INTERNATIONAL BUSINESS MACHINES CORP Form 10-Q October 30, 2018 Table of Contents

UNITED STATES SECURITIES AND EXCHANGE COMMISSION

WASHINGTON, DC 20549

FORM 10 - Q

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

FOR THE QUARTER ENDED SEPTEMBER 30, 2018

1-2360

(Commission file number)

INTERNATIONAL BUSINESS MACHINES CORPORATION

(Exact name of registrant as specified in its charter)

New York (State of incorporation)

13-0871985

(IRS employer identification number)

Armonk, New York (Address of principal executive offices)

10504 (Zip Code)

ip Couc)

914-499-1900

(Registrant s telephone number)

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

Indicate by check mark whether the registrant has submitted electronically every Interactive Data File required to be submitted pursuant to Rule 405 of Regulation S-T ($\S232.405$ of this chapter) during the preceding 12 months (or for such shorter period that the registrant was required to submit such files). Yes x No o

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

Large accelerated filer X Non-accelerated filer O Accelerated filer O
Smaller reporting company O
Emerging growth company O

If an emerging growth company, indicate by check mark if the registrant has elected not to use the extended transition period for complying with any new or revised financial accounting standards provided pursuant to Section 13(a) of the Exchange Act). O

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

The registrant had 908,793,777 shares of common stock outstanding at September 30, 2018.

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Part I - Financial Information

Item 1. Consolidated Financial Statements:

INTERNATIONAL BUSINESS MACHINES CORPORATION

AND SUBSIDIARY COMPANIES

CONSOLIDATED STATEMENT OF EARNINGS

(UNAUDITED)

(D. II		Months End	ded Sep			Nine Months End	ed Sep	,
(Dollars in millions except per share amounts)	20	18		2017		2018		2017
Revenue: Services	¢	12.566	\$	12,703	\$	20 414	\$	27.502
	\$	12,566	Þ	,	Þ	38,414	Þ	37,592
Sales		5,800		6,017		18,221		17,744
Financing T-4-1 management		389		433		1,195		1,260
Total revenue		18,756		19,153		57,830		56,597
Cost:		0.040		0.265*		25.510		25.024
Services		8,040		8,265*		25,519		25,034
Sales		1,625		1,584*		5,216		4,779
Financing		287		322		846		890
Total cost		9,953		10,172*		31,582		30,703
Gross profit		8,803		8,981*		26,249		25,894
Expense and other (income):								
Selling, general and administrative		4,363		4,606*		14,665		14,666
Research, development and engineering		1,252		1,291*		4,021		4,212
Intellectual property and custom development income		(275)		(308)		(842)		(1,118)
Other (income) and expense		275		159*		968		751
Interest expense		191		168		530		451
Total expense and other (income)		5,807		5,917*		19,341		18,962
Income from continuing operations before income taxes		2,996		3,065		6,908		6,931
Provision for income taxes		304		339		138		120
Income from continuing operations	\$	2,692	\$	2,726	\$	6,770	\$	6,811
Income/(loss) from discontinued operations, net of tax		2		0		7		(3)
Net income	\$	2,694	\$	2,726	\$	6,777	\$	6,807
Earnings/(loss) per share of common stock:								
Assuming dilution:								
Continuing operations	\$	2.94	\$	2.92	\$	7.36	\$	7.24
Discontinued operations		0.00		0.00		0.01		0.00
Total	\$	2.94	\$	2.92	\$	7.37	\$	7.24
Basic:							•	
Continuing operations	\$	2.95	\$	2.93	\$	7.39	\$	7.28
Discontinued operations		0.00		0.00		0.01		0.00
Total	\$	2.95	\$	2.93	\$	7.40	\$	7.28
Weighted-average number of common shares outstanding: (millions)								

Assuming dilution	915.2	933.2	920.0	940.2
Basic	911.2	929.4	915.6	935.6
Cash dividend per common share	\$ 1.57	\$ 1.50 \$	4.64	\$ 4.40

^{*} Recast to reflect adoption of the FASB guidance on presentation of net periodic pension and nonpension postretirement benefit costs.

(Amounts may not add due to rounding.)

INTERNATIONAL BUSINESS MACHINES CORPORATION

AND SUBSIDIARY COMPANIES

CONSOLIDATED STATEMENT OF COMPREHENSIVE INCOME

(UNAUDITED)

	Three Months En	ded Sej	. ,	Nine Months Ended September 30,				
(Dollars in millions)	2018		2017		2018		2017	
Net income	\$ 2,694	\$	2,726	\$	6,777	\$	6,807	
Other comprehensive income/(loss), before								
tax:								
Foreign currency translation adjustments	(22)		89		(535)		213	
Net changes related to available-for-sale								
securities:								
Unrealized gains/(losses) arising during the								
period	0		(1)		(2)		2	
Reclassification of (gains)/losses to net income			0				1	
Total net changes related to available-for-sale								
securities	0		(2)		(2)		2	
Unrealized gains/(losses) on cash flow hedges:								
Unrealized gains/(losses) arising during the								
period	(46)		(70)		(134)		(198)	
Reclassification of (gains)/losses to net income	28		(73)		408		(347)	
Total unrealized gains/(losses) on cash flow								
hedges	(18)		(143)		274		(545)	
Retirement-related benefit plans:								
Prior service costs/(credits)	0		0		(1)		0	
Net (losses)/gains arising during the period	(1)		1		83		106	
Curtailments and settlements	2		2		7		3	
Amortization of prior service (credits)/costs	(18)		(22)		(55)		(66)	
Amortization of net (gains)/losses	737		733		2,231		2,156	
Total retirement-related benefit plans	719		713		2,264		2,200	
Other comprehensive income/(loss), before tax	678		658		2,001		1,869	
Income tax (expense)/benefit related to items								
of other comprehensive income	(209)		11		(807)		7	
Other comprehensive income/(loss), net of tax	470		669		1,194		1,877	
Total comprehensive income/(loss)	\$ 3,164	\$	3,394	\$	7,970	\$	8,684	

(Amounts may not add due to rounding.)

INTERNATIONAL BUSINESS MACHINES CORPORATION

AND SUBSIDIARY COMPANIES

CONSOLIDATED STATEMENT OF FINANCIAL POSITION

(UNAUDITED)

ASSETS

(Dollars in millions)	A	t September 30, 2018	At	December 31, 2017
Assets:				
Current assets:				
Cash and cash equivalents	\$	11,563	\$	11,972
Restricted cash		168		262*
Marketable securities		2,932		608
Notes and accounts receivable - trade (net of allowances of \$310 in 2018 and \$297				
in 2017)		7,071		8,928
Short-term financing receivables (net of allowances of \$273 in 2018 and \$261 in				
2017)		19,249		21,721
Other accounts receivable (net of allowances of \$38 in 2018 and \$36 in 2017)		767		981
Inventories, at lower of average cost or net realizable value:				
Finished goods		448		333
Work in process and raw materials		1,445		1,250
Total inventories		1,893		1,583
Deferred costs		2,227		1,820**
Prepaid expenses and other current assets		2,388		1,860* **
Total current assets		48,257		49,735
Property, plant and equipment		32,484		32,331
Less: Accumulated depreciation		21,535		21,215
Property, plant and equipment net		10,949		11,116
Long-term financing receivables (net of allowances of \$52 in 2018 and \$74 in				
2017)		8,179		9,550
Prepaid pension assets		5,655		4,643
Deferred costs		2,581		2,136**
Deferred taxes		4,436		4,862
Goodwill		36,526		36,788
Intangible assets net		3,134		3,742
Investments and sundry assets		2,272		2,783**
Total assets	\$	121,990	\$	125,356

^{*} Recast to reflect adoption of the FASB guidance on restricted cash.

(Amounts may not add due to rounding.)

^{**} Recast to conform to current period presentation.

INTERNATIONAL BUSINESS MACHINES CORPORATION

AND SUBSIDIARY COMPANIES

CONSOLIDATED STATEMENT OF FINANCIAL POSITION (CONTINUED)

(UNAUDITED)

LIABILITIES AND EQUITY

	At Se	ptember 30,	At De	ecember 31,
(Dollars in millions)		2018		2017
Liabilities:				
Current liabilities:				
Taxes	\$	2,502	\$	4,219
Short-term debt		10,932		6,987
Accounts payable		5,384		6,451
Compensation and benefits		3,601		3,644
Deferred income		10,704		11,552
Other accrued expenses and liabilities		3,700		4,510
Total current liabilities		36,822		37,363
Long-term debt		35,989		39,837
Retirement and nonpension postretirement benefit obligations		15,774		16,720
Deferred income		3,507		3,746
Other liabilities		9,979		9,965
Total liabilities		102,071		107,631
Equity:				
IBM stockholders equity:				
Common stock, par value \$0.20 per share, and additional paid-in capital		54,987		54,566
Shares authorized: 4,687,500,000				
Shares issued: 2018 - 2,232,637,802				
2017 - 2,229,428,813				
Treasury stock - at cost		(165,995)		(163,507)
Accumulated other comprehensive income/(loss)		(27,820)		(26,592)
Total IBM stockholders equity		19,784		17,594
Noncontrolling interests		134		131
Total equity		19,918		17,725
Total liabilities and equity	\$	121,990	\$	125,356

(Amounts may not add due to rounding.)

INTERNATIONAL BUSINESS MACHINES CORPORATION AND SUBSIDIARY COMPANIES

CONSOLIDATED STATEMENT OF CASH FLOWS

(UNAUDITED)

Nine Months Ended September 30,							
(Dollars in millions)		2018		2017			
Cash flows from operating activities:	¢	6 777	¢	6.907			
Net income	\$	6,777	\$	6,807			
Adjustments to reconcile net income to cash provided by operating activities		2 227		0.021			
Depreciation		2,337		2,231			
Amortization of intangibles		1,031 371		1,161 388			
Stock-based compensation Net (gain)/loss on asset sales and other		(18)		388 92			
Changes in operating assets and liabilities, net of acquisitions/divestitures		631		312			
Net cash provided by operating activities		11,128		10,991			
Net cash provided by operating activities		11,120		10,991			
Cash flows from investing activities:							
Payments for property, plant and equipment		(2,613)		(2,273)			
Proceeds from disposition of property, plant and equipment		192		337			
Investment in software		(418)		(411)			
Acquisition of businesses, net of cash acquired		(123)		(442)			
Divestitures of businesses, net of cash transferred				35			
Non-operating finance receivables net		377		469			
Purchases of marketable securities and other investments		(6,024)		(3,764)*			
Proceeds from disposition of marketable securities and other investments		3,241		2,778			
Net cash used in investing activities		(5,368)		(3,271)*			
Cash flows from financing activities:							
Proceeds from new debt		4,714		9,355			
Payments to settle debt		(4,246)		(6,252)			
Short-term borrowings/(repayments) less than 90 days net		376		(794)			
Common stock repurchases		(2,393)		(3,674)			
Common stock repurchases for tax withholdings		(148)		(153)			
Financing other		82		137			
Cash dividends paid		(4,250)		(4,119)			
Net cash used in financing activities		(5,864)		(5,499)			
Effect of exchange rate changes on cash, cash equivalents and restricted cash		(399)		875			
Net change in cash, cash equivalents and restricted cash		(503)		3,096*			
Cash, cash equivalents and restricted cash at January 1		12,234		8,073*			
Cash, cash equivalents and restricted cash at September 30	\$	11,731	\$	11,168*			

^{*} Recast to reflect adoption of the FASB guidance on restricted cash.

(Amounts may not add due to rounding.)

INTERNATIONAL BUSINESS MACHINES CORPORATION AND SUBSIDIARY COMPANIES CONSOLIDATED STATEMENT OF CHANGES IN EQUITY

(UNAUDITED)

(Dollars in millions)	Common Stock and Additional Paid-in Capital	Retained Earnings		easury Stock	Com	umulated Other prehensive me/(Loss)	;	Total IBM Stockholders Equity	Non- Controlling Interests	Total Equity
Equity - January 1, 2018	\$ 54,566	\$ 153,126	\$	(163,507)	\$	(26,592)	\$	17,594	\$ 131	\$ 17,725
Cumulative effect of change in accounting principle:										
Revenue		524						524		524
Stranded tax effects/other *		2,422				(2,422)				
Net income plus other comprehensive income/(loss):										
Net income		6,777						6,777		6,777
Other comprehensive income/(loss)						1,194		1,194		1,194
Total comprehensive income/(loss)							\$	7,970		\$ 7,970
Cash dividends paid common stock (\$4.64 per share)		(4,250)						(4,250)		(4,250)
Common stock issued under employee plans (3,208,989 shares)	421							421		421
Purchases (978,004 shares) and sales (365,600 shares) of treasury stock under										
employee plans net		13		(101)				(89)		(89)
Other treasury shares purchased, not retired (15,982,033 shares)				(2,388)				(2,388)		(2,388)
Changes in noncontrolling interests				(2,500)				(2,300)	3	3
Equity - September 30, 2018	\$ 54,987	\$ 158,612	\$	(165,995)	\$	(27,820)	\$	19,784	\$ 134	\$ 19,918

^{*} Reflects the adoption of the FASB guidance on stranded tax effects, hedging and financial instruments. Refer to note 2, Accounting Changes .

(Amounts may not add due to rounding.)

INTERNATIONAL BUSINESS MACHINES CORPORATION AND SUBSIDIARY COMPANIES CONSOLIDATED STATEMENT OF CHANGES IN EQUITY (CONTINUED) (UNAUDITED)

	Common Stock and Additional Paid-in	Retained	Treasury	Accumulated Other Comprehensive			Total IBM Stockholders	Non- Controlling			Total
(Dollars in millions)	Capital	Earnings	Stock	Income/(Loss)			Equity	Intere			Equity
Equity - January 1,	50.00 5	152.550	(4.50.050)		(20.200)		10.016		4.46		10.000
2017	\$ 53,935	\$ 152,759	\$ (159,050)	\$	(29,398)	\$	18,246	\$	146	\$	18,392
Cumulative effect of											
change in accounting		102					102				102
principle * Net income plus other		102					102				102
comprehensive											
income/(loss):											
Net income		6,807					6,807				6,807
Other comprehensive		0,007					0,007				0,007
income/(loss)					1,877		1,877				1,877
Total comprehensive					2,017		2,011				2,017
income/(loss)						\$	8,684			\$	8,684
Cash dividends paid											
common stock (\$4.40											
per share)		(4,119)					(4,119)				(4,119)
Common stock issued											
under employee plans											
(3,372,586 shares)	460						460				460
Purchases (960,186											
shares) and sales											
(363,335 shares) of											
treasury stock under		1.5	(106)				(01)				(01)
employee plans net		15	(106)				(91)				(91)
Other treasury shares purchased, not retired											
(22,851,760 shares)			(3,655)				(3,655)				(3,655)
Changes in			(3,033)				(3,033)				(3,033)
noncontrolling											
interests									(16)		(16)
Equity -									(-0)		(20)
September 30, 2017	\$ 54,395	\$ 155,565	\$ (162,812)	\$	(27,521)	\$	19,627	\$	130	\$	19,757

^{*} Reflects the adoption of the FASB guidance on intra-entity transfers of assets.

(Amounts may not add due to rounding.)

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Notes to Consolidated Financial Statements:

1. <u>Basis of Presentation:</u> The accompanying Consolidated Financial Statements and footnotes of the International Business Machines Corporation (IBM or the company) have been prepared in accordance with accounting principles generally accepted in the United States of America (GAAP). The financial statements and footnotes are unaudited. In the opinion of the company s management, these statements include all adjustments, which are only of a normal recurring nature, necessary to present a fair statement of the company s results of operations, financial position and cash flows.

The preparation of financial statements in conformity with GAAP requires management to make estimates and assumptions that affect the amount of assets, liabilities, revenue, costs, expenses and other comprehensive income/(loss) that are reported in the Consolidated Financial Statements and accompanying disclosures. These estimates are based on management s best knowledge of current events, historical experience, actions that the company may undertake in the future and on various other assumptions that are believed to be reasonable under the circumstances. As a result, actual results may be different from these estimates. For a discussion of significant estimates and judgments made in recognizing revenue under the revenue standard effective January 1, 2018, see note 3, Revenue Recognition . Also, refer to the company s 2017 Annual Report on pages 70 to 73, for a discussion of the company s critical accounting estimates.

Noncontrolling interest amounts of \$6.2 million and \$4.4 million, net of tax, for the three months ended September 30, 2018 and 2017, respectively, and \$17.9 million and \$11.5 million, net of tax, for the nine months ended September 30, 2018 and 2017, respectively, are included as a reduction within other (income) and expense in the Consolidated Statement of Earnings.

Interim results are not necessarily indicative of financial results for a full year. The information included in this Form 10-Q should be read in conjunction with the company s 2017 Annual Report.

Within the financial statements and tables presented, certain columns and rows may not add due to the use of rounded numbers for disclosure purposes. Percentages presented are calculated from the underlying whole-dollar amounts. Certain prior year amounts have been reclassified to conform to the current year presentation. This is annotated where applicable.

2. Accounting Changes:

New Standards to be Implemented

In August 2018, the Financial Accounting Standards Board (FASB) issued guidance on a customer s accounting for implementation costs incurred in cloud-computing arrangements that are hosted by a vendor. Certain types of implementation costs should be capitalized and amortized over the term of the hosting arrangement. The guidance is effective January 1, 2020 and early adoption is permitted. The company will adopt the guidance on January 1, 2019 on a prospective basis, and does not expect the guidance to have a material impact on the consolidated financial results.

In August 2018, the FASB issued guidance which changes the disclosure requirements for fair value measurements and defined benefit plans. The guidance is effective for each of the topics on January 1, 2020 and January 1, 2021, respectively, with early adoption of certain provisions permitted. As a result, the company has removed Level 1/Level 2 transfer disclosures in the third-quarter 2018 in accordance with the fair value guidance. The company is evaluating the adoption date for the remaining changes. As the guidance is a change to disclosures only, the company does not expect the guidance to have a material impact on the consolidated financial results.

In June 2016, the FASB issued guidance for credit impairment based on an expected loss model rather than an incurred loss model. The guidance requires the consideration of all available relevant information when estimating expected credit losses, including past events, current conditions and forecasts and their implications for expected credit losses. A cross-functional team has been established that is evaluating the financial instruments portfolio and system, process and policy change requirements. The new guidance expands the scope of financial instruments subject to impairment, including off-balance sheet commitments and residual value. The guidance is effective January 1, 2020 with one-year early adoption permitted and the company is continuing to evaluate the impact of the new guidance and adoption date.

The FASB issued guidance in February 2016, with amendments in 2018, which changes the accounting for leases. The guidance requires lessees to recognize right-of-use assets and lease liabilities for most leases in the Consolidated Statement of Financial Position. The guidance makes some changes to lessor accounting, including the elimination of the use of third-party residual value guarantee insurance in the lease classification test, and overall aligns with the new revenue recognition guidance. The guidance also requires qualitative and quantitative disclosures to assess the amount, timing and uncertainty of cash flows arising from leases. The guidance is effective January 1, 2019 and early adoption is permitted. The company will

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Notes to Consolidated Financial Statements (continued)

adopt the guidance as of the effective date and will apply the transition option, whereby prior comparative periods will not be retrospectively presented in the consolidated financial statements. The company expects to elect the package of practical expedients not to reassess prior conclusions related to contracts containing leases, lease classification and initial direct costs and the lessee practical expedient to combine lease and nonlease components for all asset classes. The company will make a policy election to not recognize right-of-use assets and lease liabilities for short-term leases for all asset classes. The other practical expedients available under the guidance are being evaluated.

A cross-functional implementation team is evaluating the lease portfolio, system, process, control and policy change requirements. The company has made significant progress in these areas as well as in gathering the necessary data elements for the lease population. A system provider has been selected, with system configuration, testing and implementation underway. The company continues to evaluate the impact of the new guidance on its consolidated financial results and expects it will have a material impact on the Consolidated Statement of Financial Position. As a lessee, the company s operating lease commitments were \$6.6 billion at December 31, 2017.

From a lessor perspective, due to changes in lease termination guidance, when equipment is returned to the company prior to the end of the lease term, the carrying amounts of lease receivables, which remain outstanding relating to that equipment and still expected to be collected, will be reclassified to loan receivables. The amount that would have been reclassified from lease receivables to loan receivables in 2017, under the application of this new guidance, would have been approximately \$450 million. Additionally, the company does not expect the removal of third-party residual value guarantee insurance in the lease classification test to have a material impact on the Consolidated Statement of Earnings.

The company continues to assess the potential impacts of the guidance, including changes to the guidance expected to be issued by the FASB, normal and ongoing business dynamics or potential changes in contracting terms, and as a result, preliminary conclusions are subject to change.

Standards Implemented

In February 2018, the FASB issued guidance that allows entities to elect an option to reclassify the stranded tax effects related to the application of the Tax Cuts and Jobs Act (U.S. tax reform) from accumulated other comprehensive income/(loss) (AOCI) to retained earnings. The guidance is effective January 1, 2019 with early adoption permitted, and can be applied either in the period of adoption or retrospectively to all applicable periods. The company adopted the guidance effective January 1, 2018, and elected not to reclassify prior periods. In accordance with its accounting policy, the company releases income tax effects from AOCI once the reason the tax effects were established cease to exist (e.g., when available-for-sale debt securities are sold or if a pension plan is liquidated). This guidance allows for the reclassification of stranded tax effects as a result of the change in tax rates from U.S. tax reform to be recorded upon adoption of the guidance rather than at an actual cessation date. At adoption on January 1, 2018, \$2,420 million was reclassified from AOCI to retained earnings, primarily comprised of amounts relating to retirement-related benefit plans.

In August 2017, the FASB issued guidance to simplify the application of hedge accounting in certain areas, better portray the economic results of an entity s risk management activities in its financial statements and make targeted improvements to presentation and disclosure requirements. The guidance is effective January 1, 2019 with early adoption permitted. The company adopted the guidance as of January 1, 2018, and it did not have a material impact in the consolidated financial results.

In March 2017, the FASB issued guidance that impacts the presentation of net periodic pension and postretirement benefit costs (net benefit cost). Under the guidance, the service cost component of net benefit cost continues to be presented within cost, selling, general and administrative expense and research, development and engineering expense in the Consolidated Statement of Earnings, unless eligible for capitalization. The other components of net benefit cost are presented separately from service cost within other (income) and expense in the Consolidated Statement of Earnings. The guidance was effective January 1, 2018 with early adoption permitted. The company adopted the guidance as of the effective date. The guidance is primarily a change in financial statement presentation and did not have a material impact in the consolidated financial results. This presentation change was applied retrospectively upon adoption. For the three months ended September 30, 2017, \$181 million, \$42 million, and \$51 million was recast from total cost, selling, general and administrative (SG&A) expense, and research, development, and engineering (RD&E) expense, respectively, into other (income) and expense. For the nine months ended September 30, 2017, \$529 million, \$293 million, and \$148 million was recast from total cost, SG&A expense, and RD&E expense, respectively, into other (income) and expense. Refer to note 9, Retirement-Related Benefits, for additional information.

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Notes to Consolidated Financial Statements (continued)

In January 2016, the FASB issued guidance which addresses aspects of recognition, measurement, presentation and disclosure of financial instruments. The guidance was effective January 1, 2018 and early adoption was not permitted except for limited provisions. The company adopted the guidance on the effective date. Certain equity investments are now measured at fair value with changes recognized in net income. The amendment also simplified the impairment test of equity investments that lack readily determinable fair value. The guidance did not have a material impact in the consolidated financial results.

The FASB issued guidance on the recognition of revenue from contracts with customers in May 2014 with amendments in 2015 and 2016. Revenue recognition depicts the transfer of promised goods or services to customers in an amount that reflects the consideration to which the entity expects to be entitled in exchange for those goods or services. The guidance also requires specific disclosures relating to revenue recognition. The company adopted the guidance effective January 1, 2018 using the modified retrospective transition method. At adoption, \$557 million was reclassified from notes and accounts receivable-trade and deferred income-current to prepaid expenses and other current assets to establish the opening balance for net contract assets. In-scope sales commission costs previously recorded in the Consolidated Statement of Earnings were capitalized in deferred costs in accordance with the transition guidance, in the amount of \$737 million. Deferred income of \$29 million was recorded for certain software licenses that will be recognized over time versus at a point in time under previous guidance. Additionally, net deferred taxes were reduced by \$184 million in the Consolidated Statement of Financial Position, resulting in a cumulative-effect net increase to retained earnings of \$524 million. The guidance did not have a material impact in the company s consolidated financial results for the three and nine months ended September 30, 2018. The company expects revenue recognition for its broad portfolio of hardware, software, and services offerings to remain largely unchanged. Refer to note 3, Revenue Recognition, for additional information, including further discussion on the impact of adoption and changes in accounting policies relating to revenue recognition.

In January 2017, the FASB issued guidance which clarifies the definition of a business. The guidance provides a more robust framework to use in determining when a set of assets and activities acquired or sold is a business. The guidance was effective January 1, 2018 and early adoption was permitted. The company adopted the guidance effective January 1, 2017, and it did not have a material impact in the consolidated financial results.

In October 2016, the FASB issued guidance which requires an entity to recognize the income tax consequences of intra-entity transfers of assets, other than inventory, at the time of transfer. Assets within the scope of the guidance include intellectual property and property, plant and equipment. The guidance was effective January 1, 2018 and early adoption was permitted. The company adopted the guidance on January 1, 2017 using the required modified retrospective method. At adoption, \$95 million and \$47 million were reclassified from investments and sundry assets and prepaid expenses and other current assets, respectively into retained earnings. Additionally, net deferred taxes of \$244 million were established in deferred taxes in the Consolidated Statement of Financial Position, resulting in a cumulative-effect net increase to retained earnings of \$102 million. In January 2017, the company had one transaction that generated a \$582 million benefit to income tax expense, income from continuing operations and net income and a benefit to both basic and diluted earnings per share of \$0.62 per share for the nine months ended September 30, 2017. No transactions impacted the consolidated financial results for the nine months ended September 30, 2018. The ongoing impact of this guidance will be dependent on any transaction that is within its scope.

In March 2016, the FASB issued guidance which changes the accounting for share-based payment transactions, including the income tax consequences, classification of awards as either equity or liabilities and classification in the Consolidated Statement of Cash Flows. The guidance was effective and adopted by the company on January 1, 2017, and it did not have a material impact in the Consolidated Statement of Financial Position. The ongoing impact of the guidance could result in increased volatility in the provision for income taxes and earnings per share in the Consolidated Statement of Earnings, depending on the company s share price at exercise or vesting of share-based awards compared to grant date, however these impacts are not expected to be material. These impacts are recorded on a prospective basis. The company continues to estimate forfeitures in conjunction with measuring stock-based compensation cost. The guidance also requires cash payments on behalf of

employees for shares directly withheld for taxes to be presented as financing outflows in the Consolidated Statement of Cash Flows. The FASB also issued guidance in May 2017 and June 2018, which relates to the accounting for modifications of share-based payment awards and accounting for share-based payments issued to non-employees, respectively. The company adopted the guidance for modifications in the second quarter of 2017, and guidance for non-employees payments in the second quarter of 2018. The guidance had no impact in the consolidated financial results.

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Notes to Consolidated Financial Statements (continued)

3. Revenue Recognition: Effective January 1, 2018, the company adopted the new accounting standard related to the recognition of revenue in contracts with customers under the modified retrospective transition method. This method was applied to contracts that were not complete as of the date of initial application. The following is a summary of new and/or revised significant accounting policies, which relate primarily to revenue and cost recognition. Refer to note A, Significant Accounting Policies, in the company s 2017 Annual Report for the policies in effect for revenue and cost prior to January 1, 2018 and for all other significant accounting policies. The impact related to adopting the new standard was not material. For further information regarding the adoption of the new standard, see note 2, Accounting Changes.

Revenue

The company accounts for a contract with a client when it has written approval, the contract is committed, the rights of the parties, including payment terms, are identified, the contract has commercial substance and consideration is probable of collection.

Revenue is recognized when, or as, control of a promised product or service transfers to a client, in an amount that reflects the consideration to which the company expects to be entitled in exchange for transferring those products or services. If the consideration promised in a contract includes a variable amount, the company estimates the amount to which it expects to be entitled using either the expected value or most likely amount method. The company s contracts may include terms that could cause variability in the transaction price, including, for example, rebates, volume discounts, service-level penalties, and performance bonuses or other forms of contingent revenue.

The company only includes estimated amounts in the transaction price to the extent it is probable that a significant reversal of cumulative revenue recognized will not occur when the uncertainty associated with the variable consideration is resolved. The company may not be able to reliably estimate contingent revenue in certain long-term arrangements due to uncertainties that are not expected to be resolved for a long period of time or when the company s experience with similar types of contracts is limited. The company s arrangements infrequently include contingent revenue. Estimates of variable consideration and the determination of whether to include estimated amounts in the transaction price are based on all information (historical, current and forecasted) that is reasonably available to the company, taking into consideration the type of client, the type of transaction and the specific facts and circumstances of each arrangement. Changes in estimates of variable consideration are included in the disclosure on pages 20 and 21.

The company s standard billing terms are that payment is due upon receipt of invoice, payable within 30 days. Invoices are generally issued as control transfers and/or as services are rendered. Additionally, in determining the transaction price, the company adjusts the promised amount of consideration for the effects of the time value of money if the billing terms are not standard and the timing of payments agreed to by the parties to the contract provide the client or the company with a significant benefit of financing, in which case the contract contains a significant financing component. As a practical expedient, the company does not account for significant financing components if the period between when the company transfers the promised product or service to the client and when the client pays for that product or service will be one year or less. Most arrangements that contain a financing component are financed through the company s Global Financing business and include explicit financing terms.

The company may include subcontractor services or third-party vendor equipment or software in certain integrated services arrangements. In these types of arrangements, revenue from sales of third-party vendor products or services is recorded net of costs when the company is acting as an agent between the client and the vendor, and gross when the company is the principal for the transaction. To determine whether the company is an agent or principal, the company considers whether it obtains control of the products or services before they are transferred to the customer. In making this evaluation, several factors are considered, most notably whether the company has primary responsibility for fulfillment to the client, as well as inventory risk and pricing discretion.

The company recognizes revenue on sales to solution providers, resellers and distributors (herein referred to as resellers) when the reseller has economic substance apart from the company and the reseller is considered the principal for the transaction with the end-user client.

The company reports revenue net of any revenue-based taxes assessed by governmental authorities that are imposed on and concurrent with specific revenue-producing transactions.

In addition to the aforementioned general policies, the following are the specific revenue recognition policies for arrangements with multiple performance obligations and for each major category of revenue.

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Notes to Consolidated Financial Statements (continued)

Arrangements with Multiple Performance Obligations

The company s global capabilities as a cognitive solutions and cloud platform company include services, software, hardware and related financing. The company enters into revenue arrangements that may consist of any combination of these products and services based on the needs of its clients. For example, a client may purchase a server that includes operating system software. In addition, the arrangement may include post-contract support for the software and a contract for post-warranty maintenance service for the hardware. These types of arrangements may also include financing provided by the company. These arrangements consist of multiple products and services, whereby the hardware and software may be delivered in one period and the software support and hardware maintenance services are delivered over time. In another example, the company may assist the client in building and running an enterprise information technology (IT) environment utilizing a private cloud on a long-term basis and the client periodically purchases hardware and/or software products from the company to upgrade or expand the facility. The services delivered on the cloud are provided on a continuous basis across multiple reporting periods, and the hardware and software products are provided in each period the products are purchased.

The company continues to build new products and offerings and continuously reinvent its platforms and delivery methods, including through the use of cloud and as-a-Service models. These are not separate businesses; they are offerings across the segments that address market opportunities in analytics, data, cloud and security. Revenue from these offerings follows the specific revenue recognition policies for arrangements with multiple performance obligations and for each major category of revenue, depending on the type of offering, which are comprised of services, hardware and/or software.

To the extent that a product or service in multiple performance obligation arrangements is subject to other specific accounting guidance, such as leasing guidance, that product or service is accounted for in accordance with such specific guidance. For all other products or services in these arrangements, the criteria below are considered to determine when the products or services are distinct and how to allocate the arrangement consideration to each distinct performance obligation. A performance obligation is a promise in a contract with a client to transfer products or services that are distinct. If the company enters into two or more contracts at or near the same time, the contracts may be combined and accounted for as one contract, in which case the company determines whether the products or services in the combined contract are distinct. A product or service that is promised to a client is distinct if both of the following criteria are met:

- The client can benefit from the product or service either on its own or together with other resources that are readily available to the client (that is, the product or service is capable of being distinct); and
- The company s promise to transfer the product or service to the client is separately identifiable from other promises in the contract (that is, the product or service is distinct within the context of the contract).

If these criteria are not met, the company determines an appropriate measure of progress based on the nature of its overall promise for the single performance obligation. When products and services are distinct, the arrangement consideration is allocated to each performance obligation on a relative standalone selling price basis. The revenue policies in the Services, Hardware and/or Software sections below are then applied to each performance obligation, as applicable.

To the extent the company grants the customer the option to acquire additional products or services in one of these arrangements, the company accounts for the option as a distinct performance obligation in the contract only if the option provides a material right to the customer that it would not receive without entering into the contract (e.g., a discount incremental to the range of discounts typically given for the product or service), in which case the client in effect pays in advance for the option to purchase future products or services. The company recognizes revenue when those future products or services are transferred or when the option expires.

Services

The company s primary services offerings include infrastructure services, including outsourcing, and other managed services; application management services; global process services (GPS); maintenance and support; and consulting, including the design and development of complex IT systems to a client s specifications (e.g., design and build). Many of these services can be delivered entirely or partially through cloud or as-a-Service delivery models. The company s services are provided on a time-and-material basis, as a fixed-price contract or as a fixed-price per measure of output contract and the contract terms range from less than one year to over 10 years.

In services arrangements, the company typically satisfies the performance obligation and recognizes revenue over time. In design and build arrangements, the performance obligation is satisfied over time either because the client controls the asset as it is created (e.g., when the asset is built at the customer site) or because the company s performance does not create an

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Notes to Consolidated Financial Statements (continued)

asset with an alternative use and the company has an enforceable right to payment plus a reasonable profit for performance completed to date. In most other services arrangements, the performance obligation is satisfied over time because the client simultaneously receives and consumes the benefits provided as the company performs the services.

In outsourcing, other managed services, application management, GPS and other cloud-based services arrangements, the company determines whether the services performed during the initial phases of the arrangement, such as setup activities, are distinct. In most cases, the arrangement is a single performance obligation comprised of a series of distinct services that are substantially the same and that have the same pattern of transfer (i.e., distinct days of service). The company applies a measure of progress (typically time-based) to any fixed consideration and allocates variable consideration to the distinct periods of service based on usage. As a result, revenue is generally recognized over the period the services are provided on a usage basis. This results in revenue recognition that corresponds with the value to the client of the services transferred to date relative to the remaining services promised.

Revenue from time-and-material contracts is recognized on an output basis as labor hours are delivered and/or direct expenses are incurred. Revenue from as-a-Service type contracts, such as Infrastructure-as-a-Service, is recognized either on a straight-line basis or on a usage basis, depending on the terms of the arrangement (such as whether the company is standing ready to perform or whether the contract has usage-based metrics). If the as-a-Service contract includes setup activities, those promises in the arrangement are evaluated to determine if they are distinct.

Revenue related to maintenance and support services and extended warranty is recognized on a straight-line basis over the period of performance because the company is standing ready to provide services.

In fixed-price design and build contracts, revenue is recognized based on progress towards completion of the performance obligation using a cost-to-cost measure of progress (i.e., percentage-of-completion (POC) method of accounting). Revenue is recognized based on the labor costs incurred to date as a percentage of the total estimated labor costs to fulfill the contract. Due to the nature of the work performed in these arrangements, the estimation of cost at completion is complex, subject to many variables and requires significant judgment. Key factors reviewed by the company to estimate costs to complete each contract are future labor and product costs and expected productivity efficiencies. If circumstances arise that change the original estimates of revenues, costs, or extent of progress toward completion, revisions to the estimates are made. These revisions may result in increases or decreases in estimated revenues or costs, and such revisions are reflected in revenue on a cumulative catch-up basis in the period in which the circumstances that gave rise to the revision become known by the company. Refer to page 21 for the amount of revenue recognized in the reporting period on a cumulative catch-up basis (i.e., from performance obligations satisfied, or partially satisfied, in previous periods).

The company performs ongoing profitability analyses of its design and build services contracts accounted for using a cost-to-cost measure of progress in order to determine whether the latest estimates of revenues, costs and profits require updating. If at any time these estimates indicate that the contract will be unprofitable, the entire estimated loss for the remainder of the contract is recorded immediately. For other types of services contracts, any losses are recorded as incurred.

In some services contracts, the company bills the client prior to recognizing revenue from performing the services. In other services contracts, the company performs the services prior to billing the client. When the company performs services prior to billing the client in design and build contracts, the right to consideration is typically subject to milestone completion or client acceptance and the unbilled accounts receivable is

classified as a contract asset. Refer to page 85 of the company s 2017 Annual Report for the amount of deferred income and unbilled accounts receivable at December 31, 2017 and 2016.

Billings usually occur in the month after the company performs the services or in accordance with specific contractual provisions.

Hardware

The company s hardware offerings include the sale or lease of system servers and storage solutions. These products can also be delivered through as-a-Service or cloud delivery models, such as Storage-as-a-Service. The company also offers installation services for its more complex hardware products. Hardware offerings are often sold with distinct maintenance services, described under the Services section above.

Revenue from hardware sales is recognized when control has transferred to the customer which typically occurs when the hardware has been shipped to the client, risk of loss has transferred to the client and the company has a present right to payment for the hardware. In limited circumstances when a hardware sale includes client acceptance provisions, revenue is recognized either when client acceptance has been obtained, client acceptance provisions have lapsed, or the company has

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Notes to Consolidated Financial Statements (continued)

objective evidence that the criteria specified in the client acceptance provisions have been satisfied. Revenue from hardware sales-type leases is recognized at the beginning of the lease term. Revenue from rentals and operating leases is recognized on a straight-line basis over the term of the rental or lease.

Revenue from as-a-Service arrangements is recognized either on a straight-line basis or on a usage basis as described in the Services section above. Installation services are accounted for as distinct performance obligations with revenue recognized as the services are performed. Any cost of standard warranties is accrued when the corresponding revenue is recognized. Shipping and handling activities that occur after the client has obtained control of a product are accounted for as an activity to fulfill the promise to transfer the product rather than as an additional promised service and, therefore, no revenue is deferred and recognized over the shipping period.

Software

The company s software offerings include solutions software, which contains many of the company s strategic areas including analytics, data and security; transaction processing software, which primarily runs mission-critical systems for clients; integration software, which helps clients to create, connect and optimize their applications data and infrastructure; and, operating systems software, which provides operating systems for IBM Z and Power Systems hardware. Many of these offerings can be delivered entirely or partially through as-a-Service or cloud delivery models, while others are delivered as on-premise software licenses.

Revenue from perpetual (one-time charge) license software is recognized at a point in time at the inception of the arrangement when control transfers to the client, if the software license is distinct from the post-contract support offered by the company. In limited circumstances, when the software requires continuous updates to provide the intended functionality, the software license and post-contract support are not distinct and revenue for the single performance obligation is recognized over time as the post-contract support is provided. This is only applicable to certain security software perpetual licenses offered by the company. Prior to the adoption of the new revenue standard, the company recognized revenue for these software licenses at a point in time at the inception of the arrangement. This change did not have a material impact on the company s financial statements.

Revenue from post-contract support is recognized over the contract term on a straight-line basis because the company is providing a service of standing ready to provide support, when-and-if needed, and is providing unspecified software upgrades on a when-and-if available basis over the contract term.

Revenue from software hosting or Software-as-a-Service arrangements is recognized either on a straight-line basis or on a usage basis as described in the Services section above. In software hosting arrangements, the rights provided to the client (e.g., ownership of a license, contract termination provisions and the feasibility of the client to operate the software) are considered in determining whether the arrangement includes a license. In arrangements that include a software license, the associated revenue is recognized in accordance with the software license recognition policy above rather than over time as a service.

Revenue from term license software is recognized at a point in time for the committed term of the contract (which is typically one month due to client termination rights). However, if the amount of consideration to be paid in exchange for the license depends on client usage, revenue is recognized when the usage occurs.

Financing

Financing income attributable to sales-type leases, direct financing leases and loans is recognized on the accrual basis using the effective interest method. Operating lease income is recognized on a straight-line basis over the term of the lease.

Standalone Selling Price

The company allocates the transaction price to each performance obligation on a relative standalone selling price basis. The standalone selling price (SSP) is the price at which the company would sell a promised product or service separately to a client. In most cases, the company is able to establish SSP based on the observable prices of products or services sold separately in comparable circumstances to similar clients. The company typically establishes a standalone selling price range for its products and services which are reassessed on a periodic basis or when facts and circumstances change.

In certain instances, the company may not be able to establish a standalone selling price range based on observable prices and the company estimates the standalone selling price. The company estimates SSP by considering multiple factors

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Notes to Consolidated Financial Statements (continued)

including, but not limited to, overall market conditions, including geographic or regional specific factors, competitive positioning, competitor actions, internal costs, profit objectives and pricing practices. Additionally, in certain circumstances, the company may estimate SSP for a product or service by applying the residual approach. This approach has been most commonly used when certain perpetual software licenses are only sold bundled with one year of post-contract support and a price has not been established for the software. Estimating SSP is a formal process that includes review and approval by the company s management.

Services Costs

Recurring operating costs for services contracts are recognized as incurred. For fixed-price design and build contracts, the costs of external hardware and software accounted for under the cost-to-cost measure of progress are deferred and recognized based on the labor costs incurred to date (i.e., the measure of progress), as a percentage of the total estimated labor costs to fulfill the contract as control transfers over time for these performance obligations. Certain eligible, nonrecurring costs incurred in the initial phases of outsourcing contracts and other cloud-based services contracts (i.e., setup costs) are capitalized when the costs relate directly to the contract, the costs generate or enhance resources of the company that will be used in satisfying the performance obligation in the future, and the costs are expected to be recovered. These costs consist of transition and setup costs related to the installation of systems and processes and other deferred fulfillment costs, including, prepaid assets used in services contracts (i.e., prepaid software or prepaid maintenance), and other deferred fulfillment costs eligible for capitalization. Capitalized costs are amortized on a straight-line basis over the expected period of benefit, which includes anticipated contract renewals or extensions, consistent with the transfer to the client of the services to which the asset relates. Additionally, fixed assets associated with these contracts are capitalized and depreciated on a straight-line basis over the expected useful life of the asset. If an asset is contract specific, then the depreciation period is the shorter of the useful life of the asset or the contract term. Amounts paid to clients in excess of the fair value of acquired assets used in outsourcing arrangements are deferred and amortized on a straight-line basis as a reduction of revenue over the expected period of benefit. The company performs periodic reviews to assess the recoverability of deferred contract transition and setup costs. This review is done by comparing the carrying amount of the asset to the remaining amount of consideration the company expects to receive for the services to which the asset relates, less the costs that relate directly to providing those services that have not yet been recognized. If the carrying amount is deemed not recoverable, an impairment loss is recognized.

In situations in which an outsourcing contract is terminated, the terms of the contract may require the client to reimburse the company for the recovery of unbilled accounts receivable, unamortized deferred costs incurred to purchase specific assets utilized in the delivery of services and to pay any additional costs incurred by the company to transition the services.

Software Costs

Certain eligible, non-recurring costs incurred in the initial phases of Software-as-a-Service contracts are deferred and amortized over the expected period of benefit, which includes anticipated contract renewals or extensions, consistent with the policy described for Services Costs. Recurring operating costs in these contracts are recognized as incurred.

Incremental Costs of Obtaining a Contract

Incremental costs of obtaining a contract (e.g., sales commissions) are capitalized and amortized on a straight-line basis over the expected customer relationship period if the company expects to recover those costs. The company previously expensed these costs as incurred. The expected customer relationship is determined based on the average customer relationship period, including expected renewals, for each offering type and ranges from three to six years. Expected renewal periods are only included in the expected customer relationship period if commission amounts paid upon renewal are not commensurate with amounts paid on the initial contract. Incremental costs of obtaining a contract include only those costs the company incurs to obtain a contract that it would not have incurred if the contract had not been obtained. The company has determined that certain commissions programs meet the requirements to be capitalized. Some commission programs are not subject to capitalization as the commission expense is paid and recognized as the related revenue is recognized. Additionally, as a practical expedient, the company expenses costs to obtain a contract as incurred if the amortization period would have been a year or less. These costs are included in selling, general and administrative expenses.

Product Warranties

The company offers warranties for its hardware products that generally range up to three years, with the majority being either one or three years. Estimated costs for standard warranty terms are recognized when revenue is recorded for the related product. The company estimates its warranty costs standard to the product based on historical warranty claim experience and

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Notes to Consolidated Financial Statements (continued)

estimates of future spending, and applies this estimate to the revenue stream for products under warranty. Estimated future costs for warranties applicable to revenue recognized in the current period are charged to cost of sales. The warranty liability is reviewed quarterly to verify that it properly reflects the remaining obligation based on the anticipated expenditures over the balance of the obligation period. Adjustments are made when actual warranty claim experience differs from estimates. Costs from fixed-price support or maintenance contracts, including extended warranty contracts, are recognized as incurred.

Revenue from extended warranty contracts is initially recorded as deferred income and subsequently recognized on a straight-line basis over the delivery period because the company is providing a service of standing ready to provide services over such term.

Contract Assets and Notes and Accounts Receivable Trade

The company classifies the right to consideration in exchange for products or services transferred to a client as either a receivable or a contract asset. A receivable is a right to consideration that is unconditional as compared to a contract asset which is a right to consideration that is conditional upon factors other than the passage of time. The majority of the company s contract assets represent unbilled amounts related to design and build services contracts when the cost-to-cost method of revenue recognition is utilized, revenue recognized exceeds the amount billed to the client, and the right to consideration is subject to milestone completion or client acceptance. Contract assets are generally classified as current and are recorded on a net basis with deferred income (i.e., contract liabilities) at the contract level. At January 1, 2018 and September 30, 2018 contract assets of \$557 million and \$510 million, respectively, are included in prepaid expenses and other current assets in the Consolidated Statement of Financial Position. At December 31, 2017, these assets were classified as notes and accounts receivable-trade in the Consolidated Statement of Financial Position.

An allowance for contract assets, if needed, and uncollectible trade receivables is estimated based on a combination of write-off history, aging analysis and any specific, known troubled accounts.

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Notes to Consolidated Financial Statements (continued)

Disaggregation of Revenue

The following tables provide details of revenue by major products/service offerings and by geography.

Revenue by Major Products/Service Offerings

(Dollars in millions)				Global	Technolog Services									
For the three months ended September 30, 2018:		gnitive lutions		Business Services	Cloud Platform		c.	ystems	Globa Financi		Otl	hon		Total evenue
Solutions Software	\$	2,910	\$	Services	\$.5	\$	stems	\$	ilig	\$	iiei	\$	2,910
Transaction Processing Software	Ψ	1,238	Ψ		Ψ		Ψ		Ψ		Ψ		Ψ	1,238
Transaction Processing Software		1,230												1,230
Consulting				1,900										1,900
Global Process Services				314										314
Application Management				1,915										1,915
Infrastructure Services					5,	595								5,595
Technical Support Services					1,	707								1,707
Integration Software					9	990								990
Systems Hardware								1,339						1,339
Operating Systems Software								397						397
Global Financing*										388				388
O.I. D												(2)		(0
Other Revenue		4.440						. = 0 <		•		62		62
Total	\$	4,148	\$	4,130	\$ 8,2	292	\$	1,736	\$	388	\$	62	\$	18,756

^{*} Contains lease and loan/working capital financing arrangements which are not subject to the guidance on revenue from contracts with customers.

Revenue by Geography

(Dollars in millions)		
For the three months	7	Гotal
ended September 30, 2018:	Revenue	
Americas	\$	8,853
Europe/Middle East/Africa		5,827
Asia Pacific		4.076

Total \$ 18,756

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Notes to Consolidated Financial Statements (continued)

Revenue by Major Products/Service Offerings

(Dollars in millions)		Global	Techno Servic						
For the nine months	gnitive	Business	Clou		_		obal		Total
ended September 30, 2018:	lutions	Services	Platfo	rms		stems	ncing	Other	levenue
Solutions Software	\$ 9,080	\$	\$		\$		\$	\$	\$ 9,080
Transaction Processing Software	3,946								3,946
Consulting		5,698							5,698
Global Process Services		934							934
Application Management		5,863							5,863
Infrastructure Services			1	7,188					17,188
Technical Support Services				5,239					5,239
Integration Software				3,106					3,106
Systems Hardware						4,187			4,187
Operating Systems Software						1,225			1,225
Global Financing*							1,188		1,188
Other Revenue								176	176
Total	\$ 13,027	\$ 12,495	\$ 2	25,533	\$	5,412	\$ 1,188	\$ 176	\$ 57,830

^{*}Contains lease and loan/working capital financing arrangements which are not subject to the guidance on revenue from contracts with customers.

Revenue by Geography

(Dollars in millions)					
For the nine months	Total				
ended September 30, 2018:	R	evenue			
Americas	\$	26,772			
Europe/Middle East/Africa		18,410			
Asia Pacific		12,648			
Total	\$	57,830			

Remaining Performance Obligations

The remaining performance obligation (RPO) disclosure provides the aggregate amount of the transaction price yet to be recognized as of the end of the reporting period and an explanation as to when the company expects to recognize these amounts in revenue. It is intended to be a statement of overall work under contract that has not yet been performed and does not include contracts in which the customer is not committed, such as certain as-a-Service, governmental, term software license and services offerings. The customer is not considered committed when they are able to terminate for convenience without payment of a substantive penalty. The disclosure includes estimates of variable consideration, except when the variable consideration is a sales-based or usage-based royalty promised in exchange for a license of intellectual property. Additionally, as a practical expedient, the company does not include contracts that have an original duration of one year or less. Remaining performance obligation estimates are subject to change and are affected by several factors, including terminations, changes in the scope of contracts, periodic revalidations, adjustment for revenue that has not materialized and adjustments for currency.

At September 30, 2018, the aggregate amount of the transaction price allocated to RPO related to customer contracts that are unsatisfied or partially unsatisfied was \$119 billion. Given the profile of contract terms, approximately 60 percent of this amount is expected to be recognized as revenue over the next two years, approximately 35 percent between three and five years and the balance (mostly Infrastructure Services) thereafter.

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Notes to Consolidated Financial Statements (continued)

Revenue Recognized for Performance Obligations Satisfied (or Partially Satisfied) in Prior Periods

For the three and nine months ending September 30, 2018, revenue was reduced by \$25 million and \$50 million, respectively, for performance obligations satisfied (or partially satisfied) in previous periods mainly due to changes in estimates on percentage-of-completion based contracts. Refer to pages 14 and 15 for additional information on percentage-of-completion contracts and estimates of costs to complete.

Reconciliation of Contract Balances

The following table provides information about notes and accounts receivables-trade, contract assets and deferred income balances:

(Dollars in millions)		At September 30, 2018		At January 1, 2018 (as adjusted)	
Notes and accounts receivable-trade (net of allowances of \$310 and \$297 at September 30,					
2018 and January 1, 2018, respectively)	\$	7,071	\$	8,295	
Contract assets (1)		510		557	
Deferred income (current)		10,704		11,493	
Deferred income (noncurrent)		3,507		3,758	

⁽¹⁾ Included within prepaid expenses and other current assets in the Consolidated Statement of Financial Position.

The amount of revenue recognized during the three months ended September 30, 2018 that was included within the deferred income balance at July 1, 2018 was \$3.8 billion and primarily relates to services and software.

The amount of revenue recognized during the nine months ended September 30, 2018 that was included within the deferred income balance at January 1, 2018 was \$8.0 billion and primarily relates to services and software.

Deferred Costs

	At September 30,				
(Dollars in millions)	2018				
Capitalized costs to obtain a contract	\$	681			
Deferred costs to fulfill a contract:					
Deferred setup costs		2,123			

Other deferred fulfillment costs	2,003
Total deferred costs (1)	\$ 4,808

(1) Of the total, \$2,227 million is current and \$2,581 million is noncurrent. Prior to January 1, 2018, the current and noncurrent balance of deferred costs were included within prepaid expenses and other current assets and investments and sundry assets, respectively.

On January 1, 2018, in accordance with the transition guidance, \$737 million of in-scope sales commissions that were previously recorded in the Consolidated Statement of Earnings were capitalized as costs to obtain a contract.

The amount of total deferred costs amortized during the quarter ended September 30, 2018 was \$929 million. There were no material impairment losses incurred during the period. Refer to page 17 for additional information on deferred costs to fulfill a contract and capitalized costs of obtaining a contract.

Transition Disclosures

In accordance with the modified retrospective method transition requirements, the company will present the financial statement line items impacted and adjusted to compare to presentation under the prior GAAP for each of the interim and annual periods during the first year of adoption of the new revenue standard. The following tables summarize the impacts as of and for the three and nine months ended September 30, 2018. The impacts to adjust to prior GAAP are primarily the result of the transition adjustments recorded at adoption. Current period impacts were not material. Refer to note 2, Accounting Changes, for additional information on the transition adjustments.

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Notes to Consolidated Financial Statements (continued)

Consolidated Statement of Earnings Impacts

(Dollars in millions except per share amounts) For the three months ended September 30, 2018:	reported under new revenue standard	Adjustments to convert to prior GAAP	Adjusted amounts under prior GAAP
Revenue	\$ 18,756	\$ 4	\$ 18,760
Cost	9,953		9,953
Gross profit	8,803	4	8,807
Selling, general and administrative expense	4,363	(28)	4,335
Income from continuing operations before income taxes	2,996	33	3,029
Provision for/(benefit from) income taxes	304	8	313
Net income	\$ 2,694	\$ 24	\$ 2,718
Earnings/(loss) per share of common stock:			
Assuming dilution	\$ 2.94	\$ 0.03	\$ 2.97
Basic	\$ 2.95	\$ 0.03	\$ 2.98

(Dollars in millions except per share amounts) For the nine months ended September 30, 2018:	ne	ported under w revenue tandard	Adjustments to convert to prior GAAP	Adjusted amounts under prior GAAP
Revenue	\$	57,830	\$ (10)	\$ 57,821
Cost		31,582	0	31,582
Gross profit		26,249	(10)	26,239
Selling, general and administrative expense		14,665	(32)	14,633
Income from continuing operations before income taxes		6,908	23	6,930
Provision for/(benefit from) income taxes		138	5	143
Net income	\$	6,777	\$ 17	\$ 6,794
Earnings/(loss) per share of common stock:				
Assuming dilution	\$	7.36	\$ 0.02	\$ 7.38
Basic	\$	7.39	\$ 0.02	\$ 7.41

Consolidated Statement of Financial Position Impacts

(Dollars in millions) At September 30, 2018:		oorted under w revenue tandard	Adjustments to convert to prior GAAP	Adjusted amounts under prior GAAP		
Assets:						
Notes and accounts receivable - trade (net of allowances)	\$	7,071	\$ 574	\$	7,645	
Deferred costs (current)		2,227	(280)		1,947	
Prepaid expenses and other current assets		2,388	(510)		1,878	
Deferred taxes		4,436	179		4,615	
Deferred costs (noncurrent)		2,581	(402)		2,179	
Investments and sundry assets		2,272			2,272	
Total assets	\$	121,990	\$ (439)	\$	121,551	
Liabilities:						
Taxes	\$	2,502	\$	\$	2,502	
Deferred income (current)		10,704	51		10,754	
Deferred income (noncurrent)		3,507	(5)		3,502	

Total liabilities	\$ 102,071 \$	46 \$	102,117
Equity:			
Retained earnings	\$ 158,612 \$	(507) \$	158,106
AOCI	(27,820)	22	(27,798)
Total stockholders equity	19,918	(484)	19,434
Total liabilities and stockholders equity	\$ 121,990 \$	(439) \$	121,551

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Notes to Consolidated Financial Statements (continued)

Consolidated Statement of Cash Flows Impacts

(Dollars in millions) For the nine months ended September 30, 2018:		orted under v revenue andard	adjustments to convert to prior GAAP	Adjusted amounts under prior GAAP		
Cash flows from operating activities:						
Net income	\$	6,777	\$ 17	\$	6,794	
Adjustments to reconcile net income to cash provided by operating						
activities:						
Changes in operating assets and liabilities, net of acquisitions/divestitures		631	(17)		614	
Net cash provided by operating activities	\$	11,128	\$	\$	11,128	

4. Financial Instruments:

Fair Value Measurements

Accounting guidance defines fair value as the price that would be received to sell an asset or paid to transfer a liability in an orderly transaction between market participants at the measurement date. Under this guidance, the company is required to classify certain assets and liabilities based on the following fair value hierarchy:

- Level 1 Quoted prices (unadjusted) in active markets for identical assets or liabilities that can be accessed at the measurement date;
- Level 2 Inputs other than quoted prices included within Level 1 that are observable for the asset or liability, either directly or indirectly; and
- Level 3 Unobservable inputs for the asset or liability.

The guidance requires the use of observable market data if such data is available without undue cost and effort.

When available, the company uses unadjusted quoted market prices in active markets to measure the fair value and classifies such items as Level 1. If quoted market prices are not available, fair value is based upon internally developed models that use current market-based or independently

sourced market parameters such as interest rates and currency rates. Items valued using internally generated models are classified according to the lowest level input or value driver that is significant to the valuation.

The determination of fair value considers various factors including interest rate yield curves and time value underlying the financial instruments. For derivatives and debt securities, the company uses a discounted cash flow analysis using discount rates commensurate with the duration of the instrument.

In determining the fair value of financial instruments, the company considers certain market valuation adjustments to the base valuations calculated using the methodologies described below for several parameters that market participants would consider in determining fair value:

- Counterparty credit risk adjustments are applied to financial instruments, taking into account the actual credit risk of a counterparty as observed in the credit default swap market to determine the true fair value of such an instrument.
- Credit risk adjustments are applied to reflect the company s own credit risk when valuing all liabilities measured at fair value. The methodology is consistent with that applied in developing counterparty credit risk adjustments, but incorporates the company s own credit risk as observed in the credit default swap market.

As an example, the fair value of derivatives is derived utilizing a discounted cash flow model that uses observable market inputs such as known notional value amounts, yield curves, spot and forward exchange rates as well as discount rates. These inputs relate to liquid, heavily traded currencies with active markets which are available for the full term of the derivative.

Certain assets that are measured at fair value on a recurring basis can be subject to nonrecurring fair value measurements. These assets include available-for-sale debt securities that are deemed to be other-than-temporarily impaired. In the event of an other-than-temporary impairment of a debt security, fair value is measured using a model described above.

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Notes to Consolidated Financial Statements (continued)

Certain non-financial assets such as property, plant and equipment, land, goodwill and intangible assets are also subject to nonrecurring fair value measurements if they are deemed to be impaired. The impairment models used for nonfinancial assets depend on the type of asset. There were no material impairments of non-financial assets for the nine months ended September 30, 2018 and 2017, respectively.

Accounting guidance permits the measurement of eligible financial assets, financial liabilities and firm commitments at fair value, on an instrument-by-instrument basis, that are otherwise not permitted to be accounted for at fair value under other accounting standards. This election is irrevocable. The company has not applied the fair value option to any eligible assets or liabilities.

Effective January 1, 2018, the company adopted the new FASB guidance on recognition, measurement, presentation and disclosure of financial instruments using the cumulative catch-up transition method. Under the new standard, the company measures equity investments at fair value with changes recognized in net income. Based on the method of adoption, prior year information has not been updated to conform with the new guidance. Refer to note 2, Accounting Changes, for further information.

The following tables present the company s financial assets and financial liabilities that are measured at fair value on a recurring basis at September 30, 2018 and December 31, 2017.

(Dollars in millions) At September 30, 2018	Level 1	Level 2	Level 3	Total
•	Level 1	Level 2	Level 3	Total
Assets:				
Cash equivalents (1)				
Time deposits and certificates of deposit	\$	\$ 8,238	\$	\$ 8,238(6)
Money market funds	26			26
Total	\$ 26	\$ 8,238	\$	\$ 8,263
Equity investments (2)	11			11
Debt securities - current (3)		2,932		2,932(6)
Derivative assets (4)	9	685		694(7)
Total assets	\$ 46	\$ 11,854	\$	\$ 11,900
Liabilities:				
Derivative liabilities (5)	\$ 2	\$ 413	\$	\$ 415(7)

- (1) Included within cash and cash equivalents in the Consolidated Statement of Financial Position.
- (2) Included within investments and sundry assets in the Consolidated Statement of Financial Position.
- (3) Included within marketable securities in the Consolidated Statement of Financial Position.
- (4) The gross balances of derivative assets contained within prepaid expenses and other current assets, and investments and sundry assets in the Consolidated Statement of Financial Position at September 30, 2018 were \$312 million and \$382 million, respectively.

- (5) The gross balances of derivative liabilities contained within other accrued expenses and liabilities, and other liabilities in the Consolidated Statement of Financial Position at September 30, 2018 were \$122 million and \$292 million, respectively.
- (6) Available-for-sale debt securities with carrying values that approximate fair value.
- (7) If derivative exposures covered by a qualifying master netting agreement had been netted in the Consolidated Statement of Financial Position, the total derivative asset and liability positions each would have been reduced by \$285 million.

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Notes to Consolidated Financial Statements (continued)

(Dollars in millions)					
At December 31, 2017	Level 1	Level 2	Leve	el 3	Total
Assets:					
Cash equivalents (1)					
Time deposits and certificates of deposit	\$	\$ 8,066	\$	\$	8,066
Commercial paper		96			96
Money market funds	26				26
Canadian government securities		398			398
Total	\$ 26	\$ 8,560	\$	\$	8,586(6)
Equity investments (2)	4				4
Debt securities - current (3)		608			608(6)
Debt securities - noncurrent (2)	4	7			11
Derivative assets (4)		942			942(7)
Total assets	\$ 33	\$ 10,117	\$	\$	10,151
Liabilities:					
Derivative liabilities (5)	\$	\$ 415	\$	\$	415(7)

- (1) Included within cash and cash equivalents in the Consolidated Statement of Financial Position.
- (2) Included within investments and sundry assets in the Consolidated Statement of Financial Position.
- (3) U.S government securities reported as marketable securities in the Consolidated Statement of Financial Position.
- (4) The gross balances of derivative assets contained within prepaid expenses and other current assets, and investments and sundry assets in the Consolidated Statement of Financial Position at December 31, 2017 were \$185 million and \$757 million, respectively.
- (5) The gross balances of derivative liabilities contained within other accrued expenses and liabilities, and other liabilities in the Consolidated Statement of Financial Position at December 31, 2017 were \$377 million and \$38 million, respectively.
- (6) Available-for-sale securities with carrying values that approximate fair value.
- (7) If derivative exposures covered by a qualifying master netting agreement had been netted in the Consolidated Statement of Financial Position, the total derivative asset and liability positions each would have been reduced by \$255 million.

Financial Assets and Liabilities Not Measured at Fair Value

Short-Term Receivables and Payables

Notes and other accounts receivable and other investments are financial assets with carrying values that approximate fair value. Accounts payable, other accrued expenses and short-term debt (excluding the current portion of long-term debt) are financial liabilities with carrying values that approximate fair value. If measured at fair value in the financial statements, these financial instruments would be classified as Level 3 in the fair value hierarchy, except for short-term debt, which would be classified as Level 2.

Loans and Long-Term Receivables

Fair values are based on discounted future cash flows using current interest rates offered for similar loans to clients with similar credit ratings for the same remaining maturities. At September 30, 2018 and December 31, 2017, the difference between the carrying amount and estimated fair value for loans and long-term receivables was immaterial. If measured at fair value in the financial statements, these financial instruments would be classified as Level 3 in the fair value hierarchy.

Long-Term Debt

Fair value of publicly-traded long-term debt is based on quoted market prices for the identical liability when traded as an asset in an active market. For other long-term debt for which a quoted market price is not available, an expected present value technique that uses rates currently available to the company for debt with similar terms and remaining maturities is used to estimate fair value. The carrying amount of long-term debt was \$35,989 million and \$39,837 million, and the estimated fair value was \$37,636 million and \$42,264 million at September 30, 2018 and December 31, 2017, respectively. If measured at fair value in the financial statements, long-term debt (including the current portion) would be classified as Level 2 in the fair value hierarchy.

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Notes to Consolidated Financial Statements (continued)

Available-for-sale Securities

Gross realized gains/losses from the sale of available-for-sale securities during the three and nine month periods ended September 30, 2018 and 2017 were immaterial. After-tax net unrealized holding gains/losses on available-for-sale securities that have been included in other comprehensive income/loss for the three and nine month periods ended September 30, 2018 and 2017 were immaterial.

The contractual maturities of substantially all available-for-sale debt securities are less than one year at September 30, 2018.

Derivative Financial Instruments

The company operates in multiple functional currencies and is a significant lender and borrower in the global markets. In the normal course of business, the company is exposed to the impact of interest rate changes and foreign currency fluctuations, and to a lesser extent equity and commodity price changes and client credit risk. The company limits these risks by following established risk management policies and procedures, including the use of derivatives, and, where cost effective, financing with debt in the currencies in which assets are denominated. For interest rate exposures, derivatives are used to better align rate movements between the interest rates associated with the company s lease and other financial assets and the interest rates associated with its financing debt. Derivatives are also used to manage the related cost of debt. For foreign currency exposures, derivatives are used to better manage the cash flow volatility arising from foreign exchange rate fluctuations.

As a result of the use of derivative instruments, the company is exposed to the risk that counterparties to derivative contracts will fail to meet their contractual obligations. To mitigate the counterparty credit risk, the company has a policy of only entering into contracts with carefully selected major financial institutions based upon their overall credit profile. The company s established policies and procedures for mitigating credit risk on principal transactions include reviewing and establishing limits for credit exposure and continually assessing the creditworthiness of counterparties. The right of set-off that exists under certain of these arrangements enables the legal entities of the company subject to the arrangement to net amounts due to and from the counterparty reducing the maximum loss from credit risk in the event of counterparty default.

The company is also a party to collateral security arrangements with most of its major derivative counterparties. These arrangements require the company to hold or post collateral (cash or U.S. Treasury securities) when the derivative fair values exceed contractually established thresholds. Posting thresholds can be fixed or can vary based on credit default swap pricing or credit ratings received from the major credit agencies. The aggregate fair value of all derivative instruments under these collateralized arrangements that were in a liability position at September 30, 2018 and December 31, 2017 was \$120 million and \$126 million, respectively, for which no collateral was posted at either date. Full collateralization of these agreements would be required in the event that the company s credit rating falls below investment grade or if its credit default swap spread exceeds 250 basis points, as applicable, pursuant to the terms of the collateral security arrangements. The aggregate fair value of derivative instruments in asset positions at September 30, 2018 and December 31, 2017 was \$694 million and \$942 million, respectively. This amount represents the maximum exposure to loss at the reporting date if the counterparties failed to perform as contracted. This exposure was reduced by \$285 million and \$255 million at September 30, 2018 and December 31, 2017, respectively, of liabilities included in master netting arrangements with those counterparties. Additionally, at September 30, 2018 and December 31, 2017, this exposure was reduced by \$11 million and \$114 million of cash collateral, respectively. There were no non-cash collateral balances in U.S. Treasury securities at September 30, 2018

and December 31, 2017. At September 30, 2018 and December 31, 2017, the net exposure related to derivative assets recorded in the Consolidated Statement of Financial Position was \$398 million and \$572 million, respectively. At September 30, 2018 and December 31, 2017, the net position related to derivative liabilities recorded in the Consolidated Statement of Financial Position was \$130 million and \$160 million, respectively.

In the Consolidated Statement of Financial Position, the company does not offset derivative assets against liabilities in master netting arrangements nor does it offset receivables or payables recognized upon payment or receipt of cash collateral against the fair values of the related derivative instruments. No amount was recognized in other receivables at September 30, 2018 or December 31, 2017 for the right to reclaim cash collateral. The amount recognized in accounts payable for the obligation to return cash collateral was \$11 million and \$114 million at September 30, 2018 and December 31, 2017, respectively. The company restricts the use of cash collateral received to rehypothecation, and therefore reports it in restricted cash in the Consolidated Statement of Financial Position. No amount was rehypothecated at September 30, 2018 and December 31, 2017.

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Notes to Consolidated Financial Statements (continued)

The company may employ derivative instruments to hedge the volatility in stockholders—equity resulting from changes in currency exchange rates of significant foreign subsidiaries of the company with respect to the U.S. dollar. These instruments, designated as net investment hedges, expose the company to liquidity risk as the derivatives have an immediate cash flow impact upon maturity which is not offset by a cash flow from the translation of the underlying hedged equity. The company monitors this cash loss potential on an ongoing basis and may discontinue some of these hedging relationships by de-designating or terminating the derivative instrument in order to manage the liquidity risk. Although not designated as accounting hedges, the company may utilize derivatives to offset the changes in the fair value of the de-designated instruments from the date of de-designation until maturity.

In its hedging programs, the company uses forward contracts, futures contracts, interest-rate swaps, cross-currency swaps, and options depending upon the underlying exposure. The company is not a party to leveraged derivative instruments.

A brief description of the major hedging programs, categorized by underlying risk, follows.

Interest Rate Risk

Fixed and Variable Rate Borrowings

The company issues debt in the global capital markets to fund its operations and financing business. Access to cost-effective financing can result in interest rate mismatches with the underlying assets. To manage these mismatches and to reduce overall interest cost, the company may use interest-rate swaps to convert specific fixed-rate debt issuances into variable-rate debt (i.e., fair value hedges) and to convert specific variable-rate debt issuances into fixed-rate debt (i.e., cash flow hedges). At September 30, 2018 and December 31, 2017, the total notional amount of the company s interest rate swaps was \$9.9 billion and \$9.1 billion, respectively. The weighted-average remaining maturity of these instruments at September 30, 2018 and December 31, 2017 was approximately 4.3 years and 4.8 years, respectively. These interest-rate contracts were accounted for as fair value hedges. The company did not have any cash flow hedges relating to this program outstanding at September 30, 2018 and December 31, 2017.

Forecasted Debt Issuance

The company is exposed to interest rate volatility on future debt issuances. To manage this risk, the company may use forward starting interest-rate swaps to lock in the rate on the interest payments related to the forecasted debt issuance. These swaps are accounted for as cash flow hedges. The company did not have any derivative instruments relating to this program outstanding at September 30, 2018 and December 31, 2017.

Foreign Exchange Risk

Long-Term Investments in Foreign Subsidiaries (Net Investment)

A large portion of the company s foreign currency denominated debt portfolio is designated as a hedge of net investment in foreign subsidiaries to reduce the volatility in stockholders equity caused by changes in foreign currency exchange rates in the functional currency of major foreign subsidiaries with respect to the U.S. dollar. The company also uses cross-currency swaps and foreign exchange forward contracts for this risk management purpose. At September 30, 2018 and December 31, 2017, the total notional amount of derivative instruments designated as net investment hedges was \$6.4 billion and \$7.0 billion, respectively. At September 30, 2018 and December 31, 2017, the weighted-average remaining maturity of these instruments was approximately 0.2 years at both periods.

Anticipated Royalties and Cost Transactions

The company s operations generate significant nonfunctional currency, third-party vendor payments and intercompany payments for royalties and goods and services among the company s non-U.S. subsidiaries and with the company. In anticipation of these foreign currency cash flows and in view of the volatility of the currency markets, the company selectively employs foreign exchange forward contracts to manage its currency risk. These forward contracts are accounted for as cash flow hedges. The maximum length of time over which the company has hedged its exposure to the variability in future cash flows is four years. At September 30, 2018 and December 31, 2017, the total notional amount of forward contracts designated as cash flow hedges of forecasted royalty and cost transactions was \$9.2 billion and \$7.8 billion, respectively. The weighted-average remaining maturity of these instruments at September 30, 2018 and December 31, 2017 was 0.7 years at both periods.

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Notes to Consolidated Financial Statements (continued)

At September 30, 2018 and December 31, 2017, in connection with cash flow hedges of anticipated royalties and cost transactions, the company recorded net gains of \$202 million and net gains of \$27 million (before taxes), respectively, in AOCI. The company estimates that \$199 million (before taxes) of deferred net gains on derivatives in AOCI at September 30, 2018, will be reclassified to net income within the next 12 months, providing an offsetting economic impact against the underlying anticipated transactions.

Foreign Currency Denominated Borrowings

The company is exposed to exchange rate volatility on foreign currency denominated debt. To manage this risk, the company employs cross-currency swaps to convert fixed-rate foreign currency denominated debt to fixed-rate debt denominated in the functional currency of the borrowing entity. These swaps are accounted for as cash flow hedges. The maximum length of time over which the company has hedged its exposure to the variability in future cash flows is approximately ten years. At September 30, 2018 and December 31, 2017, the total notional amount of cross-currency swaps designated as cash flow hedges of foreign currency denominated debt was \$6.5 billion at both periods.

At September 30, 2018 and December 31, 2017, in connection with cash flow hedges of foreign currency denominated borrowings, the company recorded net gains of \$141 million and net gains of \$42 million (before taxes), respectively, in AOCI. The company estimates that \$202 million (before taxes) of deferred net gains on derivatives in AOCI at September 30, 2018, will be reclassified to net income within the next 12 months, providing an offsetting economic impact against the underlying exposure.

Subsidiary Cash and Foreign Currency Asset/Liability Management

The company uses its Global Treasury Centers to manage the cash of its subsidiaries. These centers principally use currency swaps to convert cash flows in a cost-effective manner. In addition, the company uses foreign exchange forward contracts to economically hedge, on a net basis, the foreign currency exposure of a portion of the company s nonfunctional currency assets and liabilities. The terms of these forward and swap contracts are generally less than one year. The changes in the fair values of these contracts and of the underlying hedged exposures are generally offsetting and are recorded in other (income) and expense in the Consolidated Statement of Earnings. At September 30, 2018 and December 31, 2017, the total notional amount of derivative instruments in economic hedges of foreign currency exposure was \$7.6 billion and \$11.5 billion, respectively.

Equity Risk Management

The company is exposed to market price changes in certain broad market indices and in the company s own stock primarily related to certain obligations to employees. Changes in the overall value of these employee compensation obligations are recorded in selling, general and administrative (SG&A) expense in the Consolidated Statement of Earnings. Although not designated as accounting hedges, the company utilizes derivatives, including equity swaps and futures, to economically hedge the exposures related to its employee compensation obligations. The derivatives are linked to the total return on certain broad market indices or the total return on the company s common stock, and are recorded at fair value with gains or losses also reported in SG&A expense in the Consolidated Statement of Earnings. At September 30, 2018 and

December 31, 2017, the total notional amount of derivative instruments in economic hedges of these compensation obligations was \$1.3 billion at both periods.

Other Risks

The company may hold warrants to purchase shares of common stock in connection with various investments that are deemed derivatives because they contain net share or net cash settlement provisions. The company records the changes in the fair value of these warrants in other (income) and expense in the Consolidated Statement of Earnings. The company did not have any warrants qualifying as derivatives outstanding at September 30, 2018 and December 31, 2017.

The company is exposed to a potential loss if a client fails to pay amounts due under contractual terms. The company may utilize credit default swaps to economically hedge its credit exposures. The swaps are recorded at fair value with gains and losses reported in other (income) and expense in the Consolidated Statement of Earnings. The company did not have any derivative instruments relating to this program outstanding at September 30, 2018 and December 31, 2017.

The company is exposed to market volatility on certain investment securities. The company may utilize options or forwards to economically hedge its market exposure. The derivatives are recorded at fair value with gains and losses reported

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Notes to Consolidated Financial Statements (continued)

in other (income) and expense in the Consolidated Statement of Earnings. At September 30, 2018 and December 31, 2017, the company did not have any derivative instruments relating to this program outstanding.

The following tables provide a quantitative summary of the derivative and non-derivative instrument-related risk management activity at September 30, 2018 and December 31, 2017, as well as for the three and nine months ended September 30, 2018 and 2017, respectively.

Fair Values of Derivative Instruments in the Consolidated Statement of Financial Position

	Fair Value Balance Sheet	Fair Value of Derivative Liabilities Balance Sheet								
(Dollars in millions)	Classification	9/3	30/2018	12/3	31/2017	Classification	9/3	30/2018	12/	31/2017
Designated as hedging										
instruments:	D 11					0.1				
Interest rate contracts	Prepaid expenses and other current assets	\$		\$	2	Other accrued expenses and liabilities	\$	11	\$	
	Investments and	Ψ		Ψ		naomics	Ψ	- 11	Ψ	
	sundry assets		237		459	Other liabilities		145		34
Foreign exchange contracts	Prepaid expenses and other current					Other accrued expenses and				
	assets		281		111	liabilities		52		318
	Investments and		1.45		200			1.45		2
	sundry assets		145		298	Other liabilities		147		3
	Fair value of	Φ.	<i></i>	ф	070	Fair value of derivative	•	256	Φ.	255
	derivative assets	\$	664	\$	870	liabilities	\$	356	\$	355
Not designated as hedging instruments:										
Foreign exchange contracts	Prepaid expenses and other current assets	\$	18	\$	61	Other accrued expenses and liabilities	\$	53	\$	57
Equity contracts	Prepaid expenses and other current	Ψ		Ψ		Other accrued expenses and	Ψ		Ψ	
	assets		12		12	liabilities		6		3
	Fair value of					Fair value of derivative				
	derivative assets	\$	30	\$	72	liabilities	\$	59	\$	60
Total derivatives		\$	694	\$	942		\$	415	\$	415
Total debt designated as										
hedging instruments(1): Short-term debt			N/A		N/A		\$		\$	
			N/A N/A		N/A N/A		Ф	6,294	Ф	6,471
Long-term debt			N/A N/A		N/A N/A		\$	6,294	\$	6,471
Total		\$	694	\$	942		\$	6,709	\$	6,886

N/A - not applicable

(1) Debt designated as hedging instruments are reported at carrying value.

At September 30, 2018, the following amounts were recorded in the Consolidated Statement of Financial Position related to cumulative basis adjustments for fair value hedges:

(Dollars in millions)

		Cumulative Amount of	
Line Item in the	Carrying Amount of the	Fair Value Hedging Adjustmen	t
Consolidated Statement of Financial Position	Hedged Item	Included in the Carrying	
in which the Hedged Item is Included	Assets/(Liabilities)	Amount of Assets/(Liabilities)	
Short-term debt	\$ (1,539) \$		10
Long-term debt	\$ (8,567) \$		(208)(1)

⁽¹⁾ Includes (\$178) million of hedging adjustments on discontinued hedging relationships.

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Notes to Consolidated Financial Statements (continued)

The Effect of Derivative Instruments in the Consolidated Statement of Earnings

The total amounts of income and expense line items presented in the Consolidated Statement of Earnings in which the effects of fair value hedges, cash flow hedges, net investment hedges and derivatives not designated as hedging instruments are recorded and the total effect of hedge activity on these income and expense line items, are as follows:

(Dollars in millions)						Other	
For the three months	Cost of	Cost of	Cost of	SG&A	(.	Income) and	Interest
ended September 30, 2018:	Services	Sales	Financing	Expense		Expense	Expense
Total	\$ 8,040	\$ 1,625	\$ 287	\$ 4,363	\$	275 \$	191
Gains/(losses) of total hedge							
activity	1	8	15	47		(63)	(21)

(Dollars in millions) For the three months ended September 30:	Consolidated Statement of Earnings Line Item	ngs	Attributal Being Ho 2018	edged(
Derivative instruments in fair value hedges(1):	S						
Interest rate contracts	Cost of financing	\$ (27)	\$ (3)	\$	33	\$	20
	Interest expense	(26)	(3)		33		20
Derivative instruments not designated as hedging instruments:							
Foreign exchange contracts	Other (income) and						
	expense	(55)	(35)		N/A		N/A
Equity contracts	SG&A expense	40	31		N/A		N/A
Total		\$ (69)	\$ (10)	\$	66	\$	41

	Gain (Loss) Recognized in Earnings and Other Comprehensive Income													
(Dollars in millions)					Consolidated		Reclas			Amounts Excluded fron				
For the three months		Recognize	ed in		Statement of		from A				s Testi	8. /		
ended September 30:		2018		2017	Earnings Line Item		2018		2017	017 2018			017	
Derivative instruments in														
cash flow hedges:														
Foreign exchange contracts	\$	(46)	\$	(70)	Interest expense	\$	(36)	\$	(7)	\$		\$		
					Other (income) and									
					expense		(8)		64				(1)	
					Cost of sales		8		1					
					Cost of services		1		20					
					SG&A expense		7		(6)					
Instruments in net														
investment hedges(4):														
Foreign exchange					Cost of financing						8		0	
contracts		86		(507)	Interest expense						9		8	
Total	\$	40	\$	(577)		\$	(28)	\$	73	\$	18	\$	7	

Prior period gain	or loss amounts and pro	esentation are not conformed to the new hedge accounting guidance that the company adopted in 2018.
Refer to note 2,	Accounting Changes,	for further information.

N/A - not applicable

Note: OCI represents other comprehensive income/(loss) in the Consolidated Statement of Comprehensive Income and AOCI represents accumulated other comprehensive income/(loss) in the Consolidated Statement of Financial Position and Consolidated Statement of Changes in Equity.

- (1) The amount includes changes in clean fair values of the derivative instruments in fair value hedging relationships and the periodic accrual for coupon payments required under these derivative contracts.
- (2) The amount includes basis adjustments to the carrying value of the hedged item recorded during the period and amortization of basis adjustments recorded on de-designated hedging relationships during the period.
- (3) The company s policy is to recognize all fair value changes in amounts excluded from effectiveness testing in net income each period.
- (4) Instruments in net investment hedges include derivative and non-derivative instruments.

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Notes to Consolidated Financial Statements (continued)

(Dollars in millions)						Other	
For the nine months	Cost of	Cost of	Cost of	SG&A	(Income) and	Interest
ended September 30, 2018:	Services	Sales	Financing	Expense		Expense	Expense
Total	\$ 25,519	\$ 5,216	\$ 846	\$ 14,665	\$	968	\$ 530
Gains/(losses) of total hedge							
activity	29	(15)	56	24		(449)	(53)

(Dollars in millions)	Consolidated Statement of	(Gain (Loss) F Recogni Deriva	zed o	nized in Earnir n	ıgs	S Attributable to Risk Being Hedged(2)				
For the nine months ended September 30:	Earnings Line Item		2018	2017			2018		2017		
Derivative instruments in fair value											
hedges(1):											
Interest rate contracts	Cost of financing	\$	(138)	\$	37	\$	170	\$	22		
	Interest expense		(128)		34		157		20		
Derivative instruments not designated as											
hedging instruments:											
Foreign exchange contracts	Other (income) and										
	expense		(148)		74		N/A		N/A		
Equity contracts	SG&A expense		38		88		N/A		N/A		
• •	•										
Total		\$	(377)	\$	233	\$	327	\$	42		

	Gain (Loss) Recognized in Earnings and Other Comprehensive Income											
(Dollars in millions) For the nine months ended September 30:	Recognize	ed in	OCI 2017	Consolidated Statement of Earnings Line Item		Reclas from A 2018		_	Amounts Exclude Effectiveness Tes 2018			
Derivative instruments	2010		2017	Larnings Line Item		2010		2017	20	10	20	J1 /
in cash flow hedges:												
Foreign exchange												
contracts	\$ (134)	\$	(198)	Interest expense	\$	(108)	\$	(21)	\$		\$	
				Other (income) and								
				expense		(301)		275				2
				Cost of sales		(15)		23				
				Cost of services		29		47				
				SG&A expense		(14)		23				
Instruments in net investment hedges(4):												
Foreign exchange				Cost of financing						24		0
contracts	509		(1,513)	Interest expense						25		34
Total	\$ 375	\$	(1,712)		\$	(408)	\$	347	\$	49	\$	37

Prior period gain or loss amounts and presentation are not conformed to the new hedge accounting guidance that the company adopted in 2018. Refer to note 2, Accounting Changes, for further information.

N/A - not applicable

Note: OCI represents other comprehensive income/(loss) in the Consolidated Statement of Comprehensive Income and AOCI represents accumulated other comprehensive income/(loss) in the Consolidated Statement of Financial Position and the Consolidated Statement of Changes in Equity.

- (1) The amount includes changes in clean fair values of the derivative instruments in fair value hedging relationships and the periodic accrual for coupon payments required under these derivative contracts.
- (2) The amount includes basis adjustments to the carrying value of the hedged item recorded during the period and amortization of basis adjustments recorded on de-designated hedging relationships during the period.
- (3) The company s policy is to recognize all fair value changes in amounts excluded from effectiveness testing in net income each period.
- (4) Instruments in net investment hedges include derivative and non-derivative instruments.

For the three and nine months ending September 30, 2018 and 2017, there were no material gains or losses excluded from the assessment of hedge effectiveness (for fair value or cash flow hedges), or associated with an underlying exposure that did not or was not expected to occur (for cash flow hedges); nor are there any anticipated in the normal course of business.

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Notes to Consolidated Financial Statements (continued)

5. Financing Receivables: Financing receivables primarily consist of investment in sales-type and direct financing leases, commercial financing receivables and client loan and installment payment receivables (loans). Investment in sales-type and direct financing leases relates principally to the company s systems products and are for terms ranging generally from two to six years. Commercial financing receivables relate primarily to inventory and accounts receivable financing for dealers and remarketers of IBM and OEM products. Payment terms for inventory and accounts receivable financing generally range from 30 to 90 days. Client loan and installment payment receivables (loans) are provided primarily to clients to finance the purchase of hardware, software and services. Payment terms on these financing arrangements are generally for terms up to seven years. Client loans and installment payment financing contracts are priced independently at competitive market rates.

A summary of the components of the company s financing receivables is presented as follows:

(Dollars in millions) At September 30, 2018:	Investment in Sales-Type and Direct Financing Leases			Commercial Financing Receivables	Client Loan and nstallment Payment Receivables/ (Loans)	Total	
Financing receivables, gross	\$	6,566	\$	9,397	\$	12,259	\$ 28,222
Unearned income		(502)		(30)		(576)	(1,108)
Recorded Investment	\$	6,064	\$	9,367	\$	11,683	\$ 27,114
Allowance for credit losses		(103)		(12)		(210)	(325)
Unguaranteed residual value		549					549
Guaranteed residual value		90					90
Total financing receivables, net	\$	6,599	\$	9,355	\$	11,473	\$ 27,427
Current portion	\$	2,764	\$	9,355	\$	7,130	\$ 19,249
Noncurrent portion	\$	3,836	\$		\$	4,343	\$ 8,179

(Dollars in millions) At December 31, 2017:	Sales Direct	stment in -Type and Financing Leases	Commercial Financing Receivables	1	Client Loan and Installment Payment Receivables/ (Loans)	Total
Financing receivables, gross	\$	7,128	\$ 11,649	\$	13,311	\$ 32,087
Unearned income		(535)	(32)		(644)	(1,210)
Recorded Investment	\$	6,593	\$ 11,617	\$	12,667	\$ 30,877
Allowance for credit losses		(103)	(21)		(211)	(336)
Unguaranteed residual value		630				630
Guaranteed residual value		100				100
Total financing receivables, net	\$	7,220	\$ 11,596	\$	12,456	\$ 31,272
Current portion	\$	2,900	\$ 11,596	\$	7,226	\$ 21,721
Noncurrent portion	\$	4,320	\$	\$	5,230	\$ 9,550

The company utilizes certain of its financing receivables as collateral for nonrecourse borrowings. Financing receivables pledged as collateral for borrowings were \$754 million and \$773 million at September 30, 2018 and December 31, 2017, respectively.

The company did not have any financing receivables held for sale as of September 30, 2018 and December 31, 2017.

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Notes to Consolidated Financial Statements (continued)

Financing Receivables by Portfolio Segment

The following tables present the recorded investment by portfolio segment and by class, excluding commercial financing receivables and other miscellaneous financing receivables at September 30, 2018 and December 31, 2017. Commercial financing receivables are excluded from the presentation of financing receivables by portfolio segment, as they are short term in nature and the current estimated risk of loss and resulting impact to the company s financing results are not material. The company determines its allowance for credit losses based on two portfolio segments: lease receivables and loan receivables, and further segments the portfolio into three classes: Americas, Europe/Middle East/Africa (EMEA) and Asia Pacific.

(Dollars in millions) At September 30, 2018:		Americas	EMEA	Asia Pacific	Total
Recorded investment	•		23.723.2	12010 2 001110	10001
Lease receivables	\$	3,526	\$ 1,377	\$ 1,161	\$ 6,064
Loan receivables		6,118	3,313	2,252	11,683
Ending balance	\$	9,644	\$ 4,690	\$ 3,413	\$ 17,747
Recorded investment collectively evaluated for					
impairment	\$	9,484	\$ 4,634	\$ 3,338	\$ 17,456
Recorded investment individually evaluated for					
impairment	\$	161	\$ 56	\$ 75	\$ 291
Allowance for credit losses					
Beginning balance at January 1, 2018					
Lease receivables	\$	63	\$ 9	\$ 31	\$ 103
Loan receivables		108	52	51	211
Total	\$	172	\$ 61	\$ 82	\$ 314
Write-offs	\$	(5)	\$ (1)	\$ (3)	\$ (9)
Recoveries		0	0	2	2
Provision		10	10	2	21
Other*		(9)	(2)	(4)	(15)
Ending balance at September 30, 2018	\$	167	\$ 68	\$ 78	\$ 313
Lease receivables	\$	61	\$ 12	\$ 29	\$ 103
Loan receivables	\$	106	\$ 55	\$ 48	\$ 210
Related allowance, collectively evaluated for					
impairment	\$	42	\$ 15	\$ 5	\$ 62
Related allowance, individually evaluated for					
impairment	\$	125	\$ 52	\$ 73	\$ 250

^{*} Primarily represents translation adjustments.

Write-offs of lease receivables and loan receivables were \$6 million and \$3 million, respectively, for the nine months ended September 30, 2018. Provisions for credit losses recorded for lease receivables and loan receivables were \$4 million and \$17 million, respectively, for the nine

months ended September 30, 2018.

The average recorded investment of impaired leases and loans for Americas, EMEA and Asia Pacific was \$143 million, \$56 million and \$76 million, respectively, for the three months ended September 30, 2018 and \$156 million, \$31 million and \$101 million, respectively, for the three months ended September 30, 2017. Both interest income recognized and interest income recognized on a cash basis on impaired leases and loans were immaterial for the three months ended September 30, 2018 and 2017.

The average recorded investment of impaired leases and loans for Americas, EMEA and Asia Pacific was \$136 million, \$56 million and \$79 million, respectively, for the nine months ended September 30, 2018 and \$165 million, \$27 million and \$131 million, respectively, for the nine months ended September 30, 2017. Both interest income recognized and interest income recognized on a cash basis on impaired leases and loans were immaterial for the nine months ended September 30, 2018 and 2017.

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Notes to Consolidated Financial Statements (continued)

(Dollars in millions)				
At December 31, 2017:	Americas	EMEA	Asia Pacific	Total
Recorded investment				
Lease receivables	\$ 3,911	\$ 1,349	\$ 1,333	\$ 6,593
Loan receivables	6,715	3,597	2,354	12,667
Ending balance	\$ 10,626	\$ 4,946	\$ 3,687	\$ 19,259
Recorded investment collectively evaluated for				
impairment	\$ 10,497	\$ 4,889	\$ 3,604	\$ 18,990
Recorded investment individually evaluated for				
impairment	\$ 129	\$ 57	\$ 83	\$ 269
Allowance for credit losses				
Beginning balance at January 1, 2017				
Lease receivables	\$ 54	\$ 4	\$ 76	\$ 133
Loan receivables	169	18	89	276
Total	\$ 223	\$ 22	\$ 165	\$ 410
Write-offs	\$ (51)	\$ (1)	\$ (85)	\$ (137)
Recoveries	1	1	0	2
Provision	(8)	29	(4)	16
Other*	7	11	6	24
Ending balance at December 31, 2017	\$ 172	\$ 61	\$ 82	\$ 314
Lease receivables	\$ 63	\$ 9	\$ 31	\$ 103
Loan receivables	\$ 108	\$ 52	\$ 51	\$ 211
Related allowance, collectively evaluated for				
impairment	\$ 43	\$ 15	\$ 6	\$ 64
Related allowance, individually evaluated for				
impairment	\$ 128	\$ 46	\$ 76	\$ 250

^{*} Primarily represents translation adjustments.

Write-offs of lease receivables and loan receivables were \$55 million and \$82 million, respectively, for the year ended December 31, 2017. Provisions for credit losses recorded for lease receivables and loan receivables were \$9 million and \$7 million, respectively, for the year ended December 31, 2017.

When determining the allowances, financing receivables are evaluated either on an individual or a collective basis. For individually evaluated receivables, the company determines the expected cash flow for the receivable and calculates an estimate of the potential loss and the probability of loss. For those accounts in which the loss is probable, the company records a specific reserve. The company considers any receivable with an individually evaluated reserve as an impaired receivable.

In addition, the company records an unallocated reserve that is determined by applying a reserve rate to its different portfolios, excluding accounts that have been specifically reserved. This reserve rate is based upon credit rating, probability of default, term, characteristics (lease/loan) and loss history.

Past Due Financing Receivables

The company considers a client s financing receivable balance past due when any installment is aged over 90 days. The following table summarizes information about the recorded investment in lease and loan financing receivables, including recorded investments aged over 90 days and still accruing, billed invoices aged over 90 days and recorded investment not accruing.

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Notes to Consolidated Financial Statements (continued)

(Dollars in millions) At September 30, 2018:	Total Recorded Investment	Recorded Investment > 90 Days (1)	Recorded Investment > 90 Days and Accruing (1)	Billed Invoices > 90 Days and Accruing	Recorded Investment Not Accruing (2)
Americas	3,526	\$ 268	3 \$ 213	\$ 27	\$ 59
EMEA	1,377	20	5 10	2	17
Asia Pacific	1,161	30	5 8	2	29
Total lease receivables	6,064	\$ 330) \$ 230	\$ 31	\$ 105
Americas	6,118	\$ 382	2 \$ 276	\$ 27	\$ 128
EMEA	3,313	62	2 23	4	77
Asia Pacific	2,252	78	31	8	49
Total loan receivables	11,683	\$ 523	330	\$ 39	\$ 254
Total	3 17,747	\$ 853	3 \$ 561	\$ 70	\$ 359
EMEA Asia Pacific Total lease receivables Americas EMEA Asia Pacific Total loan receivables	1,377 1,161 6 6,064 6 6,118 3,313 2,252 6 11,683	\$ 380 \$ 380 \$ 520	5 10 5 8 0 \$ 230 2 \$ 276 2 2 23 3 31 3 \$ 330	\$ 22 \$ 31 \$ 27 4 8 \$ 39	\$ 128 \$ 128 77 49 \$ 254

⁽¹⁾ At a contract level, which includes total billed and unbilled amounts for financing receivables aged greater than 90 days.

(2) Of the recorded investment not accruing, \$291 million is individually evaluated for impairment with a related allowance of \$250 million.

(Dollars in millions) At December 31, 2017:	Total Recorded Investment	;	Recorded Investment > 90 Days (1)	Recorded Investment > 90 Days and Accruing (1)			Billed Invoices > 90 Days and Accruing	Recorded Investment Not Accruing (2)(3)		
Americas	\$ 3,911	\$	239	\$	197	\$	29	\$	44	
EMEA	1,349		32		5		3		27	
Asia Pacific	1,333		57		23		3		36	
Total lease receivables	\$ 6,593	\$	328	\$	225	\$	36	\$	107	
Americas	\$ 6,715	\$	345	\$	254	\$	38	\$	96	
EMEA	3,597		90		17		0		74	
Asia Pacific	2,354		63		12		3		54	
Total loan receivables	\$ 12,667	\$	498	\$	283	\$	41	\$	224	
	,									
Total	\$ 19,259	\$	825	\$	507	\$	77	\$	331	

⁽¹⁾ At a contract level, which includes total billed and unbilled amounts for financing receivables aged greater than 90 days.

Credit Quality Indicators

⁽²⁾ Of the recorded investment not accruing, \$269 million is individually evaluated for impairment with a related allowance of \$250 million.

⁽³⁾ Recast to conform to current period presentation, which includes billed impaired amounts.

The company s credit quality indicators, which are based on rating agency data, publicly available information and information provided by customers, are reviewed periodically based on the relative level of risk. The resulting indicators are a numerical rating system that maps to Moody s Investors Service credit ratings as shown below. The company uses information provided by Moody s, where available, as one of many inputs in its determination of customer credit ratings.

The following tables present the recorded investment net of allowance for credit losses for each class of receivables, by credit quality indicator, at September 30, 2018 and December 31, 2017. Receivables with a credit quality indicator ranging from Aaa to Baa3 are considered investment grade. All others are considered non-investment grade. The credit quality indicators do not reflect mitigation actions that the company takes to transfer credit risk to third parties.

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Notes to Consolidated Financial Statements (continued)

(Dollars in millions) At September 30, 2018:	An	nericas	Lease Receivables EMEA		Asi	Asia Pacific		Americas	Receivables EMEA	Asi	a Pacific
Credit ratings:											
Aaa Aa3	\$	385	\$	54	\$	87	\$	668	\$ 128	\$	169
A1 A3		741		167		434		1,285	400		845
Baa1 Baa3		796		416		278		1,381	994		541
Ba1 Ba2		754		432		184		1,308	1,032		358
Ba3 B1		459		185		88		797	443		172
B2 B3		298		100		52		517	239		102
Caa D		32		10		8		55	23		16
Total	\$	3,465	\$	1,365	\$	1,132	\$	6,012	\$ 3,258	\$	2,203

(Dollars in millions)		Lease	e Receivables			Loan Receivables						
At December 31, 2017:	Amo	Americas		EMEA		Asia Pacific		mericas	EMEA		Asia Pacific	
Credit ratings:												
Aaa Aa3	\$	422	\$	49	\$	68	\$	724	\$	129	\$	120
A1 A3		855		190		544		1,469		502		961
Baa1 Baa3		980		371		337		1,683		982		596
Ba1 Ba2		730		448		184		1,253		1,186		325
Ba3 B1		443		192		89		760		508		157
B2 B3		367		77		64		630		204		113
Caa D		51		13		18		88		34		31
Total	\$	3,847	\$	1,340	\$	1,302	\$	6,607	\$	3,545	\$	2,303

Troubled Debt Restructurings

The company did not have any significant troubled debt restructurings during the nine months ended September 30, 2018 or for the year ended December 31, 2017.

6. <u>Stock-Based Compensation:</u> Stock-based compensation cost is measured at grant date, based on the fair value of the award, and is recognized over the employee requisite service period. The following table presents total stock-based compensation cost included in income from continuing operations.

	7	Three Months End	led Sep	otember 30,	Nine Months Ende	d Sept	tember 30,
(Dollars in millions)		2018		2017	2018		2017
Cost	\$	19	\$	22	\$ 60	\$	68
Selling, general and administrative		95		88	264		277
Research, development and engineering		15		13	47		43
Pre-tax stock-based compensation cost	\$	129	\$	123	\$ 371	\$	388
Income tax benefits		(29)		(41)	(88)		(128)
Total net stock-based compensation cost	\$	100	\$	82	\$ 283	\$	260

Pre-tax stock-based compensation cost for the three months ended September 30, 2018 increased by \$6 million compared to the corresponding period in the prior year. This was due to increases related to performance share units (\$8 million) partially offset by decreases in restricted stock units (\$1 million), and the conversion of stock-based awards previously issued by acquired entities (\$1 million).

Pre-tax stock-based compensation cost for the nine months ended September 30, 2018 decreased \$17 million compared to the corresponding period in the prior year. This was due to decreases related to restricted stock units (\$13 million), and the conversion of stock-based awards previously issued by acquired entities (\$4 million).

As of September 30, 2018, the total unrecognized compensation cost of \$805 million related to non-vested awards was expected to be recognized over a weighted-average period of approximately 2.5 years.

There was no significant capitalized stock-based compensation cost at September 30, 2018 and 2017.

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Notes to Consolidated Financial Statements (continued)

7. <u>Segments:</u> The tables below reflect the continuing operations results of the company s segments consistent with the management and measurement system utilized within the company. Performance measurement is based on operating pre-tax income from continuing operations. The segments represent components of the company for which separate financial information is available that is utilized on a regular basis by the chief operating decision maker (the chief executive officer) in determining how to allocate resources and evaluate performance.

SEGMENT INFORMATION

(Dollars in millions)	Cognitive Solutions		Global Business Services		Technology Services & Cloud Platforms		Systems		Global Financing		Total Segments
For the three months ended							·		Ö		Ü
September 30, 2018:											
External revenue	\$ 4,148	\$	4,130	\$	8,292	\$	1,736	\$	388	\$	18,694
Internal revenue	639		77		240		181		338		1,476
Total revenue	\$ 4,787	\$	4,207	\$	8,533	\$	1,917	\$	726	\$	20,170
Pre-tax income from continuing											
operations	\$ 1,629	\$	579	\$	1,075	\$	209	\$	308	\$	3,801
Revenue year-to-year change	(4.8)9	6	0.5%	,	$(1.0)^{\circ}$	%	$(1.6)^{\circ}$	%	4.0%)	(1.5)%
Pre-tax income year-to-year											
change	(0.9)	6	30.9%	,	(8.6)	%	$(37.9)^{\circ}$	%	26.9%)	(1.1)%
Pre-tax income margin	34.0%		13.8%	,	12.6%	ó	10.9%	,	42.5%	,	18.8%
For the three months ended											
September 30, 2017:											
External revenue	\$ 4,400	\$	4,093	\$	8,457	\$	1,721	\$	427	\$	19,098
Internal revenue	629		92		164		227		272		1,384
Total revenue	\$ 5,030	\$	4,185	\$	8,621	\$	1,948	\$	698	\$	20,482
Pre-tax income from continuing											
operations *	\$ 1,643	\$	442	\$	1,177	\$	337	\$	243	\$	3,843
•											
Pre-tax income margin *	32.7%		10.6%	,	13.7%	ó	17.3%	,	34.8%		18.8%

 $[\]ensuremath{^{*}}$ Recast to reflect adoption of the FASB guidance on presentation of net benefit cost.

Reconciliations to IBM as Reported:

(Dollars in millions)		
For the three months ended September 30:	2018	2017
Revenue:		

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Total reportable segments	\$ 20,170 \$	20,482
Eliminations of internal transactions	(1,476)	(1,384)
Other revenue	62	56
Total consolidated revenue	\$ 18,756 \$	19,153
Pre-tax income from continuing operations:		
Total reportable segments	\$ 3,801 \$	3,843*
Amortization of acquired intangible assets	(207)	(238)
Acquisition-related (charges)/income	(2)	0
Non-operating retirement-related (costs)/income	(389)	(273)*
Eliminations of internal transactions	(116)	(126)
Unallocated corporate amounts	(91)	(141)
Total pre-tax income from continuing operations	\$ 2,996 \$	3,065

^{*} Recast to reflect adoption of the FASB guidance on presentation of net benefit cost.

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Notes to Consolidated Financial Statements (continued)

SEGMENT INFORMATION

(Dollars in millions)		Cognitive Solutions		Global Business Services	Technology Services & Cloud Platforms		Systems		Global Financing		Total Segments	
For the nine months ended								·				Ü
September 30, 2018:												
External revenue	\$	13,027	\$	12,495	\$	25,533	\$	5,412	\$	1,188	\$	57,655
Internal revenue		2,122		249		550		576		1,240		4,738
Total revenue	\$	15,149	\$	12,744	\$	26,083	\$	5,989	\$	2,428	\$	62,392
Pre-tax income from continuing												
operations	\$	4,718	\$	1,109	\$	2,395	\$	352	\$	1,042	\$	9,616
Revenue year-to-year change		0.8%)	2.2%	,	2.0%		10.2%	,	11.8%	,	2.8%
Pre-tax income year-to-year												
change		4.3%)	7.1%	,	(15.8)%)	58.8%	,	24.8%)	1.7%
Pre-tax income margin		31.1%)	8.7%	,	9.2%		5.9%	,	42.9%	,	15.4%
For the nine months ended September 30, 2017:												
External revenue	\$	13,021	\$	12,196	\$	25,079	\$	4,863	\$	1,246	\$	56,405
Internal revenue	Ψ	2,001	Ψ	271	Ψ	497	Ψ	571	Ψ	925	Ψ	4,265
Total revenue	\$	15,022	\$	12,467	\$	25,576	\$	5,434	\$	2,171	\$	60,670
Pre-tax income from continuing	-	,	-	,	-		-	2,121	-	_,	-	00,010
operations *	\$	4,522	\$	1,035	\$	2,845	\$	222	\$	835	\$	9,459
	-	-,		2,000	ŕ	,,,,,,	Ť		Ť		Ė	2,122
Pre-tax income/(loss) margin *		30.1%)	8.3%	,	11.1%		4.1%	ò	38.5%	,	15.6%

^{*} Recast to reflect adoption of the FASB guidance on presentation of net benefit cost.

Reconciliations to IBM as Reported:

(Dollars in millions) For the nine months ended September 30:	2018	2017
Revenue:	2010	2017
Total reportable segments	\$ 62,392 \$	60,670
Eliminations of internal transactions	(4,738)	(4,265)
Other revenue	176	192
Total consolidated revenue	\$ 57,830 \$	56,597
Pre-tax income from continuing operations:		
Total reportable segments	\$ 9,616 \$	9,459*
Amortization of acquired intangible assets	(613)	(731)
Acquisition-related (charges)/income	(3)	(19)
Non-operating retirement-related (costs)/income	(1,185)	(969)*

Eliminations of internal transactions	(625)	(515)
Unallocated corporate amounts	(283)	(294)
Total pre-tax income from continuing operations	\$ 6,908 \$	6,931

^{*} Recast to reflect adoption of the FASB guidance on presentation of net benefit cost.

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Notes to Consolidated Financial Statements (continued)

8. Equity Activity:

Reclassifications and Taxes Related to Items of Other Comprehensive Income

(Dollars in millions)	_	efore Tax	Tax (Expense)/	Net of Tax
For the three months ended September 30, 2018:		Amount	Benefit	Amount
Other comprehensive income/(loss):				
Foreign currency translation adjustments	\$	(22)	\$ (22)	\$ (44)
Net changes related to available-for-sale securities:				
Unrealized gains/(losses) arising during the period	\$	0	\$ 0	\$ 0
Reclassification of (gains)/losses to other (income) and expense				
Total net changes related to available-for-sale securities	\$	0	\$ 0	\$ 0
Unrealized gains/(losses) on cash flow hedges:				
Unrealized gains/(losses) arising during the period	\$	(46)	\$ 11	\$ (35)
Reclassification of (gains)/losses to:				
Cost of sales		(8)	3	(6)
Cost of services		(1)	0	(1)
SG&A expense		(7)	2	(5)
Other (income) and expense		8	(2)	6
Interest expense		36	(9)	27
Total unrealized gains/(losses) on cash flow hedges	\$	(18)	\$ 4	\$ (14)
Retirement-related benefit plans(1):				
Prior service costs/(credits)	\$	0	\$ 0	\$ 0
Net (losses)/gains arising during the period		(1)	1	(1)
Curtailments and settlements		2	0	1
Amortization of prior service (credits)/costs		(18)	5	(13)
Amortization of net (gains)/losses		737	(196)	540
Total retirement-related benefit plans	\$	719	\$ (191)	\$ 527
Other comprehensive income/(loss)	\$	678	\$ (209)	\$ 470

⁽¹⁾ These AOCI components are included in the computation of net periodic pension cost. (See note 9, Retirement-Related Benefits, for additional information.)

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Notes to Consolidated Financial Statements (continued)

Reclassifications and Taxes Related to Items of Other Comprehensive Income

(Dollars in millions)	Before Tax	T	Cax (Expense)/	Net of Tax
For the three months ended September 30, 2017:	Amount		Benefit	Amount
Other comprehensive income/(loss):				
Foreign currency translation adjustments	\$ 89	\$	195	\$ 284
Net changes related to available-for-sale securities:				
Unrealized gains/(losses) arising during the period	\$ (1)	\$	1	\$ 0
Reclassification of (gains)/losses to other (income) and expense	0		0	0
Total net changes related to available-for-sale securities	\$ (2)	\$	1	\$ (1)
Unrealized gains/(losses) on cash flow hedges:				
Unrealized gains/(losses) arising during the period	\$ (70)	\$	20	\$ (50)
Reclassification of (gains)/losses to:				
Cost of sales	(1)		1	(1)
Cost of services	(20)		8	(12)
SG&A expense	6		(1)	4
Other (income) and expense	(64)		25	(39)
Interest expense	7		(3)	4
Total unrealized gains/(losses) on cash flow hedges	\$ (143)	\$	49	\$ (94)
Retirement-related benefit plans(1):				
Prior service costs/(credits)	\$ 0	\$	0	\$ 0
Net (losses)/gains arising during the period	1		0	1
Curtailments and settlements	2		(1)	1
Amortization of prior service (credits)/costs	(22)		7	(15)
Amortization of net (gains)/losses	733		(242)	491
Total retirement-related benefit plans	\$ 713	\$	(235)	\$ 479
Other comprehensive income/(loss)	\$ 658	\$	11	\$ 669

⁽¹⁾ These AOCI components are included in the computation of net periodic pension cost. (See note 9, Retirement-Related Benefits, for additional information.)

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Notes to Consolidated Financial Statements (continued)

Reclassifications and Taxes Related to Items of Other Comprehensive Income

(Dollars in millions)	Before Tax	Tax	x (Expense)/	Net of Tax
For the nine months ended September 30, 2018:	Amount		Benefit	Amount
Other comprehensive income/(loss):				
Foreign currency translation adjustments	\$ (535)	\$	(128)	\$ (663)
Net changes related to available-for-sale securities:				
Unrealized gains/(losses) arising during the period	\$ (2)	\$	1	\$ (1)
Reclassification of (gains)/losses to other (income) and expense				
Total net changes related to available-for-sale securities	\$ (2)	\$	1	\$ (1)
Unrealized gains/(losses) on cash flow hedges:				
Unrealized gains/(losses) arising during the period	\$ (134)	\$	39	\$ (95)
Reclassification of (gains)/losses to:				
Cost of sales	15		(4)	11
Cost of services	(29)		7	(22)
SG&A expense	14		(4)	10
Other (income) and expense	301		(76)	225
Interest expense	108		(27)	81
Total unrealized gains/(losses) on cash flow hedges	\$ 274	\$	(63)	\$ 210
Retirement-related benefit plans(1):				
Prior service costs/(credits)	\$ (1)	\$	0	\$ (1)
Net (losses)/gains arising during the period	83		(22)	60
Curtailments and settlements	7		(2)	5
Amortization of prior service (credits)/costs	(55)		15	(40)
Amortization of net (gains)/losses	2,231		(607)	1,624
Total retirement-related benefit plans	\$ 2,264	\$	(616)	\$ 1,648
Other comprehensive income/(loss)	\$ 2,001	\$	(807)	\$ 1,194

⁽¹⁾ These AOCI components are included in the computation of net periodic pension cost. (See note 9, Retirement-Related Benefits, for additional information.)

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Notes to Consolidated Financial Statements (continued)

Reclassifications and Taxes Related to Items of Other Comprehensive Income

(Dollars in millions)	Before Tax	Tax (Expense)/	Net of Tax
For the nine months ended September 30, 2017:	Amount	Benefit	Amount
Other comprehensive income/(loss):			
Foreign currency translation adjustments	\$ 213	\$ 581	\$ 794
Net changes related to available-for-sale securities:			
Unrealized gains/(losses) arising during the period	\$ 2	\$ 0	\$ 1
Reclassification of (gains)/losses to other (income) and expense	1	0	0
Total net changes related to available-for-sale securities	\$ 2	\$ 0	\$ 2
Unrealized gains/(losses) on cash flow hedges:			
Unrealized gains/(losses) arising during the period	\$ (198)	\$ 53	\$ (146)
Reclassification of (gains)/losses to:			
Cost of sales	(23)	6	(17)
Cost of services	(47)	18	(29)
SG&A expense	(23)	6	(17)
Other (income) and expense	(275)	106	(169)
Interest expense	21	(8)	13
Total unrealized gains/(losses) on cash flow hedges	\$ (545)	\$ 180	\$ (365)
Retirement-related benefit plans(1):			
Prior service costs/(credits)	\$ 0	\$ 0	\$ 0
Net (losses)/gains arising during the period	106	(36)	70
Curtailments and settlements	3	(1)	2
Amortization of prior service (credits)/costs	(66)	23	(43)
Amortization of net (gains)/losses	2,156	(739)	1,417
Total retirement-related benefit plans	\$ 2,200	\$ (754)	\$ 1,446
Other comprehensive income/(loss)	\$ 1,869	\$ 7	\$ 1,877

⁽¹⁾ These AOCI components are included in the computation of net periodic pension cost. (See note 9, Retirement-Related Benefits, for additional information.)

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Notes to Consolidated Financial Statements (continued)

Accumulated Other Comprehensive Income/(Loss) (net of tax)

(Dollars in millions)	Net Unrea Gains/(Lo on Cash F Hedge	sses) Flow	Foreign Currency Translation Adjustments*		Net Change Retirement- Related Benefit Plans	ent- Gains/(Los d on Availal t For-Sal Securitie		,	Accumulated Other Comprehensive Income/(Loss)
January 1, 2018	\$	35	\$	(2,834)	\$ (23,796)	\$	3	\$	(26,592)
Cumulative effect of a change in									
accounting principle **		5		46	(2,471)		(2)		(2,422)
Other comprehensive income before									
reclassifications		(95)		(663)	65		(1)		(695)
Amount reclassified from accumulated									
other comprehensive income		305			1,584				1,889
Total change for the period	\$	210	\$	(663)	\$ 1,648	\$	(1)	\$	1,194
September 30, 2018	\$	250	\$	(3,451)	\$ (24,618)	\$	0	\$	(27,820)

^{*} Foreign currency translation adjustments are presented gross except for any associated hedges which are presented net of tax.

^{**} Reflects the adoption of the FASB guidance on stranded tax effects, hedging and financial instruments. Refer to note 2, Accounting Changes .

(Dollars in millions)	Ga	Net Unrealized Gains/(Losses) on Cash Flow Hedges		Foreign Currency Translation Adjustments*		Net Change Retirement- Related Benefit Plans		Net Unrealized Gains/(Losses) on Available- For-Sale Securities		Accumulated Other Comprehensive Income/(Loss)
January 1, 2017	\$	319	\$	(3,603)	\$	(26,116)	\$	2	\$	(29,398)
Other comprehensive income before										
reclassifications		(146)		794		72		1		721
Amount reclassified from accumulated other										
comprehensive income		(219)				1,374		0		1,155
Total change for the period	\$	(365)	\$	794	\$	1,446	\$	2	\$	1,877
September 30, 2017	\$	(46)	\$	(2,809)	\$	(24,670)	\$	4	\$	(27,521)

^{*} Foreign currency translation adjustments are presented gross except for any associated hedges which are presented net of tax.

^{9.} <u>Retirement-Related Benefits:</u> The company offers defined benefit pension plans, defined contribution pension plans, as well as nonpension postretirement plans primarily consisting of retiree medical benefits. The following table provides the pre-tax cost for all retirement-related plans.

(Dollars in millions) For the three months ended September 30:	2018	2017		Yr. to Yr. Percent Change
Retirement-related plans cost				
Defined benefit and contribution pension plans cost	\$ 705	\$	592	19.0%
Nonpension postretirement plans cost	49		61	(19.5)
Total	\$ 754	\$	653	15.5%

(Dollars in millions) For the nine months ended September 30:	2018	2017	Yr. to Yr. Percent Change
Retirement-related plans cost			
Defined benefit and contribution pension plans cost	\$ 2,152 \$	1,915	12.3%
Nonpension postretirement plans cost	149	182	(18.3)
Total	\$ 2,300 \$	2,097	9.7%

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Notes to Consolidated Financial Statements (continued)

The following table provides the components of the cost/(income) for the company s pension plans.

Cost/(Income) of Pension Plans

(Dollars in millions)	U.S. P	lans		Non-U.S	S. Plans	S
For the three months ended September 30:	2018		2017	2018		2017
Service cost	\$	\$		\$ 104	\$	106
Interest cost (1)	430		478	204		215
Expected return on plan assets (1)	(675)		(753)	(330)		(340)
Amortization of prior service costs/(credits) (1)	4		4	(20)		(25)
Recognized actuarial losses (1)	381		334	346		387
Curtailments and settlements (1)				2		2
Multi-employer plans				9		11
Other costs (1)				5		(85)
Total net periodic pension (income)/cost of defined						
benefit plans	\$ 140	\$	63	\$ 318	\$	271
Cost of defined contribution plans	152		156	95		102
Total defined benefit and contribution pension plans						
cost recognized in the Consolidated Statement of						
Earnings	\$ 292	\$	219	\$ 413	\$	373

⁽¹⁾ These components of net periodic pension cost are included in other (income) and expense in the Consolidated Statement of Earnings.

(Dollars in millions)	U.S. 1	Plans		Non-U.S	S. Plans	S
For the nine months ended September 30:	2018		2017	2018		2017
Service cost	\$	\$		\$ 309	\$	308
Interest cost (1)	1,289		1,435	630		622
Expected return on plan assets (1)	(2,026)		(2,260)	(1,017)		(985)
Amortization of prior service costs/(credits) (1)	12		12	(62)		(73)
Recognized actuarial losses (1)	1,144		1,003	1,057		1,120
Curtailments and settlements (1)				7		3
Multi-employer plans				29		30
Other costs (1)				16		(76)
Total net periodic pension (income)/cost of defined						
benefit plans	\$ 419	\$	190	\$ 969	\$	950
Cost of defined contribution plans	457		475	306		301
Total defined benefit and contribution pension plans						
cost recognized in the Consolidated Statement of						
Earnings	\$ 876	\$	665	\$ 1,276	\$	1,250

(1) These components of net periodic pension cost are included in other (income) and expense in the Consolidated Statement of Earnings.

On October 12, 2012, the High Court in London issued a ruling against IBM United Kingdom Limited and IBM United Kingdom Holdings Limited, both wholly-owned subsidiaries of the company, in litigation involving one of IBM UK s defined benefit plans. The company recorded a pre-tax charge in SG&A expense of \$162 million in the fourth quarter of 2012. The final Court of Appeal ruling was received in August 2017, and as a result the company adjusted its obligation under the plan and recorded a gain of \$91 million in SG&A expense in the Consolidated Statement of Earnings for the three and nine months ended September 30, 2017. This gain is reflected in Non-US Plans - Other costs in the tables above.

In 2018, the company expects to contribute approximately \$400 million to its non-U.S. defined benefit and multi-employer plans, the largest of which will be contributed to the defined benefit pension plans in the UK, Japan and Spain. This amount generally represents the legally mandated minimum contribution. Total net contributions to the non-U.S. plans in the first nine months of 2018 were \$275 million, of which \$117 million was in cash and \$157 million in U.S. Treasury securities. Total contributions to the non-U.S. plans in the first nine months of 2017 were \$301 million, of which \$124 million was in cash and \$176 million in U.S. Treasury securities. The contribution of U.S. Treasury securities is considered a non-cash transaction in the Consolidated Statement of Cash Flows.

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Notes to Consolidated Financial Statements (continued)

The following table provides the components of the cost for the company s nonpension postretirement plans.

Cost of Nonpension Postretirement Plans

(Dollars in millions)		U.S. I	Plan		Non-U.S. Plans	
For the three months ended September 30:	2018			2017	2018	2017
Service cost	\$	3	\$	4	\$ 1 \$	1
Interest cost (1)		33		38	11	14
Expected return on plan assets (1)					(1)	(2)
Amortization of prior service costs/(credits) (1)		(2)		(2)	0	0
Recognized actuarial losses (1)		2		5	1	2
Curtailments and settlements (1)					0	0
Total nonpension postretirement plans cost						
recognized in Consolidated Statement of Earnings	\$	37	\$	45	\$ 12 \$	16

(1) These components of net periodic pension cost are included in other (income) and expense in the Consolidated Statement of Earnings.

(Dollars in millions)	U.S.	Plan		Non-U.S	S. Plans		
For the nine months ended September 30:	2018		2017	2018		2017	
Service cost	\$ 10	\$	11 \$	4	\$	4	1
Interest cost (1)	99		115	34		43	3
Expected return on plan assets (1)				(4)		(6	5)
Amortization of prior service costs/(credits) (1)	(6)		(6)	0		0)
Recognized actuarial losses (1)	7		15	4		5	5
Curtailments and settlements (1)				0		0)
Total nonpension postretirement plans cost							
recognized in Consolidated Statement of Earnings	\$ 111	\$	135 \$	38	\$	47	7

⁽¹⁾ These components of net periodic pension cost are included in other (income) and expense in the Consolidated Statement of Earnings.

The company contributed \$275 million in U.S. Treasury securities to the U.S. nonpension postretirement benefit plan during the nine months ended September 30, 2018, and \$259 million in U.S. Treasury securities during the nine months ended September 30, 2017. The contribution of U.S. Treasury securities is considered a non-cash transaction in the Consolidated Statement of Cash Flows.

10. <u>Acquisitions:</u> During the nine months ended September 30, 2018, the company completed two acquisitions at an aggregate cost of \$49 million.

The Cognitive Solutions segment completed the acquisition of one privately held business: in the second quarter, Armanta, Inc. (Armanta). The Global Business Services segment completed the acquisition of one privately held business: in the second quarter, Oniqua Holdings Pty Ltd. (Oniqua).

Each acquisition is expected to enhance the company s portfolio of product and services capabilities. Armanta is a provider of aggregation and analytics software to financial institutions, enabling data aggregation across multiple systems in near real-time speed, enhancing decision-making and improving regulatory compliance. Oniqua is a global innovator in maintenance-repair-operate inventory optimization solutions and services for asset-intensive industries. All of these acquisitions were for 100 percent of the acquired businesses.

The acquisitions were accounted for as business combinations using the acquisition method, and accordingly, the identifiable assets acquired, the liabilities assumed, and any noncontrolling interest in the acquired entity were recorded at their estimated fair values at the date of acquisition. The acquisitions did not have a material impact in the Consolidated Financial Statements.

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Notes to Consolidated Financial Statements (continued)

11. <u>Intangible Assets Including Goodwill:</u> The following table details the company s intangible asset balances by major asset class.

(Dollars in millions) Intangible asset class	Gı	ross Carrying Amount	Å	ptember 30, 2018 Accumulated Amortization	Net Carrying Amount		
Capitalized software	\$	1,572	\$	(784)	\$	788	
Client relationships		2,273		(1,247)		1,026	
Completed technology		2,509		(1,560)		949	
Patents/trademarks		661		(324)		337	
Other*		56		(21)		34	
Total	\$	7,071	\$	(3,937)	\$	3,134	

^{*} Other intangibles are primarily acquired proprietary and non-proprietary business processes, methodologies and systems.

(Dollars in millions)	G	Net Carrying					
Intangible asset class		Amount	A	mortization	Amount		
Capitalized software	\$	1,600	\$	(790)	\$	810	
Client relationships		2,358		(1,080)		1,278	
Completed technology		2,586		(1,376)		1,210	
Patents/trademarks		668		(256)		413	
Other*		47		(16)		31	
Total	\$	7,260	\$	(3,518)	\$	3,742	

^{*} Other intangibles are primarily acquired proprietary and non-proprietary business processes, methodologies and systems.

The net carrying amount of intangible assets decreased \$608 million during the first nine months of 2018, primarily due to intangible asset amortization, partially offset by additions resulting from capitalized software. The aggregate intangible amortization expense was \$348 million and \$1,031 million for the third quarter and first nine months of 2018, respectively, versus \$383 million and \$1,161 million for the third quarter and first nine months of 2018, the company retired \$612 million of fully amortized intangible assets, impacting both the gross carrying amount and accumulated amortization by this amount.

The amortization expense for each of the five succeeding years relating to intangible assets currently recorded in the Consolidated Statement of Financial Position is estimated to be the following at September 30, 2018:

	Capitali	zed	Acquired		
(Dollars in millions)	Softwa	re	Intangibles	Total	
2018 (for Q4)	\$	140 \$	198	\$	338

2019	393	676	1,070
2020	203	564	768
2021	51	451	502
2022		382	382

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Notes to Consolidated Financial Statements (continued)

The change in the goodwill balances by reportable segment, for the nine months ended September 30, 2018 and for the year ended December 31, 2017 are as follows:

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(Dollars in millions)	Balance	Goodwill		Purchase Price		Tra	nslation d Other	Balance
Segment	01/01/18	Additions	A	Adjustments	Divestitures		a Other istments*	9/30/18
Cognitive Solutions	\$ 19,665	\$ 10	\$	0	\$ (1)	\$	(148) \$	19,526
Global Business Services	4,813	24		(4)			(51)	4,782
Technology Services & Cloud								
Platforms	10,447			0			(86)	10,361
Systems	1,862						(6)	1,857
Total	\$ 36,788	\$ 34	\$	(4)	\$ (1)	\$	(291) \$	36,526

^{*} Primarily driven by foreign currency translation.

(Dollars in millions) Segment	Balance 01/01/17	Goodwill Additions	Purchase Price Adjustments	Divestitures	T	Foreign Currency 'ranslation And Other ljustments*	Balance 12/31/17
Cognitive Solutions	\$ 19,484	\$ 3	\$ (38)	\$ (20)	\$	235 \$	19,665
Global Business Services	4,607		2			204	4,813
Technology Services & Cloud							
Platforms	10,258	13	(2)			179	10,447
Systems	1,850		0			13	1,862
Total	\$ 36,199	\$ 16	\$ (38)	\$ (20)	\$	631 \$	36,788

^{*} Primarily driven by foreign currency translation.

There were no goodwill impairment losses recorded during the first nine months of 2018 or the full year of 2017 and the company has no accumulated impairment losses.

Purchase price adjustments recorded in the first nine months of 2018 and full year 2017 were related to acquisitions that were still subject to the measurement period that ends at the earlier of 12 months from the acquisition date or when information becomes available. Net purchase price adjustments recorded during the first nine months of 2018 were not material. Net purchase price adjustments of \$38 million were recorded during 2017, with the primary drivers being deferred tax assets, other taxes payable and other current liabilities associated with the Truven Health Analytics, Inc. and The Weather Company acquisitions.

12. Borrowings:

Short-Term Debt

(Dollars in millions)	At Se	eptember 30, 2018	At	December 31, 2017
Commercial paper	\$	3,986	\$	1,496
Short-term loans		173		276
Long-term debt current maturities		6,773		5,214
Total	\$	10,932	\$	6,987

The weighted-average interest rate for commercial paper at September 30, 2018 and December 31, 2017 was 2.2 percent and 1.5 percent, respectively. The weighted-average interest rate for short-term loans was 8.3 percent and 8.8 percent at September 30, 2018 and December 31, 2017, respectively.

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Notes to Consolidated Financial Statements (continued)

Long-Term Debt

Pre-Swap Borrowing

(Dollars in millions)	Maturities	Balance 9/30/2018		Balance 12/31/2017
U.S. dollar debt (weighted-average interest rate at September 30, 2018):*	Maturities	9/30/2018	1	12/31/2017
7.6%	2018	\$ 1,634	\$	4,640
2.9%	2019	5,474	Ψ	5,540
2.2%	2020	3,347		3,416
2.5%	2021	5,001		4,129
2.4%	2022	3,533		3,481
3.3%	2023	2,395		1,547
3.6%	2024	2,013		2,000
7.0%	2025	600		600
3.5%	2026	1,350		1,350
4.7%	2027	969		969
6.5%	2028	313		313
3.7%	2030	32		
5.9%	2032	600		600
8.0%	2038	83		83
5.6%	2039	745		745
4.0%	2042	1,107		1,107
7.0%	2045	27		27
4.7%	2046	650		650
7.1%	2096	316		316
		\$ 30,192	\$	31,515
Other currencies (average interest rate at September 30, 2018, in parentheses):*				
Euros (1.5%)	2019 2029		\$	10,502
Pound sterling (2.7%)	2020 2022	1,369		1,420
Japanese yen (0.3%)	2022 2026	, -		1,291
Other (6.6%)	2019 2022	446		717
		\$ 43,450	\$	45,445
Less: net unamortized discount		808		826
Less: net unamortized debt issuance costs		79		93
Add: fair value adjustment**		198		526
		\$ 42,762	\$	45,052
Less: current maturities		6,773		5,214
Total		\$ 35,989	\$	39,837

^{*} Includes notes, debentures, bank loans, secured borrowings and capital lease obligations.

^{**} The portion of the company s fixed-rate debt obligations that is hedged is reflected in the Consolidated Statement of Financial Position as an amount equal to the sum of the debt s carrying value and a fair value adjustment representing changes in the fair value of the hedged debt obligations attributable to movements in benchmark interest rates.

There are no debt securities issued and outstanding by IBM International Group Capital LLC, which is an indirect, 100 percent owned finance subsidiary of International Business Machines Corporation, the parent. Any debt securities issued by IBM International Group Capital LLC, would be fully and unconditionally guaranteed by the parent.

During the third quarter of 2017, IBM Credit LLC, a wholly owned subsidiary of the company, filed a shelf registration statement with the Securities and Exchange Commission (SEC) allowing it to offer for sale public debt securities. In 2017, IBM Credit LLC issued fixed- and floating-rate debt securities in the aggregate amount of \$3.0 billion with maturity dates ranging from 2019 to 2022. During the first quarter of 2018, IBM Credit LLC issued fixed- and floating-rate debt securities in the aggregate amount of \$2.0 billion with maturity dates ranging from 2021 to 2023. This debt is included in the long-term debt table above.

The company s indenture governing its debt securities and its various credit facilities each contain significant covenants which obligate the company to promptly pay principal and interest, limit the aggregate amount of secured indebtedness and

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Notes to Consolidated Financial Statements (continued)

sale and leaseback transactions to 10 percent of the company s consolidated net tangible assets, and restrict the company s ability to merge or consolidate unless certain conditions are met. The credit facilities also include a covenant on the company s consolidated net interest expense ratio, which cannot be less than 2.20 to 1.0, as well as a cross default provision with respect to other defaulted indebtedness of at least \$500 million.

The company is in compliance with all of its significant debt covenants and provides periodic certifications to its lenders. The failure to comply with its debt covenants could constitute an event of default with respect to the debt to which such provisions apply. If certain events of default were to occur, the principal and interest on the debt to which such event of default applied would become immediately due and payable.

Pre-swap annual contractual obligations of long-term debt outstanding at September 30, 2018, are as follows:

(Dollars in millions)	Total
2018 (for Q4)	\$ 1,724
2019	7,034
2020	6,286
2021	6,139
2022	4,320
2023 and beyond	17,946
Total	\$ 43,450

Interest on Debt

Į	J ol	lars	in	mil	lions)	
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For the nine months ended September 30:	2018	201	7
Cost of financing	\$ 568	\$	496
Interest expense	530		451
Interest capitalized	3		(1)
Total interest paid and accrued	\$ 1,101	\$	947

Lines of Credit

On July 19, 2018, the company amended its existing \$10.25 billion Five-Year Credit Agreement. In addition, the company and IBM Credit LLC entered into a new \$2.5 billion, 364-Day Credit Agreement, to replace the maturing \$2.5 billion, 364-Day agreement, and also amended the existing \$2.5 billion Three-Year Credit Agreement. The amended Five-Year and Three-Year credit agreements included a modification of terms to account for the potential discontinuation of LIBOR and to extend the maturity dates. The new maturity dates for the Five-Year and Three-Year Credit Agreements are July 20, 2023 and July 20, 2021, respectively. Each of the facility sizes remained unchanged.

As of September 30, 2018, there were no borrowings by the company, or its subsidiaries, under these credit facilities.

13. Contingencies: As a company with a substantial employee population and with clients in more than 175 countries, IBM is involved, either as plaintiff or defendant, in a variety of ongoing claims, demands, suits, investigations, tax matters and proceedings that arise from time to time in the ordinary course of its business. The company is a leader in the information technology industry and, as such, has been and will continue to be subject to claims challenging its IP rights and associated products and offerings, including claims of copyright and patent infringement and violations of trade secrets and other IP rights. In addition, the company enforces its own IP against infringement, through license negotiations, lawsuits or otherwise. Also, as is typical for companies of IBM s scope and scale, the company is party to actions and proceedings in various jurisdictions involving a wide range of labor and employment issues (including matters related to contested employment decisions, country-specific labor and employment laws, and the company s pension, retirement and other benefit plans), as well as actions with respect to contracts, product liability, securities, foreign operations, competition law and environmental matters. These actions may be commenced by a number of different parties, including competitors, clients, current or former employees, government and regulatory agencies, stockholders and representatives of the locations in which the company does business. Some of the actions to which the company is party may involve particularly complex technical issues, and some actions may raise novel questions under the laws of the various jurisdictions in which these matters arise.

The company records a provision with respect to a claim, suit, investigation or proceeding when it is probable that a liability has been incurred and the amount of the loss can be reasonably estimated. Any recorded liabilities, including any

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Notes to Consolidated Financial Statements (continued)

changes to such liabilities for the quarter ended September 30, 2018 were not material to the Consolidated Financial Statements.

In accordance with the relevant accounting guidance, the company provides disclosures of matters for which the likelihood of material loss is at least reasonably possible. In addition, the company also discloses matters based on its consideration of other matters and qualitative factors, including the experience of other companies in the industry, and investor, customer and employee relations considerations.

With respect to certain of the claims, suits, investigations and proceedings discussed herein, the company believes at this time that the likelihood of any material loss is remote, given, for example, the procedural status, court rulings, and/or the strength of the company s defenses in those matters. With respect to the remaining claims, suits, investigations and proceedings discussed in this note, except as specifically discussed herein, the company is unable to provide estimates of reasonably possible losses or range of losses, including losses in excess of amounts accrued, if any, for the following reasons.

Claims, suits, investigations and proceedings are inherently uncertain, and it is not possible to predict the ultimate outcome of these matters. It is the company s experience that damage amounts claimed in litigation against it are unreliable and unrelated to possible outcomes, and as such are not meaningful indicators of the company s potential liability. Further, the company is unable to provide such an estimate due to a number of other factors with respect to these claims, suits, investigations and proceedings, including considerations of the procedural status of the matter in question, the presence of complex or novel legal theories, and/or the ongoing discovery and development of information important to the matters. The company reviews claims, suits, investigations and proceedings at least quarterly, and decisions are made with respect to recording or adjusting provisions and disclosing reasonably possible losses or range of losses (individually or in the aggregate), to reflect the impact and status of settlement discussions, discovery, procedural and substantive rulings, reviews by counsel and other information pertinent to a particular matter.

Whether any losses, damages or remedies finally determined in any claim, suit, investigation or proceeding could reasonably have a material effect on the company s business, financial condition, results of operations or cash flows will depend on a number of variables, including: the timing and amount of such losses or damages; the structure and type of any such remedies; the significance of the impact any such losses, damages or remedies may have in the Consolidated Financial Statements; and the unique facts and circumstances of the particular matter that may give rise to additional factors. While the company will continue to defend itself vigorously, it is possible that the company s business, financial condition, results of operations or cash flows could be affected in any particular period by the resolution of one or more of these matters.

The following is a summary of the more significant legal matters involving the company.

The company is a defendant in an action filed on March 6, 2003 in state court in Salt Lake City, Utah by the SCO Group (SCO v. IBM). The company removed the case to Federal Court in Utah. Plaintiff is an alleged successor in interest to some of AT&T s UNIX IP rights, and alleges copyright infringement, unfair competition, interference with contract and breach of contract with regard to the company s distribution of AIX and Dynix and contribution of code to Linux and the company has asserted counterclaims. On September 14, 2007, plaintiff filed for bankruptcy protection, and all proceedings in this case were stayed. The court in another suit, the SCO Group, Inc. v. Novell, Inc., held a trial in March 2010. The jury found that Novell is the owner of UNIX and UnixWare copyrights; the judge subsequently ruled that SCO is obligated to recognize Novell s waiver of SCO s claims against IBM and Sequent for breach of UNIX license agreements. On August 30, 2011, the Tenth

Circuit Court of Appeals affirmed the district court s ruling and denied SCO s appeal of this matter. In June 2013, the Federal Court in Utah granted SCO s motion to reopen the SCO v. IBM case. In February 2016, the Federal Court ruled in favor of IBM on all of SCO s remaining claims, and SCO appealed. On October 30, 2017, the Tenth Circuit Court of Appeals affirmed the dismissal of all but one of SCO s remaining claims, which was remanded to the Federal Court in Utah.

On May 13, 2010, IBM and the State of Indiana (acting on behalf of the Indiana Family and Social Services Administration) sued one another in a dispute over a 2006 contract regarding the modernization of social service program processing in Indiana. After six weeks of trial, on July 18, 2012, the Indiana Superior Court in Marion County rejected the State s claims in their entirety and awarded IBM \$52 million plus interest and costs. On February 13, 2014, the Indiana Court of Appeals reversed portions of the trial judge s findings, found IBM in material breach, and ordered the case remanded to the trial judge to determine the State s damages, if any. The Indiana Court of Appeals also affirmed approximately \$50 million of the trial court s award of damages to IBM. On March 22, 2016, the Indiana Supreme Court affirmed the outcome of the Indiana Court of Appeals and remanded the case to the Indiana Superior Court. On August 7, 2017, the Indiana Superior Court awarded the State \$128 million, which it then offset against IBM s previously affirmed award of \$50 million, resulting in a \$78 million award to the State, plus interest. On September 28, 2018, the Indiana Court of Appeals affirmed the Superior Court s \$78 million award to the State, but reversed the Superior Court by awarding IBM prejudgment interest on

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Notes to Consolidated Financial Statements (continued)

its previously affirmed \$50 million award. Both parties have appealed to the Indiana Supreme Court and the matter remains pending.

On March 9, 2017, the Commonwealth of Pennsylvania s Department of Labor and Industry sued IBM in Pennsylvania state court regarding a 2006 contract for the development of a custom software system to manage the Commonwealth s unemployment insurance benefits programs. The matter is pending in a Pennsylvania court.

On October 29, 2013, Bridgestone Americas, Inc. (Bridgestone) sued IBM regarding a 2009 contract for the implementation of an SAP-based, enterprise-wide order management system. IBM counterclaimed against Bridgestone and its parent, Bridgestone Corp. IBM and Bridgestone have resolved the case and all claims have been dismissed.

Following the 2017 final judgment of the Appeal Court in London holding that IBM UK acted lawfully in 2010 in closing its UK defined benefit plans to future accruals for most participants and in implementing a new retirement policy, the Employment Tribunal in Southampton UK is expected to address approximately 290 individual actions alleging constructive dismissal and age discrimination brought against IBM UK in 2010 by employees who left the company at that time. The individual actions were previously stayed.

In May 2015, a putative class action was commenced in the United States District Court for the Southern District of New York related to the company s October 2014 announcement that it was divesting its global commercial semiconductor technology business, alleging violations of the Employee Retirement Income Security Act (ERISA). Management s Retirement Plans Committee and three current or former IBM executives are named as defendants. On September 29, 2017, the Court granted the defendants motion to dismiss the first amended complaint. Plaintiffs appealed to the Second Circuit Court of Appeals and the matter remains pending.

In August 2015, IBM learned that the SEC was conducting an investigation relating to revenue recognition with respect to the accounting treatment of certain transactions in the U.S., UK and Ireland. The company cooperated with the SEC in this matter. In May 2018, the SEC informed IBM that based on the information to date, it closed its investigation into this matter without pursuing any enforcement action against the company.

The company is party to, or otherwise involved in, proceedings brought by U.S. federal or state environmental agencies under the Comprehensive Environmental Response, Compensation and Liability Act (CERCLA), known as Superfund, or laws similar to CERCLA. Such statutes require potentially responsible parties to participate in remediation activities regardless of fault or ownership of sites. The company is also conducting environmental investigations, assessments or remediations at or in the vicinity of several current or former operating sites globally pursuant to permits, administrative orders or agreements with country, state or local environmental agencies, and is involved in lawsuits and claims concerning certain current or former operating sites.

The company is also subject to ongoing tax examinations and governmental assessments in various jurisdictions. Along with many other U.S. companies doing business in Brazil, the company is involved in various challenges with Brazilian tax authorities regarding non-income tax

assessments and non-income tax litigation matters. The total potential amount related to all these matters for all applicable years is approximately \$900 million. The company believes it will prevail on these matters and that this amount is not a meaningful indicator of liability.

14. <u>Commitments:</u> The company s extended lines of credit to third-party entities include unused amounts of \$8,537 million and \$8,111 million at September 30, 2018 and December 31, 2017, respectively. A portion of these amounts was available to the company s business partners to support their working capital needs. In addition, the company has committed to provide future financing to its clients in connection with client purchase agreements for approximately \$3,798 million and \$3,569 million at September 30, 2018 and December 31, 2017, respectively.

The company has applied the guidance requiring a guarantor to disclose certain types of guarantees, even if the likelihood of requiring the guarantor s performance is remote. The following is a description of arrangements in which the company is the guarantor.

The company is a party to a variety of agreements pursuant to which it may be obligated to indemnify the other party with respect to certain matters. Typically, these obligations arise in the context of contracts entered into by the company, under which the company customarily agrees to hold the party harmless against losses arising from a breach of representations and covenants related to such matters as title to the assets sold, certain intellectual property (IP) rights, specified environmental matters, third-party performance of nonfinancial contractual obligations and certain income taxes. In each of these circumstances, payment by the company is conditioned on the other party making a claim pursuant to the procedures specified in the particular contract, the procedures of which typically allow the company to challenge the other

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Notes to Consolidated Financial Statements (continued)

party s claims. While typically indemnification provisions do not include a contractual maximum on the company s payment, the company s obligations under these agreements may be limited in terms of time and/or nature of claim, and in some instances, the company may have recourse against third parties for certain payments made by the company.

It is not possible to predict the maximum potential amount of future payments under these or similar agreements due to the conditional nature of the company s obligations and the unique facts and circumstances involved in each particular agreement. Historically, payments made by the company under these agreements have not had a material effect on the company s business, financial condition or results of operations.

In addition, the company guarantees certain loans and financial commitments. The maximum potential future payment under these financial guarantees was \$15 million and \$19 million at September 30, 2018 and December 31, 2017, respectively. The fair value of the guarantees recognized in the Consolidated Statement of Financial Position is not material.

Changes in the company s warranty liability for standard warranties and deferred income for extended warranty are presented in the following tables.

Standard Warranty Liability

(Dollars in millions)	2018	2017
Balance at January 1	\$ 152 \$	156
Current period accruals	84	107
Accrual adjustments to reflect actual experience	(31)	(3)
Charges incurred	(93)	(126)
Balance at September 30	\$ 112 \$	134

Extended Warranty Liability

2018	2017
\$ 566 \$	531
138	175
(178)	(198)
(12)	24
\$ 514 \$	533
\$ 242 \$	258
\$ 273 \$	275
\$ \$ \$ \$	\$ 566 \$ 138 (178) (12) \$ 514 \$ \$ 242 \$

* Other primarily consists of foreign currency translation adjustments.

15. Taxes: For the three months ended September 30, 2018, the company reported a provision for income taxes of \$304 million and an effective tax rate of 10.2 percent, compared to a provision of \$339 million and an effective tax rate of 11.0 percent for the three months ended September 30, 2017. For the nine-month period ended September 30, 2018, the company reported a provision for income taxes of \$138 million and an effective tax rate of 2.0 percent. The year-to-date effective rate was primarily driven by the resolution in the first quarter of certain tax matters related to the ongoing U.S. federal audit of the company s 2013-2014 tax returns, the completion of the U.S. federal audit of amended tax returns filed for prior years and a benefit attributable to a tax incentive claim approved by the Internal Revenue Service (IRS) in the third quarter. For the nine months ended September 30, 2017, the company reported a provision for income taxes of \$120 million, and its effective tax rate was 1.7 percent, primarily as a result of discrete tax benefits.

The company s U.S. income tax returns for 2013 and 2014 continue to be examined by the IRS with specific focus on certain cross-border transactions in 2013. Although the IRS could propose additional adjustments, the company believes it is adequately reserved on these issues. With respect to major U.S. state and foreign taxing jurisdictions, the company is generally no longer subject to tax examinations for years prior to 2013. The company is no longer subject to income tax examination of its U.S. federal tax return for years prior to 2013. The open years contain matters that could be subject to differing interpretations of applicable tax laws and regulations as it relates to the amount and/or timing of income, deductions and tax credits. Although the outcome of tax audits is always uncertain, the company believes that adequate amounts of tax and interest have been provided for any adjustments that are expected to result for these years.

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Notes to Consolidated Financial Statements (continued)

In the third quarter of 2018, the IRS commenced its audit of the company s U.S. tax returns for 2015 and 2016. The company anticipates that this audit will be completed in 2020.

The amount of unrecognized tax benefits at December 31, 2017 decreased \$892 million in the first nine months of 2018 to \$6,139 million. The decrease was primarily driven by the resolution of certain tax matters in the first quarter related to the U.S. audits. The liability at September 30, 2018 of \$6,139 million can be reduced by \$599 million of offsetting tax benefits associated with timing adjustments, U.S. tax credits, potential transfer pricing adjustments and state income taxes. The net amount of \$5,540 million, if recognized, would favorably affect the company s effective tax rate.

The company is involved in a number of income tax-related matters in India challenging tax assessments issued by the India Tax Authorities. As of September 30, 2018, the company has recorded \$636 million as prepaid income taxes in India. A significant portion of this balance represents cash tax deposits paid over time to protect the company s right to appeal various income tax assessments made by the India Tax Authorities. The company believes it will prevail on these matters.

U.S. Tax Reform

On December 22, 2017, the U.S. Tax Cuts and Jobs Act was enacted. U.S. tax reform introduced many changes, including lowering the U.S. corporate tax rate to 21 percent, changes in incentives, provisions to prevent U.S. base erosion and significant changes in the taxation of international income, including provisions which allow for the repatriation of foreign earnings without U.S. tax. The enactment of U.S. tax reform resulted in the company recording a provisional tax expense charge of \$5,475 million in the fourth-quarter and year-ended December 31, 2017. This charge was the result of the one-time U.S. transition tax and any foreign tax costs on undistributed foreign earnings, as well as the remeasurement of deferred tax balances to the new U.S. federal tax rate.

All components of the provisional charge of \$5,475 million were based on the company s estimates as of December 31, 2017. Specifically, the transition tax, any foreign tax costs, as well as the remeasurement of deferred tax balances are provisional and were calculated based on existing tax law and the best information available as of the date of estimate. The effect of U.S. tax reform changes on deferred tax assets and liabilities was a benefit of \$270 million and was included in the one-time charge. An additional provisional charge of \$107 million was recorded in the first quarter as a result of IRS guidance issued in January 2018 and a benefit of \$14 million was recorded in the second quarter as a result of IRS guidance issued in early April 2018. The final impact of U.S. tax reform may differ, possibly materially, due to factors such as changes in interpretations and assumptions that the company has made in its assessment, conclusion of the effects of the Global Intangible Low-Taxed Income (GILTI) provisions, further refinement of the company s calculations, additional guidance that may be issued by the U.S. government, among other items. The company is still evaluating the Act s GILTI provisions and has not yet elected an accounting policy. The company has not completed its assessment and the tax charge remains provisional as of September 30, 2018.

The charge will be finalized in the fourth quarter of 2018 which is within the 12-month time limit provided by the SEC.

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Notes to Consolidated Financial Statements (continued)

16. Earnings Per Share of Common Stock: The following tables provide the computation of basic and diluted earnings per share of common stock for the three and nine months ended September 30, 2018 and 2017.

		Ended		
	Septe	mber 30, 2018	S	September 30, 2017
Number of shares on which basic earnings per share is calculated:				
Weighted-average shares outstanding during period		911,152,848		929,437,441
Add Incremental shares under stock-based compensation plans		2,566,139		2,236,234
Add Incremental shares associated with contingently issuable shares		1,493,644		1,553,754
Number of shares on which diluted earnings per share is calculated		915,212,631		933,227,429
Income from continuing operations (millions)	\$	2,692	\$	2,726
Income/(loss) from discontinued operations, net of tax (millions)		2		0
Net income on which basic earnings per share is calculated (millions)	\$	2,694	\$	2,726
Income from continuing operations (millions)	\$	2,692	\$	2,726
Net income applicable to contingently issuable shares (millions)				0
Income from continuing operations on which diluted earnings per share is calculated				
(millions)	\$	2,692	\$	2,726
Income/(loss) from discontinued operations, net of tax, on which basic and diluted				
earnings per share is calculated (millions)		2		0
Net income on which diluted earnings per share is calculated (millions)	\$	2,694	\$	2,726
Earnings/(loss) per share of common stock:				
Assuming dilution				
Continuing operations	\$	2.94	\$	2.92
Discontinued operations		0.00		0.00
Total	\$	2.94	\$	2.92
Basic				
Continuing operations	\$	2.95	\$	2.93
Discontinued operations		0.00		0.00
Total	\$	2.95	\$	2.93

Stock options to purchase 388,335 shares and 399,844 shares were outstanding as of September 30, 2018 and 2017, respectively, but were not included in the computation of diluted earnings per share because the options exercise price during the respective period was greater than the average market price of the common shares, and, therefore, the effect would have been antidilutive.

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Notes to Consolidated Financial Statements (continued)

		Ended		
	Septe	ember 30, 2018	S	September 30, 2017
Number of shares on which basic earnings per share is calculated:				
Weighted-average shares outstanding during period		915,632,501		935,600,777
Add Incremental shares under stock compensation plans		3,000,429		3,213,758
Add Incremental shares associated with contingently issuable shares		1,373,960		1,394,930
Number of shares on which diluted earnings per share is calculated		920,006,890		940,209,466
Income from continuing operations (millions)	\$	6,770	\$	6,811
Income/(loss) from discontinued operations, net of tax (millions)		7		(3)
Net income on which basic earnings per share is calculated (millions)	\$	6,777	\$	6,807
Income from continuing operations (millions)	\$	6,770	\$	6,811
Net income applicable to contingently issuable shares (millions)		(1)		(2)
Income from continuing operations on which diluted earnings per share is calculated				
(millions)	\$	6,769	\$	6,809
Income/(loss) from discontinued operations, net of tax, on which basic and diluted				
earnings per share is calculated (millions)		7		(3)
Net income on which diluted earnings per share is calculated (millions)	\$	6,776	\$	6,806
Earnings/(loss) per share of common stock:				
Assuming dilution				
Continuing operations	\$	7.36	\$	7.24
Discontinued operations		0.01		0.00
Total	\$	7.37	\$	7.24
Basic				
Continuing operations	\$	7.39	\$	7.28
Discontinued operations		0.01		0.00
Total	\$	7.40	\$	7.28

Stock options to purchase 264,628 shares and 146,795 shares (average of first, second and third quarter share amounts) were outstanding as of September 30, 2018 and 2017, respectively, but were not included in the computation of diluted earnings per share because the options exercise price during the respective periods was greater than the average market price of the common shares, and, therefore, the effect would have been antidilutive.

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Notes to Consolidated Financial Statements (continued)

17. <u>Subsequent Events:</u> On October 30, 2018, the company announced that the Board of Directors approved a quarterly dividend of \$1.57 per common share. The dividend is payable December 10, 2018 to shareholders of record on November 9, 2018.

On October 30, 2018, the company announced that the Board of Directors authorized \$4.0 billion in additional funds for use in the company s stock repurchase program.

On October 28, 2018, the company announced its intent to acquire all of the outstanding shares of Red Hat, Inc. (Red Hat). The combination of Red Hat s vast portfolio of open-source technologies, innovative cloud development platform and developer community combined with IBM s innovative hybrid cloud technology, industry expertise and commitment to data, trust and security will bring clients the hybrid, multi-cloud capabilities they are demanding. Under the terms of the definitive agreement, Red Hat shareholders will receive \$190 per share in cash. The transaction values Red Hat at approximately \$34 billion. The transaction is subject to customary closing conditions, including regulatory clearance and approval by the Red Hat shareholders.

In connection with the proposed transaction, IBM has entered into a commitment letter pursuant to which certain banks have committed to provide a 364-day bridge loan credit facility in an amount of \$20 billion in support of the transaction. At signing, the company has ample cash, credit and bridge lines to secure the transaction financing. The company intends to close the transaction through a combination of cash and debt. IBM will continue with a disciplined financial policy and is committed to continued dividend growth and maintaining strong investment grade credit ratings. As a result of the proposed transaction, the company expects the major rating agencies to downgrade IBM and IBM Credit LLC long-term debt securities by one rating. Standard and Poor s has lowered IBM and IBM Credit s long-term debt rating one notch to A from A+, with no change to the short-term debt rating of A-1. The other major rating agencies are reviewing the companies ratings. In addition, the company intends to suspend its share repurchase program in 2020 and 2021.

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Item 2.

MANAGEMENT S DISCUSSION AND ANALYSIS

OF RESULTS OF OPERATIONS AND FINANCIAL CONDITION

FOR THE THREE AND NINE MONTHS ENDED SEPTEMBER 30, 2018

Snapshot

Financial Results Summary Three Months Ended September 30:

(Dollars and shares in millions except per share amounts) For the three months ended September 30:	2018	2017	Yr. to Yr. Percent/ Margin Change
Revenue	\$ 18,756	\$ 19,153	(2.1)%*
Gross profit margin	46.9%	46.9%**	0.0pts.
Total expense and other (income)	\$ 5,807	\$ 5,917**	(1.9)%
Total expense and other (income)-to-revenue ratio	31.0%	30.9%**	0.1pts.
Income from continuing operations before income taxes	\$ 2,996	\$ 3,065	(2.2)%
Provision for income taxes from continuing operations	\$ 304	\$ 339	(10.1)%
Income from continuing operations	\$ 2,692	\$ 2,726	(1.3)%
Income from continuing operations margin	14.4%	14.2%	0.1pts.
Income/(loss) from discontinued operations, net of tax	\$ 2	\$ 0	nm
Net income	\$ 2,694	\$ 2,726	(1.2)%
Earnings per share from continuing operations - assuming dilution	\$ 2.94	\$ 2.92	0.7%
Consolidated earnings per share - assuming dilution	\$ 2.94	\$ 2.92	0.7%
Weighted-average shares outstanding - assuming dilution	915.2	933.2	(1.9)%

^{* (0.4)} percent adjusted for currency.

nm - not meaningful

Organization of Information:

Effective January 1, 2018, the company adopted the FASB guidance on presentation of net periodic pension and nonpension postretirement benefit costs (net benefit cost). The guidance is primarily a change in financial statement presentation, but it did impact the consolidated and

^{**} Recast to reflect adoption of the FASB guidance on presentation of net periodic pension and nonpension postretirement benefit costs.

reportable segment gross profit margins and expense and other income. As a result, the company aligned its presentation of operating (non-GAAP) earnings to conform to the FASB presentation of these costs in the Consolidated Statement of Earnings. The periods presented in this Form 10-Q are reported on a comparable basis. The company filed a Form 8-K on March 29, 2018 to recast its historical consolidated and segment information to reflect the change.

Currency:

The references to adjusted for currency or at constant currency in the Management Discussion do not include operational impacts that could result from fluctuations in foreign currency rates. When the company refers to growth rates at constant currency or adjusts such growth rates for currency, it is done so that certain financial results can be viewed without the impact of fluctuations in foreign currency exchange rates, thereby facilitating period-to-period comparisons of its business performance. Financial results adjusted for currency are calculated by translating current period activity in local currency using the comparable prior year period s currency conversion rate. This approach is used for countries where the functional currency is the local currency. Generally, when the dollar either strengthens or weakens against other currencies, the growth at constant currency rates or adjusting for currency will be higher or lower than growth reported at actual exchange rates. Refer to Currency Rate Fluctuations on pages 87 and 88 for additional information.

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Management Discussion (continued)

Operating (non-GAAP) Earnings:

In an effort to provide better transparency into the operational results of the business, the company separates business results into operating and non-operating categories. Operating earnings from continuing operations is a non-GAAP measure that excludes the effects of certain acquisition-related charges, intangible asset amortization expense resulting from basis differences on equity method investments, retirement-related costs, discontinued operations and related tax impacts. Operating (non-GAAP) earnings also exclude any one-time impacts associated with the enactment of the U.S. Tax Cuts and Jobs Act due to its unique non-recurring nature. For acquisitions, operating (non-GAAP) earnings exclude the amortization of purchased intangible assets and acquisition-related charges such as in-process research and development, transaction costs, applicable restructuring and related expenses and tax charges related to acquisition integration. These charges are excluded as they may be inconsistent in amount and timing from period to period and are dependent on the size, type and frequency of the company s acquisitions. All other spending for acquired companies is included in both earnings from continuing operations and in operating (non-GAAP) earnings. Throughout the Management Discussion, the impact of acquisitions over the prior 12-month period may be a driver of higher expense year to year. For retirement-related costs, the company characterizes certain items as operating and others as non-operating. The company includes defined benefit plan and nonpension postretirement benefit plan service cost, multi-employer plan costs and the cost of defined contribution plans in operating earnings. Non-operating retirement-related cost includes defined benefit plan and nonpension postretirement benefit plan amortization of prior service cost, interest cost, expected return on plan assets, amortized actuarial gains/losses, the impacts of any plan curtailments/settlements and pension insolvency costs and other costs. Non-operating retirement-related costs are primarily related to changes in pension plan assets and liabilities which are tied to financial market performance and the company considers these costs to be outside of the operational performance of the business.

Overall, the company believes that providing investors with a view of operating earnings as described above provides increased transparency and clarity into both the operational results of the business and the performance of the company s pension plans; improves visibility to management decisions and their impacts on operational performance; enables better comparison to peer companies; and allows the company to provide a long-term strategic view of the business going forward. The company s reportable segment financial results reflect operating earnings from continuing operations, consistent with the company s management and measurement system.

The following table provides the company s (non-GAAP) operating earnings for the third quarter of 2018 and 2017.

(Dollars in millions except per share amounts) For the three months ended September 30:	2018	2017	Yr. to Yr. Percent Change
Net income as reported	\$ 2,694	\$ 2,726	(1.2)%
Income/(loss) from discontinued operations, net of tax	2	0	nm
Income from continuing operations	\$ 2,692	\$ 2,726	(1.3)%
Non-operating adjustments (net of tax):			
Acquisition-related charges	153	159	(3.7)
Non-operating retirement-related costs/(income)	289	160**	80.6

Operating (non-GAAP) earnings*	\$ 3,134 \$	3,045**	2.9%
Diluted operating (non-GAAP) earnings per share	\$ 3.42 \$	3.26**	4.9%

^{*} Refer to page 91 for a more detailed reconciliation of net income to operating earnings.

** Recast to reflect adoption of the FASB guidance on presentation of net benefit cost.

nm - not meaningful

Financial Performance Summary Three Months Ended September 30:

In the third quarter of 2018, the company reported \$18.8 billion in revenue, \$2.7 billion in income from continuing operations and operating (non-GAAP) earnings of \$3.1 billion, resulting in diluted earnings per share from continuing operations of \$2.94 as reported and \$3.42 on an operating (non-GAAP) basis. The consolidated gross margin of 46.9 percent and operating (non-GAAP) gross margin of 47.4 percent were each flat compared to the prior year, representing the company strongest year-to-year gross margin performance in three years. The company generated \$4.2 billion in cash from operations and \$2.2 billion in free cash flow in the third quarter of 2018, and delivered shareholder returns of \$2.1 billion through gross common stock repurchases and dividends. These results reflect the company s ability to deliver differentiated value through innovative technologies with the skills and expertise to implement these technologies.

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Management Discussion (continued)

Total consolidated revenue decreased 2.1 percent as reported but was flat adjusted for currency in the third quarter, with continued growth in offerings in hybrid cloud, security, digital, analytics and AI.

From a segment perspective, Cognitive Solutions revenue decreased 5.7 percent as reported and 5 percent adjusted for currency, compared to third quarter 2017 with declines in both Solutions Software and Transaction Processing Software. However, within Solutions Software, there was growth in security, key areas of analytics and industry verticals such as Watson Health. Global Business Services (GBS) revenue increased 0.9 percent as reported and 3 percent year to year adjusted for currency, building on the progress from the first half. Consulting increased 5.4 percent as reported and 7 percent adjusted for currency, led by offerings in Digital Strategy and iX. Application Management revenue decreased 3.1 percent as reported and 1 percent adjusted for currency. Technology Services & Cloud Platforms (TS&CP) decreased 1.9 percent as reported and was flat adjusted for currency. While Infrastructure Services decreased 1.2 percent and Integration Software was flat year to year as reported, both grew 1 percent adjusted for currency in the third quarter with growth in hybrid cloud implementations. Technical Support Services declined year to year as reported and adjusted for currency. Systems revenue increased 0.9 percent and 2 percent adjusted for currency compared to the third quarter 2017 with continued growth in IBM Z and Power Systems and a decline in Storage as reported and adjusted for currency.

Strategic imperatives revenue over the last 12 months was \$39.5 billion, an increase of 13 percent as reported and 11 percent adjusted for currency. In the third quarter, cloud revenue of \$4.6 billion increased 11 percent (13 percent adjusted for currency) driven by as-a-Service revenue which grew 21 percent as reported and 24 percent adjusted for currency. The annual exit run rate for as-a-Service revenue increased to \$11.4 billion in the third quarter of 2018 compared to \$9.4 billion in the third quarter of 2017. Security grew 33 percent as reported (34 percent adjusted for currency). Analytics revenue of \$5.0 billion increased 1 percent as reported and 2 percent adjusted for currency. Mobile revenue increased 4 percent as reported and 5 percent adjusted for currency.

From a geographic perspective, in the third quarter, Americas revenue was down 0.9 percent year to year as reported, but grew 1 percent adjusted for currency. The U.S. grew 0.2 percent compared to the prior year, Canada grew 0.7 percent (5 percent adjusted for currency) and Latin America declined 8.6 percent, but grew 3 percent adjusted for currency. Europe/Middle East/Africa (EMEA) revenue decreased 3.0 percent as reported and 2 percent adjusted for currency. There was solid growth in the UK and Spain as reported and adjusted for currency, offset by declines in Germany and France as reported and adjusted for currency. Asia Pacific decreased 3.3 percent as reported and 1 percent adjusted for currency, with Japan flat year to year as reported and adjusted for currency.

The consolidated gross margin of 46.9 percent and the operating (non-GAAP) gross margin of 47.4 percent were each flat compared to the third quarter 2017, with an improvement in the year-to-year trajectory. This performance also represents sequential improvement from the second quarter and included margin improvement in GBS and TS&CP, partially offset by an impact from mix.

Total expense and other (income) decreased 1.9 percent in the third quarter of 2018. The year-to-year decrease was due to the effects of currency (2 points) and lower spending (1 point) as the company continues to realize acquisition synergies and drive operational efficiencies by using automation, leveraging agile processes and implementing new ways of working. This benefit was partially offset by a lower level of intellectual property (IP) income (1 point) compared to the prior year. Total operating (non-GAAP) expense and other (income) decreased 3.9 percent year to year, driven primarily by the same factors.

Pre-tax income from continuing operations of \$3.0 billion decreased 2.2 percent and the pre-tax margin was 16.0 percent, flat year to year. The continuing operations effective tax rate was 10.2 percent compared to 11.0 percent in the third quarter of 2017. Income from continuing operations of \$2.7 billion decreased 1.3 percent and the net income margin was 14.4 percent, an increase from 14.2 percent in the third quarter of 2017. Net income of \$2.7 billion decreased 1.2 percent year to year.

Operating (non-GAAP) pre-tax income from continuing operations of \$3.6 billion increased 0.5 percent year to year and the operating (non-GAAP) pre-tax margin from continuing operations increased 0.5 points to 19.2 percent. Operating (non-GAAP) income from continuing operations of \$3.1 billion increased 2.9 percent with an operating (non-GAAP) income margin from continuing operations of 16.7 percent, an increase of 0.8 points year to year. The operating (non-GAAP) effective tax rate from continuing operations in the third quarter of 2018 was 12.8 percent, a decline of 2.0 points.

Diluted earnings per share from continuing operations of \$2.94 increased 0.7 percent and operating (non-GAAP) diluted earnings per share of \$3.42 increased 4.9 percent versus the third quarter of 2017. In the third quarter of 2018, the company

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Management Discussion (continued)

repurchased 4.3 million shares of its common stock at a cost of \$0.6 billion and had \$1.4 billion remaining in the current share repurchase authorization at September 30, 2018.

The company generated \$4.2 billion in cash flow provided by operating activities, an increase of \$0.7 billion compared to the third quarter of 2017, driven primarily by an increase in cash provided by financing receivables (\$0.8 billion). Net cash used in investing activities of \$3.0 billion in the third quarter of 2018 was \$1.1 billion higher than the prior year, primarily driven by an increase from net purchases of marketable securities and other investments (\$1.5 billion). Net cash used in financing activities of \$0.4 billion decreased \$2.3 billion compared to the third quarter of 2017, driven primarily by a decrease in net cash used for debt transactions (\$2.0 billion) and a decrease in cash used for gross common share repurchases (\$0.3 billion).

The company continues to expect GAAP earnings per share from continuing operations of at least \$11.60 and operating (non-GAAP) earnings of at least \$13.80 per diluted share for 2018. The company continues to expect free cash flow to be approximately \$12 billion in 2018. Free cash flow realization is expected to be in excess of 100 percent of GAAP net income. Refer to page 89 in the Liquidity and Capital Resources section for additional information on this non-GAAP measure. Refer to the Looking Forward section on pages 86 and 87 for additional information on the company s expectations.

Financial Results Summary - Nine Months Ended September 30:

(Dollars and shares in millions except per share amounts) For the nine months ended September 30:		2018	2017	Yr. to Yr. Percent/ Margin Change
Revenue	\$	57,830 \$	56,597	2.2%*
Gross profit margin	ф	45.4%	45.8%**	(0.4) pts.
Total expense and other (income)	\$	19,341 \$	18,962**	2.0%
Total expense and other (income)-to-revenue ratio		33.4%	33.5%**	(0.1) pts.
Income from continuing operations, before income taxes	\$	6,908 \$	6,931	(0.3)%
Provision for income taxes from continuing operations	\$	138 \$	120	14.9%
Income from continuing operations	\$	6,770 \$	6,811	(0.6)%
Income from continuing operations margin		11.7%	12.0%	(0.3) pts.
Income/(loss) from discontinued operations, net of tax	\$	7 \$	(3)	nm
Net income	\$	6,777 \$	6,807	(0.5)%
Earnings per share from continuing operations - assuming dilution	\$	7.36 \$	7.24	1.7%
Consolidated earnings per share - assuming dilution	\$	7.37 \$	7.24	1.8%
Weighted-average shares outstanding - assuming dilution		920.0	940.2	(2.1)%

	At 9/30/18	At 12/31/17	
Assets	\$ 121,990	\$ 125,356	(2.7)%
Liabilities	\$ 102,071	\$ 107,631	(5.2)%
Equity	\$ 19,918	\$ 17,725	12.4%

- * 0.4 percent adjusted for currency.
- ** Recast to reflect adoption of the FASB guidance on presentation of net benefit cost.

nm - not meaningful

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Management Discussion (continued)

The following table provides the company s (non-GAAP) operating earnings for the first nine months of 2018 and 2017.

(Dollars in millions except per share amounts) For the nine months ended September 30:	2018	2017	Yr. to Yr. Percent Change
Net income as reported	\$ 6,777	\$ 6,807	(0.5)%
Income/(loss) from discontinued operations, net of tax	7	(3)	nm
Income from continuing operations	\$ 6,770	\$ 6,811	(0.6)%
Non-operating adjustments (net of tax):			
Acquisition-related charges	478	537	(11.1)
Non-operating retirement-related costs/(income)	900	681**	32.2
U.S. tax reform one-time charge	93		nm
Operating (non-GAAP) earnings*	\$ 8,241	\$ 8,030**	2.6%
Diluted operating (non-GAAP) earnings per share	\$ 8.96	\$ 8.54**	4.9%

^{*} Refer to page 92 for a more detailed reconciliation of net income to operating earnings.

nm - not meaningful

Financial Performance Summary Nine Months Ended September 30:

In the first nine months of 2018, the company reported \$57.8 billion in revenue, and delivered \$6.8 billion in income from continuing operations, resulting in diluted earnings per share from continuing operations of \$7.36 as reported and \$8.96 on an operating (non-GAAP) basis. The company generated \$11.1 billion in cash from operations and \$5.4 billion in free cash flow in the first nine months of 2018 and delivered shareholder returns of \$6.6 billion through gross common stock repurchases and dividends.

Total consolidated revenue increased 2.2 percent year to year as reported and 0.4 percent adjusted for currency in the first nine months of 2018. The company continued to have solid revenue growth in its strategic imperatives, led by cloud and security.

From a segment perspective, Cognitive Solutions revenue was flat as reported but decreased 1 percent adjusted for currency with Solutions Software growing 0.7 percent as reported (decreased 1 percent adjusted for currency) and Transaction Processing Software decreasing 1.5 percent as reported (3 percent adjusted for currency). GBS revenue increased 2.4 percent as reported, but was flat year to year adjusted for currency. Consulting increased 5.6 percent as reported (4 percent adjusted for currency) and Application Management increased 0.1 percent as reported (declined 2 percent adjusted for currency). TS&CP revenue increased 1.8 percent as reported and was flat adjusted for currency with growth in Infrastructure Services and Integration Software offset by a decline in Technical Support Services, as reported and adjusted for currency. Systems revenue increased 11.3 percent as reported and 10 percent adjusted for currency, driven by strong growth in IBM Z and growth in Power Systems.

^{**} Recast to reflect adoption of the FASB guidance on presentation of net benefit cost.

In the first nine months of 2018, the company s strategic imperatives revenue increased 12 percent year to year as reported and 10 percent adjusted for currency. Total cloud revenue in the first nine months of 2018 of \$13.5 billion increased 17 percent year to year as reported and 15 percent adjusted for currency, with as-a-Service revenue up 24 percent (22 percent adjusted for currency). Analytics revenue of \$15.3 billion increased 5 percent as reported and 4 percent adjusted for currency. Mobile revenue increased 9 percent year to year (7 percent adjusted for currency) and Security revenue increased 57 percent as reported (56 percent adjusted for currency).

From a geographic perspective, Americas revenue declined 0.3 percent year to year as reported and was flat adjusted for currency with a modest decline in the U.S. There was growth in Canada as reported and adjusted for currency, while Latin America declined as reported but grew year to year adjusted for currency. EMEA increased 6.9 percent as reported and 1 percent adjusted for currency with growth as reported and adjusted for currency in Germany, France, the UK and Spain. Asia Pacific increased 1.0 percent as reported and was flat adjusted for currency, with Japan up 2.1 percent as reported and flat adjusted for currency. China was flat as reported (declined 2 percent adjusted for currency) and India declined as reported and adjusted for currency.

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Management Discussion (continued)

The consolidated gross margin of 45.4 percent decreased 0.4 points year to year. The operating (non-GAAP) gross margin of 45.9 percent decreased 0.5 points versus the prior year. While the GBS margin has improved on a year-to-year basis, the overall margin decline is primarily driven by continued investment in cloud and portfolio mix.

Total expense and other (income) increased \$0.4 billion or 2.0 percent in the first nine months of 2018 compared to the prior year. The year-to-year increase included a higher level of workforce rebalancing charges (2 points), an impact from currency (2 points) and a lower level of IP income (1 points), partially offset by lower spending (3 points) driven by operating efficiencies, including acquisition synergies. Total operating (non-GAAP) expense and other (income) increased 1.3 percent year to year, driven primarily by the same factors.

Pre-tax income from continuing operations of \$6.9 billion decreased 0.3 percent and the pre-tax margin was 11.9 percent, a decrease of 0.3 points versus the first nine months of 2017. The continuing operations effective tax rate for the first nine months of 2018 was 2.0 percent compared to 1.7 percent in the prior year. The tax rate in the first nine months of 2018 was primarily driven by the first-quarter resolution of certain U.S. tax audit matters and a net discrete tax benefit in the third quarter. The prior year tax rate was primarily driven by discrete tax items in the first half of the year. Income from continuing operations of \$6.8 billion decreased 0.6 percent and the net income margin was 11.7 percent, a decrease of 0.3 points compared to the first nine months of 2017. Income from discontinued operations, net of tax, was \$7 million in the first nine months of 2018 versus a loss of \$3 million in the prior-year period. Net income of \$6.8 billion decreased 0.5 percent year to year.

Operating (non-GAAP) pre-tax income from continuing operations of \$8.7 billion increased 0.7 percent year to year and the operating (non-GAAP) pre-tax margin from continuing operations decreased 0.2 points to 15.1 percent. Operating (non-GAAP) income from continuing operations of \$8.2 billion increased 2.6 percent and the operating (non-GAAP) income margin from continuing operations of 14.2 percent increased 0.1 points. The operating (non-GAAP) effective tax rate from continuing operations in the first nine months of 2018 was 5.4 percent versus 7.2 percent in the first nine months of 2017.

Diluted earnings per share from continuing operations of \$7.36 increased 1.7 percent and operating (non-GAAP) diluted earnings per share of \$8.96 increased 4.9 percent versus the prior year. In the first nine months of 2018, the company repurchased 16.0 million shares of its common stock and had \$1.4 billion remaining in the current share repurchase authorization at September 30, 2018.

At September 30, 2018, the balance sheet remained strong and the company continues to have the financial flexibility to support the business for the long term. Cash, restricted cash and marketable securities at quarter end were \$14.7 billion, an increase of \$1.8 billion from December 31, 2017. Key drivers in the balance sheet and total cash flows were:

Total assets decreased \$3.4 billion (\$0.9 billion adjusted for currency) from December 31, 2017 driven by:

• Decreases in total receivables (\$6.1 billion), and net intangible assets (\$0.6 billion); partially offset by

Increases in cash, restricted cash and marketable securities (\$1.8 billion), and retirement plan assets (\$1.0

billion).
Total liabilities decreased \$5.6 billion (\$3.5 billion adjusted for currency) from December 31, 2017 driven by:
• Decreases in taxes payable (\$1.7 billion), accounts payable (\$1.1 billion), deferred income (\$1.1 billion), retirement-related liabilities (\$0.9 billion) and other accrued expenses and liabilities (\$0.8 billion).
Total equity of \$19.9 billion increased \$2.2 billion from December 31, 2017 as a result of:
• Increases from net income (\$6.8 billion), retirement-related benefit plans (\$1.6 billion) and adoption of the new revenue standard (\$0.5 billion); partially offset by
• Decreases from dividends (\$4.2 billion) and share repurchases (\$2.4 billion).
The company generated \$11.1 billion in cash flows provided by operating activities, an increase of \$0.1 billion compared to the first nine months of 2017, driven primarily by an increase in cash provided by financing receivables (\$0.4 billion); partially offset by an increase in cash income tax payments (\$0.3 billion). Net cash used in investing activities of \$5.4 billion was \$2.1 billion higher than the prior year, primarily driven by an increase in net purchases of marketable securities and other investments (\$1.8 billion) and an increase in net capital investments (\$0.5 billion); partially offset by a decrease in cash used
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Management Discussion (continued)

related to acquisitions (\$0.3 billion). Net cash used in financing activities of \$5.9 billion increased \$0.4 billion compared to the first nine months of 2017, driven by a decrease in net cash sourced from debt transactions (\$1.5 billion); partially offset by a decrease in cash used for gross common share repurchases (\$1.3 billion).

Third Quarter and First Nine Months in Review

Results of Continuing Operations

Segment Details

The following is an analysis of the third quarter and first nine months of 2018 versus the third quarter and first nine months of 2017 reportable segment external revenue and gross margin results. Segment pre-tax income includes transactions between the segments that are intended to reflect an arm s-length transfer price and excludes certain unallocated corporate items.

(Dollars in millions) For the three months ended September 30:	2018	2017	Yr. to Yr. Percent/Margin Change	Yr. to Yr. Percent Change Adjusted For Currency
Revenue:				
Cognitive Solutions	\$ 4,148	\$ 4,400	(5.7)%	(4.6)%
Gross margin	76.0%	78.7%*	(2.7)pts.	
Global Business Services	4,130	4,093	0.9%	2.5%
Gross margin	29.8%	27.1%*	2.7pts.	
Technology Services & Cloud Platforms	8,292	8,457	(1.9)%	0.2%
Gross margin	42.1%	40.9%*	1.2pts.	
Systems	1,736	1,721	0.9%	1.8%
Gross margin	52.7%	53.6%*	(1.0)pts.	
Global Financing	388	427	(9.0)%	(7.1)%
Gross margin	26.3%	25.2%	1.0pts.	
Other	62	56	11.0%	13.5%
Gross margin	(143.1)%	(148.3)%*	5.2pts.	
Total consolidated revenue	\$ 18,756	\$ 19,153	(2.1)%	(0.4)%
Total consolidated gross profit	\$ 8,803	\$ 8,981*	(2.0)%	
Total consolidated gross margin	46.9%	46.9%*	0.0pts.	
Non-operating adjustments:				
Amortization of acquired intangible assets	96	114	(15.8)%	
Retirement-related costs/(income)		*		
Operating (non-GAAP) gross profit	\$ 8,899	\$ 9,095*	(2.2)%	
Operating (non-GAAP) gross margin	47.4%	47.5%*	0.0pts.	
			*	

* Recast to reflect adoption of the FASB guidance on presentation of net benefit cost.

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Management Discussion (continued)

(Dollars in millions) For the nine months ended September 30:	2018	2017	Yr. to Yr. Percent/Margin Change	Yr. to Yr. Percent Change Adjusted For Currency
Revenue:	40.00	40.004	0.00	
Cognitive Solutions	\$ 13,027	\$ 13,021	0.0%	(1.4)%
Gross margin	76.7%	78.3%*	(1.7)pts.	
Global Business Services	12,495	12,196	2.4%	0.5%
Gross margin	26.3%	25.1%*	1.3pts.	
Technology Services & Cloud Platforms	25,533	25,079	1.8%	(0.1)%
Gross margin	39.9%	40.1%*	(0.2)pts.	
Systems	5,412	4,863	11.3%	9.9%
Gross margin	49.3%	51.5%*	(2.2)pts.	
Global Financing	1,188	1,246	(4.7)%	(5.8)%
Gross margin	29.1%	29.2%	(0.1)pts.	
Other	176	192	(8.2)%	(9.9)%
Gross margin	(132.5)%	(148.2)%*	15.7pts.	
Total consolidated revenue	\$ 57,830	\$ 56,597	2.2%	0.4%
Total consolidated gross profit	\$ 26,249	\$ 25,894*	1.4%	
Total consolidated gross margin	45.4%	45.8%*	(0.4)pts.	
Non-operating adjustments:			` . · ·	
Amortization of acquired intangible assets	283	349	(19.1)%	
Retirement-related costs/(income)		*		
Operating (non-GAAP) gross profit	\$ 26,531	\$ 26,243*	1.1%	
Operating (non-GAAP) gross margin	45.9%	46.4%*	(0.5)pts.	

^{*} Recast to reflect adoption of the FASB guidance on presentation of net benefit cost.

Cognitive Solutions

(Dollars in millions)				Yr. to Yr. Percent	Yr. to Yr. Percent Change Adjusted For
For the three months ended September 30:	2	2018	2017	Change	Currency
Cognitive Solutions external revenue:	\$	4,148 \$	4,400	(5.7)%	(4.6)%
Solutions Software	\$	2,910 \$	3,029	(4.0)%	(2.9)%
Transaction Processing Software		1,238	1,371	(9.7)	(8.3)

				Yr. to Yr.
				Percent
			Yr. to Yr.	Change
(Dollars in millions)			Percent	Adjusted For
For the nine months ended September 30:	2018	2017	Change	Currency
Cognitive Solutions external revenue:	\$ 13,027	\$ 13,021	0.0%	(1.4)%
Solutions Software	\$ 9,080	\$ 9,015	0.7%	(0.6)%

Transaction Processing Software 3,946 4,006 (1.5) (3.2)

Cognitive Solutions revenue of \$4,148 million decreased 5.7 percent as reported and 5 percent adjusted for currency in the third quarter of 2018 compared to the prior year, with declines in Solutions Software and Transaction Processing Software. For the first nine months of the year, Cognitive Solutions revenue of \$13,027 million was flat as reported, but declined 1 percent adjusted for currency, with growth in Solutions Software as reported, but declined adjusted for currency. Transaction Processing Software revenue declined both as reported and adjusted for currency.

In the third quarter, Solutions Software revenue of \$2,910 million decreased 4.0 percent as reported and 3 percent adjusted for currency. There was good performance in the quarter in strategic verticals such as health, domain-specific capabilities including security solutions and key strategic areas of analytics, and in the emerging technologies of AI and blockchain. The performance in these key areas was more than offset by transition in other areas, including collaboration,

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Management Discussion (continued)

commerce and talent, as the company continues to respond to secular shifts in the market by modernizing offerings, infusing AI and enhancing the digital experience. Transaction Processing Software revenue of \$1,238 million decreased 9.7 percent as reported and 8 percent adjusted for currency. The year-to-year performance was impacted by strong results in third quarter 2017. This software runs mission-critical workloads, leveraging IBM hardware platforms, and performance is often tied to client buying cycles. Across the platforms, declines in Storage and IBM Z middleware software were partially offset by growth in Power Systems middleware.

Cognitive Solutions third-quarter strategic imperatives revenue of \$2.8 billion declined 5 percent as reported and 4 percent adjusted for currency. Within Cognitive Solutions, strategic imperatives performance essentially reflects the performance in Solutions Software. Cloud revenue of \$0.6 billion decreased 3 percent as reported and 2 percent adjusted for currency, with an as-a-Service exit run rate of \$2.0 billion. For the first nine months of the year, Cognitive Solutions strategic imperatives revenue of \$8.6 billion grew 1 percent as reported, but decreased 1 percent adjusted for currency. Cloud revenue of \$1.9 billion grew 1 percent as reported and was flat adjusted for currency.

(Dollars in millions) For the three months ended September 30:	2018	2017*	Yr. to Yr. Percent/ Margin Change
Cognitive Solutions:			
External gross profit	\$ 3,151 \$	3,463	(9.0)%
External gross profit margin	76.0%	78.7%	(2.7)pts.
Pre-tax income	\$ 1,629 \$	1,643	(0.9)%
Pre-tax margin	34.0%	32.7%	1.3pts.

^{*} Recast to reflect adoption of the FASB guidance on presentation of net benefit cost.

(Dollars in millions) For the nine months ended September 30: Cognitive Solutions:	2018	2017*	Yr. to Yr. Percent/ Margin Change
External gross profit	\$ 9,988 \$	10,202	(2.1)%
External gross profit margin	76.7%	78.3%	(1.7)pts.
Pre-tax income	\$ 4,718 \$	4,522	4.3%
Pre-tax margin	31.1%	30.1%	1.0pts.

^{*} Recast to reflect adoption of the FASB guidance on presentation of net benefit cost.

Cognitive Solutions gross profit margin decreased 2.7 points to 76.0 percent in the third quarter of 2018. For the first nine months of 2018, gross profit margin decreased 1.7 points to 76.7 percent. The gross profit margin decline in both periods was driven by continued investment in strategic areas, a mix to services and a higher level of royalty cost associated with IP licensing agreements compared to the prior-year periods.

In the third quarter, pre-tax income of \$1,629 million decreased 0.9 percent compared to the prior year with a pre-tax margin improvement of 1.3 points to 34.0 percent. For the first nine months of the year, pre-tax income of \$4,718 million increased 4.3 percent compared to the prior year with a pre-tax margin improvement of 1.0 points to 31.1 percent. Pre-tax margins improved, driven by operational efficiencies, including acquisition synergies, even as the company continues to invest at high levels in key strategic areas, including AI, security and blockchain.

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Management Discussion (continued)

Global Business Services

(Dollars in millions)			Yr. to Yr. Percent	Yr. to Yr. Percent Change Adjusted For
For the three months ended September 30:	2018	2017	Change	Currency
Global Business Services external revenue:	\$ 4,130 \$	4,093	0.9%	2.5%
Consulting	\$ 1,900 \$	1,803	5.4%	6.8%
Global Process Services	314	314	0.1	2.0
Application Management	1,915	1,976	(3.1)	(1.3)

(Dollars in millions) For the nine months ended September 30:	2018	2017	Yr. to Yr. Percent Change	Percent Change Adjusted For Currency
Global Business Services external revenue:	\$ 12,495	\$ 12,196	2.4%	0.5%
Consulting	\$ 5,698	\$ 5,394	5.6%	3.6%
Global Process Services	934	948	(1.4)	(2.4)
Application Management	5,863	5,855	0.1	(2.0)

Global Business Services revenue of \$4,130 million increased 0.9 percent as reported and 3 percent adjusted for currency in the third quarter of 2018 compared to the prior year. The company has realigned its practice model around key growth platforms including digital transformation, cloud applications and cognitive processes. For the first nine months of the year, Global Business Services revenue of \$12,495 million increased 2.4 percent as reported and was flat adjusted for currency.

In the third quarter, Consulting revenue of \$1,900 million increased 5.4 percent as reported and 7 percent adjusted for currency, led by growth in offerings within Digital Strategy, iX and Cognitive Process Transformation. Clients are leveraging IBM s leading-edge technology portfolio and industry expertise to enable their digital transformation. Global Process Services (GPS) revenue of \$314 million was flat as reported and increased 2 percent adjusted for currency. Application Management revenue of \$1,915 million decreased 3.1 percent as reported and 1 percent adjusted for currency with decline in traditional enterprise application managed services partially offset by growth in strategic offerings, such as Cloud Migration Factory.

Third-quarter 2018 GBS strategic imperatives revenue of \$2.7 billion grew 8 percent as reported and 9 percent adjusted for currency. Cloud revenue of \$1.2 billion grew 16 percent as reported and 18 percent adjusted for currency, with an as-a-Service exit run rate of \$1.9 billion. For the first nine months of the year, GBS strategic imperatives revenue of \$7.9 billion grew 9 percent as reported and 7 percent adjusted for currency year to year. Cloud revenue of \$3.3 billion grew 15 percent as reported and 13 percent adjusted for currency.

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Management Discussion (continued)

(Dollars in millions) For the three months ended September 30: Global Business Services:	2018	2017*	Yr. to Yr. Percent/ Margin Change
External gross profit	\$ 1,231 \$	1,108	11.1%
External gross profit margin	29.8%	27.1%	2.7pts.
Pre-tax income	\$ 579 \$	442	30.9%
Pre-tax margin	13.8%	10.6%	3.2pts.

^{*} Recast to reflect adoption of the FASB guidance on presentation of net benefit cost.

(Dollars in millions) For the nine months ended September 30:	2018	2017*	Yr. to Yr. Percent/ Margin Change
Global Business Services:			
External gross profit	\$ 3,292 \$	3,056	7.7%
External gross profit margin	26.3%	25.1%	1.3pts.
Pre-tax income	\$ 1,109 \$	1,035	7.1%
Pre-tax margin	8.7%	8.3%	0.4pts.

^{*} Recast to reflect adoption of the FASB guidance on presentation of net benefit cost.

GBS third-quarter gross profit margin increased 2.7 points to 29.8 percent. The company has continued to shift toward higher value offerings such as Digital and Cognitive to capture price for value, at the same time realigning resources to key skill areas, driving increased utilization and productivity. Pre-tax income of \$579 million increased 30.9 percent year to year and pre-tax margin increased 3.2 points to 13.8 percent. For the first nine months of the year, pre-tax income of \$1,109 million increased 7.1 percent and pre-tax margin improved 0.4 points to 8.7 percent. Pre-tax margin for the first nine months of 2018 included an impact of 0.8 points due to a higher level of charges related to workforce rebalancing in the first-quarter 2018, which is contributing to productivity around labor models and structure.

Technology Services & Cloud Platforms

(Dollars in millions) For the three months ended September 30:	2018	2017	Yr. to Yr. Percent Change	Yr. to Yr. Percent Change Adjusted For Currency
Technology Services & Cloud Platforms external revenue:	\$ 8,292	\$ 8,457	(1.9)%	•
Infrastructure Services	\$ 5,595	\$ 5,665	(1.2)%	1.0%
Technical Support Services	1,707	1,801	(5.2)	(2.7)
Integration Software	990	990	0.0	1.4

(Dollars in millions) For the nine months ended September 30:	2018	2017	Yr. to Yr. Percent Change	Yr. to Yr. Percent Change Adjusted For Currency
Technology Services & Cloud Platforms external revenue:	\$ 25,533	\$ 25,079	1.8%	(0.1)%
Infrastructure Services	\$ 17,188	\$ 16,695	3.0%	0.9%
Technical Support Services	5,239	5,357	(2.2)	(3.5)
Integration Software	3,106	3,027	2.6	0.9

In the third-quarter 2018, TS&CP revenue of \$8,292 million decreased 1.9 percent as reported, but grew for the second consecutive quarter adjusted for currency, driven by growth at constant currency in Infrastructure Services and Integration Software, offset by declines in Technical Support Services. Clients are shifting mission-critical business processes and

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Management Discussion (continued)

applications to the cloud and IBM s differentiated value proposition helps clients optimize across hybrid cloud environments. For the first nine months of the year, TS&CP revenue of \$25,533 million increased 1.8 percent as reported and was flat adjusted for currency.

Infrastructure Services revenue of \$5,595 million decreased 1.2 percent as reported, but increased 1 percent adjusted for currency in the third quarter of 2018 compared to the prior-year period. Performance was driven by growth in hybrid cloud implementations and the company continues to deliver new, open and interoperable approaches to the cloud.

Technical Support Services (TSS) third-quarter revenue of \$1,707 million decreased 5.2 percent as reported and 3 percent adjusted for currency. TSS revenue continues to be impacted by the dynamics of the IBM Z product cycle as clients move from maintenance to warranty for the first year, partially offset by continued growth in core multi-vendor support services.

In the third-quarter 2018, Integration Software revenue of \$990 million was flat as reported and grew 1 percent adjusted for currency driven by offerings that assist clients with the modernization, automation and integration of their applications within a hybrid cloud environment, including strong adoption of IBM Cloud Private.

TS&CP third-quarter 2018 strategic imperatives revenue of \$2.9 billion grew 14 percent year to year as reported and 16 percent adjusted for currency. Cloud revenue of \$2.1 billion grew 19 percent as reported and 22 percent adjusted for currency, with an as-a-Service exit run rate of \$7.5 billion. For the first nine months of the year, TS&CP strategic imperatives revenue of \$9.0 billion grew 21 percent as reported and 19 percent adjusted for currency. Cloud revenue of \$6.4 billion grew 25 percent as reported and 23 percent adjusted for currency.

(Dollars in millions) For the three months ended September 30: Technology Services & Cloud Platforms:	2018	2017*	Percent/ Margin Change
External Technology Services gross profit	\$ 2,696 \$	2,657	1.5%
External Technology Services gross profit margin	36.9%	35.6%	1.3pts.
External Integration Software gross profit	\$ 797 \$	805	(1.0)%
External Integration Software gross profit margin	80.6%	81.3%	(0.8)pts.
External total gross profit	\$ 3,493 \$	3,462	0.9%
External total gross profit margin	42.1%	40.9%	1.2pts.
Pre-tax income	\$ 1,075 \$	1,177	(8.6)%
Pre-tax margin	12.6%	13.7%	(1.1)pts.

^{*} Recast to reflect adoption of the FASB guidance on presentation of net benefit cost.

Yr. to Yr. Percent/

Vm to Vm

(Dollars in millions)			Margin
For the nine months ended September 30:	2018	2017*	Change
Technology Services & Cloud Platforms:			
External Technology Services gross profit	\$ 7,674 \$	7,600	1.0%
External Technology Services gross profit margin	34.2%	34.5%	(0.2)pts.
External Integration Software gross profit	\$ 2,511 \$	2,450	2.5%
External Integration Software gross profit margin	80.9%	80.9%	(0.1) pts.
External total gross profit	\$ 10,185 \$	10,050	1.3%
External total gross profit margin	39.9%	40.1%	(0.2)pts.
Pre-tax income	\$ 2,395 \$	2,845	(15.8)%
Pre-tax margin	9.2%	11.1%	(1.9)pts.

^{*} Recast to reflect adoption of the FASB guidance on presentation of net benefit cost.

Technology Services & Cloud Platforms gross profit margin increased 1.2 points year to year to 42.1 percent in the third quarter. The company continues to make the investments required to capitalize on the shift to cloud by expanding capacity and data center footprints around the world, driving productivity and workforce optimization efficiencies, and investing in hybrid cloud innovation. Pre-tax income of \$1,075 million decreased 8.6 percent in the third quarter. Pre-tax margin declined 1.1 points year to year to 12.6 percent. For the first nine months of 2018, pre-tax income of \$2,395 million decreased 15.8

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Management Discussion (continued)

percent and pre-tax margin decreased 1.9 points to 9.2 percent. The pre-tax margin in the first nine months of 2018 compared to the prior year included an impact of 0.9 points from a higher level of workforce rebalancing charges in the first quarter of 2018.

Services Backlog and Signings

						Yr. to Yr.
						Percent
					Yr. to Yr.	Change
	At Sep	tember 30,	At Sep	tember 30,	Percent	Adjusted For
(Dollars in billions)		2018		2017	Change	Currency
Total backlog	\$	112.8	\$	119.3	(5.4)%	(2.9)%

The estimated total services backlog at September 30, 2018 was \$113 billion, a decrease of 5.4 percent as reported (3 percent adjusted for currency). Global Technology Services (GTS) backlog and GBS backlog declined year to year as reported and adjusted for currency.

Total services backlog includes Infrastructure Services, Consulting, Global Process Services, Application Management and Technical Support Services. Total backlog is intended to be a statement of overall work under contract which is either non-cancellable, or which historically has very low likelihood of termination, given the criticality of certain services to the company sclients. Total backlog does not include as-a-Service arrangements that allow for termination under contractual commitment terms. Backlog estimates are subject to change and are affected by several factors, including terminations, changes in the scope of contracts, periodic revalidations, adjustments for revenue not materialized and adjustments for currency.

Services signings are management s initial estimate of the value of a client s commitment under a services contract. There are no third-party standards or requirements governing the calculation of signings. The calculation used by management involves estimates and judgments to gauge the extent of a client s commitment, including the type and duration of the agreement, and the presence of termination charges or wind-down costs.

Signings include Infrastructure Services, Consulting, Global Process Services and Application Management contracts. Contract extensions and increases in scope are treated as signings only to the extent of the incremental new value. Technical Support Services (TSS) are generally not included in signings as maintenance contracts tend to be more steady state, where revenues equal renewals. Certain longer-term TSS contracts that have characteristics similar to outsourcing contracts are included in signings.

Contract portfolios purchased in an acquisition are treated as positive backlog adjustments provided those contracts meet the company s requirements for initial signings. A new signing will be recognized if a new services agreement is signed incidental or coincidental to an acquisition or divestiture.

(Dollars in millions) For the three months ended September 30: Total signings	\$	2018 8,029	\$	2017 10,385	Yr. to Yr. Percent Change (22.7)%	Yr. to Yr. Percent Change Adjusted For Currency (20.9)%
rom signings	Ψ	0,02)	Ψ	10,303	(22.1)70	(20.7)70
(Dollars in millions) For the nine months ended September 30:		2018		2017	Yr. to Yr. Percent Change	Yr. to Yr. Percent Change Adjusted For Currency
Total signings	\$	28,865	\$	29,178	(1.1)%	(2.6)%
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Management Discussion (continued)

Systems

(Dollars in millions) For the three months ended September 30:	2018	2017	Yr. to Yr. Percent Change	Yr. to Yr. Percent Change Adjusted For Currency
Systems external revenue:	\$ 1,736	\$ 1,721	0.9%	1.8%
Systems Hardware	\$ 1,339	\$ 1,301	3.0%	3.7%
IBM Z			5.2	5.8
Power Systems			15.9	16.7
Storage Systems			(6.4)	(5.6)
Operating Systems Software	397	420	(5.6)	(4.3)

(Dollars in millions) For the nine months ended September 30:	2018	2017		Yr. to Yr. Percent Change	Yr. to Yr. Percent Change Adjusted For Currency
Systems external revenue:	\$ 5,412	\$	4,863	11.3%	9.9%
Systems Hardware	\$ 4,187	\$	3,629	15.4%	14.1%
IBM Z				53.5	52.0
Power Systems				8.9	7.7
Storage Systems				(4.2)	(5.5)
Operating Systems Software	1,225		1,234	(0.7)	(2.3)

Systems revenue of \$1,736 million increased 0.9 percent as reported (2 percent adjusted for currency) in the third quarter of 2018 compared to the prior year. Systems Hardware revenue of \$1,339 million grew 3.0 percent as reported (4 percent adjusted for currency) driven by continued adoption of z14 and double-digit growth in Power Systems, offset by a decline in Storage Systems, as reported and adjusted for currency. Operating Systems Software revenue of \$397 million decreased 5.6 percent as reported and 4 percent adjusted for currency compared to the prior year. For the first nine months of 2018, Systems revenue of \$5,412 million increased 11.3 percent as reported (10 percent adjusted for currency) with strong growth in Systems Hardware, driven by z14 which continues to track ahead of prior cycles and Power Systems, partially offset by declines in Storage Systems and Operating Systems Software.

Within Systems Hardware, third quarter IBM Z revenue grew 5.2 percent as reported (6 percent adjusted for currency), driven by new workload MIPS. The z14 adoption remained broad based, across many countries and industries, and revenue increased year to year despite the strong growth in the prior year. The pervasive encryption capabilities of the z14 continues to be a key differentiator, as new clients were again added to the platform during the third quarter.

Power Systems revenue grew 15.9 percent as reported (17 percent adjusted for currency), driven by strong growth in Linux and good performance across the new POWER9-based architecture. New POWER9 processors for mid-range and high-end systems were launched in the third quarter which are designed for handling advanced analytics, cloud environments and data intensive workloads in AI, HANA and UNIX markets. During the third quarter, the company continued to deliver the most powerful commercially available supercomputers built with POWER9 technology to U.S. Department of Energy labs.

Storage Systems third-quarter revenue declined 6.4 percent as reported (6 percent adjusted for currency), driven by declines in mid-range and high-end, partially offset by strong growth in All Flash Arrays. Storage is an increasingly competitive environment requiring continual investment in innovation. The company has released new functionality to protect critical client data from cyberattacks, and the new FlashSystem with next generation NVMe technology was announced in the quarter.

Third-quarter Systems strategic imperatives revenue of \$0.9 billion grew 5 percent year to year both as reported and adjusted for currency. Cloud revenue of \$0.6 billion declined 9 percent as reported (8 percent adjusted for currency). For the first nine months of the year, Systems strategic imperatives revenue of \$2.9 billion increased 29 percent as reported (28 percent adjusted for currency), primarily due to the strong acceptance of the z14. Cloud revenue of \$1.9 billion increased 12 percent as reported and 10 percent adjusted for currency.

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Management Discussion (continued)

(Dollars in millions) For the three months ended September 30:	2018	2017*	Yr. to Yr. Percent/ Margin Change
Systems:			
External Systems Hardware gross profit	\$ 577 \$	557	3.5%
External Systems Hardware gross profit margin	43.1%	42.8%	0.2pts.
External Operating Systems Software gross profit	\$ 337 \$	366	(7.8)%
External Operating Systems Software gross profit margin	85.0%	87.0%	(2.1)pts.
External total gross profit	\$ 914 \$	923	(1.0)%
External total gross profit margin	52.7%	53.6%	(1.0)pts.
Pre-tax income	\$ 209 \$	337	(37.9)%
Pre-tax margin	10.9%	17.3%	(6.4)pts.

^{*} Recast to reflect adoption of the FASB guidance on presentation of net benefit cost.

(Dollars in millions) For the nine months ended September 30: Systems:		2018	2017*	Yr. to Yr. Percent/ Margin Change
External Systems Hardware gross profit	\$	1.642 \$	1.431	14.8%
External Systems Hardware gross profit margin	φ	39.2%	39.4%	(0.2)pts.
	¢	1,027 \$	1.074	
External Operating Systems Software gross profit	•		,	(4.3)%
External Operating Systems Software gross profit margin		83.9%	87.0%	(3.1)pts.
External total gross profit	\$	2,670 \$	2,505	6.6%
External total gross profit margin		49.3%	51.5%	(2.2)pts.
Pre-tax income/(loss)	\$	352 \$	222	58.8%
Pre-tax margin		5.9%	4.1%	1.8pts.

^{*} Recast to reflect adoption of the FASB guidance on presentation of net benefit cost.

Systems gross profit margin decreased 1.0 points to 52.7 percent in the third quarter of 2018 compared to the prior year. The overall decrease year to year was driven primarily by margin declines in Operating Systems Software. Systems Hardware margins were flat year to year, with growth in IBM Z offset by declines in Power Systems and Storage Systems. For the first nine months of the year, Systems gross profit margin decreased 2.2 points to 49.3 percent compared to the prior year, driven primarily by margin declines in Operating Systems Software. Systems Hardware gross profit margins were flat year to year, with margin declines in IBM Z, Power Systems and Storage Systems offset by a benefit from mix to IBM Z.

In the third quarter of 2018, pre-tax income of \$209 million declined 37.9 percent and pre-tax margin decreased 6.4 points year to year to 10.9 percent, driven primarily by a lower level of IP income and continuing investment to drive innovation across the portfolio. For the first nine months of the year, pre-tax income of \$352 million increased \$131 million and pre-tax margin increased 1.8 points year to year to 5.9 percent, primarily due to the IBM Z product cycle, partially offset by the first-quarter actions taken to improve the systems cost structure over the longer term.

Global Financing

Global Financing is a reportable segment that is measured as a stand-alone entity. Global Financing facilitates IBM clients—acquisition of information technology systems, software and services by providing financing solutions in the areas where the company has the expertise, while generating strong returns on equity. Global Financing also optimizes the recovery of residual values by selling assets sourced from end of lease, leasing used equipment to new clients, or extending lease arrangements with current clients. Sales of equipment include equipment returned at the end of a lease, surplus internal equipment and used equipment purchased externally. Residual value is a risk unique to the financing business and management of this risk is dependent upon the ability to accurately project future equipment values at lease inception. Global Financing has insight into product plans and cycles for the IBM products under lease. Based upon this product information, Global Financing continually monitors projections of future equipment values and compares them with the residual values reflected in the portfolio.

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Management Discussion (continued)

Results of Operations

	Three Months Ended September 30,			Nine Months Ended September 30,			
(Dollars in millions)		2018		2017	2018		2017
External revenue	\$	388	\$	427	\$ 1,188	\$	1,246
Internal revenue		338		272	1,240		925
Total revenue	\$	726	\$	698	\$ 2,428	\$	2,171
Pre-tax income	\$	308	\$	243*	\$ 1,042	\$	835*

^{*} Recast to reflect adoption of the FASB guidance on presentation of net benefit cost.

In the third quarter of 2018, Global Financing total revenue of \$726 million increased 4.0 percent compared to the prior year. External revenue decreased 9.0 percent as reported (7 percent adjusted for currency), due to a decrease in used equipment sales (down 41.5 percent to \$82 million), partially offset by an increase in financing (up 7.0 percent to \$306 million). Internal revenue increased 24.5 percent, driven by an increase in used equipment sales (up 23.9 percent to \$228 million), and an increase in financing (up 25.7 percent to \$110 million).

The increase in total revenue of \$257 million in the first nine months of 2018 compared to the same period in 2017 was due to an increase in internal revenue of 34.1 percent, driven by an increase in used equipment sales (up 40.0 percent to \$926 million) and an increase in financing (up 19.2 percent to \$314 million). External revenue decreased 4.7 percent (6 percent adjusted for currency), driven by a decline in used equipment sales (down 27.2 percent to \$269 million), partially offset by an increase in financing (up 4.8 percent to \$918 million).

The year-to-year increases in internal financing revenue in the three and nine months ended September 30, 2018 were due to higher asset yields and higher average asset balances. The increases in external financing revenue in the third quarter and first nine months of 2018, compared to the same periods in 2017, respectively, were due to higher average asset balances, partially offset by lower asset yields.

Total sales of used equipment represented 42.7 percent and 49.2 percent of Global Financing s revenue in the third quarter and first nine months of 2018, respectively, compared to 46.5 percent and 47.5 percent in the third quarter and first nine months of 2017, respectively. The decrease in the third quarter was due to a lower volume of external used equipment sales, partially offset by increases in internal transactions. The increase in the first nine months of 2018 compared to the prior year was due to higher volumes for internal used equipment sales. The gross profit margin on used sales was 50.9 percent and 33.2 percent in the third quarter of 2018 and 2017, respectively, and 56.6 percent and 45.4 percent in the first nine months of 2018 and 2017, respectively. The increase in the gross profit margin was driven by a shift towards higher margin internal equipment sales.

Global Financing pre-tax income increased 26.9 percent to \$308 million in the third quarter of 2018, compared to the same period in 2017, due to higher gross profit of \$58 million and a decrease in expense of \$7 million. Pre-tax income increased 24.8 percent to \$1,042 million in the first nine months of 2018, compared to the same period in 2017, due to higher gross profit of \$212 million, partially offset by an increase in expense of \$5 million.

Global Financing return on equity was 27.5 percent and 30.5 percent for the three and nine months ended September 30, 2018, respectively, compared to 23.8 percent and 24.5 percent for the three and nine months ended September 30, 2017, respectively. The increase in return on equity in the third quarter and first nine months of 2018, compared to the same periods of 2017, was due to the increase in net income. Refer to page 90 for the details of the after-tax income and return on equity calculation.

Total unguaranteed residual value of leases, including operating leases, was \$663 million as of September 30, 2018. In addition to the unguaranteed residual value, on a limited basis, Global Financing will obtain guarantees of the future value of the equipment to be returned at end of lease. Third-party residual value guarantees increase the minimum lease payments as provided for by accounting standards that are utilized in determining the classification of a lease as a sales-type lease, direct financing lease or operating lease. The aggregate asset values associated with the guarantees of sales-type leases were \$57 million and \$79 million for the financing transactions originated during the quarters ended September 30, 2018 and 2017, respectively, and \$212 million and \$186 million for the nine months ended September 30, 2018 and 2017, respectively.

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Management Discussion (continued)

Geographic Revenue

In addition to the revenue presentation by reportable segment, the company also measures revenue performance on a geographic basis.

(Dollars in millions) For the three months ended September 30:	2018	2017*	Yr. to Yr. Percent Change	Yr. to Yr. Percent Change Adjusted For Currency
Total Revenue	\$ 18,756 \$	19,153	(2.1)%	(0.4)%
Americas	\$ 8,853 \$	8,929	(0.9)%	1.0%
Europe/Middle East/Africa (EMEA)	5,827	6,010	(3.0)	(1.8)
Asia Pacific	4,076	4,215	(3.3)	(1.2)

^{*} Recast to conform to current period presentation.

(Dollars in millions) For the nine months ended September 30:	2018	2017*	Yr. to Yr. Percent Change	Yr. to Yr. Percent Change Adjusted For Currency
Total Revenue	\$ 57,830	\$ 56,597	2.2%	0.4%
Americas	\$ 26,772	\$ 26,851	(0.3)%	0.4%
Europe/Middle East/Africa (EMEA)	18,410	17,224	6.9	1.1
Asia Pacific	12,648	12,522	1.0	(0.3)

^{*} Recast to conform to current period presentation.

In the third quarter, total revenue of \$18,756 million decreased 2.1 percent as reported and was flat adjusted for currency compared to the prior year. Americas revenue of \$8,853 million decreased 0.9 percent as reported, but grew 1 percent adjusted for currency. EMEA revenue of \$5,827 million decreased 3.0 percent as reported and 2 percent adjusted for currency. Asia Pacific revenue of \$4,076 million decreased 3.3 percent as reported and 1 percent adjusted for currency.

Within Americas, U.S. revenue increased 0.2 percent compared to the prior year. Canada increased 0.7 percent as reported and 5 percent adjusted for currency. Latin America decreased 8.6 percent as reported, but grew 3 percent adjusted for currency. Within Latin America, Brazil decreased 14.5 percent as reported, but was flat adjusted for currency.

In EMEA, Germany declined 6.6 percent as reported and 6 percent adjusted for currency. France decreased 5.3 percent as reported and 4 percent adjusted for currency. Italy decreased 1.4 percent as reported and was flat adjusted for currency. The UK increased 5.9 percent as reported and 7 percent adjusted for currency and Spain increased 5.3 percent as reported and 6 percent adjusted for currency. The Middle East and Africa region decreased 11.0 percent as reported and 10 percent adjusted for currency.

Within Asia Pacific, Japan was flat as reported and adjusted for currency compared to the prior year. Australia was flat as reported, but grew 8 percent adjusted for currency. India decreased 21.4 percent (14 percent adjusted for currency) and China decreased 4.2 percent (3 percent adjusted for currency).

Total revenue of \$57,830 million increased 2.2 percent as reported and was flat adjusted for currency in the first nine months of 2018 compared to the prior year. Americas revenue of \$26,772 million was flat as reported and adjusted for currency. EMEA revenue of \$18,410 million increased 6.9 percent as reported and 1 percent adjusted for currency. Asia Pacific revenue of \$12,648 million increased 1.0 percent as reported and was flat on an adjusted for currency basis.

Within Americas, U.S. revenue decreased 0.6 percent compared to the first nine months of the prior year. Canada increased 3.7 percent as reported and 2 percent adjusted for currency. Latin America decreased 2.4 percent as reported, but grew 4 percent adjusted for currency. Within Latin America, Brazil decreased 4.4 percent as reported, but increased 4 percent adjusted for currency.

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Management Discussion (continued)

Within EMEA, the UK increased 9.0 percent as reported and 3 percent adjusted for currency and Germany increased 8.1 percent as reported and 1 percent adjusted for currency. France increased 11.4 percent as reported and 4 percent adjusted for currency. Spain increased 16.6 percent as reported and 9 percent adjusted for currency. Italy increased 6.2 percent as reported, but declined 1 percent adjusted for currency. The Middle East and Africa region increased 2.1 percent as reported and 2 percent adjusted for currency.

Within Asia Pacific, Japan increased 2.1 percent as reported and was flat adjusted for currency. Australia increased 3.3 percent as reported and 5 percent adjusted for currency. India decreased 10.0 percent as reported and 7 percent adjusted for currency, while China was flat as reported, but declined 2 percent adjusted for currency.

Expense

Total Expense and Other (Income)

(Dollars in millions) For the three months ended September 30:	2018	2017	Yr. to Yr. Percent Change
Total consolidated expense and other (income)	\$ 5,807	\$ 5,917*	(1.9)%
Non-operating adjustments:			
Amortization of acquired intangible assets	\$ (112)	\$ (125)	(10.5)%
Acquisition-related charges	(2)	0	nm
Non-operating retirement-related (costs)/income	(389)	(273)*	42.5
Operating (non-GAAP) expense and other (income)	\$ 5,304	\$ 5,519*	(3.9)%
Total consolidated expense-to-revenue ratio	31.0%	30.9%*	0.1pts.
Operating (non-GAAP) expense-to-revenue ratio	28.3%	28.8%*	(0.5)pts.

st Recast to reflect adoption of the FASB guidance on presentation of net benefit cost.

nm - not meaningful

(Dollars in millions) For the nine months ended September 30:	2018	2017	Yr. to Yr. Percent Change
Total consolidated expense and other (income)	\$ 19,341	\$ 18,962*	2.0%
Non-operating adjustments:			
Amortization of acquired intangible assets	\$ (331)	\$ (382)	(13.3)%
Acquisition-related charges	(3)	(19)	(86.1)
Non-operating retirement-related (costs)/income	(1,185)	(969)*	22.3
Operating (non-GAAP) expense and other (income)	\$ 17,822	\$ 17,593*	1.3%
Total consolidated expense-to-revenue ratio	33.4%	33.5%*	(0.1)pts.
Operating (non-GAAP) expense-to-revenue ratio	30.8%	31.1%*	(0.3)pts.

additional information regarding total expense and other (income) for both expense presentations, see the following analyses by categories	ory.

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* Recast to reflect adoption of the FASB guidance on presentation of net benefit cost.

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Management Discussion (continued)

Selling, General and Administrative Expense

(Dollars in millions) For the three months ended September 30:	2018	2017	Yr. to Yr. Percent Change
Selling, general and administrative expense:			
Selling, general and administrative other	\$ 3,805	\$ 4,032*	(5.6)%
Advertising and promotional expense	323	337	(4.3)
Workforce rebalancing charges	26	17	51.7
Amortization of acquired intangible assets	110	125	(11.5)
Stock-based compensation	95	88	8.3
Bad debt expense	4	7	(50.1)
Total consolidated selling, general and administrative expense	\$ 4,363	\$ 4,606*	(5.3)%
Non-operating adjustments:			
Amortization of acquired intangible assets	\$ (110)	\$ (125)	(11.5)%
Acquisition-related charges	(2)	0	nm
Non-operating retirement-related (costs)/income		*	
Operating (non-GAAP) selling, general and administrative expense	\$ 4,251	\$ 4,482*	(5.1)%

^{*} Recast to reflect adoption of the FASB guidance on presentation of net benefit cost.

nm not meaningful

(Dollars in millions) For the nine months ended September 30:	2018	2017	Yr. to Yr. Percent Change
Selling, general and administrative expense:			
Selling, general and administrative other	\$ 12,295	\$ 12,690*	(3.1)%
Advertising and promotional expense	1,131	1,090	3.8
Workforce rebalancing charges	590	188	213.9
Amortization of acquired intangible assets	329	382	(13.7)
Stock-based compensation	264	277	(4.8)
Bad debt expense	56	40	41.1
Total consolidated selling, general and administrative expense	\$ 14,665	\$ 14,666*	0.0%
Non-operating adjustments:			
Amortization of acquired intangible assets	\$ (329)	\$ (382)	(13.7)%
Acquisition-related charges	(3)	(12)	(77.7)
Non-operating retirement-related (costs)/income		*	
Operating (non-GAAP) selling, general and administrative expense	\$ 14,333	\$ 14,273*	0.4%

^{*} Recast to reflect adoption of the FASB guidance on presentation of net benefit cost.

Total selling, general and administrative (SG&A) expense decreased 5.3 percent in the third quarter of 2018 driven primarily by the following factors:

•	Lower spending (4 points) reflecting acquisition synergies and operational efficiencies; and
•	The effects of currency (2 points).
Operating	(non-GAAP) expense decreased 5.1 percent year to year driven primarily by the same factors.
SG&A exp	pense was flat year to year in the first nine months of 2018 versus the first nine months of 2017 driven primarily by the following
•	Higher current year workforce rebalancing charges (2 points); and
•	The effects of currency (1 point); partially offset by
•	Lower spending (4 points).
Operating	(non-GAAP) expense was flat year to year driven primarily by the same factors.
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Management Discussion (continued)

Bad debt expense increased \$16 million year to year in the first nine months of 2018. The receivables provision coverage was 1.9 percent at September 30, 2018, an increase of 30 basis points compared to December 31, 2017 and flat compared to September 30, 2017.

Research, Development and Engineering

(Dollars in millions) For the three months ended September 30:	2018	2017	Yr. to Yr. Percent Change
Total consolidated research, development and engineering expense	\$ 1,252	\$ 1,291*	(3.1)%
Non-operating adjustment:			
Non-operating retirement-related (costs)/income	\$	\$ *	
Operating (non-GAAP) research, development and engineering expense	\$ 1,252	\$ 1,291*	(3.1)%

^{*} Recast to reflect adoption of the FASB guidance on presentation of net benefit cost.

(Dollars in millions) For the nine months ended September 30:	2018	2017	Yr. to Yr. Percent Change
Total consolidated research, development and engineering expense	\$ 4,021	\$ 4,212*	(4.5)%
Non-operating adjustment:			
Non-operating retirement-related (costs)/income	\$	\$ *	
Operating (non-GAAP) research, development and engineering expense	\$ 4,021	\$ 4,212*	(4.5)%

^{*} Recast to reflect adoption of the FASB guidance on presentation of net benefit cost.

Research, development and engineering (RD&E) expense was 6.7 percent and 7.0 percent of revenue in the third quarter and first nine months of 2018, respectively, compared to 6.7 percent and 7.4 percent in the prior-year periods, respectively. The company continues to invest in research and development as it builds new markets and maintains its leadership in enterprise IT.

RD&E expense in the third quarter of 2018 decreased 3.1 percent year to year primarily driven by:

- Lower spending (2 points); and
- The effects of currency (1 point).

- Lower spending (6 points); partially offset by
- The effects of currency (1 point).

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Management Discussion (continued)

Intellectual Property and Custom Development Income

(Dollars in millions) For the three months ended September 30:	2018	2017	Yr. to Yr. Percent Change
Intellectual Property and Custom Development Income:			
Licensing of intellectual property including royalty-based fees	\$ 200	\$ 236	(15.2)%
Custom development income	66	62	7.5
Sales/other transfers of intellectual property	8	10	(13.9)
Total	\$ 275	\$ 308	(10.6)%

(Dollars in millions) For the nine months ended September 30:	2018	2017	Yr. to Yr. Percent Change
Intellectual Property and Custom Development Income:			
Licensing of intellectual property including royalty-based fees	\$ 630	\$ 921	(31.6)%
Custom development income	200	186	7.3
Sales/other transfers of intellectual property	12	11	18.4
Total	\$ 842	\$ 1,118	(24.7)%

Licensing of intellectual property including royalty-based fees decreased 15.2 percent and 31.6 percent year to year in the third quarter and first nine months of 2018, respectively. The company entered into new partnership agreements in the first nine months of 2018, which included three transactions with period income greater than \$100 million. There were two transactions greater than \$100 million in the first nine months of 2017. The company licenses IP to partners who allocate their skills to extend the value of assets that are high value, but may be in mature markets. The timing and amount of licensing, sales or other transfers of IP may vary significantly from period to period depending upon the timing of licensing agreements, economic conditions, industry consolidation and the timing of new patents and know-how development.

Other (Income) and Expense

(Dollars in millions) For the three months ended September 30:	2018	2017	Yr. to Yr. Percent Change
Other (income) and expense:			
Foreign currency transaction losses/(gains)	\$ (76) \$	37	nm
(Gains)/losses on derivative instruments	63	(29)	nm
Interest income	(70)	(38)	81.7%
Net (gains)/losses from securities and investment assets	(8)	(6)	48.4
Retirement-related costs/(income)	389	273*	42.5
Other	(23)	(79)	(70.8)
Total consolidated other (income) and expense	\$ 275 \$	159*	73.5%
Non-operating adjustments:			
Amortization of acquired intangible assets	\$ (1) \$		nm

Acquisition-related charges			
Non-operating retirement-related (costs)/income	(389)	(273)*	42.5
Operating (non-GAAP) other (income) and expense	\$ (115) \$	(114)	0.5%

^{*} Recast to reflect adoption of the FASB guidance on presentation of net benefit cost.

nm - not meaningful

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Management Discussion (continued)

(Dollars in millions) For the nine months ended September 30:	2018	2017	Yr. to Yr. Percent Change
Other (income) and expense:			
Foreign currency transaction losses/(gains)	\$ (349)	\$ 374	nm
(Gains)/losses on derivative instruments	449	(351)	nm
Interest income	(187)	(102)	82.6%
Net (gains)/losses from securities and investment assets	(89)	(16)	472.8
Retirement-related costs/(income)	1,185	969*	22.3
Other	(42)	(123)	(66.3)
Total consolidated other (income) and expense	\$ 968	\$ 751*	28.8%
Non-operating adjustments:			
Amortization of acquired intangible assets	\$ (1)	\$	nm
Acquisition-related charges		(7)	(100.0)%
Non-operating retirement-related (costs)/income	(1,185)	(969)*	22.3
Operating (non-GAAP) other (income) and expense	\$ (219)	\$ (225)	(2.8)%

^{*} Recast to reflect adoption of the FASB guidance on presentation of net benefit cost.

nm - not meaningful

Total consolidated other (income) and expense was expense of \$275 million in the third quarter of 2018, an increase of 73.5 percent compared to the third quarter of 2017. The increase was primarily driven by:

- Higher non-operating retirement-related costs (\$116 million) with drivers described in the Retirement-Related Plans cost section; and
- Lower gains on real estate transactions (reflected in Other in the table above) (\$56 million); partially offset by
- Higher interest income (\$31 million); and
- Higher net exchange gains (\$21 million).

Operating (non-GAAP) other (income) and expense was income of \$115 million in the third quarter of 2018 and was flat year to year driven by the same factors as above, excluding the higher non-operating retirement-related costs.

	solidated other (income) and expense was expense of \$968 million in the first nine months of 2018, an increase of 28.8 percent year transfer was primarily driven by:
•	Higher non-operating retirement-related costs (\$216 million);
•	Higher net exchange losses (\$77 million); and
• by	Lower gains on real estate transactions (reflected in Other in the table above) (\$52 million); partially offset
•	Higher interest income (\$85 million); and
•	Increased gains from securities and investment assets (\$74 million).
	(non-GAAP) other (income) and expense was income of \$219 million in the first nine months of 2018, a decrease of 2.8 percent year ne year-to-year change was driven primarily by the same factors as above, excluding the higher non-operating retirement-related cost

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Management Discussion (continued)

Interest Expense

(Dollars in millions) For the three months ended September 30:	2018	2017		Yr. to Yr. Percent Change
Interest expense	\$ 191	\$	168	13.8%
(Dollars in millions)				Yr. to Yr. Percent
` '				
For the nine months ended September 30:	2018	2017		Change
Interest expense	\$ 530	\$	451	17.5%

Interest expense increased \$23 million and \$79 million year to year in the third quarter and first nine months of 2018, respectively. Interest expense is presented in cost of financing in the Consolidated Statement of Earnings if the related external borrowings are to support the Global Financing external business. Overall interest expense (excluding capitalized interest) for the third quarter and first nine months of 2018 was \$384 million and \$1,098 million, respectively, an increase of \$49 million and \$151 million versus the comparable prior year periods, primarily driven by a higher average debt balance and higher average interest rates.

Retirement-Related Plans

The following table provides the total pre-tax cost for all retirement-related plans. The operating cost amounts are included in the Consolidated Statement of Earnings within the caption (e.g., Cost, SG&A, RD&E) relating to the job function of the plan participants. The non-operating cost amounts are included in other (income) and expense.

(Dollars in millions) For the three months ended September 30:	2018	2017	Yr. to Yr. Percent Change
Retirement-related plans cost:			Ü
Service cost	\$ 109	\$ 111	(1.6)%
Multi-employer plans	9	11*	(22.2)
Cost of defined contribution plans	247	258	(4.2)
Total operating costs/(income)	\$ 365	\$ 380*	(4.0)%
Interest cost	\$ 677	\$ 746	(9.3)%
Expected return on plan assets	(1,007)	(1,096)	(8.1)
Recognized actuarial losses	731	728	0.3
Amortization of prior service costs/(credits)	(18)	(22)*	(18.6)
Curtailments/settlements	2	2	(16.7)
Other costs	5	(85)	nm
Total non-operating costs/(income)	\$ 389	\$ 273*	42.5%
Total retirement-related plans cost	\$ 754	\$ 653	15.5%

* Recast to reflect adoption of the FASB guidance on presentation of net benefit cost.

nm - not meaningful

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Management Discussion (continued)

(Dollars in millions) For the nine months ended September 30:	2018	20	017	Yr. to Yr. Percent Change
Retirement-related plans cost:				g .
Service cost	\$ 323	\$	323	0.1%
Multi-employer plans	29		30*	(3.6)
Cost of defined contribution plans	763		776	(1.6)
Total operating costs/(income)	\$ 1,115	\$	1,128*	(1.2)%
Interest cost	\$ 2,053	\$	2,215	(7.3)%
Expected return on plan assets	(3,047)		(3,250)	(6.2)
Recognized actuarial losses	2,212		2,143	3.2
Amortization of prior service costs/(credits)	(55)		(66)*	(15.9)
Curtailments/settlements	7		3	110.7
Other costs	16		(76)	nm
Total non-operating costs/(income)	\$ 1,185	\$	969*	22.3%
Total retirement-related plans cost	\$ 2,300	\$	2,097	9.7%

^{*} Recast to reflect adoption of the FASB guidance on presentation of net benefit cost.

nm - not meaningful

In the third quarter of 2018, total pre-tax retirement-related plan cost increased by \$101 million compared to the third quarter of 2017, primarily driven by lower expected return on plan assets (\$89 million) and an increase in other costs (\$90 million) driven by a pension obligation adjustment recorded in the prior year related to the UK pension litigation; partially offset by lower interest costs (\$69 million). Total cost for the first nine months of 2018 increased by \$203 million versus the first nine months of 2017, primarily driven by lower expected return on plan assets (\$203 million), an increase in recognized actuarial losses (\$70 million) and an increase in other costs (\$92 million) driven by the prior year pension obligation adjustment; partially offset by lower interest costs (\$162 million).

As discussed in the Operating (non-GAAP) Earnings section on page 58, the company characterizes certain retirement-related costs as operating and others as non-operating. Utilizing this characterization, operating retirement-related costs in the third quarter of 2018 were \$365 million, a decrease of \$15 million compared to the third quarter of 2017 and non-operating costs were \$389 million increasing \$116 million year to year. For the first nine months of 2018, operating retirement-related costs were \$1,115 million, a decrease of \$13 million compared to the prior year and non-operating costs were \$1,185 million increasing \$216 million in the first nine months of 2018 compared to the prior year driven primarily by the same factors as above.

Taxes

The continuing operations effective tax rate for the third quarter of 2018 was 10.2 percent, a decrease of 0.9 points compared to the third quarter of 2017. The continuing operations effective tax rate for the first nine months of 2018 was 2.0 percent, an increase of 0.3 points compared to the first nine months of 2017. The operating (non-GAAP) tax rate for the third quarter was 12.8 percent, a decrease of 2.0 points compared to the third quarter of 2017. The operating (non-GAAP) tax rate for the first nine months of 2018 was 5.4 percent, a decrease of 1.8 points compared to the first nine months of 2017.

The decrease in the continuing operations effective tax rate in the third quarter of 2018 was primarily driven by a net discrete tax benefit primarily attributable to a tax incentive claim approved by the IRS in the quarter (4.8 points) and a more favorable mix of geographic income year to year (1.7 points). These benefits were partially offset by a decrease in foreign tax credits (4.6 points) as well as the net impact of audit activity in the third quarter (1.0 points). The decrease in the operating (non-GAAP) tax rate for the third quarter of 2018 was driven by the same factors.

The change in the continuing operations effective tax rate for the first nine months of 2018 compared to 2017 was primarily driven by the year to year impacts above, as well as a discrete tax benefit in the first quarter of 2018 from the resolution of certain U.S. federal audit activity. These benefits were partially offset by the first-half 2018 net provisional charge related to U.S. tax reform and prior year tax benefits related to the intercompany transfer of IP and foreign audit activity.

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Management Discussion (continued)

The change in the operating (non-GAAP) tax rate was primarily driven by the same factors, except for the impact of the provisional net tax charge in the first nine months of 2018 related to U.S. tax reform.

Earnings Per Share

Basic earnings per share is computed on the basis of the weighted-average number of shares of common stock outstanding during the period. Diluted earnings per share is computed on the basis of the weighted-average number of shares of common stock outstanding plus the effect of dilutive potential common shares outstanding during the period using the treasury stock method. Dilutive potential common shares include outstanding stock options and stock awards.

For the three months ended September 30: Earnings per share of common stock from continuing operations:	2018	2017	Yr. to Yr. Percent Change
Assuming dilution	\$ 2.94	\$ 2.92	0.7%
Basic	\$ 2.95	\$ 2.93	0.7%
Diluted operating (non-GAAP)	\$ 3.42	\$ 3.26*	4.9%
Weighted-average shares outstanding: (in millions)			
Assuming dilution	915.2	933.2	(1.9)%
Basic	911.2	929.4	(2.0)%

^{*} Recast to reflect adoption of the FASB guidance on presentation of net benefit cost.

For the nine months ended September 30: Earnings per share of common stock from continuing operations:	2018	2017	Yr. to Yr. Percent Change
Assuming dilution	\$ 7.36	\$ 7.24	1.7%
Basic	\$ 7.39	\$ 7.28	1.5%
Diluted operating (non-GAAP)	\$ 8.96	\$ 8.54*	4.9%
Weighted-average shares outstanding: (in millions)			
Assuming dilution	920.0	940.2	(2.1)%
Basic	915.6	935.6	(2.1)%

^{*} Recast to reflect adoption of the FASB guidance on presentation of net benefit cost.

Actual shares outstanding at September 30, 2018 were 908.8 million. The weighted-average number of common shares outstanding assuming dilution during the third quarter and first nine months of 2018 were 18.0 million and 20.2 million shares lower than the same periods of 2017. The decreases were primarily the result of the common stock repurchase program.

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Financi	al P	ดราทากท

Dynamics

At September 30, 2018, the balance sheet remained strong and the company continues to have the financial flexibility to support the business for the long term. Cash, restricted cash and marketable securities at quarter end were \$14,662 million. The company continues to manage the investment portfolio to meet its capital preservation and liquidity objectives. Total debt of \$46,921 million increased \$97 million from December 31, 2017, driven by new debt issuances of \$2,756 million and an increase in commercial paper of \$2,490 million; partially offset by debt maturities of \$4,243 million. Within total debt, \$30,367 million, or approximately 65 percent, is in support of the Global Financing business. In the first nine months of 2018, the company generated \$11,128 million in cash from operations, compared to \$10,991 million in the first nine months of 2017. The company has consistently generated strong cash flows from operations and continues to have access to additional sources of liquidity through the capital markets and its credit facilities.

The assets and debt associated with the Global Financing business are a significant part of the company s financial position. The financial position amounts appearing on pages 5 and 6 are the consolidated amounts including Global Financing.

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Management Discussion (continued)

Global Financing Financial Position Key Metrics:

(Dollars in millions)	A	At September 30, 2018		At December 31, 2017
Cash and cash equivalents	\$	1,969	\$	2,696
Net investment in sales-type and direct financing leases (1)		6,626		7,253
Equipment under operating leases external clients (2)		495		477
Client loans		11,473		12,450
Total client financing assets		18,595		20,180
Commercial financing receivables		9,355		11,590
Intercompany financing receivables (3) (4)		4,843		5,056
Total assets	\$	38,058	\$	41,096
Debt	\$	30,367	\$	31,434
Total equity	\$	3,374	\$	3,484

⁽¹⁾ Includes deferred initial direct costs which are eliminated in IBM s consolidated results.

(2) Includes intercompany mark-up, priced on an arm s-length basis, on products purchased from the company s product divisions

which is eliminated in IBM s consolidated results.

- (3) Entire amount eliminated for purposes of IBM s consolidated results and therefore does not appear on pages 5 and 6.
- (4) These assets, along with all other financing assets in this table, are leveraged at the value in the table using Global Financing debt.

At September 30, 2018, substantially all client and commercial financing assets were IT related assets, and approximately 55 percent of the total external portfolio was with investment grade clients with no direct exposure to consumers. This investment grade percentage is based on the credit ratings of the companies in the portfolio.

The company has a long-standing practice of taking mitigating actions, in certain circumstances, to transfer credit risk to third parties, including credit insurance, financial guarantees, non-recourse borrowings, transfers of receivables recorded as true sales in accordance with accounting guidance or sales of equipment under operating lease. Adjusting for the mitigation actions, the investment grade content would increase by 15 points to 69 percent, an increase of 2 points year to year.

IBM Working Capital

(Dollars in millions)	At September 30, 2018	At December 31, 2017
Current assets	\$ 48,2	257 \$ 49,73
Current liabilities	36,8	37,36
Working capital	\$ 11,4	135 \$ 12,37
Current ratio	1.3	1:1 1.33

Working capital decreased \$937 million from the year-end 2017 position. The key changes are described below:

Current assets decreased \$1,478 million (\$188 million adjusted for currency) due to:

- A decrease in receivables of \$4,543 million (\$3,894 million adjusted for currency) primarily driven by seasonal declines in financing receivables of \$2,472 million and trade receivables of \$1,857 million; partially offset by
- An increase of \$1,820 million (\$2,274 million adjusted for currency) in cash, restricted cash and marketable securities; and
- An increase of \$528 million (\$611 million adjusted for currency) in prepaid expenses and other current assets primarily due to the reclassification of certain trade receivables upon adoption of the new revenue standard.

Current liabilities decreased \$541 million (increased \$499 million adjusted for currency) as a result of:

• A decrease in taxes payable of \$1,717 million (\$1,627 million adjusted for currency) principally driven by the resolution in the first-quarter of certain matters related to the U.S. tax audit of the company s 2013-2014 tax returns; and

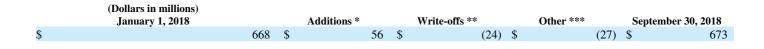
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Management Discussion (continued)

- A decrease in accounts payable of \$1,067 million (\$958 million adjusted for currency) reflecting declines from typically higher year-end balances; and
- A decrease in deferred income of \$849 million (\$562 million adjusted for currency) driven by amortization; and
- A decrease in other accrued expenses and liabilities of \$810 million (\$422 million adjusted for currency) driven by declines in derivative liabilities; partially offset by
- An increase in short-term debt of \$3,945 million (\$4,019 million adjusted for currency) primarily as a result of reclassifications of \$5,264 million from long-term debt to reflect upcoming maturities and an increase in commercial paper of \$2,490 million partially offset by maturities of \$3,808 million.

Receivables and Allowances

Roll Forward of Total IBM Receivables Allowance for Credit Losses (included in Total IBM)



^{*} Additions for Allowance for Credit Losses are charged to expense.

The total IBM receivables provision coverage was 1.9 percent at September 30, 2018, an increase of 30 basis points compared to December 31, 2017. The increase was primarily driven by the overall decline in gross receivables.

^{**} Refer to note A, Significant Accounting Policies, in the company s 2017 Annual Report on pages 92 and 93 for additional information regarding Allowance for Credit Loss write-offs.

^{***} Primarily represents translation adjustments.

Global Financing Receivables and Allowances

The following table presents external Global Financing receivables excluding residual values, the allowance for credit losses and immaterial miscellaneous receivables.

(Dollars in millions)	At S	At September 30, 2018		At December 31, 2017
Recorded investment (1)	\$	27,141	\$	30,892
Specific allowance for credit losses		252		258
Unallocated allowance for credit losses		73		78
Total allowance for credit losses		325		336
Net financing receivables	\$	26,816	\$	30,556
Allowance for credit losses coverage		1.2%	'n	1.1%

⁽¹⁾ Includes deferred initial direct costs which are eliminated in IBM s consolidated results.

The percentage of Global Financing receivables reserved increased from 1.1 percent at December 31, 2017, to 1.2 percent at September 30, 2018. The increase was primarily driven by the overall decline in gross receivables. Specific reserves decreased 2 percent from \$258 million at December 31, 2017, to \$252 million at September 30, 2018. Unallocated reserves decreased 6 percent from \$78 million at December 31, 2017, to \$73 million at September 30, 2018.

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Management Discussion (continued)

Roll Forward of Global Financing Receivables Allowance for Credit Losses

(Dollars in millions)							
January 1, 2018		Additions *		Write-offs **	Other ***	Septe	mber 30, 2018
\$	336	\$	18	\$ (15)	\$ (14)	\$	325

- * Additions for Allowance for Credit Losses are charged to expense.
- ** Refer to note A, Significant Accounting Policies, in the company s 2017 Annual Report on pages 92 and 93 for additional information regarding allowance for credit loss write-offs.
- *** Primarily represents translation adjustments.

Global Financing s bad debt expense was a release of \$6 million for the three months ended September 30, 2018, compared to a \$1 million release for the same period in 2017 due to lower unallocated allowance requirements.

Global Financing s bad debt expense was \$18 million for the nine months ended September 30, 2018 compared to \$14 million in the prior year, due to higher specific allowance requirements in 2018.

Noncurrent Assets and Liabilities

(Dollars in millions)	At Septen 201	,	At December 31, 2017		
Noncurrent assets	\$	73,733	\$	75,621	
Long-term debt	\$	35,989	\$	39,837	
Noncurrent liabilities (excluding debt)	\$	29,261	\$	30,432	

The decrease in noncurrent assets of \$1,888 million (\$748 million adjusted for currency) was driven by:

• A decrease of \$1,372 million in long-term financing receivables (\$1,209 million adjusted for currency) reflecting seasonal reductions from higher year-end balances; and

	A decrease in net intangible assets and goodwill of \$870 million (\$579 million adjusted for currency) rom amortization and currency impacts; partially offset by
	An increase in retirement plan assets of \$1,012 million (\$1,111 million adjusted for currency) driven by the eturns on plan assets, partially offset by interest costs.
Long-term de	ebt decreased \$3,848 million (\$3,641 million adjusted for currency) primarily driven by:
• R	Reclassifications to short-term debt of \$5,264 million to reflect upcoming maturities; partially offset by
• Is	ssuances of \$2,563 million.
Noncurrent li	iabilities (excluding debt) decreased \$1,171 million (\$337 million adjusted for currency) primarily driven by:
	A decrease in retirement and nonpension postretirement liabilities of \$946 million driven by a currency \$405 million.
<u>Debt</u>	
The company Additionally,	y s funding requirements are continually monitored and strategies are executed to manage the overall asset and liability profile., the company maintains sufficient flexibility to access global funding sources as needed.
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Management Discussion (continued)

(Dollars in millions)	At Septer	,	At December 31, 2017		
Total company debt	\$	46,921	\$	46,824	
Total Global Financing segment debt	\$	30,367	\$	31,434	
Debt to support external clients		26,494		27,556	
Debt to support internal clients		3,873		3,878	
Non-Global Financing debt	\$	16,554	\$	15,390	

Total debt of \$46,921 million increased \$97 million from December 31, 2017, driven by new debt issuances of \$2,756 million and an increase in commercial paper of \$2,490 million; partially offset by debt maturities of \$4,243 million.

Global Financing provides financing predominantly for the company s external client assets, as well as for assets under contract by other IBM units. These assets, primarily for Technology Services & Cloud Platforms, generate long-term, stable revenue streams similar to the Global Financing asset portfolio. Based on their attributes, these Technology Services & Cloud Platforms assets are leveraged with the balance of the Global Financing asset base. IBM Credit LLC began issuing public debt in September 2017.

Non-Global Financing debt of \$16,554 million was up \$1,164 million from December 31, 2017 and up \$319 million from September 30, 2017.

Global Financing debt-to-equity ratio

At September 30, 2018	At December 31, 2017	
9 Ox	9 ()x

The debt used to fund Global Financing assets is composed of intercompany loans and external debt. Total debt changes generally correspond with the level of client and commercial financing receivables, the level of cash and cash equivalents, the change in intercompany and external payables and the change in intercompany investment from IBM. The terms of the intercompany loans are set by the company to substantially match the term, currency and interest rate variability underlying the financing receivable and are based on arm s-length pricing.

Global Financing provides financing predominantly for the company s external client assets, as well as for assets under contract by other IBM units. As previously stated, the company measures Global Financing as a stand-alone entity, and accordingly, interest expense relating to debt supporting Global Financing s external client and internal business is included in the Global Financing Results of Operations on page 72 and in note 7, Segments, on pages 37 and 38. In the company s Consolidated Statement of Earnings, the external debt-related interest expense supporting Global Financing s internal financing to the company is reclassified from cost of financing to interest expense.

Equity

Total equity increased by \$2,194 million from December 31, 2017 primarily due to increases from net income (\$6,777 million), an increase in retirement-related amounts (\$1,648 million) and transition adjustments related to the adoption of the new revenue standard (\$524 million); partially offset by decreases from dividends (\$4,250 million) and an increase in treasury stock (\$2,489 million) primarily due to share repurchases.

Cash Flow

The company s cash flows from operating, investing and financing activities, as reflected in the Consolidated Statement of Cash Flows on page 7, are summarized in the following table. These amounts include the cash flows associated with the Global Financing business.

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Management Discussion (continued)

(Dollars in millions)

For the nine months ended September 30:	2018	2017
Net cash provided by/(used in) continuing operations:		
Operating activities	\$ 11,128 \$	10,991
Investing activities	(5,368)	(3,271)*
Financing activities	(5,864)	(5,499)
Effect of exchange rate changes on cash, cash equivalents and restricted cash	(399)	875
Net change in cash, cash equivalents and restricted cash	\$ (503) \$	3,096*

^{*} Recast to reflect adoption of the FASB guidance on restricted cash.

Net cash provided by operating activities increased \$137 million as compared to the first nine months of 2017 driven by the following key factors:

- An increase in cash provided by financing receivables of \$406 million; partially offset by
- An increase in cash income tax payments of \$266 million.

Net cash used in investing activities increased \$2,097 million driven by:

- An increase from net purchases of marketable securities and other investments of \$1,797 million; and
- An increase in cash used for net capital expenditures of \$492 million; partially offset by
- A decrease in net cash used related to acquisitions of \$319 million.

Net cash used in financing activities increased \$365 million driven by the following factors:

•	A decrease in net	cash sourced from	debt transactions	of \$1,465	million prii	marily driver	ı by a lower l	evel of
issuances	s and maturities in	the current year; p	partially offset by					

•	A decrease in	cash used for	gross common share re	epurchases of \$1,281 r	million.
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Looking Forward

The company s strategies, investments and actions are all made with an objective of optimizing long-term performance. A long-term perspective ensures that the company is well-positioned to take advantage of the major shifts in technology, business and the global economy.

As part of its strategic model, the company expects to continue to allocate capital efficiently and effectively to investments, and to return value to shareholders through a combination of dividends and share repurchases. Over the long term, in consideration of the opportunities it will continue to develop, the company continues to expect to have the ability to generate low single-digit revenue growth, and with a higher-value business mix, mid single-digit profit growth, high single-digit operating (non-GAAP) earnings per share growth, with free cash flow realization of GAAP net income over 90 percent.

Over the last several years, the company has been making investments and shifting resources, embedding AI and cloud into its offerings while building new solutions and modernizing its existing platforms. These investments not only drive current performance, but will extend the company s innovation leadership into the future. The company s key differentiators are built around three pillars - innovative technology, industry expertise and trust and security, uniquely delivered through an integrated model.

The company s performance in the third quarter and first nine months of 2018 reflects the investments that have been made and actions taken to reposition the business, further align the company s skills base to opportunity and drive operating efficiencies. The company has been rebuilding its innovation pipeline in order to address the areas enterprise clients value in an IT industry that has been rapidly reordering; technologies such as AI, blockchain and cybersecurity; delivered in hybrid cloud environments. In the first nine months of 2018, the company delivered revenue growth, as reported and adjusted for currency, an improving gross margin trajectory which was flat in the third quarter compared to the prior year (GAAP and

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Management Discussion (continued)

operating (non-GAAP)) and returned significant value to shareholders. This is consistent with the long-term model and reinforces the company s position as high-value.

At mid-October spot rates, the company expects a 0 to 1 point currency benefit to full-year 2018 revenue growth, including a 2 point currency headwind in the fourth quarter and continues to expect full-year revenue growth. The company expects average seasonality (of the last three to five years) for revenue performance from the third to fourth quarter. With enterprise productivity, the company expects both GAAP and operating (non-GAAP) pre-tax margin expansion in the fourth quarter.

Overall, the company continues to expect GAAP earnings per share from continuing operations for 2018 to be at least \$11.60; excluding acquisition-related charges of \$0.78 per share, non-operating retirement-related items of \$1.32 per share and U.S. tax reform related one-time charges of \$0.10 per share, operating (non-GAAP) earnings per share is expected to be at least \$13.80. GAAP earnings per share from continuing operations expectations do not include any estimate for final impacts that will be recorded in the fourth-quarter 2018 from U.S. tax reform enactment.

The company continues to expect free cash flow to be approximately \$12 billion in 2018. Free cash flow expectations for the year include a year-to-year headwind from strong receivables performance in 2017, a year-to-year headwind from cash tax payments, which was fully realized by the end of the second quarter, and a full year expected increase in capital expenditures. Free cash flow realization, which is defined as free cash flow to income from continuing operations (GAAP), is expected to be over 100% for the year, driven by sales cycle working capital, pension and capital expenditures (net of depreciation and amortization), mitigated by income taxes.

For 2018, the company expects the GAAP tax rate to be approximately 2 points lower than the operating (non-GAAP) tax rate expectation. The company expects its operating (non-GAAP) tax rate for 2018 to be 16 percent, plus or minus 2 points (excluding discrete items). The tax rates reflect U.S. tax reform, which includes a lower U.S. corporate tax rate, offset by the broader tax base and reduced foreign tax credit utilization. The rate will change year to year based on discrete tax events, such as the settlement of income tax audits and changes in tax laws, as well as recurring factors including the geographic mix of income before taxes, state and local taxes and the effects of various global income tax strategies. The GAAP tax rate could be affected by changes to the net provisional charge recorded by the company for U.S. tax reform enactment, as the charge is finalized in the fourth quarter. Including these items, the company expects a lower GAAP tax rate and a higher operating (non-GAAP) tax rate on a year-to-year basis.

The company expects 2018 pre-tax retirement-related plan cost to be approximately \$3.1 billion, an increase of approximately \$200 million compared to 2017. This estimate reflects current pension plan assumptions at December 31, 2017. Consistent with the new FASB guidance for the presentation of net periodic pension and postretirement benefit costs, within total retirement-related plan cost, operating retirement-related plan cost is expected to be approximately \$1.5 billion, approximately flat versus 2017. Non-operating retirement-related plan cost is expected to be approximately \$1.6 billion, an increase of approximately \$200 million compared to 2017, driven by lower income from expected return on assets and a year-to-year impact due to the pension obligation adjustment resulting from the successful resolution of the UK pension litigation matter in 2017. Contributions for all retirement-related plans are expected to be approximately \$2.3 billion in 2018, a decrease of approximately \$100 million compared to 2017.

Beginning in 2019, the company projects that within the IBM U.S. Qualified Personal Pension Plan, substantially all the plan participants will be considered inactive, which, as required by U.S. GAAP, will result in a change in the amortization period of unrecognized actuarial losses, from the average remaining service period to the average remaining life expectancy of plan participants. These periods are approximately 8 years and 18 years, respectively. As a result of this change, the company expects a reduction to 2019 amortization expense in the range of \$800 million to \$1.0 billion. Actuarial loss amortization is reported within non-operating pension costs. There will be no impact to operating (non-GAAP) retirement-related costs. There will be no impact to the funded status, retiree benefit payments or funding requirements of the U.S. Qualified Personal Pension Plan, however there will be an impact to free cash flow realization in 2019. The company is not able to provide expectations on the overall expected 2019 pre-tax retirement-related plan cost, as certain assumptions, such as discount rates, could have a material impact on the cost and are not available until December 31, 2018.

Currency Rate Fluctuations

Changes in the relative values of non-U.S. currencies to the U.S. dollar (USD) affect the company s financial results and financial position. At September 30, 2018, currency changes resulted in assets and liabilities denominated in local currencies

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Management Discussion (continued)

being translated into fewer dollars than at year-end 2017. The company uses financial hedging instruments to limit specific currency risks related to financing transactions and other foreign currency-based transactions.

During periods of sustained movements in currency, the marketplace and competition adjust to the changing rates. For example, when pricing offerings in the marketplace, the company may use some of the advantage from a weakening U.S. dollar to improve its position competitively, and price more aggressively to win the business, essentially passing on a portion of the currency advantage to its customers. Competition will frequently take the same action. Consequently, the company believes that some of the currency-based changes in cost impact the prices charged to clients. The company also maintains currency hedging programs for cash management purposes which temporarily mitigate, but do not eliminate, the volatility of currency impacts on the company s financial results.

The company translates revenue, cost and expense in its non-U.S. operations at current exchange rates in the reported period. References to adjusted for currency or constant currency reflect adjustments based upon a simple mathematical formula. However, this constant currency methodology that the company utilizes to disclose this information does not incorporate any operational actions that management could take to mitigate fluctuating currency rates. Currency movements impacted the company s year-to-year revenue and earnings per share growth in the first nine months of 2018. Based on the currency rate movements in the first nine months of 2018, total revenue increased 2.2 percent as reported and 0.4 percent at constant currency versus the first nine months of 2017. On an income from continuing operations before income tax basis, these translation impacts offset by the net impact of hedging activities resulted in a theoretical maximum (assuming no pricing or sourcing actions) increase of approximately \$200 million in the first nine months of 2018 on an as-reported basis and an increase of approximately \$225 million on an operating (non-GAAP) basis. The same mathematical exercise resulted in a decrease of approximately \$10 million in the first nine months of 2017 on an as-reported basis and a decrease of approximately \$20 million on an operating (non-GAAP) basis. The company views these amounts as a theoretical maximum impact to its as-reported financial results. Considering the operational responses mentioned above, movements of exchange rates, and the nature and timing of hedging instruments, it is difficult to predict future currency impacts on any particular period, but the company believes it could be substantially less than the theoretical maximum given the competitive pressure in the marketplace.

For non-U.S. subsidiaries and branches that operate in U.S. dollars or whose economic environment is highly inflationary, translation adjustments are reflected in results of operations. Generally, the company manages currency risk in these entities by linking prices and contracts to U.S. dollars.

In recent months there have been reported economic events impacting the Argentinean economy, such as significant depreciation of the Argentine peso, increases in interest rates and the Argentine government requesting financial assistance from the International Monetary Fund. The three-year cumulative inflation rates, using a combination of monthly indices, exceeded the 100% threshold for hyperinflation. As a result, effective July 1, 2018, the company changed the functional currency from local currency to U.S. dollar functional for Argentina with no material impact. The ongoing impact from the change is not expected to be material given the size of the company s operations in the country (less than 1 percent of total 2017 revenue).

Liquidity and Capital Resources

In the company s 2017 Annual Report, on pages 67 to 70, there is a discussion of the company s liquidity including two tables that present five years of data. The table presented on page 67 includes net cash from operating activities, cash and marketable securities and the size of the company s global credit facilities for each of the past five years. For the nine months ended, or as of, as applicable, September 30, 2018, those amounts are \$11.1 billion of net cash from operating activities, \$14.7 billion of cash, restricted cash and marketable securities and \$15.3 billion in global credit facilities, respectively.

The major rating agencies—ratings on the company—s debt securities at September 30, 2018 appear in the following table. The ratings remain unchanged from December 31, 2017. The company does not have—ratings trigger—provisions in its debt covenants or documentation, which would allow the holders to declare an event of default and seek to accelerate payments thereunder in the event of a change in credit rating. The company—s contractual agreements governing derivative instruments contain standard market clauses which can trigger the termination of the agreement if the company—s credit rating were to fall below investment grade. At September 30, 2018, the fair value of those instruments that were in a liability position was \$415 million, before any applicable netting, and this position is subject to fluctuations in fair value period to period based on the level of the company—s outstanding instruments and market conditions. The company has no other contractual arrangements that, in the event of a change in credit rating, would result in a material adverse effect on its financial position or liquidity.

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Management Discussion (continued)

	STANDARD AND	MOODY S INVESTORS	FITCH
IBM and IBM Credit LLC ratings:	POOR S	SERVICE	RATINGS
Senior long-term debt	A+	A1	A+
Commercial paper	A-1	Prime-1	F1

The company prepares its Consolidated Statement of Cash Flows in accordance with applicable accounting standards for cash flow presentation on page 7 of this Form 10-Q and highlights causes and events underlying sources and uses of cash in that format on page 86. For the purpose of running its business, the company manages, monitors and analyzes cash flows in a different manner.

Management uses free cash flow as a measure to evaluate its operating results, plan share repurchase levels, strategic investments and assess its ability and need to incur and service debt. The entire free cash flow amount is not necessarily available for discretionary expenditures. The company defines free cash flow as net cash from operating activities less the change in Global Financing receivables and net capital expenditures, including the investment in software. A key objective of the Global Financing business is to generate strong returns on equity, and increasing receivables is the basis for growth. Accordingly, management considers Global Financing receivables as a profit-generating investment, not as working capital that should be minimized for efficiency. Therefore, management includes presentations of both free cash flow and net cash from operating activities that exclude the effect of Global Financing receivables. Free cash flow guidance is derived using an estimate of profit, working capital and operational cash outflows. As previously noted, the company views Global Financing receivables as a profit-generating investment which it seeks to maximize and therefore it is not considered when formulating guidance for free cash flow. As a result the company does not estimate a GAAP Net Cash from Operations expectation metric.

The following is management s view of cash flows for the first nine months of 2018 and 2017 prepared in a manner consistent with the description above.

(Dollars in millions)		
For the nine months ended September 30:	2018	2017
Net cash from operating activities per GAAP	\$ 11,128 \$	10,991
Less: change in Global Financing receivables	2,874	2,468
Net cash from operating activities, excluding Global Financing receivables	\$ 8,254 \$	8,523
Capital expenditures, net	(2,839)	(2,347)
Free cash flow (FCF)	\$ 5,415 \$	6,176
Acquisitions	(123)	(442)
Divestitures		35
Share repurchase	(2,393)	(3,674)
Common stock repurchases for tax withholdings	(148)	(153)
Dividends	(4,250)	(4,119)
Non-Global Financing debt	1,607	1,896
Other (includes Global Financing net receivables and Global Financing debt)	1,712	3,276*
Change in cash, cash equivalents, restricted cash and short-term marketable		
securities	\$ 1,820 \$	2,995*

^{*} Recast to reflect adoption of the FASB guidance on restricted cash.

In the first nine months of 2018, the company generated free cash flow of \$5.4 billion, a decrease of \$0.8 billion versus the prior year driven by higher capital expenditures and higher cash taxes. Net capital expenditures of \$2.8 billion increased \$0.5 billion year to year reflecting increased investments to build out global cloud datacenters. In the first nine months of 2018, the company continued to focus its cash utilization on returning value to shareholders including \$4.2 billion in dividends and \$2.4 billion in gross common stock repurchases (16.0 million shares).

Events that could temporarily change the historical cash flow dynamics discussed previously and in the company s 2017 Annual Report include significant changes in operating results, material changes in geographic sources of cash, unexpected adverse impacts from litigation, future pension funding requirements during periods of severe downturn in the capital markets or the timing of tax payments. Whether any litigation has such an adverse impact will depend on a number of variables, which are more completely described in note 13, Contingencies, in this Form 10-Q. With respect to pension

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Management Discussion (continued)

funding, the company expects to make legally mandated pension plan contributions to certain non-U.S. defined benefit plans of approximately \$400 million in 2018. Contributions related to all retirement-related plans are expected to be approximately \$2.3 billion in 2018. Financial market performance could increase the legally mandated minimum contributions in certain non-U.S. countries that require more frequent remeasurement of the funded status. The company is not quantifying any further impact from pension funding because it is not possible to predict future movements in the capital markets or pension plan funding regulations.

In 2018, the company is not legally required to make any contributions to the U.S. defined benefit plans.

The company s U.S. cash flows continue to be sufficient to fund its current domestic operations and obligations, including investing and financing activities such as dividends and debt service. The company s U.S. operations generate substantial cash flows, and, in those circumstances where the company has additional cash requirements in the U.S., the company has several liquidity options available. These options may include the ability to borrow additional funds at reasonable interest rates, utilizing its committed global credit facility, repatriating certain foreign earnings and utilizing intercompany loans with certain foreign subsidiaries.

Global Financing Return on Equity Calculation

	Three Months Ended September 30,					Nine Mont Septem		
(Dollars in millions)		2018		2017 ***		2018		2017 ***
Numerator								
Global Financing after-tax income*	\$	235	\$	194	\$	791	\$	620
Annualized after-tax income (a)	\$	940	\$	774	\$	1,055	\$	827
Denominator								
Average Global Financing equity (b)**	\$	3,414	\$	3,254	\$	3,457	\$	3,371
Global Financing return on equity (a)/(b)		27.5%		23.8%	ó	30.5%		24.5%

^{*} Calculated based upon an estimated tax rate principally based on Global Financing s geographic mix of earnings as IBM s provision for income taxes is determined on a consolidated basis.

^{**} Average of the ending equity for Global Financing for the last 2 quarters and 3 quarters, for the three months ended September 30, and for the nine months ended September 30, respectively.

^{***} Recast to reflect adoption of the FASB guidance on presentation of net benefit cost.

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Management Discussion (continued)

GAAP Reconciliation

The tables below provide a reconciliation of the company s income statement results as reported under GAAP to its operating earnings presentation which is a non-GAAP measure. The company s calculation of operating (non-GAAP) earnings, as presented, may differ from similarly titled measures reported by other companies. Refer to the Operating (non-GAAP) Earnings section on page 58 for the company s rationale for presenting operating earnings information.

(Dollars in millions except per share amounts) For the three months ended September 30, 2018:	GAAP	1	Acquisition-Related Adjustments	Retirement-Related Adjustments	Operating (non-GAAP)
Gross profit	\$ 8,803	\$	96	\$ \$	8,899
Gross profit margin	46.9%		0.5pts	pts.	47.4%
S,G&A	\$ 4,363	\$	(112)	\$ \$	4,251
R,D&E	1,252				1,252
Other (income) and expense	275		(1)	(389)	(115)
Total expense and other (income)	5,807		(113)	(389)	5,304
Pre-tax income from continuing operations	2,996		209	389	3,594
Pre-tax margin from continuing operations	16.0%		1.1pts	2.1pts.	19.2%
Provision for income taxes*	\$ 304	\$	56	\$ 100 \$	460
Effective tax rate	10.2%		1.0pts	1.7pts.	12.8%
Income from continuing operations	\$ 2,692	\$	153	\$ 289 \$	3,134
Income margin from continuing operations	14.4%		0.8pts	1.5pts.	16.7%
Diluted earnings per share from continuing					
operations	\$ 2.94	\$	0.17	\$ 0.31 \$	3.42

^{*} The tax impact on operating (non-GAAP) pre-tax income from continuing operations is calculated under the same accounting principles applied to the GAAP pre-tax income which employs an annual effective tax rate method to the results.

(Dollars in millions except per share amounts) For the three months ended September 30, 2017:	GAAP**	Acquisition-Related Adjustments]	Retirement-Related Adjustments**	Operating (non-GAAP)**
Gross profit	\$ 8,981	114	\$		\$ 9,095
Gross profit margin	46.9%	0.6p	s.	pts	s. 47.5%
S,G&A	\$ 4,606	(125)	\$		\$ 4,482
R,D&E	1,291				1,291
Other (income) and expense	159			(273)	(114)
Total expense and other (income)	5,917	(125)		(273)	5,519
Pre-tax income from continuing operations	3,065	238		273	3,576
Pre-tax margin from continuing operations	16.0%	1.2p	s.	1.4pts.	18.7%
Provision for income taxes*	\$ 339	79	\$	113	\$ 531
Effective tax rate	11.0%	1.5p	s.	2.3pts.	14.8%
Income from continuing operations	\$ 2,726	159	\$	160	\$ 3,045
Income margin from continuing operations	14.2%	0.8p	s.	0.8pts.	15.9%
Diluted earnings per share from continuing					
operations	\$ 2.92	0.17	\$	0.17	\$ 3.26

- * The tax impact on operating (non-GAAP) pre-tax income from continuing operations is calculated under the same accounting principles applied to the GAAP pre-tax income which employs an annual effective tax rate method to the results.
- ** Recast to reflect adoption of the FASB guidance on presentation of net periodic pension and nonpension postretirement benefit costs.

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Management Discussion (continued)

(Dollars in millions except per share amounts) For the nine months ended September 30, 2018:	GAAP	equisition- Related ljustments	Retirement- Related djustments	Tax Reform One-Time Impact**			perating on-GAAP)
Gross profit	\$ 26,249	\$ 283	\$	\$		\$	26,531
Gross profit margin	45.4%	0.5pts.	pts		pt	s.	45.9%
S,G&A	\$ 14,665	\$ (332)	\$:	\$		\$	14,333
R,D&E	4,021						4,021
Other (income) and expense	968	(1)	(1,185)				(219)
Total expense and other (income)	19,341	(333)	(1,185)				17,822
Pre-tax income from continuing operations	6,908	616	1,185				8,709
Pre-tax margin from continuing operations	11.9%	1.1pts.	2.0pts.		pt	s.	15.1%
Provision for income taxes*	\$ 138	\$ 138	\$ 285	\$ (9	93)	\$	468
Effective tax rate	2.0%	1.4pts.	3.0pts.	(1	.1)pts		5.4%
Income from continuing operations	\$ 6,770	\$ 478	\$ 900	\$	93	\$	8,241
Income margin from continuing operations	11.7%	0.8pts.	1.6pts.	0	.2pts.		14.2%
Diluted earnings per share from continuing							
operations	\$ 7.36	\$ 0.52	\$ 0.98	\$ 0.1	10	\$	8.96

^{*} The tax impact on operating (non-GAAP) pre-tax income from continuing operations is calculated under the same accounting principles applied to the GAAP pre-tax income which employs an annual effective tax rate method to the results.

^{**} Operating (non-GAAP) earnings excludes a net charge associated with the enactment of U.S. tax reform due to its unique non-recurring nature.

(Dollars in millions except per share amounts) For the nine months ended September 30, 2017:	GAAP**	A	cquisition-Related Adjustments]	Retirement-Related Adjustments** (n	Operating ion-GAAP)**
Gross profit	\$ 25,894	\$	349	\$	\$	26,243
Gross profit margin	45.8%		0.6pts.		pts.	46.4%
S,G&A	\$ 14,666	\$	(393)	\$	\$	14,273
R,D&E	4,212					4,212
Other (income) and expense	751		(7)		(969)	(225)
Total expense and other (income)	18,962		(401)		(969)	17,593
Pre-tax income from continuing operations	6,931		750		969	8,650
Pre-tax margin from continuing operations	12.2%		1.3pts.		1.7pts.	15.3%
Provision for income taxes*	\$ 120 \$	\$	212	\$	288 \$	621
Effective tax rate	1.7%		2.3pts.		3.1pts.	7.2%
Income from continuing operations	\$ 6,811	\$	537	\$	681 \$	8,030
Income margin from continuing operations	12.0%		0.9pts.		1.2pts.	14.2%
Diluted earnings per share from continuing						
operations	\$ 7.24 \$	\$	0.57	\$	0.73 \$	8.54

^{*} The tax impact on operating (non-GAAP) pre-tax income from continuing operations is calculated under the same accounting principles applied to the GAAP pre-tax income which employs an annual effective tax rate method to the results.

** Recast to reflect adoption of the FASB guidance on presentation of net periodic pension and nonpension postretirement benefit costs.

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Management Discussion (continued)

Forward-Looking and Cautionary Statements

Except for the historical information and discussions contained herein, statements contained in this Form 10-Q may constitute forward-looking statements within the meaning of the Private Securities Litigation Reform Act of 1995. Forward-looking statements are based on the company s current assumptions regarding future business and financial performance. These statements involve a number of risks, uncertainties and other factors that could cause actual results to differ materially, including the following: a downturn in the economic environment and client spending budgets; the company s failure to meet growth and productivity objectives; a failure of the company s innovation initiatives; impacts of damage to the company s reputation; risks from investing in growth opportunities; failure of the company s intellectual property portfolio to prevent competitive offerings and the failure of the company to obtain necessary licenses; cybersecurity and data privacy considerations; fluctuations in financial results; impact of local legal, economic, political and health conditions; adverse effects from environmental matters, tax matters and the company s pension plans; ineffective internal controls; the company s use of accounting estimates; the company s ability to attract and retain key employees and its reliance on critical skills; impacts of relationships with critical suppliers; product quality issues; impacts of business with government clients; currency fluctuations and customer financing risks; impact of changes in market liquidity conditions and customer credit risk on receivables; reliance on third party distribution channels and ecosystems; the company s ability to successfully manage acquisitions, alliances and dispositions; risks from legal proceedings; risk factors related to IBM securities; and other risks, uncertainties and factors discussed in the company s Form 10-Qs, Form 10-K and in the company s other filings with the U.S. Securities and Exchange Commission (SEC) or in materials incorporated therein o

Item 4. Controls and Procedures

The company s management evaluated, with the participation of the Chief Executive Officer and Chief Financial Officer, the effectiveness of the company s disclosure controls and procedures as of the end of the period covered by this report. Based on that evaluation, the Chief Executive Officer and Chief Financial Officer have concluded that the company s disclosure controls and procedures were effective as of the end of the period covered by this report. There has been no change in the company s internal control over financial reporting that occurred during the quarter covered by this report that has materially affected, or is reasonably likely to materially affect, the company s internal control over financial reporting.

Part II Other Information

Item 1. Legal Proceedings

Refer to note 13, Contingencies, on pages 49 to 51 of this Form 10-Q.

Item 2. Unregistered Sales of Equity Securities and Use of Proceeds and Issuer Repurchases of Equity Securities

The following table provides information relating to the company s repurchase of common stock for the third quarter of 2018.

Period	Total Number of Shares Purchased	Average Price Paid per Share	Total Number of Shares Purchased as Part of Publicly Announced Program	Approximate Dollar Value of Shares that May Yet Be Purchased Under The Program*
July 1, 2018 - July 31, 2018	1,423,448	\$ 144.87	1,423,448	\$ 1,818,897,344
August 1, 2018 - August 31, 2018	1,584,553	\$ 145.52	1,584,553	\$ 1,588,310,584
September 1, 2018 - September 30, 2018	1,280,326	\$ 148.56	1,280,326	\$ 1,398,102,805
Total	4,288,327	\$ 146.21	4,288,327	

^{*} On October 31, 2017, the Board of Directors authorized \$3.0 billion in funds for use in the company s common stock repurchase program. The company stated that it would repurchase shares on the open market or in private transactions depending on market conditions. The common stock repurchase program does not have an expiration date. This table does not include shares tendered to satisfy the exercise price in connection with cashless exercises of employee stock options or shares tendered to satisfy tax withholding obligations in connection with employee equity awards.

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Item 6. Exhibits

Exhibit Number	
10.1	Forms of equity award agreements for (i) stock options, restricted stock, restricted stock units, cash-settled restricted stock units, SARS, (ii) performance share units and (iii) retention restricted stock unit awards as well as the Terms and Conditions of LTPP Equity Awards, effective October 1, 2018, in connection with the foregoing award agreements.
10.2	Form of Noncompetition Agreement.
11	Statement re: computation of per share earnings.
	The statement re: computation of per share earnings is note 16. Earnings Per Share of Common Stock, in this Form 10-Q.
12	Statement re: computation of ratios.
31.1	Certification by principal executive officer pursuant to Rule 13A-14(a) or 15D-14(a) of the Securities Exchange Act of 1934, as adopted pursuant to Section 302 of the Sarbanes-Oxley Act of 2002.
31.2	Certification by principal financial officer pursuant to Rule 13A-14(a) or 15D-14(a) of the Securities Exchange Act of 1934, as adopted pursuant to Section 302 of the Sarbanes-Oxley Act of 2002.
32.1	Certification by principal executive officer pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002.
32.2	Certification by principal financial officer pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002.
101.INS	XBRL Instance Document
101.SCH	XBRL Taxonomy Extension Schema Document
101.CAL	XBRL Taxonomy Extension Calculation Linkbase Document
101.DEF	XBRL Taxonomy Extension Definition Linkbase Document
101.LAB	XBRL Taxonomy Extension Label Linkbase Document
101.PRE	XBRL Taxonomy Extension Presentation Linkbase Document

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SIGNATURE

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

> International Business Machines Corporation (Registrant)

Date: October 30, 2018

> By: /s/ Robert F. Del Bene Robert F. Del Bene

Vice President and Controller

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