U.S. revenues in 2018 benefited from the inclusion of revenues associated with Bard products in our financial results beginning on January 1, 2018. Underlying 2018 revenue growth in the United States was driven by revenues in the Medical segment's Medication Delivery Solutions and Medication Management Solutions units, as well as by revenues in the Life Sciences segment's Diagnostic Systems unit.

International revenues in 2019 reflected growth in all three segments. International revenues in 2019 were favorably impacted by the inclusion of revenues associated with Bard's products in results for the first quarter of fiscal year 2019, as noted above. Fiscal year 2019 international revenue growth was also driven by sales in the Medical segment's Medication Delivery Solutions and Pharmaceutical Systems units as well as by sales in the Life Sciences segment's Diagnostic Systems and Preanalytical Systems units.

International revenue growth in 2018 benefited from the inclusion of revenues associated with Bard products in our financial results. International revenue growth in 2018 also reflected increased sales in the Medical segment's Medication Delivery Solutions, Medication Management Solutions and Pharmaceutical Systems units, as well as growth attributable to sales in all three of the Life Sciences segment's organizational units.

Emerging market revenues were $2.71 billion, $2.53 billion and $1.95 billion in 2019, 2018 and 2017, respectively. Foreign currency translation unfavorably impacted emerging market revenues in 2019 by an estimated $155 million and favorably impacted emerging market revenues in 2018 by an estimated $19 million. Emerging market revenue growth in 2019 was favorably impacted by the inclusion of revenues associated with Bard's products in our results for the first quarter of fiscal year 2019, as noted above. Emerging market revenue growth in 2018 benefited from the inclusion of revenues associated with Bard products in our financial results beginning on January 1, 2018. Underlying growth in fiscal years 2019 and 2018 was particularly driven by sales in China and EMA.

Specified Items

Reflected in the financial results for 2019, 2018 and 2017 were the following specified items:

(Millions of dollars)	2019	2018	2017
Integration costs [a]	$ 323	$ 344	$ 237
Restructuring costs [a]	180	344	85
Transaction costs [a]	1	56	39
Financing costs [b]	—	49	131
Purchase accounting adjustments [c]	1,499	1,733	491
Transaction gain/loss, product and other litigation-related matters [d]	646	—	(337)
Investment gains/losses and asset impairments [e]	17	(151)	—
European regulatory initiative-related costs [f]	51	—	—
Impacts of debt extinguishment [g]	54	16	73
Hurricane recovery-related impacts	(24)	17	—
Lease contract modification-related charge [h]	—	—	748
Total specified items	2,749	2,409	1,466
Less: tax impact of specified items and tax reform [i]	622	(265)	495
After-tax impact of specified items	$ 2,127	$ 2,674	$ 971

(a)   Represents integration, restructuring and transaction costs, recorded in *Acquisitions and other restructurings*, which are further discussed below.
(b)   Represents financing impacts associated with the Bard acquisition, which were recorded in *Interest income* and *Interest expense*.
(c)   Primarily represents non-cash amortization expense associated with acquisition-related identifiable intangible assets and other adjustments related to the purchase accounting for acquisitions. BD's amortization expense is primarily recorded in *Cost of products sold*. The amount in 2018 included fair value step-up adjustments of $478 million relating to Bard's inventory on the acquisition date.
(d)   The amount in 2019 includes charges relating to certain product liability matters and the estimated cost of a product recall, as well as the pre-tax gain recognized on BD's sale of its Advanced Bioprocessing business. The amount in 2017 largely represents the reversal of certain reserves related to an appellate

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