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

The following discussion should be read in conjunction with the other sections of this Annual Report on Form 10-K, including the consolidated financial statements and related notes contained in Item 8, and the discussion of risks and cautionary factors that may affect future results in Item 1A. *Risk Factors*.

Description of Our Company

We are a holding company whose subsidiaries and affiliates, and their licensees, are engaged in the manufacture and sale of cigarettes, other tobacco products and other nicotine-containing products in markets outside the United States of America. We manage our business in four segments:

- European Union;
- Eastern Europe, Middle East & Africa ("EEMA");
- Asia; and
- Latin America & Canada.

Our products are sold in more than 180 markets, and in many of these markets they hold the number one or number two market share position. We have a wide range of premium, mid-price and low-price brands. Our portfolio comprises both international and local brands. In addition to the manufacture and sale of cigarettes and other tobacco products, we are engaged in the development and commercialization of Reduced-Risk Products ("RRPs"). RRPs is the term we use to refer to products that present, are likely to present, or have the potential to present less risk of harm to smokers who switch to these products versus continued smoking. We have a range of RRPs in various stages of development, scientific assessment and commercialization. Because our RRPs do not burn tobacco, they produce far lower quantities of harmful and potentially harmful compounds than found in cigarette smoke.

We use the term net revenues to refer to our operating revenues from the sale of our products, net of sales and promotion incentives. Our net revenues and operating income are affected by various factors, including the volume of products we sell, the price of our products, changes in currency exchange rates and the mix of products we sell. Mix is a term used to refer to the proportionate value of premium-price brands to mid-price or low-price brands in any given market (product mix). Mix can also refer to the proportion of shipment volume in more profitable markets versus shipment volume in less profitable markets (geographic mix). We often collect excise taxes from our customers and then remit them to governments, and, in those circumstances, we include the excise taxes in our net revenues and in excise taxes on products. Our cost of sales consists principally of tobacco leaf, non-tobacco raw materials, labor and manufacturing costs.

Our marketing, administration and research costs include the costs of marketing and selling our products, other costs generally not related to the manufacture of our products (including general corporate expenses), and costs incurred to develop new products. The most significant components of our marketing, administration and research costs are marketing and sales expenses and general and administrative expenses.

Philip Morris International Inc. is a legal entity separate and distinct from our direct and indirect subsidiaries. Accordingly, our right, and thus the right of our creditors and stockholders, to participate in any distribution of the assets or earnings of any subsidiary is subject to the prior rights of creditors of such subsidiary, except to the extent that claims of our company itself as a creditor may be recognized. As a holding company, our principal sources of funds, including funds to make payment on our debt securities, are from the receipt of dividends and repayment of debt from our subsidiaries. Our principal wholly owned and majority-owned subsidiaries currently are not limited by long-term debt or other agreements in their ability to pay cash dividends or to make other distributions with respect to their common stock.

Executive Summary

The following executive summary provides significant highlights from the Discussion and Analysis that follows.

- **Consolidated Operating Results –** The changes in our reported diluted earnings per share ("diluted EPS") for the year ended December 31, 2016, from the comparable 2015 amounts, were as follows:

	Diluted EPS	% Growth
For the year ended December 31, 2015	**$ 4.42**	
2015 Asset impairment and exit costs	**0.03**	
2015 Tax items	**(0.03)**	
Subtotal of 2015 items	**—**	
2016 Asset impairment and exit costs	**—**	
2016 Tax items	**—**	
Subtotal of 2016 items	**—**	
Currency	**(0.46)**	
Interest	**0.05**	
Change in tax rate	**0.03**	
Operations	**0.44**	
For the year ended December 31, 2016	**$ 4.48**	**1.4%**

See the discussion of events affecting the comparability of statement of earnings amounts in the Consolidated Operating Results section of the following Discussion and Analysis.

- **Asset Impairment and Exit Costs –** During 2015, we recorded pre-tax asset impairment and exit costs of $68 million ($52 million after tax or $0.03 per share) related to severance costs for the organizational restructuring in the European Union segment. During 2016, we did not have an EPS impact related to asset impairment and exit costs.

- **Income Taxes –** Our effective income tax rate for 2016 decreased by 0.1 percentage point to 27.9%. The 2015 tax items that increased our diluted EPS by $0.03 per share in 2015 in the table above represents a reduction in unrecognized tax benefits of $41 million following the conclusion of the IRS examinations of Altria Group, Inc.'s ("Altria") consolidated tax returns for the years 2007 and 2008 and PMI's consolidated tax returns for the years 2009 through 2011. Prior to March 28, 2008, PMI was a wholly owned subsidiary of Altria. The change in tax rate that increased our diluted EPS by $0.03 per share in 2016 in the table above was primarily due to earnings mix by taxing jurisdiction and repatriation cost differences.

- **Currency –** The unfavorable currency impact during 2016 results from the strengthening of the U.S. dollar, especially against the Egyptian pound, Indonesian rupiah, Kazakh tenge, Mexican peso, Russian ruble and Turkish lira, partially offset by the Japanese yen. This unfavorable currency movement has impacted our profitability across our primary revenue markets and local currency cost bases.

- **Interest –** The favorable impact of interest was due primarily to lower effective interest rates on debt and higher interest income.

- **Operations –** The increase in diluted EPS of $0.44 from our operations in the table above was due primarily to the following segments:

  - EEMA: Higher pricing and lower marketing, administration and research costs, partially offset by unfavorable volume/mix;
  - European Union: Higher pricing, lower manufacturing costs and lower marketing, administration and research costs, partially offset by unfavorable volume/mix;
  - Asia: Higher pricing and lower marketing, administration and research costs, partially offset by unfavorable volume/mix; and
  - Latin America & Canada: Higher pricing, partially offset by unfavorable volume/mix, higher manufacturing costs and higher

marketing, administration and research costs.

For further details, see the *Consolidated Operating Results* and *Operating Results by Business Segment* sections of the following *Discussion and Analysis*.

• **2017 Forecasted Results –** On February 2, 2017, we announced our forecast for 2017 full-year reported diluted EPS to be in a range of $4.70 to $4.85, at prevailing exchange rates at that time, versus $4.48 in 2016. Excluding an unfavorable currency impact at then-prevailing exchange rates of approximately $0.18 per share for the full-year 2017, the reported diluted earnings per share range represents an increase of approximately 9% to 12% versus adjusted diluted earnings per share of $4.48 in 2016. This forecast reflects net revenue growth, excluding excise taxes, in excess of our current annual growth target range of 4%-6%, excluding currency and acquisitions. This forecast does not include any share repurchases in 2017.

Our 2016 reported and adjusted diluted EPS was $4.48. During 2016, we did not have an EPS impact related to asset impairment and exit costs, and discrete tax items.

Adjusted diluted EPS is not a measure under accounting principles generally accepted in the United States of America ("U.S. GAAP"). We define adjusted diluted EPS as reported diluted EPS adjusted for asset impairment and exit costs, discrete tax items and unusual items. We believe it is appropriate to disclose this measure as it represents core earnings, improves comparability and helps investors analyze business performance and trends. Adjusted diluted EPS should be considered neither in isolation nor as a substitute for reported diluted EPS prepared in accordance with U.S. GAAP.

This 2017 guidance excludes the impact of any future acquisitions, unanticipated asset impairment and exit cost charges, future changes in currency exchange rates and any unusual events. The factors described in Item 1A. *Risk Factors* represent continuing risks to this forecast.

Discussion and Analysis

Critical Accounting Estimates

Item 8, Note 2. *Summary of Significant Accounting Policies* to our consolidated financial statements includes a summary of the significant accounting policies and methods used in the preparation of our consolidated financial statements. In most instances, we must use a particular accounting policy or method because it is the only one that is permitted under U.S. GAAP.

The preparation of financial statements requires that we use estimates and assumptions that affect the reported amounts of our assets, liabilities, net revenues and expenses, as well as our disclosure of contingencies. If actual amounts differ from previous estimates, we include the revisions in our consolidated results of operations in the period during which we know the actual amounts. Historically, aggregate differences, if any, between our estimates and actual amounts in any year have not had a significant impact on our consolidated financial statements.

The selection and disclosure of our critical accounting estimates have been discussed with our Audit Committee. The following is a discussion of the more significant assumptions, estimates, accounting policies and methods used in the preparation of our consolidated financial statements:

• **Revenue Recognition -** We recognize revenue when persuasive evidence of an arrangement exists, delivery of product has occurred, the sales price is fixed or determinable and collectability is reasonably assured. For our company, this means that revenue is recognized when title and risk of loss is transferred to our customers. Title transfers to our customers upon shipment or upon receipt at the customer's location as determined by the sales terms for each transaction. The company estimates the cost of sales returns based on historical experience, and these estimates are immaterial.

• **Goodwill and Non-Amortizable Intangible Assets Valuation -** We test goodwill and non-amortizable intangible assets for impairment annually or more frequently if events occur that would warrant such review. During the second quarter of 2016, we changed the date of our annual goodwill impairment test from the first quarter to the second quarter. The change was made to more closely align the impairment testing date with our long-range planning and forecasting process. We have determined that this change in accounting principle is preferable under the circumstances and believe that the change in the annual impairment testing date did not delay, accelerate, or avoid an impairment charge. While the company has the option to perform a qualitative assessment for both goodwill and non-amortizable intangible assets to determine if it is more likely than not that an impairment exists, the company elects to perform the quantitative assessment for our annual impairment analysis. The impairment analysis involves comparing the fair value of each reporting unit or non-amortizable intangible asset to the carrying value. If the carrying value exceeds the fair value, goodwill or a non-amortizable intangible asset is considered impaired. To determine the fair value of goodwill, we primarily use a discounted cash flow model, supported by the market approach using earnings multiples of comparable global and local companies within the tobacco industry. At December 31, 2016, the carrying value of our goodwill was $7.3 billion, which is related to ten reporting units, each of which consists of a group of markets with similar economic characteristics. The estimated fair value of each of our ten reporting units exceeded the carrying value as of December 31, 2016. To determine the fair value of non-amortizable intangible assets, we primarily use a discounted cash flow model applying the relief-from-royalty method. We concluded that the fair value of our non-amortizable intangible assets exceeded the carrying value. These discounted cash flow models include management assumptions relevant for forecasting operating cash flows, which are subject to changes in business conditions, such as volumes and prices, costs to produce, discount rates and estimated capital needs. Management considers historical experience and all available information at the time the fair values are estimated, and we believe these assumptions are consistent with the assumptions a hypothetical marketplace participant would use. Since the March 28, 2008, spin-off from Altria, we have not recorded a charge to earnings for an impairment of goodwill or non-amortizable intangible assets.

• **Marketing and Advertising Costs -** We incur certain costs to support our products through programs that include advertising, marketing, consumer engagement and trade promotions. The costs of our advertising and marketing programs are expensed in accordance with U.S. GAAP. Recognition of the cost related to our consumer engagement and trade promotion programs contain uncertainties due to the judgment required in estimating the potential performance and compliance for each program. For volume-based incentives provided to customers, management continually assesses and estimates, by customer, the likelihood of the customer's achieving the specified targets, and records the reduction of revenue as the sales are made. For other trade promotions, management relies on estimated utilization rates that have been developed from historical experience. Changes in the assumptions used in estimating the cost of any individual marketing program would not result in a material change in our financial position, results of operations or operating cash flows. We have not made any material changes in the accounting methodology used to estimate our marketing programs during the past three years.

• **Employee Benefit Plans -** As discussed in Item 8, Note 13. *Benefit Plans* to our consolidated financial statements, we provide a range of benefits to our employees and retired employees, including pensions, postretirement health care and postemployment benefits (primarily severance). We record annual amounts relating to these plans based on calculations specified by U.S. GAAP. These calculations include various actuarial assumptions, such as discount rates, assumed rates of return on plan assets, compensation increases, mortality, turnover rates and health care cost trend rates. We review actuarial assumptions on an annual basis and make modifications to the assumptions based on current rates and trends when it is deemed appropriate to do so. As permitted by U.S. GAAP, any effect of the modifications is generally amortized over future periods. We believe that the assumptions utilized in calculating our obligations under these plans are reasonable based upon our historical experience and advice from our actuaries.

Weighted-average discount rate assumptions for pensions and postretirement plans are as follows:

	2016	2015
U.S. pension plans	**4.07%**	4.30%
Non-U.S. pension plans	**1.39%**	1.68%
Postretirement plans	**3.68%**	4.45%

We anticipate that assumption changes will decrease 2017 pre-tax U.S. and non-U.S. pension and postretirement expense to approximately $199 million as compared with approximately $215 million in 2016, excluding amounts related to early retirement programs. The anticipated decrease is primarily due to lower interest cost, partially offset by lower expected return on assets.

Weighted-average expected rate of return and discount rate assumptions have a significant effect on the amount of expense reported for the employee benefit plans. A fifty-basis-point decrease in our discount rate would increase our 2017 pension and postretirement expense by approximately $43 million, and a fifty-basis-point increase in our discount rate would decrease our 2017 pension and postretirement expense by approximately $40 million. Similarly, a fifty-basis-point decrease (increase) in the expected return on plan assets would increase (decrease) our 2017 pension expense by approximately $33 million. See Item 8, Note 13. *Benefit Plans* to our consolidated financial statements for a sensitivity discussion of the assumed health care cost trend rates.

Beginning January 1, 2017, we changed the method used to calculate the service and interest cost components for the net periodic pension benefit costs. Specifically, service costs will be determined based on duration-specific spot rates applied to service cost cash flows and interest costs will be determined by applying duration specific spot rates to the year-by-year projected benefit. The change will not have a material impact to our consolidated results of operations, financial position or cash flows and will be accounted for prospectively as a change in accounting estimate.

• **Income Taxes -** Income tax provisions for jurisdictions outside the United States, as well as state and local income tax provisions, are determined on a separate company basis, and the related assets and liabilities are recorded in our consolidated balance sheets.

The extent of our operations involves dealing with uncertainties and judgments in the application of complex tax regulations in a multitude of jurisdictions. The final taxes paid are dependent upon many factors, including negotiations with taxing authorities in various jurisdictions and resolution of disputes arising from federal, state, and international tax audits. In accordance with the authoritative guidance for income taxes, we evaluate potential tax exposures and record tax liabilities for anticipated tax audit issues based on our estimate of whether, and the extent to which, additional taxes will be due. We adjust these reserves in light of changing facts and circumstances; however, due to the complexity of some of these uncertainties, the ultimate resolution may result in a payment that is materially different from our current estimate of the tax liabilities. If our estimate of tax liabilities proves to be less than the ultimate assessment, an additional charge to expense would result. If payment of these amounts ultimately proves to be less than the recorded amounts, the reversal of the liabilities would result in tax benefits being recognized in the period when we determine the liabilities are no longer necessary.

The effective tax rates used for interim reporting are based on our full-year geographic earnings mix projections and cash repatriation plans. Changes in currency exchange rates, earnings mix by taxing jurisdiction or in cash repatriation plans could have an impact on the effective tax rates, which we monitor each quarter. Significant judgment is required in determining income tax provisions and in evaluating tax positions.

For further details, see Item 8, Note 11. *Income Taxes* to our consolidated financial statements.

• **Hedging -** As discussed below in "Market Risk," we use derivative financial instruments principally to reduce exposures to market risks resulting from fluctuations in foreign currency exchange and interest rates by creating offsetting exposures. For derivatives to which we have elected to apply hedge accounting, gains and losses on these derivatives are initially deferred in accumulated other comprehensive losses on the consolidated balance sheet and recognized in the consolidated statement of earnings in the periods when the related hedged transactions are also recognized in operating results. If we had elected not to use the hedge accounting provisions, gains (losses) deferred in stockholders' (deficit) equity would have been recorded in our net earnings for these derivatives.

• **Contingencies -** As discussed in Item 8, Note 19. *Contingencies* to our consolidated financial statements, legal proceedings covering a wide range of matters are pending or threatened against us, and/or our subsidiaries, and/or our indemnitees in various jurisdictions. We and our subsidiaries record provisions in the consolidated financial statements for pending litigation when we determine that an unfavorable outcome is probable and the amount of the loss can be reasonably estimated. The variability in pleadings in multiple jurisdictions, together with the actual experience of management in litigating claims, demonstrate that the monetary relief that may be specified in a lawsuit bears little relevance to the ultimate outcome. Much of the tobacco-related litigation is in its early stages, and litigation is subject to uncertainty. At the present time, while it is reasonably possible that an unfavorable outcome in a case may occur, after assessing the information available to it: (i) management has not concluded that it is probable that a loss has been incurred in any of the pending tobacco-related cases; (ii) management is unable to estimate the possible loss or range of loss for any of the pending tobacco-related cases; and (iii) accordingly, no estimated loss has been accrued in the consolidated financial statements for unfavorable outcomes in these cases, if any. Legal defense costs are expensed as incurred.

Consolidated Operating Results

Our cigarette volume, net revenues, excise taxes on products and operating companies income by segment were as follows:

(in millions)	2016	2015	2014
Cigarette Volume			
European Union	**193,586**	194,589	194,746
Eastern Europe, Middle East & Africa	**271,393**	279,411	278,374
Asia	**260,029**	281,350	288,128
Latin America & Canada	**87,938**	91,920	94,706
Total cigarette volume	**812,946**	847,270	855,954

(in millions)	2016	2015	2014
Net Revenues			
European Union	**$ 27,129**	$ 26,563	$ 30,517
Eastern Europe, Middle East & Africa	**18,286**	18,328	20,469
Asia	**20,531**	19,469	19,255
Latin America & Canada	**9,007**	9,548	9,865
Net revenues	**$ 74,953**	$ 73,908	$ 80,106

(in millions)	2016	2015	2014
Excise Taxes on Products			
European Union	**$ 18,967**	$ 18,495	$ 21,370
Eastern Europe, Middle East & Africa	**11,286**	10,964	11,855
Asia	**11,850**	11,266	10,527
Latin America & Canada	**6,165**	6,389	6,587
Excise taxes on products	**$ 48,268**	$ 47,114	$ 50,339

(in millions)	2016	2015	2014
Operating Income			
Operating companies income:			
European Union	**$ 3,994**	$ 3,576	$ 3,815
Eastern Europe, Middle East & Africa	**3,016**	3,425	4,033
Asia	**3,196**	2,886	3,187
Latin America & Canada	**938**	1,085	1,030
Amortization of intangibles	**(74)**	(82)	(93)
General corporate expenses	**(161)**	(162)	(165)
Less:			
Equity (income)/loss in unconsolidated subsidiaries, net	**(94)**	(105)	(105)
Operating income	**$ 10,815**	$ 10,623	$ 11,702

As discussed in Item 8, Note 12. *Segment Reporting* to our consolidated financial statements, we evaluate segment performance and allocate resources based on operating companies income, which we define as operating income, excluding general corporate expenses and amortization of intangibles, plus equity (income)/loss in unconsolidated subsidiaries, net. We believe it is appropriate to disclose this measure to help investors analyze the business performance and trends of our various business segments.

References to total international cigarette market, defined as worldwide cigarette volume excluding the United States, total cigarette market, total market and market shares throughout this *Discussion and Analysis* are our tax-paid estimates based on the latest available data from a number of internal and external sources.

The following events that occurred during 2016, 2015 and 2014 affected the comparability of our statement of earnings amounts:

• **Asset Impairment and Exit Costs –** For the year ended December 31, 2016, we did not incur asset impairment and exit costs. For the years ended December 31, 2015 and 2014, pre-tax asset impairment and exit costs by segment were as follows:

(in millions)	2015	2014
Separation programs:		
European Union	$ 68	$ 351
Eastern Europe, Middle East & Africa	—	2
Asia	—	35
Latin America & Canada	—	3
Total separation programs	68	391
Asset impairment charges:		
European Union	—	139
Latin America & Canada	—	5
Total asset impairment charges	—	144
Asset impairment and exit costs	$ 68	$ 535

For further details, see Item 8, Note 5. *Asset Impairment and Exit Costs* to our consolidated financial statements.

• **Acquisitions and Other Business Arrangements –** For further details, see Item 8, Note 6. *Acquisitions and Other Business Arrangements* to our consolidated financial statements.

2016 compared with 2015

The following discussion compares our consolidated operating results for the year ended December 31, 2016, with the year ended December 31, 2015.

Our cigarette shipment volume decreased by 4.1%, or by 4.7% excluding net estimated inventory movements, due to:

- European Union, principally Italy, Germany and Greece, partly offset by Poland and Spain;
- EEMA, mainly North Africa, primarily Algeria, and Russia, partly offset by Saudi Arabia and Ukraine;
- Asia, principally Indonesia, Pakistan, the Philippines and Thailand, partly offset by Korea; and
- Latin America & Canada, predominantly Argentina, partly offset by Mexico.

Our cigarette market share increased in a number of markets, including Brazil, Canada, Colombia, the Czech Republic, France, Kuwait, Mexico, the Netherlands, Norway, Poland, Saudi Arabia, Spain, Switzerland, Turkey and the United Arab Emirates.

Our cigarette shipment volume by brand is shown in the table below:

PMI Cigarette Shipment Volume by Brand (Million Units)

	Full-Year		
	2016	**2015**	**Change**
Marlboro	**281,720**	285,583	(1.4)%
L&M	**96,770**	97,884	(1.1)%
Parliament	**45,671**	44,879	1.8 %
Bond Street	**44,567**	43,608	2.2 %
Chesterfield	**46,291**	41,397	11.8 %
Philip Morris	**35,914**	35,815	0.3 %
Lark	**27,571**	28,828	(4.4)%
Others	**234,442**	269,276	(12.9)%
Total PMI	**812,946**	847,270	(4.1)%

Cigarette shipment volume of *Marlboro* decreased, driven by Algeria, Argentina, Egypt and Vietnam, as well as in-switching from that brand to *IQOS* Consumables, partly offset by Korea, Mexico, the Philippines, Saudi Arabia and Spain.

Cigarette shipment volume of *L&M* decreased, notably in Russia, Thailand and Turkey, partly offset by Algeria, Kazakhstan and Ukraine. Cigarette shipment volume of *Parliament* increased, mainly driven by Korea, Turkey and Ukraine, partly offset by Japan and Russia. Cigarette shipment volume of *Bond Street* increased, mainly driven by Ukraine, partly offset by Kazakhstan. Cigarette shipment volume of *Chesterfield* increased, mainly driven by Argentina, the Czech Republic, reflecting the morphing of *Red & White,* Turkey and the United Kingdom, partly offset by Russia. Cigarette shipment volume of *Philip Morris* increased, driven mainly by Italy and Russia, partly offset by Argentina. Cigarette shipment volume of *Lark* decreased, principally due to Japan and Turkey. Cigarette shipment volume of "Others" decreased, mainly due to local, largely low-margin brands in Pakistan, the Philippines, Russia and Ukraine.

Our other tobacco products ("OTP") primarily include tobacco for roll-your-own and make-your-own cigarettes, pipe tobacco, cigars and cigarillos, and do not include Reduced-Risk Products. Total shipment volume of OTP, in cigarette equivalent units, decreased by 4.5% to 32.6 billion units.

Total shipment volume for cigarettes and OTP, in cigarette equivalent units, decreased by 4.1%.

Total shipment volume of *IQOS* Consumables reached 7.4 billion units, up from 396 million units in 2015.

Our net revenues and excise taxes on products were as follows:

	For the Years Ended December 31,			
(in millions)	**2016**	**2015**	**Variance**	**%**
Net revenues	$ **74,953**	$ 73,908	$ 1,045	1.4 %
Excise taxes on products	**48,268**	47,114	1,154	2.4 %
Net revenues, excluding excise taxes on products	$ **26,685**	$ 26,794	$ (109)	(0.4)%

Net revenues, which include excise taxes billed to customers, increased by $1.0 billion. Excluding excise taxes, net revenues decreased by $109 million, due to:

- unfavorable currency ($1.3 billion) and
- unfavorable volume/mix ($450 million), partly offset by
- price increases ($1.6 billion).

The unfavorable currency was due primarily to the Argentine peso, Canadian dollar, Egyptian pound, Euro, Kazakh tenge, Mexican peso, Philippine peso, Russian ruble and Turkish lira, partially offset by the Japanese yen.

Net revenues include $739 million in 2016 related to sale of RRPs, mainly driven by Japan. This amount includes excise taxes billed to customers. Excluding excise taxes, net revenues for RRPs were $733 million in 2016. In some jurisdictions, including Japan, we are not responsible for collecting excise taxes. Approximately 22% of our $733 million in 2016 RRP net revenues, excluding excise taxes, were from *IQOS* devices.

Net revenues related to RRPs represent the sale of heat-not-burn consumables, including *IQOS* Consumables, *IQOS* devices and related accessories, and other nicotine-containing products, primarily e-vapor products, net of sales and promotion incentives.

Net revenues include $1.8 billion in 2016 and 2015 related to sales of OTP. These net revenue amounts include excise taxes billed to customers. Excluding excises taxes, net revenues for OTP were $644 million in 2016 and $673 million in 2015.

Excise taxes on products increased by $1.2 billion, due to:

- higher excise taxes resulting from changes in retail prices and tax rates ($5.3 billion), partly offset by
- favorable currency ($3.9 billion) and
- lower excise taxes resulting from volume/mix ($236 million).

Governments have consistently increased excise taxes in most of the markets in which we operate. As discussed in *Business Environment*, we expect excise taxes to continue to increase.

Our cost of sales; marketing, administration and research costs; and operating income were as follows:

	For the Years Ended December 31,			
(in millions)	**2016**	**2015**	**Variance**	**%**
Cost of sales	$ **9,391**	$ 9,365	$ 26	0.3 %
Marketing, administration and research costs	**6,405**	6,656	(251)	(3.8)%
Operating income	**10,815**	10,623	192	1.8 %

Cost of sales increased by $26 million, due to:

- higher cost of sales resulting from volume/mix ($242 million), partly offset by
- favorable currency ($216 million).

Marketing, administration and research costs decreased by $251 million, due to:

- lower expenses ($210 million, driven by a favorable comparison to 2015, notably related to cigarette brand building and business optimization initiatives, partly offset by increased support behind Reduced-Risk Products) and
- favorable currency ($41 million).

Operating income increased by $192 million, due primarily to:

- price increases ($1.6 billion) and
- lower marketing, administration and research costs ($210 million) and
- the non-recurrence of the 2015 pre-tax charges for asset impairment and exit costs ($68 million), partly offset by
- unfavorable currency ($1.0 billion) and
- unfavorable volume/mix ($692 million).

Interest expense, net, of $891 million decreased by $117 million, due primarily to lower effective interest rates on debt and higher interest income.

Our effective tax rate decreased by 0.1 percentage point to 27.9%. The 2015 effective tax rate was unfavorably impacted by changes to repatriation assertions on certain foreign subsidiary historical earnings ($58 million), partially offset by a reduction in unrecognized tax benefits of $41 million following the conclusion of the IRS examinations of Altria's consolidated tax returns for the years 2007 and 2008 and PMI's consolidated tax returns for the years 2009 through 2011. Prior to March 28, 2008, PMI was a wholly owned subsidiary of Altria. Changes in currency exchange rates, earnings mix by taxing jurisdiction or in our cash repatriation plans could have an impact on the effective tax rate, which we monitor each quarter. Significant judgment is required in determining income tax provisions and in evaluating tax positions. Based upon tax regulations in existence at December 31, 2016, and our cash repatriation plans, we estimate that our 2017 effective tax rate will be approximately 28%.

We are regularly examined by tax authorities around the world, and we are currently under examination in a number of jurisdictions. It is reasonably possible that within the next 12 months certain tax examinations will close, which could result in a change in unrecognized tax benefits along with related interest and penalties. An estimate of any possible charge cannot be made at this time.

Net earnings attributable to PMI of $7.0 billion increased by $94 million (1.4%). This increase was due primarily to higher operating income as discussed above, and lower interest expense, net. Diluted and basic EPS of $4.48 increased by 1.4%. Excluding an unfavorable currency impact of $0.46, diluted EPS increased by 11.8%.

2015 compared with 2014

The following discussion compares our consolidated operating results for the year ended December 31, 2015, with the year ended December 31, 2014.

Our cigarette shipment volume was down by 1.0%, excluding acquisitions, reflected declines in:

- Asia, mainly due to Korea, Pakistan and the Philippines; and
- Latin America & Canada, mainly due to Argentina, Brazil, Ecuador and Mexico;

partially offset by growth in:

- EEMA, notably Egypt, Saudi Arabia and Turkey, partially offset by Kazakhstan and Ukraine.

Total cigarette volume in the European Union was essentially flat, with declines in Greece, Italy and the United Kingdom largely offset by growth in France, Germany and Spain.

For the year ended December 31, 2015, estimated inventory movements were favorable, driven principally by a favorable comparison in Japan as a result of the 2014 correction of distributor inventory movements partly related to the VAT increase of April 2014. Excluding these estimated inventory movements, our total cigarette shipment volume decreased by 1.6%, excluding acquisitions.

Our cigarette market share increased in a number of key markets, including Argentina, Austria, Belgium, Egypt, France, Germany, Korea, the Netherlands, the Philippines, Poland, Russia, Saudi Arabia, Spain and Switzerland.

Our cigarette shipment volume by brand is shown in the table below:

PMI Cigarette Shipment Volume by Brand (Million Units)

	Full-Year		
	2015	**2014**	**Change**
Marlboro	285,583	282,997	0.9 %
L&M	97,884	94,168	3.9 %
Parliament	44,879	47,199	(4.9)%
Bond Street	43,608	43,585	0.1 %
Chesterfield	41,397	42,144	(1.8)%
Philip Morris	35,815	31,948	12.1 %
Lark	28,828	28,473	1.2 %
Others	269,276	285,440	(5.7)%
Total PMI	847,270	855,954	(1.0)%

The increase in cigarette shipment volume of *Marlboro* reflected growth in: the European Union, notably France, Germany and Spain, partly offset by Italy and the United Kingdom; EEMA, notably Saudi Arabia and Turkey, partly offset by North Africa and Ukraine; and Asia, notably the Philippines and Vietnam, partly offset by Japan and Korea. Cigarette shipment volume of *Marlboro* decreased in Latin America & Canada, mainly due to Argentina, Brazil and Mexico, partly offset by Colombia.

The increase in cigarette shipment volume of *L&M* was predominantly driven by growth in EEMA, notably Egypt, Turkey and Ukraine, partly offset by Russia. The decrease in cigarette shipment volume of *Parliament* was primarily due to Kazakhstan, Korea, Russia and Ukraine, partly offset by Japan and Turkey. Cigarette shipment volume of *Bond Street* was essentially flat, with growth, notably driven by Australia, Russia and Serbia, largely offset by declines in the European Union, Kazakhstan and Ukraine. The decrease in cigarette shipment volume of *Chesterfield* was due to EEMA, mainly Russia, Turkey and Ukraine, partly offset by the European Union, mainly the Czech Republic, Italy and Poland, and by Latin America & Canada, mainly Mexico. The increase in cigarette shipment volume of *Philip Morris* primarily reflects the morphing of *Diana* in Italy. The increase in cigarette shipment volume of *Lark* was principally driven by Japan, partly offset by Korea.

Total shipment volume of OTP, in cigarette equivalent units, increased by 1.0% to 34.1 billion units.

Total shipment volume for cigarettes and OTP, in cigarette equivalent units, decreased by 1.0%, excluding acquisitions.

Our net revenues and excise taxes on products were as follows:

	For the Years Ended December 31,			
(in millions)	**2015**	**2014**	**Variance**	**%**
Net revenues	$ 73,908	$ 80,106	$ (6,198)	(7.7)%
Excise taxes on products	47,114	50,339	(3,225)	(6.4)%
Net revenues, excluding excise taxes on products	$ 26,794	$ 29,767	$ (2,973)	(10.0)%

Net revenues, which include excise taxes billed to customers, decreased by $6.2 billion. Excluding excise taxes, net revenues decreased by $3.0 billion due primarily to:

- unfavorable currency ($4.7 billion) and
- unfavorable volume/mix ($325 million), partly offset by
- price increases ($2.1 billion).

Currency movements decreased net revenues by $13.5 billion and net revenues, excluding excise taxes on products, by $4.7 billion. The $4.7 billion decrease was due primarily to the Argentine peso, Australian dollar, Canadian dollar, Euro, Indonesian rupiah, Japanese yen, Mexican peso, Russian ruble, Turkish lira and the Ukrainian hryvnia.

Net revenues include $1.8 billion in 2015 and $2.0 billion in 2014 related to sales of OTP. These net revenue amounts include excise taxes billed to customers. Excluding excises taxes, net revenues for OTP were $673 million in 2015 and $753 million in 2014.

Excise taxes on products decreased by $3.2 billion, due primarily to:

- favorable currency ($8.8 billion), partly offset by
- higher excise taxes resulting from changes in retail prices and tax rates ($5.4 billion) and
- higher excise taxes resulting from volume/mix ($142 million).

Our cost of sales; marketing, administration and research costs; and operating income were as follows:

	For the Years Ended December 31,			
(in millions)	**2015**	**2014**	**Variance**	**%**
Cost of sales	$ 9,365	$ 10,436	$ (1,071)	(10.3)%
Marketing, administration and research costs	6,656	7,001	(345)	(4.9)%
Operating income	10,623	11,702	(1,079)	(9.2)%

Cost of sales decreased by $1.1 billion, due primarily to:

- favorable currency ($1.4 billion), partly offset by
- higher manufacturing costs ($166 million) and
- higher cost of sales resulting from volume/mix ($148 million).

Marketing, administration and research costs decreased by $345 million, due primarily to:

- favorable currency ($979 million), partly offset by
- higher expenses ($628 million, primarily higher marketing and selling expenses).

Operating income decreased by $1.1 billion, due primarily to:

- unfavorable currency ($2.3 billion),
- higher marketing, administration and research costs ($628 million),
- unfavorable volume/mix ($473 million) and
- higher manufacturing costs ($166 million), partly offset by
- price increases ($2.1 billion) and
- lower pre-tax charges for asset impairment and exit costs ($467 million).

Our effective tax rate decreased by 1.1 percentage points to 28.0%. The 2015 effective tax rate was unfavorably impacted by changes to repatriation assertions on certain foreign subsidiary historical earnings ($58 million), partially offset by a reduction in unrecognized tax benefits of $41 million following the conclusion of the IRS examinations of Altria's consolidated tax returns for the years 2007 and 2008 and PMI's consolidated tax returns for the years 2009 through 2011. The 2014 effective tax rate was unfavorably impacted by the asset impairment and exit costs related to the factory closures. The effective tax rate is based on our full-year earnings mix by taxing jurisdiction and cash repatriation plans.

Net earnings attributable to PMI of $6.9 billion decreased by $620 million (8.3%). This decrease was due primarily to lower operating income as discussed above, partially offset by a lower effective tax rate. Diluted and basic EPS of $4.42 decreased by 7.1%. Excluding an unfavorable currency impact of $1.20, diluted EPS increased by 18.1%.

Operating Results by Business Segment

Business Environment

Taxes, Legislation, Regulation and Other Matters Regarding the Manufacture, Marketing, Sale and Use of Tobacco Products

The tobacco industry and our business face a number of challenges that may adversely affect our business, volume, results of operations, cash flows and financial position. These challenges, which are discussed below and in "*Cautionary Factors That May Affect Future Results*," include:

- regulatory restrictions on our portfolio of products, including restrictions on the packaging, marketing, and sale of tobacco or other nicotine-containing products that could reduce our competitiveness, eliminate our ability to communicate with adult smokers, or even ban certain of our products;
- fiscal challenges, such as excise tax increases and discriminatory tax structures;
- illicit trade in cigarettes and other tobacco products, including counterfeit, contraband and so-called "illicit whites";
- intense competition, including from non-tax paid volume by certain local manufacturers;
- pending and threatened litigation as discussed in Item 8, Note 19. *Contingencies*; and
- governmental investigations.

<u>*Regulatory Restrictions:*</u> The tobacco industry operates in a highly regulated environment. The well-known risks of smoking have led regulators to impose significant restrictions and high excise taxes on cigarettes.

We support a comprehensive regulatory framework for tobacco products based on the principle of harm reduction, including mandated health warnings, minimum age laws, restrictions on advertising, and public place smoking restrictions. We also support regulatory measures that help reduce illicit trade.

Much of the regulation that shapes the business environment in which we operate is driven by the World Health Organization's ("WHO") Framework Convention on Tobacco Control ("FCTC"), which entered into force in 2005. The FCTC is the first international public health treaty and has as its main objective to establish a global agenda for tobacco regulation, with the purpose of reducing tobacco use. To date, 179 countries and the European Union are Parties to the FCTC. The treaty requires Parties to have in place various tobacco control measures and recommends others. The FCTC governing body, the Conference of the Parties ("CoP"), has also adopted non-binding guidelines and policy recommendations related to certain articles of the FCTC that go beyond the text of the treaty.

We have opposed certain measures and continue to engage in a dialogue with regulators with respect to those measures that we do not believe would protect public health and, if implemented, could disrupt competition, severely limit our ability to market and sell our products to adult smokers, or increase illicit trade. Certain measures are discussed in more detail below. It is not possible to predict whether or to what extent measures recommended in the FCTC guidelines will be implemented.

Fiscal Challenges: Excessive and disruptive excise, sales and other tax increases and discriminatory tax structures are expected to continue to have an adverse impact on our profitability, due to lower consumption and consumer down-trading to non-premium, discount, other low-price or low-taxed tobacco products, such as fine cut tobacco and illicit products. In addition, in certain jurisdictions, our combustible products, mainly, cigarettes, are subject to tax structures that discriminate against premium-price products and manufactured cigarettes. We believe that such tax policies undermine public health by encouraging consumers to turn to the illicit trade for cheaper tobacco products and ultimately undercut government revenue objectives, disrupt the competitive environment, and encourage criminal activity. Other jurisdictions have imposed, or are seeking to impose, levies or other taxes specifically on tobacco companies, such as taxes on revenues and/or profits.

EU Tobacco Products Directive: In April 2014, the EU adopted the text of a significantly revised EU Tobacco Products Directive (TPD), which entered into force in May 2016. To date, 23 Member States and Norway have adopted laws transposing the TPD, while the remaining ones are concluding the national transposition. The TPD sets forth a comprehensive set of regulatory requirements for tobacco products, including:

- health warnings covering 65% of the front and back panels of cigarette packs, with an option for Member States to further standardize tobacco packaging, including the introduction of plain packaging;
- a ban on characterizing flavors in some tobacco products, with a transition period for menthol expiring in May 2020;
- security features and tracking and tracing measures some of which could increase operational expenses depending on the scope of the implementing regulation; and
- a framework for the regulation of novel tobacco products and e-cigarettes, including requirements for health warnings and information leaflets, a prohibition on product packaging text related to reduced risk, and the introduction of notification requirements or authorization procedures in advance of commercialization.

Plain Packaging and Other Packaging Restrictions: Plain packaging legislation bans the use of branding, logos and colors on packaging other than the brand name and variant that may be printed only in specified locations and in a uniform font. To date, Australia, France, Hungary, Ireland, New Zealand, Norway and the U.K., have adopted plain packaging legislation. In Australia, plain packaging has been implemented since December 2012. In France, plain packaging has been fully implemented since January 2017, and in the U.K., full compliance is required as of May 2017. In Hungary, full compliance is required immediately for new product launches and no later than May 2019 for other products. No implementation date has yet been set in New Zealand, Norway, or Ireland.

Several countries have initiated World Trade Organization ("WTO") dispute settlement proceedings against Australia related to Australia's plain packaging legislation. The matter is still pending before the WTO panel. In May 2015, three of our subsidiaries filed papers in the English High Court seeking judicial review of the U.K.'s plain packaging legislation. In May 2016, the Court issued a judgment rejecting our claims as well as those from other tobacco companies. We chose not to appeal the decision. In December 2016, the Conseil d'Etat in France upheld the decree that implements France's plain packaging legislation.

Other countries are also considering adopting plain packaging legislation, including, but not limited to, Canada, Turkey and Singapore.

Some countries have adopted, or are considering adopting, packaging restrictions that could have an impact similar to plain packaging. Examples of such restrictions include standardizing the shape and size of packages, prohibiting certain colors or the use of certain descriptive phrases on packaging, and requiring very large graphic health warnings that leave little space for branding.

Restrictions and Bans on the Use of Ingredients: The WHO and others in the public health community have recommended restrictions or total bans on the use of some or all ingredients in tobacco products, including menthol. Broad restrictions and ingredient bans would require us to reformulate our American blend tobacco products and could reduce our ability to differentiate these products in the market in the long term. Menthol bans would eliminate the entire category of mentholated tobacco products. The European Union has banned flavored tobacco products, subject to an exemption until May 2020 for menthol. Other countries may follow the EU's approach. For instance, Turkey has banned menthol as of May 2020. More sweeping ingredient bans have been adopted by Canada and Brazil. While the Canadian ingredient ban currently exempts menthol at the national level, the majority of Canadian provinces have adopted or are in the process of adopting menthol bans. The Canadian federal government also recently published draft regulations that would prohibit menthol in cigarettes. The Brazil ingredients ban, which would prohibit the use of virtually all ingredients with flavoring or aromatic properties, is not in force due to a legal challenge by a tobacco industry union, of which our Brazilian subsidiary is a member. Other lawsuits are also pending against the Brazil ingredients ban. It is not possible to predict the outcome of these legal proceedings.

Bans on Display of Tobacco Products at Retail: In a number of our markets, including, but not limited to, Australia, Canada, Norway, Russia, and Singapore, governments have banned the display of tobacco products at the point of sale. Other countries are also considering similar bans.

Bans and Restrictions on Advertising, Marketing, Promotions and Sponsorships: For many years, the FCTC has called for, and countries have imposed, partial or total bans on tobacco advertising, marketing, promotions and sponsorships, including bans and restrictions on advertising on radio and television, in print and on the Internet. The FCTC guidelines recommend that governments prohibit all forms of communication with adult smokers.

Restrictions on Product Design: Some members of the public health community are calling for the further standardization of tobacco products by requiring, for example, that cigarettes have a certain minimum diameter, which would amount to a ban on slim cigarettes, or requiring the use of standardized filter and cigarette paper designs. In addition, at its meeting in November 2016, the CoP adopted non-binding guidelines recommending that countries regulate product design features that increase the attractiveness of tobacco products, such as the diameter of cigarettes and the use of flavor capsules. Reduced cigarette ignition propensity ("RCIP") standards previously recommended by the FCTC guidelines have been adopted in several of our markets (e.g., Australia, Canada, South Africa, South Korea, and the EU), and are being considered in others.

Restrictions on Public Smoking: The pace and scope of public smoking restrictions have increased significantly in most of our markets. Many countries around the world have adopted, or are likely to adopt, regulations that restrict or ban smoking in public and/or work places, restaurants, bars and nightclubs. Some public health groups have called for, and some countries, regional governments and municipalities have adopted or proposed, bans on smoking in outdoor places, as well as bans on smoking in cars (typically, when minors are present) and private homes.

Other Regulatory Issues: Some regulators are considering, or in some cases have adopted, regulatory measures designed to reduce the supply of tobacco products. These include regulations intended to reduce the number of retailers selling tobacco by, for example, reducing the overall number of tobacco retail licenses available or banning the sale of tobacco within arbitrary distances of certain public facilities.

In a limited number of markets, most notably Japan, we are dependent on governmental approvals that may limit our pricing flexibility.

Illicit Trade: The illicit tobacco trade creates a cheap and unregulated supply of tobacco products, undermines efforts to reduce smoking, especially among youth, damages legitimate businesses, stimulates organized crime, increases corruption and reduces government tax revenue. Illicit trade may account for as much as 10% of global cigarette consumption; this includes counterfeit, contraband and the growing problem of "illicit whites," which are cigarettes legally produced in one jurisdiction for the sole purpose of being exported and illegally sold in another jurisdiction where they have no legitimate market. We estimate that illicit trade in the European Union accounted for slightly less than 10% of total cigarette consumption in 2016.

A number of jurisdictions are considering actions to prevent illicit trade. In November 2012, the FCTC adopted the Protocol to Eliminate Illicit Trade in Tobacco Products (the "Protocol"), which includes supply chain control measures, such as licensing of manufacturers and distributors, enforcement in free trade zones, controls on duty free and Internet sales and the implementation of tracking and tracing technologies. To date, 54 countries have signed the Protocol, and 24 countries and the European Union have ratified it. The Protocol will come into force once the fortieth country ratifies it, after which countries must implement its measures via national legislation. We expect, and welcome, that other countries will ratify the Protocol.

We and our subsidiaries have entered into cooperation agreements with governments and authorities to support their anti-illicit trade efforts. In 2004, we entered into a cooperation agreement with the EU and its member states that provided for cooperation with European law enforcement agencies on anti-contraband and on anti-counterfeit efforts. Under the terms of this agreement we made financial contributions of approximately $75 million per year to support these efforts. The EU Commission decided not to renew the agreement, which expired in July 2016.

In 2009, our Colombian subsidiaries entered into an Investment and Cooperation Agreement with the national and regional governments of Colombia to promote investment in, and cooperation on, anti-contraband and anti-counterfeit efforts. The agreement provides $200 million in funding over a 20-year period to address issues such as combating the illegal cigarette trade and increasing the quality and quantity of locally grown tobacco.

In May 2016, PMI launched PMI IMPACT, a new global initiative that supports third-party projects dedicated to fighting illegal trade and related crimes such as corruption, organized criminal networks and money laundering. The centerpiece of PMI IMPACT is a council of external independent experts with impeccable credentials in the fields of law, anti-corruption and law enforcement. The experts are responsible for evaluating and approving funding proposals for PMI IMPACT grants. PMI has pledged $100 million to fund projects within PMI IMPACT during a three-year period. We expect that the first round of grants will be awarded in the second quarter of 2017.

In November 2016, PMI signed a joint Declaration of Intent to Prevent the Maritime Transportation of Counterfeit Goods together with eight other global brand owners and five of the world's largest shipping companies. This commitment was a result of a dialogue with the International Chamber of Commerce's Business Action to Stop Counterfeiting and Piracy. The signatories aim to tackle the infiltration of shipping services by criminal networks that exploit vessels to transport counterfeit goods, including "illicit whites," across the oceans.

Reduced-Risk Products

Our Approach to RRPs: We recognize that smoking cigarettes causes serious diseases and that the best way to avoid the harms of smoking is never to start or to quit. Nevertheless, it is predicted that over the next decade the number of smokers will remain largely unchanged from the current estimate of 1.1 billion, despite the considerable efforts to discourage smoking.

Cigarettes burn tobacco, which produces smoke. As a result of the combustion process, the smoker inhales various toxic substances. In contrast, Reduced-Risk Products do not burn tobacco and produce significantly lower levels of harmful or potentially harmful compounds than found in smoke.

For smokers who would otherwise continue to smoke, we believe that RRPs offer a much better choice. Accordingly, our key strategic priorities are: to develop and commercialize products that present less risk of harm to adult smokers who switch to those products versus continued smoking; and to convince current adult smokers who would otherwise continue to smoke to switch to those Reduced-Risk Products.

We recognize that this transformation from cigarettes to RRPs will take time and that the speed of transformation will depend in part upon factors beyond our control, such as the willingness of governments, regulators and other policy groups to embrace RRPs as a desired solution to the smoking problem. We also recognize that the transformation must be funded from our existing cigarette business. For so long as a significant number continues to smoke, it is critical that the industry be led by responsible and ethical manufacturers. Therefore, during the transformation, we intend to remain the leading international cigarette manufacturer.

We have a range of RRPs in various stages of development, scientific assessment and commercialization. We conduct rigorous scientific assessment of our RRP platforms to establish that they reduce exposure to harmful and potentially harmful constituents in smoke and, ultimately, that these products present, are likely to present, or have the potential to present less risk of harm to adult smokers who switch to them versus continued smoking. We draw upon a team of expert scientists and engineers from a broad spectrum of scientific disciplines and our extensive learnings of consumer preferences to develop and assess our RRPs. Our efforts are guided by the following key objectives:

- to develop RRPs that adult smokers who would otherwise continue to smoke find to be satisfying alternatives to smoking;
- for those adult smokers, our goal is to offer RRPs with a scientifically substantiated risk reduction profile that approaches as closely as possible that associated with smoking cessation;
- to substantiate the reduction of risk for the individual adult smoker and the reduction of harm to the population as a whole, based on scientific evidence of the highest standard that is made available for scrutiny and review by external independent scientists and relevant regulatory bodies; and
- to advocate for the development of science-based regulatory frameworks for the development and commercialization of RRPs, including the communication of scientifically substantiated information to enable adult consumers to make better health choices.

Our RRP Platforms: Our product development is based on the elimination of combustion via tobacco heating and other innovative systems for aerosol generation, which we believe is the most promising path to providing a better choice for those who would otherwise continue to smoke. We recognize that no single product will appeal to all adult smokers. Therefore, we are developing a portfolio of products intended to appeal to a variety of distinct tastes.

Four RRP platforms are in various stages of development and commercialization readiness:

Platform 1 uses a precisely controlled heating device that we are commercializing under the *IQOS* brand name, into which a specially designed and proprietary consumable tobacco product ("*IQOS* Consumables") is inserted and heated to generate an aerosol. Eight clinical studies have been completed (including two with the duration of three months). The study results show a substantial reduction in relevant biomarkers of exposure to harmful or potentially harmful constituents ("HPHCs") in those adult smokers who switched to *IQOS* compared to those who continued to smoke cigarettes for the duration of the study. The reductions measured in those who switched to *IQOS* approached those that were observed in study participants who quit smoking for the duration of the study. While these reduced exposure clinical studies were primarily designed to focus on biomarkers of exposure, in our three-month studies, we also measured six clinical risk markers. These clinical risk markers are associated with disease mechanisms known to be affected by smoking and to reverse upon cessation. The results are generally consistent with the expected direction of change and indicate that switching completely to *IQOS* led to an overall improvement of clinical risk markers affected by smoking after only three months. We also initiated a 6+6 month exposure response study in December 2014 and expect the results regarding the first six-month term in the third quarter of 2017. We have developed a new version of *IQOS* to further improve the consumer experience and plan to introduce this new version in the second quarter of 2017.

Platform 2 uses a pressed carbon heat source, which when ignited, generates an aerosol by heating tobacco. A pharmacokinetic study and a five-day reduced-exposure study with *Platform 2* have now been completed. In the pharmacokinetic study, we observed that the nicotine pharmacokinetic profile and the subjective user satisfaction are comparable to smoking cigarettes, indicating that this platform could be an acceptable substitute for adult smokers who want to continue to use tobacco products but seek an alternative to cigarettes. The results of the reduced exposure study show a substantial reduction in relevant biomarkers of exposure to HPHCs in those who switched to *Platform 2* compared to those who continued to smoke cigarettes over a five-day period. The clinical phase of a three-month reduced-exposure study has also been completed; we expect the results to be reported in 2017.

Platform 3 creates an aerosol of nicotine salt formed by the chemical reaction of nicotine with a weak organic acid. We are exploring two routes for this platform, one with electronics and one without. We have begun pre-clinical and clinical testing of this platform, including a pharmacokinetic study in New Zealand for the electronic version. The study assessed this product's nicotine pharmacokinetic profile in comparison to a nicotine inhalator. The study showed that nicotine absorption with this product reached peak levels six times faster than with the inhalator, in line with the pharmacokinetic profile of a cigarette, suggesting a significantly higher potential for acceptance by smokers. We have also completed the clinical phase of a pharmacodynamics study in the U.S. and expect final results for this study in the first half of 2017. We expect to commence a safety and efficacy study in the first half of 2017.

Platform 4 covers e-vapor products, which are battery-powered devices that produce an aerosol by vaporizing a liquid nicotine solution. Our e-vapor products comprise devices using current generation technology, and we are well advanced in the development and commercialization of our next generation of e-vapor technology, *MESH*, which addresses certain challenges presented by some e-vapor products currently on the market. Our *MESH* products are designed to ensure the consistency and quality of the generated aerosol. We have commenced non-clinical studies, and our planned clinical assessment includes a pharmacokinetic study scheduled to start in 2017 and a reduced-exposure study that we expect to start in 2018.

We are also developing other potential product platforms.

Commercialization of RRPs: In 2014, we introduced the *IQOS* system in pilot city launches in Nagoya, Japan, and in Milan, Italy. Since then, we have expanded our commercialization activities to include all of Japan, as well as multiple cities in Italy. We also launched *IQOS* in various cities in Switzerland, Russia, Romania, Ukraine, Portugal, Germany, New Zealand, Canada and other markets. By the end of December 2016, *IQOS* was available for sale nationwide in Japan and in key cities in 20 markets, and approximately 1.4 million adult smokers had converted to it. We expect to expand *IQOS* nationally in many of these markets in 2017 as *IQOS* Consumables capacity increases. We are also targeting launches of *IQOS* in key cities in an additional ten to fifteen markets by the end of 2017 as capacity permits.

On the basis of our experience in Japan and Italy, we estimate that only a very small percentage of adult smokers who fully convert to *IQOS* switch back to cigarettes.

In the first quarter of 2016, we started broad commercial production of *IQOS* Consumables. To date, we have experienced supply shortages resulting from stronger-than-anticipated demand, primarily in Japan, and expect capacity limitations to ease as 2017 unfolds. Our 2016 year-end installed capacity was approximately 15 billion *IQOS* Consumables, and we expect that our 2017 year-end installed *IQOS* Consumables capacity will reach approximately 50 billion units. This installed capacity is expected to allow us to produce approximately 32 billion units in 2017, up from 7 billion in 2016. We estimate that as of 2018, we can increase installed annual capacity, as needed, by approximately four billion units per month, with a lead time of 12 months.

As a result of the supply shortages of *IQOS* Consumables, in June 2016, we began to limit the sale of our *IQOS* devices in Japan. While we currently have sufficient capacity with respect to *IQOS* devices, we plan to expand our supplier base. Our *IQOS* devices are subject to product warranties for a period of 12 months from the date of purchase or such other periods as required by law. Warranty claims for these devices have not had a material impact on our consolidated financial position, results of operations or cash flows in any of the periods presented, although they may become more significant as the number of units sold increases.

We currently market our e-vapor products in several markets, including the United Kingdom, Spain, and Israel. In November 2016, we began the city test of *MESH*, our Platform 4 product, in Birmingham, United Kingdom. We also expect to conduct city tests of our Platform 2 and Platform 3 products in 2017.

RRP Regulation and Taxation: RRPs contain nicotine and are not risk-free. We therefore support science-based regulation and taxation of RRPs. Regulation and taxation should differentiate between cigarettes and products that present, are likely to present, or have the potential to present less risk of harm to adult smokers who switch to these products versus continued smoking. Regulation should provide minimum standards for RRPs and specific rules for, among other things, ingredients, labelling and consumer communication, and should ensure that the public is informed about the health risks of all tobacco and nicotine-containing products. Regulation, as well as tobacco industry activities, should reflect the fact that youth should not consume nicotine in any form.

Some governments have banned or are seeking to ban or severely restrict emerging tobacco and nicotine-containing products such as our RRPs. These regulations might foreclose or unreasonably restrict consumer access even to products that might be shown to be a better health choice than continuing to smoke. We oppose such blanket bans and unreasonable restrictions of products that have the potential to present less risk of harm compared to continued smoking. By contrast, we support regulation that sets clear standards and propels innovation to benefit adult smokers.

In the United States, an established regulatory framework for assessing "Modified Risk Tobacco Products" and "New Tobacco Products" exists under the jurisdiction of the Food and Drug Administration ("FDA"). Future FDA actions may influence the regulatory approach of other interested governments. In December 2016, we submitted a Modified Risk Tobacco Product Application for Platform 1 to the FDA. We plan to submit a Premarket Tobacco Application in the first quarter of 2017 for Platform 1.

In the EU, a majority of Member States have transposed the EU Tobacco Products Directive, including the provisions on Novel Tobacco Products, such as *IQOS* Consumables, and e-cigarettes. Most of the EU Member States require a notification submitted six months before the intended placing on the market of a Novel Tobacco Product, while some require pre-market authorizations for the introduction of such products. To date, pursuant to these requirements, we have filed a comprehensive dossier summarizing our scientific assessment of Platform 1 in 14 Member States.

There can be no assurance that we will succeed in our efforts to replace cigarettes with RRPs or that regulation will allow us to commercialize RRPs in all markets or treat RRPs differently from combustible tobacco products such as cigarettes.

Our RRP Business Development Initiatives: In December 2013, we established a strategic framework with Altria Group, Inc. ("Altria") under which Altria will make available its e-vapor products exclusively to us for commercialization outside the United States, and we will make available two of our RRPs exclusively to Altria for commercialization in the United States. In March 2015, we launched *Solaris*, a Platform 4 e-vapor product licensed from Altria, in Spain. In December 2015, we introduced *Solaris* in Israel.

In July 2015, we extended the strategic framework with Altria to include a Joint Research, Development and Technology Sharing Agreement. The additional agreement provides the framework under which PMI and Altria will collaborate to develop the next generation of e-vapor products for commercialization in the United States by Altria and in markets outside the United States by PMI. The collaboration between PMI and Altria in this endeavor is enabled by exclusive technology cross licenses and technical information sharing. The agreements also provide for cooperation on the scientific assessment of, and for the sharing of improvements to, the existing generation of licensed products.

In June 2014, we acquired 100% of Nicocigs Limited, a leading U.K.-based e-vapor company whose principal brand is *Nicolites*. This acquisition provided PMI with immediate access to, and a significant presence in, the U.K. e-vapor market.

Governmental Investigations

From time to time, we are subject to governmental investigations on a range of matters. We describe certain matters pending in Thailand and South Korea in Item 3. *Legal Proceedings-Other Litigation*.

In November 2010, a WTO panel issued its decision in a dispute relating to facts that arose from August 2006 between the Philippines and Thailand concerning a series of Thai customs and tax measures affecting cigarettes imported by PM Thailand into Thailand from the Philippines (see Item 3. *Legal Proceedings-Other Litigation* for additional information). The WTO panel decision, which was upheld by the WTO Appellate Body, concluded that Thailand had no basis to find that PM Thailand's declared customs values and taxes paid were too low, as alleged by the DSI in 2009. The decision also created obligations for Thailand to revise its laws, regulations, or practices affecting the customs valuation and tax treatment of future cigarette imports. Thailand agreed in September 2011 to fully comply with the decision by October 2012. The Philippines contends that to date Thailand has not fully complied and commenced formal proceedings at the WTO to address the outstanding issues. The Philippines has repeatedly expressed concerns with ongoing investigations by Thailand of PM Thailand, including those that led to the criminal charges described in Item 3. *Legal Proceedings-Other Litigation*, noting that these investigations appear to be based on grounds not supported by WTO customs valuation rules and inconsistent with several decisions already taken by Thai Customs and other Thai governmental agencies.

Acquisitions and Other Business Arrangements

We discuss our acquisitions and other business arrangements in Item 8, Note 6. *Acquisitions and Other Business Arrangements* to our consolidated financial statements.

Investments in Unconsolidated Subsidiaries

We discuss our investments in unconsolidated subsidiaries in Item 8, Note 4. *Investments in Unconsolidated Subsidiaries* to our consolidated financial statements.

Asset Impairment and Exit Costs

In November 2015, we commenced the implementation of a restructuring program within our European Union segment. The program is expected to be completed by the end of 2017. In total, we have incurred a total pre-tax charge of approximately $93 million for the program. During 2015, we recorded pre-tax exit costs of $68 million related to employee separation costs. In addition, as part of the total program, up to $25 million of pre-tax implementation costs, primarily related to costs for the project team and notice period payments, have been reflected in cost of sales and marketing, administration and research costs in our consolidated statement of earnings.

On April 4, 2014, we announced the initiation by our affiliate Philip Morris Holland B.V. ("PMH") of consultations with employee representatives on a proposal to discontinue cigarette production at its factory located in Bergen op Zoom, the Netherlands. PMH reached an agreement with the trade unions and their members on a social plan, and ceased cigarette production on September 1, 2014. In total, we have incurred a total pre-tax charge of approximately $549 million for the program. During 2014, we recorded pre-tax asset impairment and exit costs of $489 million. This amount included employee separation costs of $343 million, asset impairment costs of $139 million and other separation costs of $7 million. In addition, as part of the total program, approximately $60 million of pre-tax implementation costs, primarily related to notice period payments, have been reflected in cost of sales and marketing, administration and research costs in our consolidated statement of earnings, of which $50 million were recognized during 2014. Excluding asset impairment costs, substantially all of these charges have resulted in cash expenditures. The program was substantially completed as of December 31, 2015.

Trade Policy

We are subject to various trade restrictions imposed by the United States of America and countries in which we do business (“Trade Sanctions”), including the trade and economic sanctions administered by the U.S. Department of the Treasury's Office of Foreign Assets Control and the U.S. Department of State. It is our policy to comply fully with these Trade Sanctions.

Tobacco products are agricultural products under U.S. law and are not technological or strategic in nature. From time to time we make sales in countries subject to Trade Sanctions, either where such sanctions do not apply to our business or pursuant to exemptions or licenses.

To our knowledge, none of our commercial arrangements results in the governments of any country identified by the U.S. government as a state sponsor of terrorism, nor entities controlled by those governments, receiving cash or acting as intermediaries in violation of U.S. laws.

We do not sell products in Iran, Sudan, North Korea, Cuba and Syria. We may from time to time explore opportunities to sell our products in one or more of these countries, as permitted by law.

Certain states within the U.S. have enacted legislation permitting state pension funds to divest or abstain from future investment in stocks of companies that do business with certain countries that are sanctioned by the U.S. We do not believe such legislation has had a material effect on the price of our shares.

2016 compared with 2015

The following discussion compares operating results within each of our reportable segments for 2016 with 2015.

European Union:

European Union (in millions)	**For the Years Ended December 31, 2016**	**2015**	**Variance**	**%**
Net revenues	**$ 27,129**	$ 26,563	$ 566	2.1%
Excise taxes on products	**18,967**	18,495	472	2.6%
Net revenues, excluding excise taxes on products	**8,162**	8,068	94	1.2%
Operating companies income	**3,994**	3,576	418	11.7%

Net revenues, which include excise taxes billed to customers, increased by $566 million. Excluding excise taxes, net revenues increased by $94 million, due to:

- price increases ($390 million), party offset by
- unfavorable volume/mix ($149 million) and
- unfavorable currency ($147 million).

The net revenues of the European Union segment include $1.4 billion in 2016 and $1.5 billion in 2015 related to sales of OTP. Excluding excise taxes, OTP net revenues for the European Union segment were $485 million in 2016 and $509 million in 2015.

Operating companies income increased by $418 million during 2016. This increase was due primarily to:

- price increases ($390 million),
- the non-recurrence of the 2015 pre-tax charges for asset impairment and exit costs ($68 million),
- lower manufacturing costs ($49 million),
- lower marketing, administration and research costs ($47 million) and
- favorable currency ($34 million), partly offset by
- unfavorable volume/mix ($168 million).

European Union - Industry Volume

The estimated total cigarette market decreased by 1.6% to 501.0 billion units. The moderate decline of the estimated total cigarette market reflected improved macroeconomics, a lower prevalence of illicit trade and, in certain geographies, the estimated positive impact of immigration, which was concentrated in the first half of 2016.

The estimated total OTP market decreased by 2.3% to 152.5 billion cigarette equivalent units, reflecting a lower total fine cut market, down by 2.4% to 141.7 billion cigarette equivalent units.

European Union - PMI Shipment Volume and Market Share

Cigarette shipment volume and market share performance by brand are shown in the tables below:

European Union Cigarette Shipment Volume by Brand (Million Units)

	Full-Year		
	2016	**2015**	**Change**
Marlboro	**96,245**	95,588	0.7 %
L&M	**34,691**	35,010	(0.9)%
Chesterfield	**30,140**	28,278	6.6 %
Philip Morris	**16,290**	14,205	14.7 %
Others	**16,220**	21,508	(24.6)%
Total EU	**193,586**	194,589	(0.5)%

European Union Cigarette Market Shares by Brand

	Full-Year		
	2016	**2015**	**Change p.p.**
Marlboro	**19.0%**	18.8%	0.2
L&M	**6.9%**	6.9%	—
Chesterfield	**5.9%**	5.6%	0.3
Philip Morris	**3.2%**	3.2%	—
Others	**3.3%**	3.8%	(0.5)
Total EU	**38.3%**	38.3%	—

Our cigarette shipment volume decreased by 0.5% to 193.6 billion units, mainly due to Italy, Germany and Greece, partly offset by Poland and Spain. Cigarette shipment volume of *Marlboro* increased by 0.7%, mainly driven by Spain, partly offset by Greece. Our total cigarette market share was flat at 38.3%, with gains, notably in the Czech Republic, France, Poland and Spain, offset by declines, mainly in Greece and Italy. Cigarette shipment volume of "Others" decreased, mainly due the morphing of various trademarks in the Czech Republic and Italy into international brands.

Our shipments of OTP decreased by 5.3% to 22.2 billion cigarette equivalent units. Our total OTP market share decreased by 0.4 points to 14.6%.

European Union - Key Market Commentaries

In **France**, estimated industry size, our cigarette shipment volume and market share performance are shown in the table below.

	France Key Market Data		
	Full-Year		
	2016	**2015**	**Change % / p.p.**
Total Cigarette Market (billion units)	**44.9**	45.5	(1.2)%
PMI Shipments (million units)	**19,243**	18,943	1.6 %
PMI Cigarette Market Share			
Marlboro	**26.4%**	25.9%	0.5
Philip Morris	**10.2%**	9.5%	0.7
Chesterfield	**3.1%**	3.3%	(0.2)
Others	**2.7%**	2.9%	(0.2)
Total	**42.4%**	41.6%	0.8

The estimated total cigarette market decreased moderately by 1.2%, partly reflecting a lower prevalence of illicit trade and e-vapor products. The increase in our cigarette shipment volume mainly reflected market share growth, driven by *Marlboro*, as well as the launch of certain *Philip Morris* variants in January 2016. The estimated total industry fine cut category of 14.7 billion cigarette equivalent units increased by 1.2%. Our market share of the category increased by 0.6 points to 25.6%.

In **Germany**, estimated industry size, our cigarette shipment volume and market share performance are shown in the table below.

	Germany Key Market Data		
	Full-Year		
	2016	**2015**	**Change % / p.p.**
Total Cigarette Market (billion units)	**78.1**	80.0	(2.4)%
PMI Shipments (million units)	**28,950**	29,778	(2.8)%
PMI Cigarette Market Share			
Marlboro	**22.5%**	22.1%	0.4
L&M	**11.6%**	11.9%	(0.3)
Chesterfield	**1.6%**	1.7%	(0.1)
Others	**1.4%**	1.5%	(0.1)
Total	**37.1%**	37.2%	(0.1)

The estimated total cigarette market decreased by 2.4%, primarily reflecting the impact of price increases. The decrease in our cigarette shipment volume primarily reflected the lower total market. The estimated total industry fine cut category of 40.6 billion cigarette equivalent units decreased by 0.8%. Our market share of the category decreased by 1.4 points to 11.3%.

In **Italy**, estimated industry size, our cigarette shipment volume and market share performance are shown in the table below.

	Italy Key Market Data		
	Full-Year		
	2016	**2015**	**Change % / p.p.**
Total Cigarette Market (billion units)	**72.1**	73.8	(2.4)%
PMI Shipments (million units)	**38,624**	39,717	(2.8)%
PMI Cigarette Market Share			
Marlboro	**24.2%**	24.6%	(0.4)
Chesterfield	**11.5%**	11.0%	0.5
Philip Morris	**8.5%**	9.2%	(0.7)
Others	**8.2%**	8.9%	(0.7)
Total	**52.4%**	53.7%	(1.3)

The estimated total cigarette market decreased by 2.4%, primarily reflecting the impact of price increases. The decline of our cigarette shipments, down by 4.8% excluding the net impact of distributor inventory movements, reflected the lower total market, and lower cigarette market share, notably due to *Marlboro* as a result of its price increase in the second quarter of 2016, and low-price *Philip Morris*, impacted by the growth of the super-low price segment, partly offset by super-low price *Chesterfield.* The estimated total industry fine cut category of 6.6 billion cigarette equivalent units increased by 3.5%. Our market share of the category decreased by 1.9 points to 39.2%.

In **Poland**, estimated industry size, our cigarette shipment volume and market share performance are shown in the table below.

	Poland Key Market Data		
	Full-Year		
	2016	**2015**	**Change % / p.p.**
Total Cigarette Market (billion units)	**41.3**	41.1	0.5%
PMI Shipments (million units)	**17,485**	16,763	4.3%
PMI Cigarette Market Share			
Marlboro	**11.6%**	11.4%	0.2
L&M	**18.5%**	18.1%	0.4
Chesterfield	**9.1%**	8.6%	0.5
Others	**3.1%**	2.7%	0.4
Total	**42.3%**	40.8%	1.5

The estimated total cigarette market increased by 0.5%, primarily reflecting a lower prevalence of non-duty paid products. The increase in our cigarette shipment volume was mainly driven by higher cigarette market share, principally *L&M*, reflecting the positive impact of brand support, *Chesterfield*, benefiting from its 100s and super-slims variants, and *RGD* in "Others," up by 0.4 points to 2.6%. The estimated total industry fine cut category of 4.1 billion cigarette equivalent units increased by 3.3%. Our market share of the category decreased by 4.7 points to 26.7%, mainly due to increased price competition at the bottom of the market.

In **Spain**, estimated industry size, our cigarette shipment volume and market share performance are shown in the table below.

	Spain Key Market Data		
	Full-Year		
	2016	**2015**	**Change % / p.p.**
Total Cigarette Market (billion units)	**46.7**	46.7	(0.1)%
PMI Shipments (million units)	**16,365**	15,435	6.0 %
PMI Cigarette Market Share			
Marlboro	**18.0%**	17.0%	1.0
Chesterfield	**8.6%**	9.1%	(0.5)
L&M	**5.4%**	5.8%	(0.4)
Others	**1.9%**	1.5%	0.4
Total	**33.9%**	33.4%	0.5

The estimated total cigarette market decreased by 0.1%, reflecting an improved economy and the favorable estimated impact of in-switching from other tobacco products. Excluding the net impact of distributor inventory movements, our cigarette shipment volume increased by 1.6%, driven by higher market share reflecting the strong performance of *Marlboro*, benefiting from its round price point in the vending channel and the new Architecture 2.0. The estimated total industry fine cut category of 9.3 billion cigarette equivalent units decreased by 2.7%. Our market share of the fine cut category decreased by 1.9 points to 11.6%.

Eastern Europe, Middle East & Africa:

Eastern Europe, Middle East & Africa	**For the Years Ended December 31,**			
(in millions)	**2016**	**2015**	**Variance**	**%**
Net revenues	**$ 18,286**	$ 18,328	$ (42)	(0.2)%
Excise taxes on products	**11,286**	10,964	322	2.9 %
Net revenues, excluding excise taxes on products	**7,000**	7,364	(364)	(4.9)%
Operating companies income	**3,016**	3,425	(409)	(11.9)%

Net revenues, which include excise taxes billed to customers, decreased by $42 million. Excluding excise taxes, net revenues decreased by $364 million, due to:

- unfavorable currency ($600 million) and
- unfavorable volume/mix ($348 million), partly offset by
- price increases ($584 million).

Operating companies income decreased by $409 million during 2016. This decrease was due primarily to:

- unfavorable currency ($839 million) and
- unfavorable volume/mix ($333 million), partly offset by
- price increases ($584 million) and
- lower marketing, administration and research costs ($170 million).

Eastern Europe, Middle East & Africa - PMI Cigarette Shipment Volume

Our cigarette shipment volume decreased by 2.9% to 271.4 billion units, mainly due to North Africa, primarily Algeria, and Russia, partially offset by Saudi Arabia and Ukraine. Cigarette shipment volume of *Marlboro* decreased by 8.5% to 73.8 billion units, principally due to Algeria and Egypt, partly offset by Saudi Arabia. Cigarette shipment volume of *Parliament* increased by 1.0% to 33.9 billion units, driven by Saudi Arabia, Turkey and Ukraine, partly offset by Russia. Cigarette shipment volume of *L&M* increased by 1.9% to 52.2 billion units, driven notably by Algeria, Kazakhstan and Ukraine, partly offset by Russia and Turkey.

Eastern Europe, Middle East & Africa - Key Market Commentaries

In **North Africa** (defined as Algeria, Egypt, Libya, Morocco and Tunisia), estimated industry size, our cigarette shipment volume and market share performance are shown in the table below.

	North Africa Key Market Data		
	Full-Year		
	2016	**2015**	**Change % / p.p.**
Total Cigarette Market (billion units)	**139.0**	138.5	0.4 %
PMI Shipments (million units)	**34,035**	38,111	(10.7)%
PMI Cigarette Market Share			
Marlboro	**8.5%**	13.7%	(5.2)
L&M	**12.5%**	11.9%	0.6
Others	**2.7%**	2.3%	0.4
Total	**23.7%**	27.9%	(4.2)

The estimated total cigarette market increased by 0.4%, driven by Egypt, Morocco and Tunisia, partly offset by Algeria. The decrease in our cigarette shipment volume reflected lower market share, mainly due to *Marlboro* in Algeria, principally resulting from the impact of excise tax-driven price increases, as well as lower-than-anticipated acceptance of Architecture 2.0 for *Marlboro Round Taste.*

In **Russia**, estimated industry size, our cigarette shipment volume and market share performance, as measured by Nielsen, are shown in the table below.

	Russia Key Market Data		
	Full-Year		
	2016	**2015**	**Change % / p.p.**
Total Cigarette Market (billion units)	**280.7**	294.1	(4.6)%
PMI Shipments (million units)	**79,651**	84,422	(5.7)%
PMI Cigarette Market Share			
Marlboro	**1.4%**	1.4%	—
Parliament	**3.8%**	3.9%	(0.1)
Bond Street	**8.4%**	8.4%	—
Others	**13.6%**	14.7%	(1.1)
Total	**27.2%**	28.4%	(1.2)

The estimated total cigarette market decreased by 4.6%, mainly due to the impact of excise tax-driven price increases. The decrease in our cigarette shipment volume, down by 8.3% excluding the impact of estimated distributor inventory movements, mainly reflected the lower total market, and lower cigarette market share primarily due to a decline in "Others" of mid-price *L&M* and *Chesterfield* and super-low *Optima*, resulting from the timing of retail price increases compared to competition.

In **Turkey**, estimated industry size, our cigarette shipment volume and market share performance, as measured by Nielsen, are shown in the table below.

	Turkey Key Market Data		
	Full-Year		
	2016	**2015**	**Change % / p.p.**
Total Cigarette Market (billion units)	**105.5**	103.2	2.2%
PMI Shipments (million units)	**49,624**	49,014	1.2%
PMI Cigarette Market Share			
Marlboro	**10.2%**	9.5%	0.7
Parliament	**11.7%**	11.6%	0.1
Lark	**7.4%**	7.6%	(0.2)
Others	**15.0%**	15.1%	(0.1)
Total	**44.3%**	43.8%	0.5

The estimated total cigarette market increased by 2.2%, primarily reflecting a lower prevalence of illicit trade. The increase in our cigarette shipment volume was mainly driven by the higher total market. Our higher market share, led by *Marlboro*, primarily reflecting the growth of its slimmer *Touch* variant, and *Chesterfield*, partly offset by *L&M* in "Others."

In **Ukraine**, estimated industry size, our cigarette shipment volume and market share performance, as measured by Nielsen, are shown in the table below.

	Ukraine Key Market Data		
	Full-Year		
	2016	2015	Change % / p.p.
Total Cigarette Market (billion units)	**72.7**	70.6	2.9%
PMI Shipments (million units)	**22,014**	19,195	14.7%
PMI Cigarette Market Share			
Marlboro	**3.2%**	3.8%	(0.6)
Parliament	**3.0%**	2.9%	0.1
Bond Street	**10.1%**	8.3%	1.8
Others	**13.6%**	15.0%	(1.4)
Total	**29.9%**	30.0%	(0.1)

The estimated total cigarette market increased by 2.9%, mainly driven by a lower prevalence of illicit trade. The increase in our cigarette shipment volume reflected the higher total cigarette market. The decrease in our market share was primarily due to *Marlboro*, reflecting the impact of widened price gaps, and mid-price *Chesterfield* and super-low *President* in "Others," mainly resulting from competitive price pressure in the low price segment, partly offset by *Bond Street* and *L&M* in "Others."

Asia:

Asia (in millions)	For the Years Ended December 31, 2016	2015	Variance	%
Net revenues	$ **20,531**	$ 19,469	$ 1,062	5.5%
Excise taxes on products	**11,850**	11,266	584	5.2%
Net revenues, excluding excise taxes on products	**8,681**	8,203	478	5.8%
Operating companies income	**3,196**	2,886	310	10.7%

Net revenues, which include excise taxes billed to customers, increased by $1.1 billion. Excluding excise taxes, net revenues increased by $478 million, due primarily to:

- price increases ($335 million) and
- favorable volume/mix ($151 million).

Net revenues include $666 million in 2016 related to sale of RRPs, mainly driven by Japan. Excluding excise taxes, net revenues for RRPs were $666 million in 2016. In some jurisdictions, including Japan, we are not responsible for collecting excise taxes.

Operating companies income increased by $310 million during 2016. This increase was due primarily to:

- price increases ($335 million),
- favorable currency ($52 million) and
- lower marketing, administration and research costs ($28 million), partly offset by
- unfavorable volume/mix ($106 million).

Asia - PMI Cigarette Shipment Volume

Our cigarette shipment volume decreased by 7.6% to 260.0 billion units, mainly due to: Indonesia; Pakistan, reflecting a lower total estimated cigarette market resulting from excise tax-driven price increases and the growth of illicit trade; the Philippines; and Thailand, primarily reflecting the impact of excise tax-driven price increases in the first quarter of 2016, as well as lower market share; and in-switching from our cigarette brands to *IQOS* Consumables; partly offset by Korea, reflecting a normalization of the total estimated cigarette market following the disruptive excise tax increase in January 2015.

Cigarette shipment volume of *Marlboro* increased by 4.0% to 76.5 billion units, mainly driven by Korea and the Philippines, partly offset by Vietnam, as well as in-switching from that brand to *IQOS* Consumables. Cigarette shipment volume of *Parliament* increased by 7.5% to 10.1 billion units, driven by Korea. Cigarette shipment volume of *Lark* decreased by 3.8% to 17.6 billion units, principally due to Japan.

Asia - Key Market Commentaries

In **Indonesia**, estimated industry size, our cigarette shipment volume, market share and segmentation performance are shown in the tables below.

	Indonesia Key Market Data		
	Full-Year		
	2016	**2015**	**Change % / p.p.**
Total Cigarette Market (billion units)	**315.6**	320.0	(1.4)%
PMI Shipments (million units)	**105,524**	109,840	(3.9)%
PMI Cigarette Market Share			
Sampoerna A	**14.0%**	14.6%	(0.6)
Dji Sam Soe	**6.5%**	6.9%	(0.4)
U Mild	**4.2%**	4.7%	(0.5)
Others	**8.7%**	8.1%	0.6
Total	**33.4%**	34.3%	(0.9)

	Indonesia Segmentation Data		
	Full-Year		
	2016	2015	Change p.p.
Segment % of Total Market			
Hand-Rolled Kretek (SKT)	**18.2%**	19.1%	(0.9)
Machine-Made Kretek (SKM)	**75.8%**	74.7%	1.1
Whites (SPM)	**6.0%**	6.2%	(0.2)
Total	**100.0%**	100.0%	—
PMI % Share of Segment			
Hand-Rolled Kretek (SKT)	**37.3%**	37.7%	(0.4)
Machine-Made Kretek (SKM)	**28.9%**	29.7%	(0.8)
Whites (SPM)	**79.5%**	80.3%	(0.8)

The estimated total cigarette market decreased by 1.4%, mainly reflecting a soft economic environment and the impact of excise tax-driven price increases. The decrease in our cigarette shipments was mainly due to lower market share, reflecting the soft performance of our SKM portfolio, due to competitors' discounted product offerings, and our SKT portfolio, broadly in line with industry trends, as well as a lower estimated total market.

In **Japan**, estimated industry size, our cigarette shipment volume and market share performance are shown in the table below.

	Japan Key Market Data		
	Full-Year		
	2016	2015	Change % / p.p.
Total Cigarette Market (billion units)	**173.8**	182.3	(4.6)%
PMI Shipments (million units)	**43,915**	45,690	(3.9)%
PMI Cigarette Market Share			
Marlboro	**10.9%**	11.3%	(0.4)
Parliament	**2.4%**	2.3%	0.1
Lark	**9.9%**	9.9%	—
Others	**1.7%**	1.8%	(0.1)
Total	**24.9%**	25.3%	(0.4)

The estimated total cigarette market decreased by 4.6%, reflecting the continued underlying cigarette consumption decline, the growth of Reduced-Risk Products, and the impact of the April price increases of certain brands of our key competitor. Excluding the net impact of distributor inventory movements, our cigarette shipment volume decreased by 6.5%. The decline was mainly due to a lower total cigarette market, as well as lower cigarette market share, reflecting the impact of competitors' retail pricing, competitors' differentiated menthol taste product offerings and in-switching from our cigarette brands to *IQOS* Consumables.

The estimated national market share of *IQOS* Consumables was 2.9%, bringing our total combined national market share to 27.1%, up by 1.7 points. We calculate national market share for *IQOS* Consumables in Japan as the total sales volume for *IQOS* Consumables as a percentage of the total estimated sales volume for cigarettes and *IQOS* Consumables.

In **Korea**, estimated industry size, our cigarette shipment volume and market share performance are shown in the table below.

	Korea Key Market Data		
	Full-Year		
	2016	**2015**	**Change % / p.p.**
Total Cigarette Market (billion units)	**73.6**	67.3	9.4%
PMI Shipments (million units)	**15,490**	14,201	9.1%
PMI Cigarette Market Share			
Marlboro	**9.6%**	9.6%	—
Parliament	**8.5%**	8.4%	0.1
Virginia S.	**2.4%**	2.6%	(0.2)
Others	**0.5%**	0.6%	(0.1)
Total	**21.0%**	21.2%	(0.2)

Excluding a favorable comparison with the prior year driven by estimated trade inventory movements, the estimated total cigarette market increased by 4.3%, reflecting the normalization of the market following the disruptive excise tax increase of 120% in January 2015. The growth in our cigarette shipment volume primarily reflected the higher estimated total market.

In the **Philippines**, estimated industry size, our cigarette shipment volume and market share performance are shown in the table below.

	Philippines Key Market Data		
	Full-Year		
	2016	**2015**	**Change % / p.p.**
Total Cigarette Market (billion units)	**79.3**	90.2	(12.0)%
PMI Shipments (million units)	**56,611**	66,236	(14.5)%
PMI Cigarette Market Share			
Marlboro	**28.4%**	20.0%	8.4
Fortune	**23.4%**	29.2%	(5.8)
Jackpot	**7.9%**	12.4%	(4.5)
Others	**11.6%**	11.8%	(0.2)
Total	**71.3%**	73.4%	(2.1)

The estimated total cigarette market decreased by 12.0%, mainly due to the impact of excise tax-driven price increases. The decline in our cigarette shipment volume reflected the lower total market, as well as the impact of these price increases on market share, particularly on our low and super-low price brands, *Fortune* and *Jackpot,* partly offset by an increase in market share of *Marlboro*, benefiting from its narrowed price gap with lower-priced brands as a result of the price increases.

Latin America & Canada:

Latin America & Canada	**For the Years Ended December 31,**			
(in millions)	**2016**	**2015**	**Variance**	**%**
Net revenues	**$ 9,007**	$ 9,548	$ (541)	(5.7)%
Excise taxes on products	**6,165**	6,389	(224)	(3.5)%
Net revenues, excluding excise taxes on products	**2,842**	3,159	(317)	(10.0)%
Operating companies income	**938**	1,085	(147)	(13.5)%

Net revenues, which include excise taxes billed to customers, decreased by $541 million. Excluding excise taxes, net revenues decreased by $317 million, due to:

- unfavorable currency ($525 million) and
- unfavorable volume/mix ($104 million), partly offset by
- price increases ($312 million).

Operating companies income decreased by $147 million during 2016. This decrease was due to:

- unfavorable currency ($282 million),
- unfavorable volume/mix ($85 million),
- higher manufacturing costs ($57 million) and
- higher marketing, administration and research costs ($35 million), partly offset by
- price increases ($312 million).

Latin America & Canada - PMI Cigarette Shipment Volume

Our cigarette shipment volume decreased by 4.3% to 87.9 billion units, mainly due to Argentina, partly offset by Mexico. While cigarette shipment volume of *Marlboro* decreased by 1.8% to 35.2 billion units, its market share increased by 0.6 points to an estimated 15.8%, primarily driven by Brazil, up by 0.6 points to 10.3%, Colombia, up by 0.3 points to 9.3%, and Mexico, up by 1.3 points to 48.9%, partly offset by Argentina, down by 1.9 points to 22.4%. Cigarette shipment volume of *Philip Morris* decreased by 15.3% to 16.5 billion units, mainly due to Argentina.

Latin America & Canada - Key Market Commentaries

In **Argentina**, estimated industry size, our cigarette shipment volume and market share performance are shown in the table below.

	Argentina Key Market Data		
	Full-Year		
	2016	**2015**	**Change % / p.p.**
Total Cigarette Market (billion units)	**36.1**	40.8	(11.6)%
PMI Shipments (million units)	**27,512**	31,910	(13.8)%
PMI Cigarette Market Share			
Marlboro	**22.4%**	24.3%	(1.9)
Parliament	**1.9%**	2.1%	(0.2)
Philip Morris	**41.6%**	44.7%	(3.1)
Others	**10.4%**	7.1%	3.3
Total	**76.3%**	78.2%	(1.9)

The decline of the estimated total cigarette market of 11.6% mainly reflected a soft economic environment and the impact of the May 2016 excise tax increase that drove a more than 50% increase in average industry retail prices. The decrease in our cigarette shipment volume was principally due to the lower total market. Our lower cigarette market share primarily reflected growth in competitors' super-low priced products benefiting from down-trading, partly offset by low-price *Chesterfield* in "Others." The capsule segment was up by 1.0 point to 17.4% of the total market; our share of the segment increased by 0.4 points to 73.9%.

In **Canada**, estimated industry size, our cigarette shipment volume and market share performance are shown in the table below.

	Canada Key Market Data		
	Full-Year		
	2016	**2015**	**Change % / p.p.**
Total Cigarette Market (billion units)	**26.3**	26.7	(1.6)%
PMI Shipments (million units)	**10,049**	9,926	1.2 %
PMI Cigarette Market Share			
Belmont	**3.7%**	3.3%	0.4
Canadian Classics	**10.2%**	10.3%	(0.1)
Next	**11.3%**	10.6%	0.7
Others	**13.2%**	13.1%	0.1
Total	**38.4%**	37.3%	1.1

The estimated total cigarette market decreased by 1.6%. The increase in our cigarette shipment volume was principally driven by higher cigarette market share, favorably impacted by estimated trade inventory movements, partly offset by a lower total market.

In **Mexico**, estimated industry size, our cigarette shipment volume and market share performance are shown in the table below.

	Mexico Key Market Data		
	Full-Year		
	2016	2015	Change % / p.p.
Total Cigarette Market (billion units)	**36.2**	33.9	6.7%
PMI Shipments (million units)	**25,080**	23,246	7.9%
PMI Cigarette Market Share			
Marlboro	**48.9%**	47.6%	1.3
Delicados	**9.7%**	10.6%	(0.9)
Benson & Hedges	**4.7%**	4.5%	0.2
Others	**6.0%**	5.8%	0.2
Total	**69.3%**	68.5%	0.8

The estimated total cigarette market increased by 6.7%, or by 1.9% excluding the net impact of estimated trade inventory movements, primarily reflecting improved market conditions and a lower prevalence of illicit trade. The increase in our cigarette shipment volume reflected the higher total market. Our cigarette market share, benefiting from the impact of estimated inventory movements, was up by 0.8 points, with growth of *Marlboro* and *Benson & Hedges*, reflecting the impact of new product launches, partly offset by low-price *Delicados*. Our share of the premium segment, representing 56.8% of the total market, increased by 1.1 points to 93.5%.

2015 compared with 2014

The following discussion compares operating results within each of our reportable segments for 2015 with 2014.

European Union:

European Union (in millions)	For the Years Ended December 31, 2015	2014	Variance	%
Net revenues	$ 26,563	$ 30,517	$ (3,954)	(13.0)%
Excise taxes on products	18,495	21,370	(2,875)	(13.5)%
Net revenues, excluding excise taxes on products	8,068	9,147	(1,079)	(11.8)%
Operating companies income	3,576	3,815	(239)	(6.3)%

Net revenues, which include excise taxes billed to customers, decreased by $4.0 billion. Excluding excise taxes, net revenues decreased by $1.1 billion, due primarily to:

- unfavorable currency ($1.5 billion) and
- unfavorable volume/mix ($29 million), partly offset by
- price increases ($442 million).

The net revenues of the European Union segment include $1.5 billion in 2015 and $1.7 billion in 2014 related to sales of OTP. Excluding excise taxes, OTP net revenues for the European Union segment were $509 million in 2015 and $574 million in 2014.

Operating companies income decreased by $239 million during 2015. This decrease was due primarily to:

- unfavorable currency ($857 million),
- higher marketing, administration and research costs ($242 million) and
- unfavorable volume/mix ($47 million), partly offset by
- price increases ($442 million),
- lower pre-tax charges for asset impairment and exit costs ($422 million, primarily due to the non-recurrence of the 2014 pre-tax charge related to the decision to discontinue cigarette production in the Netherlands) and
- lower manufacturing costs ($46 million).

European Union - Industry Volume

The estimated total cigarette market in the European Union of 508.9 billion units decreased by 0.7%. The net impact of estimated trade inventory movements was neutral. The moderate decline of the estimated total cigarette market reflected, in certain key geographies, improving economies, a decrease in the prevalence of illicit trade, lower out-switching to the fine cut category and a lower prevalence of e-vapor products.

The estimated total OTP market in the European Union of 156.1 billion cigarette equivalent units increased by 0.3%. The total fine cut market was up by 0.8% to 145.1 billion cigarette equivalent units.

European Union - PMI Shipment Volume and Market Share

Cigarette shipment volume and market share performance by brand are shown in the tables below:

European Union Cigarette Shipment Volume by Brand (Million Units)

	Full-Year		
	2015	**2014**	**Change**
Marlboro	95,588	94,537	1.1 %
L&M	35,010	34,943	0.2 %
Chesterfield	28,278	27,100	4.3 %
Philip Morris	14,205	10,224	38.9 %
Others	21,508	27,942	(23.0)%
Total EU	194,589	194,746	(0.1)%

European Union Cigarette Market Shares by Brand

	Full-Year		
	2015	**2014**	**Change p.p.**
Marlboro	18.8%	18.7%	0.1
L&M	6.9%	6.8%	0.1
Chesterfield	5.6%	5.3%	0.3
Philip Morris	3.2%	3.2%	—
Others	3.8%	4.2%	(0.4)
Total EU	38.3%	38.2%	0.1

Our cigarette shipment volume of 194.6 billion units decreased by 0.1%, or by 0.4% excluding favorable net trade inventory movements, mainly in Italy. Market share increased by 0.1 point to 38.3%, with gains notably in France, Germany, Poland and Spain largely offset by the Czech Republic, Greece, Italy and Portugal.

Our shipments of OTP of 23.4 billion cigarette equivalent units increased by 2.2%. Our total OTP market share increased by 0.1 point to 15.0%.

European Union - Key Market Commentaries

In **France**, estimated industry size, our cigarette shipment volume and market share performance are shown in the table below.

	France Key Market Data		
	Full-Year		
	2015	**2014**	**Change % / p.p.**
Total Cigarette Market (billion units)	45.5	45.0	1.0%
PMI Shipments (million units)	18,943	18,563	2.0%
PMI Cigarette Market Share			
Marlboro	25.9%	25.1%	0.8
Philip Morris	9.5%	9.4%	0.1
Chesterfield	3.3%	3.4%	(0.1)
Others	2.9%	3.1%	(0.2)
Total	41.6%	41.0%	0.6

The increase in the estimated total cigarette market reflected its general recovery since the second half of 2014 and a lower prevalence of e-vapor products and illicit trade. The increase in our cigarette shipment volume mainly reflected market share growth, notably of premium brands *Marlboro*, benefiting from a round retail price point of €7.00 per pack and the launch of *Marlboro 25s* in the first quarter of 2015*,* and *Philip Morris*. The estimated total industry fine cut category of 14.5 billion cigarette equivalent units increased by 6.9%. Our market share of the category decreased by 1.2 share points to 25.0%.

In **Germany**, estimated industry size, our cigarette shipment volume and market share performance are shown in the table below.

	Germany Key Market Data		
	Full-Year		
	2015	**2014**	**Change % / p.p.**
Total Cigarette Market (billion units)	80.0	80.4	(0.4)%
PMI Shipments (million units)	29,778	29,411	1.2 %
PMI Cigarette Market Share			
Marlboro	22.1%	21.7%	0.4
L&M	11.9%	11.8%	0.1
Chesterfield	1.7%	1.7%	—
Others	1.5%	1.4%	0.1
Total	37.2%	36.6%	0.6

The decline of the estimated total cigarette market was partly due to the impact of price increases, partially offset by a lower prevalence of illicit trade. The increase in our cigarette shipment volume principally reflected market share growth, driven by *Marlboro*, mainly reflecting the positive impact of the new Architecture 2.0, and *L&M*, benefiting from a rounded retail price point of €5.00 per pack of 19s. The estimated total industry fine cut category of 41.0 billion cigarette equivalent units decreased by 0.6%. Our market share of the category decreased by 0.2 points to 12.7%.

In **Italy**, estimated industry size, our cigarette shipment volume and market share performance are shown in the table below.

	Italy Key Market Data		
	Full-Year		
	2015	2014	Change % / p.p.
Total Cigarette Market (billion units)	73.8	74.4	(0.8)%
PMI Shipments (million units)	39,717	40,439	(1.8)%
PMI Cigarette Market Share			
Marlboro	24.6%	25.7%	(1.1)
Chesterfield	11.0%	9.2%	1.8
Philip Morris	9.2%	10.4%	(1.2)
Others	8.9%	9.6%	(0.7)
Total	53.7%	54.9%	(1.2)

The moderate decrease in the estimated total cigarette industry was driven by an improved macro-economic environment and a lower prevalence of illicit trade and e-vapor products. Excluding the favorable net impact of estimated trade inventory movements, our cigarette shipment volume declined by 2.9%, mainly reflecting market share loss, notably of: *Marlboro*, largely due to its price increase in the first quarter of 2015 to €5.20 per pack from its round retail price point of €5.00 per pack; and *Philip Morris*, including the morphed *Diana* that had been impacted by the growth of the super-low price segment; partly offset by super-low price *Chesterfield*. The estimated total industry fine cut category of 6.4 billion cigarette equivalent units increased by 5.1%. Our market share of the category decreased by 0.4 points to 41.1%.

In **Poland**, estimated industry size, our cigarette shipment volume and market share performance are shown in the table below.

	Poland Key Market Data		
	Full-Year		
	2015	2014	Change % / p.p.
Total Cigarette Market (billion units)	41.1	42.1	(2.3)%
PMI Shipments (million units)	16,763	16,630	0.8 %
PMI Cigarette Market Share			
Marlboro	11.4%	11.2%	0.2
L&M	18.1%	18.2%	(0.1)
Chesterfield	8.6%	7.6%	1.0
Others	2.7%	3.1%	(0.4)
Total	40.8%	40.1%	0.7

The decrease in the estimated total cigarette market reflected the impact of price increases and an increase in the prevalence of illicit products, partly offset by a lower prevalence of e-vapor products. The increase in our cigarette shipment volume reflected higher market share, driven by *Marlboro*, partly reflecting the positive impact of the new Architecture 2.0, and *Chesterfield*, benefiting from its super-slims variants, partly offset by declines from super-low price brands. The estimated total industry fine cut category of 4.0 billion cigarette equivalent units increased by 11.0%, mainly reflecting the retail price impact of excise tax restructuring on the cigar and cigarillo categories that drove higher in-switching to the fine cut category, as well as a lower prevalence of illicit OTP. Our market share of the category decreased by 3.3 points to 31.4%, mainly due to increased price competition at the bottom end of the market.

In **Spain**, estimated industry size, our cigarette shipment volume and market share performance are shown in the table below.

Spain Key Market Data	Full-Year		
	2015	**2014**	**Change % / p.p.**
Total Cigarette Market (billion units)	46.7	47.0	(0.6)%
PMI Shipments (million units)	15,435	14,879	3.7 %
PMI Cigarette Market Share			
Marlboro	17.0%	15.9%	1.1
Chesterfield	9.1%	9.2%	(0.1)
L&M	5.8%	6.1%	(0.3)
Others	1.5%	0.9%	0.6
Total	33.4%	32.1%	1.3

The decrease in the estimated total cigarette market mainly reflected the impact of price increases, partly offset by an improving economy, and a lower prevalence of illicit trade and e-vapor products. The increase in our cigarette shipment volume principally reflected higher market share, driven mainly by *Marlboro*, benefiting from a round price point in the vending channel, the new Architecture 2.0, and an improving economy. The estimated total industry fine cut category of 9.5 billion cigarette equivalent units decreased by 2.1%. Our market share of the fine cut category decreased by 1.3 points to 13.5%.

Eastern Europe, Middle East & Africa:

Eastern Europe, Middle East & Africa (in millions)	For the Years Ended December 31, 2015	2014	Variance	%
Net revenues	$ 18,328	$ 20,469	$ (2,141)	(10.5)%
Excise taxes on products	10,964	11,855	(891)	(7.5)%
Net revenues, excluding excise taxes on products	7,364	8,614	(1,250)	(14.5)%
Operating companies income	3,425	4,033	(608)	(15.1)%

Net revenues, which include excise taxes billed to customers, decreased by $2.1 billion. Excluding excise taxes, net revenues decreased by $1.3 billion, due primarily to:

- unfavorable currency ($1.8 billion) and
- unfavorable volume/mix ($53 million), partly offset by
- price increases ($637 million).

Operating companies income decreased by $608 million during 2015. This decrease was due primarily to:

- unfavorable currency ($938 million),
- higher marketing, administration and research costs ($175 million),
- unfavorable volume/mix ($123 million) and
- higher manufacturing costs ($54 million), partially offset by
- price increases ($637 million) and
- higher equity income from unconsolidated subsidiaries ($44 million).

Eastern Europe, Middle East & Africa - PMI Cigarette Shipment Volume

Our cigarette shipment volume of 279.4 billion units increased by 0.4%, driven notably by Egypt, Saudi Arabia and Turkey, partially offset by Kazakhstan and Ukraine. Excluding favorable net estimated trade inventory movements, our cigarette shipment volume was essentially flat. Our cigarette shipment volume of premium brands decreased by 0.6%, mainly due to *Parliament*, down by 3.2% to 33.6 billion units, mainly due to Kazakhstan, Russia and Ukraine, partly offset by Turkey, partly offset by growth from *Marlboro*, up by 0.7% to 80.7 billion units, driven by Saudi Arabia and Turkey, partly offset by North Africa and Ukraine. Our cigarette shipment volume of *L&M* increased by 8.4% to 51.2 billion units, driven notably by Egypt, Turkey and Ukraine, partly offset by Russia.

Eastern Europe, Middle East & Africa - Key Market Commentaries

In **North Africa**, estimated industry size, our cigarette shipment volume and market share performance are shown in the table below.

	North Africa Key Market Data		
	Full-Year		
	2015	**2014**	**Change % / p.p.**
Total Cigarette Market (billion units)	138.5	143.3	(3.4)%
PMI Shipments (million units)	38,111	37,782	0.9 %
PMI Cigarette Market Share			
Marlboro	13.7%	15.3%	(1.6)
L&M	11.9%	8.9%	3.0
Others	2.3%	1.9%	0.4
Total	27.9%	26.1%	1.8

The decline of the estimated total market was principally due to Egypt, reflecting the impact of excise tax-driven price increases. The increase in our cigarette shipment volume was primarily driven by Egypt, reflecting higher market share, mainly of *L&M*, resulting from improved territorial coverage and brand building activities, partly offset by Algeria and Tunisia.

In **Russia**, estimated industry size, our cigarette shipment volume and market share performance, as measured by Nielsen, are shown in the table below.

	Russia Key Market Data		
	Full-Year		
	2015	2014	Change % / p.p.
Total Cigarette Market (billion units)	294.1	314.1	(6.4)%
PMI Shipments (million units)	84,422	84,948	(0.6)%
PMI Cigarette Market Share			
Marlboro	1.4%	1.6%	(0.2)
Parliament	3.9%	3.7%	0.2
Bond Street	8.4%	7.7%	0.7
Others	14.7%	14.5%	0.2
Total	28.4%	27.5%	0.9

The decline of the estimated total cigarette market was mainly due to the unfavorable impact of excise tax-driven price increases and lower consumer purchasing power as a result of a weak economy. The decrease in our cigarette shipment volume mainly reflected the lower total market, largely offset by market share gains, primarily by premium *Parliament*, low-price *Bond Street*, notably its *Compact* 7.0 variant, and super-low price *Next* in "Others."

In **Turkey**, estimated industry size, our cigarette shipment volume and market share performance, as measured by Nielsen, are shown in the table below.

	Turkey Key Market Data		
	Full-Year		
	2015	2014	Change % / p.p.
Total Cigarette Market (billion units)	103.2	94.7	9.0%
PMI Shipments (million units)	49,014	46,309	5.8%
PMI Cigarette Market Share			
Marlboro	9.5%	8.6%	0.9
Parliament	11.6%	11.2%	0.4
Lark	7.6%	9.0%	(1.4)
Others	15.1%	15.2%	(0.1)
Total	43.8%	44.0%	(0.2)

The increase in the estimated total cigarette market mainly reflected a significantly lower prevalence of illicit trade. The increase in our cigarette shipment volume was driven by a higher total market. The decline in our market share was mainly due to low-price *Lark*, reflecting the impact of price repositioning by our principal competitor in May 2014, partly offset by *Marlboro*, notably its *Touch* 7.0 variants, and *Parliament*, benefiting from the growth of *Parliament Night Blue KS*, the leading SKU sold on the market, and from up-trading from the mid-price segment.

In **Ukraine**, estimated industry size, our cigarette shipment volume and market share performance, as measured by Nielsen, are shown in the table below.

	Ukraine Key Market Data		
	Full-Year		
	2015	2014	Change % / p.p.
Total Cigarette Market (billion units)	70.6	69.7	1.3 %
PMI Shipments (million units)	19,195	23,273	(17.5)%
PMI Cigarette Market Share			
Marlboro	3.8%	4.9%	(1.1)
Parliament	2.9%	3.1%	(0.2)
Bond Street	8.3%	8.9%	(0.6)
Others	15.0%	15.8%	(0.8)
Total	30.0%	32.7%	(2.7)

The increase in the estimated total market was mainly driven by a lower prevalence of illicit trade. The decrease in our cigarette shipment volume largely reflected lower market share, primarily due to *Marlboro*, reflecting the impact of widened price gaps, and *Bond Street*, mainly resulting from competitive price pressure in the low-price segment.

Asia:

Asia (in millions)	For the Years Ended December 31, 2015	2014	Variance	%
Net revenues	$ 19,469	$ 19,255	$ 214	1.1 %
Excise taxes on products	11,266	10,527	739	7.0 %
Net revenues, excluding excise taxes on products	8,203	8,728	(525)	(6.0)%
Operating companies income	2,886	3,187	(301)	(9.4)%

Net revenues, which include excise taxes billed to customers, increased by $214 million. Excluding excise taxes, net revenues decreased by $525 million, due to:

- unfavorable currency ($875 million) and
- unfavorable volume/mix ($100 million), partly offset by
- price increases ($450 million).

Operating companies income decreased by $301 million during 2015. This decrease was due primarily to:

- unfavorable currency ($388 million),
- higher marketing, administration and research costs ($165 million),
- unfavorable volume/mix ($162 million) and
- higher manufacturing costs ($70 million), partly offset by
- price increases ($450 million) and
- the non-recurrence of the 2014 pre-tax charges for asset impairment and exit costs ($35 million) due to the factory closure in Australia.

Asia - PMI Cigarette Shipment Volume

Our cigarette shipment volume of 281.4 billion units decreased by 2.4%, mainly due to: Korea; Pakistan, reflecting a lower total estimated market resulting from the June and December 2015 excise tax-driven price increases, coupled with an increase in the prevalence of illicit trade and lower market share; and the Philippines. Excluding distributor inventory movements in Japan, reflecting a favorable comparison in 2015 resulting from the correction in 2014 of distributor inventory movements related to the VAT increase of April 2014, our cigarette shipment volume decreased by 3.1%.

Our cigarette shipment volume of *Marlboro* of 73.5 billion units increased by 3.0%, mainly driven by the Philippines and Vietnam, partly offset by Japan and Korea. Cigarette shipment volume of *Parliament* of 9.4 billion units decreased by 11.5%, primarily due to Korea, partly offset by Japan. Cigarette shipment volume of *Lark* of 18.3 billion units increased by 3.3%, principally driven by Japan, partly offset by Korea.

Asia - Key Market Commentaries

In **Indonesia**, estimated industry size, our cigarette shipment volume, market share and segmentation performance are shown in the tables below.

	Indonesia Key Market Data		
	Full-Year		
	2015	2014	Change % / p.p.
Total Cigarette Market (billion units)	320.0	319.0	0.3%
PMI Shipments (million units)	109,840	109,694	0.1%
PMI Cigarette Market Share			
Sampoerna A	14.6%	14.2%	0.4
Dji Sam Soe	6.9%	6.2%	0.7
U Mild	4.7%	5.3%	(0.6)
Others	8.1%	8.7%	(0.6)
Total	34.3%	34.4%	(0.1)

	Indonesia Segmentation Data		
	Full-Year		
	2015	2014	Change p.p.
Segment % of Total Market			
Hand-Rolled Kretek (SKT)	19.1%	20.6%	(1.5)
Machine-Made Kretek (SKM)	74.7%	73.0%	1.7
Whites (SPM)	6.2%	6.4%	(0.2)
Total	100.0%	100.0%	—
PMI % Share of Segment			
Hand-Rolled Kretek (SKT)	37.7%	37.5%	0.2
Machine-Made Kretek (SKM)	29.7%	29.6%	0.1
Whites (SPM)	80.3%	79.1%	1.2

The estimated total cigarette market increased slightly, reflecting a soft economic environment. The slight change in our market share reflected a strong performance from our machine-made kretek brands, notably *Sampoerna A*, *Dji Sam Soe Magnum* and *Dji Sam Soe Magnum Blue*, offset by *U Mild*, and a decline in our hand-rolled kretek portfolio, notably due to *Sampoerna Hijau* in "Others," down by 0.4 share points to 2.9%.

In **Japan**, estimated industry size, our cigarette shipment volume and market share performance are shown in the table below.

	Japan Key Market Data		
	Full-Year		
	2015	2014	Change % / p.p.
Total Cigarette Market (billion units)	182.3	186.2	(2.1)%
PMI Shipments (million units)	45,690	45,556	0.3 %
PMI Cigarette Market Share			
Marlboro	11.3%	11.6%	(0.3)
Parliament	2.3%	2.2%	0.1
Lark	9.9%	10.0%	(0.1)
Others	1.8%	2.1%	(0.3)
Total	25.3%	25.9%	(0.6)

The decrease of the estimated total cigarette market moderated to 2.1%. Excluding estimated inventory movements, driven principally by a favorable comparison as a result of the 2014 correction of distributor inventory movements partly related to the VAT increase of April 2014, our cigarette shipment volume decreased by 4.3%. The decline was mainly due to a lower total market, and lower market share principally reflecting the impact of competitive retail price and new menthol taste product offerings.

In **Korea**, estimated industry size, our cigarette shipment volume and market share performance are shown in the table below.

	Korea Key Market Data		
	Full-Year		
	2015	2014	Change % / p.p.
Total Cigarette Market (billion units)	67.3	88.1	(23.6)%
PMI Shipments (million units)	14,201	17,346	(18.1)%
PMI Cigarette Market Share			
Marlboro	9.6%	7.8%	1.8
Parliament	8.4%	8.6%	(0.2)
Virginia S.	2.6%	2.6%	—
Others	0.6%	0.7%	(0.1)
Total	21.2%	19.7%	1.5

The decline of the estimated total cigarette market reflected the impact of the January 2015 excise tax increase and related retail price increases. Excluding the impact of estimated inventory movements associated with the timing of the excise tax increase, the total cigarette market declined by approximately 17.3%. The decline in our cigarette shipment volume reflected the lower estimated total market, partly offset by share growth, driven by *Marlboro*, benefiting from the positive impact of pricing for our principal domestic competitor's main brands.

In the **Philippines**, estimated industry size, our cigarette shipment volume and market share performance are shown in the table below.

	Philippines Key Market Data		
	Full-Year		
	2015	2014	Change % / p.p.
Total Cigarette Market (billion units)	90.2	94.9	(4.9)%
PMI Shipments (million units)	66,236	68,358	(3.1)%
PMI Cigarette Market Share			
Marlboro	20.0%	16.0%	4.0
Fortune	29.2%	28.9%	0.3
Jackpot	12.4%	15.0%	(2.6)
Others	11.8%	12.1%	(0.3)
Total	73.4%	72.0%	1.4

The estimated total cigarette market decreased by 4.9%, mainly due to the impact of price increases. The decline in our cigarette shipment volume reflected the lower total market combined with lower consumption of our low and super-low price brands, following price increases in late 2014 and early 2015, partly offset by higher market share, driven by adult smoker uptrading to *Marlboro*, combined with market share growth of *Fortune*, reflecting the narrowing of retail price gaps with brands at the bottom end of the market.

Latin America & Canada:

Latin America & Canada	**For the Years Ended December 31,**				
(in millions)	**2015**	**2014**	**Variance**	**%**
Net revenues	$ 9,548	$ 9,865	$ (317)	(3.2)%
Excise taxes on products	6,389	6,587	(198)	(3.0)%
Net revenues, excluding excise taxes on products	3,159	3,278	(119)	(3.6)%
Operating companies income	1,085	1,030	55	5.3 %

Net revenues, which include excise taxes billed to customers, decreased by $317 million. Excluding excise taxes, net revenues decreased by $119 million, due primarily to:

- unfavorable currency ($505 million) and
- unfavorable volume/mix ($143 million), partly offset by
- price increases ($525 million).

Operating companies income increased by $55 million during 2015. This increase was due primarily to:

- price increases ($525 million), partly offset by
- unfavorable currency ($210 million),
- unfavorable volume/mix ($141 million),
- higher manufacturing costs ($88 million) and
- higher marketing, administration and research costs ($42 million).

Latin America & Canada - PMI Cigarette Shipment Volume and Market Share

Our cigarette shipment volume of 91.9 billion units decreased by 2.9%, mainly due to Argentina, Brazil, Canada and Mexico. Although shipment volume of *Marlboro* of 35.8 billion units decreased by 3.2%, our Regional market share increased by 0.2 points to an estimated 15.2%. Market share of *Marlboro* increased notably in Brazil and Colombia, by 0.4 and 1.1 points to 9.7% and 9.0%, respectively. Shipment volume of *Philip Morris* of 19.4 billion units increased by 1.7%, driven mainly by Canada.

Latin America & Canada - Key Market Commentaries

In **Argentina**, estimated industry size, our cigarette shipment volume and market share performance are shown in the table below.

	Argentina Key Market Data		
	Full-Year		
	2015	2014	Change % / p.p.
Total Cigarette Market (billion units)	40.8	41.9	(2.5)%
PMI Shipments (million units)	31,910	32,323	(1.3)%
PMI Cigarette Market Share			
Marlboro	24.3%	24.3%	—
Parliament	2.1%	2.2%	(0.1)
Philip Morris	44.7%	43.4%	1.3
Others	7.1%	7.3%	(0.2)
Total	78.2%	77.2%	1.0

The decline of the estimated total cigarette market was mainly due to the impact of price increases and a challenging economic environment. The decrease in our shipment volume was mainly due to a lower estimated total market, partly offset by market share growth, driven primarily by *Philip Morris*, reflecting the positive impact of the brand's capsule variants. Our share of the growing capsule segment, representing 16.4% of the total market, grew by 4.4 points to 73.5%.

In **Canada**, estimated industry size, our cigarette shipment volume and market share performance are shown in the table below.

	Canada Key Market Data		
	Full-Year		
	2015	2014	Change % / p.p.
Total Cigarette Market (billion units)	26.7	27.3	(2.3)%
PMI Shipments (million units)	9,926	10,275	(3.4)%
PMI Cigarette Market Share			
Belmont	3.3%	3.0%	0.3
Canadian Classics	10.3%	10.4%	(0.1)
Next	10.6%	10.6%	—
Others	13.1%	13.6%	(0.5)
Total	37.3%	37.6%	(0.3)

The estimated total cigarette market decreased by 2.3%. Excluding the favorable impact of estimated competitors' trade inventory movements, the total market declined by 4.6%, mainly due to the impact of tax-driven price increases. The decrease in our cigarette shipment volume was principally due to a lower estimated total market. Our market share was also negatively impacted by the above-mentioned estimated competitors' trade inventory movements.

In **Mexico**, estimated industry size, our cigarette shipment volume and market share performance are shown in the table below.

	Mexico Key Market Data		
	Full-Year		
	2015	**2014**	**Change % / p.p.**
Total Cigarette Market (billion units)	33.9	33.5	1.4 %
PMI Shipments (million units)	23,246	23,861	(2.6)%
PMI Cigarette Market Share			
Marlboro	47.6%	49.7%	(2.1)
Delicados	10.6%	11.1%	(0.5)
Benson & Hedges	4.5%	5.2%	(0.7)
Others	5.8%	5.3%	0.5
Total	68.5%	71.3%	(2.8)

The estimated total cigarette market increased by 1.4%. Excluding the unfavorable impact of estimated trade inventory movements, the total market increased by 3.8%, primarily reflecting a lower prevalence of illicit trade. The decrease in our cigarette shipment volume was mainly driven by: lower market share, mainly due to *Marlboro,* reflecting adult smoker down-trading; and the timing of price increases by our principal competitor in the first quarter of 2015; partly offset by gains for certain low-price local trademark brands.

Financial Review

- **Net Cash Provided by Operating Activities**

Net cash provided by operating activities of $8.1 billion for the year ended December 31, 2016, increased by $212 million from the comparable 2015 period. Excluding unfavorable currency movements of $409 million, the change was due primarily to net earnings growth and lower cash payments related to exit costs, partly offset by higher working capital requirements and 2016 installment payments of security into a court trust pertaining to the *Létourneau* and *Blais* cases as well as a 2016 payment to the South Korean tax authorities (see Item 8, Note 19. *Contingencies* for additional information).

Excluding currency, the unfavorable variance in working capital was due primarily to the following:

- more cash used for accounts receivable, primarily due to the timing of sales and cash collections (including unfavorable comparisons to the cash flows provided for accounts receivable in 2015 following the expansion of arrangements to sell accounts receivable to unaffiliated financial institutions as disclosed in Item 8, Note 21. *Sale of Accounts Receivable*), partly offset by
- more cash provided by accrued liabilities and other current assets, primarily due to the timing of payments for excise taxes.

Net cash provided by operating activities of $7.9 billion for the year ended December 31, 2015, increased by $126 million from the comparable 2014 period. The change was due primarily to net earnings growth (excluding unfavorable currency of $1.9 billion) and working capital initiatives.

Excluding currency, the favorable variance in working capital was due primarily to the following:

- more cash provided by accounts receivable, primarily due to the timing of sales and cash collections (including the sale of accounts receivable in 2015 to unaffiliated financial institutions as disclosed in Item 8, Note 21. *Sale of Accounts Receivable*); and
- less cash used for accrued liabilities and other current assets, primarily due to the timing of payments for excise taxes; partially offset by
- more cash used for inventories, primarily related to higher finished goods inventories.

- **Net Cash Used in Investing Activities**

Net cash used in investing activities of $968 million for the year ended December 31, 2016, increased by $260 million from the comparable 2015 period, due primarily to higher capital expenditures.

Net cash used in investing activities of $708 million for the year ended December 31, 2015, decreased by $288 million from the comparable 2014 period, due primarily to lower capital expenditures and purchases of businesses in 2014.

In June 2014, we acquired 100% of Nicocigs Limited, a leading U.K.-based e-vapor company, for the final purchase price of $103 million, net of cash acquired. For further details, see Item 8, Note 6. *Acquisitions and Other Business Arrangements* to our consolidated financial statements.

Our capital expenditures were $1.2 billion in 2016, $1.0 billion in 2015 and $1.2 billion in 2014. The 2016 expenditures were primarily related to investments in RRPs, productivity-enhancing programs, and equipment for new products. We expect total capital expenditures in 2017 of approximately $1.5 billion (including additional capital expenditures related to our ongoing investment in RRPs to support capacity expansion, notably for *IQOS* Consumables), to be funded by operating cash flows.

- **Net Cash Used in Financing Activities**

During 2016, net cash used in financing activities was $5.4 billion, compared with net cash used in financing activities of $4.7 billion during 2015 and $6.8 billion in 2014.

The 2016 change was due primarily to lower net proceeds received from the sale of subsidiary shares to noncontrolling interests, partially offset by higher proceeds from long-term debt issuances.

The 2015 change was due primarily to the cash used in 2014 to repurchase our common stock pursuant to our share repurchase program, as well as the 2015 net proceeds received from the sale of subsidiary shares to noncontrolling interests, partially offset by lower net cash proceeds in 2015 from long-term debt.

On January 30, 2014, the Indonesian Stock Exchange ("IDX") adopted a regulation requiring all listed public companies to have at least a 7.5% public shareholding by January 30, 2016. In order to comply with this requirement, our subsidiary PT HM Sampoerna Tbk. ("Sampoerna"), of which we held a 98.18% interest, conducted a rights issue. In connection with the rights issue, PT Philip Morris Indonesia ("PMID"), a fully consolidated subsidiary of PMI, sold 264,209,711 of the rights to third-party investors. Delivery of the rights sold took place on October 26, 2015. The total net proceeds from the rights issue were $1.5 billion at prevailing exchange rates on the closing date. For further details, see Item 8, Note 6. *Acquisitions and Other Business Arrangements* to our consolidated financial statements.

During 2014, we used a total of $13.2 billion to repurchase our common stock, pay dividends and repay debt. These uses were partially offset by proceeds from our debt offerings and short-term borrowings in 2014 of $6.6 billion.

Dividends paid in 2016, 2015 and 2014 were $6.4 billion, $6.3 billion and $6.0 billion, respectively.

- **Debt and Liquidity**

We define cash and cash equivalents as short-term, highly liquid investments, readily convertible to known amounts of cash that mature within a maximum of three months and have an insignificant risk of change in value due to interest rate or credit risk changes. As a policy, we do not hold any investments in structured or equity-linked products. Our cash and cash equivalents are predominantly held in demand deposits with institutions that have investment-grade long-term credit rating.

Credit Ratings – The cost and terms of our financing arrangements as well as our access to commercial paper markets may be affected by applicable credit ratings. On March 21, 2016, Standard & Poor's affirmed our long-term credit rating at "A" and short-term at "A-1," but revised our outlook to "Negative" from "Stable." On August 1, 2016, Fitch affirmed our long-term credit rating at "A" and short-term at "F1," as well as our "Negative" outlook. We do not expect the Standard & Poor's and Fitch negative outlooks to impact our borrowing costs. On August 10, 2016, Moody's affirmed our long-term credit rating at "A2" and short-term at "P-1," as well as our "Stable" outlook. At February 13, 2017, our credit ratings and outlook by major credit rating agencies were as follows:

	Short-term	Long-term	Outlook
Moody’s	P-1	A2	Stable
Standard & Poor’s	A-1	A	Negative
Fitch	F1	A	Negative

Credit Facilities – On January 27, 2016, we entered into an agreement to extend the term of our existing $2.5 billion multi-year revolving credit facility from February 28, 2020, to February 28, 2021. On January 27, 2017, we entered into an agreement to extend the term of our $2.0 billion 364-day revolving credit facility from February 7, 2017, to February 6, 2018.

At February 13, 2017, our committed credit facilities were as follows:

(in billions) Type	Committed Credit Facilities
364-day revolving credit, expiring February 6, 2018	**$ 2.0**
Multi-year revolving credit, expiring February 28, 2021	**2.5**
Multi-year revolving credit, expiring October 1, 2020 [(1)]	**3.5**
Total facilities	**$ 8.0**

[(1)] On August 30, 2016, we entered into an agreement, effective October 1, 2016, to extend the term of our multi-year revolving credit facility, for an additional year covering the period October 1, 2020 to October 1, 2021 in the amount of $3.35 billion.

At February 13, 2017, there were no borrowings under the committed credit facilities, and the entire committed amounts were available for borrowing.

All banks participating in our committed credit facilities have an investment-grade long-term credit rating from the credit rating agencies. We continuously monitor the credit quality of our banking group, and at this time we are not aware of any potential non-performing credit provider.

Each of these facilities requires us to maintain a ratio of consolidated earnings before interest, taxes, depreciation and amortization (“consolidated EBITDA”) to consolidated interest expense of not less than 3.5 to 1.0 on a rolling four-quarter basis. At December 31, 2016, our ratio calculated in accordance with the agreements was 10.6 to 1.0. These facilities do not include any credit rating triggers, material adverse change clauses or any provisions that could require us to post collateral. We expect to continue to meet our covenants. The terms “consolidated EBITDA” and “consolidated interest expense,” both of which include certain adjustments, are defined in the facility agreements previously filed with the U.S. Securities and Exchange Commission.

In addition to the committed credit facilities discussed above, certain of our subsidiaries maintain short-term credit arrangements to meet their respective working capital needs. These credit arrangements, which amounted to approximately $2.9 billion at December 31, 2016, and December 31, 2015, are for the sole use of our subsidiaries. Borrowings under these arrangements amounted to $643 million at December 31, 2016, and $825 million at December 31, 2015.

Commercial Paper Program – We have commercial paper programs in place in the U.S. and in Europe. Our commercial paper programs in place in the U.S. and in Europe currently have an aggregate issuance capacity of $8.0 billion. At December 31, 2016 and December 31, 2015, we had no commercial paper outstanding.

We expect that the existence of the commercial paper program and the committed credit facilities, coupled with our operating cash flows, will enable us to meet our liquidity requirements.

Sale of Accounts Receivable – To mitigate credit risk and enhance cash and liquidity management we sell trade receivables to unaffiliated financial institutions. These arrangements allow us to sell, on an ongoing basis, certain trade receivables without recourse. The trade receivables sold are generally short-term in nature and are removed from the consolidated balance sheets. We sell trade receivables under two types of arrangements, servicing and non-servicing.

PMI's operating cash flows were positively impacted by the amount of the trade receivables sold and derecognized from the consolidated balance sheets, which remained outstanding with the unaffiliated financial institutions. The trade receivables sold that remained outstanding under these arrangements as of December 31, 2016, 2015 and 2014, were $729 million, $888 million and $120 million, respectively. The net proceeds received are included in cash provided by operating activities in the consolidated statements of cash flows.

For further details, see Item 8, Note 21. *Sale of Accounts Receivable* to our consolidated financial statements.

Debt – Our total debt was $29.1 billion at December 31, 2016, and $28.5 billion at December 31, 2015. Our total debt is primarily fixed rate in nature. For further details, see Item 8, Note 7. *Indebtedness*. The weighted-average all-in financing cost of our total debt was 2.8% in 2016, compared to 3.0% in 2015. See Item 8, Note 16. *Fair Value Measurements* to our consolidated financial statements for a discussion of our disclosures related to the fair value of debt. The amount of debt that we can issue is subject to approval by our Board of Directors.

On February 21, 2014, we filed a shelf registration statement with the U.S. Securities and Exchange Commission, under which we may from time to time sell debt securities and/or warrants to purchase debt securities over a three-year period. During February 2017, we plan to file a new shelf registration statement with the U.S. Securities and Exchange Commission.

Our debt issuances in 2016 were as follows:

(in millions)

Type		Face Value	Interest Rate	Issuance		Maturity
U.S. dollar notes	[a]	$500	1.375%	February 2016		February 2019
U.S. dollar notes	[a]	$750	1.875%	February 2016		February 2021
U.S. dollar notes	[a]	$750	2.750%	February 2016		February 2026
U.S. dollar notes	[b]	$500	2.125%	May 2016		May 2023
U.S. dollar notes	[b]	$500	4.250%	May 2016	[d]	November 2044
EURO notes	[c]	€500 (approximately $578)	2.000%	May 2016		May 2036

[a] Interest on these notes is payable semi-annually in arrears beginning in August 2016.
[b] Interest on these notes is payable semi-annually in arrears beginning in November 2016.
[c] Interest on these notes is payable annually in arrears beginning in May 2017.
[d] These notes are a further issuance of the 4.25% notes issued by PMI in November 2014.

The net proceeds from the sale of the securities listed in the table above were used for general corporate purposes.

The weighted-average time to maturity of our long-term debt was 10.6 years at the end of 2016 and 10.5 years at the end of 2015.

- **Off-Balance Sheet Arrangements and Aggregate Contractual Obligations**

We have no off-balance sheet arrangements, including special purpose entities, other than guarantees and contractual obligations discussed below.

Guarantees – At December 31, 2016, we were contingently liable for $0.8 billion of guarantees of our own performance, which were primarily related to excise taxes on the shipment of our products. There is no liability in the consolidated financial statements associated with these guarantees. At December 31, 2016, our third-party guarantees were insignificant.

Aggregate Contractual Obligations – The following table summarizes our contractual obligations at December 31, 2016:

		Payments Due			
	Total	**2017**	**2018-2019**	**2020-2021**	**2022 and Thereafter**
(in millions)					
Long-term debt [1]	$28,674	$2,573	$5,006	$5,549	$15,546
Interest on borrowings [2]	10,969	911	1,529	1,261	7,268
Operating leases [3]	662	182	208	108	164
Purchase obligations [4]:					
Inventory and production costs	3,871	1,571	1,010	525	765
Other	1,474	1,122	298	46	8
	5,345	2,693	1,308	571	773
Other long-term liabilities [5]	462	62	75	38	287
	$46,112	$6,421	$8,126	$7,527	$24,038

(1) Amounts represent the expected cash payments of our long-term debt and capital lease obligations.
(2) Amounts represent the expected cash payments of our interest expense on our long-term debt, including the current portion of long-term debt. Interest on our fixed-rate debt is presented using the stated interest rate. Amounts exclude the amortization of debt discounts, the amortization of loan fees and fees for lines of credit that would be included in interest expense in the consolidated statements of earnings.
(3) Amounts represent the minimum rental commitments under non-cancelable operating leases.
(4) Purchase obligations for inventory and production costs (such as raw materials, indirect materials and supplies, packaging, co-manufacturing arrangements, storage and distribution) are commitments for projected needs to be utilized in the normal course of business. Other purchase obligations include commitments for marketing, advertising, capital expenditures, information technology and professional services. Arrangements are considered purchase obligations if a contract specifies all significant terms, including fixed or minimum quantities to be purchased, a pricing structure and approximate timing of the transaction. Amounts represent the minimum commitments under non-cancelable contracts. Any amounts reflected on the consolidated balance sheet as accounts payable and accrued liabilities are excluded from the table above.
(5) Other long-term liabilities consist primarily of postretirement health care costs and accruals established for employment costs. The following long-term liabilities included on the consolidated balance sheet are excluded from the table above: accrued pension and postemployment costs, tax contingencies, insurance accruals and other accruals. We are unable to estimate the timing of payments (or contributions in the case of accrued pension costs) for these items. Currently, we anticipate making pension contributions of approximately $70 million in 2017, based on current tax and benefit laws (as discussed in Item 8, Note 13. *Benefit Plans* to our consolidated financial statements).

- **Equity and Dividends**

We discuss our stock awards as of December 31, 2016, in Item 8, Note 9. *Stock Plans* to our consolidated financial statements.

On August 1, 2012, we began repurchasing shares under a three-year $18.0 billion share repurchase program that was authorized by our Board of Directors in June 2012. From August 1, 2012, through December 31, 2014, we repurchased 144.6 million shares of our common stock at a cost of $12.7 billion under this repurchase program. Our authorized three-year share repurchase program of $18.0 billion expired in August 2015. During 2016 and 2015, we did not repurchase any shares of our common stock and we do not presently intend to repurchase shares of our common stock in 2017.

Dividends paid in 2016 were $6.4 billion. During the third quarter of 2016, our Board of Directors approved a 2.0% increase in the quarterly dividend to $1.04 per common share. As a result, the present annualized dividend rate is $4.16 per common share.

Market Risk

- ***Counterparty Risk -*** We predominantly work with financial institutions with strong short- and long-term credit ratings as assigned by Standard & Poor's and Moody's. These banks are also part of a defined group of relationship banks. Non-investment grade institutions are only used in certain emerging markets to the extent required by local business needs. We have a conservative approach when it comes to choosing financial counterparties and financial instruments. As such we do not invest or hold investments in any structured or equity-linked products. The majority of our cash and cash equivalents is currently invested in demand deposits maturing within less than 30 days.

We continuously monitor and assess the credit worthiness of all our counterparties.

• ***Derivative Financial Instruments -*** We operate in markets outside of the U.S., with manufacturing and sales facilities in various locations throughout the world. Consequently, we use certain financial instruments to manage our foreign currency and interest rate exposure. We use derivative financial instruments principally to reduce our exposure to market risks resulting from fluctuations in foreign exchange rates by creating offsetting exposures. We are not a party to leveraged derivatives and, by policy, do not use derivative financial instruments for speculative purposes.

See Item 8, Note 15. *Financial Instruments,* Item 8, Note 16. *Fair Value Measurements* and Item 8, Note 20. *Balance Sheet Offsetting* to our consolidated financial statements for further details on our derivative financial instruments and the related collateral arrangements.

• ***Value at Risk -*** We use a value at risk computation to estimate the potential one-day loss in the fair value of our interest-rate-sensitive financial instruments and to estimate the potential one-day loss in pre-tax earnings of our foreign currency price-sensitive derivative financial instruments. This computation includes our debt, short-term investments, and foreign currency forwards, swaps and options. Anticipated transactions, foreign currency trade payables and receivables, and net investments in foreign subsidiaries, which the foregoing instruments are intended to hedge, were excluded from the computation.

The computation estimates were made assuming normal market conditions, using a 95% confidence interval. We use a "variance/co-variance" model to determine the observed interrelationships between movements in interest rates and various currencies. These interrelationships were determined by observing interest rate and forward currency rate movements over the preceding quarter for determining value at risk at December 31, 2016 and 2015, and over each of the four preceding quarters for the calculation of average value at risk amounts during each year. The values of foreign currency options do not change on a one-to-one basis with the underlying currency and were valued accordingly in the computation.

The estimated potential one-day loss in fair value of our interest-rate-sensitive instruments, primarily debt, under normal market conditions and the estimated potential one-day loss in pre-tax earnings from foreign currency instruments under normal market conditions, as calculated in the value at risk model, were as follows:

	Pre-Tax Earnings Impact			
(in millions)	**At 12/31/16**	**Average**	**High**	**Low**
Instruments sensitive to:				
Foreign currency rates	**$63**	**$58**	**$87**	**$34**

	Fair Value Impact			
(in millions)	**At 12/31/16**	**Average**	**High**	**Low**
Instruments sensitive to:				
Interest rates	**$143**	**$147**	**$217**	**$112**

	Pre-Tax Earnings Impact			
(in millions)	**At 12/31/15**	**Average**	**High**	**Low**
Instruments sensitive to:				
Foreign currency rates	$65	$74	$96	$62

	Fair Value Impact			
(in millions)	**At 12/31/15**	**Average**	**High**	**Low**
Instruments sensitive to:				
Interest rates	$102	$120	$147	$102

The value at risk computation is a risk analysis tool designed to statistically estimate the maximum probable daily loss from adverse movements in interest and foreign currency rates under normal market conditions. The computation does not purport to represent actual losses in fair value or earnings to be incurred by us, nor does it consider the effect of favorable changes in market rates. We cannot predict actual future movements in such market rates and do not present these results to be indicative of future movements in market rates or to be representative of any actual impact that future changes in market rates may have on our future results of operations or financial position.

Contingencies

See Item 3 and Item 8, Note 19. *Contingencies* to our consolidated financial statements for a discussion of contingencies.

Cautionary Factors That May Affect Future Results

Forward-Looking and Cautionary Statements

We may from time to time make written or oral forward-looking statements, including statements contained in filings with the SEC, in reports to stockholders and in press releases and investor webcasts. You can identify these forward-looking statements by use of words such as "strategy," "expects," "continues," "plans," "anticipates," "believes," "will," "estimates," "intends," "projects," "goals," "targets" and other words of similar meaning. You can also identify them by the fact that they do not relate strictly to historical or current facts.

We cannot guarantee that any forward-looking statement will be realized, although we believe we have been prudent in our plans and assumptions. Achievement of future results is subject to risks, uncertainties and inaccurate assumptions. Should known or unknown risks or uncertainties materialize, or should underlying assumptions prove inaccurate, actual results could vary materially from those anticipated, estimated or projected. Investors should bear this in mind as they consider forward-looking statements and whether to invest in or remain invested in our securities. In connection with the “safe harbor” provisions of the Private Securities Litigation Reform Act of 1995, we are identifying important factors that, individually or in the aggregate, could cause actual results and outcomes to differ materially from those contained in any forward-looking statements made by us; any such statement is qualified by reference to the following cautionary statements. We elaborate on these and other risks we face throughout this document, particularly in Item 1A. *Risk Factors,* and *Business Environment* of this section. You should understand that it is not possible to predict or identify all risk factors. Consequently, you should not consider the following to be a complete discussion of all potential risks or uncertainties. We do not undertake to update any forward-looking statement that we may make from time to time, except in the normal course of our public disclosure obligations.

Item 7A. *Quantitative and Qualitative Disclosures About Market Risk.*

The information called for by this Item is included in Item 7, *Market Risk*.