG has retained certain liabilities for pension and post-employment benefits earned for service up to September 30, 2008, totaling approximately \$280 million at December 31, 2008. PPG expects to recognize expense of approximately \$15 million related to these obligations in 2009. In addition, PPG is providing certain transition services, including information technology and accounting services, to Pittsburgh Glass Works LLC for a period of up to two years.

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In December 2008, Pittsburgh Glass Works LLC announced its intention to close its Oshawa, Canada manufacturing plant in the first quarter of 2009. Under Canadian pension regulations, this closure will result in a partial wind-up of the pension plans for former employees in Canada that were retained by PPG. This will result in a settlement charge against PPG earnings and a required cash contribution to the plans in amounts that will be determined as of the settlement date, which will occur later in 2009 or in 2010 following a required review of the partial wind-up by the Canadian pension authorities. The amount of the pretax charge and the cash contribution is currently estimated to be in the range of \$20-\$30 million and \$10-\$15 million, respectively. A similar outcome to PPG would result from a future decision by Pittsburgh Glass Works LLC management to close its remaining manufacturing plant in Canada.

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**Table of Contents****Notes to the Consolidated Financial Statements****4. Working Capital Detail**

<i>(Millions)</i>	2008	2007
<b>Receivables</b>		
Customers	\$ 2,640	\$ 2,369
Equity affiliates	22	35
Other	245	169
Allowance for doubtful accounts	(103)	(51)
<b>Total</b>	<b>\$ 2,804</b>	<b>\$ 2,522</b>
<b>Inventories<sup>(1)</sup></b>		
Finished products	\$ 1,045	\$ 937
Work in process	134	131
Raw materials	412	323
Supplies	111	141
<b>Total</b>	<b>\$ 1,702</b>	<b>\$ 1,532</b>
<b>Accounts payable and accrued liabilities</b>		
Trade creditors	\$ 1,402	\$ 1,182
Accrued payroll	378	326
Customer rebates	208	142
Other postretirement and pension benefits	102	90
Income taxes	62	49
Other	664	431
<b>Total</b>	<b>\$ 2,816</b>	<b>\$ 2,220</b>

(1) Inventories valued using the LIFO method of inventory valuation comprised 35% and 50% of total gross inventory values as of December 31, 2008 and 2007, respectively. If the FIFO method of inventory valuation had been used, inventories would have been \$213 million and \$234 million higher as of December 31, 2008 and 2007, respectively. During the year ended December 31, 2008 and 2007, certain inventories accounted for on the LIFO method of accounting were reduced, which resulted in the liquidation of certain quantities carried at costs prevailing in prior years. The net effect on earnings was not material.

**5. Property**

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(Millions)	Useful Lives  (years)	2008	2007
Land and land improvements	5-30	\$ 453	\$ 418
Buildings	20-40	1,416	1,391
Machinery and equipment <sup>(1)</sup>	5-25	5,338	6,164
Other	3-20	604	553
Construction in progress		232	168
<b>Total<sup>(2)</sup></b>		<b>\$ 8,043</b>	<b>\$ 8,694</b>

(1) Factors reducing machinery and equipment in 2008 were the sale of the automotive glass and services business, asset write-offs included in the business restructuring and the impact of currency. These factors were partially offset by increases due to the acquisition of SigmaKalon and 2008 capital spending.

(2) Interest capitalized in 2008, 2007 and 2006 was \$8 million, \$11 million and \$7 million, respectively.

## 6. Investments

(Millions)	2008	2007
Investments in and advances to equity affiliates	\$ 381	\$ 190
Marketable equity securities		
Trading (See Note 14)	47	80
Available for sale	4	9
Other	77	91
<b>Total</b>	<b>\$ 509</b>	<b>\$ 370</b>

The Company's investments in and advances to equity affiliates includes its approximately 40 percent interest in Pittsburgh Glass Works LLC, which had a carrying value, including \$90 million in notes receivable, of \$183 million at December 31, 2008 (see Note 3, "Divestiture of Automotive Glass and Services Business"). The Company's investments in and advances to equity affiliates also include 50% ownership interests in a number of joint ventures that manufacture and sell coatings, glass and chemicals products, the most significant of which produce fiber glass products and are located in Asia.

In addition, PPG has a fifty-percent ownership interest in RS Cogen, L.L.C., which toll produces electricity and steam primarily for PPG and its joint venture partner. The joint venture was formed with a wholly-owned subsidiary of Entergy Corporation in 2000 for the construction and operation of a \$300 million process steam, natural gas-fired cogeneration facility in Lake Charles, La., the majority of which was financed by a syndicate of banks. PPG's future commitment to purchase electricity and steam from the joint venture approximates \$25 million per year subject to contractually defined inflation adjustments for the next 15 years. The purchases for the years ended December 31, 2008, 2007 and 2006 were \$24 million, \$25 million and \$24 million, respectively.

Summarized financial information of PPG's equity affiliates on a 100 percent basis, in the aggregate, is as follows:

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<i>(Millions)</i>	2008	2007	
Working capital	\$ 284	\$ 60	
Property, net	958	818	
Short-term debt	(133)	(75)	
Long-term debt	(565)	(392)	
Other, net	229	23	
<b>Net assets</b>	<b>\$ 773</b>	<b>\$ 434</b>	
<i>(Millions)</i>	2008	2007	2006
Revenues	\$ 885	\$ 674	\$ 721
Net earnings	\$ 14	\$ 66	\$ 66

PPG's share of undistributed net earnings of equity affiliates was \$60 million and \$75 million as of December 31, 2008 and 2007, respectively. Dividends received from equity affiliates were \$18 million, \$21 million and \$16 million in 2008, 2007 and 2006, respectively.

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As of December 31, 2008 and 2007, there were unrealized pretax losses of \$1 million and unrealized pretax gains of \$4 million, respectively, recorded in Accumulated other comprehensive loss in the accompanying consolidated balance sheet related to marketable equity securities available for sale. During 2008, PPG sold certain of these investments resulting in recognition of pretax gains of \$0.1 million and proceeds of \$1 million. During 2007, PPG sold certain of these investments resulting in recognition of a pretax gain of \$2 million and proceeds of \$8 million.

**7. Goodwill and Other Identifiable Intangible Assets**

The change in the carrying amount of goodwill attributable to each reportable business segment for the years ended December 31, 2008 and 2007 was as follows:

<i>(Millions)</i>	<i>Performance Coatings</i>	<i>Industrial Coatings</i>	<i>Architectural Coatings EMEA</i>	<i>Optical and Specialty Materials</i>	<i>Glass</i>	<i>Total</i>
Balance, Jan. 1, 2007	\$ 943	\$ 285		\$ 55	\$ 83	\$ 1,366
Goodwill from acquisitions	55	7		(3)		59
Currency translation	53	18		5	6	82
Balance, Dec. 31, 2007	\$ 1,051	\$ 310		\$ 57	\$ 89	\$ 1,507
Goodwill from acquisitions	122	209	1,047	(4)		1,374
Impact of divestiture (See Note 3)					(29)	(29)
Currency translation	(95)	(37)	(71)	(3)	(5)	(211)
<b>Balance, Dec. 31, 2008</b>	<b>\$ 1,078</b>	<b>\$ 482</b>	<b>\$ 976</b>	<b>\$ 50</b>	<b>\$ 55</b>	<b>\$ 2,641</b>

The carrying amount of acquired trademarks with indefinite lives as of December 31, 2008 and 2007 totaled \$339 million and \$144 million, respectively. The amount at December 31, 2008 includes \$195 million related to the SigmaKalon acquisition.

The Company's identifiable intangible assets with finite lives are being amortized over their estimated useful lives and are detailed below.

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	Dec. 31, 2008			Dec. 31, 2007		
	<i>Gross</i>		<i>Net</i>	<i>Gross</i>		<i>Net</i>
	<i>Carrying</i>	<i>Accumulated</i>		<i>Carrying</i>	<i>Accumulated</i>	
<i>(Millions)</i>	<i>Amount</i>	<i>Amortization</i>		<i>Amount</i>	<i>Amortization</i>	
Acquired technology	\$ 520	\$ (201)	\$ 319	\$ 392	\$ (164)	\$ 228
Customer-related intangibles	927	(195)	732	334	(131)	203
Tradenames	97	(23)	74	55	(24)	31
Other	26	(18)	8	25	(17)	8
<b>Balance</b>	<b>\$ 1,570</b>	<b>\$ (437)</b>	<b>\$ 1,133</b>	<b>\$ 806</b>	<b>\$ (336)</b>	<b>\$ 470</b>

Most of the increase in gross carrying amount of identifiable intangible assets from December 31, 2007 to December 31, 2008 is the result of the SigmaKalon acquisition offset somewhat by the impact of foreign currency changes.

Aggregate amortization expense was \$135 million, \$58 million and \$43 million in 2008, 2007 and 2006, respectively. The estimated future amortization expense of identifiable intangible assets during each of the next five years is approximately \$135 million.

## 8. Business Restructuring

During the third quarter of 2008, the Company finalized a restructuring plan that is part of implementing PPG's global transformation strategy and the integration of its acquisition of SigmaKalon, completed January 2, 2008. As part of the restructuring, PPG will close several coatings manufacturing facilities, including those in Clarkson, Ont., Canada, and Geldermalsen, Netherlands, which are anticipated to close in the second and third quarters of 2009, respectively. The consultation with the applicable works council at Geldermalsen has been completed. Other staffing reductions will occur in PPG's coatings businesses in North America and Europe. PPG closed its Owen Sound, Ont., Canada, glass manufacturing facility and idled one float glass production line at its Mt. Zion, Ill., facility in the fourth quarter of 2008. Other actions included writing off idle production assets in PPG's fiber glass and chemicals businesses.

In the third quarter of 2008, the Company recorded a charge of \$163 million for business restructuring, including severance and other costs of \$73 million, pension curtailments of \$21 million and asset write-offs of \$69 million. Severance and other restructuring costs related to the SigmaKalon acquisition totaling \$33 million have been recorded as part of the purchase price allocation, effectively increasing goodwill. The restructuring reserve recorded in 2008 totaled \$196 million. It is expected that these restructuring actions will be substantially completed by the fourth quarter of 2009.

The Company also expects to incur additional costs of approximately \$15 million directly associated with the restructuring actions for demolition, dismantling, relocation and training that will be charged to expense as incurred. The Company expects to incur these additional expenses primarily in the second half of 2009.

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The following table summarizes the details through December 31, 2008:

<i>(Millions, except no. of employees)</i>	<i>Severance and Other Costs</i>	<i>Pension Curtailment Losses</i>	<i>Asset Write-offs</i>	<i>Total Reserve</i>	<i>Employees Impacted</i>
Performance Coatings	\$ 30	\$	\$ 15	\$ 45	270
Industrial Coatings	45	9	10	64	577
Architectural Coatings - EMEA	19			19	215
Commodity Chemicals			13	13	10
Glass	12	12	31	55	285
<b>Total</b>	<b>\$ 106</b>	<b>\$ 21</b>	<b>\$ 69</b>	<b>\$ 196</b>	<b>1,357</b>
Activity to date	(12)	(21)	(69)	(102)	(249)
Currency impact	(6)			(6)	
<i>Balance as of Dec. 31, 2008</i>	<i>\$ 88</i>	<i>\$</i>	<i>\$</i>	<i>\$ 88</i>	<i>1,108</i>

During 2006, the Company finalized plans for certain actions to reduce its workforce and consolidate facilities and recorded a charge of \$37 million for restructuring and other related activities, including severance costs of \$35 million and loss on asset impairment of \$2 million. All actions related to the 2006 restructuring charge were substantially completed by the end of the second quarter of 2007.

**9. Debt and Bank Credit Agreements and Leases**

<i>(Millions)</i>	2008	2007
7.05% notes, due 2009 <sup>(1)</sup>	\$ 116	\$ 116
6 7/8% notes, due 2012 <sup>(1)</sup>	71	71
5.75% notes, due 2013	600	
3 7/8% notes, due 2015 ( 300)	418	436
7 3/8% notes, due 2016	146	146
6 7/8% notes, due 2017	74	74
6.65% notes, due 2018	700	
7.4% notes, due 2019	198	198
9% non-callable debentures, due 2021	149	149
7.70% notes, due 2038	249	
	368	

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650 revolving credit facility, weighted average 2.9% as of December 31, 2008 <sup>(2)</sup>		
Impact of derivatives on debt <sup>(1)</sup>	15	9
Various other non-U.S. debt, weighted average 8.0% as of December 31, 2008	18	2
Capital lease obligations	6	1
<b>Total</b>	<b>3,128</b>	<b>1,202</b>
Less payments due within one year	119	1
<b>Long-term debt</b>	<b>\$ 3,009</b>	<b>\$ 1,201</b>

- (1) PPG entered into several interest rate swaps which have the effect of converting \$125 million and \$275 million as of December 31, 2008 and 2007, respectively, of these fixed rate notes to variable rates, based on the three-month London Interbank Offered Rate (LIBOR). The weighted average effective interest rate for these borrowings, including the effects of the outstanding swaps was 5.4% and 8.0% for the years ended December 31, 2008 and 2007, respectively. Refer to Notes 1 and 11 for additional information.
- (2) This borrowing is effectively due in 2010 as PPG has the intent and ability to rollover this amount. PPG has therefore classified this amount as long-term debt.

Aggregate maturities of long-term debt during the next five years are (in millions) \$119 in 2009, \$378 in 2010, \$1 in 2011, \$76 in 2012 and \$601 in 2013.

The Company has in place a \$1 billion revolving credit facility that expires in 2011. The annual facility fee payable on the committed amount is 7 basis points. This facility is available for general corporate purposes and also to support PPG's commercial paper programs in the U.S. and Europe. As of December 31, 2008, no amounts were outstanding under this facility; however, borrowing availability under the facility was reduced by the outstanding commercial paper balance of \$222 million at December 31, 2008.

PPG's non-U.S. operations have uncommitted lines of credit totaling \$684 million of which \$312 million was used as of December 31, 2008. These uncommitted lines of credit are subject to cancellation at any time and are generally not subject to any commitment fees.

In order to provide financing for the SigmaKalon acquisition, in December 2007, PPG and certain of its subsidiaries entered into a three year \$650 million revolving credit facility with several banks and financial institutions and Societe Generale, as facility agent for the lenders. The facility has an annual fee of 7 basis points. In addition, PPG and a subsidiary entered into two bridge loan agreements, one in the amount of \$1 billion with multiple lenders and Credit Suisse as administrative agent for those lenders and the other in the amount of \$500 million with Credit Suisse as the lender. Each bridge loan had a term of 364 days.

In December 2007, PPG issued \$617 million of commercial paper and borrowed \$1,056 million (\$717 million) under the \$1 billion bridge loan agreement. The proceeds from these borrowings were deposited into escrow in December 2007. Upon closing of the acquisition on January 2, 2008, these amounts were released from escrow and paid to the seller. Also, in January 2008, PPG borrowed \$1,143 million, representing the remaining \$417 million (\$283 million) available under the \$1 billion bridge loan agreement and \$726 million (\$493 million) under the \$650 million revolving credit facility. The proceeds from these borrowings and cash on hand of \$116 million were used to repay \$1,259 million of the \$1,517 million SigmaKalon debt assumed in the acquisition. No amounts were borrowed under the \$500 million bridge loan agreement, and it has expired. As of December 31, 2008, \$568 million (\$406 million) has been borrowed under the \$650 million revolving credit facility.





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On March 18, 2008, PPG completed a public offering of \$600 million in aggregate principal amount of its 5.75% Notes due 2013 (the 2013 Notes), \$700 million in aggregate principal amount of its 6.65% Notes due 2018 (the 2018 Notes) and \$250 million in aggregate principal amount of its 7.70% Notes due 2038 (the 2038 Notes) and, together with the 2013 Notes and the 2018 Notes, the Notes. The Notes were offered by the Company pursuant to its existing shelf registration. The proceeds of this offering of \$1,538 million (net of discount and issuance costs) and additional borrowings of \$195 million under the \$650 million revolving credit facility were used to repay existing debt, including certain short-term debt and the amounts outstanding under the \$1 billion bridge loan. No further amounts can be borrowed under the \$1 billion bridge loan. The discount and issuance costs related to the Notes, which totaled \$12 million, will be amortized to interest expense over the respective lives of the Notes.

Short-term debt outstanding as of December 31, 2008 and 2007, was as follows:

<i>(Millions)</i>	2008	2007
1 billion bridge loan agreement, 5.2%	\$	\$ 1,047
U.S. commercial paper, 5.3% as of Dec. 31, 2008	222	617
650 million revolving credit facility, weighted average 2.9% as of Dec. 31, 2008 <sup>(1)</sup>	200	
Other, weighted average 4.0% as of Dec. 31, 2008	362	154
<b>Total</b>	<b>\$ 784</b>	<b>\$ 1,818</b>

*(1) Borrowings under this facility have a term of 30 days and can be rolled over monthly until the facility expires in 2010.*

PPG is in compliance with the restrictive covenants under its various credit agreements, loan agreements and indentures. The Company's revolving credit agreements include a financial ratio covenant. The covenant requires that the amount of total indebtedness not exceed 60% of the Company's total capitalization excluding the portion of accumulated other comprehensive income (loss) related to pensions and other postretirement benefit adjustments. As of December 31, 2008, total indebtedness was 45% of the Company's total capitalization excluding the portion of accumulated other comprehensive income (loss) related to pensions and other postretirement benefit adjustments. Additionally, substantially all of the Company's debt agreements contain customary cross-default provisions. Those provisions generally provide that a default on a debt service payment of \$10 million or more for longer than the grace period provided (usually 10 days) under one agreement may result in an event of default under other agreements. None of the Company's primary debt obligations are secured or guaranteed by the Company's affiliates.

Interest payments in 2008, 2007 and 2006 totaled \$228 million, \$102 million and \$90 million, respectively.

Rental expense for operating leases was \$267 million, \$188 million and \$161 million in 2008, 2007 and 2006, respectively. The primary leased assets include paint stores, transportation equipment, warehouses and other distribution facilities, and office space, including the Company's corporate headquarters located in Pittsburgh, Pa. Minimum lease commitments for operating leases that have initial or remaining lease terms in excess of one year as of December 31, 2008, are (in millions) \$126 in 2009, \$107 in 2010, \$82 in 2011, \$65 in 2012, \$51 in 2013 and \$202

thereafter.

The Company had outstanding letters of credit of \$82 million as of December 31, 2008. The letters of credit secure the Company's performance to third parties under certain self-insurance programs and other commitments made in the ordinary course of business. As of December 31, 2008 and 2007 guarantees outstanding were \$70 million. The guarantees relate primarily to debt of certain entities in which PPG has an ownership interest and selected customers of certain of the Company's businesses. A portion of such debt is secured by the assets of the related entities. The carrying values of these guarantees were \$9 million and \$3 million as of December 31, 2008 and 2007, respectively, and the fair values were \$40 million and \$17 million, as of December 31, 2008 and 2007, respectively. The Company does not believe any loss related to these letters of credit or guarantees is likely.

#### **10. Financial Instruments, Excluding Derivative Financial Instruments**

Included in PPG's financial instrument portfolio are cash and cash equivalents, cash held in escrow, marketable equity securities, company-owned life insurance and short- and long-term debt instruments. The fair values of the financial instruments approximated their carrying values, in the aggregate, except for long-term debt.

Long-term debt (excluding capital lease obligations), had carrying and fair values totaling \$3,122 million and \$3,035 million, respectively, as of December 31, 2008. The corresponding amounts as of December 31, 2007, were \$1,201 million and \$1,226 million, respectively. The fair values of the debt instruments were based on discounted cash flows and interest rates currently available to the Company for instruments of the same remaining maturities.

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**Table of Contents****Notes to the Consolidated Financial Statements****11. Derivative Financial Instruments and Hedge Activities**

PPG's policies do not permit speculative use of derivative financial instruments. PPG uses derivative instruments to manage its exposure to fluctuating natural gas prices through the use of natural gas swap contracts. PPG also uses forward currency and option contracts as hedges against its exposure to variability in exchange rates on short-term intercompany borrowings, unrecognized firm sales commitments, and cash flows denominated in foreign currencies. PPG uses foreign denominated debt and cross currency swap contracts to hedge investments in foreign operations. Interest rate swaps are used to manage the Company's exposure to changing interest rates. PPG also uses an equity forward arrangement to hedge the Company's exposure to changes in the fair value of PPG stock that is to be contributed to the asbestos settlement trust as discussed in Note 15, Commitments and Contingent Liabilities.

PPG enters into derivative financial instruments with high credit quality counterparties and diversifies its positions among such counterparties in order to reduce its exposure to credit losses. The Company has not realized any credit losses on derivatives during the three-year period ended December 31, 2008.

PPG centrally manages its foreign currency transaction risk to minimize the volatility in cash flows caused by currency fluctuations. Decisions on whether to use derivative financial instruments to hedge the net transaction exposures, related to all regions of the world, are made based on the amount of those exposures, by currency, and, in certain situations, an assessment of the near-term outlook for certain currencies. This net hedging strategy does not qualify for hedge accounting under the provisions of SFAS No. 133; therefore, the change in the fair value of these instruments is recorded in Other charges in the accompanying consolidated statement of income in the period of change. The amounts recorded in earnings related to this hedging activity for the years ended December 31, 2008, 2007 and 2006 were a gain of \$5 million, a loss of \$2 million and a loss of \$1 million, respectively. The fair value of these contracts as of December 31, 2008 and 2007 were assets of \$1 million and \$0.4 million, respectively.

In December 2007, PPG borrowed 717 million under the 1 billion bridge loan agreement established in December 2007 to finance a portion of the SigmaKalon acquisition. The Euro proceeds were converted to \$1,056 million and deposited into escrow until the closing of the transaction on January 2, 2008. On the same day the \$1,056 million was placed into escrow, the Company entered into a foreign currency forward contract to convert the U.S. dollars back to 717 million on January 2, 2008. A loss on the forward contract was recognized as of December 31, 2007 of \$9 million, which was substantially offset by an \$8 million gain on the Euro borrowing over the same time period.

Concurrent with the public offering of the Company's Notes, on March 18, 2008, PPG entered into ten U.S. dollar to euro cross currency swap contracts with a total notional amount of \$1.3 billion, of which \$600 million were to settle on March 15, 2013 and \$700 million were to settle on March 15, 2018. PPG paid the counterparties to the contracts a total of \$1.3 billion and received euros, which were used to repay most of the 1 billion bridge loan, which the Company employed to finance the acquisition of SigmaKalon. During the fourth quarter of 2008, PPG converted \$1.16 billion of these contracts to cash at their fair value of \$208 million and replaced them with new cross currency swap contracts. During the term of these contracts, PPG will receive semiannual interest payments in March and September of each year based on U.S. dollar, long-term fixed loan rates, and PPG will make annual interest payments in September of each year to the counterparties based on euro, long-term fixed loan rates. On settlement of all of the outstanding contracts, PPG will receive \$1.3 billion U.S. dollars and pay euros to the counterparties to the contracts of which \$600 million will settle on March 15, 2013 and \$700 million will settle on March 15, 2018. The Company has designated these swaps as hedges of its net investment in SigmaKalon and, as a result, mark to fair value adjustments of the swaps have been and will be recorded as a component of other comprehensive income and the cash flow impact of these swaps has been and will be classified as investing activities in the consolidated statement of cash flows. As of December 31, 2008, the aggregate fair value of these swaps was a net liability of \$130 million.

The 300 million Euro Notes due in 2015 are designated as a hedge of a portion of PPG's net investment in the Company's European operations. As a result, the change in book value from adjusting these foreign denominated notes to current spot rates at each balance sheet date is deferred in accumulated other comprehensive (loss) income. As of December 31, 2008 and 2007, the amount recorded in accumulated other comprehensive (loss) income from this hedge of the Company's net investment was an unrealized loss of \$57 million and \$76 million, respectively.

PPG designates forward currency contracts as hedges against the Company's exposure to variability in exchange rates on short-term intercompany borrowings denominated in foreign currencies. To the extent effective, changes in the fair value of these instruments are deferred in accumulated other comprehensive (loss) income and subsequently reclassified to Other charges in the accompanying consolidated statement of income as foreign exchange gains and losses are recognized on the

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## Notes to the Consolidated Financial Statements

related intercompany borrowings. The portion of the change in fair value considered to be ineffective is recognized in *Other charges* in the accompanying consolidated statement of income. The amounts recorded in earnings for the years ended December 31, 2008, 2007 and 2006, were losses of \$5 million, \$9 million and \$5 million, respectively. The fair value of these contracts was a net asset of \$2 million and \$5 million as of December 31, 2008 and 2007, respectively.

PPG designates forward currency contracts as hedges against the Company's exposure to future changes in fair value related to certain firm sales commitments denominated in foreign currencies. These contracts are designated as fair value hedges. As such, these contracts are carried at fair value. Changes in the fair value of these contracts and that of the related firm sales commitments are recorded in net sales. The portion of the change in fair value of the hedge contracts that was considered to be ineffective for the year ended December 31, 2008 was \$4 million of expense. Prior to 2008, PPG did not hedge firm sales commitments denominated in foreign currencies. The fair value of these contracts was a liability of \$18 million as of December 31, 2008.

The Company manages its interest rate risk by balancing its exposure to fixed and variable rates while attempting to minimize its interest costs. Generally, the Company maintains variable interest rate debt at a level of approximately 25% to 50% of total borrowings. PPG principally manages its fixed and variable interest rate risk by retiring and issuing debt from time to time and through the use of interest rate swaps. As of December 31, 2008 and 2007, these swaps converted \$125 million and \$275 million, respectively, of fixed rate debt to variable rate debt. These swaps are designated as fair value hedges. As such, the swaps are carried at fair value. Changes in the fair value of these swaps and that of the related debt are recorded in *Interest expense* in the accompanying consolidated statement of income. The fair value of these contracts was an asset of \$3 million and \$6 million as of December 31, 2008 and 2007, respectively.

The Company uses derivative instruments to manage its exposure to fluctuating natural gas prices through the use of natural gas swap contracts. These instruments mature over the next 37 months. To the extent that these instruments are effective in hedging PPG's exposure to price changes, changes in the fair values of the hedge contracts are deferred in accumulated other comprehensive (loss) income and reclassified to cost of sales as the natural gas is purchased. The amount of ineffectiveness, which is reported in *Cost of sales, exclusive of depreciation and amortization* in the accompanying consolidated statement of income for the years ended December 31, 2008, 2007, and 2006, was \$0.3 million of expense, \$0.4 million of income and \$0.2 million of income, respectively. The fair value of these contracts was a liability of \$85 million and \$8 million as of December 31, 2008 and 2007, respectively. As of December 31, 2008 an aftertax loss of \$52 million was deferred in accumulated other comprehensive (loss) income, of which \$38 million related to natural gas hedge contracts that mature within the next 12 months.

In November 2002, PPG entered into a one-year renewable equity forward arrangement with a bank in order to mitigate the impact of changes in the fair value of PPG stock that is to be contributed to the asbestos settlement trust as discussed in Note 15, *Commitments and Contingent Liabilities*. This instrument, which has been renewed, is recorded at fair value as an asset or liability and changes in the fair value of this instrument are reflected in *Asbestos settlement net* in the accompanying consolidated statement of income. As of December 31, 2008 and 2007, PPG had recorded a current liability of \$6 million and a current asset of \$18 million, respectively, and recognized a loss of \$24 million for the year ended December 31, 2008, income of \$4 million for the year ended December 31, 2007 and income of \$4 million for the year ended December 31, 2006.

In accordance with the terms of this instrument the bank had purchased 504,900 shares of PPG stock on the open market at a cost of \$24 million through December 31, 2002, and during the first quarter of 2003 the bank purchased an additional 400,000 shares at a cost of \$19 million. In December 2008, the bank purchased 483,989 shares at a cost of \$19 million. The equity forward arrangement as of December 31, 2008 mitigates the full impact of changes in fair value of PPG stock that is to be contributed to the asbestos settlement trust. The total principal amount for these

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shares is \$62 million. PPG will pay to the bank interest based on the principal amount and the bank will pay to PPG an amount equal to the dividends paid on these shares during the period this instrument is outstanding. The difference between the principal amount, and any amounts related to unpaid interest or dividends, and the current market price for these shares will represent the fair value of the instrument as well as the amount that PPG would pay or receive if the bank chose to net settle the instrument. Alternatively, the bank may, at its option, require PPG to purchase the shares covered by the arrangement at the market price on the date of settlement.