## UNITED STATES SECURITIES AND EXCHANGE COMMISSION

WASHINGTON, D.C. 20549

## **FORM 10-Q**

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

For the quarterly period ended June 30, 2016

Commission file number: 1-3285

## **3M COMPANY**

(Exact name of registrant as specified in its charter)

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

41-0417775 (I.R.S. Employer Identification No.)

3M Center, St. Paul, Minnesota (Address of principal executive offices)

55144 (Zip Code)

(651) 733-1110

(Registrant's telephone number, including area code)

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  $\boxtimes$  No  $\square$ 

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 ( $\S232.405$  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  $\boxtimes$  No  $\square$ 

Indicate by check mark whether the registrant is a large accelerated filer, an accelerated filer, a non-accelerated filer, or a smaller reporting company. See the definitions of "large accelerated filer," "accelerated filer" and "smaller reporting company" in Rule 12b-2 of the Exchange Act.

This document (excluding exhibits) contains 85 pages.

The table of contents is set forth on page 2.

The exhibit index begins on page 81.

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## 3M COMPANY FORM 10-Q For the Quarterly Period Ended June 30, 2016 PART I. Financial Information

## Item 1. Financial Statements.

3M Company and Subsidiaries Consolidated Statement of Income (Unaudited)

		Three mon			Six mont Jun				
(Millions, except per share amounts)		2016	2015		2016		2015		
Net sales	\$	7,662	\$ 7,686	\$	15,071	\$	15,264		
Operating expenses									
Cost of sales		3,799	3,858		7,477		7,679		
Selling, general and administrative expenses		1,560	1,550		3,053		3,114		
Research, development and related expenses		437	438		887		901		
Total operating expenses		5,796	5,846		11,417		11,694		
Operating income		1,866	1,840		3,654		3,570		
Interest expense and income		••							
Interest expense		38	35		85		66		
Interest income		(7)	(7)		(12)		(11)		
Total interest expense — net		31	28		73		55		
			4.048						
Income before income taxes		1,835	1,812		3,581		3,515		
Provision for income taxes		542	509		1,010		1,011		
Net income including noncontrolling interest	\$	1,293	\$ 1,303	\$	2,571	\$	2,504		
			2		_				
Less: Net income attributable to noncontrolling interest		2	3		5	_	5		
Net income attributable to 3M	\$	1,291	\$ 1,300	\$	2,566	\$	2,499		
ivet income attributable to sivi	Φ	1,271	\$ 1,500	Ψ	2,500	Ψ	2,477		
Weighted average 3M common shares outstanding — basic		606.9	631.3		607.2		633.8		
Earnings per share attributable to 3M common shareholders — basic	\$	2.13	\$ 2.06	\$	4.23	\$	3.94		
Weighted average 3M common shares outstanding — diluted		620.9	643.0		621.1		646.1		
Earnings per share attributable to 3M common shareholders — diluted	\$	2.08	\$ 2.02	\$	4.13	\$	3.87		
Cash dividends paid per 3M common share	\$	1.11	\$ 1.025	\$	2.22	\$	2.05		

## 3M Company and Subsidiaries Consolidated Statement of Comprehensive Income (Unaudited)

	 Three mor	 nded	 Six mont Jun		led
(Millions)	2016	2015	2016		2015
Net income including noncontrolling interest	\$ 1,293	\$ 1,303	\$ \$ 2,571		2,504
Other comprehensive income (loss), net of tax:					
Cumulative translation adjustment	37	23	175		(170)
Defined benefit pension and postretirement plans adjustment	67	96	136		187
Debt and equity securities, unrealized gain (loss)	_	_	_		_
Cash flow hedging instruments, unrealized gain (loss)	(27)	(32)	(137)		38
Total other comprehensive income (loss), net of tax	77	87	174		55
Comprehensive income (loss) including noncontrolling interest	1,370	1,390	2,745		2,559
Comprehensive (income) loss attributable to noncontrolling interest	(2)	 (2)	 (4)		(4)
Comprehensive income (loss) attributable to 3M	\$ 1,368	\$ 1,388	\$ 2,741	\$	2,555

## 3M Company and Subsidiaries Consolidated Balance Sheet (Unaudited)

(Dollars in millions, except per share amount)		June 30, 2016	De	cember 31, 2015
Assets				
Current assets				
Cash and cash equivalents	\$	1,688	\$	1,798
Marketable securities — current		177		118
Accounts receivable — net		4,667		4,154
Inventories		4		
Finished goods		1,676		1,655
Work in process		1,165		1,008
Raw materials and supplies		772		855
Total inventories		3,613		3,518
Other current assets		1,291		1,398
Total current assets		11,436		10,986
Marketable securities — non-current		14		9
Investments		121		117
Property, plant and equipment		23,793		23,098
Less: Accumulated depreciation		(15,189)		(14,583)
Property, plant and equipment — net		8,604		8,515
Goodwill		9,356		9,249
Intangible assets — net		2,477		2,601
Prepaid pension benefits		242		188
Other assets		985		1,053
Total assets	\$	33,235	\$	32,718
Liabilities				
Current liabilities				
Short-term borrowings and current portion of long-term debt	\$	2,450	\$	2,044
Accounts payable		1,650		1,694
Accrued payroll		580		644
Accrued income taxes		169		332
Other current liabilities		2,405		2,404
Total current liabilities		7,254		7,118
Long-term debt		9,299		8,753
Pension and postretirement benefits		3,418		3,520
Other liabilities		1,327		1,580
Total liabilities	\$	21,298	\$	20,971
Commitments and contingencies (Note 12)				
Equity				
3M Company shareholders' equity:				
Common stock par value, \$.01 par value, 944,033,056 shares issued	\$	9	\$	9
Additional paid-in capital		4,963		4,791
Retained earnings		37,194		36,575
Treasury stock, at cost: 339,632,765 shares at June 30, 2016; 334,702,932 shares at December 31, 2015		(24,088)		(23,308)
Accumulated other comprehensive income (loss)		(6,184)		(6,359)
Total 3M Company shareholders' equity		11,894		11,708
Noncontrolling interest		43		39
Total equity	\$	11,937	\$	11,747
Total liabilities and equity	<u>\$</u>	33,235	\$	32,718
Total natiffics and equity	<b>3</b>	33,433	φ	32,710

## 3M Company and Subsidiaries Consolidated Statement of Cash Flows (Unaudited)

		Six months ended June 30,							
(Millions)		2016	. 30,	2015					
Cash Flows from Operating Activities									
Net income including noncontrolling interest	\$	2,571	\$	2,504					
Adjustments to reconcile net income including noncontrolling interest to net cash provided									
by operating activities		722		683					
Depreciation and amortization		(97)							
Company pension and postretirement contributions		118		(185) 283					
Company pension and postretirement expense		193		187					
Stock-based compensation expense				295					
Deferred income taxes		(134)		(129)					
Excess tax benefits from stock-based compensation Changes in assets and liabilities		_		(129)					
Accounts receivable		(419)		(446)					
Inventories		(42)		(269)					
Accounts payable		(57)		(34)					
Accrued income taxes (current and long-term)		(102)		(421)					
Other — net		(208)		(50)					
Net cash provided by operating activities	_	2,545	_	2,418					
Net cash provided by operating activities		2,343		2,710					
Cash Flows from Investing Activities									
Purchases of property, plant and equipment (PP&E)		(637)		(661)					
Proceeds from sale of PP&E and other assets		18		14					
Acquisitions, net of cash acquired		(4)		(153)					
Purchases of marketable securities and investments		(510)		(341)					
Proceeds from maturities and sale of marketable securities and investments		449		1,269					
Proceeds from sale of businesses		56		19					
Other investing		(2)		19					
Net cash provided by (used in) investing activities		(630)		166					
Cash Flows from Financing Activities									
Ü		(337)		(39)					
Change in short-term debt — net		(337)		(10)					
Repayment of debt (maturities greater than 90 days)		1,112		1,925					
Proceeds from debt (maturities greater than 90 days) Purchases of treasury stock		(2,055)		(2,581)					
<b>5</b>		612		450					
Proceeds from issuance of treasury stock pursuant to stock option and benefit plans Dividends paid to shareholders		(1,344)		(1,298)					
Excess tax benefits from stock-based compensation		(1,544)		129					
Other — net		(16)		(50)					
		(2,028)	_	(1,474)					
Net cash used in financing activities		(2,020)	_	(1,4/4)					
Effect of exchange rate changes on cash and cash equivalents		3		(24)					
Net increase (decrease) in cash and cash equivalents		(110)		1,086					
Cash and cash equivalents at beginning of year		1,798		1,080					
Cash and cash equivalents at oegiming of year  Cash and cash equivalents at end of period	<u>s</u>	1,688	\$	2,983					
Cash and cash equivalents at end of period	<b>3</b>	1,000	Ф	2,703					

3M Company and Subsidiaries Notes to Consolidated Financial Statements (Unaudited)

## NOTE 1. Significant Accounting Policies

#### **Basis of Presentation**

The interim consolidated financial statements are unaudited but, in the opinion of management, reflect all adjustments necessary for a fair statement of the Company's consolidated financial position, results of operations and cash flows for the periods presented. These adjustments consist of normal, recurring items. The results of operations for any interim period are not necessarily indicative of results for the full year. The interim consolidated financial statements and notes are presented as permitted by the requirements for Quarterly Reports on Form 10-O.

As described in 3M's Current Report on Form 8-K dated May 17, 2016 (which updated 3M's 2015 Annual Report on Form 10-K) and 3M's Quarterly Report on Form 10-Q for the period ended March 31, 2016, effective in the first quarter of 2016, the Company made a product line reporting change involving two of its business segments. Segment information presented herein reflects the impact of this change for all periods presented. This Quarterly Report on Form 10-Q should be read in conjunction with the Company's consolidated financial statements and notes included in its Current Report on Form 8-K dated May 17, 2016.

#### **Foreign Currency Translation**

Local currencies generally are considered the functional currencies outside the United States. Assets and liabilities for operations in local-currency environments are translated at month-end exchange rates of the period reported. Income and expense items are translated at month-end exchange rates of each applicable month. Cumulative translation adjustments are recorded as a component of accumulated other comprehensive income (loss) in shareholders' equity.

Although local currencies are typically considered as the functional currencies outside the United States, under Accounting Standards Codification (ASC) 830, Foreign Currency Matters, the reporting currency of a foreign entity's parent is assumed to be that entity's functional currency when the economic environment of a foreign entity is highly inflationary—generally when its cumulative inflation is approximately 100 percent or more for the three years that precede the beginning of a reporting period. 3M has a subsidiary in Venezuela with operating income representing less than 1.0 percent of 3M's consolidated operating income for 2015. Since January 1, 2010, the financial statements of the Venezuelan subsidiary have been remeasured as if its functional currency were that of its parent.

The Venezuelan government sets official rates of exchange and conditions precedent to purchase foreign currency at these rates with local currency. Such rates and conditions have been and continue to be subject to change. In January 2014, the Venezuelan government announced that the National Center for Foreign Commerce (CENCOEX), had assumed the role with respect to the continuation of the existing official exchange rate, significantly expanded the use of a second currency auction exchange mechanism called the Complementary System for Foreign Currency Acquirement (or SICAD1), and issued exchange regulations indicating the SICAD1 rate of exchange would be used for payments related to international investments. In late March 2014, the Venezuelan government launched a third foreign exchange mechanism, SICAD2, which it later replaced with another foreign currency exchange platform in February 2015 called the Marginal System of Foreign Currency (SIMADI). The SIMAD1 rate was described as being derived from daily private bidders and buyers exchanging offers through authorized agents. This rate was approved and published by the Venezuelan Central Bank. In March 2016, the Venezuelan government effected a replacement of its preferential CENCOEX rate with Tipo de Cambio Protegido (DIPRO), described as available largely for essential imports; eliminated its SICAD exchange mechanism; and replaced its SIMAD1 rate with Tipo de Cambio Complementario (DICOM), published by the Venezuelan Central Bank and described as fluctuating in rate based on supply and demand.

The financial statements of 3M's Venezuelan subsidiary were remeasured utilizing the official CENCOEX (or its predecessor) rate into March 2014, the SICAD1 rate beginning in late March 2014, the SICAD2 rate beginning in June 2014, and the DICOM rate (or its SIMADI predecessor) beginning in February 2015. 3M's uses of these rates were

based upon evaluation of a number of factors including, but not limited to, the exchange rate the Company's Venezuelan subsidiary may legally use to convert currency, settle transactions or pay dividends; the probability of accessing and obtaining currency by use of a particular rate or mechanism; and the Company's intent and ability to use a particular exchange mechanism. Other factors notwithstanding, remeasurement impacts of the changes in use of these exchange rates did not have material impacts on 3M's consolidated results of operations or financial condition.

The Company continues to monitor circumstances relative to its Venezuelan subsidiary. Changes in applicable exchange rates or exchange mechanisms may continue in the future. These changes could impact the rate of exchange applicable to remeasure the Company's net monetary assets (liabilities) denominated in Venezuelan Bolivars (VEF). As of June 30, 2016, the Company had a balance of net monetary assets denominated in VEF of less than 1.5 billion VEF and the DIPRO and DICOM exchange rates were approximately 10 VEF and 625 VEF per U.S. dollar, respectively.

A need to deconsolidate the Company's Venezuelan subsidiary's operations may result from a lack of exchangeability of VEF-denominated cash coupled with an acute degradation in the ability to make key operational decisions due to government regulations in Venezuela. 3M monitors factors such as its ability to access various exchange mechanisms; the impact of government regulations on the Company's ability to manage its Venezuelan subsidiary's capital structure, purchasing, product pricing, and labor relations; and the current political and economic situation within Venezuela. Based upon such factors as of June 30, 2016, the Company continues to consolidate its Venezuelan subsidiary. As of June 30, 2016, the balance of intercompany receivables due from this subsidiary and its equity balance were not significant.

#### **Earnings Per Share**

The difference in the weighted average 3M shares outstanding for calculating basic and diluted earnings per share attributable to 3M common shareholders is a result of the dilution associated with the Company's stock-based compensation plans. Certain options outstanding under these stock-based compensation plans were not included in the computation of diluted earnings per share attributable to 3M common shareholders because they would not have had a dilutive effect (2.9 million average options for the three months ended June 30, 2016; 5.9 million average options for the six months ended June 30, 2016; 5.5 million average options for the six months ended June 30, 2015; and 4.5 million average options for the six months ended June 30, 2015). The computations for basic and diluted earnings per share follow:

#### **Earnings Per Share Computations**

	Three moi	nths en	nded		Six mont Jun	led	
(Amounts in millions, except per share amounts)	2016		2015		2016		2015
Numerator:							
Net income attributable to 3M	\$ 1,291	\$	1,300	\$	2,566	\$	2,499
Denominator:							
Denominator for weighted average 3M common shares							
outstanding — basic	606.9		631.3		607.2		633.8
Dilution associated with the Company's stock-based							
compensation plans	14.0		11.7		13.9		12.3
Denominator for weighted average 3M common shares			642.0				
outstanding — diluted	 620.9		643.0	_	621.1		646.1
Earnings per share attributable to 3M common shareholders	2.12		2.06	_	4.00		2.04
— basic	\$ 2.13	\$	2.06	\$	4.23	\$	3.94
Earnings per share attributable to 3M common shareholders	2.00		2.02	_	4.12		2.07
— diluted	\$ 2.08	\$	2.02	\$	4.13	\$	3.87

## **New Accounting Pronouncements**

In May 2014, the Financial Accounting Standards Board (FASB) issued ASU No. 2014-09, *Revenue from Contracts with Customers*, and in August 2015 issued ASU No. 2015-14, which amended ASU No. 2014-09 as to effective date. The ASU, as amended, provides a single comprehensive model to be used in the accounting for revenue arising from

contracts with customers and supersedes most current revenue recognition guidance, including industry-specific guidance. The standard's stated core principle is that an entity should recognize revenue to depict the transfer of promised goods or services to customers in an amount that reflects the consideration to which the entity expects to be entitled in exchange for those goods or services. To achieve this core principle the ASU includes provisions within a five step model that includes identifying the contract with a customer, identifying the performance obligations in the contract, determining the transaction price, allocating the transaction price to the performance obligations, and recognizing revenue when (or as) an entity satisfies a performance obligation. The standard also specifies the accounting for some costs to obtain or fulfill a contract with a customer and requires expanded disclosures about revenue recognition. The standard provides for either full retrospective adoption or a modified retrospective adoption by which it is applied only to the most current period presented. For 3M, the ASU, as amended, is effective January 1, 2018. The Company is currently assessing this standard's impact on 3M's consolidated results of operations and financial condition.

In February 2015, the FASB issued ASU No. 2015-02, Amendments to the Consolidation Analysis, which changes guidance related to both the variable interest entity (VIE) and voting interest entity (VOE) consolidation models. With respect to the VIE model, the standard changes, among other things, the identification of variable interests associated with fees paid to a decision maker or service provider, the VIE characteristics for a limited partner or similar entity, and the primary beneficiary determination. With respect to the VOE model, the ASU eliminates the presumption that a general partner controls a limited partnership or similar entity unless the presumption can otherwise be overcome. Under the new guidance, a general partner would largely not consolidate a partnership or similar entity under the VOE model. The Company adopted this ASU effective January 1, 2016. Because 3M did not have significant involvement with entities subject to consolidation considerations impacted by the VIE model changes or with limited partnerships potentially impacted by the VOE model changes, the adoption did not have a material impact on the Company's consolidated results of operations and financial condition.

In April 2015, the FASB issued ASU No. 2015-05, *Customer's Accounting for Fees Paid in a Cloud Arrangement*, which requires a customer to determine whether a cloud computing arrangement contains a software license. If the arrangement contains a software license, the customer would account for fees related to the software license element in a manner consistent with accounting for the acquisition of other acquired software licenses. If the arrangement does not contain a software license, the customer would account for the arrangement as a service contract. An arrangement would contain a software license element if both (1) the customer has the contractual right to take possession of the software at any time during the hosting period without significant penalty and (2) it is feasible for the customer to either run the software on its own hardware or contract with another party unrelated to the vendor to host the software. 3M adopted this ASU prospectively to arrangements entered into, or materially modified beginning January 1, 2016. The adoption did not have a material impact on 3M's consolidated results of operations and financial condition.

In July 2015, the FASB issued ASU No. 2015-11, Simplifying the Measurement of Inventory, which modifies existing requirements regarding measuring inventory at the lower of cost or market. Under existing standards, the market amount requires consideration of replacement cost, net realizable value (NRV), and NRV less an approximately normal profit margin. The new ASU replaces market with NRV, defined as estimated selling prices in the ordinary course of business, less reasonably predictable costs of completion, disposal and transportation. This eliminates the need to determine and consider replacement cost or NRV less an approximately normal profit margin when measuring inventory. For 3M, this standard is effective prospectively beginning January 1, 2017, with early adoption permitted. The Company is currently assessing this ASU's impact on 3M's consolidated results of operations and financial condition.

In January 2016, the FASB issued ASU No. 2016-01, Recognition and Measurement of Financial Assets and Financial Liabilities, which revises the accounting related to (1) the classification and measurement of investments in equity securities and (2) the presentation of certain fair value changes for financial liabilities measured at fair value. The ASU also amends certain disclosure requirements associated with the fair value of financial instruments. The new guidance requires the fair value measurement of investments in equity securities and other ownership interests in an entity, including investments in partnerships, unincorporated joint ventures and limited liability companies (collectively, equity securities) that do not result in consolidation and are not accounted for under the equity method. Entities will need to measure these investments and recognize changes in fair value in net income. Entities will no longer be able to recognize unrealized holding gains and losses on equity securities they classify under current guidance as available for sale in other comprehensive income (OCI). They also will no longer be able to use the cost method of accounting for equity securities

that do not have readily determinable fair values. Instead, for these types of equity investments that do not otherwise qualify for the net asset value practical expedient, entities will be permitted to elect a practicability exception and measure the investment at cost less impairment plus or minus observable price changes (in orderly transactions). The ASU also establishes an incremental recognition and disclosure requirement related to the presentation of fair value changes of financial liabilities for which the fair value option (FVO) has been elected. Under this guidance, an entity would be required to separately present in OCI the portion of the total fair value change attributable to instrument-specific credit risk as opposed to reflecting the entire amount in earnings. For derivative liabilities for which the FVO has been elected, however, any changes in fair value attributable to instrument-specific credit risk would continue to be presented in net income, which is consistent with current guidance. For 3M, this standard is effective beginning January 1, 2018 via a cumulative-effect adjustment to beginning retained earnings, except for guidance relative to equity securities without readily determinable fair values which is applied prospectively. The Company is currently assessing this ASU's impact on 3M's consolidated results of operations and financial condition.

In February 2016, the FASB issued ASU No. 2016-02, Leases, replacing existing lease accounting guidance. The new standard introduces a lessee model that would require entities to recognize assets and liabilities for most leases, but recognize expenses on their income statements in a manner similar to current accounting. The ASU does not make fundamental changes to existing lessor accounting. However, it modifies what qualifies as a sales-type and direct financing lease and related accounting and aligns a number of the underlying principles with those of the new revenue standard, ASU No. 2014-09, such as evaluating how collectability should be considered and determining when profit can be recognized. The guidance eliminates existing real estate-specific provisions and requires expanded qualitative and quantitative disclosures. The standard requires modified retrospective transition by which it is applied at the beginning of the earliest comparative period presented in the year of adoption. For 3M, the ASU is effective January 1, 2019. The Company is currently assessing this standard's impact on 3M's consolidated results of operations and financial condition.

In March 2016, the FASB issued ASU No. 2016-06, Contingent Put and Call Options in Debt Instruments. This ASU clarifies guidance used to determine if debt instruments that contain contingent put or call options would require separation of the embedded put or call feature from the debt instrument and trigger accounting for the feature as a derivative with changes in fair value recorded through income. Under the new guidance, fewer put or call options embedded in debt instruments would require derivative accounting. For 3M, this ASU is effective January 1, 2017. The Company's outstanding debt with embedded put provisions does not require separate derivative accounting under existing guidance. As a result, 3M does not expect this ASU to have a material impact on the Company's consolidated results of operations and financial condition.

In March 2016, the FASB issued ASU No. 2016-07, Simplifying the Transition to the Equity Method of Accounting which eliminates the existing requirement to apply the equity method of accounting retrospectively (revising prior periods as if the equity method had always been applied) when an entity obtains significant influence over a previously held investment. The new guidance would require the investor to apply the equity method prospectively from the date the investment qualifies for the equity method. The investor would add the carrying value of the existing investment to the cost of any additional investment to determine the initial cost basis of the equity method investment. For 3M, this ASU is effective January 1, 2017 on a prospective basis, with early adoption permitted. 3M would apply this guidance to investments that transition to the equity method after the adoption date.

In March 2016, the FASB issued ASU No. 2016-08, Principal versus Agent Considerations (Reporting Revenue Gross versus Net), which amends ASU No. 2014-09, Revenue from Contracts with Customers, to clarify principal versus agent guidance in situations in which a revenue transaction involves a third party in providing goods or services to a customer. In such circumstances, an entity must determine whether the nature of its promise to the customer is to provide the underlying goods or services (i.e., the entity is the principal in the transaction) or to arrange for the third party to provide the underlying goods or services (i.e., the entity is the agent in the transaction). To determine the nature of its promise to the customer, the entity must first identify each specified good or service to be provided to the customer and then (before transferring it) assess whether it controls each specified good or service. The new ASU clarifies how an entity should identify the unit of accounting (the specified good or service) for the principal versus agent evaluation, and how it should apply the control principle to certain types of arrangements, such as service transactions, by explaining what a principal controls before the specified good or service is transferred to the customer. This ASU has the same effective date and

transition requirements as ASU No. 2014-09, as amended by ASU No. 2015-14, which for 3M is effective January 1, 2018. The Company is currently assessing this standard's impact on 3M's consolidated results of operations and financial condition.

In March 2016, the FASB issued ASU No. 2016-09 Improvements to Employee Share-Based Payment Accounting, which modifies certain accounting aspects for share-based payments to employees including, among other elements, the accounting for income taxes and forfeitures, as well as classifications in the statement of cash flows. With respect to income taxes, under current guidance, when a sharebased payment award such as a stock option or restricted stock unit (RSU) is granted to an employee, the fair value of the award is generally recognized over the vesting period. However, the related deduction from taxes payable is based on the award's intrinsic value at the time of exercise (for an option) or on the fair value upon vesting of the award (for RSUs), which can be either greater (creating an excess tax benefit) or less (creating a tax deficiency) than the compensation cost recognized in the financial statements. Excess tax benefits are recognized in additional paid-in capital (APIC) within equity, and tax deficiencies are similarly recognized in APIC to the extent there is a sufficient APIC amount (APIC pool) related to previously recognized excess tax benefits. Under the new guidance, all excess tax benefits/deficiencies would be recognized as income tax benefit/expense in the statement of income. The new ASU's income tax aspects also impact the calculation of diluted earnings per share by excluding excess tax benefits/deficiencies from the calculation of assumed proceeds available to repurchase shares under the treasury stock method. Relative to forfeitures, the new standard allows an entity-wide accounting policy election either to continue to estimate the number of awards that will be forfeited or to account for forfeitures as they occur. The new guidance also impacts classifications within the statement of cash flows by no longer requiring inclusion of excess tax benefits as both a hypothetical cash outflow within cash flows from operating activities and hypothetical cash inflow within cash flows from financing activities. Instead, excess tax benefits would be classified in operating activities in the same manner as other cash flows related to income taxes. Additionally, the new ASU requires cash payments to tax authorities when an employer uses a net-settlement feature to withhold shares to meet statutory tax withholding provisions to be presented as financing activity (eliminating previous diversity in practice). For 3M, this standard is required effective January 1, 2017, with early adoption permitted. The Company early adopted ASU No. 2016-09 as of January 1, 2016. Prospectively beginning January 1, 2016, excess tax benefits/deficiencies have been reflected as income tax benefit/expense in the statement of income resulting in a \$59 million and \$140 million tax benefit in the three and six months ended June 30, 2016, respectively. 3M typically experiences the largest volume of stock option exercises and RSU vestings in the first quarter of its fiscal year. The extent of excess tax benefits/deficiencies is subject to variation in 3M stock price and timing/extent of RSU vestings and employee stock option exercises. 3M's adoption of this ASU also resulted in associated excess tax benefits being classified as operating activity in the same manner as other cash flows related to income taxes in the statement of cash flows prospectively beginning January 1 2016. Based on the adoption methodology applied, the statement of cash flows classification of prior periods has not been adjusted. In addition, 3M did not change its accounting principles relative to elements of this standard and continued its existing practice of estimating the number of awards that will be forfeited

In April 2016, the FASB issued ASU No. 2016-10, Identifying Performance Obligations and Licensing, which amends ASU No. 2014-09, Revenue from Contracts with Customers. In terms of identifying performance obligations in a revenue arrangement, the amendments clarify how entities would determine whether promised goods or services are separately identifiable from other promises in a contract and, therefore, would be accounted for separately. The guidance would also allow entities to disregard goods or services that are immaterial in the context of a contract and provides an accounting policy election to account for shipping and handling activities as fulfillment costs rather than as additional promised services. With regard to the licensing, the amendments clarify how an entity would evaluate the nature of its promise in granting a license of intellectual property, which determines whether the entity recognizes revenue over time or at a point in time. The standard also clarifies certain other aspects relative to licensing. This ASU has the same effective date and transition requirements as ASU No. 2014-09, as amended by ASU No. 2015-14, which for 3M is effective January 1, 2018. The Company is currently assessing this standard's impact on 3M's consolidated results of operations and financial condition.

In May 2016, the FASB issued ASU No. 2016-12, Narrow-Scope Improvements and Practical Expedients, which amends ASU No. 2014-09, Revenue from Contracts with Customers, to address implementation issues relative to transition (adding a practical expedient for contract modifications and clarifying what constitutes a completed contract when employing ASU No. 2014-09's full or modified retrospective transition methods), collectability, noncash

consideration, and the presentation of sales and other similar-type taxes (allowing entities to exclude sales-type taxes collected from transaction price). This ASU has the same effective date and transition requirements as ASU No. 2014-09, as amended by ASU No. 2015-14, which for 3M is effective January 1, 2018. The Company is currently assessing this standard's impact on 3M's consolidated results of operations and financial condition.

In June 2016, the FASB issued ASU No. 2016-13, Measurement of Credit Losses on Financial Instruments, which revises guidance for the accounting for credit losses on financial instruments within its scope. The new standard introduces an approach, based on expected losses, to estimate credit losses on certain types of financial instruments and modifies the impairment model for available-for-sale debt securities. The new approach to estimating credit losses (referred to as the current expected credit losses model) applies to most financial assets measured at amortized cost and certain other instruments, including trade and other receivables, loans, held-to-maturity debt securities, net investments in leases and off-balance-sheet credit exposures. With respect to available-for-sale (AFS) debt securities, the ASU amends the current other-than-temporary impairment model. For such securities with unrealized losses, entities will still consider if a portion of any impairment is related only to credit losses and therefore recognized as a reduction in income. However, rather than also reflecting that credit loss amount as a permanent reduction in cost (amortized cost) basis of that AFS debt security, the ASU requires that credit losses be reflected as an allowance. As a result, under certain circumstances, a recovery in value could result in previous allowances, or portions thereof, reversing back into income. For 3M, this ASU is effective January 1, 2020, with early adoption permitted. Entities are required to apply the standard's provisions as a cumulative-effect adjustment to retained earnings as of the beginning of the first reporting period in which the guidance is adopted. The Company is currently assessing this ASU's impact on 3M's consolidated result of operations and financial condition.

#### NOTE 2. Acquisitions and Divestitures

#### **Acquisitions:**

3M makes acquisitions of certain businesses from time to time that are aligned with its strategic intent with respect to, among other factors, growth markets and adjacent product lines or technologies.

There were no material business combinations that closed during the six months ended June 30, 2016 Adjustments in the first six months of 2016 to the preliminary purchase price allocations of other acquisitions within the allocation period were not material. The allocation of purchase price related to the acquisition of Capital Safety Group S.A.R.L. in August 2015 is considered preliminary, primarily with respect to contingent liabilities and certain tax-related assets and liabilities. 3M expects to finalize the allocation of purchase price within the one year measurement-period following this acquisition.

#### **Divestitures:**

3M may divest certain businesses from time to time based upon review of the Company's portfolio considering, among other items, factors relative to the extent of strategic and technological alignment and optimization of capital deployment, in addition to considering if selling the businesses results in the greatest value creation for the Company and for shareholders.

In the first quarter of 2016, 3M (Safety and Graphics Business) completed the sale of the remainder of the assets of 3M's library systems business to One Equity Partners Capital Advisors L.P. (OEP). 3M had previously sold the North American business and the majority of the business outside of North America to OEP in the fourth quarter of 2015. The library systems business delivers circulation management solutions to library customers with on-premise hardware and software, maintenance and service, and an emerging cloud-based digital lending platform.

In the first quarter of 2016, 3M (Industrial Business) sold to Innovative Chemical Products Group, a portfolio company of Audax Private Equity, the assets of 3M's pressurized polyurethane foam adhesives business (formerly known as Polyfoam). This business is a provider of pressurized polyurethane foam adhesive formulations and systems into the residential roofing, commercial roofing and insulation and industrial foam segments in the United States with annual sales of approximately \$20 million.

The Company recorded a pre-tax gain of \$40 million in the first quarter of 2016 as a result of the sales of these businesses (recorded in selling, general and administrative expenses). The aggregate operating income of these businesses included in the Company's operating results for the periods presented and the amounts of major assets and liabilities of any associated disposal groups classified as held-for-sale as of the respective balance sheet dates presented were not material.

Refer to Note 2 in 3M's Current Report on Form 8-K dated May 17, 2016 (which updated 3M's 2015 Annual Report on Form 10-K) for more information on 3M's acquisitions and divestitures.

## NOTE 3. Goodwill and Intangible Assets

There were no material acquisitions that closed during the first six months of 2016. The amounts in the "Translation and other" column in the following table primarily relate to changes in foreign currency exchange rates. The goodwill balances by business segment as of December 31, 2015 and June 30, 2016, follow:

#### Goodwill

(Millions)	December 31, 2015 Balance		cquisition activity	Translation and other	1	June 30, 2016 Balance
Industrial	\$ 2,573	\$	1	\$ 49	9 \$	2,623
Safety and Graphics	3,342	2	2	19	)	3,363
Health Care	1,624	ļ	_	14	1	1,638
Electronics and Energy	1,510	)	_	13	3	1,523
Consumer	200				)	209
Total Company	\$ 9,249	\$	3	\$ 104	1 \$	9,356

Accounting standards require that goodwill be tested for impairment annually and between annual tests in certain circumstances such as a change in reporting units or the testing of recoverability of a significant asset group within a reporting unit. At 3M, reporting units generally correspond to a division.

As described in Note 14, effective in the first quarter of 2016, the Company changed its business segment reporting in its continuing effort to improve the alignment of its businesses around markets and customers. For any product changes that resulted in reporting unit changes, the Company applied the relative fair value method to determine the impact on goodwill of the associated reporting units. During the first quarter of 2016, the Company completed its assessment of any potential goodwill impairment for reporting units impacted by this new structure and determined that no impairment existed.

## **Acquired Intangible Assets**

The carrying amount and accumulated amortization of acquired finite-lived intangible assets, in addition to the balance of non-amortizable intangible assets, as of June 30, 2016, and December 31, 2015, follow:

(Millions)	June 201		December 31, 2015
Customer related intangible assets	<b>\$</b>	1,974	\$ 1,973
Patents		607	616
Other technology-based intangible assets		525	525
Definite-lived tradenames		424	421
Other amortizable intangible assets		214	216
Total gross carrying amount	\$	3,744	\$ 3,751
Accumulated amortization — customer related		(737)	(668)
Accumulated amortization — patents		(489)	(481)
Accumulated amortization — other technology based		(279)	(252)
Accumulated amortization — definite-lived tradenames		(228)	(215)
Accumulated amortization — other		(171)	(169)
Total accumulated amortization	\$	(1,904)	\$ (1,785)
Total finite-lived intangible assets — net	\$	1,840	\$ 1,966
3			· · · · · · · · · · · · · · · · · · ·
Non-amortizable intangible assets (primarily tradenames)		637	635
Total intangible assets — net	<u>\$</u>	2,477	\$ 2,601

Certain tradenames acquired by 3M are not amortized because they have been in existence for over 55 years, have a history of leading-market share positions, have been and are intended to be continuously renewed, and the associated products of which are expected to generate cash flows for 3M for an indefinite period of time.

Amortization expense for acquired intangible assets for the three and six months ended June 30, 2016 and 2015 follows:

	Three months ended					Six months ended				
		Jun	e 30,							
(Millions)	2010	6		2015		2016		2015		
Amortization expense	\$	66	\$	50	\$	132	\$	103		

Expected amortization expense for acquired amortizable intangible assets recorded as of June 30, 2016:

	Ren	nainder								
		of								After
(Millions)	2	2016 2017		2017	2018	2019 2020			2021	2021
Amortization expense	\$	125	\$	226	\$ 204	\$ 192	\$	182	\$ 166	\$ 745

The preceding expected amortization expense is an estimate. Actual amounts of amortization expense may differ from estimated amounts due to additional intangible asset acquisitions, changes in foreign currency exchange rates, impairment of intangible assets, accelerated amortization of intangible assets and other events. 3M expenses the costs incurred to renew or extend the term of intangible assets.

#### **NOTE 4. Restructuring Actions**

During the fourth quarter of 2015, management approved and committed to undertake certain restructuring actions primarily focused on structural overhead, largely in the U.S. and slower-growing markets, with particular emphasis on Europe, Middle East, and Africa (EMEA) and Latin America. This impacted approximately 1,700 positions worldwide and resulted in a fourth quarter 2015 pre-tax charge of \$114 million.

Components of these restructuring actions, including cash and non-cash impacts, follow:

(Millions)	Related		sset- elated	1	Γotal
Expense incurred	\$ 98 \$		16	\$	114
Non-cash changes	(8)		(16)		(24)
Cash payments	 (27)				(27)
Accrued restructuring action balances as of December 31, 2015	\$ 63	\$	_	\$	63
Cash payments	(35)		_		(35)
Accrued restructuring action balances as of June 30, 2016	\$ 28	\$		\$	28

Non-cash changes include certain pension settlements and special termination benefits recorded in accrued pension and postretirement benefits and accelerated depreciation resulting from the cessation of use of certain long-lived assets. Remaining activities related to the restructuring are expected to be completed in 2016.

## NOTE 5. Supplemental Equity and Comprehensive Income Information

## **Consolidated Statement of Changes in Equity**

Three months ended June 30, 2016

	Common Stock and Additional							ccumulated Other mprehensive	Non-	-
(Millions)	Total	Paid-in al Capital			etained arnings	Т	reasury Stock	Income (Loss)	controll Intere	
Balance at March 31, 2016	\$ 11,774	\$	4,925	\$	36,785	\$	(23,716)	\$ (6,261)	\$	41
Net income	1,293				1,291					2
Other comprehensive income (loss), net of tax:	-,				-,					
Cumulative translation adjustment	37							37		_
Defined benefit pension and post-retirement plans adjustment	67							67		_
Debt and equity securities - unrealized gain (loss)	_							_		_
Cash flow hedging instruments - unrealized gain (loss)	(27)							(27)		_
Total other comprehensive income (loss), net of tax	77									
Dividends declared	(672)				(672)					
Stock-based compensation	47		47							
Reacquired stock	(837)						(837)			
Issuances pursuant to stock option and benefit plans	255				(210)		465			
Balance at June 30, 2016	\$ 11,937	\$	4,972	\$	37,194	\$	(24,088)	\$ (6,184)	\$	43

## Six months ended June 30, 2016

	3M Company Shareholders										
		St	ommon ock and lditional						Other Omprehensive	No	n-
(Millions)	Total		Paid-in Capital		etained arnings	T	reasury Stock		Income (Loss)	contr Inte	
Balance at December 31, 2015	\$ 11,747	\$	4,800	\$	36,575	\$	(23,308)	\$	(6,359)	\$	39
Net income	2,571				2,566						5
Other comprehensive income (loss), net of tax:											
Cumulative translation adjustment	175								176		(1)
Defined benefit pension and post-retirement plans adjustment	136								136		_
Debt and equity securities - unrealized gain (loss)	_								_		_
Cash flow hedging instruments - unrealized gain (loss)	(137)								(137)		_
Total other comprehensive income (loss), net of tax	174										
Dividends declared	(1,344)				(1,344)						
Stock-based compensation	172		172								
Reacquired stock	(2,000)						(2,000)				
Issuances pursuant to stock option and benefit plans	617				(603)		1,220				
Balance at June 30, 2016	\$ 11,937	\$	4,972	\$	37,194	\$	(24,088)	\$	(6,184)	\$	43

## Three months ended June 30, 2015

					31	<b>M</b> Compan	y Sł	nareholders	S			
(Millions)		Total	A	Common tock and dditional Paid-in Capital	_	tetained arnings	1	Freasury Stock		Other Omprehensive Income (Loss)	con	Non- trolling
Balance at March 31, 2015	\$	13,952	\$	4,616	\$	35,080	\$	(19,458)	\$	(6,321)	\$	35
		4.000				4.000						
Net income		1,303				1,300						3
Other comprehensive income (loss), net of tax:												
Cumulative translation adjustment		23								24		(1)
Defined benefit pension and post-retirement plans adjustment		96								96		_
Debt and equity securities - unrealized gain (loss)		_								_		_
Cash flow hedging instruments - unrealized gain (loss)		(32)								(32)		_
Total other comprehensive income (loss), net of tax	,	87										
Dividends declared		(646)				(646)						
Stock-based compensation, net of tax impacts		78		78								
Reacquired stock		(1,787)						(1,787)				
Issuances pursuant to stock option and benefit plans		143				(119)		262				
Balance at June 30, 2015	\$	13,130	\$	4,694	\$	35,615	\$	(20,983)	\$	(6,233)	\$	37

## Six months ended June 30, 2015

	3M Company Shareholders									
		St Ac	ommon ock and Iditional Paid-in	D	Retained	7	\[reasurv\]		ccumulated Other mprehensive Income	 on- rolling
(Millions)	Total		Capital		arnings	•	Stock		(Loss)	erest
Balance at December 31, 2014	\$ 13,142	\$	4,388	\$	34,317	\$	(19,307)	\$	(6,289)	\$ 33
Net income	2,504				2,499					5
Other comprehensive income (loss), net of tax:										
Cumulative translation adjustment	(170)								(169)	(1)
Defined benefit pension and post-retirement plans adjustment	187								187	_
Debt and equity securities - unrealized gain (loss)	_								_	_
Cash flow hedging instruments - unrealized gain (loss)	38								38	_
Total other comprehensive income (loss), net of tax	55									
Dividends declared	(649)				(649)					
Stock-based compensation, net of tax impacts	306		306							
Reacquired stock	(2,683)						(2,683)			
Issuances pursuant to stock option and benefit plans	455				(552)		1,007			
Balance at June 30, 2015	\$ 13,130	\$	4,694	\$	35,615	\$	(20,983)	\$	(6,233)	\$ 37

In December 2014, 3M's Board of Directors declared a first quarter 2015 dividend of \$1.025 per share (paid in March 2015). This reduced 3M's stockholder equity and increased other current liabilities as of December 31, 2014, by approximately \$0.6 billion.

## Changes in Accumulated Other Comprehensive Income (Loss) Attributable to 3M by Component

## Three months ended June 30, 2016

Balance at June 30, 2015, net of tax:

(Millions)	Tr	umulative anslation ljustment	Pe Pos	ined Benefit ension and tretirement Plans djustment	Debt a Equi Securi Unreal Gain (I	ty ties, ized	He Instr Unr	h Flow dging uments, ealized	Con	Total cumulated Other nprehensive Income (Loss)
Balance at March 31, 2016, net of tax:	\$	(1,540)	\$	(4,735)	\$	_	\$	14	\$	(6,261)
Other comprehensive income (loss), before tax:										
Amounts before reclassifications		59		_		_		(15)		44
Amounts reclassified out				101				(28)		73
Total other comprehensive income (loss), before tax		59		101		_		(43)		117
Tax effect		(22)		(34)				16		(40)
Total other comprehensive income (loss), net of tax		37		67				(27)		77
Balance at June 30, 2016, net of tax:	\$	(1,503)	\$	(4,668)	\$		\$	(13)	\$	(6,184)
Six months ended June 30, 2016	Tı	umulative ranslation	Pos	ined Benefit ension and stretirement Plans	Debt a Equi Securi Unreal	ty ties, ized	He Instr Unr	h Flow dging uments, ealized	Con	Total cumulated Other nprehensive Income
(Millions)		ljustment		djustment	Gain (I	Loss)		(Loss)		(Loss)
Balance at December 31, 2015, net of tax:	\$	(1,679)	\$	(4,804)	\$		\$	124	\$	(6,359)
Other comprehensive income (loss), before tax:		119						(136)		(17)
Amounts before reclassifications Amounts reclassified out		119		204		_		(80)		(17) 124
	_	119		204				(216)		107
Total other comprehensive income (loss), before tax  Tax effect		57		(68)		_		79		68
		176		136				(137)		175
Total other comprehensive income (loss), net of tax		(1,503)	_				Φ.	(137)	Φ.	
Balance at June 30, 2016, net of tax: Three months ended June 30, 2015	<u>\$</u>	(1,303)	\$	(4,668)	<u>\$</u>		\$	(13)	\$	(6,184)
	Tr	ımulative anslation	Pe Pos	ined Benefit ension and tretirement Plans	Debt a Equi Securi Unreal	ty ties, ized	He Instr Unr	h Flow dging uments, ealized	Con	Total cumulated Other prehensive Income
(Millions)		ljustment	_	djustment	Gain (I	oss)		(Loss)	Φ.	(Loss)
Balance at March 31, 2015, net of tax:	\$	(1,288)	\$	(5,202)	\$		\$	169	\$	(6,321)
Other comprehensive income (loss), before tax: Amounts before reclassifications		(12)						(16)		(28)
Amounts reclassified out		(12)		141				(34)		107
	_	(12)	_	141				(50)	_	79
Total other comprehensive income (loss), before tax Tax effect		36		(45)				18		9
		24		96				(32)	_	88
Total other comprehensive income (loss), net of tax	•	(1.264)	•	(5 106)	¢		•	137	Φ.	(6.233)

(1,264)

(5,106) \$

(Millions)	Tra	mulative anslation justment	nslation Plans Unrealized estment Adjustment Gain (Loss)		Hed Instru Unre	r Flow Iging Iments, Palized (Loss)	Total Accumulated Other Comprehensive Income (Loss)		
Balance at December 31, 2014, net of tax:	\$	(1,095)	\$	(5,293)	\$ 	\$	99	\$	(6,289)
Other comprehensive income (loss), before tax:									
Amounts before reclassifications		(56)		24	_		120		88
Amounts reclassified out		_		265	_		(61)		204
Total other comprehensive income (loss), before tax		(56)		289	_		59		292
Tax effect		(113)		(102)			(21)		(236)
Total other comprehensive income (loss), net of tax		(169)		187	_		38		56
Balance at June 30, 2015, net of tax	\$	(1,264)	\$	(5,106)	\$ 	\$	137	\$	(6,233)

Income taxes are not provided for foreign translation relating to permanent investments in international subsidiaries, but tax effects within cumulative translation does include impacts from items such as net investment hedge transactions. Reclassification adjustments are made to avoid double counting in comprehensive income items that are also recorded as part of net income.

## Reclassifications out of Accumulated Other Comprehensive Income Attributable to 3M

Details about Accumulated Other		Accun		ount Recla		d from chensive Inc	come		
Comprehensive Income Components	Thr	ee months				x months er		une 30,	Location on Income
(Millions)		2016		2015		2016	2015		Statement
Gains (losses) associated with, defined benefit pension and postretirement plans amortization									
Transition asset	\$	1	\$	1	\$	1	\$	1	See Note 9
Prior service benefit		24		17		47		35	See Note 9
Net actuarial loss		(126)		(159)		(252)		(318)	See Note 9
Curtailments/Settlements		_						17	See Note 9
Total before tax		(101)		(141)		(204)		(265)	
Tax effect		34		45		68		91	Provision for income taxes
Net of tax	\$	(67)	\$	(96)	\$	(136)	\$	(174)	
Debt and equity security gains (losses)									
Sales or impairments of securities	\$	_	\$	_	\$	_	\$	_	Selling, general and administrative expenses
Total before tax									
Tax effect		_		_		_		_	Provision for income taxes
Net of tax	\$	_	\$	_	\$	_	\$	_	
Cash flow hedging instruments gains (losses)									
Foreign currency forward/option contracts	\$	28	\$	35	\$	81	\$	65	Cost of sales
Commodity price swap contracts		_		_		_		(2)	Cost of sales
Interest rate swap contracts		_		(1)		(1)		(2)	Interest expense
Total before tax		28		34		80		61	
Tax effect		(11)		(12)		(29)		(22)	Provision for income taxes
Net of tax	\$	17	\$	22	\$	51	\$	39	
Total reclassifications for the period, net of tax	\$	(50)	\$	(74)	\$	(85)	\$	(135)	
<u>r</u> ,		<u> </u>	_	<u> </u>	-	<u> </u>	-	· · · · ·	

## **NOTE 6. Income Taxes**

The Company files income tax returns in the U.S. federal jurisdiction, and various states and foreign jurisdictions. With few exceptions, the Company is no longer subject to U.S. federal, state and local, or non-U.S. income tax examinations by tax authorities for years before 2005.

The IRS has completed its field examination of the Company's U.S. federal income tax returns for the years 2005 through 2014. The Company protested certain IRS positions within these tax years and entered into the administrative appeals process with the IRS. In December 2012, the Company received a statutory notice of deficiency for the 2006 year. The Company filed a petition in Tax Court in the first quarter of 2013 relating to the 2006 tax year.

Currently, the Company is under examination by the IRS for its U.S. federal income tax returns for the years 2015 and 2016. It is anticipated that the IRS will complete its examination of the Company for 2015 by the end of the first quarter of 2017 and for 2016 by the end of the first quarter of 2018. As of June 30, 2016, the IRS has not proposed any significant adjustments to the Company's tax positions for which the Company is not adequately reserved.

Payments relating to other proposed assessments arising from the 2005 through 2016 examinations may not be made until a final agreement is reached between the Company and the IRS on such assessments or upon a final resolution resulting from the administrative appeals process or judicial action. In addition to the U.S. federal examination, there is also audit activity in several U.S. state and foreign inrisdictions.

3M anticipates changes to the Company's uncertain tax positions due to the closing and resolution of audit issues for various audit years mentioned above and closure of statutes. The Company is not currently able to reasonably estimate the amount by which the liability for unrecognized tax benefits will increase or decrease during the next 12 months as a result of the ongoing income tax authority examinations. The total amounts of unrecognized tax benefits that, if recognized, would affect the effective tax rate as of June 30, 2016 and December 31, 2015 are \$383 million and \$369 million, respectively.

The Company recognizes interest and penalties accrued related to unrecognized tax benefits in tax expense. The Company recognized in the consolidated statement of income on a gross basis approximately \$1 million of expense and \$4 million of benefit for the three months ended June 30, 2016 and June 30, 2015, respectively, and approximately \$3 million of benefit and \$2 million of benefit for the six months ended June 30, 2016 and June 30, 2015, respectively. At June 30, 2016 and December 31, 2015, accrued interest and penalties in the consolidated balance sheet on a gross basis were \$39 million and \$45 million, respectively. Included in these interest and penalty amounts are interest and penalties related to tax positions for which the ultimate deductibility is highly certain but for which there is uncertainty about the timing of such deductibility. Because of the impact of deferred tax accounting, other than interest and penalties, the disallowance of the shorter deductibility period would not affect the annual effective tax rate but would accelerate the payment of cash to the taxing authority to an earlier period.

The effective tax rate for the second quarter of 2016 was 29.6 percent, compared to 28.1 percent in the second quarter of 2015, an increase of 1.5 percentage points. Primary factors that increased the Company's effective tax rate on a combined basis by 5.3 percentage points year-on-year included international taxes that were impacted by changes to both the geographic mix of income before taxes and additional tax expense related to global cash optimization actions, plus remeasurements of 3M's uncertain tax positions. This increase was partially offset by a 3.8 percentage points year-on-year decrease to the Company's effective tax rate. Primary factors that decreased the effective tax rate included the recognition of excess tax benefits beginning in 2016 related to employee share-based payments (resulting from the adoption of ASU No. 2016-09, as discussed in Note 1), the reinstatement of the R&D tax credit, and other items.

The effective tax rate for the first six months of 2016 was 28.2 percent, compared to 28.8 percent in the first six months of 2015, a decrease of 0.6 percentage points. Primary factors that decreased the Company's effective tax rate on a combined basis by 4.5 percentage points for the first six months of 2016 when compared to the same period for 2015 included the recognition of excess tax benefits beginning in 2016 related to employee share-based payments (resulting from the adoption of ASU No. 2016-09, as discussed in Note 1), the reinstatement of the R&D tax credit, and other items. This decrease was partially offset by a 3.9 percentage point year-on-year increase, which included international

taxes that were impacted by changes to both the geographic mix of income before taxes and additional tax expense related to global cash optimization actions, plus remeasurements of 3M's uncertain tax positions.

The provision for income taxes is determined using the asset and liability approach. Under this approach, deferred income taxes represent the expected future tax consequences of temporary differences between the carrying amounts and tax basis of assets and liabilities. The Company records a valuation allowance to reduce its deferred tax assets when uncertainty regarding their realizability exits. As of June 30, 2016 and December 31, 2015, the Company had valuation allowances of \$39 million and \$31 million on its deferred tax assets, respectively.

## NOTE 7. Marketable Securities

The Company invests in asset-backed securities, certificates of deposit/time deposits, commercial paper, and other securities. The following is a summary of amounts recorded on the Consolidated Balance Sheet for marketable securities (current and non-current).

(Millions)	June 30, 2016		December 31, 2015			
Foreign government agency securities	\$ 1	0 \$	10			
Corporate debt securities	1	0	10			
Commercial paper	3	6	12			
Certificates of deposit/time deposits	5	5	26			
U.S. municipal securities		4	3			
Asset-backed securities:						
Automobile loan related	3	-	26			
Credit card related	1	9	10			
Other	<u></u>	7	21			
Asset-backed securities total	6	2	57			
Current marketable securities	<u>\$ 17</u>	<u> </u>	118			
U.S. municipal securities	\$ 1	4 \$	9			
Non-current marketable securities	<u>\$ 1</u>	<u>4</u> <u>\$</u>	9			
Total marketable securities	<u>\$ 19</u>	1 \$	127			

Classification of marketable securities as current or non-current is based on the nature of the securities and availability for use in current operations. At June 30, 2016 and December 31, 2015, gross unrealized gains and/or losses (pre-tax) were not material. Refer to Note 5 for a table that provides the net realized gains (losses) related to sales or impairments of debt and equity securities, which includes marketable securities. The gross amounts of the realized gains or losses were not material. Cost of securities sold use the first in, first out (FIFO) method. Since these marketable securities are classified as available-for-sale securities, changes in fair value will flow through other comprehensive income, with amounts reclassified out of other comprehensive income into earnings upon sale or "other-than-temporary" impairment.

3M reviews impairments associated with its marketable securities in accordance with the measurement guidance provided by ASC 320, *Investments-Debt and Equity Securities*, when determining the classification of the impairment as "temporary" or "other-than-temporary". A temporary impairment charge results in an unrealized loss being recorded in the other comprehensive income component of shareholders' equity. Such an unrealized loss does not reduce net income attributable to 3M for the applicable accounting period because the loss is not viewed as other-than-temporary. The factors evaluated to differentiate between temporary and other-than-temporary include the projected future cash flows, credit ratings actions, and assessment of the credit quality of the underlying collateral, as well as other factors.

The balances at June 30, 2016 for marketable securities by contractual maturity are shown below. Actual maturities may differ from contractual maturities because the issuers of the securities may have the right to prepay obligations without prepayment penalties.

(Millions)	June 30,	2016
Due in one year or less	\$	104
Due after one year through five years		87
Total marketable securities	\$	191

3M has a diversified marketable securities portfolio. Within this portfolio, asset-backed securities primarily include interests in automobile loans, credit cards and other asset-backed securities. 3M's investment policy allows investments in asset-backed securities with minimum credit ratings of Aa2 by Moody's Investors Service or AA by Standard & Poor's or Fitch Ratings or DBRS. Asset-backed securities must be rated by at least two of the aforementioned rating agencies, one of which must be Moody's Investors Service or Standard & Poor's. At June 30, 2016, all asset-backed security investments were in compliance with this policy. Approximately 78.4 percent of all asset-backed security investments were rated AAA or A-1+ by Standard & Poor's and/or Aaa or P-1 by Moody's Investors Service and/or AAA or F1+ by Fitch Ratings. Interest rate risk and credit risk related to the underlying collateral may impact the value of investments in asset-backed securities, while factors such as general conditions in the overall credit market and the nature of the underlying collateral may affect the liquidity of investments in asset-backed securities. 3M does not currently expect risk related to its holding in asset-backed securities to materially impact its financial condition or liquidity.

#### NOTE 8. Long-Term Debt and Short-Term Borrowings

In May 2016, 3M issued 500 million Euro aggregate principal amount of 5.75-year fixed rate medium-term notes due February 2022 with a coupon rate of 0.375% and 500 million Euro aggregate principal amount of 15-year fixed rate medium-term notes due 2031 with a coupon rate of 1.50%.

In March 2016, 3M amended and restated its existing \$2.25 billion five-year revolving credit facility expiring in August 2019 to a \$3.75 billion five-year revolving credit facility expiring in March 2021. This credit agreement includes a provision under which 3M may request an increase of up to \$1.25 billion (at lender's discretion), bringing the total facility up to \$5.0 billion. This revolving credit facility is undrawn at June 30, 2016. Under the \$3.75 billion credit agreement, the Company is required to maintain its EBITDA to Interest Ratio as of the end of each fiscal quarter at not less than 3.0 to 1. This is calculated (as defined in the agreement) as the ratio of consolidated total EBITDA for the four consecutive quarters then ended to a total interest expense on all funded debt for the same period. At June 30, 2016, this ratio was approximately 51 to 1. Debt covenants do not restrict the payment of dividends.

#### NOTE 9. Pension and Postretirement Benefit Plans

Net periodic benefit cost is recorded in cost of sales, selling, general and administrative expenses, and research, development and related expenses. Components of net periodic benefit cost and other supplemental information for the three and six months ended June 30, 2016 and 2015 follow:

#### **Benefit Plan Information**

			Three	moi	iths er	ıded	June	30,			
	Qua		l and N nsion B			ied		Po	streti	irem	ent
	 Unite				Intern				Ben		
(Millions)	 2016	2	015	_ 2	016	_2	015	20	16	20	015
Net periodic benefit cost (benefit)											
Service cost	\$ 65	\$	73	\$	34	\$	40	\$	14	\$	22
Interest cost	144		164		43		55		19		25
Expected return on plan assets	(261)		(267)		<b>(78)</b>		(81)	(	22)		(23)
Amortization of transition (asset) obligation	_		_		(1)		(1)		_		_
Amortization of prior service cost (benefit)	(6)		(6)		(4)		(3)	(	14)		(8)
Amortization of net actuarial (gain) loss	88		102		23		38		15		19
Settlements, curtailments, special termination benefits and other									_		_
Net periodic benefit cost (benefit) after settlements, curtailments, special termination benefits and other	\$ 30	\$	66	\$	17	\$	48	\$	12	\$	35

	Six months thata same co,							
	Qualified and Non-qualified							
		Pen	Postret	tirement				
	Unit	ed Sta	tes	Inte	rnational	Ben	nefits	
(Millions)	2016	20	)15	2016	2015	2016	2015	
Net periodic benefit cost (benefit)								
Service cost	\$ 130	\$	146	\$ 67	\$ 82	\$ 27	\$ 43	
Interest cost	287		328	86	110	39	50	
Expected return on plan assets	(521)	) (	(534)	(156	(162)	(45)	(45)	
Amortization of transition (asset) obligation	_		_	(1	) (1)	_	_	
Amortization of prior service cost (benefit)	(12)	)	(12)	(7	(7)	(28)	(16)	
Amortization of net actuarial (gain) loss	176		204	45	76	31	38	
Settlements, curtailments, special termination benefits and other	_		_	_	. (17)	_	_	
Net periodic benefit cost (benefit) after settlements, curtailments, special termination benefits and other	<b>\$</b> 60	\$	132	\$ 34	\$ 81	<b>\$ 24</b>	\$ 70	

Six months ended June 30.

For the six months ended June 30, 2016, contributions totaling \$95 million were made to the Company's U.S. and international pension plans and \$2 million to its postretirement plans. For total year 2016, the Company expects to contribute between approximately \$200 million to \$400 million of cash to its global defined benefit pension and postretirement plans. The Company does not have a required minimum cash pension contribution obligation for its U.S. plans in 2016. Future contributions will depend on market conditions, interest rates and other factors. 3M's annual measurement date for pension and postretirement assets and liabilities is December 31 each year, which is also the date used for the related annual measurement assumptions.

Beginning in 2016, 3M changed the method used to estimate the service and interest cost components of the net periodic pension and other postretirement benefit costs. The new method measures service cost and interest cost separately using the spot yield curve approach applied to each corresponding obligation. Service costs are determined based on duration-specific spot rates applied to the service cost cash flows. The interest cost calculation is determined by applying duration-specific spot rates to the year-by-year projected benefit payments. The spot yield curve approach does not affect the measurement of the total benefit obligations as the change in service and interest costs offset in the actuarial gains and losses recorded in other comprehensive income. The Company changed to the new method to provide a more precise measure of service and interest costs by improving the correlation between the projected benefit cash flows and the discrete spot yield curve rates. The Company accounted for this change as a change in estimate prospectively beginning

in the first quarter of 2016. As a result of the change to the spot yield curve approach, 2016 annual defined benefit pension and postretirement net periodic benefit cost has decreased approximately \$180 million.

Using this methodology, the Company determined discount rates for its plans as follows:

December 31, 2015 Liability:	U.S. Qualified Pension	International Pension (weighted average)	U.S. Postretirement Medical
Benefit obligation	4.47 %	3.12 %	4.32 %
2016 Net Periodic Benefit Cost Components:	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	,,,	,,,
Service cost	4.72 %	2.84 %	4.60 %
Interest cost	3.77 %	2.72 %	3.44 %

The Company also sponsors employee savings plans under Section 401(k) of the Internal Revenue Code, as discussed in Note 11 in 3M's Current Report on Form 8-K dated May 17, 2016 (which updated 3M's 2015 Annual Report on Form 10-K). Beginning on January 1, 2016, for U.S. employees, the Company reduced its match on employee 401(k) contributions. For eligible employees hired prior to January 1, 2009, employee 401(k) contributions of up to 5% of eligible compensation are matched in cash at rates of 45% or 60%, depending on the plan in which the employee participates. Employees hired on or after January 1, 2009, receive a cash match of 100% for employee 401(k) contributions of up to 5% of eligible compensation and also continue to receive an employer retirement income account cash contribution of 3% of the participant's total eligible compensation.

In August 2015, 3M modified the 3M Retiree Welfare Benefit Plan postretirement medical benefit reducing the future benefit for participants not retired as of January 1, 2016. Current retirees and employees who retired on or before January 1, 2016, were not impacted by these changes. The Retiree Medical Savings Account (RMSA) is no longer credited with interest, and the indexation on both the RMSA and the Medicare Health Reimbursement Arrangement was reduced from 3 percent to 1.5 percent per year (for those employees who are eligible for these accounts). Also effective January 1, 2016, 3M no longer offered 3M Retiree Health Care Accounts to new hires. Due to these changes the plan was re-measured in the third quarter of 2015, resulting in a decrease to the projected benefit obligation liability of approximately \$233 million, and a related increase to shareholders' equity, specifically accumulated other comprehensive income.

In March 2015, 3M Japan modified the Japan Limited Defined Benefit Corporate Pension Plan (DBCPP). Beginning July 1, 2015, eligible employees receive a company provided contribution match of 6.12% of their eligible salary to their defined contribution plan. Employees no longer earn additional service towards their defined benefit pension plans after July 1, 2015, except for eligible salaries above the statutory defined contribution limits. As a result of this plan modification, the Company re-measured the DBCPP, which resulted in a \$17 million pre-tax curtailment gain for the six months ended June 30, 2015.

3M was informed during the first quarter of 2009, that the general partners of WG Trading Company, in which 3M's benefit plans hold limited partnership interests, are the subject of a criminal investigation as well as civil proceedings by the SEC and CFTC (Commodity Futures Trading Commission). In March 2011, over the objections of 3M and six other limited partners of WG Trading Company, the district court judge ruled in favor of the court appointed receiver's proposed distribution plan (and in April 2013, the United States Court of Appeals for the Second Circuit affirmed the district court's ruling). The benefit plan trustee holdings of WG Trading Company interests were adjusted to reflect the decreased estimated fair market value, inclusive of estimated insurance proceeds, as of the annual measurement dates. The Company has insurance that it believes, based on what is currently known, will result in the probable recovery of a portion of the decrease in original asset value. In the first quarter of 2014, 3M and certain 3M benefit plans filed a lawsuit in the U.S. District Court for the District of Minnesota against five insurers seeking insurance coverage for the WG Trading Company claim. In September 2015, the court ruled in favor of the defendant insurance companies on a motion for summary judgment and dismissed the lawsuit. In October 2015, 3M and the 3M benefit plans filed a notice of appeal to the United States Court of Appeals for the Eighth Circuit. As of the 2015 measurement date, these holdings represented less than one half of one percent of 3M's fair value of total plan assets. 3M currently believes that the resolution of these events will not have a material adverse effect on the consolidated financial position of the Company.

#### NOTE 10. Derivatives

The Company uses interest rate swaps, currency swaps, commodity price swaps, and forward and option contracts to manage risks generally associated with foreign exchange rate, interest rate and commodity price fluctuations. The information that follows explains the various types of derivatives and financial instruments used by 3M, how and why 3M uses such instruments, how such instruments are accounted for, and how such instruments impact 3M's financial position and performance.

Additional information with respect to the impacts on other comprehensive income of nonderivative hedging and derivative instruments is included in Note 5. Additional information with respect to the fair value of derivative instruments is included in Note 11. References to information regarding derivatives and/or hedging instruments associated with the Company's long-term debt are also made in Note 10 in 3M's Current Report on Form 8-K dated May 17, 2016 (which updated 3M's 2015 Annual Report on Form 10-K)

Types of Derivatives/Hedging Instruments and Inclusion in Income/Other Comprehensive Income

#### Cash Flow Hedges:

For derivative instruments that are designated and qualify as cash flow hedges, the effective portion of the gain or loss on the derivative is reported as a component of other comprehensive income and reclassified into earnings in the same period 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 earnings.

Cash Flow Hedging - Foreign Currency Forward and Option Contracts: The Company enters into foreign exchange forward and option contracts to hedge against the effect of exchange rate fluctuations on cash flows denominated in foreign currencies. These transactions are designated as cash flow hedges. The settlement or extension of these derivatives will result in reclassifications (from accumulated other comprehensive income) to earnings in the period during which the hedged transactions affect earnings. 3M may dedesignate these cash flow hedge relationships in advance of the occurrence of the forecasted transaction. The portion of gains or losses on the derivative instrument previously accumulated in other comprehensive income for dedesignated hedges remains in accumulated other comprehensive income until the forecasted transaction occurs. Changes in the value of derivative instruments after dedesignation are recorded in earnings and are included in the Derivatives Not Designated as Hedging Instruments section below. Beginning in the second quarter of 2014, 3M began extending the maximum length of time over which it hedges its exposure to the variability in future cash flows of the forecasted transactions from a previous term of 12 months to a longer term of 24 months, with certain currencies being extended further to 36 months starting in the first quarter of 2015.

Cash Flow Hedging - Commodity Price Management: The Company manages commodity price risks through negotiated supply contracts, price protection agreements and forward contracts. 3M discontinued the use of commodity price swaps as cash flow hedges of forecasted commodity transactions in the first quarter of 2015. The Company used commodity price swaps as cash flow hedges of forecasted commodity transactions to manage price volatility. The related mark-to-market gain or loss on qualifying hedges was included in other comprehensive income to the extent effective, and reclassified into cost of sales in the period during which the hedged transaction affected earnings.

Cash Flow Hedging — Interest Rate Contracts: The Company may use forward starting interest rate contracts to hedge exposure to variability in cash flows from forecasted debt issuances. The amortization of gains and losses on forward starting interest rate swaps is included in the tables below as part of the gain/(loss) recognized in income on the effective portion of derivatives as a result of reclassification from accumulated other comprehensive income. Additional information regarding previously issued and terminated interest rate contracts can be found in Note 12 in 3M's Current Report on Form 8-K dated May 17, 2016 (which updated 3M's 2015 Annual Report on Form 10-K).

In the first six months of 2016, the Company entered into forward starting interest rate swaps expiring in December 2016 with an aggregate notional amount of \$300 million as a hedge against interest rate volatility associated with a forecasted issuance of fixed rate debt.

As of June 30, 2016, the Company had a balance of \$13 million associated with the after-tax net unrealized loss associated with cash flow hedging instruments recorded in accumulated other comprehensive income. This includes a remaining balance of \$5 million (after tax loss) related to the forward starting interest rate swaps, which will be amortized over the respective lives of the debt Based on exchange rates as of June 30, 2016, 3M expects to reclassify approximately \$20 million of the after-tax net unrealized foreign exchange cash flow hedging gains to earnings over the remainder of 2016, approximately \$12 million of the after-tax net unrealized foreign exchange cash flow hedging losses to earnings in 2017, and approximately \$21 million of the after-tax net unrealized foreign exchange cash flow hedging losses to earnings after 2017 (with the impact offset by earnings/losses from underlying hedged items). 3M expects to reclassify approximately \$12 million of the after-tax net unrealized foreign exchange cash flow hedging gains to earnings over the next 12 months.

The location in the consolidated statements of income and comprehensive income and amounts of gains and losses related to derivative instruments designated as cash flow hedges are provided in the following table.

#### Three months ended June 30, 2016

Derivatives in Cash Flow Hedging Relationships

Foreign currency forward/option contracts

Interest rate swap contracts

(Millions)

Total

Derivatives in Cash Flow Hedging Relationships (Millions)	Recogniz Comp Income <u>Portion c</u> Ai	Gain (Loss)  med in Other  rehensive  on Effective  of Derivative  nount	Derivativ Reclass Accum Comprel Location	Effective Portion of as a Result of ification from ulated Other nensive Incom Am	on of of e ount	(Loss) on Amount Effectiv Recogni Location	Portion of Gain Derivative and Excluded from eness Testing zed in Income Amount
Foreign currency forward/option contracts	\$	(11)	Cost of sales	\$	28	Cost of sales	\$ -
Interest rate swap contracts Total	\$	(15)	Interest expense	\$	28	Interest expense	<u> </u>
Derivatives in Cash Flow Hedging Relationships	Recogniz Comp Income	Gain (Loss)  ted in Other  rehensive  on Effective  f Derivative	ed in Other Derivative as a Result of ehensive Reclassification from n Effective Accumulated Other				Portion of Gain Derivative and Excluded from eness Testing zed in Income
(Millions)		nount	Location		ount	Location	Amount
Foreign currency forward/option contracts	\$	(131)	Cost of sales	\$	81	Cost of sales	\$ -
Interest rate swap contracts Total		(136)	Interest expense		(1) 80	Interest expense	
Three months ended June 30, 2015	Recogniz Comp	Gain (Loss) ed in Other rehensive	Derivativ Reclass	Loss) Recogni Effective Portion The as a Result of the initial of	zed in on of	(Loss) on Amount	Portion of Gain Derivative and Excluded from eness Testing

(16)

(16)

Comprehensive Income

Amount

35

(1)

Location

Cost of sales

Interest expense

Recognized in Income

Location

Cost of sales

Interest expense

Portion of Derivative

	Pretax Gain (Loss) Recognized in										
	Pretax Gain (Loss)	Income on Eff	ective Portion of	Ineffective	Ineffective Portion of Gain						
	Recognized in Other	Derivative	as a Result of	(Loss) on	(Loss) on Derivative and						
	Comprehensive	Reclassifi	cation from	Amount	Amount Excluded from						
	Income on Effective	Accumul	lated Other	Effectiveness Testing							
Derivatives in Cash Flow Hedging Relationships	Portion of Derivative	Comprehe	nsive Income	Recogni	Recognized in Income						
(Millions)	Amount	Location	Amount	Location	Amount						
Foreign currency forward/option contracts	\$ 120	Cost of sales	\$	5 Cost of sales	s —						
Commodity price swap contracts	_	Cost of sales		<ol><li>Cost of sales</li></ol>	_						
Interest rate swap contracts		Interest expense		<ol> <li>Interest expense</li> </ol>							
Total	§ 120	-	<u>s</u> 6	1	<u>s</u> —						

## Fair Value Hedges:

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

Fair Value Hedging - Interest Rate Swaps: The Company manages interest expense using a mix of fixed and floating rate debt. To help manage borrowing costs, the Company may enter into interest rate swaps. Under these arrangements, the Company agrees to exchange, at specified intervals, the difference between fixed and floating interest amounts calculated by reference to an agreed-upon notional principal amount. The mark-to-market of these fair value hedges is recorded as gains or losses in interest expense and is offset by the gain or loss of the underlying debt instrument, which also is recorded in interest expense. These fair value hedges are highly effective and, thus, there is no impact on earnings due to hedge ineffectiveness. Additional information regarding designated interest rate swaps can be found in Note 12 in 3M's Current Report on Form 8-K dated May 17, 2016 (which updated 3M's 2015 Annual Report on Form 10-K).

The location in the consolidated statements of income and amounts of gains and losses related to derivative instruments designated as fair value hedges and similar information relative to the hedged items are as follows:

#### Three months ended June 30, 2016

Location Interest expense	Amount 5	Location Interest expense	Amount		
Interest expense	\$ 5	Interest expense	Φ /		
	Φ 5		\$ (		
	3		\$ (		
Gain (Loss	s) on Derivative	Gain (Loss) on Hedged Item			
Recogniz	zed in Income	Recognized in Income			
Location	Amount	Location	Amount		
Interest expense	\$ 34	Interest expense	\$ (3		
	\$ 34		\$ (3		
Gain (Loss	) on Derivative	Gain (Loss)	on Hedged Item		
	red in Income		ed in Income		
Location	Amount	Location	Amount		
Interest expense	\$ (11)	Interest expense	\$ 1		
	\$ (11)		\$ 1		
	\$ (11)		3		
	Recognic Location Interest expense  Gain (Loss Recognic Location	S   34   S	Recognized in Income   Recognized		

	Gain (Loss	) on Derivative	Gain (Loss) on Hedged Item				
Derivatives in Fair Value Hedging Relationships	Recogniz	ed in Income	Recognized in Income				
(Millions)	Location	Amount	Location	Amount			
Interest rate swap contracts	Interest expense	\$ (5)	Interest expense	\$	5		
Total		\$ (5)	·	\$	5		

## Net Investment Hedges:

The Company may use non-derivative (foreign currency denominated debt) and derivative (foreign exchange forward contracts) instruments to hedge portions of the Company's investment in foreign subsidiaries and manage foreign exchange risk. For instruments that are designated and qualify as hedges of net investments in foreign operations and that meet the effectiveness requirements, the net gains or losses attributable to changes in spot exchange rates are recorded in cumulative translation within other comprehensive income. The remainder of the change in value of such instruments is recorded in earnings. Recognition in earnings of amounts previously recorded in cumulative translation is limited to circumstances such as complete or substantially complete liquidation of the net investment in the hedged foreign operation. To the extent foreign currency denominated debt is not designated in or is dedesignated from a net investment hedge relationship, changes in value of that portion of foreign currency denominated debt due to exchange rate changes are recorded in earnings through their maturity date.

3M's use of foreign exchange forward contracts designated in hedges of the Company's net investment in foreign subsidiaries can vary by time period depending on when foreign currency denominated debt balances designated in such relationships are dedesignated, matured, or are newly issued and designated. Additionally, variation can occur in connection with the extent of the Company's desired foreign exchange risk coverage.

At June 30, 2016, the total notional amount of foreign exchange forward contracts designated in net investment hedges was approximately 150 million Euros and approximately 248 billion South Korean Won, along with a principal amount of long-term debt instruments designated in net investment hedges totaling 4.4 billion Euros. The maturity dates of these derivative and nonderivative instruments designated in net investment hedges range from 2016 to 2031.

The location in the consolidated statements of income and comprehensive income and amounts of gains and losses related to derivative and nonderivative instruments designated as net investment hedges are as follows. There were no reclassifications of the effective portion of net investment hedges out of accumulated other comprehensive income into income for the periods presented in the table below.

#### Three months ended June 30, 2016

Derivative and Nonderivative Instruments in Net Investment Hedging	Cum	etax Gain (Loss) Recognized as ulative Translation within Other prehensive Income ffective Portion of	Ineffective Portion of Gain (Loss) on Instrument and Amount Excluded from Effectiveness Testing				
Relationships (Millions)		Instrument Amount	Recognized in Income Location Amount				
Foreign currency denominated debt	\$	94	N/A		Amount		
Foreign currency forward contracts	Ψ	16	Cost of sales	Ψ	3		
Total	\$	110	Cost of sales	\$	3		
				<del></del>			

Derivative and Nonderivative Instruments in Net Investment Hedging Relationships (Millions)	Recogr Cumulative within Compreher on Effectiv Instr	ain (Loss) nized as Translation Other sive Income e Portion of ument	Ineffective Portion of Gain (Loss) on Instrument and Amount Excluded from Effectiveness Testing Recognized in Income Location Amount			
Foreign currency denominated debt	\$	(50)	N/A	<u>\$</u>		
Foreign currency forward contracts	Ψ	(27)	Cost of sales	Ψ	1	
Total	\$	(77)		\$	1	
Three months ended June 30, 2015	Recogn					
Derivative and Nonderivative Instruments in Net Investment Hedging Relationships (Millions)	Cumulative Translation within Other Comprehensive Income on Effective Portion of Instrument		Ineffective Portion of Gain (Loss) of Instrument and Amount Excluded from Effectiveness Testing Recognized in Income Location Amount			
Foreign currency denominated debt	\$	(55)	N/A	\$		
Foreign currency forward contracts	Ψ	(55)	Cost of sales	ý.	4	
Total	\$	(110)	Cost of sales	\$	4	
Six months ended June 30, 2015	<u>\$</u>	(110)		ψ	<u> </u>	
Derivative and Nonderivative Instruments in Net Investment Hedging Relationships (Millions)	Recogr Cumulative within Compreher on Effectiv Instr	ain (Loss) nized as Translation Other sive Income e Portion of ument	Instrument a from Effe	rtion of Gain (Loss) o nd Amount Excludec ectiveness Testing nized in Income Amount	l 	
Relationships	Recogr Cumulative within Compreher on Effectiv Instr	nized as Translation Other sive Income e Portion of iment	Instrument a from Effo Recogn	nd Amount Excluded ectiveness Testing nized in Income	l 	

## <u>Derivatives Not Designated as Hedging Instruments:</u>

Total

3M enters into foreign exchange forward contracts that are not designated in hedge relationships to offset, in part, the impacts of certain intercompany transactions and to further mitigate short-term currency impacts. In addition, the Company enters into commodity price swaps to offset, in part, fluctuations in costs associated with the use of certain precious metals. These derivative instruments are not designated in hedging relationships; therefore, fair value gains and losses on these contracts are recorded in earnings. The Company does not hold or issue derivative financial instruments for trading purposes.

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The location in the consolidated statements of income and amounts of gains and losses related to derivative instruments not designated as hedging instruments are as follows:

Derivatives Not Designated as Hedging Instruments	Gain (Loss) on Deri	ded June 30, 2016 wative Recognized in ome	Six months ended June 30, 2016 Gain (Loss) on Derivative Recognized in Income			
(Millions)	Location	Amount	Location	Amount		
Foreign currency forward/option contracts	Cost of sales	\$ (1)	Cost of sales	\$ (6)		
Foreign currency forward contracts	Interest expense	49	Interest expense	42		
Total	_	\$ 48	-	\$ 36		
Derivatives Not Designated as Hedging Instruments	Gain (Loss) on Deri Inc	ded June 30, 2015 vative Recognized in ome	Six months ende Gain (Loss) on Deriv Inco Location	ative Recognized in		
(Millions)	Location Amount					

	Gain (Loss) on Deri	vative Recogni	Gain (Loss) on Derivative Recognized in				
Derivatives Not Designated as Hedging Instruments	Inc	ome	Income				
(Millions)	Location Amount		Location	A	mount		
Foreign currency forward/option contracts	Cost of sales	\$	1	Cost of sales	\$	5	
Foreign currency forward contracts	Interest expense		(61)	Interest expense		28	
Commodity price swap contracts	Cost of sales		_	Cost of sales		(4	
Total		\$	(60)		\$	29	

Location and Fair Value Amount of Derivative Instruments

The following tables summarize the fair value of 3M's derivative instruments, excluding nonderivative instruments used as hedging instruments, and their location in the consolidated balance sheet. Notional amounts below are presented at period end foreign exchange rates, except interest rate swaps, which are presented using the contract inception date's foreign exchange rate. Additional information with respect to the fair value of derivative instruments is included in Note 11.

		Gross	Asset	Liabilities				
June 30, 2016	N	otional			Fair		F	air
(Millions)	A	mount	Location	Value	Amount	Location	Value	Amount
Derivatives designated as								
hedging instruments								
Foreign currency forward/option contracts	\$	2,371	Other current assets	\$	56	Other current liabilities	\$	54
Foreign currency forward/option contracts		1,187	Other assets		35	Other liabilities		35
Interest rate swap contracts		2,053	Other assets		58	Other current liabilities		5
Total derivatives designated as hedging					1.40		•	0.4
instruments				\$	149		\$	94
Derivatives not designated as								
hedging instruments								
Foreign currency forward/option contracts	\$	5,365	Other current assets	\$	94	Other current liabilities	\$	97
Total derivatives not designated as hedging instruments				\$	94		\$	97
instruments				ð	74		Ф	21
Total derivative instruments				\$	243		\$	191
				4			4	
		Gross	Gross Assets			Liabilitie	s	
December 31, 2015	N	otional			air		Fair	
(Millions)	A	mount	Location	Value	Amount	Location	Value Amount	
Derivatives designated as		mount	200 miles	· mue	- Imount	Location	· mac	
Derivatives designated as								
hedging instruments								
hedging instruments Foreign currency forward/option contracts	S	2.815	Other current assets	S	148	Other current liabilities	\$	14
Foreign currency forward/option contracts	\$	2,815 1,240	Other current assets	\$	148 61	Other current liabilities	\$	14
Foreign currency forward/option contracts Foreign currency forward/option contracts	\$	1,240	Other assets	\$	61	Other liabilities	\$	14 3 1
Foreign currency forward/option contracts Foreign currency forward/option contracts Interest rate swap contracts	\$	,	0.1111	\$			\$	
Foreign currency forward/option contracts Foreign currency forward/option contracts	\$	1,240	Other assets	\$ 	61	Other liabilities	\$ 	
Foreign currency forward/option contracts Foreign currency forward/option contracts Interest rate swap contracts Total derivatives designated as hedging	\$	1,240	Other assets	\$ 	61 24	Other liabilities	\$	3
Foreign currency forward/option contracts Foreign currency forward/option contracts Interest rate swap contracts Total derivatives designated as hedging instruments	\$	1,240	Other assets	\$	61 24	Other liabilities	\$ <u>\$</u>	3
Foreign currency forward/option contracts Foreign currency forward/option contracts Interest rate swap contracts Total derivatives designated as hedging	\$	1,240	Other assets	\$ <u>\$</u>	61 24	Other liabilities	\$ <u>\$</u>	3
Foreign currency forward/option contracts Foreign currency forward/option contracts Interest rate swap contracts Total derivatives designated as hedging instruments  Derivatives not designated as	\$	1,240	Other assets	\$ <u>\$</u>	61 24	Other liabilities	\$ <u>\$</u>	3
Foreign currency forward/option contracts Foreign currency forward/option contracts Interest rate swap contracts Total derivatives designated as hedging instruments  Derivatives not designated as hedging instruments Foreign currency forward/option contracts Total derivatives not designated as hedging		1,240 1,753	Other assets Other assets	\$	61 24 233 63	Other liabilities Other liabilities	\$	3 1 18
Foreign currency forward/option contracts Foreign currency forward/option contracts Interest rate swap contracts Total derivatives designated as hedging instruments  Derivatives not designated as hedging instruments Foreign currency forward/option contracts		1,240 1,753	Other assets Other assets	\$	24 233	Other liabilities Other liabilities	\$	3 1 18
Foreign currency forward/option contracts Foreign currency forward/option contracts Interest rate swap contracts Total derivatives designated as hedging instruments  Derivatives not designated as hedging instruments Foreign currency forward/option contracts Total derivatives not designated as hedging		1,240 1,753	Other assets Other assets	\$	61 24 233 63	Other liabilities Other liabilities	\$	3 1 18

Credit Risk and Offsetting of Assets and Liabilities of Derivative Instruments

The Company is exposed to credit loss in the event of nonperformance by counterparties in interest rate swaps, currency swaps, commodity price swaps, and forward and option contracts. However, the Company's risk is limited to the fair value of the instruments. The Company actively monitors its exposure to credit risk through the use of credit approvals and credit limits, and by selecting major international banks and financial institutions as counterparties. 3M enters into master netting arrangements with counterparties when possible to mitigate credit risk in derivative transactions. A master netting arrangement may allow each counterparty to net settle amounts owed between a 3M entity and the counterparty as a result of multiple, separate derivative transactions. As of June 30, 2016, 3M has International Swaps and Derivatives Association (ISDA) agreements with 16 applicable banks and financial institutions which contain netting provisions. In addition to a master agreement with 3M supported by a primary counterparty's parent guarantee, 3M also has associated credit support agreements in place with 15 of its primary derivative counterparties which, among other things, provide the circumstances under which either party is required to post eligible collateral (when the market value of transactions covered by these agreements exceeds specified thresholds or if a counterparty's credit rating has been downgraded to a predetermined rating). The Company does not anticipate nonperformance by any of these counterparties.

3M has elected to present the fair value of derivative assets and liabilities within the Company's consolidated balance sheet on a gross basis even when derivative transactions are subject to master netting arrangements and may otherwise qualify for net presentation. However, the following tables provide information as if the Company had elected to offset the asset and liability balances of derivative instruments, netted in accordance with various criteria in the event of default or termination as stipulated by the terms of netting arrangements with each of the counterparties. For each counterparty, if netted, the Company would offset the asset and liability balances of all derivatives at the end of the reporting period based on the 3M entity that is a party to the transactions. Derivatives not subject to master netting agreements are not eligible for net presentation. As of the applicable dates presented below, no collateral had been received or pledged related to these derivative instruments

## Offsetting of Financial Assets under Master Netting Agreements with Derivative Counterparties

June 30, 2016			the								
				Consolidated Balance S	heet that ar	e Subject					
	Gross	Amount of		to Master Nettin	g Agreemer	its					
	Derivative Assets Presented in the Consolidated		1	Gross Amount of Eligible Offsetting Recognized		Collateral	Net Amount of				
(Millions)	Balai	Balance Sheet		Balance Sheet Derivative Liabilities			Re	eceived	Derivative Assets		
Derivatives subject to master netting agreements	©.	243	S	74	\$		•	169			
Derivatives not subject to master netting	\$	243	Ф	/ 7	.p	_	Φ	10)			
agreements		_						_			
Total	\$	243					\$	169			
December 31, 2015	Gross	Amount of		Gross Amounts n Consolidated Balance S to Master Nettin							

	Gross Amount of			Consolidated Balance S to Master Nettir			
(Millions)		Derivative Assets Presented in the Consolidated Balance Sheet		Gross Amount of Eligible Offsetting Recognized Derivative Liabilities	Cash Collateral Received		Net Amount of Derivative Assets
Derivatives subject to master netting agreements	\$	296	\$	37	\$		\$ 259
Derivatives not subject to master netting agreements		_					
Total	\$	296					\$ 259

## Offsetting of Financial Liabilities under Master Netting Agreements with Derivative Counterparties

June 30, 2016	Gross Amounts not Offset in the Consolidated Balance Sheet that are Subject Gross Amount of to Master Netting Agreements								
(Millions)	Derivative Liabilities Presented in the Consolidated Balance Sheet			Gross Amount of Eligible Offsetting Recognized Derivative Assets			Cash Collateral Pledged	Net Amount of Derivative Liabilities	
Derivatives subject to master netting agreements  Derivatives not subject to master netting	\$	180	\$	74		\$		\$	106
agreements		11							11
Total	\$	191						\$	117

December 31, 2015

(Millions)

Gross A	Amount of	 Gross Amount Consolidated Balanc to Master Ne								
Derivative Liabilities Presented in the Consolidated Balance Sheet		Gross Amount of Eligible Offsetting Recognized Derivative Assets		Cash Collateral Pledged			Net Amount of Derivative Liabilities			
\$	64	\$ 3′	7	\$		_	\$	27		
	5							5		

#### Currency Effects

agreements Total

Derivatives subject to master netting agreements
Derivatives not subject to master netting

3M estimates that year-on-year foreign currency transactions effects, including hedging impacts, decreased pre-tax income by approximately \$10 million for the three months ended June 30, 2016, which resulted in a minimal impact for the six months ended June 30, 2016. These estimates include transaction gains and losses, including derivative instruments designed to reduce foreign currency exchange rate risks and any impacts from swapping Venezuelan bolivars into U.S. dollars.

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#### **NOTE 11. Fair Value Measurements**

3M follows ASC 820, Fair Value Measurements and Disclosures, with respect to assets and liabilities that are measured at fair value on a recurring basis and nonrecurring basis. Under the standard, fair value is defined as the exit price, or the amount that would be received to sell an asset or paid to transfer a liability in an orderly transaction between market participants as of the measurement date. The standard also establishes a hierarchy for inputs used in measuring fair value that maximizes the use of observable inputs and minimizes the use of unobservable inputs by requiring that the most observable inputs be used when available. Observable inputs are inputs market participants would use in valuing the asset or liability developed based on market data obtained from sources independent of the Company. Unobservable inputs are inputs that reflect the Company's assumptions about the factors market participants would use in valuing the asset or liability developed based upon the best information available in the circumstances. The hierarchy is broken down into three levels. Level 1 inputs are quoted prices (unadjusted) in active markets for identical assets or liabilities. Level 2 inputs include quoted prices for similar assets or liabilities in active markets, quoted prices for identical or similar assets or liabilities in markets that are not active, and inputs (other than quoted prices) that are observable for the asset or liability, either directly or indirectly. Level 3 inputs are unobservable inputs for the asset or liability. Categorization within the valuation hierarchy is based upon the lowest level of input that is significant to the fair value measurement.

Assets and Liabilities that are Measured at Fair Value on a Recurring Basis:

For 3M, assets and liabilities that are measured at fair value on a recurring basis primarily relate to available-for-sale marketable securities, available-for-sale investments (included as part of investments in the Consolidated Balance Sheet) and certain derivative instruments. Derivatives include cash flow hedges, interest rate swaps and net investment hedges. The information in the following paragraphs and tables primarily addresses matters relative to these financial assets and liabilities. Separately, there were no material fair value measurements with respect to nonfinancial assets or liabilities that are recognized or disclosed at fair value in the Company's financial statements on a recurring basis for the three and six months ended June 30, 2016 and 2015.

3M uses various valuation techniques, which are primarily based upon the market and income approaches, with respect to financial assets and liabilities. Following is a description of the valuation methodologies used for the respective financial assets and liabilities measured at fair value.

Available-for-sale marketable securities — except certain U.S. municipal securities:

Marketable securities, except certain U.S. municipal securities, are valued utilizing multiple sources. A weighted average market price is used for these securities. Market prices are obtained for these securities from a variety of industry standard data providers, security master files from large financial institutions, and other third-party sources. These multiple prices are used as inputs into a distribution-curve-based algorithm to determine the daily fair value to be used. 3M classifies U.S. treasury securities as level 1, while all other marketable securities (excluding certain U.S. municipal securities) are classified as level 2. Marketable securities are discussed further in Note 7.

Available-for-sale marketable securities — certain U.S. municipal securities only:

In the fourth quarter of 2014 and first quarter of 2016, 3M obtained municipal bonds from the City of Nevada, Missouri, which represent 3M's only U.S. municipal securities holding as of June 30, 2016 and December 31, 2015. Due to the nature of this security, the valuation method utilized will include the financial health of the City of Nevada, any recent municipal bond issuances by Nevada, and macroeconomic considerations related to the direction of interest rates and the health of the overall municipal bond market, and as such has been classified as a level 3 security.

#### Available-for-sale investments:

Investments include equity securities that are traded in an active market. Closing stock prices are readily available from active markets and are used as being representative of fair value. 3M classifies these securities as level 1.

#### Derivative instruments:

The Company's derivative assets and liabilities within the scope of ASC 815, Derivatives and Hedging, are required to be recorded at fair value. The Company's derivatives that are recorded at fair value include foreign currency forward and option contracts, commodity price swaps, interest rate swaps, and net investment hedges where the hedging instrument is recorded at fair value. Net investment hedges that use foreign currency denominated debt to hedge 3M's net investment are not impacted by the fair value measurement standard under ASC 820, as the debt used as the hedging instrument is marked to a value with respect to changes in spot foreign currency exchange rates and not with respect to other factors that may impact fair value.

3M has determined that foreign currency forwards, commodity price swaps, currency swaps, foreign currency options, interest rate swaps and cross-currency swaps will be considered level 2 measurements. 3M uses inputs other than quoted prices that are observable for the asset. These inputs include foreign currency exchange rates, volatilities, and interest rates. Derivative positions are primarily valued using standard calculations/models that use as their basis readily observable market parameters. Industry standard data providers are 3M's primary source for forward and spot rate information for both interest rates and currency rates, with resulting valuations periodically validated through third-party or counterparty quotes and a net present value stream of cash flows model.

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The following tables provide information by level for assets and liabilities that are measured at fair value on a recurring basis.

Description	Fair	Fair Value at June 30, 2016		Fair Value Measurements Using Inputs Considered as						
(Millions)	June			vel 1	Level 2		Level 3			
Assets: Available-for-sale: Marketable securities:										
Foreign government agency securities	\$	10	\$	_	\$ 10	\$	_			
Corporate debt securities		10		_	10		_			
Commercial paper		36		_	36		_			
Certificates of deposit/time deposits		55		_	55		_			
Asset-backed securities:										
Automobile loan related		36		_	36					
Credit card related		19		_	19		_			
Other		7		_	7					
U.S. municipal securities		18		_	_		18			
Derivative instruments — assets:										
Foreign currency forward/option contracts		185		_	185		_			
Interest rate swap contracts		58		_	58					
Liabilities:										
Derivative instruments — liabilities:										
Foreign currency forward/option contracts		186			186					
Interest rate swap contracts		5			5					
interest rate swap contracts					5					
Description		Fair Value at December 31, 2015		Fair Value Measurements Using Inputs Considered as						
(Millions)					Level 2		Level 3			
		015	Lev	vel 1	Level 2		Level 3			
Assets: Available-for-sale: Marketable securities:		015	Lev	vel 1	Level 2		Level 3			
Assets: Available-for-sale:	\$	10	\$		Level 2	\$				
Assets: Available-for-sale: Marketable securities:						\$				
Assets: Available-for-sale: Marketable securities: Foreign government agency securities		10			§ 10	\$				
Assets: Available-for-sale: Marketable securities: Foreign government agency securities Corporate debt securities Commercial paper Certificates of deposit/time deposits		10 10			\$ 10 10	\$				
Assets: Available-for-sale: Marketable securities: Foreign government agency securities Corporate debt securities Commercial paper Certificates of deposit/time deposits Asset-backed securities:		10 10 12 26			\$ 10 10 12 26	\$				
Assets: Available-for-sale: Marketable securities: Foreign government agency securities Corporate debt securities Commercial paper Certificates of deposit/time deposits Asset-backed securities: Automobile loan related		10 10 12 26			\$ 10 10 12 26	\$	_ _ _ _			
Assets: Available-for-sale: Marketable securities: Foreign government agency securities Corporate debt securities Commercial paper Certificates of deposit/time deposits Asset-backed securities: Automobile loan related Credit card related		10 10 12 26 26			\$ 10 10 12 26 26	\$	_ _ _ _			
Assets: Available-for-sale: Marketable securities: Foreign government agency securities Corporate debt securities Commercial paper Certificates of deposit/time deposits Asset-backed securities: Automobile loan related Credit card related Other		10 10 12 26 26 10 21			\$ 10 10 12 26	\$				
Assets: Available-for-sale: Marketable securities: Foreign government agency securities Corporate debt securities Commercial paper Certificates of deposit/time deposits Asset-backed securities: Automobile loan related Credit card related Other U.S. municipal securities		10 10 12 26 26			\$ 10 10 12 26 26	\$				
Assets: Available-for-sale: Marketable securities: Foreign government agency securities Corporate debt securities Commercial paper Certificates of deposit/time deposits Asset-backed securities: Automobile loan related Credit card related Other U.S. municipal securities Derivative instruments — assets:		10 10 12 26 26 10 21			\$ 10 10 12 26 26 10 21	\$				
Assets: Available-for-sale: Marketable securities: Foreign government agency securities Corporate debt securities Commercial paper Certificates of deposit/time deposits Asset-backed securities: Automobile loan related Credit card related Other U.S. municipal securities Derivative instruments — assets: Foreign currency forward/option contracts		10 10 12 26 26 10 21 12			\$ 10 10 12 26 26 10 21 —	\$				
Assets: Available-for-sale: Marketable securities: Foreign government agency securities Corporate debt securities Commercial paper Certificates of deposit/time deposits Asset-backed securities: Automobile loan related Credit card related Other U.S. municipal securities Derivative instruments — assets:		10 10 12 26 26 10 21			\$ 10 10 12 26 26 10 21	\$				
Assets: Available-for-sale: Marketable securities: Foreign government agency securities Corporate debt securities Commercial paper Certificates of deposit/time deposits Asset-backed securities: Automobile loan related Credit card related Other U.S. municipal securities Derivative instruments — assets: Foreign currency forward/option contracts Interest rate swap contracts		10 10 12 26 26 10 21 12			\$ 10 10 12 26 26 10 21 —	\$				
Assets: Available-for-sale: Marketable securities: Foreign government agency securities Corporate debt securities Commercial paper Certificates of deposit/time deposits Asset-backed securities: Automobile loan related Credit card related Other U.S. municipal securities Derivative instruments — assets: Foreign currency forward/option contracts		10 10 12 26 26 10 21 12			\$ 10 10 12 26 26 10 21 —	\$				
Assets: Available-for-sale: Marketable securities: Foreign government agency securities Corporate debt securities Commercial paper Certificates of deposit/time deposits Asset-backed securities: Automobile loan related Credit card related Other U.S. municipal securities Derivative instruments — assets: Foreign currency forward/option contracts Interest rate swap contracts Liabilities: Derivative instruments — liabilities:		10 10 12 26 26 10 21 12			\$ 10 10 12 26 26 10 21 —	\$				
Assets: Available-for-sale: Marketable securities: Foreign government agency securities Corporate debt securities Commercial paper Certificates of deposit/time deposits Asset-backed securities: Automobile loan related Credit card related Other U.S. municipal securities Derivative instruments — assets: Foreign currency forward/option contracts Interest rate swap contracts Liabilities:		10 10 12 26 26 10 21 12 272 24			\$ 10 10 12 26 26 10 21 — 272 24	\$				

The following table provides a reconciliation of the beginning and ending balances of items measured at fair value on a recurring basis in the table above that used significant unobservable inputs (Level 3).

Marketable securities — certain U.S. municipal securities only	Three months ended June 30,					Six months ended June 30,				
(Millions)	2016		2015		2016		2015			
Beginning balance	\$	18	\$	15	\$	12	\$	15		
Total gains or losses:										
Included in earnings		_		_		_		_		
Included in other comprehensive income		_		_		_		_		
Purchases and issuances		_		_		6		_		
Sales and settlements		_		_				_		
Transfers in and/or out of level 3										
Ending balance	\$	18	\$	15	\$	18	\$	15		
Change in unrealized gains or losses for the period included in earnings for securities held at the end of the reporting period		_				_				

In addition, the plan assets of 3M's pension and postretirement benefit plans are measured at fair value on a recurring basis (at least annually). Refer to Note 11 in 3M's Current Report on Form 8-K dated May 17, 2016 (which updated 3M's 2015 Annual Report on Form 10-K)

Assets and Liabilities that are Measured at Fair Value on a Nonrecurring Basis:

Disclosures are required for certain assets and liabilities that are measured at fair value, but are recognized and disclosed at fair value on a nonrecurring basis in periods subsequent to initial recognition. For 3M, such measurements of fair value relate primarily to long-lived asset impairments. There were no material long-lived asset impairments for the three and six months ended June 30, 2016 and 2015.

Fair Value of Financial Instruments:

The Company's financial instruments include cash and cash equivalents, marketable securities, accounts receivable, certain investments, accounts payable, borrowings, and derivative contracts. The fair values of cash and cash equivalents, accounts receivable, accounts payable, and short-term borrowings and current portion of long-term debt approximated carrying values because of the short-term nature of these instruments. Available-for-sale marketable securities and investments, in addition to certain derivative instruments, are recorded at fair values as indicated in the preceding disclosures. For its long-term debt, the Company utilized third-party quotes to estimate fair values (classified as level 2). Information with respect to the carrying amounts and estimated fair values of these financial instruments follow:

		June 30, 2016				Decembe	r 31,	1, 2015	
	Carrying Fair		Fair		Carrying		Fair		
(Millions)		Value		Value		Value		Value	
Long-term debt, excluding current portion	\$	9,299	\$	10,115	\$	8,753	\$	9,101	

The fair values reflected above consider the terms of the related debt absent the impacts of derivative/hedging activity. The carrying amount of long-term debt referenced above is impacted by certain fixed-to-floating interest rate swaps that are designated as fair value hedges and by the designation of fixed rate Eurobond securities issued by the Company as hedging instruments of the Company's net investment in its European subsidiaries. Many of 3M's fixed-rate bonds were trading at a premium atJune 30, 2016 and December 31, 2015 due to the low interest rates and tightening of 3M's credit spreads.

## NOTE 12. Commitments and Contingencies

## Legal Proceedings:

The Company and some of its subsidiaries are involved in numerous claims and lawsuits, principally in the United States, and regulatory proceedings worldwide. These include various products liability (involving products that the Company now or formerly manufactured and sold), intellectual property, and commercial claims and lawsuits, including those brought under the antitrust laws, and environmental proceedings. Unless otherwise stated, the Company is vigorously defending all such litigation. Additional information about the Company's process for disclosure and recording of liabilities and insurance receivables related to legal proceedings can be found in Note 14 "Commitments and Contingencies" in the Company's Annual Report on Form 10-K for the year ended December 31, 2015 as updated by the Company's Current Report on Form 8-K dated May 17, 2016.

The following sections first describe the significant legal proceedings in which the Company is involved, and then describe the liabilities and associated insurance receivables the Company has accrued relating to its significant legal proceedings.

### Respirator Mask/Asbestos Litigation

As of June 30, 2016, the Company is a named defendant, with multiple co-defendants, in numerous lawsuits in various courts that purport to represent approximately 2,325 individual claimants, compared to approximately 2,130 individual claimants with actions pending at December 31, 2015.

The vast majority of the lawsuits and claims resolved by and currently pending against the Company allege use of some of the Company's mask and respirator products and seek damages from the Company and other defendants for alleged personal injury from workplace exposures to asbestos, silica, coal mine dust or other occupational dusts found in products manufactured by other defendants or generally in the workplace. A minority of the lawsuits and claims resolved by and currently pending against the Company generally allege personal injury from occupational exposure to asbestos from products previously manufactured by the Company, which are often unspecified, as well as products manufactured by other defendants, or occasionally at Company premises.

The Company's current volume of new and pending matters is substantially lower than it experienced at the peak of filings in 2003. The Company expects that filing of claims by unimpaired claimants in the future will continue to be at much lower levels than in the past. Accordingly, the number of claims alleging more serious injuries, including mesothelioma and other malignancies, will represent a greater percentage of total claims than in the past. The Company has prevailed in all ten cases taken to trial, including eight of the nine cases tried to verdict (such trials occurred in 1999, 2000, 2001, 2003, 2004, 2007, and 2015), and an appellate reversal in 2005 of the 2001 jury verdict adverse to the Company. The remaining case, tried in 2009, was dismissed by the court at the close of plaintiff's evidence, based on the court's legal finding that the plaintiff had not presented sufficient evidence to support a jury verdict. The plaintiff in the 2015 trial filed an appeal to the Missouri Court of Appeals for the Eastern District. In June 2016, the Missouri Court of Appeals affirmed the trial court's judgment and jury verdict in favor of 3M, a decision that is final as the Plaintiff did not file an appeal to the Missouri Supreme Court.

The Company has demonstrated in these past trial proceedings that its respiratory protection products are effective as claimed when used in the intended manner and in the intended circumstances. Consequently the Company believes that claimants are unable to establish that their medical conditions, even if significant, are attributable to the Company's respiratory protection products. Nonetheless the Company's litigation experience indicates that claims of persons with malignant conditions are costlier to resolve than the claims of unimpaired persons, and it therefore believes the average cost of resolving pending and future claims on a per-claim basis will continue to be higher than it experienced in prior periods when the vast majority of claims were asserted by medically unimpaired claimants.

As previously reported, the State of West Virginia, through its Attorney General, filed a complaint in 2003 against the Company and two other manufacturers of respiratory protection products in the Circuit Court of Lincoln County, West Virginia and amended its complaint in 2005. The amended complaint seeks substantial, but unspecified, compensatory

damages primarily for reimbursement of the costs allegedly incurred by the State for worker's compensation and healthcare benefits provided to all workers with occupational pneumoconiosis and unspecified punitive damages. The case was inactive from the fourth quarter of 2007 until late 2013, other than a case management conference in March 2011. In November 2013, the State filed a motion to bifurcate the lawsuit into separate liability and damages proceedings. At the hearing on the motion, the court declined to bifurcate the lawsuit. No liability has been recorded for this matter because the Company believes that liability is not probable and estimable at this time. In addition, the Company is not able to estimate a possible loss or range of loss given the lack of any meaningful discovery responses by the State of West Virginia, the otherwise minimal activity in this case and the fact that the complaint asserts claims against two other manufacturers where a defendant's share of liability may turn on the law of joint and several liability and by the amount of fault, if any, a jury might allocate to each defendant if the case is ultimately tried.

Respirator Mask/Asbestos Liabilities and Insurance Receivables: The Company estimates its respirator mask/asbestos liabilities, including the cost to resolve the claims and defense costs, by examining: (i) the Company's experience in resolving claims, (ii) apparent trends, (iii) the apparent quality of claims (e.g., whether the claim has been asserted on behalf of asymptomatic claimants), (iv) changes in the nature and mix of claims (e.g., the proportion of claims asserting usage of the Company's mask or respirator products and alleging exposure to each of asbestos, silica, coal or other occupational dusts, and claims pleading use of asbestos-containing products allegedly manufactured by the Company), (v) the number of current claims and a projection of the number of future asbestos and other claims that may be filed against the Company, (vi) the cost to resolve recently settled claims, and (vii) an estimate of the cost to resolve and defend against current and future claims.

Developments may occur that could affect the Company's estimate of its liabilities. These developments include, but are not limited to, significant changes in (i) the number of future claims, (ii) the average cost of resolving claims, (iii) the legal costs of defending these claims and in maintaining trial readiness, (iv) changes in the mix and nature of claims received, (v) trial and appellate outcomes, (vi) changes in the law and procedure applicable to these claims, and (vii) the financial viability of other co-defendants and insurers.

As a result of the Company's cost of resolving claims of persons who claim more serious injuries, including mesothelioma and other malignancies, the Company increased its accruals in the first six months of 2016 for respirator mask/asbestos liabilities by \$29 million, \$18 million of which occurred in the second quarter of 2016. In the first six months of 2016, the Company made payments for legal fees and settlements of \$26 million related to the respirator mask/asbestos litigation, \$12 million of which occurred in the second quarter of 2016. As of June 30, 2016, the Company had accruals for respirator mask/asbestos liabilities of \$147 million (excluding Aearo accruals). This accrual represents the low end in a range of loss.

The Company cannot estimate the amount or upper end of the range of amounts by which the liability may exceed the accrual the Company has established because of the (i) inherent difficulty in projecting the number of claims that have not yet been asserted or the time period in which future claims may be asserted, (ii) the complaints nearly always assert claims against multiple defendants where the damages alleged are typically not attributed to individual defendants so that a defendant's share of liability may turn on the law of joint and several liability, which can vary by state, (iii) the multiple factors described above that the Company considers in estimating its liabilities, and (iv) the several possible developments described above that may occur that could affect the Company's estimate of liabilities.

As of June 30, 2016, the Company's receivable for insurance recoveries related to the respirator mask/asbestos litigation was \$4 million. The Company estimates insurance receivables based on an analysis of its policies, including their exclusions, pertinent case law interpreting comparable policies, its experience with similar claims, and an assessment of the nature of each claim and remaining coverage. The Company then records an amount it has concluded is likely to be recovered. Various factors could affect the timing and amount of recovery of this receivable, including (i) delays in or avoidance of payment by insurers; (ii) the extent to which insurers may become insolvent in the future, and (iii) the outcome of negotiations with insurers and legal proceedings with respect to respirator mask/asbestos liability insurance coverage.

As a result of a final arbitration decision in June 2016 regarding insurance coverage under two policies, 3M reversed its receivable for insurance recoveries related to respirator mask/asbestos litigation by \$35 million. The Company is seeking

coverage under the policies of certain insolvent insurers. Once those claims for coverage are resolved, the Company will have collected substantially all of its remaining insurance coverage for respirator mask/asbestos claims.

#### Respirator Mask/Asbestos Litigation — Aearo Technologies

On April 1, 2008, a subsidiary of the Company purchased the stock of Aearo Holding Corp., the parent of Aearo Technologies ("Aearo"). Aearo manufactured and sold various products, including personal protection equipment, such as eye, ear, head, face, fall and certain respiratory protection products.

As of June 30, 2016, Aearo and/or other companies that previously owned and operated Aearo's respirator business (American Optical Corporation, Warner-Lambert LLC, AO Corp. and Cabot Corporation ("Cabot")) are named defendants, with multiple co-defendants, including the Company, in numerous lawsuits in various courts in which plaintiffs allege use of mask and respirator products and seek damages from Aearo and other defendants for alleged personal injury from workplace exposures to asbestos, silica-related, or other occupational dusts found in products manufactured by other defendants or generally in the workplace.

As of June 30, 2016, the Company, through its Aearo subsidiary, had accruals of \$20 million for product liabilities and defense costs related to current and future Aearo-related asbestos and silica-related claims. Responsibility for legal costs, as well as for settlements and judgments, is currently shared in an informal arrangement among Aearo, Cabot, American Optical Corporation and a subsidiary of Warner Lambert and their respective insurers (the "Payor Group"). Liability is allocated among the parties based on the number of years each company sold respiratory products under the "AO Safety" brand and/or owned the AO Safety Division of American Optical Corporation and the alleged years of exposure of the individual plaintiff. Aearo's share of the contingent liability is further limited by an agreement entered into between Aearo and Cabot on July 11, 1995. This agreement provides that, so long as Aearo pays to Cabot a quarterly fee of \$100,000, Cabot will retain responsibility and liability for, and indemnify Aearo against, any product liability claims involving exposure to asbestos, silica, or silica products for respirators sold prior to July 11, 1995. Because of the difficulty in determining how long a particular respirator remains in the stream of commerce after being sold, Aearo and Cabot have applied the agreement to claims arising out of the alleged use of respirators involving exposure to asbestos, silica or silica products prior to January 1, 1997. With these arrangements in place, Aearo's potential liability is limited to exposures alleged to have arisen from the use of respirators involving exposure to asbestos, silica, or silica products on or after January 1, 1997. To date, Aearo has elected to pay the quarterly fee. Aearo could potentially be exposed to additional claims for some part of the pre-July 11, 1995 period covered by its agreement with Cabot if Aearo elects to discontinue its participation in this arrangement, or if Cabot is no longer able to meet its obligations in these matters.

In March 2012, Cabot CSC Corporation and Cabot Corporation filed a lawsuit against Aearo in the Superior Court of Suffolk County, Massachusetts seeking declaratory relief as to the scope of Cabot's indemnity obligations under the July 11, 1995 agreement, including whether Cabot has retained liability for coal workers' pneumoconiosis claims, and seeking damages for breach of contract. In 2014, the court granted Aearo's motion for summary judgment on two claims, but declined to rule on two issues: the specific liability for certain known coal mine dust lawsuits; and Cabot's claim for allocation of liability between injuries allegedly caused by exposure to coal mine dust and injuries allegedly caused by exposure to silica dust. Following additional discovery, the parties filed new motions for summary judgment. In February 2016, the court ruled in favor of Aearo on these two remaining issues, and ordered that Cabot, and not Aearo, is solely responsible for all liability for the coal mine dust lawsuits under the 1995 agreement. Cabot has appealed.

Developments may occur that could affect the estimate of Aearo's liabilities. These developments include, but are not limited to:
(i) significant changes in the number of future claims, (ii) significant changes in the average cost of resolving claims, (iii) significant changes in the legal costs of defending these claims, (iv) significant changes in the mix and nature of claims received, (v) trial and appellate outcomes, (vi) significant changes in the law and procedure applicable to these claims, (vii) significant changes in the liability allocation among the co-defendants, (viii) the financial viability of members of the Payor Group including exhaustion of available insurance coverage limits, and/or (ix) a determination that the interpretation of the contractual obligations on which Aearo has estimated its share of liability is inaccurate. The Company cannot determine the impact of these potential developments on its current estimate of Aearo's share of

liability for these existing and future claims. If any of the developments described above were to occur, the actual amount of these liabilities for existing and future claims could be significantly larger than the amount accrued.

Because of the inherent difficulty in projecting the number of claims that have not yet been asserted, the complexity of allocating responsibility for future claims among the Payor Group, and the several possible developments that may occur that could affect the estimate of Aearo's liabilities, the Company cannot estimate the amount or range of amounts by which Aearo's liability may exceed the accrual the Company has established.

## **Environmental Matters and Litigation**

The Company's operations are subject to environmental laws and regulations including those pertaining to air emissions, wastewater discharges, toxic substances, and the handling and disposal of solid and hazardous wastes enforceable by national, state, and local authorities around the world, and private parties in the United States and abroad. These laws and regulations provide, under certain circumstances, a basis for the remediation of contamination, for restoration of or compensation for damages to natural resources, and for personal injury and property damage claims. The Company has incurred, and will continue to incur, costs and capital expenditures in complying with these laws and regulations, defending personal injury and property damage claims, and modifying its business operations in light of its environmental responsibilities. In its effort to satisfy its environmental responsibilities and comply with environmental laws and regulations, the Company has established, and periodically updates, policies relating to environmental standards of performance for its operations worldwide.

Under certain environmental laws, including the United States Comprehensive Environmental Response, Compensation and Liability Act of 1980 and similar state laws, the Company may be jointly and severally liable, typically with other companies, for the costs of remediation of environmental contamination at current or former facilities and at off-site locations. The Company has identified numerous locations, most of which are in the United States, at which it may have some liability. Please refer to the section entitled "Environmental Liabilities and Insurance Receivables" that follows for information on the amount of the accrual.

## **Environmental Matters**

As previously reported, the Company has been voluntarily cooperating with ongoing reviews by local, state, federal (primarily the U.S. Environmental Protection Agency (EPA)), and international agencies of possible environmental and health effects of various perfluorinated compounds ("PFCs"), including perfluorocatanyl compounds such as perfluorocatanoate ("PFOA") and perfluorocatanyl compounds ("PFOS"). As a result of its phase-out decision in May 2000, the Company no longer manufactures perfluorocatanyl compounds. The company ceased manufacturing and using the vast majority of these compounds within approximately two years of the phase-out announcement, and ceased all manufacturing and the last significant use of this chemistry by the end of 2008. Through its ongoing life cycle management and its raw material composition identification processes associated with the Company's policies covering the use of all persistent and bio-accumulative materials, the Company has on occasion identified the presence of precursor chemicals in materials received from suppliers that may ultimately degrade to PFOA, PFOS, or similar compounds. Upon such identification, the Company works to find alternatives for such materials.

Regulatory activities concerning PFOA and/or PFOS continue in the United States, Europe and elsewhere, and before certain international bodies. These activities include gathering of exposure and use information, risk assessment, and consideration of regulatory approaches. As the database of studies of both chemicals has expanded, the EPA has developed human health effects documents summarizing the available data from these studies. In February 2014, the EPA initiated external peer review of its draft human health effects documents for PFOA and PFOS. The peer review panel met in August 2014. In May 2016, the EPA announced lifetime health advisory levels for PFOA and PFOS at 70 parts per trillion (superseding the provisional levels established by the EPA in 2009 of 400 parts per trillion for PFOA and 200 parts per trillion for PFOS). Where PFOA and PFOS are found together, EPA recommends that the concentrations be added together, and the lifetime health advisory for PFOA and PFOS combined is also 70 parts per trillion. Lifetime health advisories, while not enforceable, serve as guidance and are benchmarks for determining if concentrations of chemicals in tap water from public utilities are safe for public consumption. In an effort to collect exposure information under the Safe Drinking Water Act, the EPA published on May 2, 2012 a list of unregulated

substances, including six PFCs, required to be monitored during the period 2013-2015 by public water system suppliers to determine the extent of their occurrence. The EPA is reporting results from this exercise on a rolling basis that will continue in 2016. Through April 2016, the EPA has reported results for 4,864 public water supplies nationwide. Based on the 2016 lifetime health advisory, 13 public water supplies exceed the level for PFOA, 46 exceed the level for PFOS, and 72 exceed the combined level for PFOA and PFOS. These results are based on one or more samples collected during the period 2012-2015 and do not necessarily reflect current conditions of these public water supplies. EPA reporting does not identify the sources of the PFOA and PFOS in the public water supplies.

The Company is continuing to make progress in its work, under the supervision of state regulators, to address its historic disposal of PFC-containing waste associated with manufacturing operations at the Decatur, Alabama, Cottage Grove, Minnesota, and Cordova, Illinois plants.

As previously reported, the Company entered into a voluntary remedial action agreement with the Alabama Department of Environmental Management (ADEM) to address the presence of PFCs in the soil at the Company's manufacturing facility in Decatur, Alabama. Pursuant to a permit issued by ADEM, for approximately twenty years, the Company incorporated its wastewater treatment plant sludge containing PFCs in fields at its Decatur facility. After a review of the available options to address the presence of PFCs in the soil, ADEM agreed that the preferred remediation option is to use a multilayer cap over the former sludge incorporation areas on the manufacturing site with subsequent groundwater migration controls and treatment. Implementation of that plan continues and is expected to be completed in 2018.

The Company continues to work with the Minnesota Pollution Control Agency (MPCA) pursuant to the terms of the previously disclosed May 2007 Settlement Agreement and Consent Order to address the presence of certain PFCs in the soil and groundwater at former disposal sites in Washington County, Minnesota (Oakdale and Woodbury) and at the Company's manufacturing facility at Cottage Grove, Minnesota. Under this agreement, the Company's principal obligations include (i) evaluating releases of certain PFCs from these sites and proposing response actions; (ii) providing treatment or alternative drinking water upon identifying any level exceeding a Health Based Value ("HBV") or Health Risk Limit ("HRL") (i.e., the amount of a chemical in drinking water determined by the Minnesota Department of Health (MDH) to be safe for human consumption over a lifetime) for certain PFCs for which a HBV and/or HRL exists as a result of contamination from these sites; (iii) remediating identified sources of other PFCs at these sites that are not controlled by actions to remediate PFOA and PFOS; and (iv) sharing information with the MPCA about certain perfluorinated compounds. During 2008, the MPCA issued formal decisions adopting remedial options for the former disposal sites in Washington County, Minnesota (Oakdale and Woodbury). In August 2009, the MPCA issued a formal decision adopting remedial options for the Company's Cottage Grove manufacturing facility. During the spring and summer of 2010, 3M began implementing the agreed upon remedial options at the Cottage Grove and Woodbury sites, 3M commenced the remedial option at the Oakdale site in late 2010. At each location the remedial options were recommended by the Company and approved by the MPCA. Remediation work has been completed at the Oakdale and Woodbury sites, and they are in an operational maintenance mode. Remediation will continue at the Cottage Grove site during 2016.

In August 2014, the Illinois EPA approved a request by the Company to establish a groundwater management zone at its manufacturing facility in Cordova, Illinois, which includes ongoing pumping of impacted site groundwater, groundwater monitoring, and routine reporting of results.

The Company cannot predict what additional regulatory actions arising from the foregoing proceedings and activities, if any, may be taken regarding such compounds or the consequences of any such actions.

### Environmental Litigation

As previously reported, a former employee filed a purported class action lawsuit in 2002 in the Circuit Court of Morgan County, Alabama (the St. John case), seeking unstated damages and alleging that the plaintiffs suffered fear, increased risk, subclinical injuries, and property damage from exposure to certain perfluorochemicals at or near the Company's Decatur, Alabama, manufacturing facility. The court in 2005 granted the Company's motion to dismiss the named plaintiff's personal injury-related claims on the basis that such claims are barred by the exclusivity provisions of the state's Workers Compensation Act. The plaintiffs' counsel filed an amended complaint in November 2006, limiting the

case to property damage claims on behalf of a purported class of residents and property owners in the vicinity of the Decatur plant. In June 2015, the plaintiffs filed an amended complaint adding additional defendants, including BFI Waste Management Systems of Alabama, LLC; BFI Waste Management of North America, LLC; the City of Decatur, Alabama; Morgan County, Alabama; Municipal Utilities Board of Decatur; and Morgan County, Alabama, d/b/a Decatur Utilities. In September 2015, the court issued a scheduling order staying discovery pending mediation which occurred in January 2016, but did not resolve the case and the parties continue their negotiations. A hearing on class certification is scheduled for November 2016.

In 2005, the judge in a second purported class action lawsuit filed by three residents of Morgan County, Alabama, seeking unstated compensatory and punitive damages involving alleged damage to their property from emissions of certain perfluorochemical compounds from the Company's Decatur, Alabama, manufacturing facility that formerly manufactured those compounds (the Chandler case) granted the Company's motion to abate the case, effectively putting the case on hold pending the resolution of class certification issues in the St. John case. Despite the stay, plaintiffs filed an amended complaint seeking damages for alleged personal injuries and property damage on behalf of the named plaintiffs and the members of a purported class. No further action in the case is expected unless and until the stay is lifted

In February 2009, a resident of Franklin County, Alabama, filed a purported class action lawsuit in the Circuit Court of Franklin County (the Stover case) seeking compensatory damages and injunctive relief based on the application by the Decatur utility's wastewater treatment plant of wastewater treatment sludge to farmland and grasslands in the state that allegedly contain PFOA, PFOS and other perfluorochemicals. The named plaintiff seeks to represent a class of all persons within the State of Alabama who have had PFOA, PFOS, and other perfluorochemicals released or deposited on their property. In March 2010, the Alabama Supreme Court ordered the case transferred from Franklin County to Morgan County. In May 2010, consistent with its handling of the other matters, the Morgan County Circuit Court abated this case, putting it on hold pending the resolution of the class certification issues in the St. John case.

In October 2015, West Morgan-East Lawrence Water & Sewer Authority (Water Authority) filed an individual complaint against 3M Company, Dyneon, L.L.C, and Daikin America, Inc., in the U.S. District Court for the Northern District of Alabama. The complaint also includes representative plaintiffs who brought the complaint on behalf of themselves, and a class of all owners and possessors of property who use water provided by the Water Authority and five local water works to which the Water Authority supplies water (collectively, the "Water Utilities"). The complaint seeks compensatory and punitive damages and injunctive relief based on allegations that the defendants' chemicals, including PFOA and PFOS from their manufacturing processes in Decatur, have contaminated the water in the Tennessee River at the water intake, and that the chemicals cannot be removed by the water treatment processes utilized by the Water Authority. 3M has moved to dismiss the case on legal grounds. That motion is pending.

In June 2016, the Tennessee Riverkeeper, Inc. (Riverkeeper), a non-profit corporation, filed a lawsuit in the U.S. District Court for the Northern District of Alabama against 3M; BFI Waste Systems of Alabama; the City of Decatur, Alabama; and the Municipal Utilities Board of Decatur, Morgan County, Alabama. The complaint alleges that the defendants violated the Resource Conservation and Recovery Act in connection with the disposal of certain PFCs through their ownership and operation of their respective sites. The complaint further alleges such practices may present an imminent and substantial endangerment to health and/or the environment and that Riverkeeper has suffered and will continue to suffer irreparable harm caused by defendants' failure to abate the endangerment unless the court grants the requested relief, including declaratory and injunctive relief. The Company believes that the complaint lacks merit.

In December 2010, the State of Minnesota, by its Attorney General Lori Swanson, acting in its capacity as trustee of the natural resources of the State of Minnesota, filed a lawsuit in Hennepin County District Court against 3M to recover damages (including unspecified assessment costs and reasonable attorney's fees) for alleged injury to, destruction of, and loss of use of certain of the State's natural resources under the Minnesota Environmental Response and Liability Act (MERLA) and the Minnesota Water Pollution Control Act (MWPCA), as well as statutory nuisance and common law claims of trespass, nuisance, and negligence with respect to the presence of PFCs in the groundwater, surface water, fish or other aquatic life, and sediments (the "NRD Lawsuit"). The State also seeks declarations under MERLA that 3M is responsible for all damages the State may suffer in the future for injuries to natural resources from releases of PFCs into

the environment, and under MWPCA that 3M is responsible for compensation for future loss or destruction of fish, aquatic life, and other damages.

In November 2011, the Metropolitan Council filed a motion to intervene and a complaint in the NRD Lawsuit seeking compensatory damages and other legal, declaratory and equitable relief, including reasonable attorneys' fees, for costs and fees that the Metropolitan Council alleges it will be required to assess at some time in the future if the MPCA imposes restrictions on Metropolitan Council's PFOS discharges to the Mississippi River, including the installation and maintenance of a water treatment system. The Metropolitan Council's intervention motion was based on several theories, including common law negligence, and statutory claims under MERLA for response costs, and under the Minnesota Environmental Rights Act (MERA) for declaratory and equitable relief against 3M for PFOS and other PFC pollution of the waters and sediments of the Mississippi River. 3M did not object to the motion to intervene. In January 2012, 3M answered the Metropolitan Council's complaint and filed a counterclaim alleging that the Metropolitan Council discharges PFCs to the Mississippi River and discharges PFC-containing sludge and bio solids from one or more of its wastewater treatment plants onto agricultural lands and local area landfills. Accordingly, 3M's complaint against the Metropolitan Council asks that if the court finds that the State is entitled to any of the damages it seeks, 3M be awarded contribution and apportionment from the Metropolitan Council, including attorneys' fees, under MERLA, and contribution from and liability for the Metropolitan Council's proportional share of damages awarded to the State under the MWPCA, as well as under statutory nuisance and common law theories of trespass, nuisance, and negligence. 3M also seeks declaratory relief under MERA.

In April 2012, 3M filed a motion to disqualify the State of Minnesota's counsel, Covington & Burling, LLP (Covington). In October 2012, the court granted 3M's motion to disqualify Covington as counsel to the State and the State and Covington appealed the court's disqualification to the Minnesota Court of Appeals. In July 2013, the Minnesota Court of Appeals affirmed the district court's disqualification order. In October 2013, the Minnesota Supreme Court granted both the State's and Covington's petition for review of the decision of the Minnesota Court of Appeals. In April 2014, the Minnesota Supreme Court affirmed in part, reversed in part, and remanded the case to the district court for further proceedings. The district court took evidence on the disqualification issues at a hearing in October 2015. In February 2016, the district court ruled that Covington violated the professional ethics rule against representing a client (here the State of Minnesota) in the same or substantially related matter where that person's interests are materially adverse to the interests of a former client (3M). The district court, however, denied 3M's motion to disqualify Covington because it further found that 3M impliedly waived by delaying to assert the conflict. Other activity in the case, which had been stayed pending the outcome of the disqualification issue, has resumed. A trial date has not yet been set. In a separate but related action, the Company filed suit against Covington for breach of its fiduciary duties to the Company and for breach of contract arising out of Covington's representation of the State of Minnesota in the NRD Lawsuit

For environmental litigation matters described in this section for which a liability, if any, has been recorded, the Company believes the amount recorded, as well as the possible loss or range of loss in excess of the established accrual is not material to the Company's consolidated results of operations or financial condition. For those matters for which a liability has not been recorded, the Company believes any such liability is not probable and estimable and the Company is not able to estimate a possible loss or range of loss at this time.

#### Environmental Liabilities and Insurance Receivables

As of June 30, 2016, the Company had recorded liabilities of \$47 million for estimated "environmental remediation" costs based upon an evaluation of currently available facts with respect to each individual site and also recorded related insurance receivables of \$11 million. The Company records liabilities for remediation costs on an undiscounted basis when they are probable and reasonably estimable, generally no later than the completion of feasibility studies or the Company's commitment to a plan of action. Liabilities for estimated costs of environmental remediation, depending on the site, are based primarily upon internal or third-party environmental studies, and estimates as to the number, participation level and financial viability of any other potentially responsible parties, the extent of the contamination and the nature of required remedial actions. The Company adjusts recorded liabilities as further information develops or circumstances change. The Company expects that it will pay the amounts recorded over the periods of remediation for the applicable sites, currently ranging up to 20 years.

As of June 30, 2016, the Company had recorded liabilities of \$33 million for "other environmental liabilities" based upon an evaluation of currently available facts to implement the Settlement Agreement and Consent Order with the MPCA, the remedial action agreement with ADEM, and to address trace amounts of perfluorinated compounds in drinking water sources in the City of Oakdale, Minnesota, as well as presence in the soil and groundwater at the Company's manufacturing facilities in Decatur, Alabama, and Cottage Grove, Minnesota, and at two former disposal sites in Washington County, Minnesota (Oakdale and Woodbury). The Company expects that most of the spending will occur over the next four years. As of June 30, 2016, the Company's receivable for insurance recoveries related to "other environmental liabilities" was \$15 million.

It is difficult to estimate the cost of environmental compliance and remediation given the uncertainties regarding the interpretation and enforcement of applicable environmental laws and regulations, the extent of environmental contamination and the existence of alternative cleanup methods. Developments may occur that could affect the Company's current assessment, including, but not limited to: (i) changes in the information available regarding the environmental impact of the Company's operations and products; (ii) changes in environmental regulations, changes in permissible levels of specific compounds in drinking water sources, or changes in enforcement theories and policies, including efforts to recover natural resource damages; (iii) new and evolving analytical and remediation techniques; (iv) success in allocating liability to other potentially responsible parties; and (v) the financial viability of other potentially responsible parties and third-party indemnitors. For sites included in both "environmental remediation liabilities" and "other environmental liabilities," at which remediation activity is largely complete and remaining activity relates primarily to operation and maintenance of the remedy, including required post-remediation monitoring, the Company believes the exposure to loss in excess of the amount accrued would not be material to the Company's consolidated results of operations or financial condition. However, for locations at which remediation activity is largely ongoing, the Company cannot estimate a possible loss or range of loss in excess of the associated established accruals for the reasons described above

#### Other Matters

## Commercial Litigation

3M sued TransWeb Corporation in Minnesota in 2010 for infringement of several 3M patents covering fluorination and hydrocharging of filter media used in 3M's respirators and furnace filters. TransWeb filed a declaratory judgment action in and successfully moved the litigation to the U.S. District Court for the District of New Jersey, seeking a declaration of invalidity and non-infringement of 3M's patents, and further alleging that 3M waited too long to enforce its rights. TransWeb also alleged 3M obtained the patents through inequitable conduct and that 3M's attempt to enforce the patents constituted a violation of the antitrust laws. In November 2012, a jury returned a verdict in favor of TransWeb on all but one count, including findings that 3M's patents were invalid and not infringed, and that 3M had committed an antitrust violation by seeking to enforce a patent it had obtained fraudulently. The jury also recommended that the court find 3M had committed inequitable conduct in obtaining the patents, and that the patents were therefore unenforceable. Since the vast majority of TransWeb's claim for treble antitrust damages was in the form of its attorneys' fees and expenses in connection with the defense of the patent case, the parties agreed that the measure of damages would not go to the jury, but rather would be submitted to a special master after the trial. In April, 2014, the court issued an order denying 3M's motions to set aside the jury's verdict. In addition, the court found two 3M patents unenforceable due to inequitable conduct. The court accepted the special master's recommendation as to the amount of attorneys' fees to be awarded as damages, and entered judgment against 3M in the amount of approximately \$26 million. In July 2014, 3M filed a notice of appeal of the judgment to the U.S. Court of Appeals for the Federal Circuit. In February, 2016, the U.S. Court of Appeals for the Federal Circuit issued its decision affirming the lower court's judgment. In March 2016, 3M paid TransWeb \$27 million in

Andover Healthcare filed an infringement suit against 3M in May 2013 in the U.S. District Court for the District of Delaware. Andover also filed a related infringement action against 3M and 3M Deutschland GmbH in December 2013 in Mannheim, Germany. In both cases, Andover alleges that certain of 3M's self-adherent wraps, including Coban™ Latex Free and Nexcare™ No Hurt Latex Free wraps, infringe Andover's U.S. and German patents. 3M denies that it infringes Andover's patents, asserts that the patents are invalid, and claims that Andover should be precluded from any recovery, in part because of its long delay in bringing this action. 3M and Andover have each filed motions for summary

judgment. A hearing on the motions is scheduled in August 2016. Trial in the U.S. matter is scheduled for November 2016. A hearing in the German infringement case occurred in September 2014. In November 2014, the German trial court issued a decision ordering the appointment of an expert to assist with analysis of whether 3M's products infringe Andover's German patent. Separately, 3M filed a nullity action in Germany, challenging the validity of Andover's German patent. At a hearing in July 2015, the German patent court revoked Andover's German patents. Andover has appealed that decision and, in April 2016, the German trial court stayed the infringement proceedings during the pendency of Andover's appeal. No liability has been recorded in the Andover litigation, as the Company believes that any such liability is not probable and estimable.

### Product Liability Litigation

Électricité de France (EDF) filed a lawsuit against 3M France in the French courts in 2006 claiming commercial loss and property damage after experiencing electrical network failures which EDF claims were caused by allegedly defective 3M transition splices. The French Court of Appeals at Versailles affirmed the commercial trial court's decision that the transition splices conformed to contract specifications and that EDF thoroughly analyzed and tested the splices before purchase and installation. The Court of Appeals, however, ordered a court-appointed expert to study the problem and issue a technical opinion on the cause of the network failures. The court-appointed expert submitted his report to the commercial court in May 2014. The expert found potential defects in 3M's product and found that EDF incurred damages in excess of 100 million euros. The expert's opinion was not dispositive of liability or damages and subject to numerous factual and legal challenges that could be raised with the court. In June 2016, the parties reached an agreement to resolve this dispute; the agreement includes confidential terms that, when taking into account 3M's insurance coverage, were not material to the Company's consolidated results of operations or financial condition.

One customer obtained an order in the French courts against 3M Purification SAS (a French subsidiary) in October 2011 appointing an expert to determine the amount of commercial loss and property damage allegedly caused by allegedly defective 3M filters used in the customer's manufacturing process. An Austrian subsidiary of this same customer also filed a claim against 3M Austria GmbH (an Austrian subsidiary) and 3M Purification SAS in the Austrian courts in September 2012 seeking damages for the same issue. Those two cases are still pending. Another customer filed a lawsuit against 3M Deutschland GmbH (a German subsidiary) in the German courts in March 2012 seeking commercial loss and property damage allegedly caused by the same 3M filters used in that customer's manufacturing process; the Company has resolved the claims in the German litigation. The Company has also settled without litigation the claims of two other customers arising out of the same issue. The amounts paid are not material to the Company's consolidated results of operations or financial condition.

As of June 30, 2016, the Company is a named defendant in approximately 437 lawsuits (compared to approximately 122 lawsuits at December 31, 2015), most of which are pending in federal or state court in Minnesota, in which the plaintiffs claim they underwent various joint arthroplasty, cardiovascular, and other surgeries and later developed surgical site infections due to the use of the Bair Hugger™ patient warming system. The complaints seek damages and other relief based on theories of strict liability, negligence, breach of express and implied warranties, failure to warn, design and manufacturing defect, fraudulent and/or negligent misrepresentation/concealment, unjust enrichment, and violations of various state consumer fraud, deceptive or unlawful trade practices and/or false advertising acts. One case, from the U.S. District Court for the Western District of Tennessee is a putative nationwide class action. The U.S. Judicial Panel on Multidistrict Litigation (MDL) granted the plaintiffs' motion to transfer and consolidate all cases pending in federal courts to the U.S. District Court for the District of Minnesota to be managed in a multi-district proceeding during the pre-trial phase of the litigation. In June 2016, the Company was served with a putative class action filed in the Ontario Superior Court of Justice for all Canadian residents who underwent various joint arthroplasty, cardiovascular, and other surgeries and later developed surgical site infections due to the use of the Bair Hugger™ patient warming system. The representative plaintiff seeks relief (including punitive damages) under Canadian law based on theories similar to those asserted in the MDL The Bair Hugger™ product line was acquired by 3M as part of the 2010 acquisition of Arizant, Inc., a leading manufacturer of patient warming solutions designed to prevent hypothermia and maintain normal body temperature in surgical settings. No liability has been recorded for this matter because the Company believes that any such liability is not pro

In September 2011, 3M Oral Care launched Lava Ultimate CAD/CAM dental restorative material. The product was originally indicated for inlay, onlay, veneer, and crown applications. In June 2015, 3M Oral Care voluntarily removed crown applications from the product's instructions for use, following reports from dentists of patients' crowns debonding, requiring additional treatment. The product remains on the market for other applications. 3M communicated with the U.S. Food and Drug Administration, as well as regulators outside the United States. 3M also informed customers and distributors of its action, offered to accept return of unused materials and provide refunds. In the second quarter of 2016 and in July, six complaints were filed in the U.S. District Court for the District of Minnesota and one complaint was filed in the U.S. District Court for the Southern District of Florida each seeking certification of a class action of dentists in the United States and its territories related to the Lava Ultimate dental crowns. The complaints allege 3M marketed and sold defective Lava Ultimate dental crowns to dentists throughout the country and, under various theories, seek monetary damages (replacement costs and business reputation loss), disgorgement of profits, injunction from marketing and selling Lava Ultimate for use in dental crowns, statutory penalties, and attorneys' fees. The plaintiffs in one of the cases filed in the District of Minnesota have moved the MDL to transfer and consolidate all pending cases to the District of Minnesota to be managed in an MDL proceeding during the pre-trial phase of the litigation. 3M opposed that motion and filed a motion instead to transfer the one case pending in the Southern District of Florida to the District of Minnesota where it can be consolidated with the other six pending cases for both pretrial and trial. Oral argument on the MDL motion occurred in July 2016. No liability has been recorded for this matter because the Company believes that any such liability is not proba

For product liability litigation matters described in this section for which a liability has been recorded, the Company believes the amount recorded is not material to the Company's consolidated results of operations or financial condition. In addition, the Company is not able to estimate a possible loss or range of loss in excess of the established accruals at this time.

## **NOTE 13. Stock-Based Compensation**

The 3M 2008 Long-Term Incentive Plan (LTIP), as discussed in 3M's Current Report on Form 8-K dated May 17, 2016 (which updated 3M's 2015 Annual Report on Form 10-K), provides for the issuance or delivery of up to 100 million shares of 3M common stock (including additional shareholder approvals subsequent to 2008) pursuant to awards granted under the plan. In May 2016, shareholders approved the 2016 LTIP, providing an additional 23,965,000 shares, increasing the number of approved shares to 123,965,000 shares. The 2016 LTIP succeeds the 3M 2008 LTIP. Awards may be issued in the form of incentive stock options, nonqualified stock options, progressive stock options, stock appreciation rights, restricted stock, restricted stock units, other stock awards, and performance units and performance shares. Awards denominated in shares of common stock other than options and Stock Appreciation Rights, count against the 123,965,000 million share limit as 3.38 shares for every one share covered by such award (for full value awards with grant dates prior to May 11, 2010), as 2.87 shares for every one share covered by such award (for full value awards with grant dates on or after of May 11, 2010 and prior to May 8, 2012), as 3.50 shares for every one share covered by such award (for full value awards with grant dates on or after of May 8, 2012 and prior to May 10, 2016), or as 2.50 shares for every one share covered by such award (for full value awards with grant dates on or after of May 8, 2012 and prior to May 10, 2016), or as 2.50 shares for every one share covered by such award (for full value awards with grant dates on or after of May 8, 2012 and prior to May 10, 2016), or as 2.50 shares for every one share covered by such award (for full value awards with grant dates on or after of May 8, 2012 and prior to May 10, 2016), or as 2.50 shares for every one share covered by such award (for full value awards with grant dates on or after of May 10, 2016 or later). The remaining total shares available for grant under the LTIP Pro

The Company's annual stock option and restricted stock unit grant is made in February to provide a strong and immediate link between the performance of individuals during the preceding year and the size of their annual stock compensation grants. The grant to eligible employees uses the closing stock price on the grant date. Accounting rules require recognition of expense under a non-substantive vesting period approach, requiring compensation expense recognition when an employee is eligible to retire. Employees are considered eligible to retire at age 55 and after having completed ten years of service. This retiree-eligible population represents 35 percent of the 2016 annual grant stock-based compensation award expense dollars; therefore, higher stock-based compensation expense is recognized in the first quarter.

In addition to the annual grants, the Company makes other minor grants of stock options, restricted stock units and other stock-based grants. The Company issues cash settled restricted stock units and stock appreciation rights in certain countries. These grants do not result in the issuance of common stock and are considered immaterial by the Company.

Amounts recognized in the financial statements with respect to stock-based compensation programs, which include stock options, restricted stock, restricted stock units, performance shares and the General Employees' Stock Purchase Plan (GESPP), are provided in the following table. Capitalized stock-based compensation amounts were not material.

During the first quarter of 2016, the Company adopted ASU No. 2016-09, *Improvements to Employee Share-Based Payment Accounting*. The adoption is required to be implemented prospectively and resulted in income tax benefits of \$59 million and \$140 million in the second quarter and first six months of 2016, respectively. See Note 1 for additional information regarding ASU No. 2016-09.

# **Stock-Based Compensation Expense**

	Three mon	 ded	Six months ended June 30,			
(Millions)	2016	2015		2016		2015
Cost of sales	\$ 8	\$ 8	\$	31	\$	31
Selling, general and administrative expenses	34	35		130		123
Research, development and related expenses	 7	6		32		33
Stock-based compensation expenses	\$ 49	\$ 49	\$	193	\$	187
Income tax benefits	\$ (72)	\$ (14)	\$	(199)	\$	(61)
Stock-based compensation expenses (benefits), net of tax	\$ (23)	\$ 35	\$	(6)	\$	126

# **Stock Option Program**

The following table summarizes stock option activity during the six months ended June 30, 2016:

			Weighted	
		Weighted	Remaining	Aggregate
	Number of	Average	Contractual Life	Intrinsic Value
	Options	Exercise Price	(months)	(millions)
Under option —				
January 1	38,552,445	<b>\$</b> 102.01		
Granted:				
Annual	5,591,727	147.99		
Exercised	(6,201,880)	86.81		
Canceled	(136,887)	147.97		
June 30	37,805,405	\$ 111.14	74	\$ 2,419
Options exercisable				
June 30	26,739,297	\$ 95.14	61	\$ 2,139

Stock options vest over a period from one year to three years with the expiration date at 10 years from date of grant. As of June 30, 2016, there was \$105 million of compensation expense that has yet to be recognized related to non-vested stock option based awards. This expense is expected to be recognized over the remaining weighted-average vesting period of 24 months. The total intrinsic values of stock options exercised were \$469 million and \$366 million during the six months ended June 30, 2016 and 2015, respectively. Cash received from options exercised was \$534 million and \$376 million for the June 30, 2016 and 2015, respectively. The Company's actual tax benefits realized for the tax deductions related to the exercise of employee stock options were \$173 million and \$136 million for the six months ended June 30, 2016 and 2015, respectively.

For the primary 2016 annual stock option grant, the weighted average fair value at the date of grant was calculated using the Black-Scholes option-pricing model and the assumptions that follow.

## **Stock Option Assumptions**

	Annual 2016
Exercise price	\$ 147.87
Risk-free interest rate	1.5 %
Dividend yield	2.5 %
Expected volatility	20.8 %
Expected life (months)	 77
Black-Scholes fair value	\$ 22.47

Expected volatility is a statistical measure of the amount by which a stock price is expected to fluctuate during a period. For the 2016 annual grant date, the Company estimated the expected volatility based upon the average of the most recent one year volatility, the median of the term of the expected life rolling volatility, the median of the most recent term of the expected life volatility of 3M stock, and the implied volatility on the grant date. The expected term assumption is based on the weighted average of historical grants.

# **Restricted Stock and Restricted Stock Units**

The following table summarizes restricted stock and restricted stock unit activity during the six months ended June 30, 2016:

Nonvested balance —	Number of Awards	A Gr	Veighted Average Pant Date hir Value
As of January 1 Granted	2,441,088	\$	127.47
Annual	749,068		148.20
Other	7,278		167.80
Vested	(882,421)		102.20
Forfeited	(30,014)		142.64
As of June 30	2,284,999	\$	143.95

As of June 30, 2016, there was \$120 million of compensation expense that has yet to be recognized related to non-vested restricted stock units and restricted stock. This expense is expected to be recognized over the remaining weighted-average vesting period of 26 months. The total fair value of restricted stock units and restricted stock that vested during the six months ended June 30, 2016 and 2015 was \$136 million, respectively. The Company's actual tax benefits realized for the tax deductions related to the vesting of restricted stock units and restricted stock was \$51 million and \$58 million for the six months ended June 30, 2016 and 2015, respectively.

Restricted stock units granted generally vest three years following the grant date assuming continued employment. Dividend equivalents equal to the dividends payable on the same number of shares of 3M common stock accrue on these restricted stock units during the vesting period, although no dividend equivalents are paid on any of these restricted stock units that are forfeited prior to the vesting date. Dividends are paid out in cash at the vest date on restricted stock units. Since the rights to dividends are forfeitable, there is no impact on basic earnings per share calculations. Weighted average restricted stock unit shares outstanding are included in the computation of diluted earnings per share.

# **Performance Shares**

Instead of restricted stock units, the Company makes annual grants of performance shares to members of its executive management. The 2016 performance criteria for these performance shares (organic volume growth, return on invested capital, free cash flow conversion, and earning per share growth) were selected because the Company believes that they

are important drivers of long-term stockholder value. The number of shares of 3M common stock that could actually be delivered at the end of the three-year performance period may be anywhere from 0% to 200% of each performance share granted, depending on the performance of the Company during such performance period. Non-substantive vesting requires that expense for the performance shares be recognized over one or three years depending on when each individual became a 3M executive. Prior to the 2016 performance share grant, performance shares did not accrue dividends during the performance period. Therefore, the grant date fair value was determined by reducing the closing stock price on the date of grant by the net present value of dividends during the performance period. The 2016 performance share grant accrues dividends, therefore the grant date fair value is equal to the closing stock price on the date of grant. Since the rights to dividends are forfeitable, there is no impact on basic earnings per share calculations. Weighted average performance shares whose performance period is complete are included in computation of diluted earnings per share.

The following table summarizes performance share activity during the six months endedJune 30, 2016:

Undistributed balance —	Number of Awards	Gı	Veighted Average rant Date hir Value
As of January 1	871,192	\$	120.89
Granted	211,021		159.50
Distributed	(367,428)		99.06
Performance change	(69,743)		161.40
Forfeited	(17,488)		146.65
As of June 30	627,554	\$	141.44

As of June 30, 2016, there was \$27 million of compensation expense that has yet to be recognized related to performance shares. This expense is expected to be recognized over the remaining weighted-average earnings period of 10 months. The total fair values of performance shares that were distributed were \$54 million for both the six months ended June 30, 2016 and 2015. The Company's actual tax benefits realized for the tax deductions related to the distribution of performance shares were \$15 million for both the six months ended June 30, 2016 and 2015.

## **NOTE 14. Business Segments**

3M's businesses are organized, managed and internally grouped into segments based on differences in markets, products, technologies and services. 3M manages its operations in five business segments: Industrial; Safety and Graphics; Health Care; Electronics and Energy; and Consumer. 3M's five business segments bring together common or related 3M technologies, enhancing the development of innovative products and services and providing for efficient sharing of business resources. Transactions among reportable segments are recorded at cost. 3M is an integrated enterprise characterized by substantial intersegment cooperation, cost allocations and inventory transfers. Therefore, management does not represent that these segments, if operated independently, would report the operating income information shown. The difference between operating income and pre-tax income relates to interest income and interest expense, which are not allocated to business segments.

Effective in the first quarter of 2016, 3M made a product line reporting change involving two of its business segments in its continuing effort to improve the alignment of its businesses around markets and customers.

The change between business segments was as follows:

Elements of the electronic bonding product lines were previously separately reflected in the Electronics Materials Solutions Division (Electronics and Energy business segment) and the Industrial Adhesives and Tapes Division (Industrial business segment). Effective in the first quarter of 2016, certain sales and operating income results for these electronic bonding product lines in aggregate were equally divided between the Electronics and Energy business segment and Industrial business segment. This change resulted in a decrease in

net sales and operating income for total year 2015 of \$33 million and \$7 million, respectively, in the Industrial business segment offset by a corresponding increase in the Electronics and Energy business segment.

The financial information presented herein reflects the impact of the preceding product line reporting change between business segments for all periods presented.

## **Business Segment Information**

	Three months ended June 30,					Six months ended June 30,			
(Millions)		2016		2015		2016		2015	
Net Sales									
Industrial	\$	2,631	\$	2,632	\$	5,207	\$	5,288	
Safety and Graphics		1,499		1,432		2,911		2,804	
Health Care		1,404		1,364		2,787		2,693	
Electronics and Energy		1,181		1,312		2,325		2,636	
Consumer		1,130		1,111		2,179		2,159	
Corporate and Unallocated		4		(4)		5		(2)	
Elimination of Dual Credit		(187)		(161)		(343)		(314)	
Total Company	\$	7,662	\$	7,686	\$	15,071	\$	15,264	
		,							
Operating Income									
Industrial	\$	615	\$	608	\$	1,232	\$	1,204	
Safety and Graphics		411		364		756		699	
Health Care		460		440		915		848	
Electronics and Energy		229		278		437		563	
Consumer		281		259		519		499	
Corporate and Unallocated		(88)		(74)		(129)		(174)	
Elimination of Dual Credit		(42)		(35)		(76)		(69)	
Total Company	\$	1,866	\$	1,840	\$	3,654	\$	3,570	

Corporate and unallocated operating income includes a variety of miscellaneous items, such as corporate investment gains and losses, certain derivative gains and losses, certain insurance-related gains and losses, certain litigation and environmental expenses, corporate restructuring charges and certain under- or over-absorbed costs (e.g. pension, stock-based compensation) that the Company may choose not to allocate directly to its business segments. Because this category includes a variety of miscellaneous items, it is subject to fluctuation on a quarterly and annual basis.

3M business segment reporting measures include dual credit to business segments for certain U.S. sales and related operating income. Management evaluates each of its five business segments based on net sales and operating income performance, including dual credit U.S. reporting to further incentivize U.S. sales growth. As a result, 3M provides additional ("dual") credit to those business segments selling products in the U.S. to an external customer when that segment is not the primary seller of the product. For example, certain respirators are primarily sold by the Personal Safety Division within the Safety and Graphics business segment; however, the Industrial business segment also sells this product to certain customers in its U.S. markets. In this example, the non-primary selling segment (Industrial) would also receive credit for the associated net sales it initiated and the related approximate operating income. The assigned operating income related to dual credit activity may differ from operating income that would result from actual costs associated with such sales. The offset to the dual credit business segment reporting is reflected as a reconciling item entitled "Elimination of Dual Credit," such that sales and operating income for the U.S. in total are unchanged.

# REPORT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM\*

To the Stockholders and Board of Directors of 3M Company:

We have reviewed the accompanying consolidated balance sheet of 3M Company and its subsidiaries as of June 30, 2016, and the related consolidated statements of income and comprehensive income for the three-month and six-month periods ended June 30, 2016 and 2015 and the consolidated statements of cash flows for the six-month periods ended June 30, 2016 and 2015. These interim financial statements are the responsibility of the Company's management.

We conducted our review in accordance with the standards of the Public Company Accounting Oversight Board United States). A review of interim financial information consists principally of applying analytical procedures and making inquiries of persons responsible for financial and accounting matters. It is substantially less in scope than an audit conducted in accordance with the standards of the Public Company Accounting Oversight Board (United States), the objective of which is the expression of an opinion regarding the financial statements taken as a whole. Accordingly, we do not express such an opinion.

Based on our review, we are not aware of any material modifications that should be made to the accompanying consolidated interim financial statements for them to be in conformity with accounting principles generally accepted in the United States of America.

We previously audited, in accordance with the standards of the Public Company Accounting Oversight Board (United States), the consolidated balance sheet as of December 31, 2015, and the related consolidated statements of income, comprehensive income, changes in equity, and cash flows for the year then ended (not presented herein), and in our report dated February 11, 2016, except with respect to our opinion on the consolidated financial statements insofar as it relates to the business segment reporting changes discussed in Notes 3 and 16 as to which the date is May 17, 2016, which included a paragraph that described the change in the manner of accounting for marketable securities and deferred tax assets and liabilities, we expressed an unqualified opinion on those consolidated financial statements. In our opinion, the information set forth in the accompanying consolidated balance sheet information as of December 31, 2015, is fairly stated in all material respects in relation to the consolidated balance sheet from which it has been derived.

/s/ PricewaterhouseCoopers LLP

PricewaterhouseCoopers LLP Minneapolis, Minnesota August 2, 2016

<sup>\*</sup> Pursuant to Rule 436(c) of the Securities Act of 1933 ("Act") this should not be considered a "report" within the meaning of Sections 7 and 11 of the Act and the independent registered public accounting firm liability under Section 11 does not extend to it.

# Item 2. Management's Discussion and Analysis of Financial Condition and Results of Operations.

Management's Discussion and Analysis of Financial Condition and Results of Operations (MD&A) is designed to provide a reader of 3M's financial statements with a narrative from the perspective of management. 3M's MD&A is presented in the following sections:

- Overview
- Results of Operations
- Performance by Business Segment
- · Financial Condition and Liquidity
- · Cautionary Note Concerning Factors That May Affect Future Results

Forward-looking statements in Part I, Item 2 may involve risks and uncertainties that could cause results to differ materially from those projected (refer to the section entitled "Cautionary Note Concerning Factors That May Affect Future Results" in Part I, Item 2 and the risk factors provided in Part II, Item 1A for discussion of these risks and uncertainties).

## **OVERVIEW**

3M is a diversified global manufacturer, technology innovator and marketer of a wide variety of products and services. 3M manages its operations in five operating business segments: Industrial; Safety and Graphics; Health Care; Electronics and Energy; and Consumer. From a geographic perspective, any references to EMEA refer to Europe, Middle East and Africa on a combined basis. Any references to "Membrana" refer to the former Separations Media business acquired by 3M from Polypore in 2015.

As described in 3M's Quarterly Report on Form 10-Q for the period ended March 31, 2016, and also in 3M's Current Report on Form 8-K dated May 17, 2016 (which updated 3M's 2015 Annual Report on Form 10-K), effective in the first quarter of 2016, 3M made a product line reporting change involving two of its business segments. Segment information presented herein reflects the impact of these changes for all periods presented. Refer to Note 14 for additional detail. This quarterly report on Form 10-Q should be read in conjunction with the Company's consolidated statements and notes included in its Current Report on Form 8-K dated May 17, 2016.

The stronger U.S. dollar negatively impacted sales and earnings in the second quarter and first six months of 2016 versus the same periods last year, while global economic growth was mixed. Despite these challenges, 3M had positive organic local-currency growth in three of its five business segments and in all major geographic areas, except Asia Pacific. 3M also expanded operating income margins by 0.5 percentage points. Fourth quarter 2015 restructuring actions, as discussed in Note 4, impacted approximately 1,700 positions worldwide, contributing to an estimated pre-tax savings of approximately \$130 million for total year 2016.

Additional discussion of second quarter and first six months results follows.

## Earnings per share attributable to 3M common shareholders - diluted:

The following table provides the increase (decrease) in diluted earnings per share for the three-months and six-months ended June 30, 2016 compared to 2015.

(Earnings per diluted share)	Three m	Six months ended June 30, 2016		
Same period last year	\$	2.02	\$	3.87
Increase/(decrease) in earnings per share - diluted, due to:				
Operational benefits		0.04		0.08
Acquisitions and divestitures		0.03		0.10
Foreign exchange impacts		(0.04)		(0.09)
Net interest expense		_		(0.02)
Income tax rate		(0.04)		0.03
Shares of common stock outstanding		0.07		0.16
Current period	\$	2.08	\$	4.13

Net income attributable to 3M increased 6 cents and 26 cents per diluted share in the second quarter and first six months of 2016, respectively, when compared to the same periods last year. Operational benefits increased earnings, helped by lower defined benefit pension and postretirement expenses. Operational benefits also included the combination of higher selling prices and lower raw material costs, in addition to productivity benefits related to the fourth quarter 2015 restructuring. These operational benefits were partially offset by the impact of organic sales volume declines and lower asset utilization.

Acquisition and divestiture impacts, which are measured for the first twelve months post-transaction, related to the 2015 acquisitions of Membrana and Capital Safety, plus the first quarter 2016 divestiture of Polyfoam, the fourth quarter 2015/first quarter 2016 divestiture of the library systems business, and the fourth quarter 2015 divestiture of the license plate converting business in France. On a combined basis, these acquisition/divestiture year-on-year impacts increased earnings by 3 cents and 10 cents per diluted share in the second quarter and first six months of 2016, respectively, driven by solid performances from 2015 acquisitions and divestiture gains.

Foreign currency impacts (net of hedging) decreased pre-tax earnings by approximately \$40 million and \$90 million year-on-year in the second quarter and first six months of 2016, respectively, excluding the impact of foreign currency changes on tax rates. This is equivalent to a year-on-year decrease of 4 cents and 9 cents per diluted share for the second quarter and first six months of 2016, respectively.

Over the past few years, 3M has taken actions to better optimize its capital structure and reduce its cost of capital by adding debt. These actions have led to an increase in interest expense year-on-year in the first six months of 2016, largely due to higher average debt balances.

The income tax rate was 29.6 percent in the second quarter, up 1.5 percentage points versus last year's second quarter, while the first six months 2016 tax rate of 28.2 percent declined 0.6 percentage points from the same period last year. The second quarter and first six months 2016 change in tax rate was driven by a number of factors as referenced in Note 6, including the first quarter 2016 adoption of Accounting Standards Update (ASU) No. 2016-09 (discussed in Note 1).

Weighted-average diluted shares outstanding in the second quarter and first six months of 2016 declined 3.4 percent and 3.9 percent year-on-year, respectively, which benefited earnings per share. The benefits from share repurchases, net of issuances, were partially offset by the adoption of ASU No. 2016-09, which increased the number of diluted shares.

# Sales and operating income by business segment:

The following tables contain sales and operating income results by business segment for the three months and six months ended June 30, 2016 and 2015. In addition to the discussion below, refer to the section entitled "Performance by Business Segment" later in MD&A for a more detailed discussion of the sales and operating income results of the

Company and its respective business segments (including Corporate and Unallocated). Refer to Note 14 for additional information on business segments, including Elimination of Dual Credit.

			Thre	e months							
	2016 2015								% change		
	Net		(	Oper.		Net	Oper.		Net	Oper.	
(Dollars in millions)		Sales	I	Income		Sales		ncome	Sales	Income	
Business Segments											
Industrial	\$	2,631	\$	615	\$	2,632	\$	608	(0.1)%	1.2 %	
Safety and Graphics		1,499		411		1,432		364	4.7 %	12.8 %	
Health Care		1,404		460		1,364		440	3.0 %	4.3 %	
Electronics and Energy		1,181		229		1,312		278	(10.0)%	(18.1)%	
Consumer		1,130		281		1,111		259	1.7 %	8.8 %	
Corporate and Unallocated		4		(88)		(4)		(74)	_	_	
Elimination of Dual Credit		(187)		(42)		(161)		(35)	_	_	
Total Company	\$	7,662	\$	1,866	\$	7,686	\$	1,840	(0.3)%	1.4 %	

Three months ended June 30, 2016									
Worldwide Sales Change Analysis By Business Segment	Organic local- currency sales	Acquisitions	Divestitures	Translation	Total sales change				
Industrial	(1.4)%	2.8 %	(0.2)%	(1.3)%	(0.1)%				
Safety and Graphics	2.3 %	6.9 %	(2.3)%	(2.2)%	4.7 %				
Health Care	4.9 %	— %	— %	(1.9)%	3.0 %				
Electronics and Energy	(9.1)%	— %	— %	(0.9)%	(10.0)%				
Consumer	2.7 %	<u> </u>	<u> </u>	(1.0)%	1.7_%				
Total Company	(0.2)%	1.9 %	(0.5)%	(1.5)%	(0.3)%				

Sales in U.S. dollars in the second quarter of 2016 decreased 0.3 percent, substantially impacted by foreign currency translation, which reduced sales by 1.5 percent. Total company organic local-currency sales (which includes organic volume impacts plus selling price impacts) decreased 0.2 percent, with growth in Health Care, Consumer, and Safety and Graphics more than offset by declines in Industrial, and Electronics and Energy. Four of 3M's five business segments achieved operating income margins in excess of 23 percent. Worldwide operating income margins for the second quarter of 2016 were 24.4 percent, compared to 23.9 percent for the second quarter of 2015.

3M continued to invest for long-term success through research and development, commercialization and acquisitions. Acquisitions increased second quarter sales growth by 1.9 percent, which related to acquisitions closed in 2015. In August 2015, 3M (Safety and Graphics Business) acquired Capital Safety, a leading global provider of fall protection equipment. In August 2015, 3M (Industrial Business) also acquired Membrana, a leading provider of microporous membranes and modules for filtration in life sciences, industrial and specialty segments. For additional detail, refer to Note 2 in the Consolidated Financial Statements in 3M's Current Report on Form 8-K dated May 17, 2016 (which updated 3M's 2015 Annual Report on Form 10-K).

Divestitures reduced second quarter sales growth by 0.5 percent. As part of its portfolio management process, in the fourth quarter of 2015, 3M (Safety and Graphics Business) divested the license plate converting business in France and substantially all of the library systems business. In the first quarter of 2016, 3M completed the sale of the remaining portions of its library systems business. Also, in the first quarter of 2016, 3M (Industrial Business Group) divested the assets of 3M's pressurized polyurethane foam adhesives business (formerly known as Polyfoam). This business is a provider of pressurized polyurethane foam adhesive formulations and systems into the residential roofing, commercial roofing and insulation and industrial foam segments in the United States with annual sales of approximately \$20 million. The Company recorded a pre-tax gain of \$40 million in the first quarter of 2016 as a result of the sale of Polyfoam and the remaining portion of the library systems business. Refer to Note 2 in the Consolidated Financial Statements for additional detail.

		20	16			20	15		% change		
		Net		Oper.		Net	Oper.		Net	Oper.	
(Dollars in millions)	_	Sales	I	Income		Sales		ncome	Sales	Income	
Business Segments											
Industrial	\$	5,207	\$	1,232	\$	5,288	\$	1,204	(1.5)%	2.4 %	
Safety and Graphics		2,911		756		2,804		699	3.8 %	8.2 %	
Health Care		2,787		915		2,693		848	3.5 %	7.8 %	
Electronics and Energy		2,325		437		2,636		563	(11.8)%	(22.5)%	
Consumer		2,179		519		2,159		499	0.9 %	4.0 %	
Corporate and Unallocated		5		(129)		(2)		(174)	_	_	
Elimination of Dual Credit		(343)		(76)		(314)		(69)		<u> </u>	
Total Company	\$	15,071	\$	3,654	\$	15,264	\$	3,570	(1.3)%	2.3 %	

Six months ended June 30, 2016									
Worldwide Sales Change Analysis By Business Segment	Organic local- currency sales	Acquisitions	Divestitures	Translation	Total sales change				
Industrial	(1.6)%	2.4 %	(0.2)%	(2.1)%	(1.5)%				
Safety and Graphics	2.4 %	6.9 %	(2.4)%	(3.1)%	3.8 %				
Health Care	5.6 %	0.4 %	— %	(2.5)%	3.5 %				
Electronics and Energy	(10.4)%	— %	— %	(1.4)%	(11.8)%				
Consumer	2.7 %	— %	— %	(1.8)%	0.9 %				
Total Company	(0.6)%	2.0 %	(0.5)%	(2.2)%	(1.3)%				

Sales in U.S. dollars in the first six months of 2016 decreased 1.3 percent, substantially impacted by foreign currency translation, which reduced sales by 2.2 percent. Total company organic local-currency sales (which includes organic volume impacts plus selling price impacts) decreased 0.6 percent, with growth in Health Care, Consumer, and Safety and Graphics more than offset by declines in Industrial, and Electronics and Energy. Four of 3M's five business segments achieved operating income margins in excess of 23 percent. Worldwide operating income margins for the first six months of 2016 were 24.2 percent, compared to 23.4 percent for the first six months of 2015.

In March 2015, 3M (Health Care Business) acquired Ivera Medical Corp., a manufacturer of health care products that disinfect and protect devices used for access into a patient's bloodstream. Additional acquisition and divestiture impacts that impacted six months ended June 30, 2016 results are provided in the second quarter discussion above.

## Sales by geographic area:

Percent change information compares the second quarter and first six months of 2016 with the same periods last year, unless otherwise indicated. From a geographic perspective, any references to EMEA refer to Europe, Middle East and Africa on a combined basis.

	Three months ended June 30, 2016									
				F	Europe,	1	Latin			
	United		Asia		ddle East		nerica/	Other	**7	
	States	_	Pacific	_	Africa	_	anada	Unallocated	_	orldwide
Net sales (millions)	\$ 3,112	\$	2,144	\$	1,665	\$	739	<b>\$</b> 2	\$	7,662
% of worldwide sales	40.6 %	6	28.0	<b>%</b>	21.7 9	<b>6</b>	9.7 %	′о <u> </u>		100.0 %
Components of net sales change:										
Volume — organic	0.1 %	6	$(5.3)^{\circ}$	%	1.5 %	<b>6</b>	(2.4)%	′о —		(1.3)%
Price	0.3		(0.1)		1.5		7.2			1.1
Organic local-currency sales	0.4		(5.4)		3.0		4.8	_		(0.2)
Acquisitions	2.1		1.0		2.7		2.3	_		1.9
Divestitures	(0.6)		(0.2)		(0.7)		(0.3)	_		(0.5)
Translation			(0.2)		(1.7)		(10.5)			(1.5)
Total sales change	1.9 %	<u></u>	(4.8)	% <u> </u>	3.3	/ <sub>6</sub>	(3.7)%	<u></u>		(0.3)%

Sales in U.S. dollars increased 3.3 percent in EMEA and 1.9 percent in the United States, while sales declined 3.7 percent in Latin America/Canada and 4.8 percent in Asia Pacific. Currency impacts reduced second quarter 2016 worldwide sales growth by 1.5 percent.

Worldwide selling prices rose 1.1 percent in the second quarter of 2016. 3M has been raising selling prices in a number of developing countries to help offset the impact of currency devaluations. 3M also continues to generate positive selling price changes across most of its businesses, boosted by world-class innovation and strong new product flow, both of which are important elements of the 3M business model.

Foreign currency translation reduced year-on-year sales in all major geographies, driven by a 10.5 percent translation impact in Latin America/Canada, as the Brazilian Real weakened versus the U.S. dollar compared to second quarter 2015 by 11 percent. The Euro and Yen strengthened versus the U.S. dollar compared to second quarter 2015 by 2 percent and 14 percent, respectively.

In Latin America/Canada, organic local-currency sales grew 4.8 percent, led by Health Care at 8 percent, Industrial at 6 percent, and Safety and Graphics at 5 percent. Organic local-currency sales were flat in Consumer, and Electronics and Energy. Organic local-currency sales grew 5 percent in Mexico and declined 2 percent in Brazil.

In EMEA, organic local-currency sales increased 3.0 percent, as West Europe was up 3 percent and Central/East Europe and Middle East/Africa grew 2 percent. Organic local-currency sales growth in EMEA was led by both Health Care and Industrial at 4 percent, while both Electronics and Energy, and Safety and Graphics grew 2 percent. Organic local-currency sales declined 2 percent in Consumer.

In the United States, organic local-currency sales growth was 0.4 percent, with growth of 5 percent in Safety and Graphics, 4 percent in Health Care, and 3 percent in Consumer. Organic local-currency growth was flat in Electronics and Energy, and declined 5 percent in Industrial. Similar to the first quarter, U.S manufacturing activity remained soft in the second quarter, which impacted portions of 3M's Industrial business.

In Asia Pacific, organic local-currency sales declined 5.4 percent. Organic local-currency sales growth was led by Health Care at 7 percent, and Consumer at 6 percent, while Safety and Graphics declined 3 percent, and Industrial declined 4 percent. Electronics and Energy declined 15 percent, as 3M continues to experience soft end-market demand and channel inventory adjustments in consumer electronics. Organic local-currency sales declined 1 percent in Japan and 7 percent in China/Hong Kong. Excluding electronics, organic local-currency sales in Japan increased 2 percent and China/Hong Kong declined 2 percent.

	Six months ended June 30, 2016					
			Europe,	Latin		
	United	Asia	Middle East	America/	Other	*** 11 .1
	States	Pacific	& Africa		Unallocated	Worldwide
Net sales (millions)	\$ 6,038 \$	4,357	\$ 3,244	\$ 1,432	<b>\$</b>	\$ 15,071
% of worldwide sales	40.1 %	28.9 %	<b>6</b> 21.5 %	6 9.5 %	. —	100.0 %
Components of net sales change:						
Volume — organic	0.2 %	(5.3)%	6 1.1 %	6 (2.5)%	_	(1.6)%
Price	0.1	(0.2)	1.3	7.0		1.0
Organic local-currency sales	0.3	(5.5)	2.4	4.5	_	(0.6)
Acquisitions	2.4	1.0	2.7	2.3	_	2.0
Divestitures	(0.6)	(0.2)	(0.7)	(0.3)	_	(0.5)
Translation		(1.4)	(2.3)	(13.1)		(2.2)
Total sales change	2.1 %	(6.1)	% 2.1 %	(6.6)%		(1.3)%

Sales in U.S. dollars increased 2.1 percent in both the United States and EMEA, while sales declined 6.1 percent in Asia Pacific, and 6.6 percent in Latin America/Canada. Currency impacts reduced first six months 2016 worldwide sales growth by 2.2 percent. Worldwide selling prices rose 1.0 percent in the first six months of 2016.

In Latin America/Canada, organic local-currency sales grew 4.5 percent, led by Health Care at 8 percent, and Industrial at 7 percent, and Safety and Graphics at 3 percent. Organic local-currency sales were flat in both Electronics and Energy, and Consumer. Organic local-currency sales grew 8 percent in Mexico and was flat in Brazil.

In EMEA, organic local-currency sales increased 2.4 percent. Central/East Europe and Middle East/Africa grew 4 percent, and West Europe was up 2 percent. Organic local-currency sales growth in EMEA was led by Health Care at 5 percent, and Industrial at 3 percent, while Safety and Graphics grew 2 percent, and Electronics and Energy grew 1 percent. Organic local-currency sales declined 3 percent in Consumer

In the United States, organic local-currency sales grew 0.3 percent, with growth of 4 percent in both Health Care, and Safety and Graphics, and growth in Consumer of 3 percent, largely offset by declines in Electronics and Energy of 1 percent and Industrial of 5 percent. U.S manufacturing activity was soft in the first half of 2016, which impacted portions of 3M's Industrial business.

In Asia Pacific, organic local-currency sales declined 5.5 percent. Organic local-currency sales growth was led by Health Care at 9 percent, and Consumer at 6 percent, while Safety and Graphics was flat, and Industrial declined 4 percent. Electronics and Energy declined 16 percent, as 3M continues to experience soft end-market demand and channel inventory adjustments in consumer electronics. Organic local-currency sales declined 5 percent in Japan and 6 percent in China/Hong Kong. Excluding electronics, organic local-currency sales in Japan increased 1 percent and China/Hong Kong decreased 1 percent.

## Managing currency risks:

As discussed above, the stronger U.S. dollar negatively impacted sales and earnings in the second quarter and first six months of 2016 compared to the same period last year. 3M utilizes a number of tools to hedge currency risk related to earnings. 3M uses natural hedges such as pricing, productivity, hard currency and hard currency-indexed billings, and localizing source of supply. 3M also uses financial hedges to mitigate currency risk. In the case of more liquid currencies, 3M hedges a portion of its aggregate exposure, using a 12, 24 or 36 month horizon, depending on the currency in question. In the second quarter of 2014, 3M began extending its hedging tenor for certain major currencies, most notably the Euro and Yen, from a previous term of 12 months to a term of 24 months, and in the first quarter of 2015 extended this to 36 months. For less liquid currencies, financial hedging is frequently more expensive with more limitations on tenor. Thus this risk is largely managed via local operational actions using natural hedging tools as discussed above. In either case, 3M's hedging approach is designed to mitigate a portion of foreign currency risk and reduce volatility, ultimately allowing time for 3M's businesses to respond to changes in the marketplace.

## Financial condition:

3M generated \$2.545 billion of operating cash flows in the first six months of 2016, an increase of \$127 million when compared to the first six months of 2015. Refer to the section entitled "Financial Condition and Liquidity" later in MD&A for a discussion of items impacting cash flows.

In February 2016, 3M's Board of Directors authorized the repurchase of up to \$10 billion of 3M's outstanding common stock, with no pre-established end date. In the first six months of 2016, the Company purchased \$2.055 billion of its own stock, compared to \$2.581 billion of stock purchases in the first six months of 2015. As of June 30, 2016, approximately \$8.7 billion remained available under the February 2016 authorization. The Company expects to purchase \$4 billion to \$6 billion of its own stock in 2016. In February 2016, 3M's Board of Directors declared a first quarter 2016 dividend of \$1.11 per share, an increase of 8 percent. This marked the 58th consecutive year of dividend increases for 3M. In May 2016, 3M's Board of Directors declared a second quarter 2016 dividend of \$1.11 per share.

3M's debt to total capital ratio (total capital defined as debt plus equity) was 50 percent at June 30, 2016, and 48 percent at December 31, 2015. 3M currently has an AA- credit rating with a stable outlook from Standard & Poor's and has an A1 credit rating with a stable outlook from Moody's Investors Service. The Company generates significant ongoing cash flow and has proven access to capital markets funding throughout business cycles.

3M expects to contribute approximately \$200 million to \$400 million of cash to its global defined benefit pension and postretirement plans in 2016. The Company does not have a required minimum cash pension contribution obligation for its U.S. plans in 2016.

## RESULTS OF OPERATIONS

## Net Sales:

Refer to the preceding sections entitled "Sales and operating income by business segment" and "Sales and operating income by geographic area" for discussion of sales change.

## Operating Expenses:

	Three months ended June 30,			Six m		
(Percent of net sales)	2016	2015	Change	2016	2015	Change
Cost of sales	49.5 %	50.2 %	(0.7)%	49.6 %	50.3 %	(0.7)%
Selling, general and administrative expenses	20.4	20.2	0.2	20.3	20.4	(0.1)
Research, development and related expenses	5.7	5.7	_	5.9	5.9	_
Operating income	24.4 %	23.9 %	0.5 %	24.2 %	23.4 %	0.8 %

3M expects global defined benefit pension and postretirement expense in 2016 (before settlements, curtailments, special termination benefits and other) to decrease by approximately \$320 million pre-tax when compared to 2015, which impacts cost of sales; selling, general and administrative expenses (SG&A); and research, development and related expenses (R&D). Refer to 3M's Current Report on Form 8-K dated May 17, 2016 (MD&A section entitled Critical Accounting Estimates — Pension and Postretirement Obligations and Note 11, Pension and Postretirement Benefit Plans) for background concerning the change to the spot yield curve approach and other factors, which will result in decreased expenses in 2016. The year-on-year decrease in defined benefit pension and postretirement expense for the second quarter and first six months of 2016 was \$90 million and \$165 million, respectively. The first six months of 2015 includes the impact of a first quarter 2015 Japan pension curtailment gain of \$17 million.

The Company is investing in an initiative called business transformation, with these investments impacting cost of sales, SG&A, and R&D. Business transformation encompasses the ongoing multi-year phased implementation of an enterprise resource planning (ERP) system on a worldwide basis, as well as changes in processes and internal/external service delivery across 3M.

#### Cost of Sales:

Cost of sales includes manufacturing, engineering and freight costs.

Cost of sales as a percent of net sales improved by 0.7 percentage points in both the second quarter and first six months of 2016 when compared to the same periods last year. Cost of sales, measured as a percent of sales, decreased due to selling price increases and raw material cost decreases. Selling prices increased net sales year-on-year by 1.1 percent and 1.0 percent in the second quarter and first six months, respectively, while raw material cost deflation in both the second quarter and first six months was favorable by approximately 3.5 percent year-on-year. In addition, cost of sales decreased due to lower defined benefit pension and postretirement expense (of which a portion impacts cost of sales).

## Selling, General and Administrative Expenses:

SG&A increased 0.6 percent in the second quarter of 2016 and declined 2.0 percent in the first six months of 2016, when compared to the same periods last year, with year-to-date results benefiting from first quarter 2016 divestiture gains (as discussed in Note 2), foreign currency translation, and productivity benefits related to the fourth quarter 2015 restructuring. In addition, lower defined benefit pension and postretirement expense benefited SG&A, measured as a percent of sales, was 20.3 percent of sales in the first six months of 2016 compared to 20.4 percent in the first six months of 2015.

#### Research, Development and Related Expenses:

R&D, measured as a percent of sales, was 5.7 percent of sales for both the three months ended June 30, 2016 and 2015, and was 5.9 percent of sales for both the six months ended June 30, 2016 and 2015. R&D in dollars were flat in the second quarter of 2016 and decreased \$14 million in the first six months of 2016 compared to the same periods last year, benefitting from foreign currency translation and lower defined benefit pension and postretirement expense. 3M continued to invest in its key growth initiatives, including more R&D aimed at disruptive innovation programs with the potential to create entirely new markets and disrupt existing markets.

## Operating Income:

3M uses operating income as one of its primary business segment performance measurement tools. Refer to the table below for a reconciliation of operating income margins for the three months and six months ended June 30, 2016 versus the same periods last year.

(Percent of net sales)	Three months ended June 30, 2016	Six months ended June 30, 2016
Same period last year	23.9 %	23.4 %
Increase/(decrease) in operating income margin, due to:		
Selling price and raw material impact	1.3	1.2
Pension and postretirement benefit costs	1.1	1.0
Productivity from restructuring	0.4	0.4
Strategic investments	(0.3)	(0.2)
Foreign exchange impacts	(0.3)	(0.2)
Acquisitions	_	(0.1)
Organic volume and utilization	(1.1)	(0.9)
Legal and other	(0.6)	(0.4)
Current period	24.4 %	24.2 %

Operating income margins were 24.4 percent in the second quarter of 2016, compared to 23.9 percent in the second quarter of 2015, an improvement of 0.5 percentage points. The first six months of 2016 improved by 0.8 percentage points. 3M continues to benefit from the combination of higher selling prices and lower raw material costs, plus lower year-on-year defined benefit pension and postretirement expense, in addition to productivity benefits related to the fourth quarter 2015 restructuring. Items that reduced operating income margins included strategic investments, as 3M took

actions to better optimize its manufacturing footprint and accelerated growth investments across its businesses, in addition to foreign currency impacts (net of hedge gains). Acquisitions had a minimal impact on operating income margins due to solid performances from both Capital Safety and Membrana. Organic volume declines and related utilization impacts included the impact of lower asset utilization, particularly in electronics, and to a lesser extent, in the industrial businesses. The legal and other penalty in the preceding table, largely related to a second quarter 2016 unfavorable arbitration ruling on an insurance claim (discussed in Note 12). In the first six months of 2016, legal and other impacts were partially offset by first quarter 2016 divestiture gains.

## Interest Expense and Income:

	<u></u>	Three months ended June 30,					Six months ended June 30,		
(Millions)	2	016		2015		2016		2015	
Interest expense	\$	38	\$	35	\$	85	\$	66	
Interest income		(7)		(7)		(12)		(11)	
Total	\$	31	\$	28	\$	73	\$	55	

Interest expense was higher in the second quarter and first six months of 2016 compared to the same periods last year, largely due to higher average debt balances, which was partially offset by favorable foreign exchange impacts on inter-company financing activities.

#### Provision for Income Taxes:

	Three months ended		Six months e	nded	
	June 30, Ju		June 30, June 30,		,
(Percent of pre-tax income)	2016	2015	2016	2015	
Effective tax rate	29.6 %	28.1 %	28.2 %	28.8 %	

The effective tax rate for the second quarter of 2016 was 29.6 percent, compared to 28.1 percent in the second quarter of 2015, an increase of 1.5 percentage points. The effective tax rate for the first six months of 2016 was 28.2 percent, compared to 28.8 percent in the first six months of 2015, a decrease of 0.6 percentage points. The change in tax rates was driven by a number of factors as referenced in Note 6, including the 2016 adoption of ASU No. 2016-09 (discussed in Note 1). The company updated its tax rate guidance for total year 2016 to 29.5 percent (from 29.5 to 30.5 percent), as a result of additional net benefits from the 2016 adoption of ASU No. 2016-09. Refer to Note 6 for additional discussion.

The effective tax rate can vary from quarter to quarter due to discrete items, such as the settlement of income tax audits, changes in tax laws and employee share-based payment accounting; as well as recurring factors, such as the geographic mix of income before taxes.

## Net Income Attributable to Noncontrolling Interest:

	Three months ended			Six months ended					
	June 30,			June 30,					
(Millions)	2016		2015		20	116		2015	
Net income attributable to noncontrolling interest	\$	2	\$	3	\$	5	\$	5	Ē

Net income attributable to noncontrolling interest represents the elimination of the income or loss attributable to non-3M ownership interests in 3M consolidated entities. The primary noncontrolling interest relates to 3M India Limited, of which 3M's effective ownership is 75 percent.

# Currency Effects:

3M estimates that year-on-year currency effects, including hedging impacts, decreased pre-tax income by approximately \$40 million for the three months ended June 30, 2016, and decreased pre-tax income by approximately \$90 million for

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the six months ended June 30, 2016. This estimate includes the effect of translating profits from local currencies into U.S. dollars; the impact of currency fluctuations on the transfer of goods between 3M operations in the United States and abroad; and transaction gains and losses, including derivative instruments designed to reduce foreign currency exchange rate risks and any impacts from swapping Venezuelan bolivars into U.S. dollars. 3M estimates that year-on-year derivative and other transaction gains and losses decreased pre-tax income by approximately \$10 million for the three months ended June 30, 2016, which resulted in a minimal impact for the six months ended June 30, 2016.

# Significant Accounting Policies:

Information regarding new accounting standards is included in Note 1 to the Consolidated Financial Statements.

In March 2016, the FASB issued ASU No. 2016-09, Improvements to Employee Share-Based Payment Accounting, which modifies certain accounting aspects for share-based payments to employees including, among other elements, the accounting for income taxes and forfeitures, as well as classifications in the statement of cash flows. The Company early adopted ASU No. 2016-09 as of January 1, 2016. Prospectively beginning January 1, 2016, excess tax benefits/deficiencies have been reflected as income tax benefit/expense in the statement of income resulting in a \$59 million tax benefit in the quarter ended June 30, 2016, and \$140 million benefit for the six months ended June 30, 2016. 3M typically experiences the largest volume of stock option exercises and restricted stock unit vestings in the first quarter of its fiscal year. Refer to Note 1 for additional detail.

# PERFORMANCE BY BUSINESS SEGMENT

Disclosures related to 3M's business segments are provided in Note 14. The reportable segments are Industrial; Safety and Graphics; Health Care; Electronics and Energy; and Consumer.

## Corporate and Unallocated:

In addition to these five operating business segments, 3M assigns certain costs to "Corporate and Unallocated", which is presented separately in the preceding business segments table and in Note 14. Corporate and Unallocated includes a variety of miscellaneous items, such as corporate investment gains and losses, certain derivative gains and losses, certain insurance-related gains and losses, certain litigation and environmental expenses, corporate restructuring charges and certain under- or over-absorbed costs (e.g. pension, stock-based compensation) that the Company may choose not to allocate directly to its business segments. Because this category includes a variety of miscellaneous items, it is subject to fluctuation on a quarterly and annual basis.

Corporate and Unallocated operating income in the second quarter and first six months of 2016 when compared to the same periods last year decreased by \$14 million and improved by \$45 million, respectively. 3M's defined benefit pension and postretirement expense allocation to Corporate and Unallocated decreased by \$63 million and \$126 million, respectively, in the second quarter and first six months of 2016 when compared to the same periods last year. In the second quarter and first six months of 2016, the pension and postretirement benefit was partially offset by an unfavorable second quarter 2016 arbitration ruling (discussed in Note 12).

## **Operating Business Segments:**

Information related to 3M's business segments for the second quarter and first six months of both 2016 and 2015 is presented in the tables that follow. Organic local-currency sales include both organic volume impacts plus selling price impacts. Acquisition impacts, if any, are measured separately for the first twelve months post-transaction. The divestiture impacts, if any, foreign currency translation impacts and total sales change are also provided for each business segment. Any references to EMEA relate to Europe, Middle East and Africa on a combined basis.

## **Industrial Business:**

	 Three months ended June 30,			i
	 2016	2015	2016	2015
Sales (millions)	\$ 2,631 \$	2,632 \$	5,207 \$	5,288
Sales change analysis:				
Organic local currency	(1.4)%	1.4 %	(1.6)%	2.0 %
Acquisitions	2.8	_	2.4	_
Divestitures	(0.2)	_	(0.2)	_
Translation	(1.3)	(7.9)	(2.1)	(7.4)
Total sales change	(0.1)%	(6.5)%	(1.5)%	(5.4)%
Operating income (millions)	\$ 615 \$	608 \$	1,232 \$	1,204
Percent change	1.2 %	(1.2)%	2.4 %	(2.3)%
Percent of sales	 23.4 %	23.1 %	23.7 %	22.8 %

The Industrial segment serves a broad range of markets, such as automotive original equipment manufacturer (OEM) and automotive aftermarket (auto body shops and retail), electronics, appliance, paper and printing, packaging, food and beverage, and construction. Industrial products include tapes, a wide variety of coated, non-woven and bonded abrasives, adhesives, advanced ceramics, sealants, specialty materials, 3M purification (filtration products), closure systems for personal hygiene products, acoustic systems products, and components and products that are used in the manufacture, repair and maintenance of automotive, marine, aircraft and specialty vehicles. 3M is also a leading global supplier of precision grinding technology serving customers in the area of hard-to-grind precision applications in industrial, automotive, aircraft and cutting tools. 3M develops and produces advanced technical ceramics for demanding applications in the automotive, oil and gas, solar, industrial, electronics and defense industries.

#### Second Quarter 2016 results:

Sales in Industrial totaled \$2.6 billion, down 0.1 percent in U.S. dollars. Organic local-currency sales decreased 1.4 percent, acquisitions added 2.8 percent, divestitures reduced sales by 0.2 percent, and foreign currency translation reduced sales by 1.3 percent. The organic local-currency sales decline reflected the continued economic challenges in the global industrial sector. Manufacturing activity in the U.S. remained soft in the second quarter, which impacted portions of 3M's Industrial business.

On an organic local-currency sales basis:

- Sales grew in automotive OEM, automotive aftermarket, and abrasives, which was offset by declines across the rest of the
- Sales declined in 3M purification, industrial adhesives and tapes, and aerospace commercial transportation.
- Sales also declined in advanced materials, primarily due to ongoing weakness in the oil and gas end markets.
- Geographically, sales increased 6 percent in Latin America/Canada and 4 percent in EMEA, while Asia Pacific declined 4 percent and the United States declined 5 percent.

# Acquisitions and divestitures:

- Acquisition sales growth related to the August 2015 acquisition of Membrana, a leading provider of microporous membranes and
- modules for filtration in the life sciences, industrial, and specialty segments.

  3M completed its sale of the assets of 3M's pressurized polyurethane foam adhesives business (formerly known as Polyfoam) in January 2016 as discussed in Note 2.

Operating income:
Operating income margins increased by 0.3 percentage points to 23.4 percent, helped by fourth quarter 2015 restructuring actions, and lower raw material costs.

## First Six Months 2016 results:

Sales in Industrial totaled \$5.2 billion, down 1.5 percent in U.S. dollars. Organic local-currency sales decreased 1.6 percent, acquisitions added 2.4 percent, divestitures reduced sales by 0.2 percent, and foreign currency translation reduced sales by 2.1 percent. The organic local-currency decline reflected the continued economic challenges in the global industrial sector.

On an organic local-currency sales basis:

- Sales grew in automotive OEM, and automotive aftermarket.
- Sales declined in abrasives, 3M purification, industrial adhesives and tapes, and aerospace commercial transportation.
- Sales also declined in advanced materials, primarily due to ongoing weakness in the oil and gas end markets.
- Geographically, sales increased 7 percent in Latin America/Canada and 3 percent in EMEA, while Asia Pacific declined 4 percent and the United States declined 5 percent.

## Acquisitions and divestitures:

- Acquisition sales growth related to the August 2015 acquisition of Membrana, a leading provider of microporous membranes and
- modules for filtration in the life sciences, industrial, and specialty segments.

  3M completed its sale of the assets of 3M's pressurized polyurethane foam adhesives business (formerly known as Polyfoam) in January 2016 as discussed in Note 2.

# Operating income:

- Operating income margins increased by 0.9 percentage points to 23.7 percent, helped by fourth quarter 2015 restructuring actions, and lower raw material costs.
- In addition, the gain on sale of the Polyfoam business was partially offset by acquisition impacts, which resulted in a net operating income margin benefit of 0.5 percentage points.

#### Safety and Graphics Business:

	Three months ended June 30,			Six months ended June 30,		
	 2016	2015		2016	2015	
Sales (millions)	\$ 1,499	\$ 1,432	\$	2,911 \$	2,804	
Sales change analysis:						
Organic local currency	2.3 %	4.9 %	6	2.4 %	4.4 %	
Acquisitions	6.9	_		6.9	_	
Divestitures	(2.3)	_		(2.4)	_	
Translation	(2.2)	(9.0)		(3.1)	(8.3)	
Total sales change	4.7 %	(4.1)%	6	3.8 %	(3.9)%	
Operating income (millions)	\$ 411	\$ 364	\$	756 \$	699	
Percent change	12.8 %	3.1 %	6	8.2 %	4.1 %	
Percent of sales	 27.4 %	25.4 %	о́ <u></u>	26.0 %	24.9 %	

The Safety and Graphics segment serves a broad range of markets that increase the safety, security and productivity of people, facilities and systems. Major product offerings include personal protection products, such as respiratory, hearing, eye and fall protection equipment; traffic safety and security products, including border and civil security solutions; commercial solutions, including commercial graphics sheeting and systems, architectural design solutions for surfaces, and cleaning and protection products for commercial establishments; and roofing granules for asphalt shingles.

## Second Quarter 2016 results:

Sales in Safety and Graphics totaled \$1.5 billion, an increase of 4.7 percent in U.S. dollars. Organic local-currency sales increased 2.3 percent, and foreign currency translation reduced sales by 2.2 percent. Acquisitions added 6.9 percent, while divestitures reduced sales by 2.3 percent.

On an organic local-currency sales basis:

- Sales growth was led by roofing granules, as demand increased in the replacement shingle market, and by commercial solutions.
- Sales grew slightly in personal safety, while sales declined slightly in traffic safety and security.
- Sales increased 5 percent in both Latin America/Canada and the United States, and 2 percent in EMEA. Sales declined 3 percent

## Acquisitions and divestitures:

- Acquisition sales growth reflects the acquisition of Capital Safety in August 2015. Capital Safety is a leading global provider of fall protection equipment.
- In the fourth quarter of 2015, 3M divested its license plate converting business in France and substantially all of its library systems business. In the first quarter of 2016, 3M divested the remainder of the library systems business as discussed in Note 2.

# Operating income:

- Operating income totaled \$411 million, up 12.8 percent.
- Operating income margins were 27.4 percent of sales, compared to 25.4 percent in the same quarter last year, benefiting from higher selling prices and lower raw material costs, plus fourth quarter 2015 restructuring actions.

## First Six Months 2016 results:

Sales in Safety and Graphics totaled \$2.9 billion, an increase of 3.8 percent in U.S. dollars. Organic local-currency sales increased 2.4 percent, and foreign currency translation reduced sales by 3.1 percent. Acquisitions added 6.9 percent, while divestitures reduced sales by 2.4 percent.

On an organic local-currency sales basis:

- Sales growth was led by roofing granules, commercial solutions, and personal safety, while sales declined in traffic safety and
- Sales increased 4 percent in the United States, 3 percent in Latin America/Canada, and 2 percent in EMEA, while sales in Asia Pacific were flat.

## Acquisitions and divestitures:

- Acquisition sales growth reflects the acquisition of Capital Safety in August 2015. Capital Safety is a leading global provider of
- fall protection equipment.

  In the fourth quarter of 2015, 3M divested its license plate converting business in France and substantially all of its library systems business. In the first quarter of 2016, 3M divested the remainder of the library systems business as discussed in Note 2.

## Operating income:

- Operating income totaled \$756 million, up 8.2 percent.

  Operating income margins were 26.0 percent of sales, compared to 24.9 percent in the same period last year, benefiting from higher selling prices and lower raw material costs, plus fourth quarter 2015 restructuring actions.

## Health Care Business:

	 Three months end June 30,	led	Six months ended June 30,		
	 2016	2015	2016	2015	
Sales (millions)	\$ 1,404 \$	1,364 \$	2,787 \$	2,693	
Sales change analysis:					
Organic local currency	4.9 %	3.4 %	5.6 %	3.2 %	
Acquisitions	_	0.7	0.4	0.7	
Translation	(1.9)	(7.8)	(2.5)	(7.4)	
Total sales change	 3.0 %	(3.7)%	3.5 %	(3.5)%	
-	 				
Operating income (millions)	\$ 460 \$	440 \$	915 \$	848	
Percent change	4.3 %	1.3 %	7.8 %	(1.5)%	
Percent of sales	 32.7 %	32.3 %	32.8 %	31.5 %	

The Health Care segment serves markets that include medical clinics and hospitals, pharmaceuticals, dental and orthodontic practitioners, health information systems, and food manufacturing and testing. Products and services provided to these and other markets include medical and surgical supplies, skin health and infection prevention products, inhalation and transdermal drug delivery systems, oral care solutions (dental and orthodontic products), health information systems, and food safety products. Effective in the third quarter of 2015, the Company formed the Oral Care Solutions Division, which combined the former 3M ESPE and 3M United divisions.

## Second Quarter 2016 results:

Health Care sales totaled \$1.4 billion, an increase of 3.0 percent in U.S. dollars. Organic local-currency sales increased 4.9 percent, and foreign currency translation reduced sales by 1.9 percent.

On an organic local-currency sales basis:

- Sales growth was broad-based across the Health Care portfolio, led by food safety, health information systems, and medical consumables (which includes critical and chronic care solutions, and infection prevention).
- On a geographic basis, sales increased 8 percent in Latin America/Canada, 7 percent in Asia Pacific, and 4 percent in both EMEA and the United States.
- In developing markets, Health Care organic local-currency sales grew 8 percent, with particular strength in China/Hong Kong, Taiwan, and Mexico.

# Operating income:

- Operating income increased 4.3 percent to \$460 million.

  Operating income margins were 32.7 percent, compared to 32.3 percent in the same period last year, driven by the combination of higher selling prices and lower raw material costs, plus organic volume increases.

## First Six Months 2016 results:

Health Care sales totaled \$2.8 billion, an increase of 3.5 percent in U.S. dollars. Organic local-currency sales increased 5.6 percent, acquisitions added 0.4 percent, and foreign currency translation reduced sales by 2.5 percent.

- Sales growth was broad-based across the Health Care portfolio, led by food safety, and health information systems.
- On a geographic basis, sales increased 9 percent in Asia Pacific, 8 percent in Latin America/Canada, 5 percent in EMEA, and 4 percent in the United States.
- În developing markets, Health Care organic local-currency sales grew 10 percent.
- 3M continues to increase investments across the businesses to drive efficient growth into the future.

# Acquisitions:

Acquisition sales growth related to the March 2015 purchase of Ivera Medical Corp. Ivera is a manufacturer of health care
products that disinfect and protect devices used for access into a patient's bloodstream.

#### Operating income:

- · Operating income increased 7.8 percent to \$915 million.
- Operating income margins were 32.8 percent, compared to 31.5 percent in the same period last year, driven by the combination of higher selling prices and lower raw material costs, plus organic volume increases.
- Acquisitions had a minimal impact on operating income margins.

In September 2015, 3M announced that it would explore strategic alternatives for its Health Information Systems Division (HIS), which included spinning-off, selling, or retaining the business. In February 2016, following an in-depth exploration of strategic alternatives, the Company announced its intent to retain and further invest in HIS.

## Electronics and Energy Business:

	Three months ended June 30,			Six months ended June 30,		
		2016	2015	2016	2015	
Sales (millions)	\$	1,181 \$	1,312 \$	2,325 \$	2,636	
Sales change analysis:						
Organic local currency		(9.1)%	(2.9)%	(10.4)%	1.4 %	
Divestitures		_	(0.7)	_	(0.8)	
Translation		(0.9)	(4.2)	(1.4)	(4.1)	
Total sales change		(10.0)%	(7.8)%	(11.8)%	(3.5)%	
, and the second						
Operating income (millions)	\$	229 \$	278 \$	437 \$	563	
Percent change		(18.1)%	(5.3)%	(22.5)%	7.7 %	
Percent of sales		19.3 %	21.3 %	18.8 %	21.4 %	

The Electronics and Energy segment includes solutions that improve the dependability, cost-effectiveness, and performance of electronic devices; electrical products, including infrastructure protection; telecommunications networks; and power generation and distribution. This segment's electronics solutions include optical film solutions for the electronic display industry; high-performance fluids and abrasives; high-temperature and display tapes; flexible circuits, which use electronic packaging and interconnection technology; and touch systems products. This segment's energy solutions include pressure sensitive tapes and resins; electrical insulation; infrastructure products that provide both protection and detection solutions; a wide array of fiber-optic and copper-based telecommunications systems; and renewable energy component solutions for the solar and wind power industries.

# Second Quarter 2016 results:

Electronics and Energy sales totaled \$1.2 billion, down 10.0 percent in U.S. dollars. Organic local-currency sales declined 9.1 percent, and foreign currency translation reduced sales by 0.9 percent.

On an organic local-currency sales basis:

- Sales decreased 14 percent in 3M's electronics-related businesses, with declines in both electronics materials solutions and display materials and systems. 3M continues to be impacted by weak end market demand across most consumer electronic applications. In addition, channel inventory remains high, and 3M expects these challenges to persist into the second half of 2016.
- Sales decreased 2 percent in 3M's energy-related businesses, as declines in electrical markets and renewable energy were partially
  offset by growth in telecommunications.
- On a geographic basis, sales were up 2 percent in EMEA, and were flat in both Latin America/Canada, and the United States.
   Sales declined 15 percent in Asia Pacific, where 3M's electronics business is concentrated.

## Divestitures:

3M completed the sale of its static control business in January 2015.

#### Operating income:

- Operating income decreased 18.1 percent to \$229 million.

  Operating income margins were 19.3 percent compared to 21.3 percent in the same period last year, as lower organic volume and foreign currency effects were only partially offset by lower raw material costs.
- In addition, as announced in late April 2016, 3M took actions within Electronics and Energy in the second quarter to better position the business going forward, with the majority of these actions impacting the electronics side of the business. These actions reduced second quarter 2016 operating income margins by approximately 0.8 percentage points.

## First Six Months 2016 results:

Electronics and Energy sales totaled \$2.3 billion, down 11.8 percent in U.S. dollars. Organic local-currency sales declined 10.4 percent, and foreign currency translation reduced sales by 1.4 percent.

- On an organic local-currency sales basis:

  Sales decreased 16 percent in 3M's electronics-related businesses, with declines in both electronics materials solutions and display materials and systems. 3M continues to be impacted by weak end market demand across most consumer electronic applications. In addition, channel inventory remains high, and 3M expects these challenges to persist into the second half of 2016.

  Sales decreased approximately 1 percent in 3M's energy-related businesses, with declines in electrical markets, telecommunications, and renewable energy.

  On a geographic basis, sales increased 1 percent in EMEA, were flat in Latin America/Canada, and declined 1 percent in the United States. Sales declined 16 percent in Asia Pacific, where 3M's electronics business is concentrated.

## Divestitures:

3M completed the sale of its static control business in January 2015.

# Operating income:

- Operating income decreased 22.5 percent to \$437 million.
- Operating income margins were 18.8 percent compared to 21.4 percent in the same period last year, as lower organic volume and foreign currency effects were only partially offset by lower raw material costs.
- In addition, as discussed in second quarter results, actions taken to better position the business going forward reduced operating income margins.

## Consumer Business:

	 Three months endo	ed	Six months ended June 30,		
	2016	2015	2016	2015	
Sales (millions)	\$ 1,130 \$	1,111 \$	2,179 \$	2,159	
Sales change analysis:					
Organic local currency	2.7 %	3.4 %	2.7 %	2.8 %	
Translation	(1.0)	(5.9)	(1.8)	(5.5)	
Total sales change	 1.7 %	(2.5)%	0.9 %	(2.7)%	
Operating income (millions)	\$ 281 \$	259 \$	519 \$	499	
Percent change	8.8 %	7.4 %	4.0 %	6.3 %	
Percent of sales	 24.9 %	23.3 %	23.8 %	23.1 %	

The Consumer segment serves markets that include consumer retail, office retail, office business to business, home improvement, drug and pharmacy retail, and other markets. Products in this segment include office supply products, stationery products, construction and home improvement products (do-it-yourself), home care products, protective material products, certain consumer retail personal safety products, and consumer health care products.

## Second Quarter 2016 results:

Consumer sales totaled \$1.1 billion, up 1.7 percent in U.S. dollars. Organic local-currency sales increased 2.7 percent, and foreign currency translation reduced sales by 1.0 percent.

On an organic local-currency sales basis:

- Sales growth was led by construction and home improvement, in addition to consumer health care.
- On a geographic basis, sales increased 6 percent in Asia Pacific, 3 percent in the United States, were flat in Latin America/Canada, and declined 2 percent in EMEA.

#### Operating income:

- Operating income was \$281 million, up 8.8 percent from the same period last year.

  Operating income margins were 24.9 percent, up from 23.3 percent in the same period last year, benefiting from the combination of higher selling prices and lower raw material costs. In addition, organic sales growth, prioritization of investments, and productivity efforts contributed to strong operating income margin performance.

## First Six Months 2016 results:

Consumer sales totaled \$2.2 billion, up 0.9 percent in U.S. dollars. Organic local-currency sales increased 2.7 percent, and foreign currency translation reduced sales by 1.8 percent.

On an organic local-currency sales basis:

- Sales growth was led by construction and home improvement, in addition to consumer health care.
- On a geographic basis, sales increased 6 percent in Asia Pacific, and 3 percent in the United States, were flat in Latin America/Canada, and declined 3 percent in EMEA.

## Operating income:

- Operating income was \$519 million, up 4.0 percent from the same period last year.
- Operating income margins were 23.8 percent, up from 23.1 percent in the same period last year, benefiting from the combination of higher selling prices and lower raw material costs.

## FINANCIAL CONDITION AND LIQUIDITY

3M continues its transition to a better-optimized capital structure and is adding leverage at a measured pace. The strength and stability of 3M's business model and strong free cash flow capability, together with proven capital markets access, enable the Company to implement this strategy. Investing in 3M's businesses to drive organic growth remains the first priority for capital deployment, including research and development, capital expenditures, and commercialization capability. Investment in organic growth will be supplemented by complementary acquisitions. 3M will also continue to return cash to shareholders through dividends and share repurchases. Sources for cash availability in the United States, such as ongoing cash flow from operations and access to capital markets, have historically been sufficient to fund dividend payments to shareholders and share repurchases, as well as funding U.S. acquisitions and other items as needed. For those international earnings considered to be reinvested indefinitely, the Company currently has no plans or intentions to repatriate these funds for U.S. operations. However, if these international funds are needed for operations in the U.S., 3M would be required to accrue and pay U.S. taxes to repatriate them. See Note 8 in 3M's Current Report on Form 8-K dated May 17, 2016, for further information on earnings considered to be reinvested indefinitely.

3M's primary short-term liquidity needs are met through cash on hand and U.S. commercial paper issuances 3M believes it will have continuous access to the commercial paper market. 3M's commercial paper program permits the Company to have a maximum of \$3 billion outstanding with a maximum maturity of 397 days from date of issuance. Effective July 15, 2016, this program was increased to a maximum of \$5 billion outstanding.

#### Total daht

The strength of 3M's capital structure and significant ongoing cash flows provide 3M proven access to capital markets. Additionally, the Company's maturity profile is staggered to help ensure refinancing needs in any given year are reasonable in proportion to the total portfolio. 3M currently has an AA- credit rating with a stable outlook from Standard & Poor's and has an A1 credit rating with a stable outlook from Moody's Investors Service.

The Company has a "well-known seasoned issuer" (WKSI) shelf registration statement, effective May 16, 2014, which registers an indeterminate amount of debt and equity securities for future sales. In May 2016, in connection with the WKSI shelf, 3M entered into an amended and restated distribution agreement relating to the future issuance and sale (from time to time) of the Company's medium-term notes program (Series F), up to the aggregate principal amount of \$18 billion, which was an increase from the previous aggregate principal amount up to \$9 billion of the same Series.

The Company's total debt was \$952 million higher at June 30, 2016 when compared to December 31, 2015, with the increase primarily due to May 2016 debt issuances. In May 2016, 3M issued 500 million Euro aggregate principal amount of 5.75-year fixed rate medium-term notes due February 2022 with a coupon rate of 0.375% and 500 million Euro aggregate principal amount of 15-year fixed rate medium-term notes due 2031 with a coupon rate of 1.50%. Both of these issuances were under the medium-term notes program (Series F). As of June 30, 2016, the total amount of debt issued as part of the medium-term notes program (Series F), inclusive of debt issued in 2011, 2012, 2014, 2015 and the 2016 debt referenced above, is approximately \$9.3 billion (utilizing the foreign exchange rates applicable at the time of issuance for the Euro denominated debt).

In March 2016, 3M amended and restated its existing \$2.25 billion five-year revolving credit facility expiring in August 2019 to a \$3.75 billion five-year revolving credit facility expiring in March 2021. This credit agreement includes a provision under which 3M may request an increase of up to \$1.25 billion (at lenders' discretion), bringing the total facility up to \$5.0 billion. This revolving credit facility is undrawn at June 30, 2016. Under the \$3.75 billion credit agreement, the Company is required to maintain its EBITDA to Interest Ratio as of the end of each fiscal quarter at not less than 3.0 to 1. This is calculated (as defined in the agreement) as the ratio of consolidated total EBITDA for the four consecutive quarters then ended to total interest expense on all funded debt for the same period. At June 30, 2016, this ratio was approximately 51 to 1. Debt covenants do not restrict the payment of dividends. Apart from the committed facilities, \$291 million in stand-alone letters of credit and \$22 million in bank guarantees were also issued and outstanding at June 30, 2016. These lines of credit are utilized in connection with normal business activities.

#### Cash, cash equivalents and marketable securities:

At June 30, 2016, 3M had \$1.9 billion of cash, cash equivalents and marketable securities, of which approximately \$1.7 billion was held by the Company's foreign subsidiaries and approximately \$160 million was held by the United States. These balances are invested in bank instruments and other high-quality fixed income securities. Specifics concerning marketable securities investments are provided in Note 7. At December 31, 2015, cash, cash equivalents and marketable securities held by the Company's foreign subsidiaries and by the United States totaled approximately \$1.7 billion and \$200 million, respectively.

## Net Debt (non-GAAP measure):

Net debt is not defined under U.S. GAAP and may not be computed the same as similarly titled measures used by other companies. The Company defines net debt as total debt less the total of cash, cash equivalents and current and long-term marketable securities. 3M believes net debt is meaningful to investors as 3M considers net debt and its components to be

an important indicator of liquidity and a guiding measure of capital structure strategy. The following table provides net debt as of June 30, 2016, and December 31, 2015.

(Millions)	 June 30, 2016	 December 31, 2015
Total Debt	\$ 11,749	\$ 10,797
Less: Cash and cash equivalents and marketable securities	1,879	1,925
Net Debt (non-GAAP measure)	\$ 9,870	\$ 8,872

In the first six months of 2016, net debt increased by \$1.0 billion to a net debt balance of \$9.9 billion, driven by the May 2016 debt issuances.

#### Balance Sheet:

3M's strong balance sheet and liquidity provide the Company with significant flexibility to take advantage of future investment opportunities. The Company will continue to invest in its operations to drive both organic growth and acquisition opportunities.

Various assets and liabilities, including cash and short-term debt, can fluctuate significantly from month to month depending on short-term liquidity needs. Working capital (defined as current assets minus current liabilities) totaled \$4.182 billion at June 30, 2016, compared with \$3.868 billion at December 31, 2015, an increase of \$314 million. Current asset balance changes increased working capital by \$450 million, driven by higher accounts receivable balances, which are discussed further below. Current liability balance changes decreased working capital by \$136 million, driven by higher short-term debt balances.

The Company uses working capital measures that place emphasis and focus on certain working capital assets. These measures are not defined under U.S. generally accepted accounting principles and may not be computed the same as similarly titled measures used by other companies. These measures include accounts receivable until these measures include accounts receivable net) and inventory turns (defined as quarterly manufacturing cost multiplied by 4 divided by ending inventory). For inventory turns calculation purposes, manufacturing cost is defined as cost of sales less freight and engineering costs. Freight and engineering cost totaled \$159 million for both the second quarter of 2016 and fourth quarter of 2015, and totaled \$165 million for the second quarter of 2015.

Accounts receivable increased \$513 million, or approximately 12%, compared with December 31, 2015, as higher June 2016 sales compared to December 2015 sales contributed to this increase. Accounts receivable increased \$89 million compared to the same quarter last year. Accounts receivable turns were 6.57 at June 30, 2016, compared to 7.03 at December 31, 2015 and 6.72 at June 30, 2015. Inventories increased \$95 million, or approximately 3.0 percent, compared with December 31, 2015, and decreased \$234 million when compared to June 30, 2015. Inventory turns were 4.03 at June 30, 2016, down from 4.13 at December 31, 2015, but an improvement from 3.84 at June 30, 2015.

## Cash Flows:

Cash flows from operating, investing and financing activities are provided in the tables that follow. Individual amounts in the Consolidated Statement of Cash Flows exclude the effects of acquisitions, divestitures and exchange rate impacts on cash and cash equivalents, which are presented as separate line items within the statement of cash flows. Thus, the amounts presented in the following operating, investing and financing activities tables reflect changes in balances from period to period adjusted for these effects.

As discussed in Note 1, 3M adopted ASU No. 2016-09 effective January 1, 2016, on a prospective basis. The new guidance impacts classifications within the statement of cash flows by no longer requiring inclusion of excess tax benefits as both a hypothetical cash outflow within cash flows from operating activities and hypothetical cash inflow within cash flows from financing activities. Instead, excess tax benefits would be classified in operating activities in the same manner as other cash flows related to income taxes.

## Cash Flows from Operating Activities:

	Six	months en June 30,	ded
(Millions)	2016		2015
Net income including noncontrolling interest	<b>\$</b> 2,	571 \$	2,504
Depreciation and amortization		722	683
Company pension contributions		(95)	(183)
Company postretirement contributions		(2)	(2)
Company pension expense		94	213
Company postretirement expense		24	70
Stock-based compensation expense		193	187
Income taxes (deferred and accrued income taxes)	(	236)	(126)
Excess tax benefits from stock-based compensation		_	(129)
Accounts receivable	(	419)	(446)
Inventories		(42)	(269)
Accounts payable		(57)	(34)
Other — net		208)	(50)
Net cash provided by operating activities	<u>\$</u> 2,	545 \$	2,418

Cash flows from operating activities can fluctuate significantly from period to period, as pension funding decisions, tax timing differences and other items can significantly impact cash flows.

In the first six months of 2016, cash flows provided by operating activities increased \$127 million compared to the same period last year, with this increase primarily due to a year-on-year improvement in inventories and accounts receivable, plus lower cash taxes. The combination of accounts receivable, inventories and accounts payable increased working capital by \$518 million in the first six months of 2016, compared to working capital increases of \$749 million in the first six months of 2015. Additional discussion on working capital changes is provided earlier in the "Financial Condition and Liquidity" section. Information concerning pension and postretirement contributions and expense is provided in Note 9, with additional discussion in the preceding Performance by Business Segment section. Other-net in the preceding table reflects a reduction in cash flows from operating activities, partially due to a \$40 million divestiture gain in 2016 (discussed in Note 2), as cash divestiture activity is presented as proceeds from sale of businesses within investing activities, not operating activities.

## Cash Flows from Investing Activities:

	Six months ended June 30,								
(Millions)		2016		2015					
Purchases of property, plant and equipment (PP&E)	\$	(637)	\$	(661)					
Proceeds from sale of PP&E and other assets		18		14					
Acquisitions, net of cash acquired		(4)		(153)					
Purchases and proceeds from maturities and sale of marketable securities and investments, net		(61)		928					
Proceeds from sale of businesses		56		19					
Other investing activities		(2)		19					
Net cash provided by (used in) investing activities	\$	(630)	\$	166					

Capital spending was \$637 million in the first six months of 2016, compared to \$661 million in the first six months of 2015. The Company expects 2016 capital spending to be approximately \$1.3 billion to \$1.5 billion.

Investments in property, plant and equipment enable growth across many diverse markets, helping to meet product demand and increasing manufacturing efficiency. 3M invests in renewal and maintenance programs, which pertain to cost reduction, cycle time, maintaining and renewing current capacity, pollution reduction, and compliance. Costs related to maintenance, ordinary repairs, and certain other items are expensed. 3M also invests in new growth capacity, both through expansion of current facilities and by building new facilities. 3M also invests in corporate laboratory facilities and information technology (IT).

Refer to Note 2 for information on acquisitions and divestitures. The Company is actively considering additional acquisitions, investments and strategic alliances, and from time to time may also divest certain businesses. Proceeds from sale of businesses in the first six months of 2016 related to the divestiture of the assets of the pressurized polyurethane foam adhesives business (formerly known as Polyfoam) business within the Industrial business segment and the completion of the divestiture of the Library business within the Safety and Graphics business segment.

Purchases of marketable securities and investments and proceeds from maturities and sale of marketable securities and investments are primarily attributable to asset-backed securities, certificates of deposit/time deposits, commercial paper, and other securities, which are classified as available-for-sale. Net proceeds from maturities and sale of marketable securities in the first six months of 2015 were used to help fund the August 2015 acquisitions of Capital Safety and Membrana. Refer to Note 7 for more details about 3M's diversified marketable securities portfolio. Purchases of investments include additional survivor benefit insurance, plus cost method and equity investments.

## Cash Flows from Financing Activities:

	Six months ended June 30,								
(Millions)		2016		2015					
Change in short-term debt — net	\$	(337)	\$	(39)					
Repayment of debt (maturities greater than 90 days)		_		(10)					
Proceeds from debt (maturities greater than 90 days)		1,112		1,925					
Total cash change in debt	\$	775	\$	1,876					
Purchases of treasury stock		(2,055)		(2,581)					
Proceeds from issuances of treasury stock pursuant to stock option and benefit plans		612		450					
Dividends paid to stockholders		(1,344)		(1,298)					
Excess tax benefits from stock-based compensation		_		129					
Other — net		(16)		(50)					
Net cash used in financing activities	\$	(2,028)	\$	(1,474)					

Total debt at June 30, 2016 was \$11.7 billion, up from \$10.8 billion at year-end 2015, with the increase primarily due to May 2016 debt issuances (approximately \$1.1 billion at issue date exchange rates). This increase was partially offset by the net impact of repayments and borrowings by international subsidiaries, which is reflected in "Change in short-term debt—net" in the preceding table. Total debt was 50 percent of total capital (total capital is defined as debt plus equity) at June 30, 2016, compared to 48 percent of total capital at year-end 2015.

Proceeds from debt for the six-months ended June 30, 2016, primarily related to the May 2016 issuance of 500 million Euros aggregate principal amount of 5.75-year fixed rate medium-term notes due February 2022, and 500 million Euros aggregate principal amount of 15-year fixed rate medium-term notes due 2031 (refer to Note 8 for more detail).

Proceeds from debt for the six-months ended June 30, 2015, primarily related to the May 2015 issuance of 650 million Euros aggregate principal amount of five-year floating rate medium-term notes due 2020, 600 million Euros aggregate principal amount of eight-year fixed rate medium-term notes due 2023, and 500 million Euros aggregate principal amount of fifteen-year fixed rate medium-term notes due 2030, which in the aggregate totaled approximately \$1.9 billion at issue date exchange rates.

Repurchases of common stock are made to support the Company's stock-based employee compensation plans and for other corporate purposes. In February 2016, 3M's Board of Directors authorized the repurchase of up to \$10 billion of 3M's outstanding common stock, with no pre-established end date. In the first six months of 2016, the Company purchased \$2.055 billion of its own stock, compared to \$2.581 billion in the first six months of 2015. The Company expects full-year 2016 gross share repurchases will be in the range of \$4 billion to \$6 billion. For more information, refer to the table titled "Issuer Purchases of Equity Securities" in Part II, Item 2. The Company does not utilize derivative instruments linked to the Company's stock.

Cash dividends paid to shareholders totaled \$1.344 billion in the first six months of 2016, compared to \$1.298 billion in the first six months of 2015. 3M has paid dividends each year since 1916. In February 2016, 3M's Board of Directors declared a first quarter 2016 dividend of \$1.11 per share, an increase of 8 percent. This is equivalent to an annual dividend of \$4.44 per share and marked the 58th consecutive year of dividend increases for 3M. In May 2016, 3M's Board of Directors declared a second quarter 2016 dividend of \$1.11 per share.

Other cash flows from financing activities may include various other items, such as distributions to or sales of noncontrolling interests, changes in cash overdraft balances, and principal payments for capital leases.

#### Free Cash Flow (non-GAAP measure):

Free cash flow and free cash flow conversion are not defined under U.S. generally accepted accounting principles (GAAP). Therefore, they should not be considered a substitute for income or cash flow data prepared in accordance with U.S. GAAP and may not be comparable to similarly titled measures used by other companies. The Company defines free cash flow as net cash provided by operating activities less purchases of property, plant and equipment. It should not be inferred that the entire free cash flow amount is available for discretionary expenditures. The Company defines free cash flow conversion as free cash flow divided by net income attributable to 3M. The Company believes free cash flow and free cash flow conversion are meaningful to investors as they function as useful measures of performance and the Company uses these measures as an indication of the strength of the company and its ability to generate cash. The first quarter of each year is typically 3M's seasonal low for free cash flow and free cash flow conversion. Below find a recap of operating, investing and financing cash flows along with free cash flow details for the six months ended June 30, 2016 and 2015.

	S	Six months ended June 30,							
(Millions)	2016		2015						
Major GAAP Cash Flow Categories									
Net cash provided by operating activities	\$ 2	,545 \$	2,418						
Net cash provided by (used in) investing activities		(630)	166						
Net cash used in financing activities	(2	,028)	(1,474)						
Free Cash Flow (non-GAAP measure)									
Net cash provided by operating activities	\$ 2	,545 \$	2,418						
Purchases of property, plant and equipment (PP&E)		(637)	(661)						
Free cash flow	\$ 1	,908 \$	1,757						
Net income attributable to 3M	<u>\$</u>	,566 \$	2,499						
Free cash flow conversion		74 %	70 %						

## CAUTIONARY NOTE CONCERNING FACTORS THAT MAY AFFECT FUTURE RESULTS

This Quarterly Report on Form 10-Q, including "Management's Discussion and Analysis of Financial Condition and Results of Operations" in Part I, Item 2, contains forward-looking statements within the meaning of the Private Securities Litigation Reform Act of 1995. The Company may also make forward-looking statements in other reports filed with the Securities and Exchange Commission, in materials delivered to shareholders and in press releases. In addition, the Company's representatives may from time to time make oral forward-

Forward-looking statements relate to future events and typically address the Company's expected future business and financial performance. Words such as "plan," "expect," "aim," "believe," "project," "target," "anticipate," "intend," "estimate," "will," "should," "could," "forecast" and other words and terms of similar meaning, typically identify such forward-looking statements. In particular, these include, among others, statements relating to:

- the Company's strategy for growth, future revenues, earnings, cash flow, uses of cash and other measures of financial performance, and market position,
- worldwide economic, political, and capital markets conditions, such as interest rates, foreign currency exchange rates, financial conditions of our suppliers and customers, and natural and other disasters or climate change affecting the operations of the Company or its suppliers and customers,
- new business opportunities, product development, and future performance or results of current or anticipated products, the scope, nature or impact of acquisitions, strategic alliances and divestitures, the outcome of contingencies, such as legal and regulatory proceedings,

- future levels of indebtedness, common stock repurchases and capital spending,
- future availability of and access to credit markets,
- pension and postretirement obligation assumptions and future contributions,
- asset impairments,
- tax liabilities,
- information technology security, and
- the effects of changes in tax, environmental and other laws and regulations in the United States and other countries in which we

The Company assumes no obligation to update or revise any forward-looking statements.

Forward-looking statements are based on certain assumptions and expectations of future events and trends that are subject to risks and uncertainties. Actual future results and trends may differ materially from historical results or those reflected in any such forward-looking statements depending on a variety of factors. Important information as to these factors can be found in this document, including, among others, "Management's Discussion and Analysis of Financial Condition and Results of Operations" under the headings of "Overview," "Financial Condition and Liquidity" and annually in "Critical Accounting Estimates." Discussion of these factors is incorporated by reference from Part II, Item 1A, "Risk Factors," of this document, and should be considered an integral part of Part I, Item 2, "Management's Discussion and Analysis of Financial Condition and Results of Operations." For additional information concerning factors that may cause actual results to vary materially from those stated in the forward-looking statements, see our reports on Form 10-K, 10-Q and 8-K filed with the SEC from time to time.

#### Item 3. Quantitative and Qualitative Disclosures About Market Risk.

In the context of Item 3, 3M is exposed to market risk due to the risk of loss arising from adverse changes in foreign currency exchange rates, interest rates and commodity prices. Changes in those factors could impact the Company's results of operations and financial condition. For a discussion of sensitivity analysis related to these types of market risks, refer to Part II, Item 7A, Quantitative and Qualitative Disclosures About Market Risk, in 3M's Current Report on Form 8-K dated May 17, 2016 (which updated 3M's 2015 Annual Report on Form 10-K). There have been no material changes in information that would have been provided in the context of Item 3 from the end of the preceding year until June 30, 2016. However, the Company does provide risk management discussion in various places in this Quarterly Report on Form 10-Q, primarily in the Derivatives note.

## Item 4. Controls and Procedures.

- a. The Company carried out an evaluation, under the supervision and with the participation of its management, including the Chief Executive Officer and Chief Financial Officer, of the effectiveness of the design and operation of the Company's "disclosure controls and procedures" (as defined in the Exchange Act Rule 13a-15(e)) as of the end of the period covered by this report. Based upon that evaluation, the Chief Executive Officer and Chief Financial Officer concluded that the Company's disclosure controls and procedures are effective.
- b. There was no change in the Company's internal control over financial reporting that occurred during the Company's most recently completed fiscal quarter that has materially affected, or is reasonably likely to materially affect, the Company's internal control over financial reporting.

The Company is implementing an enterprise resource planning ("ERP") system on a worldwide basis, which is expected to improve the efficiency of certain financial and related transaction processes. The gradual implementation is expected to occur in phases over the next several years. The implementation of a worldwide ERP system will likely affect the processes that constitute our internal control over financial reporting and will require testing for effectiveness.

The Company completed implementation with respect to elements of certain processes/sub-processes in limited subsidiaries/locations and will continue to roll out the ERP system over the next several years. As with any new information technology application we implement, this application, along with the internal controls over financial reporting included in this process, was appropriately considered within the testing for effectiveness with respect to the implementation in these instances. We concluded, as part of its evaluation described in the above paragraphs, that the implementation of the ERP system in these circumstances has not materially affected our internal control over financial reporting.

#### 3M COMPANY FORM 10-Q For the Quarterly Period Ended June 30, 2016 PART II. Other Information

## Item 1. Legal Proceedings.

Discussion of legal matters is incorporated by reference from Part I, Item 1, Note 12, "Commitments and Contingencies" of this document, and should be considered an integral part of Part II, Item 1, "Legal Proceedings."

#### Item 1A. Risk Factors.

Provided below is a cautionary discussion of what we believe to be the most important risk factors applicable to the Company. Discussion of these factors is incorporated by reference into and considered an integral part of Part I, Item 2, "Management's Discussion and Analysis of Financial Conditions and Results of Operations."

- \* Results are impacted by the effects of, and changes in, worldwide economic, political, and capital markets conditions. The Company operates in more than 70 countries and derives approximately 60 percent of its revenues from outside the United States. The Company's business is subject to global competition and geopolitical risks and may be adversely affected by factors in the United States and other countries that are beyond its control, such as slower economic growth, disruptions in financial markets, economic downturns in the form of either contained or widespread recessionary conditions, inflation, elevated unemployment levels, sluggish or uneven recovery, government deficit reduction and other austerity measures in specific countries or regions, or in the various industries in which the Company operates; social, political or labor conditions in specific countries or regions; natural and other disasters or climate change affecting the operations of the Company or its customers and suppliers; or adverse changes in the availability and cost of capital, interest rates, tax rates, tax laws, or exchange control, ability to expatriate earnings and other regulations in the jurisdictions in which the Company operates.
- \* Change in the Company's credit ratings could increase cost of funding. The Company's credit ratings are important to 3M's cost of capital. The major rating agencies routinely evaluate the Company's credit profile and assign debt ratings to 3M. This evaluation is based on a number of factors, which include financial strength, business and financial risk, as well as transparency with rating agencies and timeliness of financial reporting. 3M currently has an AA- credit rating with a stable outlook from Standard & Poor's and has an A1 credit rating with a stable outlook from Moody's Investors Service. In March 2016, Moody's downgraded 3M's rating from Aa3 to A1, revised 3M's outlook from negative to stable, and affirmed the Company's short-term rating of P-1. This ratings action followed 3M's announcement of its new five-year plan for the period 2016 through 2020 in which the Company communicated its intent to further increase financial leverage. The Company's credit ratings have served to lower 3M's borrowing costs and facilitate access to a variety of lenders. The Company's ongoing transition to a better-optimized capital structure, financed with additional low-cost debt, could impact 3M's credit rating in the future. Failure to maintain strong investment grade ratings would adversely affect the Company's cost of funding and could adversely affect liquidity and access to capital markets.
- \* The Company's results are affected by competitive conditions and customer preferences. Demand for the Company's products, which impacts revenue and profit margins, is affected by (i) the development and timing of the introduction of competitive products; (ii) the Company's response to downward pricing to stay competitive; (iii) changes in customer order patterns, such as changes in the levels of inventory maintained by customers and the timing of customer purchases which may be affected by announced price changes, changes in the Company's incentive programs, or the customer's ability to achieve incentive goals; and (iv) changes in customers' preferences for our products, including the success of products offered by our competitors, and changes in customer designs for their products that can affect the demand for some of the Company's products.
- \* Foreign currency exchange rates and fluctuations in those rates may affect the Company's ability to realize projected growth rates in its sales and earnings. Because the Company's financial statements are denominated in U.S. dollars and approximately 60 percent of the Company's revenues are derived from outside the United States, the Company's results

of operations and its ability to realize projected growth rates in sales and earnings could be adversely affected if the U.S. dollar strengthens significantly against foreign currencies.

- \* The Company's growth objectives are largely dependent on the timing and market acceptance of its new product offerings, including its ability to continually renew its pipeline of new products and to bring those products to market. This ability may be adversely affected by difficulties or delays in product development, such as the inability to identify viable new products, obtain adequate intellectual property protection, or gain market acceptance of new products. There are no guarantees that new products will prove to be commercially successful.
- \* The Company's future results are subject to fluctuations in the costs and availability of purchased components, compounds, raw materials and energy, including oil and natural gas and their derivatives, due to shortages, increased demand, supply interruptions, currency exchange risks, natural disasters and other factors. The Company depends on various components, compounds, raw materials, and energy (including oil and natural gas and their derivatives) supplied by others for the manufacturing of its products. It is possible that any of its supplier relationships could be interrupted due to natural and other disasters and other events, or be terminated in the future. Any sustained interruption in the Company's receipt of adequate supplies could have a material adverse effect on the Company. In addition, while the Company has a process to minimize volatility in component and material pricing, no assurance can be given that the Company will be able to successfully manage price fluctuations or that future price fluctuations or shortages will not have a material adverse effect on the Company.
- \* Acquisitions, strategic alliances, divestitures, and other unusual events resulting from portfolio management actions and other evolving business strategies, and possible organizational restructuring could affect future results. The Company monitors its business portfolio and organizational structure and has made and may continue to make acquisitions, strategic alliances, divestitures and changes to its organizational structure. With respect to acquisitions, future results will be affected by the Company's ability to integrate acquired businesses quickly and obtain the anticipated synergies.
- \* The Company's future results may be affected if the Company generates fewer productivity improvements than estimated. The Company utilizes various tools, such as Lean Six Sigma, and engages in ongoing global business transformation. Business transformation is defined as changes in processes and internal/external service delivery across 3M to move to more efficient business models to improve operational efficiency and productivity, while allowing 3M to serve customers with greater speed and efficiency. This is enabled by the ongoing multi-year phased implementation of an enterprise resource planning (ERP) system on a worldwide basis. There can be no assurance that all of the projected productivity improvements will be realized.
- \* The Company employs information technology systems to support its business, including ongoing phased implementation of an ERP system as part of business transformation on a worldwide basis over the next several years. Security breaches and other disruptions to the Company's information technology infrastructure could interfere with the Company's operations, compromise information belonging to the Company and its customers, suppliers, and employees, exposing the Company to liability which could adversely impact the Company's business and reputation. In the ordinary course of business, the Company relies on information technology networks and systems, some of which are managed by third parties, to process, transmit and store electronic information, and to manage or support a variety of business processes and activities. Additionally, the Company collects and stores certain data, including proprietary business information, and may have access to confidential or personal information in certain of our businesses that is subject to privacy and security laws, regulations and customer-imposed controls. Despite our cybersecurity measures (including employee and third-party training, monitoring of networks and systems, and maintenance of backup and protective systems) which are continuously reviewed and upgraded, the Company's information technology networks and infrastructure may still be vulnerable to damage, disruptions or shutdowns due to attack by hackers or breaches, employee error or malfeasance, power outages, computer viruses, telecommunication or utility failures, systems failures, service providers including cloud services, natural disasters or other catastrophic events. It is possible for such vulnerabilities to remain undetected for an extended period, up to and including several years. While we have experienced, and expect to continue to experience, these types of threats to the Company's information technology networks and infrastructure, none of them to date has had a material impact to the Company. The

could result in legal claims or proceedings, liability or penalties under privacy laws, disruption in operations, and damage to the Company's reputation, which could adversely affect the Company's business. Although the Company maintains insurance coverage for various cybersecurity risks, there can be no guarantee that all costs or losses incurred will be fully insured.

- \* The Company's defined benefit pension and postretirement plans are subject to financial market risks that could adversely impact our results. The performance of financial markets and discount rates impact the Company's funding obligations under its defined benefit plans. Significant changes in market interest rates, decreases in the fair value of plan assets and investment losses on plan assets, and relevant legislative or regulatory changes relating to defined benefit plan funding may increase the Company's funding obligations and adversely impact its results of operations and cash flows.
- \*The Company's future results may be affected by various legal and regulatory proceedings and legal compliance risks, including those involving product liability, antitrust, intellectual property, environmental, the U.S. Foreign Corrupt Practices Act and other anti-bribery, anti-corruption, or other matters. The outcome of these legal proceedings may differ from the Company's expectations because the outcomes of litigation, including regulatory matters, are often difficult to reliably predict. Various factors or developments can lead the Company to change current estimates of liabilities and related insurance receivables where applicable, or make such estimates for matters previously not susceptible of reasonable estimates, such as a significant judicial ruling or judgment, a significant settlement, significant regulatory developments or changes in applicable law. A future adverse ruling, settlement or unfavorable development could result in future charges that could have a material adverse effect on the Company's results of operations or cash flows in any particular period. For a more detailed discussion of the legal proceedings involving the Company and the associated accounting estimates, see the discussion in Note 12 "Commitments and Contingencies" within the Notes to Consolidated Financial Statements.

## Item 2. Unregistered Sales of Equity Securities and Use of Proceeds.

## **Issuer Purchases of Equity Securities**

Repurchases of 3M common stock are made to support the Company's stock-based employee compensation plans and for other corporate purposes. In February 2014, 3M's Board of Directors authorized the repurchase of up to \$12 billion of 3M's outstanding common stock, with no pre-established end date. In February 2016, 3M's Board of Directors replaced the Company's February 2014 repurchase program with a new program. This new program authorizes the repurchase of up to \$10 billion of 3M's outstanding common stock, with no preestablished end date.

**Issuer Purchases of Equity** Securities (registered pursuant to Section 12 of the Exchange Act)

Period	Total Number of Shares Purchased (1)	A	verage Price Paid per Share	Total Number of Shares Purchased as Part of Publicly Announced Plans or Programs (2)	I Si Yo	Maximum Approximate Dollar Value of hares that May et Be Purchased nder the Plans or Programs (Millions)
January 1-31, 2016	4,867,209	\$	141.70	4,867,019	\$	777
February 1-29, 2016	1,593,234	\$	153.47	1,590,500	\$	9,756
March 1-31, 2016	1,094,083	\$	162.58	1,091,293	\$	9,578
Total January 1-March 31, 2016	7,554,526	\$	147.21	7,548,812	\$	9,578
April 1-30, 2016	1,543,073	\$	167.78	1,538,003	\$	9,320
May 1-31, 2016	1,695,626	\$	167.90	1,695,200	\$	9,036
June 1-30, 2016	1,712,490	\$	169.72	1,712,490	\$	8,745
Total April 1-June 30, 2016	4,951,189	\$	168.49	4,945,693	\$	8,745
Total January 1-June 30, 2016	12,505,715	\$	155.63	12,494,505	\$	8,745

<sup>(1)</sup> The total number of shares purchased includes: (i) shares purchased under the Board's authorizations described above, and (ii) shares purchased in connection with the exercise of stock options.

The total number of shares purchased as part of publicly announced plans or programs includes shares purchased under the Board's

## Item 3. <u>Defaults Upon Senior Securities.</u> — No matters require disclosure.

Item 4. Mine Safety Disclosures . Pursuant to Section 1503 of the Dodd-Frank Wall Street Reform and Consumer Protection Act (the "Act"), the Company is required to disclose, in connection with the mines it operates, information concerning mine safety violations or other regulatory matters in its periodic reports filed with the SEC. The information concerning mine safety violations or other regulatory matters required by Section 1503(a) of the Act is included in Exhibit 95 to this quarterly report.

Item 5. Other Information. — No matters require disclosure.

## Item 6. Exhibits.

Exhibits. These exhibits are either incorporated by reference into this report or filed herewith with this report. Exhibit numbers 10.1 through 10.34 are management contracts or compensatory plans or arrangements.

authorizations described above.

## **Index to Exhibits:**

- Articles of Incorporation and bylaws
  - Certificate of incorporation, as amended as of May 11, 2007, is incorporated by reference from our Form 8-K dated (3.1)May 14, 2007.
  - (3.2)Amended and Restated Bylaws, as adopted as of November 10, 2015, are incorporated by reference from our Form 8-K dated November 10, 2015.
- Instruments defining the rights of security holders, including indentures:
  - Indenture, dated as of November 17, 2000, between 3M and The Bank of New York Mellon Trust Company, N.A., as successor trustee, with respect to 3M's senior debt securities, is incorporated by reference from our Form 8-K dated
  - (4.2)First Supplemental Indenture, dated as of July 29, 2011, to Indenture dated as of November 17, 2000, between 3M and The Bank of New York Mellon Trust Company, N.A., as successor trustee, with respect to 3M's senior debt securities, is incorporated by reference from our Form 10-Q for the quarter ended June 30, 2011.
- (10) Material contracts and management compensation plans and arrangements:

  - 3M Company 2016 Long-Term Incentive Plan is incorporated by reference from our Form 8-K dated May 12, 2016. Form of Stock Option Award Agreement under 3M Company 2016 Long-Term Incentive Plan is incorporated by (10.2)reference from our Form 8-K dated May 12, 2016.
  - Form of Stock Appreciation Right Award Agreement under 3M Company 2016 Long-Term Incentive Plan is incorporated by reference from our Form 8-K dated May 12, 2016.

    Form of Restricted Stock Unit Award Agreement under 3M Company 2016 Long-Term Incentive Plan is incorporated by (10.3)
  - (10.4)reference from our Form 8-K dated May 12, 2016.
  - Form of Performance Share Award Agreement under 3M Company 2016 Long-Term Incentive Plan is incorporated by (10.5)reference from our Form 8-K dated May 12, 2016.
  - 3M 2008 Long-Term Incentive Plan (including amendments through February 2, 2016) is incorporated by reference from (10.6)our Form 10-K for the year ended December 31, 2015.
  - Form of Agreement for Stock Option Grants to Executive Officers under 3M 2008 Long-Term Incentive Plan is (10.7)incorporated by reference from our Form 8-K dated May 13, 2008.
  - (10.8)Form of Stock Option Agreement for options granted to Executive Officers under the 3M 2008 Long-Term Incentive Plan, commencing February 9, 2010, is incorporated by reference from our Form 10-K for the year ended December 31,
  - (10.9)Form of Restricted Stock Unit Agreement for restricted stock units granted to Executive Officers under the 3M Long-Term Incentive Plan, effective February 9, 2010, is incorporated by reference from our Form 10-K for the year ended December 31, 2009.
  - (10.10)Form of 3M 2010 Performance Share Award under the 3M 2008 Long-Term Incentive Plan is incorporated by reference
  - from our Form 8-K dated March 4, 2010. Form of Stock Option Agreement for U.S. Employees under 3M 2008 Long-Term Incentive Plan is incorporated by (10.11)
  - reference from our Form 10-K for the year ended December 31, 2008.
    Form of Restricted Stock Unit Agreement for U.S. Employees under 3M 2008 Long-Term Incentive Plan is incorporated (10.12)by reference from our Form 10-K for the year ended December 31, 2008.
  - (10.13)3M 2005 Management Stock Ownership Program (including amendments through February 2, 2016) is incorporated by reference from our Form 10-K for the year ended December 31, 2015.
  - (10.14)Form of award agreement for non-qualified stock options granted under the 2005 Management Stock Ownership Program, is incorporated by reference from our Form 8-K dated May 16, 2005.
  - (10.15)3M VIP Excess Plan is incorporated by reference from our Form 8-K dated November 14, 2008.
  - (10.16)Amendment of 3M VIP Excess Plan is incorporated by reference from our Form 8-K dated November 24, 2009.
  - (10.17)3M VIP (Voluntary Investment Plan) Plus is incorporated by reference from Registration Statement No. 333-73192 on Form S-8, filed on November 13, 2001.
  - (10.18)Amendment of 3M VIP Plus is incorporated by reference from our Form 8-K dated November 14, 2008.

- (10.19) 3M Deferred Compensation Plan, as amended through February 2008, is incorporated by reference from our Form 8-K
- (10.20) Amendment of 3M Deferred Compensation Plan is incorporated by reference from our Form 8-K dated November 14, 2008.
- (10.21) 3M Deferred Compensation Excess Plan is incorporated by reference from our Form 10-K for the year ended December 31, 2009.
- (10.22) 3M Performance Awards Deferred Compensation Plan is incorporated by reference from our Form 10-K for the year ended December 31, 2009.
- (10.23) 3M Executive Annual Incentive Plan is incorporated by reference from our Form 8-K dated May 14, 2007.
- (10.24) Description of changes to 3M Compensation Plan for Non-Employee Directors is incorporated by reference from our Form 8-K dated August 8, 2005.
- (10.25) 3M Compensation Plan for Non-Employee Directors, as amended, through November 8, 2004, is incorporated by reference from our Form 10-K for the year ended December 31, 2004.
- (10.26) Amendment of 3M Compensation Plan for Non-Employee Directors is incorporated by reference from our Form 8-K dated November 14, 2008.
- (10.27) Amendment of 3M Compensation Plan for Non-Employee Directors as of August 12, 2013, is incorporated by reference from our Form 10-Q for the quarter ended September 30, 2013.
- (10.28) 3M Executive Life Insurance Plan, as amended, is incorporated by reference from our Form 10-K for the year ended December 31, 2003.
- (10.29) Summary of Personal Financial Planning Services for 3M Executives is incorporated by reference from our Form 10-K for the year ended December 31, 2003.
- (10.30) 3M policy on reimbursement of incentive payments is incorporated by reference from our Form 10-K for the year ended December 31, 2006.
- (10.31) Amended and Restated 3M Nonqualified Pension Plan I is incorporated by reference from our Form 8-K dated December 23, 2008.
- (10.32) Amended and Restated 3M Nonqualified Pension Plan II is incorporated by reference from our Form 8-K dated December 23, 2008.
- (10.33) 3M Nonqualified Pension Plan III is incorporated by reference from our Form 8-K dated November 14, 2008.
- (10.34) Policy on Reimbursement of Incentive Compensation (effective May 11, 2010) is incorporated by reference from our Form 10-Q dated August 4, 2010.
- (10.35) Amended and restated five-year credit agreement as of March 9, 2016, is incorporated by reference from our Form 8-K dated March 11, 2016.
- (10.36) Registration Rights Agreement as of August 4, 2009, between 3M Company and State Street Bank and Trust Company as Independent Fiduciary of the 3M Employee Retirement Income Plan, is incorporated by reference from our Form 8-K dated August 5, 2009.

Filed herewith, in addition to items, if any, specifically identified above:

- Calculation of ratio of earnings to fixed charges.
- (12) (15) A letter from the Company's independent registered public accounting firm regarding unaudited interim consolidated financial statements.
- (31.1)Certification of the Chief Executive Officer pursuant to Section 302 of the Sarbanes-Oxley Act of 2002, 18 U.S.C. Section 1350.
- Certification of the Chief Financial Officer pursuant to Section 302 of the Sarbanes-Oxley Act of 2002, 18 U.S.C. (31.2)
- Section 1350.
  Certification of the Chief Executive Officer pursuant to Section 906 of the Sarbanes-Oxley Act of 2002, 18 U.S.C. (32.1)Section 1350.
- Certification of the Chief Financial Officer pursuant to Section 906 of the Sarbanes-Oxley Act of 2002, 18 U.S.C. (32.2)Section 1350.
- Mine Safety Disclosures. (95)
- The following financial information from 3M Company's Quarterly Report on Form 10-Q for the period ended June 30, 2016, filed with the SEC on August 2, 2016, formatted in Extensible Business Reporting Language (XBRL): (i) the Consolidated Statement of Income for the three-month and six-month periods ended June 30, 2016 and 2015, (ii) the Consolidated Statement of Comprehensive Income for the three-month and six-month periods ended June 30, 2016 and (101)2015 (iii) the Consolidated Balance Sheet at June 30, 2016 and December 31, 2015, (iv) the Consolidated Statement of Cash Flows for the three-month and six-month periods ended June 30, 2016 and 2015, and (v) Notes to Consolidated Financial Statements.

## **SIGNATURES**

Pursuant to the requirements of the Securities Exchange Act of 1934, the Registrant has duly caused this report to be signed on its behalf by the undersigned, thereunto duly authorized.

3M COMPANY (Registrant)

Date: August 2, 2016

By /s/ Nicholas C. Gangestad
Nicholas C. Gangestad,

Senior Vice President and Chief Financial Officer (Mr. Gangestad is the Principal Financial Officer and has been duly authorized to sign on behalf of the Registrant.)

# 3M COMPANY AND SUBSIDIARIES CALCULATION OF RATIO OF EARNINGS TO FIXED CHARGES (Millions)

Six months

	ended June 30, 2016	Year 2015				Year 2013		Year 2012		Year 2011
EARNINGS										
Income before income taxes	\$ 3,581	\$	6,823	\$	7,026	\$	6,562	\$	6,351	\$ 6,031
Add:										
Interest expense (including amortization of capitalized interest)	96		171		164		166		191	206
Portion of rent under operating leases representative of the interest component	49		101		104		103		92	85
Less:										
Equity in undistributed income of 20-50% owned companies	4		5	_	(1)		(1)		3	4
TOTAL EARNINGS AVAILABLE FOR FIXED CHARGES	\$ 3,722	\$	7,090	\$	7,295	\$	6,832	\$	6,631	\$ 6,318
FIXED CHARGES										
Interest on debt (including capitalized interest)	90		162		159		166		194	206
Portion of rent under operating leases representative of the interest component	49		101		104		103		92	85
TOTAL FIXED CHARGES	\$ 139	\$	263	\$	263	\$	269	\$	286	\$ 291
RATIO OF EARNINGS TO FIXED CHARGES	26.8		27.0		27.7		25.4		23.2	21.7

August 2, 2016

Securities and Exchange Commission 100 F Street, N.E. Washington, DC 20549

## Commissioners:

We are aware that our report dated August 2, 2016 on our review of interim financial information of 3M Company and its subsidiaries for the three and six month periods ended June 30, 2016 and 2015 and included in the Company's quarterly report on Form 10-Q for the quarter ended June 30, 2016 is incorporated by reference in its Registration Statements on Form S-8 (Registration Nos. 333-30689, 333-30691, 333-44760, 333-73192, 333-101727, 333-109282, 333-128251, 333-130150, 333-151039, 333-156626, 333-156627, 333-166908, 333-174562, 333-181269, 333-181270, and 333-211431) and Form S-3 (Registration Nos. 333-196003, 33-48089, 333-42660, and 333-109211) dated August 2, 2016.

Very truly yours,

/s/ PricewaterhouseCoopers LLP

PricewaterhouseCoopers LLP Minneapolis, Minnesota

## SARBANES-OXLEY SECTION 302 CERTIFICATION

I, Inge G. Thulin, certify that:

- 1. I have reviewed this quarterly report on Form 10-Q of 3M Company;
- Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;
- 3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the Registrant as of, and for, the periods presented in this report;
- 4. The Registrant's other certifying officer and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for the Registrant and have:
  - (a) Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the Registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;
  - (b) Designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;
  - (c) Evaluated the effectiveness of the Registrant's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and
  - (d) Disclosed in this report any change in the Registrant's internal control over financial reporting that occurred during the Registrant's most recent fiscal quarter (the Registrant's fourth fiscal quarter in the case of an annual report) that has materially affected, or is reasonably likely to materially affect, the Registrant's internal control over financial reporting; and
- 5. The Registrant's other certifying officer and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the Registrant's auditors and the audit committee of the Registrant's board of directors (or persons performing the equivalent functions):
  - (a) All significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the Registrant's ability to record, process, summarize and report financial information; and
  - (b) Any fraud, whether or not material, that involves management or other employees who have a significant role in the Registrant's internal control over financial reporting.

/s/ Inge G. Thulin

Inge G. Thulin Chief Executive Officer

August 2, 2016

## **SARBANES-OXLEY SECTION 302 CERTIFICATION**

## I, Nicholas C. Gangestad, certify that:

- 1. I have reviewed this quarterly report on Form 10-Q of 3M Company;
- 2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;
- 3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the Registrant as of, and for, the periods presented in this report;
- 4. The Registrant's other certifying officer and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for the Registrant and have:
  - (a) Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the Registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;
  - (b) Designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;
  - (c) Evaluated the effectiveness of the Registrant's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and
  - (d) Disclosed in this report any change in the Registrant's internal control over financial reporting that occurred during the Registrant's most recent fiscal quarter (the Registrant's fourth fiscal quarter in the case of an annual report) that has materially affected, or is reasonably likely to materially affect, the Registrant's internal control over financial reporting; and
- 5. The Registrant's other certifying officer and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the Registrant's auditors and the audit committee of the Registrant's board of directors (or persons performing the equivalent functions):
  - (a) All significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the Registrant's ability to record, process, summarize and report financial information; and
  - (b) Any fraud, whether or not material, that involves management or other employees who have a significant role in the Registrant's internal control over financial reporting.

/s/ Nicholas C. Gangestad
Nicholas C. Gangestad
Chief Financial Officer

August 2, 2016

## SARBANES-OXLEY SECTION 906 CERTIFICATION

In connection with the Quarterly Report of 3M Company (the "Company") on Form 10-Q for the period ended June 30, 2016 as filed with the Securities and Exchange Commission on the date hereof (the "Report"), I, Inge G. Thulin, Chief Executive Officer of the Company, certify, pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002, that, to my knowledge:

- 1. The Report fully complies with the requirements of Section 13(a) or 15(d) of the Securities Exchange Act of 1934; and
- 2. The information contained in the Report fairly presents, in all material respects, the financial condition and results of operations of the Company.

/s/ Inge G. Thulin	
Inge G. Thulin Chief Executive Officer	
August 2, 2016	

## SARBANES-OXLEY SECTION 906 CERTIFICATION

In connection with the Quarterly Report of 3M Company (the "Company") on Form 10-Q for the period ended June 30, 2016 as filed with the Securities and Exchange Commission on the date hereof (the "Report"), I, Nicholas C. Gangestad, Chief Financial Officer of the Company, certify, pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002, that, to my knowledge:

- 1. The Report fully complies with the requirements of Section 13(a) or 15(d) of the Securities Exchange Act of 1934; and
- 2. The information contained in the Report fairly presents, in all material respects, the financial condition and results of operations of the Company.

/s/ Nicholas C. Gangestad	
Nicholas C. Gangestad Chief Financial Officer	
August 2, 2016	

## MINE SAFETY DISCLOSURES

For the second quarter of 2016, the Company has the following mine safety information to report in accordance with Section 1503(a) of the Act, in connection with the Pittsboro, North Carolina mine, the Little Rock, Arkansas mine, the Corona, California mine, and the Wausau, Wisconsin mine (including Greystone Plant):

										Received			
									Received	Notice of			
						To	tal Dollar Value		Notice of	Potential to			Aggregate
Mine or Operating			Section				of MSHA	Total Number	Pattern of	Have Pattern	Legal Actions	Aggregate	Legal Actions
Name/MSHA	Section 104	Section	104(d)	Section	Section		Assessments	of Mining	Violations	<b>Under Section</b>	Pending as of	Legal Actions	Resolved
Identification	S&S Citations	104(b)	Citations and	110(b)(2)	107(a)		Proposed	Related	<b>Under Section</b>	104(e)	Last Day of	Initiated During	During Period
Number	(#)	Orders (#)	Orders (#)	Violations (#)	Orders (#)		(\$)	Fatalities (#)	104(e) (yes/no)	(yes/no)	Period (#)	Period (#)	(#)
3M Pittsboro ID: 3102153	_	_	_	_	_	s	_	_	No	No	_		
3M Little Rock ID: 0300426	_	_	_	_	_	s	2,996	_	No	No	_		
3M Corona Plant ID: 0400191	_	_	_	_	_	s	_	_	No	No	_		
Greystone Plant ID: 4700119	2	_	_	_	_	s	786	_	No	No	_		
Wausau Plant ID: 4702918	2	_	_	_	_	\$	1,667	_	No	No	_		
Total	4					\$	5,449						