

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 leading a transformation in the tobacco industry to create a smoke-free future and ultimately replace cigarettes with smoke-free products to the benefit of adults who would otherwise continue to smoke, society, the company and its shareholders. We are a leading international tobacco company engaged in the manufacture and sale of cigarettes, as well as smoke-free products and associated electronic devices and accessories, and other nicotine-containing products in markets outside the United States. In addition, we ship a version of our Platform 1 device and its consumables authorized by the U.S. Food and Drug Administration ("FDA") to Altria Group, Inc., for sale in the United States under license. We are building a future on a new category of smoke-free products that, while not risk free, are a much better choice than continuing to smoke. Through multidisciplinary capabilities in product development, state-of-the-art facilities and scientific substantiation, we aim to ensure that our smoke-free products meet adult consumer preferences and rigorous regulatory requirements. Our *IQOS* smoke-free product brand portfolio includes heat-not-burn tobacco and nicotine-containing vapor products.

We manage our business in six operating segments:

- European Union ("EU");
- Eastern Europe ("EE");
- Middle East & Africa ("ME&A"), which includes our international duty free business;
- South & Southeast Asia ("S&SA");
- East Asia & Australia ("EA&A"); and
- Latin America & Canada ("LA&C"), which includes transactions under license with Altria Group, Inc. for the distribution of our Platform 1 product in the United States.

Our cigarettes 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, we are engaged in the development and commercialization of reduced-risk products ("RRPs"). RRP 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 continuing smoking.

We use the term net revenues to refer to our operating revenues from the sale of our products, including shipping and handling charges billed to customers, net of sales and promotion incentives, and excise taxes. 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).

Our cost of sales consists principally of: tobacco leaf, non-tobacco raw materials, labor and manufacturing costs; shipping and handling costs; and the cost of the *IQOS* devices produced by third-party electronics manufacturing service providers. Estimated costs associated with *IQOS* warranty programs are generally provided for in cost of sales in the period the related revenues are recognized.

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 its 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

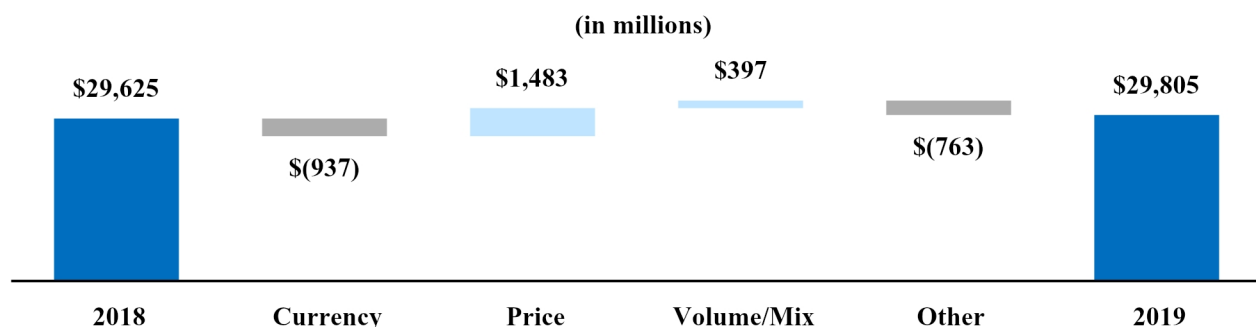
dividends and repayment of debt from our subsidiaries. Our principal wholly owned and majority-owned subsidiaries currently are not limited by long-term debt or other agreements in their ability to pay cash dividends or to make other distributions with respect to their common stock that are otherwise compliant with law.

Executive Summary

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

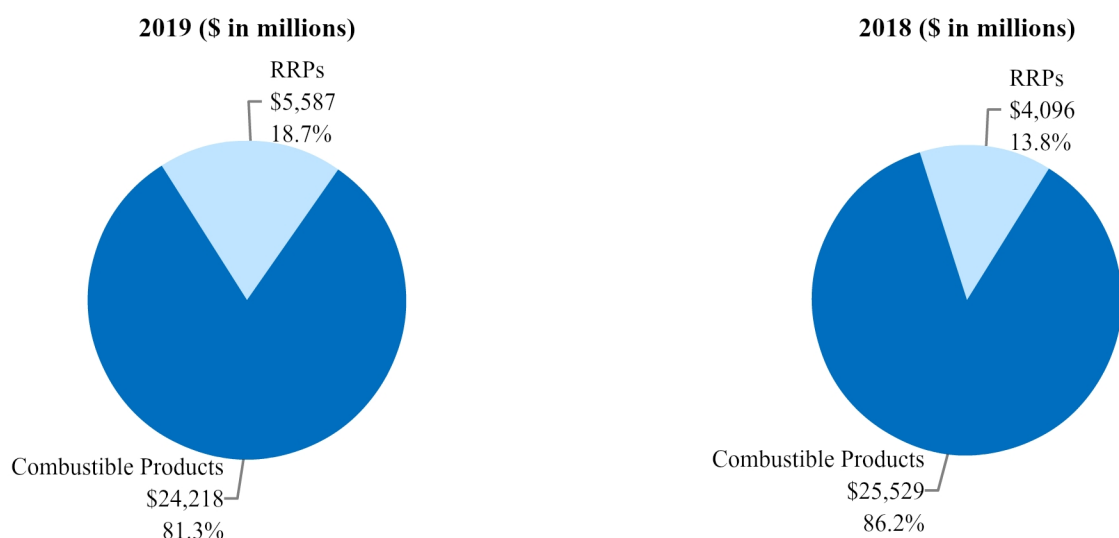
Consolidated Operating Results

- **Net Revenues** – Net revenues of \$29.8 billion for the year ended December 31, 2019, increased by \$0.2 billion, or 0.6%, from the comparable 2018 amount. The change in our net revenues from the comparable 2018 amount was driven by the following (variances not to scale with year-to-date results):



Net revenues, excluding unfavorable currency, increased by 3.8%, mainly reflecting: a favorable pricing variance, notably in Germany, Indonesia, Japan, the Philippines and Turkey; and favorable volume/mix, mainly driven by heated tobacco unit and *IQOS* device volume in the EU and Russia, and heated tobacco unit volume in Japan, partly offset by unfavorable volume/mix of cigarettes, notably in Australia, the EU, Indonesia, Japan and Russia, unfavorable heated tobacco unit volume in PMI Duty Free, and unfavorable *IQOS* device volume in Japan and Korea. The currency-neutral growth in net revenues of 3.8% came despite the unfavorable impact of \$763 million, shown in "Other" above, predominantly resulting from the deconsolidation of our Canadian subsidiary, Rothmans, Benson & Hedges, Inc. ("RBH"), effective March 22, 2019. For further details on the deconsolidation of RBH, see Item 8, Note 18. *Contingencies* and Note 22. *Deconsolidation of RBH*.

Net revenues by product category for the years ended December 31, 2019 and 2018, are shown below:



- **Diluted Earnings Per Share** – The changes in our reported diluted earnings per share (“diluted EPS”) for the year ended December 31, 2019, from the comparable 2018 amounts, were as follows:

	Diluted EPS	% Growth (Decline)
For the year ended December 31, 2018	\$ 5.08	
2018 Asset impairment and exit costs	—	
2018 Tax items	0.02	
Subtotal of 2018 items	0.02	
2019 Asset impairment and exit costs	(0.23)	
2019 Canadian tobacco litigation-related expense	(0.09)	
2019 Loss on deconsolidation of RBH	(0.12)	
2019 Russia excise and VAT audit charge	(0.20)	
2019 Fair value adjustment for equity security investments	0.02	
2019 Tax items	0.04	
Subtotal of 2019 items	(0.58)	
Currency	(0.13)	
Interest	0.04	
Change in tax rate	(0.04)	
Operations	0.22	
For the year ended December 31, 2019	\$ 4.61	(9.3)%

Income taxes – The 2018 Tax items that decreased our 2018 diluted EPS by \$0.02 per share in the table above represented a current income tax charge of \$185 million primarily due to an increase in our final 2017 transition tax liability, mostly offset by a deferred income tax benefit of \$154 million primarily due to the recognition of deferred tax assets for net operating losses in the state of New York.

The 2019 Tax items that increased our 2019 diluted EPS by \$0.04 per share in the table above was primarily due to a reduction in estimated U.S. federal income tax on dividend repatriation for the years 2015-2018 (\$67 million).

The change in the tax rate that decreased our diluted EPS by \$0.04 per share in the table above was primarily due to changes in earnings mix by taxing jurisdiction and U.S. state deferred income tax expense, partially offset by repatriation cost differences.

For further details, see Item 8, Note 11. *Income Taxes*.

Asset impairment and exit costs – As a part of the optimization of our global manufacturing infrastructure, we recorded pre-tax asset impairment and exit costs of \$422 million during 2019, representing \$362 million net of income tax and a diluted EPS charge of \$0.23 per share. This charge primarily related to a cigarette plant closure in Berlin, Germany (approximately \$0.19 per share), as well as the closure of a cigarette plant in Argentina, Colombia and Pakistan. The total pre-tax charge was included in marketing, administration and research costs on the consolidated statements of earnings. For further details, see Item 8, Note 21. *Asset Impairment and Exit Costs*.

Canadian tobacco litigation-related expense – In the first quarter of 2019, we recorded a pre-tax charge of \$194 million, representing \$142 million net of tax, relating to the judgment against RBH in two Québec smoking and health class actions. The charge of \$0.09 per share reflects our assessment of the portion of the judgment that represents probable and estimable loss prior to the deconsolidation of RBH and corresponds to the trust account deposit required by the judgment. The total pre-tax charge was included in marketing, administration and research costs on the consolidated statements of earnings and was included in the operating income of the Latin America & Canada segment. For further details, see Item 8, Note 18. *Contingencies* and Item 8, Note 22. *Deconsolidation of RBH*.

Loss on deconsolidation of RBH – Following the judgment in the two Québec smoking and health class actions, RBH obtained an initial order from the Ontario Superior Court of Justice granting it protection under the Companies’ Creditors Arrangement Act (“CCAA”), which is a Canadian federal law that permits a Canadian business to restructure its affairs while carrying on its business in the ordinary course with minimal disruption to its customers, suppliers and employees. The administration of the CCAA process, principally relating to the powers provided to the court and the court appointed monitor, removes certain elements of control of the business from both PMI and RBH. As a result, we have determined that we no longer have a controlling financial interest over RBH and that we do not exert “significant influence” over RBH under U.S. GAAP. Therefore, we deconsolidated RBH as of the date of the CCAA filing on March 22, 2019, and will account for our continuing investment in RBH as an equity security, without readily determinable fair value.

A loss on the deconsolidation of RBH of \$239 million was included in marketing, administration and research costs on the consolidated statements of earnings and was included in the operating income of the Latin America & Canada segment. The \$0.12 per share impact also included a tax benefit of \$49 million within the provision for income taxes, as discussed above, related to the reversal of a deferred tax liability on the unremitted earnings of RBH. For further details, see Item 8, Note 18. *Contingencies* and Item 8, Note 22. *Deconsolidation of RBH*.

Russia excise and VAT audit charge – As a result of the final tax assessment for the 2015-2017 financial years received by our Russian affiliate, in the third quarter of 2019, PMI recorded a pre-tax charge of \$374 million in marketing, administration and research costs in the consolidated statements of earnings, representing \$315 million net of income tax and a diluted EPS charge of \$0.20. The pre-tax charge of \$374 million was included in the operating income of the Eastern Europe segment. For further details, see Item 8, Note 18. *Contingencies*.

Fair Value adjustment for equity security investments – In the fourth quarter of 2019, PMI recorded a favorable fair value adjustment for its equity security investments of \$35 million after tax (or \$0.02 per share increase in diluted EPS). The fair value adjustment for its equity security investments was included in equity investments and securities (income)/loss, net (\$44 million income) and provision for income taxes (\$9 million expense) on the consolidated statements of earnings in 2019. For further details, see Item 8, Note 16. *Fair Value Measurements*.

Currency – The unfavorable currency impact during 2019 results from the fluctuations of the U.S. dollar, especially against the Euro, Russian ruble and Turkish lira. 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 our ongoing efforts to optimize our capital structure following the passage of the U.S. Tax Cuts and Jobs Act. This included the decision to use existing cash to repay \$2.5 billion and \$4.0 billion of long-term debt that matured in 2018 and in 2019, respectively.

Operations – The increase in diluted EPS of \$0.22 from our operations in the table above was due primarily to the following segments:

- European Union: Favorable volume/mix and favorable pricing, partially offset by higher marketing, administration and research costs and higher manufacturing costs;
- South & Southeast Asia: Favorable pricing and lower manufacturing costs, partially offset by unfavorable volume/mix and higher marketing, administration and research costs;
- Middle East & Africa: Favorable pricing, lower manufacturing costs and lower marketing, administration and research costs, partially offset by unfavorable volume/mix; and
- East Asia & Australia: Favorable pricing and lower manufacturing costs, partially offset by unfavorable volume/mix and higher marketing, administration and research costs;

partially offset by

- Latin America & Canada: Unfavorable impact resulting from the deconsolidation of RBH, as well as unfavorable volume/mix, partially offset by lower marketing, administration and research costs, favorable pricing and lower manufacturing costs; and
- Eastern Europe: Higher marketing, administration and research costs and higher manufacturing costs, partially offset by favorable volume/mix and favorable pricing.

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

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 as performance obligations are satisfied. Our primary performance obligation is the distribution and sales of cigarettes and other nicotine-containing products, including reduced-risk products. Our performance obligations are typically satisfied upon shipment or delivery to our customers. The company estimates the cost of sales returns based on historical experience, and these estimates are immaterial. Estimated costs associated with warranty programs for *IQOS* devices are generally provided for in cost of sales in the period the related revenues are recognized, based on a number of factors, including historical experience, product failure rates and warranty policies. The transaction price is typically based on the amount billed to the customer and includes estimated variable consideration where applicable. Such variable consideration is typically not constrained and is estimated based on the most likely amount that PMI expects to be entitled to under the terms of the contracts with customers, historical experience of discount or rebate redemption, where relevant, and the terms of any underlying discount or rebate programs, which may change from time to time as the business and product categories evolve.

Inventories - Our inventories are valued at the lower of cost or market based upon assumptions about future demand and market conditions. The valuation of inventory also requires us to estimate obsolete and excess inventory. We perform regular reviews of our inventory on hand, as well as our future purchase commitments with our suppliers, considering multiple factors, including demand forecasts, product life cycle, current sales levels, pricing strategy and cost trends. If our review indicates that inventories of raw materials, components or finished products have become obsolete or are in excess of anticipated demand or that inventory cost exceeds net realizable value, we may be required to make adjustments that will impact the results of operations.

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. 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, 2019, the carrying value of our goodwill was \$5.9 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, 2019. 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 Group, Inc., we have not recorded a charge to earnings for an impairment of goodwill or non-amortizable intangible assets.

Marketing 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.

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 pension and postretirement plan obligations at December 31, 2019 and 2018 are as follows:

	<u>2019</u>	<u>2018</u>
Pension plans	0.83%	1.61%
Postretirement plans	3.28%	3.97%

We anticipate that assumption changes will increase 2020 pre-tax pension and postretirement expense to approximately \$256 million as compared with approximately \$201 million in 2019, excluding amounts related to employee severance and early retirement programs. The anticipated increase is primarily due to higher amortization of unrecognized actuarial gains/losses of \$73 million, coupled with higher service cost of \$48 million, partially offset by lower interest cost of \$49 million and higher expected return on plan assets of \$18 million and other movements of \$1 million.

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 2020 pension and postretirement expense by approximately \$65 million, and a fifty-basis-point increase in our discount rate would decrease our 2020 pension and postretirement expense by approximately \$58 million. Similarly, a fifty-basis-point decrease (increase) in the expected return on plan assets would increase (decrease) our 2020 pension expense by approximately \$36 million.

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.

We are required to assess the likelihood of recovering deferred tax assets against future sources of taxable income. If we determine, using all available evidence, that we do not reach the more likely than not threshold for recovery, a valuation allowance is recorded. Significant judgment is required in determining the need for and amount of valuation allowances for deferred tax assets including estimates of future taxable income in the applicable jurisdictions and the feasibility of on-going tax planning strategies, as applicable.

The effective tax rates used for interim reporting are based on our full-year geographic earnings mix projections. Changes in currency exchange rates or earnings mix by taxing jurisdiction could have an impact on the effective tax rates. 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 into the same line item as the impact of the underlying transaction and 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.

Fair value of non-marketable equity securities - For further details, see Item 8, Note 22. *Deconsolidation of RBH*.

Contingencies - As discussed in Item 8, Note 18. *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, except as stated otherwise in Item 8, Note 18. *Contingencies*, 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 net revenues and operating income by segment were as follows:

(in millions)	2019	2018	2017
Net Revenues			
European Union	\$ 9,817	\$ 9,298	\$ 8,318
Eastern Europe	3,282	2,921	2,711
Middle East & Africa	4,042	4,114	3,988
South & Southeast Asia	5,094	4,656	4,417
East Asia & Australia	5,364	5,580	6,373
Latin America & Canada	2,206	3,056	2,941
Net revenues	\$ 29,805	\$ 29,625	\$ 28,748
Operating Income			
European Union	\$ 3,970	\$ 4,105	\$ 3,691
Eastern Europe	547	902	887
Middle East & Africa	1,684	1,627	1,884
South & Southeast Asia	2,163	1,747	1,514
East Asia & Australia	1,932	1,851	2,608
Latin America & Canada	235	1,145	997
Operating income	\$ 10,531	\$ 11,377	\$ 11,581

Items affecting the comparability of results from operations were as follows:

- **Russia excise and VAT audit charge** - See Item 8, Note 18. *Contingencies* for details of the \$374 million pre-tax charge included in the Eastern Europe segment for the year ended December 31, 2019.
- **Asset impairment and exit costs** - See Item 8, Note 21. *Asset Impairment and Exit Costs* for details of the \$422 million pre-tax charge for the year ended December 31, 2019, as well as a breakdown of these costs by segment.
- **Canadian tobacco litigation-related expense** - See Item 8, Note 18. *Contingencies* and Note 22. *Deconsolidation of RBH* for details of the \$194 million pre-tax charge included in the Latin America & Canada segment for the year ended December 31, 2019.

- **Loss on deconsolidation of RBH** - See Item 8, Note 22. *Deconsolidation of RBH* for details of the \$239 million loss included in the Latin America & Canada segment for the year ended December 31, 2019.

Our net revenues by product category were as follows:

<u>PMI Net Revenues by Product Category</u>				
(in millions)	2019		2018	
				2017
<u>Combustible Products</u>				
European Union	\$	8,093	\$	8,433
Eastern Europe		2,438		2,597
Middle East & Africa		3,721		3,732
South & Southeast Asia		5,094		4,656
East Asia & Australia		2,693		3,074
Latin America & Canada		2,179		3,037
Total Combustible Products	\$	24,218	\$	25,529
<u>Reduced-Risk Products</u>				
European Union	\$	1,724	\$	865
Eastern Europe		844		324
Middle East & Africa		321		382
South & Southeast Asia		—		—
East Asia & Australia		2,671		2,506
Latin America & Canada		27		19
Total Reduced-Risk Products	\$	5,587	\$	4,096
Total PMI Net Revenues	\$	29,805	\$	29,625

Note: Sum of product categories or Regions might not foot to total PMI due to rounding.

Net revenues related to combustible products refer to the operating revenues generated from the sale of these products, including shipping and handling charges billed to customers, net of sales and promotion incentives, and excise taxes. These net revenue amounts consist of the sale of our cigarettes and other tobacco products combined. Other tobacco products primarily include roll-your-own and make-your-own cigarettes, pipe tobacco, cigars and cigarillos and do not include reduced-risk products.

Net revenues related to reduced-risk products refer to the operating revenues generated from the sale of these products, including shipping and handling charges billed to customers, net of sales and promotion incentives, and excise taxes. These net revenue amounts consist of the sale of our heated tobacco units, *IQOS* devices and related accessories, and other nicotine-containing products, which primarily include our e-vapor products.

We recognize revenue when control is transferred to the customer, typically either upon shipment or delivery of goods.

Revenues from shipments of Platform 1 devices, heated tobacco units and accessories to Altria Group, Inc., commencing in the third quarter of 2019, for sale under license in the United States, are included in Net Revenues of the Latin America & Canada segment.

References to "Cost/Other" in the Consolidated Financial Summary table of total PMI and the six operating segments throughout this *"Discussion and Analysis"* reflects the currency-neutral variances of: cost of sales (excluding the volume/mix cost component); marketing, administration and research costs (including asset impairment and exit costs, the Canadian tobacco litigation-related expense, the charge related to the deconsolidation of RBH in Canada, and the Russia excise and VAT audit charge); and amortization of intangibles. "Cost/Other" also includes the currency-neutral net revenue variance, unrelated to volume/mix and price components, attributable to fees for certain distribution rights billed to customers in certain markets in the ME&A Region, as well as the impact of the deconsolidation in RBH.

Our shipment volume by segment for cigarettes and heated tobacco units was as follows:

PMI Shipment Volume (Million Units)

	2019	2018	2017
<u>Cigarettes</u>			
European Union	174,319	179,622	187,293
Eastern Europe	100,644	108,718	119,398
Middle East & Africa	134,568	136,605	136,759
South & Southeast Asia	174,934	178,469	171,600
East Asia & Australia	49,951	56,163	62,653
Latin America & Canada	72,293	80,738	84,223
Total Cigarettes	706,709	740,315	761,926
<u>Heated Tobacco Units</u>			
European Union	12,569	5,977	1,889
Eastern Europe	13,453	4,979	674
Middle East & Africa	2,654	3,403	907
South & Southeast Asia	—	—	—
East Asia & Australia	30,677	26,866	32,729
Latin America & Canada ⁽¹⁾	299	147	27
Total Heated Tobacco Units	59,652	41,372	36,226
<u>Cigarettes and Heated Tobacco Units</u>			
European Union	186,888	185,599	189,182
Eastern Europe	114,097	113,697	120,072
Middle East & Africa	137,222	140,008	137,666
South & Southeast Asia	174,934	178,469	171,600
East Asia & Australia	80,628	83,029	95,382
Latin America & Canada	72,592	80,885	84,250
Total Cigarettes and Heated Tobacco Units	766,361	781,687	798,152

⁽¹⁾ Includes shipments to Altria Group, Inc., commencing in the third quarter of 2019, for sale in the United States under license.

Following the deconsolidation of our Canadian subsidiary, we will continue to report the volume of brands sold by RBH for which other PMI subsidiaries are the trademark owners. These include *HEETS*, *Next*, *Philip Morris* and *RoofTop*, which together accounted for approximately 40% of RBH's total shipment volume in 2018.

Heated tobacco units ("HTU") is the term we use to refer to heated tobacco consumables, which for us include our *HEETS*, *HEETS Marlboro* and *HEETS FROM MARLBORO*, defined collectively as *HEETS*, as well as *Marlboro HeatSticks* and *Parliament HeatSticks*.

Shipment volume of heated tobacco units to the United States is included in the heated tobacco unit shipment volume of the Latin America & Canada segment.

References to total international market, defined as worldwide cigarette and heated tobacco unit volume excluding the United States, total industry, total market and market shares throughout this "Discussion and Analysis" are our estimates for tax-paid products based on the latest available data from a number of internal and external sources and may, in defined instances, exclude the People's Republic of China and/or our duty free business. In addition, to reflect the deconsolidation of RBH, effective March 22, 2019, PMI's total market share has been restated for previous periods.

In-market sales ("IMS") is defined as sales to the retail channel, depending on the market and distribution model.

North Africa is defined as Algeria, Egypt, Libya, Morocco and Tunisia.

The Gulf Cooperation Council ("GCC") is defined as Bahrain, Kuwait, Oman, Qatar, Saudi Arabia and the United Arab Emirates (UAE).

Unless otherwise stated, references to total industry, total market, our shipment volume and our market share performance reflect cigarettes and heated tobacco units.

From time to time, PMI's shipment volumes are subject to the impact of distributor inventory movements, and estimated total industry/market volumes are subject to the impact of inventory movements in various trade channels that include estimated trade inventory movements of PMI's competitors arising from market-specific factors that significantly distort reported volume disclosures. Such factors may include changes to the manufacturing supply chain, shipment methods, consumer demand, timing of excise tax increases or other influences that may affect the timing of sales to customers. In such instances, in addition to reviewing PMI shipment volumes and certain estimated total industry/market volumes on a reported basis, management reviews these measures on an adjusted basis that excludes the impact of distributor and/or estimated trade inventory movements. Management also believes that disclosing PMI shipment volumes and estimated total industry/market volumes in such circumstances on a basis that excludes the impact of distributor and/or estimated trade inventory movements improves the comparability of performance and trends for these measures over different reporting periods.

2019 compared with 2018

The following discussion compares our consolidated operating results for the year ended December 31, 2019, with the year ended December 31, 2018.

Estimated international industry cigarette and heated tobacco unit volume, excluding China and the United States, of 2.7 trillion, decreased by 2.0%, due to the EU, EE, S&SA, EA&A and LA&C, as described in the Regional sections below.

Our total shipment volume decreased by 2.0%, due to:

- Middle East & Africa, primarily reflecting lower cigarette shipment volume, notably in Turkey, partly offset by Egypt and Saudi Arabia, and lower heated tobacco unit shipment volume in PMI Duty Free;
- South & Southeast Asia, reflecting lower cigarette shipment volume, primarily in Indonesia, Pakistan and the Philippines, partly offset by Thailand;
- East Asia & Australia, primarily reflecting lower cigarette shipment volume in Japan and lower cigarette and heated tobacco unit shipment volume in Korea, partly offset by higher heated tobacco unit shipment volume in Japan; and
- Latin America & Canada, reflecting lower cigarette shipment volume, principally in Argentina, Canada (primarily due to the impact of the deconsolidation of RBH) and Venezuela. Excluding the volume impact from the RBH deconsolidation of approximately 4.3 billion units (reflecting the volume of RBH-owned brands from March 22, 2018 through December 31, 2018), our total shipment volume in the Region decreased by 5.2%;

partly offset by

- the EU, reflecting higher heated tobacco unit shipment volume across the Region, notably in Italy, partly offset by lower cigarette shipment volume, primarily in France, Germany and Italy; and
- Eastern Europe, reflecting higher heated tobacco unit shipment volume across the Region, notably in Kazakhstan, Russia and Ukraine, partly offset by lower cigarette shipment volume, primarily in Russia and Ukraine.

Excluding the volume impact from the RBH deconsolidation of approximately 4.3 billion units (reflecting the volume of RBH-owned brands from March 22, 2018 through December 31, 2018 and including Duty-Free sales of these brands in Canada), PMI's total shipment volume decreased by 1.4%.

Impact of Inventory Movements

Excluding the volume impact from the deconsolidation of RBH, and the net favorable impact of estimated distributor inventory movements of approximately 1.1 billion units, our total in-market sales declined by 1.5%, due to a 3.7% decline of cigarettes, partly offset by a 35.3% increase in heated tobacco units.

The net favorable impact of estimated distributor inventory movements of approximately 1.1 billion units reflected a 2.7 billion favorable impact from heated tobacco units (driven primarily by Japan, mainly reflecting a favorable comparison with 2018 in which *IQOS* consumable inventories were reduced, partly offset by PMI Duty Free), partially offset by a 1.6 billion unfavorable impact from cigarettes (due primarily to Japan, North Africa and Thailand, partly offset by the EU Region and Saudi Arabia).

Our cigarette shipment volume by brand and heated tobacco unit shipment volume was as follows:

<u>PMI Shipment Volume by Brand (Million Units)</u>			
	<u>2019</u>	<u>Full-Year 2018</u>	<u>Change</u>
<u>Cigarettes</u>			
<i>Marlboro</i>	262,908	264,423	(0.6)%
<i>L&M</i>	92,873	89,789	3.4 %
<i>Chesterfield</i>	57,185	59,452	(3.8)%
<i>Philip Morris</i>	49,164	49,864	(1.4)%
<i>Parliament</i>	38,723	41,697	(7.1)%
<i>Sampoerna A</i>	35,133	39,522	(11.1)%
<i>Dji Sam Soe</i>	32,435	29,195	11.1 %
<i>Bond Street</i>	28,025	32,173	(12.9)%
<i>Lark</i>	19,602	23,021	(14.9)%
<i>Fortune</i>	12,831	16,596	(22.7)%
Others	77,830	94,583	(17.7)%
Total Cigarettes	706,709	740,315	(4.5)%
Heated Tobacco Units ⁽¹⁾	59,652	41,372	44.2 %
Total Cigarettes and Heated Tobacco Units	766,361	781,687	(2.0)%

⁽¹⁾ Includes shipments to Altria Group, Inc., commencing in the third quarter of 2019, for sale in the United States under license.

Note: *Sampoerna A* includes *Sampoerna*; *Philip Morris* includes *Philip Morris/Dubliss*; and *Lark* includes *Lark Harmony*.

Our cigarette shipment volume of the following brands decreased:

- *Marlboro*, mainly due to Italy and Japan, partly reflecting the impact of out-switching to heated tobacco units, as well as France, partially offset by the Philippines, Saudi Arabia and Turkey;
- *Chesterfield*, mainly due to Argentina, Italy, Russia and Venezuela, partly offset by Brazil;
- *Philip Morris*, notably due to Argentina, partly offset by Indonesia and Russia;
- *Parliament*, mainly due to Japan, Korea and Russia;
- *Sampoerna A* in Indonesia, mainly reflecting the impact of retail price increases resulting in widened price gaps with competitors' products;
- *Bond Street*, mainly due to Russia and Ukraine;
- *Lark*, mainly due to Japan and Turkey;
- *Fortune* in the Philippines, mainly reflecting up-trading to *Marlboro* resulting from narrowed price gaps with the below premium price segment; and
- "Others," notably due to: the impact of the deconsolidation of RBH in Canada; mid-price *Sampoerna U* in Indonesia, partly reflecting the impact of above-inflation retail price increases; and low-price brands, notably *Morven* in Pakistan and *Next/Dubliss* in Russia, partly offset by *Jackpot* in the Philippines.

The increase in our heated tobacco unit shipment volume was mainly driven by: the EU (notably Italy and Poland), Eastern Europe (notably Kazakhstan, Russia and Ukraine) and Japan, partly offset by Korea and PMI Duty Free.

Our cigarette shipment volume of the following brands increased:

- *L&M*, mainly driven by Egypt and Thailand, partly offset by Russia and Turkey; and
- *Dji Sam Soe* in Indonesia, driven by the strong performance of the *DSS Magnum Mild 16* variant and the introduction of 20s and 50s variants.

2019 International Share of Market (excluding China and the United States)

Our total international market share (excluding China and the United States), defined as our cigarette and heated tobacco unit sales volume as a percentage of total industry cigarette and heated tobacco unit sales volume, increased by 0.1 point to 28.4%, reflecting:

- Total international heated tobacco unit market share of 2.2%, up by 0.6 points; and
- Total international cigarette market share of 26.2%, down by 0.5 points.

Our total international cigarette market share, defined as our cigarette sales volume as a percentage of total industry cigarette sales volume, was down by 0.3 points to 26.9%, mainly reflecting: out-switching to heated tobacco units, notably in the EU and Japan; and lower cigarette market share, notably in Argentina, Indonesia, Korea and Turkey.

In 2019, we owned six of the world's top 15 international cigarette brands, with international cigarette market shares as follows: *Marlboro*, 10.0%; *L&M*, 3.5%; *Chesterfield*, 2.2%; *Philip Morris*, 1.9%; *Parliament*, 1.5%; and *Bond Street*, 1.1%.

Key Market Data

Key market data regarding total market size, our shipments and market share were as follows:

Market	Total Market (billion units)		PMI Shipments (billion units)						PMI Market Share (%) ⁽¹⁾			
			Total		Cigarette		Heated Tobacco Unit		Total		Heated Tobacco Unit	
			2019	2018	2019	2018	2019	2018	2019	2018	2019	2018
Total	2,703.6	2,757.7	766.4	781.7	706.7	740.3	59.7	41.4	28.4	28.3	2.2	1.6
European Union												
France	37.9	40.9	17.0	18.5	16.9	18.4	0.1	—	45.0	45.5	0.2	0.1
Germany	73.3	75.2	27.9	28.1	27.0	27.7	0.9	0.4	38.0	37.3	1.2	0.5
Italy	67.9	69.0	34.9	35.2	31.4	33.5	3.5	1.7	51.8	51.8	4.8	2.2
Poland	46.2	43.2	19.0	17.9	17.9	17.6	1.1	0.4	41.2	41.5	2.5	0.9
Spain	45.3	45.0	14.5	14.1	14.1	13.9	0.3	0.2	31.3	32.1	0.7	0.4
Eastern Europe												
Russia	226.5	238.9	68.0	68.0	58.8	64.6	9.2	3.4	30.1	28.3	3.8	1.0
Middle East & Africa												
Saudi Arabia	20.8	20.6	9.2	7.4	9.2	7.4	—	—	43.0	41.5	—	—
Turkey	118.9	118.5	51.9	55.0	51.9	55.0	—	—	43.7	46.4	—	—
South & Southeast Asia												
Indonesia	306.8	303.6	98.5	101.4	98.5	101.4	—	—	32.1	33.4	—	—
Philippines	70.5	73.2	49.7	51.2	49.7	51.2	—	—	70.5	69.9	—	—
East Asia & Australia												
Australia	12.0	12.8	3.3	3.8	3.3	3.8	—	—	27.5	29.7	—	—
Japan	158.0	167.3	52.4	52.3	26.6	30.8	25.8	21.4	34.5	34.0	17.1	15.5
Korea	68.6	69.5	15.5	17.4	10.8	12.0	4.6	5.4	22.6	25.0	6.8	7.8
Latin America & Canada												
Argentina	33.4	35.0	23.3	25.8	23.3	25.8	—	—	70.0	73.8	—	—
Mexico	35.5	35.5	23.8	24.2	23.8	24.2	—	—	67.1	68.0	—	—

(1) Market share estimates are calculated using IMS data

Note: % change for Total Market and PMI shipments is computed based on millions of units; PMI Market Share estimates for previous periods are restated to reflect RBH deconsolidation and exclude RBH-owned brands.

Financial Summary

Financial Summary - Years Ended December 31, (in millions)	2019	2018	Change Fav./(Unfav.)		Variance Fav./(Unfav.)				
			Total	Excl. Curr.	Total	Cur- rency	Price	Vol/ Mix	Cost/ Other⁽¹⁾
Net Revenues	\$ 29,805	\$ 29,625	0.6 %	3.8 %	\$ 180	\$ (937)	\$ 1,483	\$ 397	\$ (763)
Cost of Sales	(10,513)	(10,758)	2.3 %	(0.5)%	245	302	—	(309)	252
Marketing, Administration and Research Costs ⁽²⁾	(8,695)	(7,408)	(17.4)%	(22.0)%	(1,287)	340	—	—	(1,627)
Amortization of Intangibles	(66)	(82)	19.5 %	15.9 %	16	3	—	—	13
Operating Income	\$ 10,531	\$ 11,377	(7.4)%	(4.9)%	\$ (846)	\$ (292)	\$ 1,483	\$ 88	\$ (2,125)

⁽¹⁾ Cost/Other variance includes the impact of the RBH deconsolidation.

⁽²⁾ Unfavorable Cost/Other variance includes asset impairment and exit costs of \$422 million in 2019, the Russia excise and VAT audit charge of \$374 million in 2019, the 2019 loss on deconsolidation of RBH of \$239 million, and the 2019 Canadian tobacco litigation-related expense of \$194 million, as well as the impact of the RBH deconsolidation.

Note: Net Revenues include revenues from shipments of Platform 1 devices, heated tobacco units and accessories to Altria Group, Inc., commencing in the third quarter of 2019, for sale under license in the United States.

Net revenues, excluding unfavorable currency, increased by 3.8%, mainly reflecting: a favorable pricing variance, notably in Germany, Indonesia, Japan, the Philippines and Turkey; and favorable volume/mix, mainly driven by heated tobacco unit and IQOS device volume in the EU and Russia, and heated tobacco unit volume in Japan, partly offset by unfavorable volume/mix of cigarettes, notably in Australia, the EU, Indonesia, Japan and Russia, unfavorable heated tobacco unit volume in PMI Duty Free, and unfavorable IQOS device volume in Japan and Korea. The currency-neutral growth in net revenues of 3.8% came despite the unfavorable impact of \$763 million, shown in "Cost/Other," predominantly resulting from the deconsolidation of RBH.

The unfavorable currency in net revenues was due primarily to the Euro, Russian ruble and Turkish lira.

Net revenues include \$5.6 billion in 2019 and \$4.1 billion in 2018 related to the sale of RRP. In 2019, approximately \$0.7 billion of our \$5.6 billion in RRP net revenues were from IQOS devices.

Operating income decreased by 7.4%. Excluding unfavorable currency (\$292 million), asset impairment and exit costs (\$422 million) in 2019 related to plant closures in Argentina, Colombia, Germany and Pakistan as part of global manufacturing infrastructure optimization, the 2019 Russia excise and VAT audit charge (\$374 million), the 2019 loss on deconsolidation of RBH (\$239 million) and the 2019 Canadian tobacco litigation-related expense (\$194 million), operating income increased by 5.9%, primarily reflecting: a favorable pricing variance; favorable volume/mix, mainly driven by heated tobacco units in the EU, Japan and Russia, partly offset by unfavorable volume/mix of cigarettes, notably in Australia, the EU, Indonesia, Japan and Russia, as well as unfavorable heated tobacco unit volume in PMI Duty Free; and lower manufacturing costs; partly offset by higher marketing, administration and research costs, reflecting increased investment behind reduced-risk products (mainly in the EU and Eastern Europe), and the net unfavorable impact resulting from the deconsolidation of RBH shown in "Cost/Other."

Interest expense, net, of \$570 million decreased by \$95 million (14.3%), due primarily to our ongoing efforts to optimize our capital structure following the passage of the Tax Cuts and Jobs Act. This included the decision to use existing cash to repay \$2.5 billion and \$4.0 billion of long-term debt that matured in 2018 and 2019, respectively.

Our effective tax rate increased by 0.3 percentage points to 23.2%. The effective tax rate for the year ended December 31, 2019, was unfavorably impacted by changes in earnings mix by taxing jurisdiction and U.S. state deferred income tax expense, partially offset by the reversal of a deferred tax liability on the unremitted earnings of our Canadian subsidiary, RBH (\$49 million), a reduction in estimated U.S. federal income tax on dividend repatriation for the years 2015-2018 (\$67 million), and other repatriation cost differences. We estimate that our 2020 effective tax rate will be approximately 23%, excluding discrete tax events. Changes in currency exchange rates, earnings mix by taxing jurisdiction, or dividend repatriation costs may 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*.

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 change cannot be made at this time.

Net earnings attributable to PMI of \$7.2 billion decreased by \$726 million or 9.2%. This decrease was due primarily to lower operating income as discussed above, partially offset by a lower interest expense, net. Diluted and basic EPS of \$4.61 decreased by 9.3%. Excluding an unfavorable currency impact of \$0.13, diluted EPS decreased by 6.7%.

2018 compared with 2017

For a discussion comparing our consolidated operating results for the year ended December 31, 2018, with the year ended December 31, 2017, refer to Part II, Item 7. *Management's Discussion and Analysis of Financial Condition and Results of Operation - Discussion and Analysis - Consolidated Operating Results* in our Annual Report on Form 10-K for the year ended December 31, 2018, which was filed with the U.S. Securities and Exchange Commission on February 7, 2019.

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 company 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 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 consumers, or even ban certain of our products;
- fiscal challenges, such as excessive 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 18. *Contingencies*; and
- governmental investigations.

Regulatory Restrictions: 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 has as its main objective to establish a global agenda for tobacco regulation, with the purpose of reducing tobacco use. To date, 180 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. In October 2018, the CoP recognized the need for more scientific assessment and improved reporting to define policy on heated tobacco products. Similar to its previous policy recommendations on e-cigarettes, the CoP invited countries to regulate, restrict or prohibit heated tobacco products, as appropriate under their national laws.

In July 2019, the WHO issued the Report on the Global Tobacco Epidemic 2019. While citing insufficient independent studies regarding the benefits and the unknown long-term health impacts of electronic nicotine delivery systems and heated tobacco products, the WHO has taken the position that such products are not risk-free and should be regulated in the same manner as cigarettes and in line with the FCTC provisions.

It is not possible to predict whether or to what extent measures recommended by the WHO, including the FCTC guidelines, will be implemented.

We agree that all tobacco and nicotine-containing products, including our RRP, need to be regulated; however, we continue to seek 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 (including our RRP) to adult smokers, or increase illicit trade. We advocate for measures that would accelerate switching to better alternatives to continued smoking and embrace a regulatory framework that recognizes a risk continuum of tobacco and other nicotine-containing products.

Certain measures are discussed in more detail below and in the *Reduced-Risk Products (RRPs)* section.

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 combustible tobacco products such as fine cut tobacco and illicit cigarettes. In addition, in certain jurisdictions, some of our combustible products 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 illicit trade, 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 a significantly revised EU Tobacco Products Directive (TPD), which entered into force in May 2016. All Member States have adopted laws transposing the TPD. 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 that became effective on May 20, 2019; 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, plain packaging laws have been adopted in certain markets in all of our operating segments, including the key markets of Australia, France, Saudi Arabia and Turkey, and are in various degrees of implementation. Some countries, such as Canada, New Zealand and Israel, adopted plain packaging regulations that apply to all tobacco products, including RRP. Other countries are also considering plain packaging legislation.

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. Broader ingredient bans have been adopted by Canada and Brazil. In Brazil, an ingredient ban is currently on appeal by a tobacco industry union, of which our Brazilian subsidiary is a member. 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 and Russia, governments have banned the display of tobacco products at the point of sale. Other countries are 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's non-binding 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.

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 products by, for example, reducing the overall number of tobacco retail licenses available or banning the sale of tobacco products within specified 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.

The EU Single-Use Plastics Directive, which will require tobacco manufacturers and importers to cover the costs of public collection systems for tobacco product filters, entered into force on July 2, 2019, after which Member States will have two years to transpose it into national law. While we cannot predict the impact of this initiative on our business at this time, we are monitoring developments in this area.

Illicit Trade: Illicit tobacco trade creates a cheap and unregulated supply of tobacco products, undermines efforts to reduce smoking prevalence, especially among youth, damages legitimate businesses, stimulates organized crime, increases corruption and reduces government tax revenue. Excluding China and the U.S., 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 approximately 10% of total cigarette consumption in 2019.

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, 58 Parties, including the European Union, have ratified it. The Protocol came into force in September 2018. Parties must now start implementing its measures via national legislation. In October 2018, the first Meeting of the Parties to the Protocol decided to produce a comprehensive report on good practices for the implementation of tracking and tracing systems and to prepare a conceptual framework for global information sharing to combat illicit tobacco trade. We welcome this decision and expect that other Parties will ratify the Protocol.

We devote substantial resources to help prevent illicit trade in combustible tobacco products and RRPs. For example, we engage with governments, our business partners and other stakeholders to implement effective measures to combat illicit trade and, in some instances, pursue legal remedies to protect our intellectual property rights.

The tracking and tracing regulations for cigarettes and roll-your-own products manufactured or destined for the EU became effective on May 20, 2019. The effective date for other tobacco-containing products, including some of our RRPs such as heated tobacco units, is May 20, 2024. While we expect that this regulation will increase our operating expenses, we do not expect this increase to be significant.

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 illegal cigarette trade and increasing the quality and quantity of locally-grown tobacco.

In May 2016, PMI launched PMI IMPACT, a 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 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 over three funding rounds.

Reduced-Risk Products (RRPs)

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, RRPs do not burn tobacco and produce an aerosol that contains significantly lower levels of harmful and potentially harmful constituents ("HPHCs") than found in cigarette smoke.

For smokers who would otherwise continue to smoke, we believe that RRPs, while not risk-free, offer a much better consumer 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 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 alternative to continued cigarette smoking. We also recognize that our part in this transformation must be funded from our existing cigarette business. For as long as a significant number of adult smokers continues to smoke, it is critical that the industry be led by responsible and ethical manufacturers. Therefore, during the transformation, we intend to remain a leading international cigarette manufacturer.

We have a range of RRPs in various stages of development, scientific assessment and commercialization. We conduct rigorous scientific assessments of our RRP platforms to substantiate that they reduce exposure to HPHCs 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 adult 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 smokers to make better consumer 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 consumer 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 adult consumer preferences.

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

Platform 1 uses a precisely controlled heating device incorporating our *IQOS HeatControl* technology, into which a specially designed and proprietary tobacco unit is inserted and heated to generate an aerosol. We have conducted a series of clinical studies for this platform, the results of which were included in our submission to the U.S. Food and Drug Administration ("FDA") described below.

The results of the first six-month term of the 6+6 month exposure response study were received at the end of 2017, and the related report was completed and submitted to the FDA in the second quarter of 2018. The study showed that all eight of the co-primary clinical risk endpoints moved in the same direction in the group that switched to our Platform 1 product as observed for smoking cessation, with statistically significant changes in five of the eight endpoints compared with on-going smoking. The results of the second six-month term of the 6+6 month exposure response study were received for analysis in the second quarter of 2018; we are analyzing the results, and expect to finalize the report later this year. In addition, as set out in our submission to the FDA referenced above, we completed an 18-month combined chronic toxicity and carcinogenicity study in mice, which was on-going at the time of our FDA submission. We shared the results with the FDA in August 2018.

Platform 2 uses a pressed carbon heat source which, when ignited, generates a nicotine-containing aerosol by heating tobacco. The results of our pharmacokinetic study (that measured the nicotine pharmacokinetic profile as well as subjective effects) and of our five-day reduced exposure study indicate that this platform could be an acceptable substitute for adult smokers who seek an alternative to cigarettes. The reduced exposure study results showed a substantial reduction in relevant biomarkers of exposure to the measured HPHCs in those who switched to Platform 2 compared to those who continued to smoke cigarettes over a five-day period. The sustainability of this reduction as well as changes in clinical risk markers were assessed in a three-month reduced exposure study. The results of this study were received at the end of 2017, and the related report was finalized in the second quarter of 2018.

Platform 3 provides an aerosol of nicotine salt. We have explored two routes for this platform, one with electronics and one without, and conducted nicotine pharmacokinetic studies with both versions. The results of the pharmacokinetic study related to the version without electronics were received, and the related report was finalized in the fourth quarter of 2018. The results indicate this product's potential as an acceptable alternative to continued cigarette smoking in terms of product satisfaction. We are conducting a product use and adaptation study in adult smokers and expect the results in 2020.

Platform 4 covers e-vapor products, which are battery-powered devices that produce an aerosol by vaporizing a nicotine-containing liquid solution. Our e-vapor products comprise devices using current generation technology and our new e-vapor mesh technology that addresses certain challenges presented by some e-vapor products currently on the market. Our *IQOS MESH* products are designed to ensure the consistency and quality of the generated aerosol. We conducted a nicotine pharmacokinetic study in 2017. The results of this study were received in the second quarter of 2018 for analysis, and the related report was finalized in the fourth quarter of 2018. The results of this study indicate that *IQOS MESH* products are an effective means of nicotine delivery while being a satisfying alternative for e-cigarette users. In March 2019, a six-month pre-clinical study in mice evaluating the impact of e-cigarette vapor on the risks of pulmonary and cardiovascular disease compared to cigarette smoke was completed; this study did not pertain to a specific product. The study demonstrated that e-cigarette vapors induce significantly lower biological responses associated with cardiovascular and pulmonary diseases compared with cigarette smoke. We will also initiate a clinical study to measure selected biomarkers of exposure to HPHCs and assess changes in clinical risk markers.

After we receive the results of our scientific studies mentioned above, in accordance with standard scientific practices, we intend to share the conclusions in scientific forums and to submit them for inclusion in peer-reviewed publications.

The research and development expense for our RRP portfolio accounted for 98%, 92% and 74% of our total research and development expense for the years ended December 31, 2019, 2018 and 2017, respectively. The research and development expense for the years ended December 31, 2019, 2018 and 2017, is set forth in Item 8, Note 14. *Additional Information* to the consolidated financial statements.

Commercialization of RRP: We are building a new product category and tailor our commercialization strategy to the characteristics of each specific market. We focus our commercialization efforts on consumer retail experience, guided consumer trials and customer care, as well as digital communication programs. In order to accelerate switching to our Platform 1 product, our initial market introductions typically entail one-on-one consumer engagement and introductory device discounts. These initial commercialization efforts require substantial investment, which we believe will moderate over time.

In 2014, we introduced our Platform 1 product in pilot city launches in Nagoya, Japan, and in Milan, Italy. Since then, we have continuously expanded our commercialization activities, and the product is currently available for sale in 52 markets in key cities or nationwide.

We estimate that only a very small percentage of adult smokers who convert to our Platform 1 product switch back to cigarettes.

We have integrated the production of our heated tobacco units into a number of our existing manufacturing facilities, are progressing with our plans to build manufacturing capacity for our other RRP platforms, and continue to optimize our manufacturing infrastructure.

An adequate supply chain for our RRP portfolio, including the supply of electronic devices, is important to our business. We work with two electronics manufacturing service providers for the supply of our Platform 1 and *IQOS MESH* devices and a small number of other

providers for other products in our RRP portfolio and related accessories. Although we work closely with these service providers on monitoring their production capability and financial health, the commercialization of our RRPs could be adversely affected if they are unable to meet their commitments. The production of our RRP portfolio requires various metals, and we believe that there is an adequate supply of such metals in the world markets to satisfy our current and anticipated production requirements. However, some components and materials necessary for the production of our RRPs, including those for the electronic devices, are obtained from single or limited sources, and can be subject to industry-wide shortages and price fluctuations. Our inability to secure an adequate supply of such components and materials could negatively impact the commercialization of our RRPs.

Our Platform 1 and *IQOS MESH* devices are subject to standard product warranties generally for a period of 12 months from the date of purchase or such other periods as required by law. We discuss product warranties in more detail in Item 8, Note 5, *Product Warranty*. The significance of warranty claims is dependent on a number of factors, including device version mix, product failure rates, logistics and service delivery costs, and warranty policies, and may increase with the number of devices sold.

Product quality may affect consumer acceptance of our RRPs.

Our commercialization efforts for the other RRP platforms are as follows:

- We currently market our e-vapor products in Ireland and the U.K. In July 2018, we pilot-launched *IQOS MESH*, one of our Platform 4 products, in London, U.K. In light of the current confusion in the e-vapor category, we have postponed our planned launch of an improved version of this product until the third quarter of 2020, when we expect to reach the optimal capacity for commercialization at scale.
- We completed a small-scale city test of *TEEPS*, our Platform 2 product, that we had initiated in December 2017 in Santo Domingo, the Dominican Republic. We are finalizing our improvements to this product and plan to conduct a consumer test by the end of 2020.
- Depending on the outcome of the use and adaptation study described above as well as consumer research, we plan to conduct a consumer test of our Platform 3 product by the end of 2020.

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 and should recognize a continuum of risk for tobacco and other nicotine-containing products. Regulation should provide minimum standards for all RRP categories and specific rules for product assessment methodologies, ingredients, labeling and consumer communication, and should ensure that the public is informed about the health risks of all combustible and non-combustible tobacco and nicotine-containing products. Regulation, as well as industry practices, 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 and communication of truthful and non-misleading information about such products. These regulations might foreclose or unreasonably restrict adult consumer access even to products that might be shown to be a better consumer 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 for all RRP categories and propels innovation to benefit adult smokers who would otherwise continue to smoke.

In the United States, an established regulatory framework for assessing “Modified Risk Tobacco Products” and “New Tobacco Products” exists under the jurisdiction of the FDA. We submitted to the FDA a Modified Risk Tobacco Product Application (“MRTPA”) for our Platform 1 product in December 2016, and a Premarket Tobacco Product Application (“PMTA”) for our Platform 1 product in March 2017.

On April 30, 2019, the FDA determined that a version of our Platform 1 product is appropriate for the protection of public health and authorized it for sale in the United States. The FDA’s decision followed its comprehensive assessment of our PMTA.

The FDA’s marketing order does not mean that the agency “approved” our Platform 1 product. The authorization is subject to strict marketing, reporting and other requirements and is not a guarantee that the product will remain authorized, particularly if there is a significant uptake in youth initiation. The FDA will monitor the marketing of the product.

We plan to file a PMTA application for the *IQOS 3* device in the coming months.

In May 2017, the FDA formally accepted and filed our MRTPA for substantive scientific review and, in June 2017, the FDA opened the period for the public to provide comments on our application. The FDA closed the public comment period on February 11, 2019. In late 2019, we provided a response to the FDA's request for clarification regarding our mice study described above. Following our response, the FDA re-opened a public comment period ending February 24, 2020.

The FDA referred our MRTPA to the Tobacco Product Scientific Advisory Committee ("TPSAC"). TPSAC held a meeting on January 24 and January 25, 2018 to discuss our MRTPA. The recommendations and votes of TPSAC are not binding on the FDA. By regulation, the FDA's decision on our MRTPA will take into account, in addition to the views of TPSAC, scientific evidence as well as comments, data and information submitted by interested persons.

The FDA review of our MRTPA is on-going.

Separately, in July 2017, the FDA issued a policy announcement aiming to explore the potential of nicotine reduction in cigarettes in conjunction with the availability of less harmful products that deliver nicotine for adults who choose to use such products. In July 2018, as part of a public consultation procedure, we submitted our views on this topic to the FDA. It is not possible to predict the regulatory measures that may be recommended by the FDA as a result of this policy.

In the U.S., tobacco and nicotine-containing products that were not commercially marketed as of February 15, 2007 are subject to review and authorization by the FDA. Following a rise in the use of e-vapor products among minors in the U.S. and an outbreak of lung injuries alleged to be associated with the use of certain e-vapor products in many states, on January 2, 2020, the FDA announced an enforcement policy against the sale of e-vapor products sold without FDA authorization, prioritizing enforcement against the sale of cartridge-based e-vapor products with flavors other than tobacco and menthol, and sale of any nicotine-containing products to minors and where the manufacturer fails to take adequate measures to prevent access by minors.

While we do not sell e-vapor products in the U.S. and therefore are not subject to these actions, we continue to support regulation and industry practices that reflect the fact that youth should not consume nicotine in any form.

Future FDA actions may influence the regulatory approach of other governments.

Until recently, there were no countries with specific product standards for heat-not-burn products. Effective July 2017 and March 2018, respectively, Russia and Ukraine adopted standards that set minimum quality and safety requirements for the consumables and defined methods for demonstrating the absence of combustion, and the product standards in Kazakhstan that came into force in March 2019 also cover devices. In the UAE, a product standard on minimum quality and safety of electronic nicotine-containing products, including heat-not-burn products, was approved in March 2019. Effective December 2019, Jordan adopted a national standard for heat-not-burn products (both devices and consumables), and defined a method for demonstrating the absence of combustion in these products. We expect and encourage other governments to consider similar product standards going forward.

In the EU, all EU Member States have transposed the EU Tobacco Products Directive, including the provisions on novel tobacco products, such as heated tobacco units, 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, we have filed a comprehensive dossier summarizing our scientific assessment of our Platform 1 product in over 20 Member States.

In addition, in Italy, in April 2018, we submitted under recent legislation an application for *HEETS*, used with the *IQOS* device, requesting regulatory recognition of the reduction of toxic substances and potential risk reduction resulting from switching to this product compared to continued cigarette smoking. In January 2019, our application was not granted primarily on the grounds of insufficient data and questions of methodology. Due to the constraints of the review process, we had been unable to supplement the application with all the data we subsequently filed with the FDA and to address methodological questions during the review. We plan to submit a new application where we will clarify the concerns raised by the decision and further strengthen our application by submitting additional evidence that became available since we submitted our first application, consistent with our FDA filing. We are confident that our evidence supports our application.

To date, several governmental agencies have published their scientific findings that analyze the harm-reduction potential of certain RRP's versus continuing smoking, including:

In December 2017, at the request of the U.K. Department of Health and Public Health England, the U.K. Committee on Toxicity published its assessment of the risk of heat-not-burn products relative to cigarette smoking. This assessment included analysis of scientific data for two heat-not-burn products, one of which was our Platform 1 product. The assessment concluded that, while still harmful to health,

compared with the known risks from cigarettes, heat-not-burn products are probably less harmful. Subsequently, in February 2018, Public Health England published a report stating that the available evidence suggests that heat-not-burn products may be considerably less harmful than cigarettes and more harmful than e-cigarettes.

In May 2018, the German Federal Institute for Risk Assessment (“BfR”) published a study on the Platform 1 aerosol relative to cigarette smoke using the Health Canada Intense Smoking Regimen. BfR found reductions in selected HPHCs in a range of 80-99%. This publication indicates that significant reductions in the levels of selected toxicants are likely to reduce toxicant exposure, which BfR stated might be regarded as a discrete benefit compared to combustible cigarettes.

In May 2018, the Dutch National Institute for Public Health and Environment (“RIVM”) published a factsheet on novel tobacco products that heat rather than burn tobacco, focusing on our Platform 1 product. RIVM analyzed the aerosol generated by our Platform 1 product and concluded that the use of this product, while still harmful to health, is probably less harmful than continued smoking.

In June 2018, the Korean Food and Drug Administration (“KFDA”) issued a statement on products that heat rather than burn tobacco. The KFDA tested three heat-not-burn products, one of which was our Platform 1 product. The KFDA confirmed that the levels of the nine HPHCs tested in the aerosol of these products were on average approximately 90% lower compared to those measured in the cigarette smoke of the top five cigarette brands in South Korea. However, the KFDA stated that it could not establish that the tested heat-not-burn products are less harmful than cigarettes. In October 2018, our Korean affiliate filed a request with a local court seeking information underlying KFDA’s analysis, conclusions and public statements.

In August 2018, the Science & Technology Committee of the U.K. House of Commons published a report of its inquiry into e-cigarettes and heat-not-burn products. The report concluded that e-cigarettes are significantly less harmful to health than smoking tobacco. The report also observed that for those smokers who don’t accept e-cigarettes, heat-not-burn products may offer a public health benefit despite their relative risk. The report called for a risk-proportionate regulatory environment for both e-cigarettes and heat-not-burn products and noted that e-cigarettes should remain the least taxed, cigarettes the most taxed, with heat-not-burn products falling between the two. The U.K. Committee on Advertising Practice announced the removal of a prohibition of health claims in the advertising of e-cigarettes in the U.K. effective November 2018, with a review of the impact of this decision on market practices 12 months thereafter.

In November 2018, the Eurasian Economic Commission (regulatory body of the Eurasian Union consisting of Armenia, Belarus, Kazakhstan, Kyrgyzstan and Russia) published the results of its commissioned study on novel nicotine-containing products, including our Platform 1 product. The study confirms significantly lower levels of HPHCs in the aerosol generated by this product compared to cigarette smoke.

In January 2019, scientific media published the results of the study of the China National Tobacco Quality Supervision and Test Centre (“CNTQST”) comparing the aerosol generated by our Platform 1 product with cigarette smoke. The CNTQST found that the former contained fewer, and lower levels of, harmful constituents than the latter and concluded that the lower temperature of heating tobacco in our Platform 1 product contributed to the difference. The CNTQST stated that the reduction in emissions of harmful constituents cannot be interpreted as equivalent to a proportionate harm/risk reduction for smokers.

We make our scientific findings publicly available for scrutiny and peer review through several channels, including our websites. From time to time, adult consumers, competitors, members of the scientific community, and others inquire into our scientific methodologies, challenge our scientific conclusions or request further study of certain aspects of our RRP’s and their health effects. We are committed to a robust and open scientific debate but believe that such debate should be based on accurate and reliable scientific information. We seek to provide accurate and reliable scientific information about our RRP’s; nonetheless, we may not be able to prevent third-party dissemination of false, misleading or unsubstantiated information about these products. The dissemination of scientifically unsubstantiated information or studies with a strong confirmation bias by third parties may cause confusion among adult smokers and affect their decision to switch to better alternatives to continued smoking, such as our RRP’s.

To date, we have been largely successful in demonstrating to regulators that our heated tobacco units are not cigarettes due to the absence of combustion, and as such they are generally taxed either as a separate category or as other tobacco products, which typically yields more favorable tax rates than cigarettes. Although we believe that this is sensible from the public health perspective, we cannot guarantee that regulators will continue this approach.

There can be no assurance that we will succeed in our efforts to replace cigarettes with RRP’s or that regulation will allow us to commercialize RRP’s in all markets, to communicate about our RRP’s, including making scientifically substantiated risk-reduction claims, or to treat RRP’s differently from cigarettes.

Legal Challenges to RRP: We face various administrative and legal challenges related to certain RRP activities, including allegations concerning product classification, advertising restrictions, corporate communications, product coach activities, scientific substantiation, product liability, and unfair competition. While we design our programs to comply with relevant regulations, we expect these or similar challenges to continue as we expand our efforts to commercialize RRP and to communicate publicly. The outcomes of these matters may affect our RRP commercialization and public communication activities and performance in one or more countries.

Our RRP Business Development Initiatives: In December 2013, we established a strategic framework with Altria Group, Inc. (“Altria”) setting out terms on how the parties would collaborate to develop and commercialize e-vapor products and commercialize two of our RRP in the U.S. In late 2018, Altria announced that it will participate in the e-vapor category only through another e-vapor company in which Altria acquired a minority interest. Regarding heat-not-burn products, as discussed above, the FDA has authorized a version of our Platform 1 product for sale in the U.S., and we are seeking authorization for our MRTP submission. These efforts are not affected by Altria's e-vapor announcement. In September 2019, Altria's subsidiary, Philip Morris USA Inc., began commercialization of a version of our Platform 1 product in the U.S.

In January 2020, we announced an agreement with KT&G, a leading tobacco and nicotine company in South Korea, for the commercialization of KT&G's smoke-free products outside of South Korea on an exclusive basis. For more information, see *Acquisitions and Other Business Arrangements* below.

Other Developments: In September 2017, we announced our support of the Foundation for a Smoke-Free World. We agreed to contribute \$80 million per year over the next 12 years, as specified in the agreement. We made an initial contribution of \$4.5 million in 2017, the first annual contribution of \$80 million in the first quarter of 2018 and the second annual contribution of \$80 million in the first quarter of 2019. The Foundation is an independent body and is governed by its independent Board of Directors. The Foundation's role, as set out in its corporate charter, includes funding research in the field of tobacco harm reduction, encouraging measures that reduce the harm caused by smoking, and assessing the effect of reduced cigarette consumption on the industry value chain.

Governmental Investigations

From time to time, we are subject to governmental investigations on a range of matters, including tax, customs, antitrust, advertising, and labor practices. We describe certain matters pending in Thailand, Russia and South Korea in Item 8, Note 18. *Contingencies*.

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 (see Item 8, Note 18. *Contingencies* 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 asserts that to date Thailand has not fully complied with the WTO panel decision. 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 8, Note 18. *Contingencies*, and has commenced two formal proceedings at the WTO to challenge criminal charges against PM Thailand arguing that the criminal charges 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. On November 12, 2018 and July 12, 2019, the WTO issued its decisions agreeing with the Philippines that the criminal charges against PM Thailand and its former and current employees in connection with import entries of cigarettes from the Philippines and Indonesia, respectively, described in Item 8, Note 18. *Contingencies*, are inconsistent with WTO customs valuation rules. In January 2019 and September 2019, Thailand appealed the WTO's decision related to the criminal charges in connection with import entries of cigarettes from the Philippines and Indonesia, respectively. It is not possible to predict any future developments in these proceedings while the WTO Appellate Body is not operational.

U.S. GAAP Treatment of Argentina as a Highly Inflationary Economy

Following the categorization of Argentina by the International Practices Task Force of the Center for Audit Quality as a country with a three-year cumulative inflation rate greater than 100%, the country is considered highly inflationary in accordance with U.S. GAAP. Consequently, we began to account for the operations of our Argentinian affiliates as highly inflationary, and to treat the U.S. dollar as the functional currency of the affiliates, effective July 1, 2018.

Asset Impairment and Exit Costs

We discuss asset impairment and exit costs in Item 8, Note 21. *Asset Impairment and Exit Costs* to our consolidated financial statements.

As part of our transformation to a smoke-free future, we also seek to optimize our organizational design. In January 2020, we commenced the first phase of a two-phase restructuring project in Switzerland. This phase may impact approximately 265 existing positions that will be eliminated or relocated, and we initiated consultation procedures for the impacted employees as required under the law. The second phase of this restructuring project is expected to commence in the second quarter of 2020.

Acquisitions and Other Business Arrangements

We discuss our acquisitions in Item 8, Note 6. *Acquisitions* to our consolidated financial statements.

On August 27, 2019, we announced that we were in discussions with Altria Group, Inc. regarding a potential all-stock, no premium merger of equals, and on September 25, 2019, we announced that the merger discussions had ended and that both companies agreed to focus on launching our Platform 1 product in the United States.

Global Collaboration Agreement with KT&G

In January 2020, PMI announced a global collaboration agreement with the leading tobacco and nicotine company in South Korea, KT&G, to commercialize KT&G's smoke-free products outside of the country. The agreement will run for an initial period of three years. The two companies plan for global collaboration with the intention to actively expand to cover many markets, based on commercial success. The agreement allows PMI to distribute current KT&G smoke-free products, and their evolutions, on an exclusive basis, and does not restrict PMI from distributing its own or third-party products. KT&G's smoke-free product brand portfolio includes heat-not-burn tobacco products (e.g., *Lil Mini* and *Lil Plus*), hybrid technologies that combine heat-not-burn tobacco and e-vapor technologies (e.g., *Lil Hybrid*), and e-vapor products (e.g., *Lil Vapor*). PMI will be responsible for the commercialization of smoke-free products supplied under the agreement.

Products sold under the agreement will be subject to careful assessment to ensure they meet the regulatory requirements in the markets where they are launched, as well as our standards of quality and scientific substantiation of their harm reduction potential. PMI and KT&G will seek any necessary regulatory approvals that may be required on a market-by-market basis. There are no current plans to commercialize KT&G products in the United States.

Investments in Unconsolidated Subsidiaries and Equity Securities

We discuss our investments in unconsolidated subsidiaries and equity securities in Item 8, Note 4. *Related Parties - Investments in Unconsolidated Subsidiaries, Equity Securities and Other* and Item 8, Note 16. *Fair Value Measurements* to our consolidated financial statements.

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.

A subsidiary sells products to distributors that, in turn, sell those products to duty free customers that supply U.N. peacekeeping forces around the world, including those in the U.N. peacekeeping mission located in Abyei, a special administrative territory in Sudan. We do not believe that these sales, which are not subject to Trade Sanctions, and are *de minimis* in volume and value, present a material risk to our shareholders, our reputation or the value of our shares. We have no employees, operations or assets in the Sudan.

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, North Korea and Syria. From time to time, we 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 or requiring 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.

2019 compared with 2018

The following discussion compares operating results within each of our operating segments for 2019 with 2018.

Unless otherwise stated, references to total industry, total market, our shipment volume and our market share performance reflect cigarettes and heated tobacco units.

European Union:

<u>Financial Summary - Years Ended December 31,</u> (in millions)			<u>Change Fav./Unfav.)</u>		<u>Variance Fav./Unfav.)</u>				
	2019	2018	Total	Excl. Curr.	Total	Currency	Price	Vol/ Mix	Cost/ Other
Net Revenues	\$ 9,817	\$ 9,298	5.6 %	11.6%	\$ 519	\$ (563)	\$ 288	\$ 794	\$ —
Operating Income	\$ 3,970	\$ 4,105	(3.3)%	4.8%	\$ (135)	\$ (330)	\$ 288	\$ 587	\$ (680)

Net revenues, excluding unfavorable currency, increased by 11.6%, reflecting a favorable pricing variance, driven principally by France and Germany, partly offset by Poland; and favorable volume/mix, primarily driven by heated tobacco unit and *IQOS* device volume, notably in the Czech Republic, Germany, Greece, Italy and Poland, partly offset by lower cigarette volume, notably in France and Italy, and unfavorable cigarette volume/mix in Germany.

The net revenues of the European Union segment include \$1,724 million in 2019 and \$865 million in 2018 related to the sale of RRP.

Operating income decreased by 3.3%. Excluding asset impairment and exit charges of \$342 million in 2019 related to the plant closure in Germany and unfavorable currency of \$330 million, operating income increased by 13.1% mainly reflecting: a favorable pricing variance; favorable volume/mix, primarily driven by heated tobacco unit volume, notably in the Czech Republic, Germany, Greece, Italy and Poland, partly offset by lower cigarette volume, notably in France and Italy, and unfavorable cigarette volume/mix in Germany; partially offset by higher manufacturing costs and higher marketing, administration and research costs, notably related to increased investment behind reduced-risk products.

European Union - Total Market, PMI Shipment and Market Share Commentaries

Total market, PMI shipment volume and market share performance are shown in the table below:

European Union Key Data	Full-Year		Change % / pp
	2019	2018	
Total Market (billion units)	482.5	484.5	(0.4)%
PMI Shipment Volume (million units)			
Cigarettes	174,319	179,622	(3.0)%
Heated Tobacco Units	12,569	5,977	+100.0%
Total European Union	186,888	185,599	0.7 %
PMI Market Share			
<i>Marlboro</i>	18.0%	18.5%	(0.5)
<i>L&M</i>	6.7%	6.9%	(0.2)
<i>Chesterfield</i>	5.8%	5.9%	(0.1)
<i>Philip Morris</i>	2.7%	2.9%	(0.2)
<i>HEETS</i>	2.5%	1.2%	1.3
Others	3.1%	3.1%	—
Total European Union	38.8%	38.5%	0.3

The estimated total market in the EU decreased by 0.4% to 482.5 billion units, notably due to:

- France, down by 7.4%, primarily reflecting the impact of significant excise tax-driven price increases and a higher prevalence of illicit trade;
 - Germany, down by 2.5%, primarily reflecting the impact of price increases in 2018 and March 2019; and
 - Italy, down by 1.5%, primarily reflecting the impact of price increases in 2018 and the first quarter of 2019;
- partly offset by
- Poland, up by 6.8%, primarily reflecting a lower prevalence of illicit trade; and
 - Spain, up by 0.8%, partly reflecting a lower prevalence of illicit trade.

Our total shipment volume increased by 0.7% to 186.9 billion units, reflecting:

- higher heated tobacco unit shipment volume across the Region (notably Italy), driven by higher market share;
- partly offset by
- lower cigarette shipment volume, mainly in France, due to the lower total market and lower cigarette market share, as well as Germany and Italy, partly reflecting out-switching to heated tobacco units.

Our Regional market share increased by 0.3 points to 38.8%, with gains in the Czech Republic, Germany, Greece and Portugal, partly offset by declines in France, Poland and Spain.

Eastern Europe:

Financial Summary - Years Ended December 31,

(in millions)	2019	2018	Change Fav./ (Unfav.)		Variance Fav./ (Unfav.)				
			Total	Excl. Curr.	Total	Currency	Price	Vol/ Mix	Cost/ Other
Net Revenues	\$ 3,282	\$ 2,921	12.4 %	16.1 %	\$ 361	\$ (108)	\$ 85	\$ 384	\$ —
Operating Income	\$ 547	\$ 902	(39.4)%	(41.9)%	\$ (355)	\$ 23	\$ 85	\$ 109	\$ (572)

Net revenues, excluding unfavorable currency, increased by 16.1%, reflecting a favorable pricing variance, mainly driven by Russia and Ukraine, and favorable volume/mix, predominantly driven by heated tobacco unit and IQOS device volume in Russia and Ukraine, and heated tobacco unit volume in Kazakhstan, partly offset by unfavorable cigarette volume/mix in Russia and lower cigarette volume in Ukraine.

The net revenues of the Eastern Europe segment include \$844 million in 2019 and \$324 million in 2018 related to the sale of RRP's.

Operating income decreased by 39.4%. Excluding the unfavorable impact of \$374 million related to the Russia excise and VAT audit charge, and favorable currency of \$23 million, operating income decreased by 0.4%, due to: higher marketing, administration and research costs, notably reflecting increased investments behind reduced-risk products (primarily in Russia in support of geographic expansion); and higher manufacturing costs; partly offset by a favorable pricing variance; and favorable volume/mix, predominantly driven by heated tobacco unit volume in Kazakhstan, Russia and Ukraine, partly offset by unfavorable cigarette volume/mix in Russia.

Eastern Europe - Total Market, PMI Shipment Volume and Market Share Commentaries

The estimated total market in Eastern Europe decreased by 5.4% to 397.4 billion units, notably due to:

- Russia, down by 5.2%, primarily reflecting the impact of price increases, as well as an increase in the prevalence of illicit trade; and
- Ukraine, down by 12.0%, primarily reflecting the impact of excise tax-driven price increases, as well as an increase in the prevalence of illicit trade;

partly offset by

- Kazakhstan, up by 5.7%, partly reflecting a lower prevalence of illicit trade.

Our Regional market share increased by 1.6 points to 28.7%.

PMI Shipment Volume (million units)	Full-Year		
	2019	2018	Change
Cigarettes	100,644	108,718	(7.4)%
Heated Tobacco Units	13,453	4,979	+100.0%
Total Eastern Europe	114,097	113,697	0.4 %

PMI's total shipment volume increased by 0.4% to 114.1 billion units, notably reflecting:

- Kazakhstan, up by 11.6%, reflecting the higher total market and a higher market share of heated tobacco units;
- partly offset by
- Ukraine, down by 3.0%, reflecting the lower total market, partly offset by a higher market share of heated tobacco units.

Middle East & Africa:

<u>Financial Summary - Years Ended December 31,</u> (in millions)	2019	2018	Change Fav./(Unfav.)		Variance Fav./(Unfav.)				
			Total	Excl. Curr.	Total	Cur- rency	Price	Vol/ Mix	Cost/ Other
Net Revenues	\$ 4,042	\$ 4,114	(1.8)%	2.2%	\$ (72)	\$ (162)	\$ 207	\$ (113)	\$ (4)
Operating Income	\$ 1,684	\$ 1,627	3.5 %	6.8%	\$ 57	\$ (53)	\$ 207	\$ (128)	\$ 31

Net revenues, excluding unfavorable currency, increased by 2.2%, mainly reflecting: a favorable pricing variance, primarily driven by Egypt, the GCC, PMI Duty Free and Turkey, partly offset by Morocco; partially offset by unfavorable volume/mix, mainly due to heated tobacco unit and cigarette volume in PMI Duty Free, as well as cigarette volume in Kuwait, partly offset by favorable cigarette volume in Egypt and favorable cigarette volume/mix in Algeria and Saudi Arabia.

The net revenues of the Middle East & Africa segment include \$321 million in 2019 and \$382 million in 2018 related to the sale of RRP's.

Operating income, excluding unfavorable currency, increased by 6.8%, mainly reflecting a favorable pricing variance; lower manufacturing costs; and lower marketing, administration and research costs, notably in the GCC; partly offset by unfavorable volume/mix, mainly due to the same factors as for net revenues noted above.

Middle East & Africa - Total Market, PMI Shipment Volume and Market Share Commentaries

The estimated total market in the Middle East & Africa was essentially flat at 592.4 billion units, notably reflecting:

- Algeria, up by 7.0%, partly reflecting the timing of estimated trade inventory movements in 2019 compared to 2018; and
- Egypt, up by 1.6%, mainly due to the timing of estimated trade inventory movements in 2019 related to anticipated price increases; offset by
- Duty Free, down by 1.6%, mainly reflecting lower purchases by travelers to China; and
- Morocco, down by 16.0%, primarily reflecting the impact of significant excise tax-driven price increases in 2019.

Our Regional market share decreased by 0.2 points to 23.5%.

PMI Shipment Volume (million units)	Full-Year		
	2019	2018	Change
Cigarettes	134,568	136,605	(1.5)%
Heated Tobacco Units	2,654	3,403	(22.0)%
Total Middle East & Africa	137,222	140,008	(2.0)%

Our total shipment volume decreased by 2.0% to 137.2 billion units, notably in:

- PMI Duty Free, down by 7.0%. Excluding the net unfavorable impact of estimated distributor inventory movements of 0.4 billion units, PMI's in-market sales decline was 4.6%, mainly reflecting lower market share and the lower total market; and
- Turkey, down by 5.6%, mainly reflecting lower market share, primarily driven by the timing of retail price increases in April 2019 compared to competition;

partly offset by

- Egypt, up by 12.2%, primarily reflecting higher market share, driven by L&M, as well as the higher total market; and

- Saudi Arabia, up by 24.9%. Excluding the net favorable impact of estimated distributor inventory movements of 1.5 billion units, mainly attributable to the timing of shipments compared to 2018, PMI's in-market sales grew by 4.1%, primarily reflecting higher market share.

South & Southeast Asia:

<u>Financial Summary - Years Ended December 31,</u> (in millions)	2019	2018	<u>Change Fav./ (Unfav.)</u>		<u>Variance Fav./ (Unfav.)</u>				
			Total	Excl. Curr.	Total	Cur- rency	Price	Vol/ Mix	Cost/ Other
Net Revenues	\$ 5,094	\$ 4,656	9.4%	9.6%	\$ 438	\$ (10)	\$ 583	\$ (135)	\$ —
Operating Income	\$ 2,163	\$ 1,747	23.8%	22.8%	\$ 416	\$ 17	\$ 583	\$ (99)	\$ (85)

Net revenues, excluding unfavorable currency, increased by 9.6%, reflecting: a favorable pricing variance, principally driven by Indonesia and the Philippines, partly offset by unfavorable volume/mix, largely due to Indonesia, partly offset by favorable volume in India and Thailand, as well as favorable mix in the Philippines.

Operating income increased by 23.8%. Excluding asset impairment and exit costs of \$20 million related to a plant closure in Pakistan in the first quarter of 2019 as part of our global manufacturing infrastructure optimization, and favorable currency of \$17 million, operating income increased by 24.0%, mainly reflecting: a favorable pricing variance and lower manufacturing costs, partly offset by unfavorable volume/mix, reflecting the same factors as for net revenues noted above, and higher marketing, administration and research costs, partly due to the Philippines.

South & Southeast Asia - Total Market, PMI Shipment Volume and Market Share Commentaries

The estimated total market in South & Southeast Asia decreased by 1.2% to 738.1 billion units, notably due to:

- Pakistan, down by 14.0%, mainly reflecting the impact of excise tax-driven price increases;
- the Philippines, down by 3.7%, primarily reflecting the impact of price increases in the below premium segment in the fourth quarter of 2018, as well as price increases in the third quarter of 2019; and
- Vietnam, down by 5.2%, mainly reflecting the impact of excise tax-driven price increases;

partly offset by

- Indonesia, up by 1.1%, reflecting the absence of an excise tax increase in 2019; and
- Thailand, up by 5.8%, primarily reflecting on-going recovery from the September 2017 excise tax reform.

Our Regional market share decreased by 0.1 point to 23.7%.

<u>PMI Shipment Volume (million units)</u>	<u>Full-Year</u>		
	2019	2018	Change
Cigarettes	174,934	178,469	(2.0)%
Heated Tobacco Units	—	—	— %
Total South & Southeast Asia	174,934	178,469	(2.0)%

Our total shipment volume decreased by 2.0% to 174.9 billion units, notably due to:

- Indonesia, down by 2.9%, mainly reflecting lower market share, primarily due to the widened retail price gap of *Sampoerna A* to competitive brands following its price increase in October 2018, partly offset by the higher total market;
- Pakistan, down by 8.6%, mainly reflecting the lower total market, partly offset by higher market share driven by favorable retail price gaps with competitors' brands; and

- the Philippines, down by 2.9%, mainly reflecting the lower total market, partly offset by higher market share, notably of *Marlboro*; partly offset by
- Thailand, up by 18.0%, mainly reflecting higher market share, driven by the continued strong performance of *L&M 7.1* and the favorable impact of distribution expansion in 2018, as well as the higher total market.

East Asia & Australia:

<u>Financial Summary - Years Ended December 31,</u> (in millions)			<u>Change Fav./ (Unfav.)</u>		<u>Variance Fav./ (Unfav.)</u>				
	2019	2018	Total	Excl. Curr.	Total	Currency	Price	Vol/ Mix	Cost/ Other
Net Revenues	\$ 5,364	\$ 5,580	(3.9)%	(3.4)%	\$ (216)	\$ (26)	\$ 230	\$ (420)	\$ —
Operating Income	\$ 1,932	\$ 1,851	4.4 %	2.4 %	\$ 81	\$ 37	\$ 230	\$ (292)	\$ 106

Net revenues, excluding unfavorable currency, decreased by 3.4%, reflecting: unfavorable volume/mix, mainly due to lower cigarette volume in Australia, Japan and Korea, lower *IQOS* device volume in Japan, and lower heated tobacco unit volume and *IQOS* device volume in Korea, partly offset by higher heated tobacco unit volume in Japan. The unfavorable volume/mix was partly offset by a favorable pricing variance, predominantly driven by Australia and Japan.

The net revenues of the East Asia & Australia segment include \$2,671 million in 2019 and \$2,506 million in 2018 related to the sale of RRP's.

Operating income, excluding favorable currency, increased by 2.4%, mainly reflecting: a favorable pricing variance and lower manufacturing costs, primarily related to Japan and Korea, partly offset by unfavorable volume/mix, mainly reflecting the same drivers as for net revenues noted above, as well as higher marketing, administration and research costs.

East Asia & Australia - Total Market, PMI Shipment Volume and Market Share Commentaries

The estimated total market in East Asia & Australia, excluding China, decreased by 4.0% to 299.2 billion units, notably due to:

- Australia, down by 5.9%, or by 8.9% excluding the impact of estimated trade inventory movements, mainly reflecting the impact of excise tax-driven retail price increases;
- Japan, down by 5.6%, mainly reflecting the impact of the October 1, 2018 excise tax-driven retail price increases, as well as out-switching to the cigarillo category;
- Korea, down by 1.4%, reflecting the secular decline of the cigarette category, partly offset by the growth of the heat-not-burn category; and
- Taiwan, down by 1.9%, continuing to reflect the impact of significant excise tax-driven retail price increases in June 2017, as well as an increase in the prevalence of illicit trade.

Our Regional market share, excluding China, decreased by 0.5 points to 26.9%.

<u>PMI Shipment Volume (million units)</u>	<u>Full-Year</u>		
	2019	2018	Change
Cigarettes	49,951	56,163	(11.1)%
Heated Tobacco Units	30,677	26,866	14.2 %
Total East Asia & Australia	80,628	83,029	(2.9)%

PMI's total shipment volume decreased by 2.9% to 80.6 billion units, notably in:

- Korea, down by 11.1%, principally due to lower cigarette and heated tobacco unit market share, as well as the lower total market; partly offset by
- Japan, up by 0.3%, reflecting the net favorable impact of estimated distributor inventory movements of approximately 2.6 billion units (comprised of approximately 3.4 billion heated tobacco units, partially offset by approximately 0.8 billion cigarettes), mainly due to a favorable comparison with 2018 in which IQOS consumable inventories in Japan were reduced. Excluding the impact of these inventory movements, PMI's in-market sales declined by 4.2%, primarily reflecting the lower total market, partly offset by higher heated tobacco unit market share.

Latin America & Canada:

Financial Summary - Years Ended December 31,

(in millions)			Change Fav./ (Unfav.)		Variance Fav./ (Unfav.)				
	2019	2018	Total	Excl. Curr.	Total	Currency	Price	Vol/ Mix	Cost/ Other ⁽¹⁾
Net Revenues	\$ 2,206	\$ 3,056	(27.8)%	(25.6)%	\$ (850)	\$ (68)	\$ 90	\$ (113)	\$ (759)
Operating Income	\$ 235	\$ 1,145	(79.5)%	(80.7)%	\$ (910)	\$ 14	\$ 90	\$ (89)	\$ (925)

⁽¹⁾ Unfavorable Cost/Other variance includes the impact of the RBH deconsolidation.

Note: Net Revenues include revenues from shipments of Platform 1 devices, heated tobacco units and accessories to Altria Group, Inc., commencing in the third quarter of 2019, for sale under license in the United States.

Net revenues, excluding unfavorable currency, decreased by 25.6%, predominantly due to: the unfavorable impact shown in "Cost/Other," resulting from the deconsolidation of RBH; and unfavorable volume/mix, mainly due to lower cigarette volume in Argentina and Canada, partly offset by a favorable pricing variance, notably in Brazil, Canada, Colombia and Mexico, partially offset by Argentina, mainly due to the adoption of highly inflationary accounting.

The net revenues of the Latin America & Canada segment include \$27 million in 2019 and \$19 million in 2018 related to the sale of RRP's.

Operating income decreased by 79.5%. Excluding the loss on deconsolidation of RBH (\$239 million), the Canadian tobacco litigation-related expense (\$194 million), asset impairment and exit costs (\$60 million) related to plant closures in Argentina and Colombia as part of our global manufacturing infrastructure optimization, and favorable currency (\$14 million), operating income decreased by 37.6%. This decline was predominantly due to the unfavorable impact, shown in "Cost/Other," resulting from the deconsolidation of RBH; an unfavorable volume/mix, mainly due to lower cigarette volume in Argentina and Canada, partially offset by a favorable pricing variance, lower manufacturing costs and lower marketing, administration and research costs.

Latin America & Canada - Total Market, PMI Shipment Volume and Market Share Commentaries

The estimated total market in Latin America & Canada decreased by 4.3% to 194.1 billion units, notably due to:

- Argentina, down by 4.6%, primarily due to the impact of cumulative price increases and the impact of the economic downturn as of the second half of 2018;
- Canada, down by 7.7%, primarily due to the impact of cumulative price increases, as well as the growing prevalence of e-vapor products; and
- Venezuela, down by 61.6%, mainly reflecting the deterioration of the socioeconomic environment and the impact of inflation-driven price increases.

Our Regional market share decreased by 0.4 points to 36.9%.

PMI Shipment Volume (million units)	Full-Year		
	2019	2018	Change
Cigarettes	72,293	80,738	(10.5)%
Heated Tobacco Units	299	147	+100.0%
Total Latin America & Canada	72,592	80,885	(10.3)%

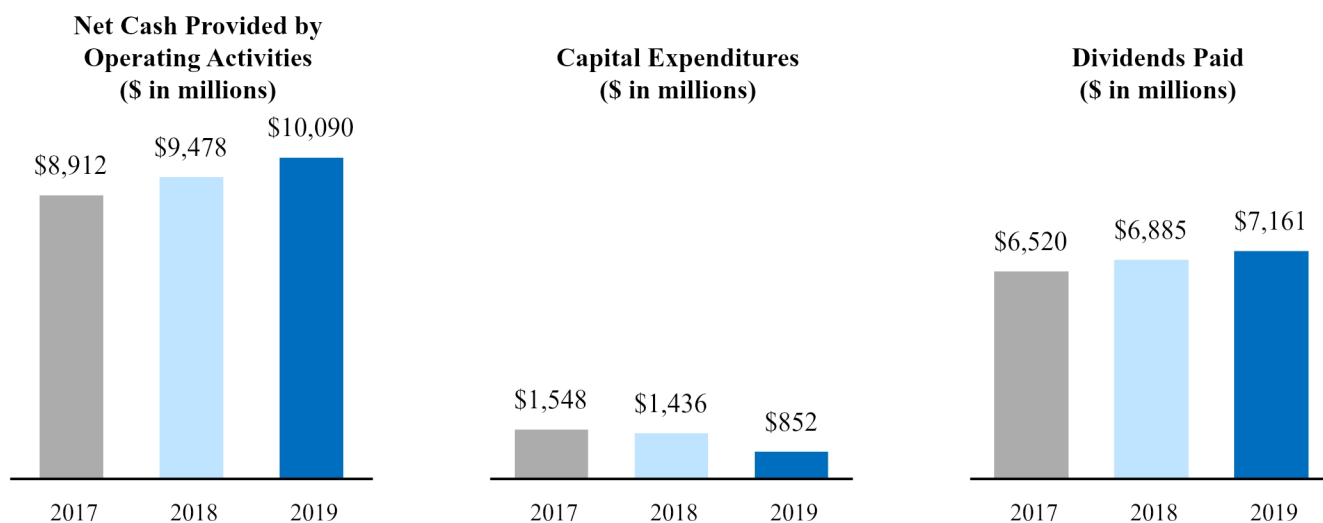
Our total shipment volume decreased by 10.3% to 72.6 billion units, or by 5.2% excluding the impact of the RBH deconsolidation, notably due to:

- Argentina, down by 9.4%, primarily reflecting the lower total market, as well as lower market share; and
- Venezuela, down by 74.8%, primarily reflecting the lower total market.

2018 compared with 2017

For a discussion comparing our consolidated operating results within each of our operating segments for the year ended December 31, 2018, with the year ended December 31, 2017, refer to Part II, Item 7. *Management's Discussion and Analysis of Financial Condition and Results of Operation - Operating Results by Business Segment* in our Annual Report on Form 10-K for the year ended December 31, 2018, which was filed with the U.S. Securities and Exchange Commission on February 7, 2019.

Financial Review



(in millions)	For the Years Ended December 31,		
	2019	2018	2017
Net cash provided by operating activities	\$ 10,090	\$ 9,478	\$ 8,912
Net cash used in investing activities	(1,811)	(998)	(3,083)
Net cash used in financing activities	(8,061)	(9,651)	(2,769)

2019 compared with 2018

- *Net Cash Provided by Operating Activities*

Net cash provided by operating activities of \$10.1 billion for the year ended December 31, 2019, increased by \$0.6 billion from the comparable 2018 period. Excluding unfavorable currency movements of \$1.0 billion, net cash provided by operating activities increased by \$1.6 billion, due to lower working capital requirements of \$1.3 billion and other movements of \$0.3 billion. The unfavorable currency movements represented the impacts on net earnings coupled with the currency impacts on subsidiary working capital movements and the related inter-company positions from the fluctuations of the U.S. dollar in 2018 and 2019, especially against the Euro, Mexican peso, Russian ruble and Turkish lira.

The lower working capital requirements were primarily due to higher cash provided by accrued liabilities and other current assets related to the timing of excise tax-paid inventory movements and excise tax payments, and higher cash provided by accounts payable reflecting a combination of extended payment terms from vendors in 2019 and higher 2018 payments for IQOS device purchases in the fourth quarter of 2017, partially offset by more cash used for accounts receivable primarily due to the timing of cash collections.

The other movements of \$0.3 billion, excluding currency, was driven by the net impact of the net earnings decline of \$0.4 billion adjusted for the add-back of the non-cash items of \$0.7 billion, comprised of \$0.3 billion related to the 2019 Canadian tobacco litigation-related expense and the 2019 loss on deconsolidation of RBH and \$0.4 billion related to the 2019 asset impairment and exit costs. While the asset impairment and exit costs were largely non-cash charges in 2019, approximately \$0.2 billion of employee separation costs will be paid by the end of 2021 - see Item 8, Note 21. *Asset Impairment and Exit Costs* for additional information.

- *Net Cash Used in Investing Activities*

Net cash used in investing activities of \$1.8 billion for the year ended December 31, 2019, increased by \$0.8 billion from the comparable 2018 period. This increase in net cash used in investing activities was due principally to the reduction of cash resulting from the deconsolidation of RBH, partly offset by lower capital expenditures. For further details on deconsolidation of RBH, see Item 8. Note 22. *Deconsolidation of RBH*.

Our capital expenditures were \$0.9 billion in 2019 and \$1.4 billion in 2018. The 2019 expenditures were primarily related to our ongoing investments in RRP. We expect total capital expenditures in 2020 of approximately \$1.0 billion (including capital expenditures related to our ongoing investment in RRP), to be funded by operating cash flows.

- *Net Cash Used in Financing Activities*

Net cash used in financing activities of \$8.1 billion for the year ended December 31, 2019, decreased by \$1.6 billion from the comparable 2018 period. The decrease in net cash used in financing activities was due primarily to 2019 proceeds from long-term debt issuances (\$3.8 billion proceeds from our U.S. dollar and Euro debt issuances in 2019) and the purchase of the remaining 49% interest in our Costa Rican affiliates in 2018, partially offset by higher long-term debt repayments and higher repayments of short-term borrowing. For further details on the purchase of the remaining 49% interest in our Costa Rican affiliates, see Item 8, Note 6. *Acquisitions*.

Dividends paid in 2019 and 2018 were \$7.2 billion and \$6.9 billion, respectively.

2018 compared with 2017

For a discussion comparing our net cash activities (operating, investing and financing) for the year ended December 31, 2018, with the year ended December 31, 2017, refer to Part II, Item 7. Management's Discussion and Analysis of Financial Condition and Results of Operation - Financial Review in our Annual Report on Form 10-K for the year ended December 31, 2018, which was filed with the U.S. Securities and Exchange Commission on February 7, 2019.

- **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. As part of our cash management strategy and in order to

manage counterparty exposure, we also enter into reverse repurchase agreements. Such agreements are collateralized with government or corporate securities held by a custodial bank and, at maturity, cash is paid back to PMI, and the collateral is returned to the bank. For 2018, we had an average balance of \$0.3 billion, and we had a zero balance at December 31, 2018. For 2019, the activity for such reverse repurchase agreements was not material.

We utilize long-term and short-term debt financing, including a commercial paper program that is regularly used to finance ongoing liquidity requirements, as part of our overall cash management strategy. Our ability to access the capital and credit markets as well as overall dynamics of these markets may impact borrowing costs. We expect that the combination of our long-term and short-term debt financing, the commercial paper program and the committed credit facilities, coupled with our operating cash flows, will enable us to meet our liquidity requirements.

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. At February 6, 2020, 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	Stable
Fitch	F1	A	Stable

Credit Facilities – On January 31, 2020, we entered into an agreement to amend and extend the term of our \$2.0 billion 364-day revolving credit facility from February 4, 2020, to February 2, 2021.

At February 6, 2020, our committed credit facilities were as follows:

(in billions)

Type	Committed Credit Facilities
364-day revolving credit, expiring February 2, 2021	\$ 2.0
Multi-year revolving credit, expiring February 28, 2021	2.5
Multi-year revolving credit, expiring October 1, 2022	3.5
Total facilities	\$ 8.0

At February 6, 2020, 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.

All but the \$2.0 billion 364-day revolving credit facility in the table above require 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, 2019, our ratio calculated in accordance with the agreements was 11.2 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.

We plan to replace our existing \$2.5 billion multi-year revolving credit facility, expiring February 28, 2021 with a new \$2.0 billion revolving credit facility expiring February 10, 2025. The new credit facility, which is expected to close on February 10, 2020, will not include the consolidated EBITDA to consolidated interest expense ratio covenant discussed above.

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 \$2.7 billion at December 31, 2019,

and \$3.3 billion at December 31, 2018, are for the sole use of our subsidiaries. Borrowings under these arrangements amounted to \$338 million at December 31, 2019, and \$730 million at December 31, 2018.

Commercial Paper Program – We continue to have access to liquidity in the commercial paper market through programs in place in the U.S. and in Europe having an aggregate issuance capacity of \$8.0 billion. At December 31, 2019, and December 31, 2018, we had no commercial paper outstanding. The average commercial paper balance outstanding during 2019 and 2018 was \$2.3 billion and \$3.4 billion, respectively.

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 nonservicing.

Our 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, 2019, 2018 and 2017, were \$0.9 billion, \$1.0 billion and \$1.1 billion, 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 20. *Sale of Accounts Receivable* to our consolidated financial statements.

Debt – Our total debt was \$31.0 billion at December 31, 2019, and \$31.8 billion at December 31, 2018. 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 2.5% in 2019 and 2018. 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 14, 2017, 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 2020, we plan to file a new shelf registration statement with the Securities and Exchange Commission.

Our debt issuances in 2019 were as follows:

(in millions)

Type		Face Value	Interest Rate	Issuance	Maturity
U.S. dollar notes	(a)	\$900	2.875%	May 2019	May 2024
U.S. dollar notes	(b)	\$750	3.375%	May 2019	August 2029
EURO notes	(c)	€500 (approximately \$557)	(d) 0.125%	August 2019	August 2026
EURO notes	(c)	€750 (approximately \$835)	(d) 0.800%	August 2019	August 2031
EURO notes	(c)	€750 (approximately \$835)	(d) 1.450%	August 2019	August 2039

(a) Interest on these notes is payable semi-annually in arrears beginning in November 2019.

(b) Interest on these notes is payable semi-annually in arrears beginning in August 2019.

(c) Interest on these notes is payable annually in arrears beginning in August 2020.

(d) USD equivalents for foreign currency notes were calculated based on exchange rates on the date of issuance.

The net proceeds from the sale of the securities listed in the table above have been and will be used for general corporate purposes, including repayment of outstanding commercial paper and refinancing of outstanding 2.000% Notes due 2020, outstanding Floating Rate Notes due 2020 and outstanding Euro denominated 1.750% Notes due 2020.

The weighted-average time to maturity of our long-term debt was 10.2 years at the end of 2019 and 9.6 years at the end of 2018.

• 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, 2019, we were contingently liable for \$0.5 billion of guarantees of our own performance, of which \$0.3 billion related to our obligations under indemnity agreements to enable appeals of customs assessments against our distributors, and \$0.2 billion 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, 2019, our third-party guarantees were insignificant.

Aggregate Contractual Obligations – The following table summarizes our contractual obligations at December 31, 2019:

(in millions)	Total	Payments Due			
		2020	2021-2022	2023-2024	2025 and Thereafter
Long-term debt ⁽¹⁾	\$30,962	\$4,051	\$5,779	\$4,890	\$16,242
Interest on borrowings ⁽²⁾	10,124	877	1,534	1,273	6,440
Operating leases ⁽³⁾	949	222	286	158	283
Purchase obligations ⁽⁴⁾ :					
Inventory and production costs	3,493	2,199	885	409	—
Other	2,180	977	578	213	412
	5,673	3,176	1,463	622	412
Other long-term liabilities ⁽⁵⁾	1,992	278	408	661	645
	\$49,700	\$8,604	\$9,470	\$7,604	\$24,022

⁽¹⁾ Amounts represent the expected cash payments at the face value of our long-term debt and finance lease obligations. For further details, see Item 8, Note 7. *Indebtedness* to our consolidated financial statements.

⁽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. Interest on our variable debt is estimated using the rate in effect at December 31, 2019. 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 maturity of PMI's operating lease liabilities, on an undiscounted basis.

⁽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. Other purchase obligations also include the expected future contributions to the Foundation for a Smoke-Free World. For further details see *Business Environment—Other Developments*. 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 transition tax (as discussed in Item 8, Note 11. *Income Taxes* to our consolidated financial statements), postretirement health care costs, accruals established for employment costs and accruals established for Exit activities (for further details, see Note 21. *Asset impairment and Exit 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 \$77 million in 2020, 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, 2019, in Item 8, Note 9. *Stock Plans* to our consolidated financial statements.

During 2019, 2018 and 2017, we did not repurchase any shares under a share repurchase program, and we do not presently intend to repurchase shares of our common stock in 2020.

Dividends paid in 2019 were \$7.2 billion. During the third quarter of 2019, our Board of Directors approved a 2.6% increase in the quarterly dividend to \$1.17 per common share. As a result, the present annualized dividend rate is \$4.68 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 and interest 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 19. *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 and foreign currency price-sensitive derivative financial instruments. This computation includes our debt 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 and a one-day holding period using a "parametric delta-gamma" approximation technique to determine the observed interrelationships between movements in interest rates and various currencies and in calculating the risk of the underlying positions in the portfolio. These interrelationships were determined by observing interest rate and forward currency rate movements primarily over the preceding quarter for determining value at risk at December 31, 2019 and 2018, and primarily over each of the four preceding quarters for the calculation of average value at risk amounts during each year.

(in millions)	Fair Value Impact			
	At December 31, 2019	Average	High	Low
Instruments sensitive to:				
Foreign currency rates	\$18	\$20	\$24	\$18
Interest rates	\$301	\$247	\$346	\$169
Fair Value Impact				
(in millions)	At December 31, 2018	Average	High	Low
Instruments sensitive to:				
Foreign currency rates	\$19	\$20	\$23	\$19
Interest rates	\$142	\$132	\$152	\$96

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 18. *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. Our RRP's constitute a new product category in its early stages that is less predictable than our mature cigarette business. 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 this discussion of potential risks or uncertainties to be complete. 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*.