CABOT CORP
Form 10-K
November 25, 2015

UNITED STATES SECURITIES AND EXCHANGE COMMISSION

Washington, D.C. 20549

Form 10-K

x ANNUAL REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934
For the fiscal year ended September 30, 2015

or

o TRANSITION REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934
For the transition period from to

Commission file number 1-5667

Cabot Corporation

(Exact name of Registrant as specified in its charter)

Delaware	04-2271897
(State or other jurisdiction of incorporation or organization)	(I.R.S. Employer Identification No.)
Two Seaport Lane, Suite 1300	
Boston, Massachusetts	02210
(Address of Principal Executive Offices)	(Zip Code)

(617) 345-0100

(Registrant's telephone number, including area code)

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

Title of Each Class	Name of Each Exchange on Which Registered
Common stock, $1.00 par value per share	New York Stock Exchange

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

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 o   No x

Indicate by check mark whether the Registrant (1) has filed all reports required to be filed by Section 13 or 15(d) of the Securities Exchange Act of 1934 during the preceding 12 months (or for such shorter period that the Registrant was required to file such reports), and (2) has been subject to such filing requirements for the past 90 days.   Yes x   No o

Indicate by check mark whether the registrant has submitted electronically and posted on its corporate Web site, if any, every Interactive Data File required to be submitted and posted pursuant to Rule 405 of Regulation S-T (§232.405 of this chapter) during the preceding 12 months (or for such shorter period that the registrant was required to submit and post such files).   Yes x   No o

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 the 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.   x

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 definitions of "large accelerated filer," "accelerated filer" and "smaller reporting company" in Rule 12b-2 of the Exchange Act.

Large accelerated filer	x	Accelerated filer	o
Non-accelerated filer	o (Do not check if a smaller reporting company)	Smaller reporting company	o

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

As of the last business day of the Registrant's most recently completed second fiscal quarter (March 31, 2015), the aggregate market value of the Registrant's common stock held by non-affiliates was $2,832,098,400. As of November 19, 2015, there were 62,566,968 shares of the Registrant's common stock outstanding.

DOCUMENTS INCORPORATED BY REFERENCE

Portions of the Registrant's definitive proxy statement for its 2016 Annual Meeting of Shareholders are incorporated by reference into Part III of this annual report on Form 10-K.

TABLE OF CONTENTS

Information Relating to Forward-Looking Statements

This annual report on Form 10-K contains “forward-looking statements” under the Federal securities laws. These forward-looking statements include statements relating to our expectations regarding our future business performance and overall prospects; demand for our products; the cost savings we expect to achieve from our restructuring plans; when we expect to cease manufacturing operations at our carbon black plant in Merak, Indonesia; the amount expected to be received from the sale of land by our carbon black joint venture in Malaysia; the sufficiency of our cash on hand, cash provided from operations and cash available under our credit and commercial paper facilities to fund our cash requirements; anticipated capital spending, including environmental-related capital expenditures; cash requirements and uses of available cash, including future cash outlays associated with long-term contractual obligations, restructurings, contributions to employee benefit plans, environmental remediation costs and future respirator liabilities; exposure to interest rate and foreign exchange risk; future benefit plan payments we expect to make; future amortization expenses; our expected tax rate for fiscal 2016; our ability to recover deferred tax assets; and the possible outcome of legal and environmental proceedings. From time to time, we also provide forward-looking statements in other materials we release to the public and in oral statements made by authorized officers.

Forward-looking statements are based on our current expectations, assumptions, estimates and projections about Cabot’s businesses and strategies, market trends and conditions, economic conditions and other factors. These statements are not guarantees of future performance and are subject to risks, uncertainties, potentially inaccurate assumptions, and other factors, some of which are beyond our control and difficult to predict. If known or unknown risks materialize, or should underlying assumptions prove inaccurate, our actual results could differ materially from past results and from those expressed in the forward-looking statements. Important factors that could cause our actual results to differ materially from those expressed in our forward-looking statements are described in Item 1A in this report.

We undertake no obligation to publicly update forward-looking statements, whether as a result of new information, future events or otherwise, except as required by law. Investors are advised, however, to consult any further disclosures we make on related subjects in our 10-Q and 8-K reports filed with the Securities and Exchange Commission (the “SEC”).

PART I

Item 1. Business

General

Cabot is a global specialty chemicals and performance materials company headquartered in Boston, Massachusetts. Our principal products are rubber and specialty grade carbon blacks, fumed metal oxides, activated carbon, inkjet colorants, aerogel, and cesium formate drilling fluids. Cabot and its affiliates have manufacturing facilities and operations in the United States and over 20 other countries. Cabot’s business was founded in 1882 and incorporated in the State of Delaware in 1960. The terms “Cabot”, “Company”, “we”, and “our” as used in this report refer to Cabot Corporation and its consolidated subsidiaries.

Our strategy is to deliver earnings growth through leadership in performance materials. We intend to achieve this goal by focusing on margin improvement, capacity expansion and emerging market growth, developing new products and businesses and actively managing our portfolio of businesses.

Our products are generally based on technical expertise and innovation in one or more of our three core competencies: making and handling very fine particles; modifying the surfaces of very fine particles to alter their functionality; and designing particles to impart specific properties to a composite. We focus on creating particles with the composition, morphology, surface functionalities and formulations to support our customers' existing and emerging applications.

During fiscal 2015, we realigned our global business segments to improve efficiency and resource prioritization, as well as to enable stronger customer focus. Our four business segments are: Reinforcement Materials; Performance Chemicals; Purification Solutions; and Specialty Fluids. The business segments are discussed in more detail later in this section. Financial information about our business segments appears in Management's Discussion and Analysis of Financial Condition and Results of Operations in Item 7 below ("MD&A") and in Note V of the Notes to our Consolidated Financial Statements in Item 8 below ("Note V").

Our internet address is www.cabotcorp.com. We make available free of charge on or through our internet website our annual reports on Form 10-K, quarterly reports on Form 10-Q, current reports on Form 8-K, and amendments to those reports filed or furnished pursuant to Section 13(a) or 15(d) of the Securities Exchange Act of 1934 as soon as reasonably practicable after electronically filing such material with, or furnishing it to, the SEC. Information appearing on our website is not a part of, and is not incorporated in, this Annual Report on Form 10-K.

Reinforcement Materials

Products

Carbon black is a form of elemental carbon that is manufactured in a highly controlled process to produce particles and aggregates of varied structure and surface chemistry, resulting in many different performance characteristics for a wide variety of applications. Rubber grade carbon blacks are used to enhance the physical properties of the systems and applications in which they are incorporated.

Our rubber blacks products are used in tires and industrial products. Rubber blacks have traditionally been used in the tire industry as a rubber reinforcing agent to increase tread durability and are also used as a performance additive to reduce rolling resistance and improve traction. In industrial products such as hoses, belts, extruded profiles and molded goods, rubber blacks are used to improve the physical performance of the product, including the product’s physical strength, fluid resistance, conductivity and resistivity.

Sales and Customers

Sales of rubber blacks products are made by Cabot employees and through distributors and sales representatives. Sales to three major tire customers represent a material portion of Reinforcement Materials’ total net sales and operating revenues. The loss of any of these customers, or a significant reduction in volumes sold to them, could have a material adverse effect on the Segment.

Under appropriate circumstances, we have entered into supply contracts with certain customers, the typical duration of which is one year. Many of these contracts provide for sales price adjustments to account for changes in relevant feedstock indices and, in some cases, changes in other relevant costs (such as the cost of natural gas). In fiscal 2015, approximately half of our rubber blacks volume was sold under these supply agreements. The majority of the volumes sold under these agreements are sold to customers in North America and Europe.

In addition to sales of our rubber blacks products, we have licensed our patented elastomer composites manufacturing process to Manufacture Francaise des Pneumatiques Michelin for their exclusive use in tire applications. This liquid phase process is used to manufacture compounds of carbon black and natural latex rubber that improve abrasion/wear resistance, reduce fatigue and reduce rolling resistance compared to carbon black/natural rubber compounds made by conventional dry mix methods. As consideration, we receive quarterly royalty payments extending through fiscal 2022.

Much of the rubber blacks we sell is used in tires and automotive products and, therefore, our financial results may be affected by the cyclical nature of the automotive industry. However, a large portion of the market for our products is in replacement tires that historically have been less subject to automotive industry cycles.

Competition

We are one of the leading manufacturers of carbon black in the world. We compete in the manufacture of carbon black primarily with two companies with a global presence and numerous other companies that operate regionally. Competition for products within Reinforcement Materials is based on product performance, quality, reliability, price, service, technical innovation, and logistics. We believe our product differentiation, technological leadership, global manufacturing presence, operations and logistics excellence and customer service provide us with a competitive advantage.

Raw Materials

The principal raw material used in the manufacture of carbon black is a portion of the residual heavy oils derived from petroleum refining operations, the distillation of coal tars, and the production of ethylene throughout the world. Natural gas is also used in the production of carbon black. Raw material costs generally are influenced by the availability of various types of carbon black feedstock and natural gas, supply and demand of such raw materials, and related transportation costs. Importantly, movements in the market price for crude oil typically affect carbon black feedstock costs.

Operations

We own, or have a controlling interest in, and operate plants that produce rubber blacks in Argentina, Brazil, Canada, China, Colombia, the Czech Republic, France, Indonesia, Italy, Japan, Mexico, The Netherlands and the United States. Our equity affiliate operates a carbon black plant in Venezuela.

The following table shows our ownership interest as of September 30, 2015 in rubber blacks operations in which we own less than 100% of the common equity:

Location	Percentage Interest
Shanghai, China	70% (consolidated subsidiary)
Tianjin, China	70% (consolidated subsidiary)
Xingtai City, China	60% (consolidated subsidiary)
Valasske Mezirici (Valmez), Czech Republic	52% (consolidated subsidiary)
Cilegon and Merak, Indonesia [1]	97% (consolidated subsidiary)
Valencia, Venezuela	49% (equity affiliate)

(1) The Company intends to cease its manufacturing operations in Merak in January 2016.

Performance Chemicals

Performance Chemicals is comprised of two businesses: (i) our Specialty Carbons and Formulations business, which manufactures and sells specialty grades of carbon black, specialty compounds and inkjet colorants, and (ii) our Metal Oxides business, which manufactures and sells fumed silica, fumed alumina and dispersions thereof and aerogel. In Performance Chemicals, we design, manufacture and sell materials that deliver performance in a broad range of customer applications across the automotive, construction and infrastructure, inkjet printing, electronics, and consumer products sectors.

Products

Specialty Carbons and Formulations Business

Carbon black is a form of elemental carbon that is manufactured in a highly controlled process to produce particles and aggregates of varied structure and surface chemistry, resulting in many different performance characteristics for a wide variety of applications.

Our specialty grades of carbon black are used to impart color, provide rheology control, enhance conductivity and static charge control, provide UV protection, enhance mechanical properties, and provide formulation flexibility through surface treatment. These specialty carbon products are used in a wide variety of applications, such as inks, coatings, cables, pipes, toners and electronics.

Our thermoplastic concentrates and compounds, which we refer to as “specialty compounds”, are derived from our specialty grades of carbon black mixed with polymers and other additives. These products are generally used by plastics formulators in thermoplastic polymer applications, such as cable jacketings, films, fibers, moldings, pipes and sheets, as they are generally easier to handle, mix and disperse for these applications than carbon black alone. In addition, our electrically conductive compound products generally are used to reduce the risk of damage from electrostatic discharge in plastics applications.

Our inkjet colorants are high-quality pigment-based black and color dispersions based on our patented carbon black surface modification technology. The dispersions are used in aqueous inkjet inks to impart color, sharp print characteristics and durability, while maintaining high printhead reliability. These products are used in various inkjet printing applications, including commercial printing, small office/home office and corporate office, and niche applications that require a high level of dispersibility and colloidal stability. Our inkjet inks, which utilize our pigment-based colorant dispersions, are used in the emerging commercial printing segment for digital print.

Metal Oxides Business

Fumed silica is an ultra-fine, high-purity particle used as a reinforcing, thickening, abrasive, thixotropic, suspending or anti-caking agent in a wide variety of products for the automotive, construction, microelectronics, and consumer products industries. These products include adhesives, sealants, cosmetics, inks, toners, silicone rubber, coatings, polishing slurries and pharmaceuticals. Fumed alumina, also an ultra-fine, high-purity particle, is used as an abrasive, absorbent or barrier agent in a variety of products, such as inkjet media, lighting, coatings, cosmetics and polishing slurries.

Aerogel is a hydrophobic, silica-based particle with a high surface area that is used in a variety of thermal insulation and specialty chemical applications. In the building and construction industry, the product is used in insulative sprayable plasters and composite building products, as well as translucent skylight, window, wall and roof systems for insulating eco-daylighting applications. In the specialty chemicals industry, the product is used to provide matte finishing, insulating and thickening properties for use in a variety of applications.

Sales and Customers

Sales of these products are made by Cabot employees and through distributors and sales representatives. In our Specialty Carbons and Formulations business, sales are generally to a broad number of customers. In our Metal Oxides business, sales under long-term contracts with two customers account for a substantial portion of the revenue.

Competition

We are a leading producer of the products we sell in this segment. We compete in the manufacture of carbon black primarily with two companies with a global presence and several other companies that have a regional presence, some of which export product outside their region. We compete with several companies that produce specialty compounds, primarily in Europe, the Middle East and Asia. Our inkjet colorants and inks are designed to replace traditional pigment dispersions and dyes used in inkjet printing applications. Competitive products for inkjet colorants are organic dyes and other dispersed pigments manufactured and marketed by large chemical companies and small independent producers. For fumed silica, we compete primarily with two companies with a global presence and several other companies which have a regional presence. For aerogel, we compete principally with one other company that produces aerogel products. We also compete with non-aerogel insulation products manufactured by regional companies throughout the world.

Competition for our products is based on product performance, quality, reliability, service, technical innovation and price. We believe our product differentiation, technological leadership, operations excellence and customer service provide us with a competitive advantage.

Raw Materials

Raw materials for our products are, in general, readily available. The principal raw material used in the manufacture of carbon black is a portion of the residual heavy oils derived from petroleum refining operations, the distillation of coal tars, and the production of ethylene throughout the world. Natural gas is also used in the production of carbon black. These raw material costs generally are influenced by the availability of various types of carbon black feedstock and natural gas, supply and demand of such raw materials, and related transportation costs. Importantly, movements in the market price for crude oil typically affect carbon black feedstock costs. The primary raw materials used for our specialty compounds include carbon black sourced from our carbon black plants, thermoplastic resins and mineral fillers from various sources. Raw materials for inkjet colorants include carbon black sourced from our carbon black plants, organic pigments and other treating agents available from various sources. Raw materials for inkjet inks include pigment dispersions, solvents and other additives. We believe that all raw materials to produce inkjet colorants and inks are in adequate supply.

Raw materials for the production of fumed silica are various chlorosilane feedstocks. We purchase feedstocks and for some customers convert their feedstock to product on a fee-basis (so called “toll conversion”). We also purchase aluminum chloride as feedstock for the production of fumed alumina. We have long-term procurement contracts or arrangements in place for the purchase of fumed silica feedstock, which we believe will enable us to meet our raw material requirements for the foreseeable future. In addition, we buy some raw materials in the spot market to help ensure flexibility and minimize costs. The principal raw materials for the production of aerogel are silica sol and/or sodium silicate.

Operations

We own, or have a controlling interest in, and operate plants that produce specialty grades of carbon black primarily in China, The Netherlands and the United States. Our specialty compounds are produced in facilities that we own, or have a controlling interest in, located in Belgium, China and the United Arab Emirates. Our inkjet colorants and inks are manufactured at our facility in Haverhill, Massachusetts. We also own, or have a controlling interest in, manufacturing plants that produce fumed metal oxides in the United States, China, the United Kingdom, and Germany and a manufacturing plant that produces aerogel in Frankfurt, Germany. An equity affiliate operates a fumed metal oxides plant in Mettur Dam, India.

The following table shows our ownership interest as of September 30, 2015 in these segment operations in which we own less than 100%:

Location	Percentage Interest
Tianjin, China (Specialty Carbons and Formulations business)	90% (consolidated subsidiary)
Jiangxi Province, China (Metal Oxides business)	90% (consolidated subsidiary)
Mettur Dam, India (Metal Oxides business)	50% (equity affiliate)

Purification Solutions

Products

Activated carbon is a porous material consisting mainly of elemental carbon treated with heat, steam and/or chemicals to create high internal porosity, resulting in a large internal surface area that resembles a sponge. It is generally produced in two forms, powdered and granular, and is manufactured in different sizes, shapes and levels of purity and using a variety of raw materials for a wide variety of applications. Activated carbon is used to remove contaminants from liquids and gases using a process called adsorption, whereby the interconnected pores of activated carbon trap contaminants.

Our activated carbon products are used for the purification of water, air, food and beverages, pharmaceuticals and other liquids and gases, as either a colorant or a decolorizing agent in the production of products for food and beverage applications and as a chemical carrier in slow release applications. In gas and air applications, one of the uses of activated carbon is for the removal of mercury in flue gas streams. In certain applications, used activated carbon can be reactivated for further use by removing the contaminants from the pores of the activated carbon product. The most common applications for our reactivated carbon are water treatment and food and beverage purification. In addition to our activated carbon production and reactivation, we also provide activated carbon solutions through on-site equipment and services, including delivery systems for activated carbon injection in coal-fired utilities, mobile water filter units and carbon reactivation services.

Sales and Customers

Sales of activated carbon are made by Cabot employees and through distributors and sales representatives to a broad range of customers, including coal-fired utilities, food and beverage processors, water treatment plants, pharmaceutical companies and catalyst producers. Some of our sales of activated carbon are made under annual contracts or longer-term agreements, particularly in mercury removal applications.

Competition

We are one of the leading manufacturers of activated carbon in the world. We compete in the manufacture of activated carbon with a number of companies, some of whom have a global presence and others who have a regional or local presence, although not all of these companies manufacture activated carbon for the range of applications for which we sell our products.

Competition for activated carbon and activated carbon equipment and services is based on quality, performance, price and supply-chain stability. We believe our product and application diversity, product differentiation, technological leadership, quality, cost-effective access to raw materials, and scalable manufacturing capabilities provide us with a competitive advantage.

Raw Materials

The principal raw materials we use in the manufacture of activated carbon are various forms of coal, including lignite, wood and other carbonaceous materials, which are, in general, readily available and we believe we have in adequate supply. We also own a lignite mine that is operated by Caddo Creek Resources Company, LLC, a subsidiary of the North American Coal Company. The mine began operations in November 2014 and supplies our Marshall, Texas facility.

Operations

We own, or have a controlling interest in, and operate plants that produce activated carbon in the United States, the United Kingdom, The Netherlands and Italy. Our affiliates operate activated carbon plants in Canada and Mexico. The following table shows our ownership interest as of September 30, 2015 in activated carbon operations in which we own less than 100%:

Location	Percentage Interest
Estevan, Saskatchewan, Canada	50% (contractual joint venture)
Atitalaquia, Hidalgo, Mexico	49% (equity affiliate)

Specialty Fluids

Products

Our Specialty Fluids segment principally produces and markets cesium formate as a drilling and completion fluid for use primarily in high pressure and high temperature oil and gas well construction. Cesium formate products are solids-free, high-density fluids that have a low viscosity, enabling safe and efficient well construction and workover operations. The fluid is resistant to high temperatures, minimizes damage to producing reservoirs and is readily biodegradable in accordance with the testing guidelines set by the Organization for Economic Cooperation and Development. In a majority of applications, cesium formate is blended with other formates or products. We also manufacture and sell fine cesium chemicals that are used in a wide range of applications, including catalysts and brazing fluxes.

Sales, Rental and Customers

Sales of our cesium formate products are made to oil and gas operating companies directly by Cabot employees and sales representatives and indirectly through oil field service companies. We generally rent cesium formate to our customers for use in drilling operations on a short-term basis and on occasion make direct sales of cesium formate outside of the rental process. After completion of a job under our rental process, the customer returns the remaining fluid to Cabot and it is reprocessed for use in subsequent well operations. Any fluid that is lost during use and not returned to Cabot is paid for by the customer.

A large portion of our fluids has been used for drilling and completion of wells in the North Sea with a limited number of customers, where we have supplied cesium formate-based fluids for both reservoir drilling and completion activities on large gas and condensate field projects in the Norwegian Continental Shelf. We continue to look for opportunities to expand the use of our fluids to drilling operations outside of the North Sea, particularly in Asia and the Middle East.

Competition

Formate fluids compete mainly with traditional drilling fluid technologies. Competition in the well fluids business is based on product performance, quality, reliability, service, technical innovation, price, and proximity of inventory to customers' drilling operations. We believe our commercial strengths include our unique product offerings and their performance, and our customer service.

Raw Materials

The principal raw material used in this business is pollucite (cesium ore), of which we own a substantial portion of the world's known pollucite reserves. In November 2015, we successfully completed a development project at our mine in Manitoba, Canada. We believe we have sufficient raw material to enable us to continue to supply cesium products for the foreseeable future, based on our anticipated consumption. We are not currently mining at the site and will assess options to access additional reserves in the mine, various technologies to augment our cesium supply and alternative sources of ore as demand for our cesium products warrants.

Most jobs for which cesium formate is used require a large volume of the product. Accordingly, the Specialty Fluids business maintains a large inventory of fluid.

Operations

Our mine and cesium formate manufacturing facility are located in Manitoba, Canada, and we have fluid blending and reclamation facilities in Aberdeen, Scotland and in Bergen, Norway. In addition, we warehouse fluid at various locations around the world to support existing and potential operations.

Patents and Trademarks

We own and are a licensee of various patents, which expire at different times, covering many of our products as well as processes and product uses. Although the products made and sold under these patents and licenses are important to Cabot, the loss of any particular patent or license would not materially affect our business, taken as a whole. We sell our products under a variety of trademarks we own and take reasonable measures to protect them. While our trademarks are important to Cabot, the loss of any one of our trademarks would not materially affect our business, taken as a whole.

Seasonality

Our businesses are generally not seasonal in nature, although we may experience some regional seasonal declines during holiday periods and some weather-related seasonality in Purification Solutions.

Backlog

We do not consider backlog to be a significant indicator of the level of future sales activity. In general, we do not manufacture our products against a backlog of orders. Production and inventory levels are based on the level of incoming orders as well as projections of future demand. Therefore, we believe that backlog information is not material to understanding our overall business and is not a reliable indicator of our ability to achieve any particular level of revenue or financial performance.

Employees

As of September 30, 2015, we had approximately 4,600 employees. Some of our employees in the United States and abroad are covered by collective bargaining or similar agreements. We believe that our relations with our employees are generally satisfactory.

Research and Development

Cabot develops new and improved products and higher efficiency processes through Company-sponsored research and technical service activities, including those initiated in response to customer requests. Our expenditures for such activities generally are spread among our businesses and are shown in the consolidated statements of operations. Further discussion of our research and technical expenses incurred in each of our last three fiscal years appears in MD&A in Item 7 below.

Safety, Health and Environment ("SH&E")

Cabot has been named as a potentially responsible party under the Comprehensive Environmental Response, Compensation, and Liability Act of 1980 (the "Superfund law") and comparable state statutes with respect to several sites primarily associated with our divested businesses. (See "Legal Proceedings" below.) During the next several years, as remediation of various environmental sites is carried out, we expect to spend against our $16 million environmental reserve for costs associated with such remediation. Adjustments are made to the reserve based on our continuing analysis of our share of costs likely to be incurred at each site. Inherent uncertainties exist in these estimates due to unknown conditions at the various sites, changing governmental regulations and legal standards regarding liability, and changing technologies for handling site investigation and remediation. While the reserve represents our best estimate of the costs we expect to incur, the actual costs to investigate and remediate these sites may exceed the amounts accrued in the environmental reserve. While it is always possible that an unusual event may occur with respect to a given site and have a material adverse effect on our results of operations in a particular period, we do not believe that the costs relating to these sites, in the aggregate, are likely to have a material adverse effect on our consolidated financial position. Furthermore, it is possible that we may also incur future costs relating to environmental liabilities not currently known to us or as to which it is currently not possible to make an estimate.

Our ongoing operations are subject to extensive federal, state, local, and foreign laws, regulations, rules, and ordinances relating to safety, health, and environmental matters ("SH&E Requirements"). These SH&E Requirements include requirements to obtain and comply with various environmental-related permits for constructing any new facilities and operating all of our existing facilities and for product registrations. We have expended and will continue to expend considerable sums to construct, maintain, operate, and improve facilities for safety, health and environmental protection and to comply with SH&E Requirements. We spent approximately $17 million in environmental-related capital expenditures at existing facilities in fiscal 2015 and anticipate spending approximately $34 million for such matters in fiscal 2016.

In recognition of the importance of compliance with SH&E Requirements to Cabot, our Board of Directors has a Safety, Health, and Environmental Affairs Committee. The Committee, which is comprised of independent directors, meets at least three times a year and provides oversight and guidance to Cabot's safety, health and environmental management programs. In particular, the Committee reviews Cabot's environmental reserve, safety, health and environmental risk assessment and management processes, environmental and safety audit reports, performance metrics, performance as benchmarked against industry peer groups, assessed fines or penalties, site security and safety issues, health and environmental training initiatives, and the SH&E budget. The Committee also consults with our outside and internal advisors regarding management of Cabot's safety, health and environmental programs.

The International Agency for Research on Cancer ("IARC") classifies carbon black as a Group 2B substance (known animal carcinogen, possible human carcinogen). We have communicated IARC's classification of carbon black to our customers and employees and have included that information in our safety data sheets and elsewhere, as appropriate. We continue to believe that the available evidence, taken as a whole, indicates that carbon black is not carcinogenic to humans, and does not present a health hazard when handled in accordance with good housekeeping and safe workplace practices as described in our safety data sheets.

REACH (Registration, Evaluation and Authorization of Chemicals), the European Union ("EU") regulatory framework for chemicals developed by the European Commission ("EC"), applies to all chemical substances produced or imported into the EU in quantities greater than one metric ton a year. Manufacturers or importers of these chemical substances are required to submit specified health, safety, risk and use information about the substance to the European Chemical Agency. We have completed all required registrations under REACH to date and will continue to complete the registrations under REACH for our products in accordance with future registration deadlines. We will also continue to work with the manufacturers and importers of our raw materials, including our feedstocks, to ensure their registration prior to the applicable deadlines. In addition, the EC has adopted a harmonized definition of "nanomaterial" to be used in the EU to identify materials for which special provisions may apply, such as risk assessment and ingredient labeling. The EC definition is broad and applies to many of our existing products, including carbon black, fumed silica and alumina. Country-specific product registration and assessment programs have been implemented in some countries and are being developed by others. We will continue to address these requirements.

Environmental agencies worldwide are increasingly implementing regulations and other requirements resulting in more restrictive air emission limits globally, particularly as they relate to nitrogen oxide, sulphur dioxide and particulate matter emissions. In addition, global efforts to reduce greenhouse gas emissions impact the carbon black and activated carbon industries as carbon dioxide is emitted from those manufacturing processes. The EU Emission Trading Scheme applies to our carbon black facilities and one activated carbon facility in Europe. In China, two of our carbon black facilities are participating in an emissions trading regional pilot program associated with the development of a national trading program. In the U.S., some of our facilities are required to report their greenhouse gas emissions, but are not currently subject to programs requiring trading or emission controls. We generally expect to purchase emission credits where necessary to respond to allocation shortfalls. In addition, air emission regulations may be adopted in the future in other regions and countries where we operate which could have an impact on our operations.

A number of organizations and regulatory agencies have become increasingly focused on the issue of water scarcity and water quality, particularly in certain geographic regions. We are engaged in various activities to promote water conservation and wastewater recycling. The costs associated with these activities are not expected to have a material adverse effect on our operations.

Various U.S. agencies and international bodies have adopted security requirements applicable to certain manufacturing and industrial facilities and marine port locations. These security-related requirements involve the preparation of security assessments and security plans in some cases, and in other cases the registration of certain facilities with specified governmental authorities. We closely monitor all security-related regulatory developments and believe we are in compliance with all existing requirements. Compliance with such requirements is not expected to have a material adverse effect on our operations.

Foreign and Domestic Operations and Export Sales

A significant portion of our revenues and operating profits is derived from overseas operations. The profitability of our segments is affected by fluctuations in the value of the U.S. dollar relative to foreign currencies. (See MD&A and the Geographic Information portion of Note V for further information relating to sales and long-lived assets by geographic area.) Currency fluctuations, nationalization and expropriation of assets are risks inherent in international operations. We have taken steps we deem prudent in our international operations to diversify and otherwise to protect against these risks, including the use of foreign currency financial instruments to reduce the risk associated with changes in the value of certain foreign currencies compared to the U.S. dollar. (See the risk management discussion contained in "Quantitative and Qualitative Disclosures About Market Risk" in Item 7A below and Note L of the Notes to the Company's Consolidated Financial Statements).

Item 1A. Risk Factors

In addition to factors described elsewhere in this report, the following are important factors that could cause our actual results to differ materially from those expressed in our forward-looking statements. The risks described below are not the only risks we face. Additional risks not presently known to us or that we currently deem immaterial may also impair our business operations and financial results.

Negative or uncertain worldwide or regional economic conditions may adversely impact our business.

Our operations and performance are affected by worldwide and regional economic conditions. Continued uncertainty or a deterioration in the economic conditions affecting the businesses to which, or geographic areas in which, we sell products could reduce demand for our products. We may also experience pricing pressure on products and services, which could decrease our revenues and have an adverse effect on our financial condition and cash flows. In addition, during periods of economic uncertainty, our customers may temporarily pursue inventory reduction measures that exceed declines in the actual underlying demand. Our businesses are sensitive to industry capacity utilization, particularly Reinforcement Materials and Purification Solutions. As a result, pricing tends to fluctuate when capacity utilization changes occur, which could affect our financial performance.

As a chemical manufacturing company, our operations are subject to operational risks and have the potential to cause environmental or other damage as well as personal injury, which could adversely affect our business, results of operations and cash flows.

The operation of a chemical manufacturing business as well as the sale and distribution of chemical products involve safety, health and environmental risks. For example, the production and/or processing of carbon black, fumed metal oxides, aerogel, activated carbon and other chemicals involve the handling, transportation, manufacture or use of certain substances or components that may be considered toxic or hazardous. Our manufacturing processes and the transportation of chemical products entail risks such as leaks, fires, explosions, toxic releases, mechanical failures or unscheduled downtime. If operational risks materialize, they could result in injury or loss of life, damage to the environment, or damage to property. In addition, the occurrence of material operating problems at our facilities may result in loss of production, which, in turn, may make it difficult for us to meet customer needs. Accordingly, these events and their consequences could negatively impact the Company's results of operations and cash flows, both during and after the period of operational difficulties, and could harm our reputation.

A significant adverse change in a customer relationship or the failure of a customer to perform its obligations under agreements with us could harm our business or cash flows.

Our success in strengthening relationships and growing business with our largest customers and retaining their business over extended time periods could affect our future results. We have a group of key customers across our businesses that together represent a significant portion of our total net sales and operating revenues. The loss of any of our important customers, or a significant reduction in volumes sold to them, could adversely affect our results of operations until such business is replaced or any temporary disruption ends. Any deterioration in the financial condition of any of our customers that impairs our customers' ability to make payments to us also could increase our uncollectible receivables and could affect our future results and financial condition.

Our restructuring activities and cost saving initiatives may not achieve the results we anticipate.

We have undertaken and expect to continue to undertake cost reduction initiatives and organizational restructurings to improve operating efficiencies, optimize our asset base and generate cost savings. For example, we have recently undertaken a restructuring plan to reduce our cost structure. We cannot be certain that we will be able to complete these initiatives as planned or without business interruption, or that the estimated operating efficiencies or cost savings from such activities will be fully realized or maintained over time.

Volatility in the price of energy and raw materials could impact our margins and working capital.

Our manufacturing processes consume significant amounts of energy and raw materials, the costs of which are subject to worldwide supply and demand as well as other factors beyond our control. Dramatic increases in such costs or decreases in the availability of raw materials at acceptable costs could have an adverse effect on our results of operations. For example, movements in the market price for crude oil typically affect carbon black feedstock costs. Significant movements in the market price for crude oil tend to create volatility in our carbon black feedstock costs, which can affect our working capital and results of operations. Certain of our carbon black supply contracts contain provisions that adjust prices to account for changes in a relevant feedstock price index. We attempt to offset the effects of increases in raw material costs through selling price increases in our non-contract sales, productivity improvements and cost reduction efforts. Success in offsetting increased raw material costs with price increases is largely influenced by competitive and economic conditions and could vary significantly depending on the segment served. Such increases may not be accepted by our customers, may not be sufficient to compensate for increased raw material and energy costs or may decrease demand for our products and our volume of sales. If we are not able to fully offset the effects of increased raw material or energy costs, it could have a significant impact on our financial results. Rapid declines in energy and raw material costs can also negatively impact our financial results, as such changes can negatively affect the returns we receive on our energy centers and yield improvement investments, and may negatively impact our contract pricing adjustments. In addition, we use a variety of feedstock indices in our supply contracts to adjust our prices for changes in raw materials costs. Depending on feedstock markets and our choice of feedstocks, the indices we use in our supply contracts may not precisely track our actual costs. This could result in an incongruity between our contract pricing adjustments and changes in our actual feedstock costs, which can affect our margins.

The strategic growth plan of the mercury removal products portion of our Purification Solutions segment relies significantly on the enforcement of environmental laws and regulations, and if our assumptions about future sales and profitability prove incorrect, we may be required to impair certain assets.

The strategic growth plan for the mercury removal products portion of our Purification Solutions segment relies significantly upon the enforcement of environmental laws and regulations, particularly those that would require industrial facilities to reduce the quantity of air pollutants they release. In particular, we expect demand for our activated carbon products to increase as coal fired utilities in the U.S. enhance their emission control systems in order to comply with the U.S. Mercury and Air Toxics Standards (MATS), which sets forth federal mercury emission levels. The implementation period for the MATS regulation began in April 2015, although state permitting agencies that enforce these standards were authorized to allow a one-year extension of time for compliance. In addition, the MATS regulation has been subject to legal challenge, and in June, 2015, the U.S. Supreme Court held that the EPA unreasonably failed to consider costs in determining whether it is necessary and appropriate to regulate hazardous air pollutants, including mercury, emitted by coal-fired utilities and remanded the case back to the U.S. Court of Appeals for the District of Columbia Circuit for further proceedings. Pending these legal proceedings, the MATS regulation remains in effect and utilities are required to comply with these emission regulations unless they obtained an extension. However, there are a number of possible outcomes of the U.S. Court of Appeals' current review, ranging from the current rule staying in place to a significant multi-year delay in the time when compliance is required, if at all. In our assumptions about the future sales and profitability of the mercury removal products portion of our Purification Solutions segment, we have assumed an approximate two year delay in the time within which compliance with MATS will be required. If our assumptions concerning sales volumes or margins are incorrect because of a change in the implementation of or requirements under MATS as a result of the Court's review or otherwise, our actual results for our activated carbon business could be less than expected, which could lead to an impairment of certain assets.

Our mining operations have the potential to cause safety issues, including those that could result in significant personal injury.

We own two mines, a cesium mine in Manitoba, Canada, a portion of which is located under Bernic Lake, and an above-ground lignite mine, which is located close to our Marshall, Texas facility and operated by a subsidiary of The North American Coal Company. Mining operations by their nature are activities that involve a high level of uncertainty and are often affected by risks and hazards outside of our control. At our lignite mine, the risks are primarily operational risks associated with the maintenance and operation of the heavy equipment required to dig and haul the lignite, and risks relating to lower than expected lignite quality or recovery rates. Our underground mine in Manitoba is subject to a number of risks, including industrial accidents, unexpected geological conditions, fall of ground accidents or structural collapses, which, in the case of our cesium mine, could lead to flooding, and lower than expected ore quality, ore grades or recovery rates. In 2013, following a fall of ground in a portion of the mine that contains significant cesium reserves, we implemented additional safety measures and added several types of monitoring devices in the mine. Since that time, the monitoring devices have indicated good structural stability in the mine, however, the structural stability may change at any time and there is a possibility of further deterioration and flooding of this mine. In November 2015, we successfully completed a development project at our mine in Manitoba, Canada and we are not currently mining at the site. The failure to adequately manage these risks could result in significant personal injury, loss of life, damage to mineral properties, production facilities or mining equipment, damage to the environment, delays in or reduced production, and potential legal liabilities.

Any failure to realize benefits from acquisitions, alliances or joint ventures could adversely affect future financial results.

Attainment of our strategic plan objectives requires, in part, strategic acquisitions or joint ventures intended to complement or expand our businesses globally or add product technology, or both. The success of acquisitions of businesses, new technologies and products, or arrangements with third parties is not always predictable and we may not be successful in realizing our objectives as anticipated. We may not be able to integrate any acquired businesses successfully into our existing businesses, make such businesses profitable, or realize anticipated cost savings or synergies, if any, from these acquisitions, which could adversely affect our business results.

Plant capacity expansions and site development projects may be delayed and/or not achieve the expected benefits.

Our ability to complete capacity expansions and other site development projects as planned may be delayed or interrupted by the need to obtain environmental and other regulatory approvals, unexpected cost increases, availability of labor and materials, unforeseen hazards such as weather conditions, and other risks customarily associated with construction projects. Moreover, the cost of these activities could have a negative impact on the financial performance of the relevant business, and in the case of capacity expansion projects, until capacity utilization at the particular facility is sufficient to absorb the incremental costs associated with the expansion. In addition, our ability to expand capacity in emerging regions depends in part on economic and political conditions in these regions and, in some cases, on our ability to establish operations, construct additional manufacturing capacity or form strategic business alliances.

An interruption in our operations as a result of fence-line arrangements could disrupt our manufacturing operations and adversely affect our financial results.

At certain of our facilities we have fence-line arrangements with adjacent third party manufacturing operations ("fence-line partners"), who provide raw materials for our manufacturing operations and/or take by-products generated from our operations. Accordingly, any unplanned disruptions or curtailments in a fence-line partner's production facilities that impacts their ability to supply us with raw materials or to take our manufacturing by-products could disrupt our manufacturing operations or cause us to incur increased operating costs to mitigate such disruption.

We are exposed to political or country risk inherent in doing business in some countries.

Sales outside of the U.S. constituted a majority of our revenues in fiscal 2015. Although much of our international business is currently in regions where the political and economic risk levels and established legal systems are similar to those in the U.S., we also conduct business in countries that have less stable legal systems and financial markets, and potentially more corrupt business environments than the U.S. Our operations in some countries may be subject to the following risks: changes in the rate of economic growth; unsettled political or economic conditions; possible expropriation or other governmental actions; corruption by government officials and other third parties; social unrest, war, terrorist activities or other armed conflict; confiscatory taxation or other adverse tax policies; deprivation of contract rights; trade regulations affecting production, pricing and marketing of products; reduced protection of intellectual property rights; restrictions on the repatriation of income or capital; exchange controls; inflation; currency fluctuations and devaluation; the effect of global health, safety and environmental matters on economic conditions and market opportunities; and changes in financial policy and availability of credit. We have an equity method investment in Venezuela, a country that has established rigid controls over the ability of foreign companies to repatriate cash and which has effectively devalued its currency in the past. Such exchange controls could potentially impact our ability, in both the short and long term, to recover both the cost of our investment and earnings from that investment.

We face competition from other specialty chemical companies.

We operate in a highly competitive marketplace. Our ability to compete successfully depends in part upon our ability to maintain a superior technological capability and to continue to identify, develop and commercialize new and innovative, high value-added products for existing and future customers. Increased competition from existing or newly developed products offered by our competitors or companies whose products offer a similar functionality as our products and could be substituted for our products, may negatively affect demand for our products. In addition, actions by our competitors could affect our ability to maintain or raise prices, successfully enter new markets or maintain or grow our market position.

Litigation or legal proceedings could expose us to significant liabilities and thus negatively affect our financial results.

As more fully described in "Item 3—Legal Proceedings", we are a party to or the subject of lawsuits, claims, and proceedings, including, but not limited to, those involving environmental, and health and safety matters as well as product liability and personal injury claims relating to asbestosis, silicosis, and coal worker's pneumoconiosis. We are also a potentially responsible party in various environmental proceedings and remediation matters wherein substantial amounts are at issue. Adverse rulings, judgments or settlements in pending or future litigation (including liabilities associated with respirator claims) or in connection with environmental remediation activities could adversely affect our financial results or cause our results to differ materially from those expressed or forecasted in any forward-looking statements.

Fluctuations in foreign currency exchange and interest rates could affect our financial results.

We earn revenues, pay expenses, own assets and incur liabilities in countries using currencies other than the U.S. dollar. In fiscal 2015, we derived a majority of our revenues from sales outside the U.S. Because our consolidated financial statements are presented in U.S. dollars, we must translate revenues, income and expenses, as well as assets and liabilities, into U.S. dollars at exchange rates in effect during or at the end of each reporting period. Therefore, increases or decreases in the value of the U.S. dollar against other currencies in countries where we operate will affect our results of operations and the value of balance sheet items denominated in foreign currencies. Due to the geographic diversity of our operations, weaknesses in some currencies might be offset by strengths in others over time. In addition, we are exposed to adverse changes in interest rates. We manage both these risks through normal operating and financing activities and, when deemed appropriate, through the use of derivative instruments as well as foreign currency debt. We cannot be certain, however, that we will be successful in reducing the risks inherent in exposures to foreign currency and interest rate fluctuations.

There are also instances where we have direct current exposures to foreign currency movements because settlement back into a different currency is intended. These situations can have a direct impact on our cash flows.

Our tax rate is dependent upon a number of factors, a change in any of which could impact our future tax rates and net income.

Our future tax rates may be adversely affected by a number of factors, including changes in tax laws or the interpretation of such tax laws; changes in the estimated realization of our net deferred tax assets; the jurisdictions in which profits are determined to be earned and taxed; the repatriation of non-U.S. earnings for which we have not previously provided for U.S. income and non-U.S. withholding taxes; adjustments to estimated taxes upon finalization of various tax returns; increases in expenses that are not deductible for tax purposes, including impairment of goodwill in connection with acquisitions; changes in available tax credits; and the resolution of issues arising from tax audits with various tax authorities. Losses for which no tax benefits can be recorded could materially impact our tax rate and its volatility from one quarter to another. Any significant change in our jurisdictional earnings mix or in the tax laws in those jurisdictions could impact our future tax rates and net income in those periods.

We may be subject to information technology systems failures, network disruptions and breaches of data security.

We depend on integrated information systems to conduct our business. Information technology systems failures, including risks associated with upgrading our systems or in successfully integrating information technology and other systems in connection with the integration of businesses we acquire, network disruptions and breaches of data security could disrupt our operations by impeding our processing of transactions, our ability to protect customer or company information and our financial reporting. Our computer systems, including our back-up systems, could be damaged or interrupted by power outages, computer and telecommunications failures, computer viruses, internal or external security breaches, events such as fires, earthquakes, floods, tornadoes and hurricanes, and/or errors by our employees. Although we have taken steps to address these concerns by implementing sophisticated network security and internal control measures and back-up systems at multiple sites, there can be no assurance that a system failure or data security breach will not have a material adverse effect on our financial condition and results of operations.

Our operations are subject to extensive safety, health and environmental requirements, which could increase our costs and/or reduce our profit.

Our ongoing operations are subject to extensive federal, state, local and foreign laws, regulations, rules and ordinances relating to safety, health and environmental matters, many of which provide for substantial monetary fines and criminal sanctions for violations. These include requirements to obtain and comply with various environmental-related permits for constructing any new facilities and operating all of our existing facilities, and, in certain geographic areas, to pay emissions-related fees based on certain emissions levels. The enactment of new environmental laws and regulations and/or the more aggressive interpretation of existing requirements could require us to incur significant costs for compliance or capital improvements or limit our current or planned operations, any of which could have a material adverse effect on our earnings or cash flow. We attempt to offset the effects of these compliance costs through price increases, productivity improvements and cost reduction efforts. Success in offsetting any such increased regulatory costs is largely influenced by competitive and economic conditions and could vary significantly depending on the segment served. Such increases may not be accepted by our customers, may not be sufficient to compensate for increased regulatory costs or may decrease demand for our products and our volume of sales. See "Item 3 Legal Proceedings—Environmental Proceedings".

Regulations requiring a reduction of greenhouse gas emissions may impact our carbon black and activated carbon operations.

Global efforts to reduce greenhouse gas emissions impact the carbon black and activated carbon industries as carbon dioxide is emitted from those manufacturing processes. The European Commission's Emissions Trading Scheme applies to our carbon black facilities and one of our activated carbon facilities in Europe, and we generally expect to purchase emission credits where necessary to respond to allocation shortfalls. However, if our carbon black or activated carbon operations generate more carbon dioxide than our allocations permit, the cost to purchase allocation credits at that time may be unacceptable to us. There are also regulatory developments in other regions and countries, including the U.S., Canada, China and Brazil, regarding greenhouse gas emission reduction programs. Those programs have not yet been fully defined and their potential impact on our manufacturing operations or financial results cannot be estimated at this time.

The money we spend developing new businesses and technologies may not result in a proportional increase in our revenues or profits.

We cannot be certain that the costs we incur investing in new businesses and technologies will result in a proportional increase in revenues or profits. In addition, the timely commercialization of products that we are developing may be disrupted or delayed by manufacturing or other technical difficulties, market acceptance or insufficient market size to support a new product, competitors' new products, and difficulties in moving from the experimental stage to the production stage. These disruptions or delays could affect our future business results.

The reduction or elimination of tariffs placed on U.S. imports of Chinese activated carbon could have a material adverse effect on our Purification Solutions segment.

Purification Solutions faces pressure and competition in its U.S. markets from low-priced imports of activated carbon products that are frequently sold at less than fair value in the U.S. If the amounts of these low-priced imports increase, especially if they are sold at less than fair value, our sales of competing products could decline, which could have an adverse effect on the earnings of Purification Solutions. In addition, sales of these low-priced imports may negatively impact our pricing. To limit these activities, regulators in the U.S. have enacted antidumping duties on steam activated carbon products that are set to expire in 2017, subject to provisions for renewal. The amount of these antidumping duties are reviewed annually, and the lower the tariff, the less effective they may be in reducing the volume of low-priced activated carbon imports in the U.S., which could negatively effect demand or pricing for our products.

The continued protection of our patents, trade secrets and other proprietary intellectual property rights are important to our success.

Our patents, trade secrets and other intellectual property rights are important to our success and competitive position. We own various patents and other intellectual property rights in the U.S. and other countries covering many of our products, as well as processes and product uses. Where we believe patent protection is not appropriate or obtainable, we rely on trade secret laws and practices to protect our proprietary technology and processes, such as physical security, limited dissemination and access and confidentiality agreements with our employees, customers, consultants, business partners, potential licensees and others to protect our trade secrets and other proprietary information. However, trade secrets can be difficult to protect and the protective measures we have put in place may not prevent disclosure or unauthorized use of our proprietary information or provide an adequate remedy in the event of misappropriation or other violations of our proprietary rights. In addition, we are a licensee of various patents and intellectual property rights belonging to others in the U.S. and other countries. Because the laws and enforcement mechanisms of some countries may not allow us to protect our proprietary rights to the same extent as we are able to do in the U.S., the strength of our intellectual property rights will vary from country to country.

Irrespective of our proprietary intellectual property rights, we may be subject to claims that our products, processes or product uses infringe the intellectual property rights of others. These claims, even if they are without merit, could be expensive and time consuming to defend and if we were to lose such claims, we could be enjoined from selling our products or using our processes and/or be subject to damages, or be required to enter into licensing agreements requiring royalty payments and/or use restrictions. Licensing agreements may not be available to us, or if available, may not be available on acceptable terms.

Natural disasters could affect our operations and financial results.

We operate facilities in areas of the world that are exposed to natural hazards, such as floods, windstorms and earthquakes. Such events could disrupt our supply of raw materials or otherwise affect production, transportation and delivery of our products or affect demand for our products.

Item 1B. Unresolved Staff Comments

None.

Item 2. Properties

Cabot's corporate headquarters are in leased office space in Boston, Massachusetts. We also own or lease office, manufacturing, storage, distribution, marketing and research and development facilities in the United States and in foreign countries. The locations of our principal manufacturing and/or administrative facilities are set forth in the table below. Unless otherwise indicated, all the properties are owned.

Location by Region	Reinforcement Materials	Performance Chemicals	Purification Solutions	Specialty Fluids
Americas Region				
Alpharetta, GA*(1)	X	X	X	X
Tuscola, IL		X		
Canal, LA	X	X		
Ville Platte, LA	X			
Billerica, MA	X	X	X	X
Haverhill, MA		X		
Midland, MI		X		
Pryor, OK			X	
Marshall, TX			X	
Pampa, TX	X	X		
Campana, Argentina	X			
Maua, Brazil	X	X		
Sao Paulo, Brazil*(1)	X	X	X	X
Cartagena, Colombia	X			
Lac du Bonnet, Manitoba**				X
Altamira, Mexico	X			
Sarnia, Ontario	X	X		

(1) Business service center
*Leased premises
**Building(s) owned by Cabot on leased land

Location by Region	Reinforcement Materials	Performance Chemicals	Purification Solutions	Specialty Fluids
EMEA Region				
Loncin, Belgium		X		
Pepinster, Belgium		X		
Valasske Mezirici (Valmez), Czech Republic**	X			
Port Jerome, France**	X			
Frankfurt, Germany*		X		
Rheinfelden, Germany		X		
Ravenna, Italy (2 plants)	X		X	
Riga, Latvia*(1)	X	X	X	X
Bergen, Norway*				X
Schaffhausen, Switzerland*	X	X	X	X
Botlek, The Netherlands**	X	X		
Amersfoort, The Netherlands*			X	
Klazienaveen, The Netherlands			X	
Zaandam, The Netherlands			X	
Dubai, United Arab Emirates*		X		
Purton, United Kingdom (England)			X	
Aberdeen, United Kingdom (Scotland)*				X
Glasgow, United Kingdom (Scotland)			X	
Barry, United Kingdom (Wales)**		X		
Asia Pacific Region				
Jiangxi Province, China**		X		
Tianjin, China**	X	X		
Shanghai, China*(1)	X	X	X	X
Shanghai, China** (plant)	X			
Xingtai City, China**	X			
Mumbai, India*	X	X		
Cilegon, Indonesia**	X			
Jakarta, Indonesia*(1)	X	X		
Merak, Indonesia(2)	X			
Chiba, Japan	X			
Shimonoseki, Japan**	X			
Tokyo, Japan*(1)	X	X	X	X
Port Dickson, Malaysia**	X			

(1) Business service center
(2) The Company intends to cease its manufacturing operations in Merak in January 2016.
* Leased premises
** Building(s) owned by Cabot on leased land

We conduct research and development for our various businesses primarily at facilities in Billerica, MA; Amersfoort, The Netherlands; Pampa, TX; Pepinster, Belgium; Frankfurt and Rheinfelden, Germany; and Shanghai, China.

Our existing manufacturing plants will generally have sufficient production capacity to meet current requirements and expected near-term growth. These plants are generally well maintained, in good operating condition and suitable and adequate for their intended use. Our administrative offices and other facilities are generally suitable and adequate for their intended purposes.

Item 3. Legal Proceedings

Cabot is a party in various lawsuits and environmental proceedings wherein substantial amounts are claimed. The following is a description of the significant proceedings pending on September 30, 2015, unless otherwise specified.

Environmental Proceedings

In November 2013, Cabot entered into a Consent Decree with the United States Environmental Protection Agency (“EPA”) and the Louisiana Department of Environmental Quality (“LDEQ”) regarding Cabot’s three carbon black manufacturing facilities in the United States. This settlement is related to EPA’s national enforcement initiative focused on the U.S. carbon black manufacturing sector alleging non-compliance with certain regulatory and permitting requirements under The Clean Air Act, including the New Source Review (“NSR”) construction permitting requirements. Pursuant to this settlement, which was approved by the U.S. District Court for the Western District of Louisiana in March, 2014, Cabot paid a combined $975,000 civil penalty to EPA and LDEQ, agreed to fund environmental mitigation projects in the three communities where the plants are located for a total cost of approximately $450,000, two of which have been completed, and will install technology controls for sulfur dioxide and nitrogen oxide. We expect that the capital costs to install these controls will total approximately $100 million and be incurred through calendar year 2020. In addition, Cabot has agreed to certain best management practices (“BMPs”) to control emissions of particulate matter at the three locations. Continental Carbon settled with EPA on similar terms in 2015. It is expected that other carbon black manufacturers will also be required to install technology controls and agree to adopt BMPs at their U.S. facilities in connection with this initiative and are also likely to pay a civil penalty and fund mitigation projects.

In 1986, Cabot sold a beryllium manufacturing facility in Reading, Pennsylvania to NGK Metals, Inc. (“NGK”). In doing so, we agreed to share with NGK the costs of certain environmental remediation of the Reading plant site. After the sale, the EPA issued an order to NGK pursuant to the Resource Conservation and Recovery Act (“RCRA”) requiring NGK to address soil and groundwater contamination at the site. Soil remediation at the site has been completed and the groundwater remediation activities are ongoing pursuant to the RCRA order. We are contributing to the costs of the groundwater remediation activities pursuant to the cost-sharing agreement with NGK. Cabot and NGK also pursued various legal claims against the U.S. for cost recovery and participation in future remediation activities based on the U.S.’s previous involvement at the site and contractual arrangements, beginning in World War II and continuing thereafter. Those claims were recently settled by the U.S. Government with a cash payment toward past costs and a commitment to pay a designated share of future costs to be incurred at the site.

We continue to perform certain sampling and remediation activities at a former pine tar manufacturing site in Gainesville, Florida that we sold in the 1960s. Those activities are pursuant to a formal Record of Decision and 1991 Consent Decree with EPA. Cabot installed a groundwater treatment system at the site in the early 1990s, and that system is still in operation. We have also been requested by EPA and other stakeholders to carry out various other additional work at the site, the scope of which has yet to be determined. We continue to work cooperatively with EPA, the Florida Department of Environmental Protection and the local authorities on this matter.

As of September 30, 2015, we had a $16 million reserve for environmental remediation costs at various sites. The operation and maintenance component of this reserve was $7 million. The $16 million reserve represents our current best estimate of costs likely to be incurred for remediation based on our analysis of the extent of cleanup required, alternative cleanup methods available, the ability of other responsible parties to contribute and our interpretation of laws and regulations applicable to each of our sites.

Other Proceedings

Respirator Liabilities

We have exposure in connection with a safety respiratory products business that a subsidiary acquired from American Optical Corporation (“AO”) in an April 1990 asset purchase transaction. The subsidiary manufactured respirators under the AO brand and disposed of that business in July 1995. In connection with its acquisition of the business, the subsidiary agreed, in certain circumstances, to assume a portion of AO’s liabilities, including costs of legal fees together with amounts paid in settlements and judgments, allocable to AO respiratory products used prior to the 1990 purchase by the Cabot subsidiary. In exchange for the subsidiary’s assumption of certain of AO’s respirator liabilities, AO agreed to provide to the subsidiary the benefits of: (i) AO’s insurance coverage for the period prior to the 1990 acquisition and (ii) a former owner’s indemnity of AO holding it harmless from any liability allocable to AO respiratory products used prior to May 1982.

Generally, these respirator liabilities involve claims for personal injury, including asbestosis, silicosis and coal worker’s pneumoconiosis, allegedly resulting from the use of respirators that are alleged to have been negligently designed and/or labeled. Neither Cabot, nor its past or present subsidiaries, at any time manufactured asbestos or asbestos-containing products. At no time did this respiratory product line represent a significant portion of the respirator market.

The subsidiary transferred the business to Aearo Corporation ("Aearo") in July 1995. Cabot agreed to have the subsidiary retain certain liabilities associated with exposure to asbestos and silica while using respirators prior to the 1995 transaction so long as Aearo paid, and continues to pay, Cabot an annual fee of $400,000. Aearo can discontinue payment of the fee at any time, in which case it will assume the responsibility for and indemnify Cabot against those liabilities which Cabot's subsidiary had agreed to retain. We anticipate that we will continue to receive payment of the $400,000 fee from Aearo and thereby retain these liabilities for the foreseeable future. We have no liability in connection with any products manufactured by Aearo after 1995.

In addition to Cabot's subsidiary and as described above, other parties are responsible for significant portions of the costs of respirator liabilities, leaving Cabot's subsidiary with a portion of the liability in only some of the pending cases. These parties include Aearo, AO, AO's insurers, another former owner and its insurers, and a third-party manufacturer of respirators formerly sold under the AO brand and its insurers (collectively, with Cabot's subsidiary, the "Payor Group").

As of September 30, 2015 and 2014, there were approximately 38,000 and 41,000 claimants, respectively, in pending cases asserting claims against AO in connection with respiratory products. Cabot has contributed to the Payor Group's defense and settlement costs with respect to a percentage of pending claims depending on several factors, including the period of alleged product use. In order to quantify our estimated share of liability for pending and future respirator liability claims, we have engaged, through counsel, the assistance of Hamilton, Rabinovitz & Alschuler, Inc. ("HR&A"), a leading consulting firm in the field of tort liability valuation. The methodology used by HR&A addresses the complexities surrounding our potential liability by making assumptions about future claimants with respect to periods of asbestos, silica and coal mine dust exposure and respirator use. Using those and other assumptions, HR&A estimates the number of future asbestos, silica and coal mine dust claims that will be filed and the related costs that would be incurred in resolving both currently pending and future claims. On this basis, HR&A then estimates the value of the share of these liabilities that reflect our period of direct manufacture and our contractual obligations. Based on the HR&A estimates, we have recorded an $11 million reserve for our estimated share of liability for pending and future respirator claims. We made payments related to our respirator liability of $2 million in each of fiscal 2015, 2014 and 2013.

Our current estimate of the cost of our share of existing and future respirator liability claims is based on facts and circumstances existing at this time. Developments that could affect our estimate include, but are not limited to, (i) significant changes in the number of future claims, (ii) changes in the rate of dismissals without payment of pending silica and non-malignant asbestos claims, (iii) significant changes in the average cost of resolving claims, (iv) significant changes in the legal costs of defending these claims, (v) changes in the nature of claims received, (vi) changes in the law and procedure applicable to these claims, (vii) the financial viability of members of the Payor Group, (viii) a change in the availability of the insurance coverage of the members of the Payor Group or the indemnity provided by AO's former owner, (ix) changes in the allocation of costs among the Payor Group, and (x) a determination that the assumptions that were used to estimate our share of liability are no longer reasonable. We cannot determine the impact of these potential developments on our current estimate of our share of liability for these existing and future claims. Accordingly, the actual amount of these liabilities for existing and future claims could be different than the reserved amount.

Other Matters

We have various other lawsuits, claims and contingent liabilities. In our opinion, although final disposition of some or all of these other suits and claims may impact our financial statements in a particular period, they should not, in the aggregate, have a material adverse effect on our consolidated financial statements.

Item 4. Mine Safety Disclosures

Not applicable.

Executive Officers of the Registrant

Set forth below is certain information about Cabot's executive officers as of November 25, 2015.

Patrick M. Prevost, age 60, is President and Chief Executive Officer and a member of Cabot's Board of Directors, positions he has held since joining Cabot in January 2008. Prior to joining Cabot, since October 2005, Mr. Prevost served as President, Performance Chemicals, of BASF AG, an international chemical company. Prior to that, he was responsible for BASF Corporation's Chemicals and Plastics business in North America. Prior to joining BASF in 2003, he held senior management positions at BP plc and Amoco.

Eduardo E. Cordeiro, age 48, is Executive Vice President and Chief Financial Officer and President of the Americas and Europe, Middle East and Africa ("EMEA") regions. Mr. Cordeiro joined Cabot in 1998 and has served in a variety of leadership positions, including Corporate Controller, General Manager of the Fumed Metal Oxides business and General Manager of the Supermetals business. He was responsible for Corporate Strategy from May 2008 until February 2009, when he became Cabot's Chief Financial Officer. Mr. Cordeiro was appointed Vice President in March 2003 and Executive Vice President in March 2009.

Nicholas S. Cross, age 54, is Executive Vice President and President of Performance Chemicals and Specialty Fluids. Mr. Cross joined Cabot in September 2009 as President of the EMEA region and was appointed President of Advanced Technologies in January 2013 and President of Performance Chemicals in November 2014. He was appointed Vice President upon joining Cabot in 2009, Senior Vice President in March 2012 and Executive Vice President in November 2014. Prior to joining Cabot, Mr. Cross held a variety of leadership positions in BP plc's Chemicals, Oil and Gas businesses, including Director of Chemicals Strategy and Head of International NGLs.

Sean D. Keohane, age 48, is Executive Vice President and President of Reinforcement Materials. Mr. Keohane joined Cabot in August 2002 and was named General Manager of Performance Chemicals in May 2008. From March 2012 until November 2014, he was Senior Vice President and President of Performance Chemicals and in November 2014 he was appointed President of Reinforcement Materials. He was appointed Vice President in March 2005, Senior Vice President in March 2012 and Executive Vice President in November 2014.

Brian A. Berube, age 53, is Senior Vice President and General Counsel. Mr. Berube joined Cabot in 1994 as an attorney in Cabot's law department and became Deputy General Counsel in June 2001, business General Counsel in March 2002, and General Counsel in March 2003. Mr. Berube was appointed Vice President in March 2002 and Senior Vice President in March 2012.

Friedrich von Gottberg, age 47, is Senior Vice President and President of Purification Solutions. Mr. von Gottberg joined Cabot in 1997. Since joining the Company he has held a variety of leadership positions in Research and Development and Finance. Prior to assuming his current role in January 2013, he was Vice President of the New Business Group from March 2008 until March 2012, and Senior Vice President and President of Advanced Technologies from March 2012 until January 2013. Mr. von Gottberg was appointed Vice President in March 2005 and Senior Vice President in March 2012.

PART II

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

Cabot's common stock is listed for trading (symbol CBT) on the New York Stock Exchange. As of November 19, 2015, there were 792 holders of record of Cabot's common stock. The tables below show the high and low sales price for Cabot's common stock for each of the fiscal quarters ended December 31, March 31, June 30, and September 30 and the quarterly cash dividend paid on Cabot's common stock for the past two fiscal years.

Stock Price and Dividend Data

	Quarters Ended			
	December 31	March 31	June 30	September 30
Fiscal 2015				
Cash dividends per share	$0.22	$0.22	$0.22	$ 0.22
Price range of common stock:				
High	$50.86	$47.94	$47.27	$ 38.59
Low	$39.62	$40.33	$37.24	$ 31.04
Fiscal 2014				
Cash dividends per share	$0.20	$0.20	$0.22	$ 0.22
Price range of common stock:				
High	$51.72	$59.28	$61.46	$ 59.12
Low	$41.59	$46.24	$55.05	$ 50.36

Issuer Purchases of Equity Securities

The table below sets forth information regarding Cabot's purchases of its equity securities during the quarter ended September 30, 2015:

Period	Total Number of Shares Purchased[(1)]	Average Price Paid per Share	Total Number of Shares Purchased as Part of Publicly Announced Plans or Programs[(1)]	Maximum Number (or Approximate Dollar Value) of Shares that May Yet Be Purchased Under the Plans or Programs[(1)]
July 1, 2015—July 31, 2015	—	$ —	—	4,125,700
August 1, 2015—August 31, 2015	380,000	$ 33.99	380,000	3,745,700
September 1, 2015—September 30, 2015	80,000	$ 33.54	80,000	3,665,700
Total	460,000		460,000	

(1) On January 13, 2015, Cabot publicly announced that the Board of Directors authorized the Company to repurchase up to five million shares of its common stock on the open market or in privately negotiated transactions. The prior repurchase authorization was terminated at that time. The current authorization does not have a set expiration date. In the fourth quarter of 2015, Cabot repurchased 460,000 shares under this authorization.

Item 6. Selected Financial Data

On July 31, 2012, Cabot completed the purchase of Norit N.V. (“Purification Solutions”). The operating results and ratios presented below for fiscal 2012 include two months of results of Purification Solutions. Beginning September 30, 2012 the balance sheet items presented below include those of Purification Solutions.

On November 18, 2013, Cabot purchased all of its joint venture partner’s common stock in NHUMO, S.A. de C.V. (“NHUMO”), which represented approximately 60% of the outstanding common stock of the joint venture. Prior to this transaction, the Company owned approximately 40% of the outstanding common stock of NHUMO, and the NHUMO entity was accounted for as an equity affiliate of the Company. The results of fiscal 2014 in the table below include 11 months of results at 100% consolidation and one month of results accounted for under the equity method at 40%. Results for all years prior to fiscal 2014 are reported under the equity method at 40%.

The Company completed the sales of its Supermetals business and Security Materials business on January 20, 2012 and July 31, 2014, respectively. The results of operations for both businesses for all periods presented are reflected as discontinued operations in the Consolidated Statements of Operations.

	Years Ended September 30				
	2015	2014	2013	2012	2011
	(Dollars in millions, except per share amounts and ratios)				
Consolidated Net (Loss) Income					
Net sales and other operating revenues	$2,871	$3,647	$3,456	$3,291	$3,091
Gross profit	585	721	633	644	553
Selling and administrative expenses	282	326	297	281	247
Research and technical expenses	58	60	68	72	63
Purification Solutions long-lived assets impairment charge	210	—	—	—	—
Purification Solutions goodwill impairment charge	352	—	—	—	—
(Loss) income from operations	(317)	335	268	291	243
Net interest expense and other charges(1)	(60)	(27)	(58)	(45)	(40)
(Loss) income from continuing operations (2)	(377)	308	210	246	203
Benefit (provision) for income taxes (3)	45	(92)	(60)	(55)	(6)
Equity in earnings of affiliated companies	4	—	11	11	8
Income (loss) from discontinued operations, net of tax	2	2	(1)	204	53
Net (loss) income	(326)	218	160	406	258
Net income attributable to noncontrolling interests, net of tax	8	19	7	18	22
Net (loss) income attributable to Cabot Corporation	$(334)	$199	$153	$388	$236
Common Share Data					
Diluted net (loss) income attributable to Cabot Corporation:					
(Loss) income from continuing operations	$(5.29)	$3.01	$2.37	$2.84	$2.77
Income (loss) from discontinued operations	0.02	0.02	(0.01)	3.15	0.80
Net (loss) income attributable to Cabot Corporation	$(5.27)	$3.03	$2.36	$5.99	$3.57
Dividends	$0.88	$0.84	$0.80	$0.76	$0.72
Closing prices	$31.56	$50.77	$42.71	$36.57	$24.78
Weighted-average diluted shares outstanding—millions	63.4	65.1	64.5	64.2	65.4
Shares outstanding at year end—millions	62.5	64.4	64.0	63.3	63.9
Consolidated Financial Position					
Current assets	$1,048	$1,364	$1,495	$1,443	$1,555
Net property, plant, and equipment	1,383	1,581	1,600	1,547	1,031
Other assets	644	1,139	1,138	1,409	555
Total assets	$3,075	$4,084	$4,233	$4,399	$3,141
Current liabilities	$441	$630	$844	$919	$656
Long-term debt	970	1,004	1,020	1,172	556
Other long-term liabilities	326	386	286	369	313
Cabot Corporation stockholders' equity	1,234	1,942	1,951	1,813	1,487
Noncontrolling interests	104	122	132	126	129
Total liabilities and stockholders' equity	$3,075	$4,084	$4,233	$4,399	$3,141
Selected Financial Ratios					

Adjusted return on invested capital[4]	8	%	9	%	8	%	12	%	16	%
Net debt to capitalization ratio[5]	41	%	33	%	36	%	40	%	20	%
Adjusted return on net assets[6]	9	%	10	%	9	%	12	%	14	%

[1] Net interest expense and other charges includes foreign currency activity as follows: a loss of $8 million for fiscal 2015, a loss of $2 million for fiscal 2014, a gain of $2 million for fiscal 2013, and losses of $2 million and $6 million for fiscal 2012 and 2011, respectively.

(2) Income from operations includes certain items as presented in the table below. Refer to Note V to the consolidated financial statements for a description of certain items.

	Years Ended September 30				
	2015	2014	2013	2012	2011
	(Dollars in millions)				
Global restructuring activities (Note P)	$(21)	$(29)	$(35)	$(17)	$(18)
Legal and environmental matters and reserves	—	(18)	(1)	(8)	(1)
Acquisition and integration-related charges	(5)	(7)	(21)	(26)	—
Employee benefit plan settlement and other charges (Note N)	(21)	—	—	—	—
Impairment of goodwill and long-lived assets of Purification Solutions (Note G)	(562)	—	—	—	—
Foreign currency (loss) gain on revaluations	(2)	(3)	3	—	—
Gain on existing investment in NHUMO	—	29	—	—	—
Inventory adjustment (Note E)	(6)	—	—	—	—
Certain items, pre-tax	$(617)	$(28)	$(54)	$(51)	$(19)

(3) The Company's effective tax rate for fiscal 2015 was a benefit of 12%, which included $13 million of discrete tax benefits composed of $7 million for tax settlements, $4 million for repatriation, and $2 million for the renewal of the U.S. research and experimentation credit. The Company's effective tax rate for fiscal 2014 was a provision of 30% which included net discrete charges of $17 million, composed of a $20 million charge for a valuation allowance, offset by $3 million of net tax benefit primarily related to tax settlements. The Company's effective tax rate for fiscal 2013 was a provision of 28% which included net discrete charges of $3 million, composed of a $13 million foreign currency related charge, offset by $10 million of net tax benefit related to tax settlements, renewal of the U.S. research and experimentation ("R&E") credit, and other miscellaneous tax items in the tax provision. The Company's effective tax rate for fiscal 2012 was a provision of 22% which includes net discrete tax benefits of $8 million from the release of a valuation allowance and $3 million from settlements and miscellaneous tax items. The Company's effective tax rate for fiscal 2011 was a provision of 3% which includes net tax benefits of $24 million from the repatriation of high taxed income, $10 million from the settlements of various tax audits, $2 million from the renewal of the R&E credit and $2 million for investment incentive tax credits recognized in China.

(4) Adjusted return on invested capital ("Adjusted ROIC") is a non-GAAP financial measure that management believes is useful to investors as a measure of performance and the effectiveness of our use of capital. We use Adjusted ROIC as one measure to monitor and evaluate performance. ROIC is not a measure of financial performance under GAAP and may not be defined and calculated by other companies in the same manner. Adjusted ROIC, which excludes items management does not consider representative of the Company's segment results, is calculated as follows.

Numerator (four quarter rolling):

Net income (loss) attributable to Cabot Corporation

Less the after-tax impact of:

Noncontrolling interest in net income
Interest expense
Interest income
Certain items

Discontinued operations
Denominator:

Previous five quarter average ending invested capital calculated as follows:

Total Cabot Corporation stockholders' equity

Plus: Noncontrolling interests' equity
Long-term debt
Current portion of long-term debt
Notes payable

Less: Cash and cash equivalents
Less the four quarter rolling impact of after tax certain items.

(5) Net debt to capitalization ratio is calculated by dividing total debt (the sum of short-term and long-term debt less cash and cash equivalents) by total capitalization (the sum of Total stockholders' equity plus total Debt).

(6) Adjusted return on net assets ("Adjusted RONA") is a non-GAAP financial measure that management believes is useful to investors as a measure of performance and the effectiveness of our use of capital. We use Adjusted RONA as one measure to monitor and evaluate performance. RONA is not a measure of financial performance under GAAP and may not be defined and calculated by other companies in the same manner. Adjusted RONA, which excludes items management does not consider representative of the Company's segment results, is calculated as follows.

Numerator (four quarter rolling):

Net income (loss) attributable to Cabot Corporation

Less the after-tax impact of:

Noncontrolling interest in net income

Certain items

Discontinued operations

Denominator:

Previous five quarter average ending net asset balance calculated as follows:

Net Working Capital (Accounts Receivable plus Inventory less Accounts Payable and Accruals)

Plus: Property Plant & Equipment (net of depreciation)
Assets held for rent
External investments, including Equity affiliates

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

Critical Accounting Policies

The preparation of our financial statements requires management to make estimates and judgments that affect the reported amounts of assets, liabilities, revenues, and expenses and related disclosure of contingent assets and liabilities. We consider an accounting estimate to be critical to the financial statements if (i) the estimate is complex in nature or requires a high degree of judgment and (ii) different estimates and assumptions were used, the results could have a material impact on the consolidated financial statements. On an ongoing basis, we evaluate our estimates and the application of our policies. We base our estimates on historical experience, current conditions and on various other assumptions that we believe are reasonable under the circumstances, the results of which form the basis for making judgments about the carrying values of assets and liabilities that are not readily apparent from other sources. Actual results may differ from these estimates under different assumptions or conditions. The policies that we believe are critical to the preparation of the Consolidated Financial Statements are presented below.

Revenue Recognition and Accounts and Notes Receivable

We recognize revenue when persuasive evidence of an arrangement exists, delivery has occurred or services have been rendered, the price is fixed or determinable and collectability is reasonably assured. We generally are able to ensure that products meet customer specifications prior to shipment. If we are unable to determine that the product has met the specified objective criteria prior to shipment or if title has not transferred because of sales terms, the revenue is considered "unearned" and is deferred until the revenue recognition criteria are met.

Shipping and handling charges related to sales transactions are recorded as sales revenue when billed to customers or included in the sales price. Taxes collected on sales to customers are excluded from revenues.

The following table shows the relative size of the revenue recognized in each of the Company's reportable segments:

	Years ended September 30		
	2015	2014	2013
Reinforcement Materials	54%	59 %	57 %
Performance Chemicals	33%	29 %	30 %
Purification Solutions	11%	9 %	10 %
Specialty Fluids	2 %	3 %	3 %

We derive the substantial majority of revenues from the sale of products in Reinforcement Materials and Performance Chemicals. Revenue from these products is typically recognized when the product is shipped and title and risk of loss have passed to the customer. We offer certain customers cash discounts and volume rebates as sales incentives. The discounts and volume rebates are recorded as a reduction in sales at the time revenue is recognized and are estimated based on historical experience and contractual obligations. We periodically review the assumptions underlying estimates of discounts and volume rebates and adjust revenues accordingly.

Revenue in Purification Solutions is typically recognized when the product is shipped and title and risk of loss have passed to the customer. For major activated carbon injection systems projects, revenue is recognized using the percentage-of-completion method.

A significant portion of the revenue in Specialty Fluids arises from the rental of cesium formate. This revenue is recognized throughout the rental period based on the contracted rental terms. Customers are also billed and revenue is recognized, typically at the end of the job, for cesium formate product that is not returned. We also generate revenues from cesium formate sold outside of a rental process and revenue is recognized upon delivery of the fluid.

We maintain allowances for doubtful accounts based on an assessment of the collectability of specific customer accounts, the aging of accounts receivable and other economic information on both a historical and prospective basis. Customer account balances are charged against the allowance when it is probable the receivable will not be recovered. There is no material off-balance sheet credit exposure related to customer receivable balances.

Inventory Valuation

The cost of all carbon black inventories in the U.S. is determined using the last-in, first-out (“LIFO”) method. Total U.S. inventories utilizing this cost flow assumption was $24 million at September 30, 2015 and $28 million at September 30, 2014. These inventories represent 6% and 5% of total worldwide inventories at September 30, 2015 and 2014, respectively. Had we used the first-in, first-out (“FIFO”) method instead of the LIFO method for such inventories, the value of those inventories would have been $30 million and $52 million higher as of September 30, 2015 and 2014, respectively. The cost of Specialty Fluids inventories, which are classified as assets held for rent, is determined using the average cost method. The cost of other U.S. and all non-U.S. inventories is determined using the FIFO method. In periods of rapidly rising or declining raw material costs, the inventory method we employ can have a significant impact on our profitability. Under our current LIFO method, when raw material costs are rising, our most recent higher priced purchases are the first to be charged to Cost of sales. If, however, we were using a FIFO method, our purchases from earlier periods, which were at lower prices, would instead be the first charged to Cost of sales. The opposite result could occur during a period of rapid decline in raw material costs.

At certain times, we may decrease inventory levels to the point where layers of inventory recorded under the LIFO method that were purchased in preceding years are liquidated. The inventory in these layers may be valued at an amount that is different than our current costs. If there is a liquidation of an inventory layer, there may be an impact to our Cost of sales and Net income for that period. If the liquidated inventory is at a cost lower than our current cost, there would be a reduction in our Cost of sales and an increase to our Net income during the period. Conversely, if the liquidated inventory is at a cost higher than our current cost, there will be an increase in our Cost of sales and a reduction to our net income during the period.

We review inventory for both potential obsolescence and potential declines in anticipated selling prices periodically. In this review, we make assumptions about the future demand for and market value of the inventory and based on these assumptions estimate the amount of any obsolete, unmarketable, slow moving or overvalued inventory. We write down the value of our inventories by an amount equal to the difference between the cost of inventory and the estimated market value. Historically, such write-downs have not been material. If actual market conditions are less favorable than those projected by management at the time of the assessment, however, additional inventory write-downs may be required, which could reduce our gross profit and our earnings.

Intangible Assets and Goodwill Impairment

We record tangible and intangible assets acquired and liabilities assumed in business combinations under the acquisition method of accounting. Amounts paid for an acquisition are allocated to the assets acquired and liabilities assumed based on their fair values at the date of acquisition. Goodwill is comprised of the purchase price of business acquisitions in excess of the fair value assigned to the net tangible and identifiable intangible assets acquired. Goodwill is not amortized, but is reviewed for impairment annually as of May 31, or when events or changes in the business environment indicate that the carrying value of the reporting unit may exceed its fair value. A reporting unit, for the purpose of the impairment test, is at or below the operating segment level, and constitutes a business for which discrete financial information is available and regularly reviewed by segment management. The separate businesses included within Performance Chemicals are considered separate reporting units. The goodwill balance relative to this segment is recorded in the Metal Oxides reporting unit.

For the purpose of the goodwill impairment test, we first assess qualitative factors to determine whether it is more likely than not that the fair value of a reporting unit is less than its carrying amount. If an initial qualitative assessment identifies that it is more likely than not that the carrying value of a reporting unit exceeds its estimated fair value, an additional quantitative evaluation is performed under the two-step impairment test. Alternatively, we may elect to proceed directly to the quantitative goodwill impairment test. If based on the quantitative evaluation the fair value of the reporting unit is less than its carrying amount, we perform an analysis of the fair value of all assets and liabilities of the reporting unit. If the implied fair value of the reporting unit's goodwill is determined to be less than its carrying amount, an impairment is recognized for the difference. The fair value of a reporting unit is based on discounted estimated future cash flows. The fair value is also benchmarked against a market approach using the guideline public companies method. The assumptions used to estimate fair value include management's best estimates of future growth rates, operating cash flows, capital expenditures and discount rates over an estimate of the remaining operating period at the reporting unit level. Should the fair value of any of our reporting units decline below its carrying amount because of reduced operating performance, market declines, changes in the discount rate, or other conditions, charges for impairment may be necessary. Based on our most recent annual goodwill impairment test performed as of May 31, 2015, the fair values of the Reinforcement Materials and Metal Oxides reporting units were substantially in excess of their carrying values. The fair value of the Purification Solutions reporting unit was less than its carrying amount and an impairment charge was recorded in the third quarter of fiscal 2015 as described below under

"Purification Solutions Goodwill and Long-Lived Assets Impairment Charges." Due to the impairment recorded, the fair value of the Purification Solutions reporting unit was insignificantly higher than its carrying value. No events occurred in the fourth fiscal quarter of 2015 that would suggest that it is more likely than not that the carrying values of any of our reporting units exceeded its fair value.

We use assumptions and estimates in determining the fair value of assets acquired and liabilities assumed in a business combination. The determination of the fair value of intangible assets requires the use of significant judgment with regard to assumptions used in the valuation model. We estimate the fair value of identifiable acquisition-related intangible assets principally based on projections of cash flows that will arise from these assets. The projected cash flows are discounted to determine the fair value of the assets at the dates of acquisition.

Definite-lived intangible assets, which are comprised of customer relationships and developed technologies, are amortized over their estimated useful lives and are reviewed for impairment when indication of potential impairment exists, such as a significant reduction in cash flows associated with the assets. We evaluate indefinite-lived intangible assets, which are comprised of the trademarks of Purification Solutions, for impairment annually or when events occur or circumstances change that may reduce the fair value of the asset below its carrying amount. The annual review is performed as of May 31. We may first perform a qualitative assessment to determine whether it is necessary to perform the quantitative impairment test or bypass the qualitative assessment and proceed directly to performing the quantitative impairment test. The quantitative impairment test is based on discounted estimated future cash flows. The assumptions used to estimate fair value include management's best estimates of future growth rates and discount rates over an estimate of the remaining operating period at the unit of accounting level. Refer to the "Purification Solutions Goodwill and Long-Lived Assets Impairment Charges" section below for details on the impairment test performed on intangible assets of the Purification Solutions reporting unit and the resulting impairment charges recorded. Effective in the third quarter of fiscal year 2015 and as a part of the impairment assessment performed, we determined that the trademarks for Purification Solutions no longer had an indefinite life.

Long-lived Assets Impairment

Our long-lived assets primarily include property, plant and equipment, intangible assets, long-term investments and assets held for rent. The carrying values of long-lived assets are reviewed for impairment whenever events or changes in business circumstances indicate that the carrying amount of an asset may not be recoverable.

To test for impairment of assets we generally use a probability-weighted estimate of the future undiscounted net cash flows of the assets over their remaining lives to determine if the value of the asset is recoverable. Long-lived assets are grouped with other assets and liabilities at the lowest level for which independent identifiable cash flows are determinable.

Refer to the "Purification Solutions Goodwill and Long-Lived Assets Impairment Charges" section below for details on the Purification Solutions goodwill impairment test and the resulting impairment charge recorded.

An asset impairment is recognized when the carrying value of the asset is not recoverable based on the analysis described above, in which case the asset is written down to its fair value. If the asset does not have a readily determinable market value, a discounted cash flow model may be used to determine the fair value of the asset. In circumstances when an asset does not have separate identifiable cash flows, an impairment charge is recorded when we no longer intend to use the asset.

Purification Solutions Goodwill and Long-Lived Assets Impairment Charges

During fiscal 2015 and as a result of the impairment tests performed on goodwill and long-lived assets of the Purification Solutions reporting unit, we recorded impairment charges and an associated tax benefit in the Consolidated Statements of Operations as follows:

	Year Ended September 30, 2015 (Dollars in millions)
Purifications Solutions goodwill impairment charge	$ 352
Purification Solutions long-lived assets impairment charge	210
Provision (benefit) for income taxes	(80)
Impairment charges, after tax	$ 482

The future growth in the Purification Solutions segment is highly dependent on achieving the expected volumes and margins in the activated carbon based mercury removal business. These volumes and margins are highly dependent on demand for mercury removal products and our successful realization of our anticipated share of volumes in this segment. The expected demand for mercury removal products significantly depends on: (1) the implementation and enforcement of environmental laws and regulations, particularly those that would require U.S. based coal-fired electric utilities to reduce the quantity of air pollutants they release, including mercury, to comply with the Mercury and Air Toxics Standards ("MATS") issued by the U.S. Environmental Protection Agency ("EPA") and (2) other factors such as the anticipated usage of activated carbon in the coal-fired energy units. In November 2014, the U.S. Supreme Court agreed to consider whether the EPA appropriately considered costs in determining whether it is necessary and appropriate to regulate hazardous air pollutants emitted by electric utilities. On June 29, 2015, the U.S. Supreme Court held that the EPA unreasonably failed to consider costs in determining whether it is necessary and appropriate to regulate hazardous air pollutants emitted by coal-fired utilities, and remanded the case back to the U.S. Court of Appeals for the District of Columbia Circuit for further proceedings.

The implementation period for the MATS regulations began in April 2015. With this recent implementation and associated customer and industry developments during the third fiscal quarter, as well as the Supreme Court's ruling, we reassessed our previous estimates for expected growth in volumes, prices and margins in the Purification Solutions reporting unit. The main drivers of growth, including the size of the overall mercury removal industry, utility adoption rates, usage levels, and pricing, among others were lowered from previous estimates. Based on these revised estimates and as part of step one of the annual impairment test, we determined the estimated fair value of the Purification Solutions reporting unit was lower than the reporting unit's carrying value. As such, the reporting unit failed step one of the goodwill impairment test.

In determining the fair value of the Purification Solutions reporting unit, we used an income approach (a discounted cash flow analysis) which incorporated significant estimates and assumptions related to future periods including, timing of MATS implementation, the anticipated size of the mercury removal industry, and growth rates and pricing assumptions of activated carbon, among others. We assumed a two year delay in the final MATS implementation due to the U.S. Supreme Court's ruling. Additional impairment charges may be required if the rulings of the U.S. Court of Appeals for the District of Columbia Circuit on remand result in a delay in the implementation of MATS that is longer than two years or if the regulation is vacated. In addition, an estimate of the reporting unit's weighted average cost of capital ("WACC") is used to discount future estimated cash flows to their present value. The WACC was based upon externally available data considering market participants' costs of equity and debt, capital structure and risk factors specific to the Purification Solutions reporting unit.

Step two of the goodwill impairment test requires us to perform a theoretical purchase price allocation for the reporting unit to determine the implied fair value of goodwill and to compare the implied fair value of goodwill to the recorded amount of goodwill. The estimate of fair value is complex and requires significant judgment. Accounting guidance provides that a company should recognize an estimated impairment charge to the extent that it determines that it is probable that an impairment loss has occurred and such impairment can be reasonably estimated. As of June 30, 2015, we recorded a pre-tax goodwill impairment charge in the amount of $353 million. We completed the step two analysis in the fourth quarter of fiscal year 2015, which resulted in recording a credit of $1 million to the pre-tax goodwill impairment charge. Therefore, for the year ended September 30, 2015, the pre-tax goodwill impairment charge was $352 million.

Based on the same factors leading to goodwill impairment, we also considered whether the reporting unit's carrying values of definite-lived intangible assets and property, plant and equipment may not be recoverable or whether the carrying value of certain indefinite-lived intangible assets were impaired. We used the income approach to determine the fair value of the indefinite-lived intangible assets represented by the trademarks of Purification Solutions and determined that the fair value of these intangible assets was lower than their carrying value. As such, an impairment loss was recorded in the amount of $39 million. Subsequent to this impairment analysis, we concluded that an indefinite life of such assets could no longer be supported and have begun amortizing these assets on their estimated useful life. We also performed an impairment analysis to assess if definite-lived intangible assets and property, plant and equipment were recoverable based on the estimated undiscounted cash flows of the reporting unit, which was determined to be the lowest level of identifiable cash flows, and these cash flows were not sufficient to recover the carrying value of the long-lived assets over their remaining useful lives. Accordingly, an impairment charge was recorded based on the lower of the carrying amount or fair value of the long-lived assets. We used the income approach to determine the fair value of the definite-lived intangible assets and a combination of the cost and market approaches to fair value our property, plant and equipment. We recorded impairment charges of $119 million and $51 million, to our definite-lived intangible assets and property, plant and equipment, respectively, in the quarter ended June 30, 2015. We completed the impairment analysis in the fourth quarter of fiscal year 2015 which resulted in increasing the property, plant and equipment impairment charge by $1 million to $52 million. Therefore, for the year ended September 30, 2015, the long-lived assets impairment charge was $210 million. In connection with the long-lived assets impairment charges, we recorded a deferred tax benefit of $80 million to our income tax provision.

The performance of the Purification Solutions reporting unit will continue to be monitored. If the reporting unit does not achieve the financial performance that we expect or events or circumstances change, it is possible that additional impairment charges may result.

Pensions and Other Postretirement Benefits

We maintain both defined benefit and defined contribution plans for our employees. In addition, we provide certain postretirement health care and life insurance benefits for our retired employees. Plan obligations and annual expense calculations are based on a number of key assumptions. The assumptions, which are specific for each of our U.S. and foreign plans, are related to both the assets we hold to fund our plans (where applicable) and the characteristics of the benefits that will ultimately be provided to our employees. The most significant assumptions relative to our plan assets include the anticipated rates of return on these assets. Assumptions relative to our pension obligations are more varied; they include estimated discount rates, rates of compensation increases for employees, and mortality, employee turnover and other related demographic data. Projected health care and life insurance obligations also rely on the above mentioned demographic assumptions and assumptions surrounding health care cost trends. Actual results that differ from the assumptions are generally accumulated and amortized over future periods and could therefore affect the recognized expense and recorded obligation in such future periods. However, cash flow requirements may be different from the amounts of expense that are recorded in the consolidated financial statements.

Litigation and Contingencies

We are involved in litigation in the ordinary course of business, including personal injury and environmental litigation. After consultation with counsel, as appropriate, we accrue a liability for litigation when it is probable that a liability has been incurred and the amount can be reasonably estimated. The estimated reserves are recorded based on our best estimate of the liability associated with such matters or the low end of the estimated range of liability if we are unable to identify a better estimate within that range. Our best estimate is determined through the evaluation of various information, including claims, settlement offers, demands by government agencies, estimates performed by independent third parties, identification of other responsible parties and an assessment of their ability to contribute, and our prior experience. Litigation is highly uncertain and there is always the possibility of an unusual result in any particular case that may reduce our earnings and cash flows.

The most significant reserves that we have established are for environmental remediation and respirator litigation claims. The amount accrued for environmental matters reflects our assumptions about remediation requirements at the contaminated sites, the nature of the remedies, the outcome of discussions with regulatory agencies and other potentially responsible parties at multi-party sites, and the number and financial viability of other potentially responsible parties. These liabilities can be affected by the availability of new information, changes in the assumptions on which the accruals are based, unanticipated government enforcement action or changes in applicable government laws and regulations, which could result in higher or lower costs.

Our current estimate of the cost of our share of existing and future respirator liability claims is based on facts and circumstances existing at this time. Developments that could affect our estimate include, but are not limited to, (i) significant changes in the number of future claims, (ii) changes in the rate of dismissals without payment of pending silica and non-malignant asbestos claims, (iii) significant changes in the average cost of resolving claims, (iv) significant changes in the legal costs of defending these claims, (v) changes in the nature of claims received, (vi) changes in the law and procedure applicable to these claims, (vii) the financial viability of other parties which contribute to the settlement of respirator claims, (viii) a change in the availability of insurance coverage maintained by certain of the other parties which contribute to the settlement of respirator claims, or the indemnity provided by a former owner of the business, (ix) changes in the allocation of costs among the various parties paying legal and settlement costs and (x) a determination that the assumptions that were used to estimate our share of liability are no longer reasonable. We cannot determine the impact of these potential developments on our current estimate of our share of liability for these existing and future claims. Accordingly, the actual amount of these liabilities for existing and future claims could be different than the reserved amount.

Income Taxes

Our business operations are global in nature, and we are subject to taxes in numerous jurisdictions. Tax laws and tax rates vary substantially in these jurisdictions and are subject to change based on the political and economic climate in those countries. We file our tax returns in accordance with our interpretations of each jurisdiction’s tax laws.

Significant judgment is required in determining our worldwide provision for income taxes and recording the related tax assets and liabilities. In the ordinary course of our business, there are operational decisions, transactions, facts and circumstances, and calculations which make the ultimate tax determination uncertain. Furthermore, our tax positions are periodically subject to challenge by taxing authorities throughout the world. We have recorded reserves for taxes and associated interest and penalties that may become payable in future years as a result of audits by tax authorities. Any significant impact as a result of changes in underlying facts, law, tax rates, tax audit, or review could lead to adjustments to our income tax expense, our effective tax rate, and/or our cash flow.

We record benefits for uncertain tax positions based on an assessment of whether the position is more likely than not to be sustained by the taxing authorities. If this threshold is not met, no tax benefit of the uncertain tax position is recognized. If the threshold is met, the tax benefit that is recognized is the largest amount that is greater than 50% likely of being realized upon ultimate settlement. This analysis presumes the taxing authorities' full knowledge of the positions taken and all relevant facts, but does not consider the time value of money. We also accrue for interest and penalties on these uncertain tax positions and include such charges in the income tax provision in the Consolidated Statements of Operations.

Additionally, we have established valuation allowances against a variety of deferred tax assets, including net operating loss carry-forwards, foreign tax credits, and other income tax credits. Valuation allowances take into consideration our ability to use these deferred tax assets and reduce the value of such items to the amount that is deemed more likely than not to be recoverable. Our ability to utilize these deferred tax assets is dependent on achieving our forecast of future taxable operating income over an extended period of time. We review our forecast in relation to actual results and expected trends on a quarterly basis. Failure to achieve our operating income targets may change our assessment regarding the recoverability of our net deferred tax assets and such change could result in a valuation allowance being recorded against some or all of our net deferred tax assets. An increase in a valuation allowance would result in additional income tax expense, while a release of valuation allowances in periods when these tax attributes become realizable would reduce our income tax expense.

Significant Accounting Policies

We have other significant accounting policies that are discussed in Note A of the Notes to our Consolidated Financial Statements in Item 8 below. Certain of these policies include the use of estimates, but do not meet the definition of critical because they generally do not require estimates or judgments that are as difficult or subjective to measure. However, these policies are important to an understanding of the Consolidated Financial Statements.

Results of Operations

Definition of Terms and Non-GAAP Financial Measures

When discussing our results of operations, we use several terms as described below.

The term "product mix" refers to the mix of types and grades of products sold or the mix of geographic regions where products are sold, and the positive or negative impact this has on the revenue or profitability of the business or segment.

The term "LIFO" includes two factors: (i) the impact of current inventory costs being recognized immediately in Cost of sales under a last-in first-out method, compared to the older costs that would have been included in Cost of sales under a first-in first-out method ("Cost of sales impact"); and (ii) the impact of reductions in inventory quantities, causing historical inventory costs to flow through Cost of sales ("liquidation impact").

The discussion under the heading "Provision for Income Taxes and Reconciliation of Effective Tax Rate to Operating Tax Rate" includes a discussion of our "effective tax rate" and our "operating tax rate" and includes a reconciliation of the two rates. Our operating tax rate is a non-GAAP financial measure and should not be considered as an alternative to our effective tax rate, the most comparable GAAP financial measure. In calculating our operating tax rate, we exclude discrete tax items, which include: i) unusual or infrequent items such as a significant release of a valuation allowance, ii) items related to uncertain tax positions such as the tax impact of audit settlements, interest on tax reserves, and the release of tax reserves from the expiration of statutes of limitations, and iii) other discrete tax items, such as the tax impact of legislative changes and, on a quarterly basis, the timing of losses in certain jurisdictions and the cumulative rate adjustment, if applicable. We also exclude the tax impact of certain items, as defined below in the discussion of Total segment EBIT, on both operating income and the tax provision. Our definition of the operating tax rate may not be comparable to the definition used by other companies. Management believes that the non-GAAP financial measure is useful supplemental information because it helps our investors compare our tax rate year to year on a consistent basis and understand what our tax rate on current operations would be without the impact of these items which we do not believe are reflective of the underlying business results.

Total segment EBIT is a non-GAAP performance measure, and should not be considered an alternative for Income from continuing operations before taxes, the most directly comparable GAAP financial measure. In calculating Total segment EBIT, we make certain adjustments such as excluding certain items, meaning items that management does not consider representative of our fundamental segment results, as well as items that are not allocated to our business segments, such as interest expense and other corporate costs. Our Chief Operating Decision Maker uses segment

EBIT to evaluate the operating results of each segment and to allocate resources to the segments. We believe Total segment EBIT provides useful supplemental information for our investors as it is an important indicator of the Company's operational strength and performance. Investors should consider the limitations associated with this non-GAAP measure, including the potential lack of comparability of this measure from one company to another. A reconciliation of Total segment EBIT to Income from continuing operations before income taxes and equity in earnings of affiliated companies is provided in Note V of our consolidated financial statements.

Cabot is organized into four reportable business segments: Reinforcement Materials, Performance Chemicals, Purification Solutions, and Specialty Fluids. In fiscal 2015, we realigned our business reporting structure into these four segments. Segment results have been recast for all periods presented to reflect the realignment of our global business segments. The new segment structure is designed to improve efficiency and resource prioritization and reflects how our chief operating decision maker reviews segment results to assess performance and allocate resources.

Our analysis of financial condition and operating results should be read with our consolidated financial statements and accompanying notes. Unless a calendar year is specified, all references to years in this discussion are to our fiscal years ended September 30.

Drivers of Demand and Key Factors Affecting Profitability

Drivers of demand and key factors affecting our profitability differ by segment. In Reinforcement Materials, demand is influenced on a long-term basis primarily by: i) the number of vehicle miles driven globally; ii) the number of original equipment and replacement tires produced; and iii) the number of automotive builds. Over the past several years, operating results have been driven by a number of factors, including: i) increases or decreases in our sales volumes driven by changes in production levels for tires or industrial rubber products and the level at which we service that demand; ii) changes in raw material costs and our ability to adjust the sales price for our products commensurate with changes in raw material costs; iii) changes in pricing and product mix dependent on the level of price increases or decreases to customers as well as the mix of products sold or the region in which they are sold; iv) global and regional capacity utilization for carbon black; v) fixed cost savings achieved through restructuring and other cost saving activities; vi) the growth of our volumes and market position in emerging economies; vii) capacity management and technology investments, including the impact of energy utilization and yield improvement technologies at our manufacturing facilities; and viii) royalties and technology payments related to our patented elastomer composites technology that is used in tire applications.

In Performance Chemicals, longer term demand is driven primarily by the construction and infrastructure, automotive, electronics and consumer products industries. In recent years, operating results in Performance Chemicals have been driven by: i) increases or decreases in sales volumes to the industries previously noted; ii) our ability to deliver differentiated products that drive enhanced performance in customers' applications; iii) our ability to obtain value pricing for this differentiation; iv) the cost of new capacity; and v) the adoption of new products for use in our customers' applications.

In Purification Solutions, longer term demand is driven primarily by the demand for activated carbon based solutions for water, gas and air, pharmaceuticals, food and beverages, catalysts and other chemical applications. Operating results in Purification Solutions have been influenced by i) changes in volume in the various applications previously noted, ii) the amount of coal-based power generation utilized in the U.S. and the regulation of those utilities, iii) management of our operations, including inventory levels, and the commensurate costs, iv) changes in price and product mix, and v) industry capacity utilization.

In Specialty Fluids, demand for cesium formate is primarily driven by the level of drilling activity for high pressure oil and gas wells and by the petroleum industry's acceptance of our product as a drilling and completion fluid for this application. Operating results in Specialty Fluids are influenced by the number of drilling projects as well as the size, type and duration of the drilling jobs within the business.

Overview of Results for Fiscal 2015

During fiscal 2015, Income from continuing operations before income taxes and equity in earnings (loss) of affiliated companies decreased compared to fiscal 2014 largely due to an impairment charge related to the assets of Purification Solutions. The impairment was driven by a less favorable estimate of the developing business for activated carbon in mercury removal applications and uncertainty created by the June 2015 U.S. Supreme Court decision regarding the Mercury and Air Toxics Standards ("MATS") regulations. This resulted in a pre-tax Long-lived assets impairment charge of $210 million and a pre-tax Goodwill impairment charge of $352 million. The total after-tax charge was $482 million. In addition, results declined due to margin pressure in Reinforcement Materials and lower project activity in Specialty Fluids, partially offset by improved EBIT results in Purification Solutions and Performance Chemicals.

Fiscal 2015 compared to Fiscal 2014 and Fiscal 2014 compared to Fiscal 2013—Consolidated

Net Sales and other operating revenue and Gross Profit

	Years ended September 30		
	2015	2014	2013
	(Dollars in millions)		
Net sales and other operating revenues	$2,871	$3,647	$3,456
Gross profit	$585	$721	$633

The $776 million decrease in net sales from fiscal 2014 to fiscal 2015 was due primarily to a less favorable price and product mix (combined $433 million), an unfavorable impact from foreign currency translation ($203 million), a decrease in volumes ($116 million), lower elastomer composites royalties and technology payments ($10 million), and lower royalties in Purification Solutions ($3 million). The less favorable price and product mix impact was primarily due to lower selling prices during the year from price adjustments to customers for decreases in raw materials costs. The $191 million increase in net sales from fiscal 2013 to fiscal 2014 was due primarily to an increase in volumes ($247 million). The improvement was partially offset by a less favorable price and product mix (combined $57 million).

Gross profit decreased by $136 million in fiscal 2015 when compared to fiscal 2014 driven by lower margins in Reinforcement Materials and lower volumes in Specialty Fluids. Gross profit increased by $88 million in fiscal 2014 when compared to fiscal 2013 driven by higher volumes, raw material purchasing savings, and the benefits from energy efficiency investments.

Selling and Administrative Expenses

	Years Ended September 30		
	2015	2014	2013
	(Dollars in millions)		
Selling and administrative expenses	$282	$326	$297

Selling and administrative expenses decreased by $44 million in fiscal 2015 when compared to fiscal 2014. The decrease was principally driven by reduced spending on travel and corporate projects, lower incentive compensation expense, and lower expenses related to a 2014 restructuring in our Europe, Middle East and Africa ("EMEA") business service center. Selling and administrative expenses increased by $29 million in fiscal 2014 when compared to fiscal 2013. The increase was principally driven by higher expenses related to the restructuring of our EMEA business service center, the addition of NHUMO, and higher costs associated with corporate projects.

Research and Technical Expenses

	Years Ended September 30		
	2015	2014	2013
	(Dollars in millions)		
Research and technical expenses	$58	$ 60	$ 68

Research and technical expenses decreased by $2 million in fiscal 2015 when compared to fiscal 2014 due to lower spending on projects across the segments. Research and technical expenses decreased by $8 million in fiscal 2014 when compared to fiscal 2013 primarily due to lower costs from the benefits associated with restructuring-related activities as we focus on activities that are closer to our existing businesses.

Purification Solutions Long-Lived Assets and Goodwill Impairment Charges

	Years ended September 30		
	2015	2014	2013
	(Dollars in millions)		
Purification Solutions long-lived assets impairment charge	$210	$ —	$ —

Purification Solutions goodwill impairment charge	$352	$ —	$ —

The Purification Solutions long-lived assets and goodwill impairment charges were recorded during fiscal 2015. Refer to Note G for further information on these charges.

Interest and Dividend Income

	Years Ended September 30		
	2015	2014	2013
	(Dollars in millions)		
Interest and dividend income	$4	$ 3	$ 5

Interest and dividend income increased by $1 million in fiscal 2015 when compared to fiscal 2014 due to higher interest earned on cash balances. Interest and dividend income decreased by $2 million in fiscal 2014 when compared to fiscal 2013 due to lower interest earned on cash balances.

Interest Expense

	Years Ended September 30		
	2015	2014	2013
	(Dollars in millions)		
Interest expense	$53	$ 55	$ 62

Interest expense decreased by $2 million in fiscal 2015 as compared to fiscal 2014. The decrease was primarily due to the repayment of certain long-term debt. Interest expense decreased by $7 million in fiscal 2014 as compared to fiscal 2013. The decrease was due to the maturity of long-term debt in the fourth quarter of fiscal 2013 that was refinanced with commercial paper carrying a lower interest rate.

Other (Expense) Income

	Years Ended September 30		
	2015	2014	2013
	(Dollars in millions)		
Other (expense) income	$ (11)	$ 25	$ (1)

Other (expense) income during fiscal 2015 changed by $36 million as compared to fiscal 2014 due primarily to a gain recognized on our existing equity investment in NHUMO ($29 million) in fiscal 2014 as a result of the NHUMO transaction and the unfavorable comparison of foreign currency movements ($6 million). Other (expense) income during fiscal 2014 changed by $26 million as compared to fiscal 2013 due primarily to a gain recognized on our existing equity investment in NHUMO ($29 million) as a result of the NHUMO transaction. This gain was partially offset by an unfavorable comparison of foreign currency movements.

Provision for Income Taxes and Reconciliation of Effective Tax Rate to Operating Tax Rate

	Years Ended September 30		
	2015	2014	2013
	(Dollars in millions)		
(Benefit) provision for income taxes	$ (45)	$ 92	$ 60
Effective tax rate	12 %	30 %	28 %
Impact of discrete tax items:			
Unusual or infrequent items	(2)%	(7 %)	(3 %)
Items related to uncertain tax positions	(2)%	3 %	2 %
Other discrete tax items	1 %	(2 %)	1 %
Impact of certain items	17 %	3 %	(2 %)
Operating tax rate	26 %	27 %	26 %

The benefit for income taxes was $45 million for fiscal 2015, resulting in an effective tax rate of 12%. This amount included net tax benefits of $107 million, principally comprised of an $80 million benefit from the impairment of the Purification Solutions segment, $14 million of benefits from other certain items and $13 million of benefits from discrete tax items. See Note G of the consolidated financial statements for details of the impairment. The operating tax rate for fiscal 2015 was 26%.

The provision for income taxes was $92 million for fiscal 2014, resulting in an effective tax rate of 30%. This amount included net discrete charges of $17 million, principally comprised of a $20 million valuation allowance, partially offset by a non-taxable gain of $29 million recognized on the Company's pre-existing investment in NHUMO as a result of the NHUMO transaction. This gain is reported as a certain item. See Note C of the consolidated financial statements for details of the transaction. The operating tax rate for fiscal 2014 was 27%.

The provision for income taxes was $60 million for fiscal 2013, resulting in an effective tax rate of 28%. The increase in the effective tax rate for fiscal 2013, as compared to fiscal 2012, is due to a change in our geographic mix of earnings and an increase in losses from jurisdictions for which no benefit can be recognized. This amount included net discrete charges of $3 million composed of $13 million foreign currency related charge, offset by $10 million of net tax benefit related to tax settlements, renewal of the U.S. research and experimentation credit, and other miscellaneous tax items in the tax provision. The operating tax rate for fiscal 2013 was 26%.

Our anticipated operating tax rate for fiscal 2016 is between 26% and 28%. The IRS has not yet commenced the audit of our 2012 and later tax years and certain Cabot subsidiaries are under audit in a number of jurisdictions outside of the U.S. It is possible that some of these audits will be resolved in fiscal 2016 and could impact our anticipated effective tax rate. We have filed our tax returns in accordance with the tax laws in each jurisdiction and maintain tax reserves for uncertain tax positions.

Equity in Earnings of Affiliated Companies and Net Income Attributable to Noncontrolling Interest, net of tax

	Years Ended September 30		
	2015	2014	2013
	(Dollars in millions)		
Equity in earnings of affiliated companies, net of tax	$4	$ —	$ 11
Net income attributable to noncontrolling interests, net of tax	$8	$ 19	$ 7

Equity in earnings of affiliated companies, net of tax, increased by $4 million in fiscal 2015 compared to fiscal 2014. The increase was primarily due to higher earnings from our Venezuelan equity affiliate. Equity in earnings of affiliated companies, net of tax, decreased by $11 million in fiscal 2014 compared fiscal 2013. The decline was primarily due to the consolidation of the earnings of NHUMO following the NHUMO transaction and lower earnings from our Venezuelan equity affiliate, including the unfavorable impact from the devaluation of the Venezuelan bolivar.

For fiscal 2015, net income attributable to noncontrolling interests, net of tax, decreased by $11 million compared to fiscal 2014 due to lower profitability of our joint ventures. For fiscal 2014, net income attributable to noncontrolling interests, net of tax, increased by $12 million compared to fiscal 2013 due to higher profitability of our joint ventures and charges associated with our 2013 restructuring in Malaysia that did not repeat in fiscal 2014.

Income (Loss) from Discontinued Operations, net of tax

During fiscal 2014, we divested our Security Materials business and during fiscal 2012, we divested our Supermetals business. Accordingly, for all periods we have classified the income or loss from these businesses as Income from discontinued operations, net of tax.

Net (Loss) Income Attributable to Cabot Corporation

In fiscal 2015, we reported a net loss of $334 million ($5.27 per diluted common share). The loss is driven by the Purification Solutions long-lived asset and goodwill impairment charges more fully discussed in Note G to our consolidated financial statements. This is compared to net income of $199 million ($3.03 per diluted common share) in fiscal 2014 and net income of $153 million ($2.36 per diluted common share) in fiscal 2013.

Fiscal 2015 compared to Fiscal 2014 and Fiscal 2014 compared to Fiscal 2013—By Business Segment

Total segment EBIT, certain items, other unallocated items and Income from continuing operations before income taxes and equity in earnings of affiliated companies for fiscal 2015, 2014 and 2013 are set forth in the table below. The details of certain items and other unallocated items are shown below and in Note V of our Consolidated Financial Statements.

	Years Ended September 30		
	2015	2014	2013
	(Dollars in millions)		
Total segment EBIT	$332	$447	$386
Certain items	(617)	(28)	(54)
Other unallocated items	(92)	(111)	(122)
(Loss) income from continuing operations before income taxes and equity in earnings of affiliated companies	$(377)	$308	$210

In fiscal 2015, total segment EBIT decreased by $115 million when compared to fiscal 2014. The decrease was driven by lower volumes ($69 million), lower unit margins ($44 million), an unfavorable comparison of foreign currency movements ($20 million), lower elastomer composites royalties and technology payments ($10 million), lower Purification Solutions royalties ($3 million) and the absence of a one-time insurance recovery in fiscal 2014 that did not repeat in fiscal 2015 in Purification Solutions ($9 million). These impacts were partially offset by lower fixed costs ($46 million).

In fiscal 2014, total segment EBIT increased by $61 million when compared to fiscal 2013. The increase was driven by higher volumes ($84 million), higher unit margins ($23 million) that resulted from raw material purchasing savings and the benefits from energy efficiency investments, a favorable comparison of foreign currency movements ($15 million), and higher royalty and technology payments in elastomer composites ($11 million). These increases were partially offset by higher fixed costs ($73 million) driven by costs from new capacity in the Reinforcement Materials segment and higher maintenance costs in the Purification Solutions segment.

Certain Items:

Details of the certain items for fiscal 2015, 2014, and 2013 are as follows:

	Years Ended September 30		
	2015	2014	2013
	(Dollars in millions)		
Impairment of goodwill and long-lived assets of Purification Solutions	$(562)	$—	$—
Global restructuring activities	(21)	(29)	(35)
Acquisition and integration-related charges	(5)	(7)	(21)
Employee benefit plan settlement and other charges	(21)	—	—
Foreign currency (loss) gain on revaluations	(2)	(3)	3
Gain on existing investment in NHUMO	—	29	—
Legal and environmental matters and reserves	—	(18)	(1)
Inventory reserve adjustment	(6)	—	—
Total certain items, pre-tax	$(617)	$(28)	$(54)
Tax-related certain items			
Tax impact of certain items	$94	$17	$10
Tax impact of certain foreign exchange (losses) gains	—	—	(12)
Tax impact of non-deductible interest expense	—	—	—
Discrete tax items	13	(17)	11
Total tax-related certain items	—	—	9
Total certain items after tax	$(510)	$(28)	$(45)

Certain items for fiscal 2015 include charges related to the impairment of Purification Solutions long-lived assets and goodwill, restructuring activities, acquisition and integration-related charges, foreign currency impacts on revaluations, employee benefit plan settlements, an inventory adjustment, and tax certain items. Details of the impairment of goodwill and long-lived assets are included in Note G of the Consolidated Financial Statements. Details of restructuring activities are included in Note P of the Consolidated Financial Statements. Acquisition and integration-related charges include legal and professional fees, the incremental value of inventory as a result of purchase accounting adjustments and other expenses related to the completion of the acquisitions and the integrations of Purification Solutions and NHUMO. A discussion of employee benefit plan settlements is included in Note N of the consolidated financial statements. A discussion of the inventory reserve adjustment is included in Note E of the consolidated financial statements. Tax-related certain items include discrete tax items, which are unusual and infrequent, and the tax impact of certain foreign exchange losses.

Other Unallocated Items:

	Years Ended September 30		
	2015	2014	2013
	(Dollars in millions)		
Interest expense	$(53)	$(55)	$(62)
Equity in earnings of affiliated companies, net of tax	(4)	—	(11)
Unallocated corporate costs	(46)	(54)	(48)

General unallocated income (expense)	11	(2)	(1)
Total other unallocated items	$(92)	$(111)	$(122)

Other unallocated items include Interest expense, Equity in earnings of affiliated companies, net of tax, Unallocated corporate costs, and General unallocated income (expense). The balances of unallocated corporate costs are primarily comprised of expenditures related to managing a public company that are not allocated to the segments and corporate business development costs related to new technology efforts. The balances of General unallocated expense primarily include foreign currency transaction gains (losses), interest income, dividend income, the elimination of profit related to unearned revenue, and the cost of sales impact of LIFO accounting.

In fiscal 2015, costs from total other unallocated items decreased by $19 million when compared to fiscal 2014. The decrease was driven by a change of $13 million of General unallocated income (expense) due to the cost of sales impact of LIFO accounting from changes in carbon black raw material costs that resulted in a favorable comparison ($19 million) partially offset by the unfavorable impact of changes in foreign currency movements ($6 million). In addition, Unallocated corporate costs decreased by $8 million primarily associated with lower spending for corporate projects and lower expenses related to incentive compensation.

In fiscal 2014, costs from total other unallocated items decreased by $11 million when compared to fiscal 2013. The decrease was driven by $11 million of lower Equity in earnings of affiliated companies, net of tax, due to the consolidation of the earnings of NHUMO following the NHUMO transaction and lower earnings from our Venezuelan equity affiliate. Interest expense also decreased by $7 million due to the maturity of long-term debt in the fourth quarter of fiscal 2013 that was refinanced with commercial paper carrying a lower interest rate. These decreases were partially offset by a $6 million increase in Unallocated corporate costs primarily associated with spending for corporate projects and higher expenses related to incentive compensation.

Reinforcement Materials

Sales and EBIT for Reinforcement Materials for fiscal 2015, 2014 and 2013 are as follows:

	Years Ended September 30		
	2015	2014	2013
	(Dollars in millions)		
Reinforcement Materials Sales	$1,507	$2,108	$1,931
Reinforcement Materials EBIT	$143	$259	$195

In fiscal 2015, sales in Reinforcement Materials decreased by $601 million when compared to fiscal 2014. The decrease was principally driven by a less favorable price and product mix (combined $418 million), an unfavorable comparison of foreign currency translation ($116 million), 2% lower volumes ($55 million), and lower elastomer composites royalties and technology payments ($10 million). The less favorable price and product mix was primarily due to price adjustments to customers for decreases in raw material costs, lower pricing, and a shift in regional mix from North America to Asia. Lower volumes were driven by a reduction in rubber blacks volumes from lower contractual volumes in North America and weaker demand in China and South America. The lower elastomer composites royalties and technology payments were due to the transition from a fixed to a variable royalty arrangement and lower technology milestone payments.

In fiscal 2014, sales in Reinforcement Materials increased by $177 million when compared to fiscal 2013. The increase was principally driven by 13% higher rubber blacks volumes ($254 million). The increase was offset by a less favorable rubber blacks price and product mix (combined $67 million) and an unfavorable comparison of foreign currency translation ($14 million). Higher rubber blacks volumes were due to improved carbon black demand, the addition of new capacity in China, and the acquisition of NHUMO. The less favorable rubber blacks price and product mix was primarily due to price adjustments to customers for decreases in raw material costs.

In fiscal 2015, Reinforcement Materials EBIT decreased by $116 million when compared to fiscal 2014 driven principally by lower rubber blacks unit margins ($91 million), lower rubber blacks volumes ($14 million), lower elastomer composites royalties and technology payments ($10 million), and an unfavorable comparison of foreign currency translation ($7 million). The decreases were partially offset by lower rubber blacks fixed costs ($9 million). The less favorable rubber blacks unit margins were due to lower contract pricing and increased competition in Asia, negative feedstock effects from lower raw materials purchasing savings, lower benefits from our energy efficiency investments, and the impact of high cost inventory that moved through our supply chain during the first half of the year. We also experienced a less favorable sales mix, with lower sales in North America and higher sales in Asia. Lower rubber blacks fixed costs were primarily associated with cost management efforts to operate more efficiently and lower discretionary spending.

In fiscal 2014, Reinforcement Materials EBIT increased by $64 million when compared to fiscal 2013 driven principally by higher rubber blacks volumes ($85 million), higher rubber blacks unit margins ($16 million) from raw material purchasing savings and the benefit from energy efficiency investments, a favorable comparison of foreign currency translation ($12 million), and higher elastomer composites royalties and technology payments ($11 million). The increase was partially offset by higher rubber blacks fixed costs ($58 million). Higher rubber blacks fixed costs were primarily associated with new carbon black capacity in China and the acquisition of NHUMO.

Performance Chemicals

Sales and EBIT for Performance Chemicals for fiscal 2015, 2014 and 2013 are as follows:

	Years Ended September 30		
	2015	2014	2013
	(Dollars in millions)		
Specialty Carbons and Formulations Sales	$630	$709	$686
Metal Oxides Sales	297	313	303
Performance Chemicals Sales	$927	$1,022	$989
Performance Chemicals EBIT	$178	$168	$149

In fiscal 2015, sales in Performance Chemicals decreased by $95 million when compared to fiscal 2014 due to an unfavorable comparison of foreign currency translation ($64 million), and a less favorable price and product mix (combined $32 million). The change in price and product mix was mainly driven by price adjustments to customers for decreases in raw material costs.

In fiscal 2014, sales in Performance Chemicals increased by $33 million when compared to fiscal 2013 due to higher volumes ($41 million) and a favorable comparison of foreign currency translation ($9 million), offset by a less favorable price and product mix (combined $10 million) and lower aerogel royalties ($8 million). During fiscal 2014, volumes in Specialty Carbons and Formulations increased by 4% and volumes in Metal Oxides increased by 4%. Higher volumes were due to improved demand in our key end markets. The change in price and product mix was driven by price adjustments to customers for decreases in raw material costs.

In fiscal 2015, EBIT in Performance Chemicals was $10 million higher when compared to fiscal 2014 due to higher unit margins ($20 million) and lower fixed costs ($8 million). The improvement in unit margins was driven by lower raw material costs in the specialty carbons product line. Lower fixed costs were a result of cost management efforts across the segment. These benefits were partially offset by unfavorable foreign currency translation ($16 million) and slightly lower volumes ($2 million). Volumes were relatively flat across the segment during fiscal 2015.

In fiscal 2014, EBIT in Performance Chemicals was $19 million higher when compared to fiscal 2013 due to higher volumes ($21 million) as demand improved in our key end markets.

Purification Solutions

Sales and EBIT for Purification Solutions for fiscal 2015, 2014 and 2013 are as follows:

	Years Ended September 30		
	2015	2014	2013
	(Dollars in millions)		
Purification Solutions Sales	$296	$315	$328
Purification Solutions EBIT	$5	$(19)	$(4)

Sales in Purification Solutions decreased by $19 million in fiscal 2015 when compared to fiscal 2014 due to an unfavorable comparison of foreign currency translation ($23 million), lower royalties ($3 million) and lower volumes ($3 million) partially offset by a more favorable price and product mix (combined $10 million). The more favorable price and product mix was primarily due to the implementation of price increases and an improved product mix. Overall volumes declined slightly from the effect on volumes of increasing prices, however, volumes sold to mercury removal customers increased. This was due to the first wave of customers complying with the MATS regulation in April of 2015.

Sales in Purification Solutions decreased by $13 million in fiscal 2014 when compared to fiscal 2013 due to lower volumes ($31 million) partially offset by a more favorable price and product mix (combined $13 million) and a favorable comparison of foreign currency translation ($5 million). Lower volumes were driven by a decline in demand in the air and gas sector. The more favorable price and product mix was primarily due to the implementation of price increases.

EBIT in Purification Solutions increased by $24 million in fiscal 2015 when compared to fiscal 2014 driven by improved unit margins ($21 million), lower fixed costs ($14 million), and the favorable comparison of foreign currency translation ($2 million). These improvements were partially offset by lower royalties ($3 million) and the absence of a one-time insurance recovery in fiscal 2014 that did not repeat in fiscal 2015 ($9 million), and lower volumes ($2 million). Higher unit margins were due to the implementation of price increases, improvement in the product mix and lower variable costs. Lower fixed costs were a result of improved operational performance, cost management efforts and $5 million of lower depreciation and amortization.

EBIT in Purification Solutions decreased by $15 million in fiscal 2014 when compared to fiscal 2013 driven by lower volumes ($17 million) and higher fixed costs ($10 million). These declines were partially offset by higher unit margins ($2 million) due to price increases and the benefit from insurance proceeds ($9 million). Lower volumes were primarily due to a decline in demand in the air and gas sector. Higher fixed costs were primarily related to higher maintenance costs and higher allocation of certain functional and indirect costs. The insurance proceeds were related to business interruption and property damage insurance recoveries for operating issues experienced in late fiscal 2013 and early fiscal 2014.

Specialty Fluids

Sales and EBIT for Specialty Fluids for fiscal 2015, 2014 and 2013 are as follows:

	Years Ended September 30		
	2015	2014	2013
	(Dollars in millions)		
Specialty Fluids Sales	$42	$ 98	$101
Specialty Fluids EBIT	$6	$ 39	$46

Sales in Specialty Fluids decreased by $56 million in fiscal 2015 when compared to fiscal 2014. The decrease was primarily due to lower volumes ($62 million) from lower project activity levels that resulted in lower rental and sales volumes for our drilling fluids. The lower level of project activity was caused by the downturn in the oil and gas industry, which resulted in fewer investments, project delays, and stringent cost management by our customers. The decrease in volumes was partially offset by a more favorable price and product mix (combined $6 million).

Sales in Specialty Fluids decreased by $3 million in fiscal 2014 when compared to fiscal 2013. The decrease was primarily due to lower volumes ($8 million) partially offset by a more favorable price and product mix (combined $6 million).

EBIT in Specialty Fluids decreased by $33 million in fiscal 2015 when compared to fiscal 2014. The decrease was primarily due to lower volumes ($46 million). In response, we improved our price and product mix ($5 million) and reduced fixed costs ($8 million) to help partially offset the lower volumes.

EBIT in Specialty Fluids decreased by $7 million in fiscal 2014 when compared to fiscal 2013. The decrease is primarily due to higher fixed costs ($10 million) driven by higher mine-related costs, and lower volumes ($1 million), partially offset by a more favorable price and product mix (combined $5 million).

Outlook

We expect modest growth in volumes in fiscal year 2016 in Reinforcement Materials and Performance Chemicals driven by demand growth for our products in the developed economies and continued economic uncertainty in Asia and South America. We anticipate continued margin pressure in the Reinforcement Materials segment during the remainder of calendar year 2015 from feedstock-related effects and an increasingly competitive environment in Asia. For Purification Solutions, we are repositioning our cost profile and until a decision from the U.S. Court of Appeals for the District of Columbia about next steps for MATS can provide clarity of direction for the regulation, we expect that Purification Solutions will operate at roughly breakeven EBIT in the near-term. Specialty Fluids continues to work on strengthening the project pipeline, but the short-term outlook remains difficult for the segment. To respond to the current environment, we remain focused on managing costs and cash flow. In October 2015, we announced our intention to implement a restructuring plan that is expected to result in Company-wide cost savings of approximately $50 million in fiscal 2016 as compared to fiscal 2015, with savings starting in the second quarter of fiscal 2016. In November 2015, we announced our intention to close our Merak, Indonesia carbon black manufacturing facility by the end of January 2016. It is expected that this closure will result in annual cost savings of approximately $8 million. We anticipate capital expenditures to be approximately $150 million in fiscal 2016.

Cash Flows and Liquidity

Overview

Our liquidity position, as measured by cash and cash equivalents plus borrowing availability, increased by $28 million during fiscal 2015. The increase was largely attributable to an increase in cash and the paydown of commercial paper. As of September 30, 2015, we had cash and cash equivalents of $77 million and borrowing availability under our revolving credit agreement of $738 million. Our revolving credit agreement, which was amended in October 2015 to increase the borrowing limit from $750 million to $1 billion, supports our commercial paper program. The outstanding balance of commercial paper as of September 30, 2015 was $12 million and is included within the Notes payable caption on our Consolidated Balance Sheets. At September 30, 2015, we were in compliance with all applicable covenants including the total consolidated debt to consolidated EBITDA (earnings before interest, taxes, depreciation and amortization) covenant.

We generally manage our cash and debt on a global basis to provide for working capital requirements as needed by region or site. Cash and debt are generally denominated in the local currency of the subsidiary holding the assets or liabilities, except where there are operational cash flow reasons to hold non-functional currency or debt. The vast majority of our cash and cash equivalent holdings tend to be held outside the U.S., as excess cash balances in the U.S. are generally used to repay commercial paper.

We anticipate sufficient liquidity from (i) cash on hand; (ii) cash flows from operating activities; and (iii) cash available from our revolving credit agreement and our commercial paper program to meet our operational and capital investment needs and financial obligations for the foreseeable future. Our liquidity derived from cash flows from operations is, to a large degree, predicated on our ability to collect our receivables in a timely manner, the cost of our raw materials, and our ability to manage inventory levels.

Our Consolidated Statements of Cash Flows have been presented to include discontinued operations with continuing operations. Therefore, unless noted otherwise, the following discussion of our cash flows and liquidity position include both continuing and discontinued operations.

The following discussion of the changes in our cash balance refers to the various sections of our Consolidated Statements of Cash Flows.

Cash Flows from Operating Activities

Cash provided by operating activities, which consists of net income adjusted for the various non-cash items included in income, changes in working capital and changes in certain other balance sheet accounts, totaled $499 million in fiscal 2015. Operating activities provided $315 million and $419 million in fiscal 2014 and 2013, respectively.

Cash provided by operating activities in fiscal 2015 was driven primarily by our non-cash charges for depreciation and amortization and asset impairments, which more than offset our net loss for the period. In addition, there was a net decrease in accounts receivable and inventories largely driven by lower raw material costs and associated price reductions.

Cash provided from operating activities in fiscal 2014 was driven primarily by net income of $218 million plus $201 million of depreciation and amortization and $25 million of dividends from equity affiliates, $14 million of which was received from NHUMO prior to our purchase of the remaining outstanding common stock of the joint venture. These sources of cash were partially offset by an increase in accounts receivable and inventories due to higher sales and the inclusion of NHUMO balances.

Cash provided from operating activities in fiscal 2013 was driven primarily by net income of $160 million plus $190 million of depreciation and amortization and a decrease in accounts receivable and inventories.

In addition to the factors noted above, the following other elements of operations have a bearing on operating cash flows:

Restructurings — As of September 30, 2015, we had $9 million of total restructuring costs in accrued expenses in the consolidated balance sheet related to our global restructuring activities. We made cash payments of $24 million during fiscal 2015 and expect to make cash payments of approximately $9 million in fiscal 2016 and thereafter related to these restructuring plans.

In the first quarter of fiscal 2016, we announced our intention to restructure our operations subject to local consultation requirements and processes in certain locations. Additionally, we announced our commitment to close our carbon black manufacturing facility in Merak, Indonesia. These actions are expected to result in net cash outlays of approximately $38 million, substantially all of which is expected to be paid in fiscal 2016.

We may receive cash in the future from the sale of certain assets and land relating to restructured sites, which is not included in these amounts.

Environmental Reserves and Litigation Matters—As of September 30, 2015, we have recorded a $16 million reserve for environmental remediation costs at various sites. These sites are primarily associated with businesses divested in prior years. We anticipate that the expenditures at these sites will be made over a number of years, and will not be concentrated in any one year. Additionally, as of September 30, 2015 we have recorded an $11 million reserve for respirator claims. These expenditures will be incurred over many years. We also have other litigation costs arising in the ordinary course of business.

The following table represents the estimated future payments related to our environmental reserve.

	Future Payments by Fiscal Year						
	2016	2017	2018	2019	2020	Thereafter	Total
	(Dollars in millions)						
Environmental	$2	$ 3	$ 3	$ 1	$ 1	$ 6	$ 16

Cash Flows from Investing Activities

In fiscal 2015, capital expenditures were $141 million. Major capital project expenditures were related to the completion of our lignite mine development project in the Purification Solutions segment, mine development activities for our Specialty Fluids segment, and sustaining and compliance capital projects at our operating facilities. In fiscal 2014, capital expenditures of $171 million and cash paid for NHUMO of $73 million (net of cash acquired of $7 million) were partially offset by the receipt of the final cash payment for the sale of the Supermetals business of $215 million. Capital expenditures were primarily related to our lignite mine development project in the Purification Solutions segment, sustaining and compliance capital projects at our operating facilities, and mine development activities for the Specialty Fluids segment. In fiscal 2013, investing activities consumed $227 million of cash and were primarily driven by capital expenditures of $264 million partially offset by cash received from the notes receivable from the sale of the Supermetals business ($40 million in total, comprised of $39 million of principal and $1 million of interest).

Capital expenditures for fiscal 2016 are expected to be approximately $150 million. Our planned capital spending program for fiscal 2016 is primarily for sustaining and compliance capital projects at our operating facilities.

In January 2012, we completed the sale of our Supermetals business, which we classified as discontinued operations beginning in the fourth quarter of fiscal 2011 when we entered into the sale and purchase agreement. In connection with the sale, we received $175 million on the closing date and notes for additional minimum consideration totaling approximately $277 million that were payable at various dates through March 2014. Total cash proceeds collected were $452 million, of which the final payment of $215 million was received in fiscal 2014.

In July 2014, we completed the sale of our Security Materials business, which we classified as discontinued operations. In connection with the sale, we received approximately $20 million in cash proceeds.

Cash Flows from Financing Activities

Financing activities consumed $256 million of cash in fiscal 2015 compared to $302 million of cash in fiscal 2014 and $206 million in fiscal 2013. During fiscal 2015, our overall debt balance decreased by $78 million. The decrease was driven primarily by our repayment of certain long-term debt and commercial paper. As of September 30, 2015, we had outstanding notes under our commercial paper program in an aggregate amount of $12 million, with a weighted average interest rate of 0.36%. During fiscal 2014, our overall debt balance decreased by $226 million. The decrease was driven primarily by our repayment of commercial paper using the cash received from the sale of the Supermetals business. As of September 30, 2014, we had outstanding notes under our commercial paper program in an aggregate amount of $30 million, with a weighted average interest rate of 0.25%.

The following table provides a summary of our outstanding debt.

	September 30	
	2015	2014
	(Dollars in millions)	
Notes payable	$22	$44
Variable rate debt	—	28
Total variable rate debt	22	72
Fixed rate debt, net of discount	958	984
Unamortized bond discounts	(1)	(1)
Capital leases	14	17
Total debt	$993	$1,072

At September 30, 2015, we had $738 million of availability under our credit agreement.

Our long-term total debt, of which $1 million is current, matures at various times as presented in Note J. The weighted-average interest rate on our fixed rate long-term debt was 4.04% as of September 30, 2015.

At September 30, 2015, we have provided standby letters of credit totaling $11 million, which expire throughout fiscal 2016.

On October 23, 2015, we entered into a new revolving credit agreement that amended and extended our $750 million revolving credit agreement (which was scheduled to mature October 3, 2019). With this amendment and extension, we increased our borrowing availability to $1 billion. The new credit agreement matures on October 23, 2020, subject to two one-year options to extend on the first and second anniversaries of the effective date. The new credit agreement continues to support our commercial paper program. Borrowings under the new revolving credit agreement may be used for working capital, letters of credit and other general corporate purposes. The new revolving credit agreement contains affirmative and negative covenants, a single financial covenant (consolidated total debt to consolidated EBITDA) and events of default customary for financings of this type.

We issued $300 million of 5% fixed rate debt in fiscal 2009 that matures in early fiscal 2017 (October 1, 2016). Our intention is to refinance these securities prior to maturity during fiscal 2016.

Share repurchases

During fiscal 2015 and fiscal 2014, we repurchased approximately 2.3 million and 0.2 million shares of our common stock on the open market for an aggregate purchase price of $96 million and $11 million, respectively. We did not make any repurchases on the open market in fiscal 2013. As of September 30, 2015, we had approximately 3.7 million shares available for repurchase under the Board of Directors’ share repurchase authorization.

Dividend payments

In fiscal 2015, 2014 and 2013, we paid cash dividends on our common stock of $0.88, $0.84 and $0.80 per share, respectively. These cash dividend payments totaled $56 million in fiscal 2015, $54 million in fiscal 2014, and $51 million in fiscal 2013.

Venezuela

We own 49% of an operating carbon black affiliate in Venezuela, which is accounted for as an equity affiliate, through wholly-owned subsidiaries that carry the investment and receive its dividends. As of September 30, 2015, these subsidiaries carried the operating affiliate investment of $14 million and held 18 million bolivars (less than $1 million) in cash.

During fiscal 2015, 2014 and 2013, we received dividends in the amounts of $6 million, $5 million and $3 million, respectively, which were paid in U.S. dollars.

A significant portion of our operating affiliate's sales are exports denominated in U.S. dollars. The Venezuelan government mandates that a certain percentage of the dollars collected from these sales be converted into bolivars. The operating affiliate and our wholly owned subsidiaries used an exchange rate that was available to us when converting these dollars into bolivars to remeasure their bolivar denominated monetary accounts. The exchange rate made available to us on September 30, 2015 was 52 bolivars to the U.S. dollar (B/$).

The operating entity has generally been profitable. We continue to closely monitor developments in Venezuela and their potential impact on the recoverability of our equity affiliate investment.

We closely monitor our ability to convert our bolivar holdings into U.S. dollars, as we intend to convert substantially all bolivars held by our wholly-owned subsidiaries in Venezuela to U.S. dollars as soon as practical. Any future change in the exchange rate or opening of additional parallel markets could cause us to change the exchange rate we use and result in gains or losses on the bolivar denominated assets held by our wholly-owned subsidiaries.

Employee Benefit Plans

As of September 30, 2015, we had a consolidated pension obligation, net of the fair value of plan assets, of $139 million, comprised of $86 million for pension benefit plan liabilities and $53 million for postretirement benefit plan liabilities.

The $86 million of unfunded pension benefit plan liabilities is derived as follows:

	U.S.	Foreign	Total
	(Dollars in millions)		
Fair Value of Plan Assets	$153	$ 279	$432
Benefit Obligation	$170	$ 348	$518
Unfunded Status	$(17)	$ (69)	$(86)

In fiscal 2015, we made cash contributions totaling approximately $9 million to our foreign pension benefit plans. In fiscal 2016, we expect to make cash contributions of $8 million to our foreign pension plans.

The $53 million of unfunded postretirement benefit plan liabilities is comprised of $38 million for our U.S. and $15 million for our foreign postretirement benefit plans. These postretirement benefit plans provide certain health care and life insurance benefits for retired employees. Typical of such plans, our postretirement plans are unfunded and, therefore, have no plan assets. We fund these plans as claims or insurance premiums come due. In fiscal 2015, we paid postretirement benefits of $4 million under our U.S. postretirement plans and less than $1 million under our foreign postretirement plans. For fiscal 2016, we expect to make benefit payments of approximately $4 million under our U.S. postretirement plans and less than $1 million under our foreign postretirement plans.

Off-balance sheet arrangements

We had no material transactions that meet the definition of an off-balance sheet arrangement.

Contractual Obligations

The following table sets forth our long-term contractual obligations.

	Payments Due by Fiscal Year						
	2016	2017	2018	2019	2020	Thereafter	Total
	(Dollars in millions)						
Contractual Obligations[1]							
Purchase Commitments	$302	$225	$216	$212	$174	$ 2,001	$3,130
Long-term debt	—	305	250	30	—	373	958
Capital lease obligations[2]	3	4	3	3	3	17	33
Fixed interest on long-term debt	39	24	19	15	15	30	142
Operating leases	21	14	12	10	8	67	132
Total	$365	$572	$500	$270	$200	$ 2,488	$4,395

(1) We are unable to estimate the timing of potential future payments related to our accrual for uncertain tax positions in the amount of $16 million at September 30, 2015.

(2) Capital lease obligations include executory costs and interest.

Purchase commitments

We have entered into long-term, volume-based purchase agreements primarily for the purchase of raw materials and natural gas with various key suppliers in Reinforcement Materials, Performance Chemicals, and Purification Solutions. Under certain of these agreements the quantity of material being purchased is fixed, but the price we pay changes as market prices change. For purposes of the table above, current purchase prices have been used to quantify total commitments.

Capital Leases

We have capital lease obligations primarily for certain equipment and buildings. These obligations are payable over the next 16 years.

Operating Leases

We have operating leases primarily comprised of leases for transportation vehicles, warehouse facilities, office space, and machinery and equipment.

Item 7A. Quantitative and Qualitative Disclosures About Market Risk

We are exposed to changes in interest rates and foreign currency exchange rates because we finance certain operations through long- and short-term borrowings and denominate our transactions in a variety of foreign currencies. Changes in these rates may have an impact on future cash flows and earnings. We manage these risks through normal operating and financing activities and, when deemed appropriate, through the use of derivative financial instruments.

We have policies governing our use of derivative instruments, and we do not enter into financial instruments for trading or speculative purposes.

By using derivative instruments, we are subject to credit and market risk. The derivative instruments are booked to our balance sheet at fair market value and reflect the asset or (liability) position as of September 30, 2015. If a counterparty fails to fulfill its performance obligations under a derivative contract, our exposure will equal the fair value of the derivative. Generally, when the fair value of a derivative contract is positive, the counterparty owes Cabot, thus creating a payment risk for Cabot. We minimize counterparty credit (or repayment) risk by entering into these transactions with major financial institutions of investment grade credit rating. As of September 30, 2015, the counterparty that we had executed derivatives with was rated AA- by Standard and Poor’s. Our exposure to market risk is not hedged in a manner that completely eliminates the effects of changing market conditions on earnings or cash flow.

Foreign Currency Risk

Our international operations are subject to certain risks, including currency exchange rate fluctuations and government actions. Foreign currency exposures also relate to assets and liabilities denominated in foreign currencies other than the functional currency of a given subsidiary as well as the risk that currency fluctuations could affect the dollar value of future cash flows generated in foreign currencies. Accordingly, we use short-term forward contracts to reduce the exposure to foreign currency risk. At September 30, 2015, we had $2 million in net notional foreign currency contracts, which were denominated in British pound sterling and Czech koruna. These forwards had a fair value of less than $1 million as of September 30, 2015.

In certain situations where we have a long-term commitment denominated in a foreign currency we may enter into appropriate financial instruments in accordance with our risk management policy to hedge future cash flow exposures.

The primary currencies for which we have exchange rate exposure are the Euro, the Yen and the Brazilian Real. In fiscal year 2015, the unfavorable impact from foreign currency translations on our business segment EBIT was $20 million, affecting most significantly the results of the Performance Chemicals segment. This was largely from the depreciation of the Euro versus the U.S. dollar, which depreciated by 13% from September 30, 2014 to September 30, 2015, and the Yen versus the U.S. dollar, which depreciated by 9% in that same period. In addition, we recognized an $8 million unfavorable impact in Other (expense) income in fiscal 2015 related to the translation of monetary assets and liabilities, largely attributable to the depreciation of the Brazilian Real by 66% from September 30, 2014 to September 30, 2015.

Item 8. Financial Statements and Supplementary Data

INDEX TO FINANCIAL STATEMENTS

CABOT CORPORATION

CONSOLIDATED STATEMENTS OF OPERATIONS

	Years Ended September 30		
	2015	2014	2013
	(In millions, except per share amounts)		
Net sales and other operating revenues	$2,871	$3,647	$3,456
Cost of sales	2,286	2,926	2,823
Gross profit	585	721	633
Selling and administrative expenses	282	326	297
Research and technical expenses	58	60	68
Purification Solutions long-lived assets impairment charge (Note G)	210	—	—
Purification Solutions goodwill impairment charge (Note G)	352	—	—
(Loss) income from operations	(317)	335	268
Interest and dividend income	4	3	5
Interest expense	(53)	(55)	(62)
Other (expense) income	(11)	25	(1)
(Loss) income from continuing operations before income taxes and equity in earnings of affiliated companies	(377)	308	210
Benefit (provision) for income taxes	45	(92)	(60)
Equity in earnings of affiliated companies, net of tax	4	—	11
(Loss) income from continuing operations	(328)	216	161
Income (loss) from discontinued operations, net of tax of $-, $2 and $(6)	2	2	(1)
Net (loss) income	(326)	218	160
Net income attributable to noncontrolling interests, net of tax of $5, $5 and $5	8	19	7
Net (loss) income attributable to Cabot Corporation	$(334)	$199	$153
Weighted-average common shares outstanding, in millions:			
Basic	63.4	64.4	63.8
Diluted	63.4	65.1	64.5
(Loss) income per common share:			
Basic:			
(Loss) income from continuing operations attributable to Cabot Corporation	$(5.29)	$3.04	$2.39
Income (loss) from discontinued operations	$0.02	0.02	(0.01)
Net (loss) income attributable to Cabot Corporation	$(5.27)	$3.06	$2.38
Diluted:			
(Loss) income from continuing operations attributable to Cabot Corporation	$(5.29)	$3.01	$2.37
Income (loss) from discontinued operations	$0.02	0.02	(0.01)
Net (loss) income attributable to Cabot Corporation	$(5.27)	$3.03	$2.36
Dividends per common share	$0.88	$0.84	$0.80

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

CABOT CORPORATION

CONSOLIDATED STATEMENTS OF COMPREHENSIVE (LOSS) INCOME

	Years Ended September 30		
	2015	2014	2013
	(In millions)		
Net (loss) income	$(326)	$218	$160
Other comprehensive (loss) income, net of tax			
Foreign currency translation adjustment (net of tax (benefit) provision of $(3), $(10), ($12))	(270)	(131)	(10)
Unrealized holding gains (losses) arising during the period (net of tax provision of $—, $—, $1)	—	—	2
Pension and other postretirement benefit liability adjustments			
Pension and other postretirement benefit liability adjustments arising during the period (net of tax provision (benefit) of $5, $(1), $13)	28	(40)	20
Amortization of net loss and prior service credit included in net periodic pension cost (net of tax provision of $—, $—, $—)	3	—	2
Other comprehensive (loss) income	(239)	(171)	14
Comprehensive (loss) income	(565)	47	174
Net income attributable to noncontrolling interests, (net of tax provision of $5, $5, $5)	8	19	7
Noncontrolling interests foreign currency translation adjustment	(4)	(4)	3
Comprehensive income attributable to noncontrolling interests	4	15	10
Comprehensive (loss) income attributable to Cabot Corporation	$(569)	$32	$164

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

CABOT CORPORATION

CONSOLIDATED BALANCE SHEETS

ASSETS

	September 30 2015	2014
	(In millions, except share and per share amounts)	
Current assets:		
Cash and cash equivalents	$77	$67
Accounts and notes receivable, net of reserve for doubtful accounts of $7 and $7	477	688
Inventories	397	498
Prepaid expenses and other current assets	54	69
Deferred income taxes	43	42
Total current assets	1,048	1,364
Property, plant and equipment	3,385	3,710
Accumulated depreciation	(2,002)	(2,129)
Net property, plant and equipment	1,383	1,581
Goodwill	154	536
Equity affiliates	57	68
Intangible assets, net	153	347
Assets held for rent	86	56
Deferred income taxes	152	80
Other assets	42	52
Total assets	$3,075	$4,084

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

CABOT CORPORATION

CONSOLIDATED BALANCE SHEETS

LIABILITIES AND STOCKHOLDERS' EQUITY

	September 30	
	2015	2014
	(In millions, except share and per share amounts)	
Current liabilities:		
Notes payable	$22	$44
Accounts payable and accrued liabilities	389	512
Income taxes payable	28	49
Deferred income taxes	1	1
Current portion of long-term debt	1	24
Total current liabilities	441	630
Long-term debt	970	1,004
Deferred income taxes	59	68
Other liabilities	240	291
Redeemable Preferred Stock	27	27
Commitments and contingencies (Note T)		
Stockholders' equity:		
Preferred stock:		
Authorized: 2,000,000 shares of $1 par value		
Issued and Outstanding: None and none	—	—
Common stock:		
Authorized: 200,000,000 shares of $1 par value		
Issued: 62,704,966 and 64,634,731 shares		
Outstanding 62,458,396 and 64,382,366 shares	63	64
Less cost of 246,570 and 252,365 shares of common treasury stock	(8)	(7)
Additional paid-in capital	—	49
Retained earnings	1,478	1,900
Accumulated other comprehensive loss	(299)	(64)
Total Cabot Corporation stockholders' equity	1,234	1,942
Noncontrolling interests	104	122
Total stockholders' equity	1,338	2,064
Total liabilities and stockholders' equity	$3,075	$4,084

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

CABOT CORPORATION

CONSOLIDATED STATEMENT OF CASH FLOWS

	Years Ended September 30		
	2015	2014	2013
Cash Flows from Operating Activities:			
Net (loss) income	$(326)	$218	$160
Adjustments to reconcile net (loss) income to cash provided (used in) by operating activities:			
Depreciation and amortization	183	201	190
Purification Solutions long-lived asset impairment charge (Note G)	210	—	—
Purification Solutions goodwill impairment charge (Note G)	352	—	—
Deferred tax (benefit) provision	(86)	8	(9)
Gain on existing investment in NHUMO	—	(29)	—
Gain on sale of business	—	(4)	—
Employee benefit plan settlement	18	—	
Equity in net income of affiliated companies	(4)	—	(11)
Non-cash compensation	12	14	16
Other non-cash expense	6	22	18
Changes in assets and liabilities:			
Accounts and notes receivable	154	(54)	34
Inventories	58	(56)	64
Prepaid expenses and other current assets	16	2	5
Accounts payable and accrued liabilities	(75)	(29)	(18)
Income taxes payable	(21)	15	(29)
Other liabilities	(17)	(14)	(11)
Cash dividends received from equity affiliates	14	25	8
Other	5	(4)	2
Cash provided by operating activities	499	315	419
Cash Flows from Investing Activities:			
Additions to property, plant and equipment	(141)	(171)	(264)
Proceeds from notes receivable from sales of business	—	20	—
Receipts from notes receivable from sale of business	—	215	39
Change in assets held for rent	(21)	(7)	(2)
Cash paid for acquisition of business, net of cash acquired of $7	—	(73)	—
Cash used in investing activities	(162)	(16)	(227)
Cash Flows from Financing Activities:			
Borrowings under financing arrangements	—	13	6
Repayments under financing arrangements	(3)	(17)	(33)
Decrease in notes payable, net	—	(4)	(12)
(Repayments) proceeds from issuance of commercial paper, net	(18)	(211)	241
Proceeds from long-term debt, net of issuance costs	—	17	117
Repayments of long-term debt	(57)	(23)	(442)
Settlement of derivatives	—	—	(31)
Proceeds from cash contributions received from noncontrolling stockholders	—	—	13
Purchases of common stock	(101)	(18)	(6)
Proceeds from sales of common stock	6	14	9
Cash dividends paid to noncontrolling interests	(27)	(19)	(17)

Cash dividends paid to common stockholders	(56)	(54)	(51)
Cash used in financing activities	(256)	(302)	(206)
Effects of exchange rate changes on cash	(71)	(25)	(11)
Increase (decrease) in cash and cash equivalents	10	(28)	(25)
Cash and cash equivalents at beginning of year	67	95	120
Cash and cash equivalents at end of year	$77	$67	$95
Income taxes paid	78	53	84
Interest paid	42	47	51

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

CABOT CORPORATION

CONSOLIDATED STATEMENT OF CHANGES IN STOCKHOLDERS' EQUITY

Years Ended September 30

(In millions, except shares in thousands)

2013	Common Stock, Net of Treasury Stock Shares	Cost	Additional Paid-in Capital	Retained Earnings	Deferred Employee Benefits	Accumulated Other Comprehensive Income (Loss)	Total Cabot Corporation Stockholders' Equity	Non-controlling Interests	Total Stockholders' Equity
Balance at September 30, 2012	63,348	$ 56	$ 20	$ 1,653	$ (8)	$ 92	$ 1,813	$ 126	$ 1,939
Net income attributable to Cabot Corporation				153			153		153
Net income attributable to non-controlling interests								7	7
Total other comprehensive income						11	11	3	14
Contribution from noncontrolling interests								13	13
Noncontrolling interest—dividends								(17)	(17)
Cash dividends paid to common stockholders				(51)			(51)		(51)
Issuance of stock under employee compensation plans	784	—	12				12		12
Amortization of share-based compensation			13				13		13
Purchase and retirement of common stock	(161)		(6)				(6)		(6)
Principal payment by Employee Stock Ownership Plan under guaranteed loan					6		6		6
Balance at September 30, 2013	63,971	$ 56	$ 39	$ 1,755	$ (2)	$ 103	$ 1,951	$ 132	$ 2,083

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

CABOT CORPORATION

CONSOLIDATED STATEMENT OF CHANGES IN STOCKHOLDERS' EQUITY

Years Ended September 30

(In millions, except shares in thousands)

2014	Common Stock, Net of Treasury Stock Shares	Cost	Additional Paid-in Capital	Retained Earnings	Deferred Employee Benefits	Accumulated Other Comprehensive Income (Loss)	Total Cabot Corporation Stockholders' Equity	Non-controlling Interests	Total Stockholders' Equity
Balance at September 30, 2013	63,971	$ 56	$ 39	$ 1,755	$ (2)	$ 103	$ 1,951	$ 132	$ 2,083
Net income attributable to Cabot Corporation				199			199		199
Net income attributable to non-controlling interests								19	19
Total other comprehensive loss						(167)	(167)	(4)	(171)
Noncontrolling interest—other								(1)	(1)
Noncontrolling interest—dividends								(24)	(24)
Cash dividends paid to common stockholders				(54)			(54)		(54)
Issuance of stock under employee compensation plans	758	1	13				14		14
Amortization of share-based compensation			14				14		14
Purchase and retirement of common stock	(346)		(17)				(17)		(17)
Principal payment by Employee Stock Ownership Plan under guaranteed loan					2		2		2
Balance at September 30, 2014	64,383	$ 57	$ 49	$ 1,900	$ —	$ (64)	$ 1,942	$ 122	$ 2,064

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

CABOT CORPORATION

CONSOLIDATED STATEMENT OF CHANGES IN STOCKHOLDERS' EQUITY

Years Ended September 30

(In millions, except shares in thousands)

2015	Common Stock, Net of Treasury Stock Shares	Common Stock, Net of Treasury Stock Cost	Additional Paid-in Capital	Retained Earnings	Accumulated Other Comprehensive Income (Loss)	Total Cabot Corporation Stockholders' Equity	Non-controlling Interests	Total Stockholders' Equity
Balance at September 30, 2014	64,383	$ 57	$ 49	$ 1,900	$ (64)	$ 1,942	$ 122	$ 2,064
Net loss attributable to Cabot Corporation				(334)		(334)		(334)
Net income attributable to non-controlling interests							8	8
Total other comprehensive loss					(235)	(235)	(4)	(239)
Noncontrolling interest—dividends							(22)	(22)
Cash dividends paid to common stockholders				(56)		(56)		(56)
Issuance of stock under employee compensation plans	450	—	6			6		6
Amortization of share-based compensation			12			12		12
Purchase and retirement of common stock	(2,375)	(2)	(67)	(32)		(101)		(101)
Balance at September 30, 2015	62,458	$ 55	$ —	$ 1,478	$ (299)	$ 1,234	$ 104	$ 1,338

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

Notes to Consolidated Financial Statements

Note A. Significant Accounting Policies

The consolidated financial statements have been prepared in conformity with accounting principles generally accepted in the United States. The significant accounting policies of Cabot Corporation ("Cabot" or "the Company") are described below.

In November 2013, the Company purchased all of Grupo Kuo S.A.B. de C.V.'s ("KUO") common stock in NHUMO, S.A. de C.V. ("NHUMO"), a carbon black joint venture between the Company and KUO in Mexico, which represented approximately 60% of the outstanding common stock of NHUMO (the "NHUMO transaction"). Prior to this transaction, the Company owned approximately 40% of the outstanding common stock of NHUMO, and the NHUMO entity was accounted for as an equity affiliate of the Company. The financial position, results of operations and cash flows of NHUMO are included in the Company's consolidated financial statements from the date of acquisition.

In July 2014, the Company completed the sale of its Security Materials business. The results of this business are reflected as discontinued operations in the Consolidated Statements of Operations.

In the first quarter of fiscal 2015, the Company realigned its business reporting structure into four segments that consist of Reinforcement Materials, Performance Chemicals, Purification Solutions and Specialty Fluids. The new structure is aligned with senior management changes and it better leverages Cabot's global activities across common customer applications, production, and research and development activities. Prior period segment results have been recast to reflect the realignment.

Unless otherwise indicated, all disclosures and amounts in the Notes to Consolidated Financial Statements relate to the Company's continuing operations.

Certain amounts in prior years' Consolidated Statement of Cash Flows have been reclassified to conform to the current presentation.

Principles of Consolidation

The consolidated financial statements include the accounts of Cabot and its wholly-owned subsidiaries and majority-owned and controlled U.S. and non-U.S. subsidiaries. Additionally, Cabot considers consolidation of entities over which control is achieved through means other than voting rights, of which there were none in the periods presented. Intercompany transactions have been eliminated in consolidation.

Cash and Cash Equivalents

Cash equivalents include all highly liquid investments with a maturity of three months or less at date of acquisition. Cabot continually assesses the liquidity of cash equivalents and, as of September 30, 2015, has determined that they are readily convertible to cash.

Inventories

Inventories are stated at the lower of cost or market. The cost of all carbon black inventories in the U.S. is determined using the last-in, first-out ("LIFO") method. The cost of Specialty Fluids inventories, which are classified as assets held for rent, is determined using the average cost method. The cost of other U.S. and non-U.S. inventories is determined using the first-in, first-out ("FIFO") method.

Cabot reviews inventory for both potential obsolescence and potential declines in anticipated selling prices. In this review, the Company makes assumptions about the future demand for and market value of the inventory, and based on these assumptions estimates the amount of any obsolete, unmarketable, slow moving, or overvalued inventory. Cabot writes down the value of these inventories by an amount equal to the difference between the cost of the inventory and its estimated net realizable value.

Investments

The Company has investments in equity affiliates and marketable securities. As circumstances warrant, all investments are subject to periodic impairment reviews. Unless consolidation is required, investments in equity affiliates, where Cabot generally owns between 20% and 50% of the affiliate, are accounted for using the equity method. Cabot records its share of the equity affiliate's results of operations based on its percentage of ownership of the affiliate. Dividends declared from equity affiliates are a return on investment and are recorded as a reduction to the equity investment value. At September 30, 2015 and 2014, Cabot had equity affiliate investments of $57 million and $68 million, respectively. Dividends declared and received from these investments were $14 million, $25 million and $8 million in fiscal 2015, 2014 and 2013, respectively.

All investments in marketable securities are classified as available-for-sale and are recorded at fair value with the corresponding unrealized holding gains or losses, net of taxes, recorded as a separate component of Other comprehensive loss within stockholders' equity. Unrealized losses that are determined to be other-than-temporary, based on current and expected market conditions, are recognized in earnings. The fair value of marketable securities is determined based on quoted market prices at the balance sheet dates. The cost of marketable securities sold is determined by the specific identification method. The Company's investment in marketable securities was immaterial as of both September 30, 2015 and 2014.

Intangible Assets and Goodwill Impairment

The Company records tangible and intangible assets acquired and liabilities assumed in business combinations under the acquisition method of accounting. Amounts paid for an acquisition are allocated to the assets acquired and liabilities assumed based on their fair values at the date of acquisition. Goodwill is comprised of the purchase price of business acquisitions in excess of the fair value assigned to the net tangible and identifiable intangible assets acquired. Goodwill is not amortized, but is reviewed for impairment annually as of May 31, or when events or changes in the business environment indicate that the carrying value of the reporting unit may exceed its fair value. A reporting unit, for the purpose of the impairment test, is at or below the operating segment level, and constitutes a business for which discrete financial information is available and regularly reviewed by segment management. The reporting units with goodwill balances are Reinforcement Materials, Purification Solutions, and Fumed Metal Oxides. The separate businesses included within Performance Chemicals are considered separate reporting units. As such, the goodwill balance relative to Performance Chemicals is recorded in the Fumed Metal Oxides reporting unit.

For the purpose of the goodwill impairment test, the Company first assesses qualitative factors to determine whether it is more likely than not that the fair value of a reporting unit is less than its carrying amount. If an initial qualitative assessment identifies that it is more likely than not that the carrying value of a reporting unit exceeds its estimated fair value, an additional quantitative evaluation is performed under the two-step impairment test. Alternatively, the Company may elect to proceed directly to the quantitative goodwill impairment test. If based on the quantitative evaluation the fair value of the reporting unit is less than its carrying amount, the Company performs an analysis of the fair value of all assets and liabilities of the reporting unit. If the implied fair value of the reporting unit's goodwill is determined to be less than its carrying amount, an impairment is recognized for the difference. The fair value of a reporting unit is based on discounted estimated future cash flows. The fair value is also benchmarked against a market approach using the guideline public companies method. The assumptions used to estimate fair value include management's best estimates of future growth rates, operating cash flows, capital expenditures and discount rates over an estimate of the remaining operating period at the reporting unit level. Should the fair value of any of the Company's reporting units decline below its carrying amount because of reduced operating performance, market declines, changes in the discount rate, or other conditions, charges for impairment may be necessary. Based on the Company's most recent annual goodwill impairment test performed as of May 31, 2015, the fair values of the Reinforcement Materials and Fumed Metal Oxides reporting units were substantially in excess of their carrying values. The fair value of the Purification Solutions reporting unit was less than its carrying amount. Refer to Note G for details on the Purification Solutions goodwill impairment test and the resulting impairment charge recorded in the third fiscal quarter of 2015. Due to the impairment recorded, the fair value of the Purification Solutions reporting unit was insignificantly higher than its carrying value. No events occurred in the fourth fiscal quarter of 2015 that would suggest that it is more likely than not that the carrying values of any of our reporting units exceeded its fair value.

The Company uses assumptions and estimates in determining the fair value of assets acquired and liabilities assumed in a business combination. The determination of the fair value of intangible assets requires the use of significant judgment with regard to assumptions used in the valuation model. The Company estimates the fair value of identifiable acquisition-related intangible assets principally based on projections of cash flows that will arise from these assets. The projected cash flows are discounted to determine the fair value of the assets at the dates of acquisition.

Definite-lived intangible assets, which are comprised of customer relationships and developed technologies, are amortized over their estimated useful lives and are reviewed for impairment when indication of potential impairment exists, such as a significant reduction in cash flows associated with the assets. The Company evaluates indefinite-lived intangible assets, which are comprised of the trademarks of Purification Solutions, for impairment annually or when events occur or circumstances change that may reduce the fair value of the asset below its carrying amount. The annual review is performed as of May 31. The Company may first perform a qualitative assessment to determine whether it is necessary to perform the quantitative impairment test or bypass the qualitative assessment and proceed directly to performing the quantitative impairment test. The quantitative impairment test is based on discounted estimated future cash flows. The assumptions used to estimate fair value include management's best estimates of future growth rates and discount rates over an estimate of the remaining operating period at the unit of accounting level. Refer to Note G for details on the impairment test performed on intangible assets of the Purification Solutions reporting unit and the resulting impairment charges recorded. Effective in the third quarter of 2015 and as a part of the impairment assessment performed, the Company determined that the trademarks for Purification Solutions no longer have an indefinite life.

Long-lived Assets Impairment

The Company's long-lived assets primarily include property, plant and equipment, intangible assets, long-term investments and assets held for rent. The carrying values of long-lived assets are reviewed for impairment whenever events or changes in business circumstances indicate that the carrying amount of an asset may not be recoverable.

To test for impairment of assets, the Company generally uses a probability-weighted estimate of the future undiscounted net cash flows of the assets over their remaining lives to determine if the value of the asset is recoverable. Long-lived assets are grouped with other assets and liabilities at the lowest level for which independent identifiable cash flows are determinable.

An asset impairment is recognized when the carrying value of the asset is not recoverable based on the analysis described above, in which case the asset is written down to its fair value. If the asset does not have a readily determinable market value, a discounted cash flow model may be used to determine the fair value of the asset. In circumstances when an asset does not have separate identifiable cash flows, an impairment charge is recorded when the Company no longer intends to use the asset. Refer to Note G regarding the results of the impairment test performed on the long-lived assets of the Purification Solutions segment.

Property, Plant and Equipment

Property, plant and equipment are recorded at cost. Depreciation of property, plant and equipment is calculated using the straight-line method over the estimated useful lives. The depreciable lives for buildings, machinery and equipment, and other fixed assets are twenty to twenty-five years, ten to twenty-five years, and three to twenty-five years, respectively. The cost and accumulated depreciation for property, plant and equipment sold, retired, or otherwise disposed of are removed from the Consolidated Balance Sheets and resulting gains or losses are included in earnings in the Consolidated Statements of Operations. Expenditures for repairs and maintenance are charged to expenses as incurred. Expenditures for major renewals and betterments, which significantly extend the useful lives of existing plant and equipment, are capitalized and depreciated.

Cabot capitalizes interest costs when they are part of the historical cost of acquiring and constructing certain assets that require a period of time to prepare for their intended use. During fiscal 2015, 2014 and 2013, Cabot capitalized less than $1 million, $3 million and $5 million of interest costs, respectively. These amounts will be amortized over the lives of the related assets.

Assets Held for Rent

Assets held for rent represent Specialty Fluids cesium formate product that is available to customers in the normal course of business and $11 million of ore that has been mined and will be converted into cesium formate. Assets held for rent are stated at average cost.

Asset Retirement Obligations

Cabot estimates incremental costs for special handling, removal and disposal of materials that may or will give rise to conditional asset retirement obligations ("ARO") and then discounts the expected costs back to the current year using a credit adjusted risk free rate. Cabot recognizes ARO liabilities and costs when the timing and/or settlement can be reasonably estimated. The ARO reserves were $20 million and $15 million at September 30, 2015 and 2014, respectively.

Foreign Currency Translation

The functional currency of the majority of Cabot’s foreign subsidiaries is the local currency in which the subsidiary operates. Assets and liabilities of foreign subsidiaries are translated into U.S. dollars at exchange rates in effect at the balance sheet dates. Income and expense items are translated at average monthly exchange rates during the year. Unrealized currency translation adjustments are included as a separate component of Accumulated other comprehensive (loss) income within stockholders’ equity.

Realized and unrealized foreign currency gains and losses arising from transactions denominated in currencies other than the subsidiary’s functional currency are reflected in earnings with the exception of (i) intercompany transactions considered to be of a long-term investment nature; and (ii) foreign currency borrowings designated as net investment hedges. Gains or losses arising from these transactions are included as a component of other comprehensive (loss) income. In fiscal 2015, 2014 and 2013, net foreign currency transaction losses of $8 million, losses of $2 million, and gains of $2 million, respectively, are included in Other (expense) income in the Consolidated Statements of Operations.

Financial Instruments

Cabot's financial instruments consist primarily of cash and cash equivalents, accounts and notes receivable, investments, accounts payable and accrued liabilities, short-term and long-term debt, and derivative instruments. The carrying values of Cabot's financial instruments approximate fair value with the exception of fixed rate long-term debt, which is recorded at amortized cost. The fair values of the Company's financial instruments are based on quoted market prices, if such prices are available. In situations where quoted market prices are not available, the Company relies on valuation models to derive fair value. Such valuation takes into account the ability of the financial counterparty to perform.

Cabot uses derivative financial instruments primarily for purposes of hedging the exposures to fluctuations in foreign currency exchange rates, which exist as part of its on-going business operations. Cabot does not enter into derivative contracts for speculative purposes, nor does it hold or issue any derivative contracts for trading purposes. All derivatives are recognized on the Consolidated Balance Sheets at fair value. Where Cabot has a legal right to offset derivative settlements under a master netting agreement with a counterparty, derivatives with that counterparty are presented on a net basis. The changes in the fair value of derivatives are recorded in either earnings or Accumulated other comprehensive (loss) income, depending on whether or not the instrument is designated as part of a hedge transaction and, if designated as part of a hedge transaction, the type of hedge transaction. The gains or losses on derivative instruments reported in Accumulated other comprehensive (loss) income are reclassified to earnings in the period in which earnings are affected by the underlying hedged item. The ineffective portion of all hedges is recognized in earnings during the period in which the ineffectiveness occurs.

In accordance with Cabot's risk management strategy, the Company may enter into certain derivative instruments that may not be designated as hedges for hedge accounting purposes. Although these derivatives are not designated as hedges, the Company believes that such instruments are closely correlated with the underlying exposure, thus managing the associated risk. The Company records in earnings the gains or losses from changes in the fair value of derivative instruments that are not designated as hedges. Cash movements associated with these instruments are presented in the Consolidated Statement of Cash Flows as Cash Flows from Operating Activities because the derivatives are designed to mitigate risk to the Company's cash flow from operations. The cash flows related to the principal amount of outstanding debt instruments are presented in the Cash Flows from Financing Activities section of the Consolidated Statement of Cash Flows.

Revenue Recognition

Cabot recognizes revenue when persuasive evidence of an arrangement exists, delivery has occurred or services have been rendered, the price is fixed or determinable and collectability is reasonably assured. Cabot generally is able to ensure that products meet customer specifications prior to shipment. If the Company is unable to determine that the product has met the specified objective criteria prior to shipment or if title has not transferred because of sales terms, the revenue is considered "unearned" and is deferred until the revenue recognition criteria are met.

Shipping and handling charges related to sales transactions are recorded as sales revenue when billed to customers or included in the sales price. Taxes collected on sales to customers are excluded from revenues.

The following table shows the relative size of the revenue recognized in each of the Company's reportable segments

	Years ended September 30		
	2015	2014	2013
Reinforcement Materials	54%	59 %	57 %

Performance Chemicals	33%	29 %	30 %
Purification Solutions	11%	9 %	10 %
Specialty Fluids	2 %	3 %	3 %

Cabot derives the substantial majority of its revenues from the sale of products in Reinforcement Materials and Performance Chemicals. Revenue from these products is typically recognized when the product is shipped and title and risk of loss have passed to the customer. The Company offers certain of its customers cash discounts and volume rebates as sales incentives. The discounts and volume rebates are recorded as a reduction in sales at the time revenue is recognized and are estimated based on historical experience and contractual obligations. Cabot periodically reviews the assumptions underlying its estimates of discounts and volume rebates and adjusts its revenues accordingly.

Revenue in Purification Solutions is typically recognized when the product is shipped and title and risk of loss have passed to the customer. For major activated carbon injection systems projects, revenue is recognized using the percentage-of-completion method.

Revenue in Specialty Fluids arises primarily from the rental of cesium formate. This revenue is recognized throughout the rental period based on the contracted rental terms. Customers are also billed and revenue is recognized, typically at the end of the job, for cesium formate product that is not returned. The Company also generates revenues from cesium formate sold outside of a rental process and revenue is recognized upon delivery of the fluid.

Cost of Sales

Cost of sales consists of the cost of raw and packaging materials, direct manufacturing costs, depreciation, internal transfer costs, inspection costs, inbound and outbound freight and shipping and handling costs, plant purchasing and receiving costs and other overhead expenses necessary to manufacture the products.

Accounts and Notes Receivable

Trade receivables are recorded at the invoiced amount and generally do not bear interest. Trade receivables in China may at certain times be settled with the receipt of bank issued non-interest bearing notes. These notes totaled 95 million Chinese Renminbi (“RMB”) ($15 million) and 193 million RMB ($31 million) as of September 30, 2015 and 2014, respectively, and are included in accounts and notes receivable. Cabot periodically sells a portion of the trade receivables in China and other customer receivables at a discount and such sales are accounted for as asset sales. The Company does not have any continuing involvement with the notes after the sale. The difference between the proceeds from the sale and the carrying value of the receivables is recognized as a loss on the sale of receivables and is included in Other (expense) income in the accompanying Consolidated Statements of Operations. During each of fiscal 2015, 2014 and 2013, the Company recorded charges of $3 million, $3 million, and $4 million, respectively, for the sale of these receivables.

Cabot maintains allowances for doubtful accounts based on an assessment of the collectability of specific customer accounts, the aging of accounts receivable and other economic information on both a historical and prospective basis. Customer account balances are charged against the allowance when it is probable the receivable will not be recovered. There were no material changes in the allowance for any of the years presented. There is no material off-balance sheet credit exposure related to customer receivable balances.

Stock-based Compensation

Cabot recognizes compensation expense for stock-based awards granted to employees using the fair value method. Under the fair value recognition provisions, stock-based compensation cost is measured at the grant date based on the fair value of the award, and is recognized as expense over the service period, which generally represents the vesting period, and includes an estimate of the awards that will be forfeited, and an estimate of what level of performance the Company will achieve for Cabot’s performance-based stock awards. Cabot calculates the fair value of its stock options using the Black-Scholes option pricing model. The fair value of restricted stock units is determined using the closing price of Cabot stock on the day of the grant.

Selling and Administrative Expenses

Selling and administrative expenses consist of salaries and fringe benefits of sales and office personnel, general office expenses and other expenses not directly related to manufacturing operations.

Research and Technical Expenses

Research and technical expenses include salaries, equipment and material expenditures, and contractor fees and are expensed as incurred.

Income Taxes

Deferred income taxes are determined based on the estimated future tax effects of differences between financial statement carrying amounts and the tax bases of existing assets and liabilities. Deferred tax assets are recognized to the extent that realization of those assets is considered to be more likely than not.

A valuation allowance is established for deferred taxes when it is more likely than not that all or a portion of the deferred tax assets will not be realized. Provisions are made for the U.S. income tax liability and additional non-U.S. taxes on the undistributed earnings of non-U.S. subsidiaries, except for amounts Cabot has designated to be indefinitely reinvested.

Cabot records benefits for uncertain tax positions based on an assessment of whether the position is more likely than not to be sustained by the taxing authorities. If this threshold is not met, no tax benefit of the uncertain tax position is recognized. If the threshold is met, the tax benefit that is recognized is the largest amount that is greater than 50% likely of being realized upon ultimate settlement. This analysis presumes the taxing authorities' full knowledge of the positions taken and all relevant facts, but does not consider the time value of money. The Company also accrues for interest and penalties on its uncertain tax positions and includes such charges in its income tax provision in the Consolidated Statements of Operations.

Accumulated Other Comprehensive (Loss) Income

Accumulated other comprehensive (loss) income, which is included as a component of stockholders' equity, includes unrealized gains or losses on available-for-sale marketable securities and derivative instruments, currency translation adjustments in foreign subsidiaries, translation adjustments on foreign equity securities and minimum pension liability adjustments.

Environmental Costs

Cabot accrues environmental costs when it is probable that a liability has been incurred and the amount can be reasonably estimated. When a single liability amount cannot be reasonably estimated, but a range can be reasonably estimated, Cabot accrues the amount that reflects the best estimate within that range or the low end of the range if no estimate within the range is better. The amount accrued reflects Cabot's assumptions about remediation requirements at the contaminated site, the nature of the remedy, the outcome of discussions with regulatory agencies and other potentially responsible parties at multi-party sites, and the number and financial viability of other potentially responsible parties. Cabot does not reduce its estimated liability for possible recoveries from insurance carriers. Proceeds from insurance carriers are recorded when realized by either the receipt of cash or a contractual agreement.

Use of Estimates

The preparation of consolidated financial statements in conformity with generally accepted accounting principles in the United States requires management to make certain estimates and assumptions that affect the reported amount of assets and liabilities and the disclosure of contingent assets and liabilities at the date of the consolidated financial statements and the reported amounts of revenues and expenses during the reported period. Actual results could differ from those estimates.

Note B. Recent Accounting Pronouncements

In July 2013, the Financial Accounting Standards Board ("FASB") issued a new standard related to the "Presentation of an Unrecognized Tax Benefit When a Net Operating Loss Carryforward, a Similar Tax Loss, or a Tax Credit Carryforward Exists". The standard requires, unless certain conditions exist, an unrecognized tax benefit or a portion of an unrecognized tax benefit to be presented in the consolidated financial statements as a reduction to a deferred tax asset for a net operating loss carryforward, similar to a tax loss or a tax credit carryforward. This standard is applicable for fiscal years beginning after December 15, 2013, and for interim periods within those years. The Company adopted this standard on October 1, 2014 and the implementation of the new standard did not have a material impact on its consolidated financial statements.

In April 2014, the FASB issued a new standard related to "Reporting Discontinued Operations and Disclosures of Disposals of Components of an Entity". The standard requires discontinued operations treatment for disposals of a component or group of components of a business that represents a strategic shift that has or will have a major impact on an entity's operations or financial results and requires additional disclosures for discontinued operations and new disclosures for individually material disposal transactions that do not meet the definition of a discontinued operation. This standard is applicable for fiscal years beginning after December 15, 2014 and for interim periods within those years and early adoption is permitted, but only for disposals that have not been reported in consolidated financial statements previously issued. The Company will adopt this standard beginning on October 1, 2015 and does not expect it to have a material impact on its consolidated financial statements.

In May 2014, the FASB issued a new standard related to the "Revenue from Contracts with Customers" which amends the existing accounting standards for revenue recognition. The standard requires entities to recognize revenue when they transfer promised goods or services to customers in an amount that reflects the consideration the entity expects to be entitled to in exchange for those goods or services. This standard is applicable for fiscal years beginning after December 15, 2017 and for interim periods within those years and early adoption is permitted for the fiscal years beginning after December 15, 2016. The Company expects to adopt this standard on October 1, 2018. The Company is currently evaluating the impact the adoption of this standard may have on its consolidated financial statements.

In April 2015, the FASB issued a new standard simplifying the presentation of debt issuance costs by requiring debt issuance costs to be presented as a reduction of the corresponding debt liability. This will make the presentation of debt issuance costs consistent with the presentation of debt discounts or premiums. This standard is applicable for fiscal years beginning after December 15, 2015 and for interim periods within those years and early adoption is permitted. The Company expects to adopt this standard on October 1, 2016. The adoption of this standard is not expected to materially impact the Company's consolidated financial statements.

Note C. Acquisition of NHUMO

In November 2013, the Company purchased all of KUO's common stock in the former NHUMO joint venture, which represented approximately 60% of the outstanding common stock of the joint venture. Prior to this transaction, the Company owned approximately 40% of the outstanding common stock of NHUMO, and the NHUMO entity was accounted for as an equity affiliate of the Company.

At the close of the transaction, the Company paid KUO $80 million in cash and NHUMO issued redeemable preferred stock to KUO with a redemption value of $25 million. The preferred stock accumulates dividends at a fixed rate of 6% annually and is redeemable at the option of KUO or the Company for $25 million starting in November 2018 or upon the occurrence of certain other conditions. Annual payment by NHUMO of the dividends is contingent on NHUMO achieving a minimum EBITDA (earnings before interest, taxes, depreciation and amortization) level and if such minimum EBITDA is not achieved in any year, the dividend will be accumulated and paid at the time the preferred shares are redeemed. The minimum EBITDA was achieved in both 2014 and 2015. A dividend payment of $1.5 million was made in December 2014 related to fiscal 2014 and a dividend payment of $1.5 million related to fiscal 2015 is due in December 2015. The preferred stock issued in connection with the transaction is not mandatorily redeemable and has embedded put and call rights at the fixed redemption price. Accordingly, the instrument is accounted for as a financing obligation and has been separately presented in the Consolidated Balance Sheets as a long-term liability. Upon acquisition, the Company began consolidating NHUMO into its consolidated financial statements. Prior to closing, the Company received a $14 million dividend from NHUMO.

The Company incurred acquisition costs of approximately $2 million in fiscal 2014, which are included in Selling and administrative expenses in the Consolidated Statements of Operations.

As of September 2014, the Company completed the valuation of its assets acquired and liabilities assumed. The allocation of the purchase price is based on the fair value of assets acquired and liabilities assumed, and Cabot's previously held equity interest in NHUMO as of the acquisition date. The following table presents the components and allocation of the purchase price:

	(Dollars in millions)
Assets	
Current assets	$ 54
Property, plant and equipment	48
Other non-current assets	1
Intangible assets	63
Goodwill	45
Total assets acquired	211
Liabilities	
Accounts payable, accruals and other liabilities	(20)
Deferred tax liabilities - long-term	(29)
Total liabilities assumed	(49)
Net assets acquired	$ 162
Cash consideration paid	80
Fair value of redeemable preferred stock	28
Previously held equity interest in NHUMO	54
Total	$ 162

As a result of the acquisition, the Company recorded a gain of $29 million for the difference between the carrying value and the fair value of the previously held equity interest in NHUMO, which was included in Other (expense) income in the first quarter of fiscal 2014. The fair value of $54 million for the previously held equity interest was determined based on the fair value of Cabot’s pre-existing interest in NHUMO as adjusted for a control premium derived from synergies gained as a result of the Company obtaining control of NHUMO.

As part of the purchase price allocation, the Company determined that a separately identifiable intangible asset was customer relationships in the amount of $63 million, which is being amortized over a period of 20 years. The Company estimated the fair value of the identifiable acquisition-related intangible asset based on projections of cash flows that will arise from the asset. The projected cash flows are discounted to determine the fair value of the asset at the date of acquisition. The determination of the fair value of the intangible asset acquired required the use of significant judgment with regard to assumptions in the discounted cash flow model used.

The fair value of the redeemable preferred stock was determined based on a discounted cash flow model, using the expected timing of the cash flows and an appropriate discount rate.

The excess of the purchase price, which includes the cash consideration paid and the fair values of redeemable preferred stock and the previously held equity interest in NHUMO, over the fair value of the tangible net assets and intangible asset acquired, was recorded as goodwill. The goodwill recognized is attributable to the expected growth and operating synergies that the Company expects to realize from this acquisition. Goodwill generated from the acquisition is not deductible for tax purposes.

Note D. Discontinued Operations

In July 2014, the Company sold its Security Materials business to SICPA SA. The Consolidated Statements of Operations for all periods presented have been recast to reflect the Security Materials business in discontinued operations.

In January 2012, the Company sold its Supermetals business to Global Advanced Metals Pty Ltd., an Australian company ("GAM") for $452 million, including cash consideration of $175 million received on the closing date and notes receivable ("GAM Notes") totaling $277 million that were payable at various dates through March 2014. In fiscal 2014, Cabot received the final payment on the GAM Notes in the amount of $215 million.

During fiscal 2015, Cabot recorded $2 million of income from discontinued operations related to sales of businesses that occurred in prior years.

Note E. Inventories

Inventories, net of LIFO, obsolete, unmarketable and slow moving reserves, are as follows:

	September 30	
	2015	2014
	(Dollars in millions)	
Raw materials	$69	$111
Work in process	1	2
Finished goods	287	341
Other	40	44
Total	$397	$498

Inventories valued under the LIFO method comprised approximately 6% and 5% of total inventories at September 30, 2015 and 2014, respectively. At September 30, 2015 and 2014, the LIFO reserve was $30 million and $52 million, respectively. Other inventory is comprised of certain spare parts and supplies.

During fiscal 2015 and 2013, inventory quantities carried on a LIFO basis were decreased at the Company's U.S. carbon black sites. In fiscal 2015, these reductions led to liquidations of LIFO inventory quantities and resulted in an increase of Cost of sales of $1 million and a decrease in consolidated Net income of $1 million ($0.01 per diluted common share). In fiscal 2013, these reductions led to liquidations of LIFO inventory quantities and resulted in a decrease of Cost of sales of $1 million and an increase in consolidated Net income of $1 million ($0.01 per diluted common share). No such reductions occurred in fiscal 2014.

Cabot reviews inventory for both potential obsolescence and potential loss of value periodically. In this review, Cabot makes assumptions about the future demand for and market value of the inventory and, based on these assumptions, estimates the amount of obsolete, unmarketable or slow moving inventory. Total inventory reserves were $20 million and $14 million, respectively, as of September 30, 2015 and 2014. During fiscal year 2015, the Company recorded a lower cost or market reserve in the amount of $6 million related to its Purification Solutions inventory held in Marshall, TX. This reserve reflects less favorable sales trends for activated carbon in mercury removal applications in the U.S., which continued into the fourth fiscal quarter of 2015.

Note F. Property, Plant and Equipment

Property, plant and equipment consists of the following:

	September 30	
	2015	2014
	(Dollars in millions)	
Land and land improvements	$154	$132
Buildings	509	536
Machinery and equipment	2,391	2,593
Other	225	233
Construction in progress	106	216
Total property, plant and equipment	3,385	3,710
Less: accumulated depreciation	(2,002)	(2,129)
Net property, plant and equipment	$1,383	$1,581

Depreciation expense was $169 million, $184 million and $175 million for fiscal 2015, 2014 and 2013, respectively.

Note G. Purification Solutions Goodwill and Long-Lived Assets Impairment Charges

During fiscal 2015 and as a result of the impairment tests performed on goodwill and long-lived assets of the Purification Solutions reporting unit, the Company recorded impairment charges and an associated tax benefit in the Consolidated Statements of Operations as follows:

	Year Ended September 30, 2015 (Dollars in millions)
Purification Solutions goodwill impairment charge	$ 352
Purification Solutions long-lived assets impairment charge	210
Provision (benefit) for income taxes	(80)
Impairment charges, after tax	$ 482

The future growth in the Purification Solutions segment is highly dependent on achieving the expected volumes and margins in the activated carbon based mercury removal business. These volumes and margins are highly dependent on demand for mercury removal products and the Company's successful realization of its anticipated share of volumes in this business. The expected demand for mercury removal products significantly depends on: (1) the implementation and enforcement of environmental laws and regulations, particularly those that would require U.S. based coal-fired electric utilities to reduce the quantity of air pollutants they release, including mercury, to comply with the Mercury and Air Toxics Standards ("MATS") issued by the U.S. Environmental Protection Agency ("EPA") and (2) other factors such as the anticipated usage of activated carbon in the coal-fired energy units. In November 2014, the U.S. Supreme

Court agreed to consider whether the EPA appropriately considered costs in determining whether it is necessary and appropriate to regulate hazardous air pollutants emitted by electric utilities. On June 29, 2015, the U.S. Supreme Court held that the EPA unreasonably failed to consider costs in determining whether it is necessary and appropriate to regulate hazardous air pollutants emitted by coal-fired utilities, and remanded the case back to the U.S. Court of Appeals for the District of Columbia Circuit further proceedings.

The implementation period for the MATS regulations began in April 2015. With this recent implementation and associated customer and industry developments during the third fiscal quarter, as well as the U.S. Supreme Court’s ruling, the Company reassessed its previous estimates for expected growth in volumes, prices and margins in the Purification Solutions reporting unit. The main drivers of growth, including the size of the overall mercury removal industry, utility adoption rates, usage levels, and pricing, among others, were lowered from previous estimates. Based on these revised estimates and as part of step one of the annual impairment test, the Company determined that the estimated fair value of the Purification Solutions reporting unit was lower than the reporting unit's carrying value. As such, the reporting unit failed step one of the goodwill impairment test.

In determining the fair value of the Purification Solutions reporting unit, the Company used an income approach (a discounted cash flow analysis) which incorporated significant estimates and assumptions related to future periods, including timing of MATS implementation, the anticipated size of the mercury removal industry, and growth rates and pricing assumptions of activated carbon, among others. The Company assumed a two year delay in the final MATS implementation due to the U.S. Supreme Court’s ruling. Total charges incurred could be higher if the rulings of the U.S. Court of Appeals for the District of Columbia Circuit on remand result in a delay in the implementation of MATS that is longer than two years. In addition, an estimate of the reporting unit’s weighted average cost of capital (“WACC”) is used to discount future estimated cash flows to their present value. The WACC was based upon externally available data considering market participants’ cost of equity and debt, capital structure and risk factors specific to the Purification Solutions reporting unit.

Step two of the goodwill impairment test requires the Company to perform a theoretical purchase price allocation for the reporting unit to determine the implied fair value of goodwill and to compare the implied fair value of goodwill to the recorded amount of goodwill. The estimate of fair value is complex and requires significant judgment. Accounting guidance provides that a company should recognize an estimated impairment charge to the extent that it determines that it is probable that an impairment loss has occurred and such impairment can be reasonably estimated. As of June 30, 2015, we recorded a pre-tax goodwill impairment charge in the amount of $353 million. We completed the step two analysis in the fourth quarter of fiscal 2015, which resulted in recording a credit of $1 million to the pre-tax goodwill impairment charge. Therefore, for the year ended September 30, 2015, the pre-tax goodwill impairment charge was $352 million.

Based on the same factors leading to goodwill impairment, the Company also considered whether the reporting unit's carrying values of definite-lived intangible assets and property, plant and equipment may not be recoverable or whether the carrying value of certain indefinite-lived intangible assets were impaired. The Company used the income approach to determine the fair value of the indefinite-lived intangible assets, which are the trademarks of Purification Solutions, and determined that the fair value of these intangible assets was lower than their carrying value. As such, an impairment loss was recorded in the amount of $39 million. Subsequent to this impairment analysis, the Company concluded that such assets no longer had an indefinite life and began amortizing these assets over their estimated useful life. The Company also performed an impairment analysis to assess if definite-lived intangible assets and property, plant and equipment were recoverable based on the estimated undiscounted cash flows of the reporting unit, and these cash flows were not sufficient to recover the carrying value of the long-lived assets over their remaining useful lives. Accordingly, an impairment charge was recorded based on the lower of the carrying amount or fair value of the long-lived assets. The Company used the income approach to determine the fair value of the definite-lived intangible assets and a combination of the cost and market approaches to fair value its property, plant and equipment. The Company recorded impairment charges of $119 million and $51 million, to its definite-lived intangible assets and property, plant and equipment, respectively. We completed the impairment analysis in the fourth quarter of fiscal year 2015 which resulted in increasing the property, plant and equipment impairment charge by $1 million to $52 million. Therefore, for the year ended September 30, 2015, the long-lived assets impairment charge was $210 million.

In connection with the long-lived assets impairment charges, the Company recorded a deferred tax benefit of $80 million to its income tax provision.

The performance of the Purification Solutions reporting unit will continue to be monitored. If the reporting unit does not achieve the financial performance that the Company expects or events or circumstances change, it is possible that additional impairment charges may result.

Note H. Goodwill and Intangible Assets

Cabot had goodwill balances of $154 million and $536 million at September 30, 2015 and September 30, 2014, respectively. The carrying amount of goodwill attributable to each reportable segment with goodwill balances and the changes in those balances during the period ended September 30, 2015 are as follows:

	Reinforcement Materials	Performance Chemicals	Purification Solutions	Total
	(Dollars in millions)			

Balance at September 30, 2014	$68	$ 10	$ 458	$536
Impairment charge	—	—	(352)	(352)
Foreign currency impact	(13)	(1)	(16)	(30)
Balance at September 30, 2015	$55	$ 9	$ 90	$154

	Reinforcement Materials	Performance Chemicals	Purification Solutions	Total
	(Dollars in millions)			
Accumulated impairment losses at September 30, 2014	—	—	—	—
Accumulated impairment losses at September 30, 2015	$—	$ —	$ (352)	$(352)

Goodwill impairment tests are performed at least annually. The Company performed its most recent annual impairment assessment as of May 31, 2015 and determined there was an impairment of the assets attributable to the Purification Solutions reporting unit. Refer to Note G.

The following table provides information regarding the Company's intangible assets:

	September 30, 2015			September 30, 2014		
	Gross Carrying Value	Accumulated Amortization	Net Intangible Assets	Gross Carrying Value	Accumulated Amortization	Net Intangible Assets
	(Dollars in millions)					
Intangible assets with finite lives[1]						
Developed technologies	$48	$ (1)	$ 47	$152	$ (16)	$ 136
Trademarks	16	—	16	57	—	57
Customer relationships	96	(6)	90	171	(17)	154
Total intangible assets	$160	$ (7)	$ 153	$380	$ (33)	$ 347

[1] Refer to Note G for intangible assets impairment charges recorded in fiscal 2015.

Intangible assets are amortized over their estimated useful lives, which range from fourteen to twenty-five years, with a weighted average amortization period of approximately nineteen years. Amortization expense for the years ended September 30, 2015, 2014 and 2013 was $14 million, $17 million and $14 million, respectively, and is included in Cost of sales and Selling and administrative expenses in the Consolidated Statements of Operations. Total amortization expense is estimated to be approximately $9 million each year for the next five fiscal years.

Note I. Accounts Payable, Accrued Liabilities and Other Liabilities

Accounts payable and accrued liabilities included in current liabilities consist of the following:

	September 30	
	2015	2014
	(Dollars in millions)	
Accounts payable	$274	$351
Accrued employee compensation	34	48
Other accrued liabilities	81	113
Total	$389	$512

Other long-term liabilities consist of the following:

	September 30	
	2015	2014
	(Dollars in millions)	
Employee benefit plan liabilities	$138	$174
Non-current tax liabilities	17	33
Other accrued liabilities	85	84
Total	$240	$291

Note J. Debt and Other Obligations

Long-term Obligations

The Company's long-term obligations, the fiscal year in which they mature and their respective interest rates are summarized below:

	September 30	
	2015	2014
	(Dollars in millions)	
Variable Rate Debt:		
$750 million Revolving Credit Facility, expires 2019	$—	$—
Chinese Renminbi Notes, due through 2016, 6.15%—6.77%	—	28
Total variable rate debt	—	28
Fixed Rate Debt:		
5% Notes due 2017	$300	$300
2.55% Notes due 2018	250	250
3.7% Notes due 2022	350	350
Medium Term Notes:		
Notes due 2019, 7.42%	30	30
Notes due 2022, 8.35%—8.47%	15	15
Notes due 2028, 6.57%—7.28%	8	8
Total Medium Term Notes	$53	$53
Chinese Renminbi Notes, due through 2017, 4.63%—6.15%	5	31
Total fixed rate debt	958	984
Capital lease obligations, due through 2031	14	17
Unamortized debt discount	(1)	(1)
Total debt	971	1,028
Less current portion of long-term debt	(1)	(24)
Total long-term debt	$970	$1,004

$750 million Revolving Credit Facility—The amount available for borrowing under the revolving credit agreement, after consideration of letters of credit and commercial paper outstanding, was $738 million as of September 30, 2015. Effective October 23, 2015, the Company entered into a new revolving credit agreement that amended and extended the $750 million revolving credit agreement, which was scheduled to mature on October 3, 2019. The borrowing capacity on the new revolving credit agreement, which matures on October 23, 2020, subject to two one-year options to extend on the first and second anniversaries of the effective date, is $1 billion and continues to support the Company's commercial paper program. Borrowings under the new revolving credit agreement may be used for working capital, letters of credit and other general corporate purposes. The new revolving credit agreement contains affirmative and negative covenants, a single financial covenant (consolidated total debt to consolidated EBITDA) and events of default customary for financings of this type.

Chinese Renminbi Debt—The Company's consolidated Chinese subsidiaries had $5 million and $59 million of unsecured long-term debt outstanding as of September 30, 2015 and September 30, 2014, respectively.

5% Notes due fiscal 2017—In fiscal 2009, Cabot issued $300 million in registered notes with a coupon of 5% that will mature on October 1, 2016. These notes are unsecured and pay interest on April 1 and October 1. The net proceeds of this offering were $296 million after deducting discounts and issuance costs. The discount of approximately $2 million was recorded at issuance and is being amortized over the life of the notes.

2.55% Notes due fiscal 2018—In July 2012, Cabot issued $250 million in registered notes with a coupon of 2.55% that will mature on January 15, 2018. These notes are unsecured and pay interest on January 15 and July 15. The net proceeds of this offering were $248 million after deducting discounts and issuance costs. The discount of less than $1 million was recorded at issuance and is being amortized over the life of the notes.

3.7% Notes due fiscal 2022—In July 2012, Cabot issued $350 million in registered notes with a coupon of 3.7% that will mature on July 15, 2022. These notes are unsecured and pay interest on January 15 and July 15. The net proceeds of this offering were $347 million after deducting discounts and issuance costs. The discount of less than $1 million was recorded at issuance and is being amortized over the life of the notes.

Medium Term Notes—At both September 30, 2015 and 2014, there were $53 million of unsecured medium term notes outstanding issued to numerous lenders with various fixed interest rates and maturity dates. The weighted average maturity of the total outstanding medium term notes is 6 years with a weighted average interest rate of 7.65%.

Capital Lease Obligations—Cabot had capital lease obligations for certain equipment and buildings with a recorded value of $14 million and $17 million at September 30, 2015 and 2014, respectively. Cabot will make payments totaling $33 million over the next 16 years, including $9 million of imputed interest. At September 30, 2015 and 2014, the original cost of capital lease assets was $20 million and $22 million, respectively, and the associated accumulated depreciation of assets under capital leases was $9 million at both September 30, 2015 and 2014. The amortization related to those assets under capital lease is included in depreciation expense.

Future Years Payment Schedule

The aggregate principal amounts of long-term debt and capital lease obligations due in each of the five years from fiscal 2016 through 2020 and thereafter are as follows:

Fiscal Years Ending September 30,	Principal on Long-Term Debt	Payments on Payments Capital Lease Obligations	Total
	(Dollars in millions)		
2016	$—	$ 3	$3
2017	305	4	309
2018	250	3	253
2019	30	3	33
2020	—	3	3
Thereafter	373	17	390
Less: executory costs and interest	—	(19)	(19)
Total	$958	$ 14	$972

Standby letters of credit—At September 30, 2015, the Company had provided standby letters of credit that were outstanding and not drawn totaling $11 million, which expire through fiscal 2016.

Short-term Obligations

Short-term Notes Payable—The Company had unsecured short-term notes of $22 million and $44 million as of September 30, 2015 and 2014, respectively, with maturities of less than one year. The weighted-average interest rate on short-term notes payable, including commercial paper, was 4.6% and 3.9% as of September 30, 2015 and 2014, respectively.

The Company has a commercial paper program and the maximum aggregate balance of commercial paper notes outstanding and the amounts borrowed under the revolving credit facility may not exceed the borrowing capacity of the revolving credit facility, $750 million (increased to $1 billion in October 2015). The proceeds from the issuance of the commercial paper have been used for general corporate purposes, which may include working capital, refinancing existing indebtedness, capital expenditures, share repurchases, and acquisitions. The revolving credit facility is available to repay the outstanding commercial paper, if necessary.

The outstanding balance of commercial paper, included within the Notes payable caption on the Consolidated Balance Sheets, was $12 million as of September 30, 2015 bearing a weighted-average interest rate of 0.36% with a weighted-average maturity of 1 day. The outstanding balance of commercial paper was $30 million as of September 30, 2014 bearing a weighted-average interest rate of 0.25% with a weighted-average maturity of 1 day.

Note K. Financial Instruments and Fair Value Measurements

The FASB authoritative guidance on fair value measurements defines fair value, provides a framework, for measuring fair value in generally accepted accounting principles, and requires certain disclosures about fair value measurements. The disclosures focus on the inputs used to measure fair value. The guidance establishes the following hierarchy for categorizing these inputs:

Level 1—Quoted market prices in active markets for identical assets or liabilities

Level 2—Significant other observable inputs (e.g., quoted prices for similar items in active markets, quoted prices for identical or similar items in markets that are not active, inputs other than quoted prices that are observable such as interest rate and yield curves, and market-corroborated inputs)

Level 3—Significant unobservable inputs

There were no transfers of financial assets or liabilities measured at fair value between Level 1 and Level 2, or transfers into or out of Level 3, during fiscal 2015 or 2014.

At September 30, 2015 and 2014, the fair value of Guaranteed investment contracts, included in Other assets on the Consolidated Balance Sheets, was $12 million and $13 million, respectively. Guaranteed investment contracts were classified as Level 2 instruments within the fair value hierarchy as the fair value determination was based on other observable inputs.

At September 30, 2015 and 2014, the fair values of cash and cash equivalents, accounts and notes receivable, accounts payable and accrued liabilities, and notes payable and variable rate debt approximated their carrying values due to the short-term nature of these instruments. The carrying value and fair value of the long-term fixed rate debt were $0.96 billion and $1.02 billion, respectively, as of September 30, 2015. The carrying value and fair value of the long-term fixed rate debt were $0.98 billion and $1.05 billion, respectively, as of September 30, 2014. The fair values of Cabot's fixed rate long-term debt and capital lease obligations are estimated based on comparable quoted market prices at the respective period ends. The carrying amounts of Cabot's floating rate long-term debt and capital lease obligations approximate their fair values. All such measurements are based on observable inputs and are classified as Level 2 within the fair value hierarchy. The valuation technique used is the discounted cash flow model.

Note L. Derivatives

Risk Management

Cabot's business operations are exposed to changes in interest rates, foreign currency exchange rates and commodity prices because Cabot finances certain operations through long and short-term borrowings, denominates transactions in a variety of foreign currencies and purchases certain commoditized raw materials. Changes in these rates and prices may have an impact on future cash flows and earnings. The Company manages these risks through normal operating and financing activities and, when deemed appropriate, through the use of derivative financial instruments.

The Company has policies governing the use of derivative instruments and does not enter into financial instruments for trading or speculative purposes.

By using derivative instruments, Cabot is subject to credit and market risk. If a counterparty fails to fulfill its performance obligations under a derivative contract, Cabot's credit risk will equal the fair value of the derivative. Generally, when the fair value of a derivative contract is positive, the counterparty owes Cabot, thus creating a payment risk for Cabot. The Company minimizes counterparty credit (or repayment) risk by entering into transactions with major financial institutions of investment grade credit rating. As of September 30, 2015, the counterparty with which the Company has executed derivatives carried a Standard and Poor's credit rating of AA-. Cabot's exposure to market risk is not hedged in a manner that completely eliminates the effects of changing market conditions on earnings or cash flow. No significant concentration of credit risk existed at September 30, 2015.

Interest Rate Risk Management

Cabot's objective is to maintain a certain fixed-to-variable interest rate mix on the Company's debt obligations. Cabot may enter into interest rate swaps as a hedge of the underlying debt instruments to effectively change the characteristics of the interest rate without changing the debt instrument. As of both September 30, 2015 and 2014, there were no derivatives held to manage interest rate risk.

Foreign Currency Risk Management

Cabot's international operations are subject to certain risks, including currency exchange rate fluctuations and government actions. Cabot endeavors to match the currency in which debt is issued to the currency of the Company's major, stable cash receipts. In some situations Cabot has issued debt denominated in U.S. dollars and then entered into cross currency swaps that exchange the dollar principal and interest payments into a currency where the Company expects long-term, stable cash receipts.

Additionally, the Company has foreign currency exposure arising from its net investments in foreign operations. Cabot, from time to time, enters into cross-currency swaps to mitigate the impact of currency rate changes on the Company's net investments.

The Company also has foreign currency exposure arising from the denomination of monetary assets and liabilities in foreign currencies other than the functional currency of a given subsidiary as well as the risk that currency fluctuations could affect the dollar value of future cash flows generated in foreign currencies. Accordingly, Cabot uses short-term forward contracts to minimize the exposure to foreign currency risk.

In certain situations where the Company has forecasted purchases under a long-term commitment or forecasted sales denominated in a foreign currency, Cabot may enter into appropriate financial instruments in accordance with the Company's risk management policy to hedge future cash flow exposures.

The following table provides details of the derivatives held as of September 30, 2015 and 2014 to manage foreign currency risk.

		Notional Amount		Hedge
Description	Borrowing	September 30, 2015	September 30, 2014	Designation
Forward Foreign Currency Contracts [1]	N/A	USD 2 million	USD 32 million	No designation

[1] Cabot's forward foreign exchange contracts are denominated primarily in the British pound sterling, Brazilian real, and Czech koruna.

Accounting for Derivative Instruments and Hedging Activities

The Company determines the fair value of financial instruments using quoted market prices whenever available. When quoted market prices are not available for various types of financial instruments (such as forwards, options and swaps), the Company uses standard models with market-based inputs, which take into account the present value of estimated future cash flows and the ability of the financial counterparty to perform. For interest rate and cross-currency swaps, the significant inputs to these models are interest rate curves for discounting future cash flows. For forward foreign currency contracts, the significant inputs are interest rate curves for discounting future cash flows, and exchange rate curves of the foreign currency for translating future cash flows.

Fair Value Hedge

For derivative instruments that are designated and qualify as fair value hedges, the gain or loss on the derivative as well as the offsetting gain or loss on the hedged item attributable to the hedged risk are recognized in current period earnings.

Cash Flow Hedge

For derivative instruments that are designated and qualify as cash flow hedges, the effective portion of the gain or loss on the derivative is recorded in Accumulated other comprehensive (loss) income and reclassified to earnings in the same period or periods during which the hedged transaction affects earnings. Gains and losses on the derivative representing either hedge ineffectiveness or hedge components excluded from the assessment of effectiveness are recognized in current period earnings.

Other Derivative Instruments

From time to time, the Company may enter into certain derivative instruments that may not be designated as hedges for accounting purposes, which include cross currency swaps, foreign currency forward contracts and commodity derivatives. For cross currency swaps and foreign currency forward contracts not designated as hedges, the Company uses standard models with market-based inputs. The significant inputs to these models are interest rate curves for discounting future cash flows, and exchange rate curves of the foreign currency for translating future cash flows. In determining the fair value of the commodity derivatives, the significant inputs to valuation models are quoted market prices of similar instruments in active markets. Although these derivatives do not qualify for hedge accounting, Cabot believes that such instruments are closely correlated with the underlying exposure, thus managing the associated risk. The gains or losses from changes in the fair value of derivative instruments that are not accounted for as hedges are recognized in current period earnings.

During fiscal 2015 and 2014, there were no derivatives designated as hedges. During fiscal 2013, for derivatives designated as hedges, the change in unrealized gains in Accumulated other comprehensive (loss) income, the hedge ineffectiveness recognized in earnings, the realized gains or losses reclassified from Accumulated other comprehensive (loss) income, and the losses reclassified from Accumulated other comprehensive (loss) income to earnings were immaterial.

During fiscal 2013 a gain of $4 million was recognized in earnings as a result of the remeasurement to Euros of the $175 million bond held by one of Cabot's European subsidiaries. The gain was recognized in earnings through Other (expense) income within the Consolidated Statements of Operations. The gain was offset by a loss of $2 million from Cabot's cross currency swaps that are not designated as hedges, but which Cabot entered into to offset the foreign currency remeasurement exposure on the debt. Additionally, during fiscal 2013, Cabot recognized in earnings through Other (expense) income within the Consolidated Statements of Operations, a gain of $5 million related to its foreign currency forward contracts, which were not designated as hedges.

At both September 30, 2015 and 2014, the fair value of derivative instruments were immaterial and were presented in Prepaid expenses and other current assets and Accounts payable and accrued liabilities on the Consolidated Balance Sheets.

Note M. Venezuela

Cabot owns 49% of an operating carbon black affiliate in Venezuela, which is accounted for as an equity affiliate, through wholly-owned subsidiaries that carry the investment and receive its dividends. As of September 30, 2015, these subsidiaries carried the operating affiliate investment of $14 million and held 18 million bolivars (less than $1 million) in cash.

During fiscal 2015, 2014 and 2013, the Company received dividends in the amounts of $6 million, $5 million and $3 million, respectively, which were paid in U.S. dollars.

A significant portion of the Company's operating affiliate's sales are exports denominated in U.S. dollars. The Venezuelan government mandates that a certain percentage of the dollars collected from these sales be converted into bolivars. The operating affiliate and the Company's wholly owned subsidiaries used an exchange rate that was available to Cabot when converting these dollars into bolivars to remeasure their bolivar denominated monetary accounts. The exchange rate made available to us on September 30, 2015 was 52 bolivars to the U.S. dollar (B/S).

The operating entity has generally been profitable. The Company continues to closely monitor developments in Venezuela and their potential impact on the recoverability of its equity affiliate investment.

The Company closely monitors its ability to convert its bolivar holdings into U.S. dollars, as the Company intends to convert substantially all bolivars held by its wholly-owned subsidiaries in Venezuela to U.S. dollars as soon as practical. Any future change in the exchange rate made available to the Company or opening of additional parallel markets could cause the Company to change the exchange rate it uses and result in gains or losses on the bolivar denominated assets held by its operating affiliate and wholly-owned subsidiaries.

Note N. Employee Benefit Plans

The information below provides detail concerning the Company's benefit obligations under the defined benefit and postretirement benefit plans it sponsors.

Defined benefit plans provide pre-determined benefits to employees that are distributed upon retirement. Cabot is making all required contributions to these plans. The accumulated benefit obligation was $170 million for the U.S. defined benefit plans and $326 million for the foreign plans as of September 30, 2015 and $173 million for the U.S. defined benefit plans and $462 million for the foreign plans as of September 30, 2014.

In addition to benefits provided under the defined benefit and postretirement benefit plans, the Company provided benefits under defined contribution plans. One of these plans included an Employee Stock Ownership Plan ("ESOP") component, which is described below. Cabot recognized expenses related to these plans, not including the expenses related to the ESOP, of $20 million in fiscal 2015, $14 million in fiscal 2014 and $9 million in fiscal 2013.

Employee Stock Ownership Plan

In the first quarter of fiscal 2014, all shares that remained available for distribution under the ESOP were allocated to participant accounts and no further contributions under the plan have been or will be made. Compensation expense related to the ESOP, which is based on the fair value of the shares on the date of allocation, was $1 million in fiscal 2014 and $4 million in fiscal 2013.

The following provides information about benefit obligations, plan assets, the funded status and weighted-average assumptions of the defined benefit pension and postretirement benefit plans:

	Years Ended September 30							
	2015		2014		2015		2014	
	Pension Benefits				Postretirement Benefits			
	U.S.	Foreign	U.S.	Foreign	U.S.	Foreign	U.S.	Foreign
	(Dollars in millions)							
Change in Benefit Obligations:								
Benefit obligation at beginning of year	$173	$ 491	$170	$ 439	$50	$ 17	$55	$ 17
Service cost	1	9	2	9	—	—	—	—
Interest cost	7	11	7	16	2	1	2	1
Plan participants’ contribution	—	2	—	2	—	—	—	—
Foreign currency exchange rate changes	—	(45)	—	(28)	—			