INTERNATIONAL BUSINESS MACHINES CORP
Form 10-Q
October 31, 2017
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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, 2017

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)

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 l3 or l5(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 o

Indicate by check mark whether the registrant has submitted electronically and posted on its corporate Web site, if any, every Interactive Data File required to be submitted and posted pursuant to Rule 405 of Regulation S-T (§232.405 of this chapter) during the preceding 12 months (or for such shorter period that the registrant was required to submit and post such files). Yes 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	Accelerated filer o
Non-accelerated filer o (Do not check if a smaller reporting company)	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 o No x

The registrant had 925,791,378 shares of common stock outstanding at September 30, 2017.

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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)

(Dollars in millions except per share amounts)	Three Months Ended September 30, 2017	2016	Nine Months Ended September 30, 2017	2016
Revenue:				
Services	$ 12,703	$ 12,938	$ 37,592	$ 38,347
Sales	6,017	5,872	17,744	18,542
Financing	433	417	1,260	1,260
Total revenue	19,153	19,226	56,597	58,149
Cost:				
Services	8,426	8,418	25,502	25,492
Sales	1,605	1,536	4,839	4,496
Financing	322	259	890	760
Total cost	10,353	10,213	31,232	30,748
Gross profit	8,800	9,013	25,365	27,401
Expense and other (income):				
Selling, general and administrative	4,648	4,732	14,959	16,093
Research, development and engineering	1,342	1,397	4,360	4,320
Intellectual property and custom development income	(308)	(528)	(1,118)	(1,110)
Other (income) and expense	(114)	(8)	(218)	281
Interest expense	168	158	451	473
Total expense and other (income)	5,735	5,751	18,434	20,056
Income from continuing operations before income taxes	3,065	3,263	6,931	7,345
Provision for/(benefit from) income taxes	339	409	120	(31)
Income from continuing operations	$ 2,726	$ 2,854	$ 6,811	$ 7,375
Loss from discontinued operations, net of tax	0	(1)	(3)	(4)
Net income	$ 2,726	$ 2,853	$ 6,807	$ 7,371
Earnings/(loss) per share of common stock:				
Assuming dilution:				
Continuing operations	$ 2.92	$ 2.98	$ 7.24	$ 7.67
Discontinued operations	0.00	0.00	0.00	0.00
Total	$ 2.92	$ 2.98	$ 7.24	$ 7.67
Basic:				
Continuing operations	$ 2.93	$ 2.99	$ 7.28	$ 7.70
Discontinued operations	0.00	0.00	0.00	0.00
Total	$ 2.93	$ 2.99	$ 7.28	$ 7.70
Weighted-average number of common shares outstanding: (millions)				

Assuming dilution	933.2	957.3	940.2	960.7
Basic	929.4	954.0	935.6	957.7
Cash dividend per common share	$ 1.50	$ 1.40	$ 4.40	$ 4.10

(Amounts may not add due to rounding.)

(The accompanying notes are an integral part of the financial statements.)

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INTERNATIONAL BUSINESS MACHINES CORPORATION AND SUBSIDIARY COMPANIES

CONSOLIDATED STATEMENT OF COMPREHENSIVE INCOME

(UNAUDITED)

(Dollars in millions)	Three Months Ended September 30, 2017	2016	Nine Months Ended September 30, 2017	2016
Net income	$ 2,726	$ 2,853	$ 6,807	$ 7,371
Other comprehensive income/(loss), before tax:				
Foreign currency translation adjustments	89	(99)	213	(109)
Net changes related to available-for-sale securities:				
Unrealized gains/(losses) arising during the period	(1)	(1)	2	(36)
Reclassification of (gains)/losses to net income	0	(1)	1	36
Total net changes related to available-for-sale securities	(2)	(2)	2	0
Unrealized gains/(losses) on cash flow hedges:				
Unrealized gains/(losses) arising during the period	(70)	35	(198)	(221)
Reclassification of (gains)/losses to net income	(73)	15	(347)	26
Total unrealized gains/(losses) on cash flow hedges	(143)	50	(545)	(195)
Retirement-related benefit plans:				
Prior service costs/(credits)	0		0	
Net (losses)/gains arising during the period	1	11	106	(57)
Curtailments and settlements	2	4	3	19
Amortization of prior service (credits)/costs	(22)	(28)	(66)	(81)
Amortization of net (gains)/losses	733	696	2,156	2,079
Total retirement-related benefit plans	713	683	2,200	1,960
Other comprehensive income/(loss), before tax	658	632	1,869	1,656
Income tax (expense)/benefit related to items of other comprehensive income	11	(192)	7	(213)
Other comprehensive income/(loss)	669	440	1,877	1,442
Total comprehensive income/(loss)	$ 3,394	$ 3,293	$ 8,684	$ 8,813

(Amounts may not add due to rounding.)

(The accompanying notes are an integral part of the financial statements.)

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INTERNATIONAL BUSINESS MACHINES CORPORATION AND SUBSIDIARY COMPANIES

CONSOLIDATED STATEMENT OF FINANCIAL POSITION

(UNAUDITED)

ASSETS

(Dollars in millions)	At September 30, 2017	At December 31, 2016
Assets:		
Current assets:		
Cash and cash equivalents	$ 10,915	$ 7,826
Marketable securities	600	701
Notes and accounts receivable - trade (net of allowances of $296 in 2017 and $290 in 2016)	8,150	9,182
Short-term financing receivables (net of allowances of $270 in 2017 and $337 in 2016)	18,050	19,006
Other accounts receivable (net of allowances of $39 in 2017 and $48 in 2016)	926	1,057
Inventories, at lower of average cost or market:		
Finished goods	430	358
Work in process and raw materials	1,281	1,195
Total inventories	1,711	1,553
Prepaid expenses and other current assets	4,389	4,564
Total current assets	44,742	43,888
Property, plant and equipment	31,937	30,133
Less: Accumulated depreciation	20,880	19,303
Property, plant and equipment net	11,057	10,830
Long-term financing receivables (net of allowances of $84 in 2017 and $101 in 2016)	8,459	9,021
Prepaid pension assets	4,521	3,034
Deferred taxes	7,289	5,224
Goodwill	36,782	36,199
Intangible assets net	3,981	4,688
Investments and sundry assets	4,806	4,585
Total assets	$ 121,636	$ 117,470

(Amounts may not add due to rounding.)

(The accompanying notes are an integral part of the financial statements.)

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INTERNATIONAL BUSINESS MACHINES CORPORATION
AND SUBSIDIARY COMPANIES

CONSOLIDATED STATEMENT OF FINANCIAL POSITION (CONTINUED)
(UNAUDITED)

LIABILITIES AND EQUITY

(Dollars in millions)	At September 30, 2017	At December 31, 2016
Liabilities:		
Current liabilities:		
Taxes	$ 3,038	$ 3,235
Short-term debt	4,299	7,513
Accounts payable	5,442	6,209
Compensation and benefits	3,918	3,577
Deferred income	10,649	11,035
Other accrued expenses and liabilities	4,352	4,705
Total current liabilities	31,697	36,275
Long-term debt	41,327	34,655
Retirement and nonpension postretirement benefit obligations	17,554	17,070
Deferred income	3,579	3,600
Other liabilities	7,723	7,477
Total liabilities	101,879	99,078
Equity:		
IBM stockholders equity:		
Common stock, par value $0.20 per share, and additional paid-in capital	54,395	53,935
Shares authorized: 4,687,500,000		
Shares issued: 2017 - 2,228,489,401		
2016 - 2,225,116,815		
Retained earnings	155,565	152,759
Treasury stock - at cost	(162,812)	(159,050)
Shares: 2017 - 1,302,698,023		
2016 - 1,279,249,412		
Accumulated other comprehensive income/(loss)	(27,521)	(29,398)
Total IBM stockholders equity	19,627	18,246
Noncontrolling interests	130	146
Total equity	19,757	18,392
Total liabilities and equity	$ 121,636	$ 117,470

(Amounts may not add due to rounding.)

(The accompanying notes are an integral part of the financial statements.)

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INTERNATIONAL BUSINESS MACHINES CORPORATION
AND SUBSIDIARY COMPANIES

CONSOLIDATED STATEMENT OF CASH FLOWS

(UNAUDITED)

(Dollars in millions)	Nine Months Ended September 30, 2017	2016
Cash flows from operating activities:		
Net income	$ 6,807	$ 7,371
Adjustments to reconcile net income to cash provided by operating activities		
Depreciation	2,231	2,106
Amortization of intangibles	1,161	1,148
Stock-based compensation	388	403
Net (gain)/loss on asset sales and other	92	100
Changes in operating assets and liabilities, net of acquisitions/divestitures	312	1,978* **
Net cash provided by operating activities	10,991	13,105* **
Cash flows from investing activities:		
Payments for property, plant and equipment	(2,273)	(2,594)
Proceeds from disposition of property, plant and equipment	337	234
Investment in software	(411)	(441)
Acquisition of businesses, net of cash acquired	(442)	(5,445)
Divestitures of businesses, net of cash transferred	35	35
Non-operating finance receivables net	469	1,441*
Purchases of marketable securities and other investments	(3,770)	(4,021)
Proceeds from disposition of marketable securities and other investments	2,778	3,501
Net cash used in investing activities	(3,278)	(7,289)*
Cash flows from financing activities:		
Proceeds from new debt	9,355	8,368
Payments to settle debt	(6,252)	(5,616)
Short-term borrowings/(repayments) less than 90 days net	(794)	(864)
Common stock repurchases	(3,674)	(2,632)
Common stock repurchases for tax withholdings	(153)	(115)**
Common stock transactions other	137	166
Cash dividends paid	(4,119)	(3,927)
Net cash used in financing activities	(5,499)	(4,619)**
Effect of exchange rate changes on cash and cash equivalents	875	155
Net change in cash and cash equivalents	3,089	1,352
Cash and cash equivalents at January 1	7,826	7,686
Cash and cash equivalents at September 30	$ 10,915	$ 9,039

* Revised classification of certain financing receivables.

** Reclassified to reflect adoption of the FASB guidance on share-based compensation.

(Amounts may not add due to rounding.)

(The accompanying notes are an integral part of the financial statements.)

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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	Treasury Stock	Accumulated Other Comprehensive Income/(Loss)	Total IBM Stockholders Equity	Non-Controlling Interests	Total Equity
Equity - January 1, 2017	$ 53,935	$ 152,759	$ (159,050)	$ (29,398)	$ 18,246	$ 146	$ 18,392
Cumulative effect of change in accounting principle *		102			102		102
Net income		6,807			6,807		6,807
Other comprehensive income/(loss)				1,877	1,877		1,877
Total comprehensive income/(loss)					$ 8,684		$ 8,684
Cash dividends paid common stock		(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 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 noncontrolling interests						(16)	(16)
Equity - September 30, 2017	$ 54,395	$ 155,565	$ (162,812)	$ (27,521)	$ 19,627	$ 130	$ 19,757

(Dollars in millions)	Common Stock and Additional Paid-in Capital	Retained Earnings	Treasury Stock	Accumulated Other Comprehensive Income/(Loss)	Total IBM Stockholders Equity	Non-Controlling Interests	Total Equity
Equity - January 1, 2016	$ 53,262	$ 146,124	$ (155,518)	$ (29,607)	$ 14,262	$ 162	$ 14,424
Net income		7,371			7,371		7,371
Other comprehensive income/(loss)				1,442	1,442		1,442
Total comprehensive income/(loss)					$ 8,813		$ 8,813
Cash dividends paid common stock		(3,927)			(3,927)		(3,927)
Common stock issued under employee plans (3,370,992 shares)	513				513		513
Purchases (787,805 shares) and sales (336,480 shares) of treasury stock under employee plans net		16	(72)		(56)		(56)
Other treasury shares purchased, not retired (17,793,841 shares)			(2,579)		(2,579)		(2,579)

Changes in other equity	(16)	0			(17)		(17)
Changes in noncontrolling interests						(12)	(12)
Equity - September 30, 2016	$ 53,759	$ 149,585	$ (158,170)	$ (28,164)	$ 17,010	$ 149	$ 17,159

* Reflects the adoption of the FASB guidance on intra-entity transfers of assets in the first-quarter 2017.

(Amounts may not add due to rounding.)

(The accompanying notes are an integral part of the financial statements.)

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Notes to Consolidated Financial Statements:

1. Basis of Presentation: 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. Refer to the company s 2016 Annual Report on pages 71 to 74, for a discussion of the company s critical accounting estimates.

The company revised the classification of certain financing receivables for the three and nine months ended September 30, 2016, decreasing net cash provided by operating activities and net cash used in investing activities in the amount of $99 million and $311 million, respectively, which the company concluded to be immaterial to the periods presented. The twelve-month revision for the period ended December 31, 2016 was provided in the company s 2016 Annual Report on page 26. There was no impact to total GAAP cash flows or free cash flow.

In the first quarter of 2017, the company reported a benefit from income taxes of $329 million, and its effective tax rate was (23.1) percent. This was primarily driven by a discrete tax benefit of $582 million from a first-quarter 2017 transaction accounted for under the new Financial Accounting Standards Board (FASB) guidance related to intra-entity transfers of assets. This benefit was partially offset by a discrete tax charge related to foreign audit activity of $99 million. The company had additional discrete tax benefits of $170 million in second-quarter 2017. 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 the first and second quarter discrete items. For the nine months ended September 30, 2016, the company reported a benefit from income taxes of $31 million and its effective tax rate was (0.4) percent. The negative effective tax rate in the comparable period of 2016 was due to the resolution of a long-standing Japan tax matter in February 2016. Refer to note 2, Accounting Changes, and the Taxes section of the Management Discussion for additional information.

Noncontrolling interest amounts of $4.4 million and $3.1 million, net of tax, for the three months ended September 30, 2017 and 2016, respectively, and $11.5 million and $7.5 million, net of tax, for the nine months ended September 30, 2017 and 2016, 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 2016 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 2017, the FASB issued guidance to simplify the application of current 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 plans to adopt the guidance as of January 1, 2018. The guidance is not expected to 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. Under the guidance, the service cost component of net benefit cost will continue to be presented in the same line items as other employee compensation costs, unless eligible for capitalization in the Consolidated Statement of Financial Position. The other components of net benefit costs will be presented separately from service cost as non-operating costs in the Consolidated Statement of Earnings or Notes to the Consolidated Financial Statements. The guidance is effective

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Notes to Consolidated Financial Statements (continued)

January 1, 2018 with early adoption permitted. The company will adopt the guidance as of the effective date. The guidance is primarily a change in financial statement presentation and is not expected to have a material impact in 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. The guidance is effective January 1, 2020 with a one year early adoption permitted. The company is evaluating the impact of the new guidance.

In February 2016, the FASB issued guidance 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 capital lease 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 adopt the guidance as of the effective date. A cross-functional implementation team has been established which is evaluating the lease portfolio, system, process and policy change requirements. The company is currently evaluating 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. The company s operating lease commitments were $6.9 billion at December 31, 2016. In 2016, the use of third-party residual value guarantee insurance resulted in the company recognizing $220 million of sales-type lease revenue that would otherwise have been recognized over the lease period as operating lease revenue.

In January 2016, the FASB issued guidance which addresses aspects of recognition, measurement, presentation and disclosure of financial instruments. Certain equity investments will be measured at fair value with changes recognized in net income. The amendment also simplifies the impairment test of equity investments that lack readily determinable fair value. The guidance is effective January 1, 2018 and early adoption is not permitted except for limited provisions. The guidance is not expected to 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 will depict the transfer of promised goods or services to customers in an amount that reflects the consideration to which the entity expects to be entitled in exchange for those goods or services. The guidance also requires disclosures regarding the nature, amount, timing and uncertainty of revenue and cash flows arising from contracts with customers. The guidance permits two methods of adoption: retrospectively to each prior reporting period presented, or retrospectively with the cumulative effect of initially applying the guidance recognized at the date of initial application (the cumulative catch-up transition method). The company will adopt the guidance on January 1, 2018 and apply the cumulative catch-up transition method. The transition adjustment to be recorded to stockholders equity upon adoption of the new standard is not expected to be material.

Given the scope of work required to implement the recognition and disclosure requirements under the new standard, the company began its assessment process in 2014 and has identified changes to policy, processes, systems and controls. This also includes the assessment of data availability and presentation necessary to meet the additional disclosure requirements of the guidance in the Notes to the Consolidated Financial Statements.

The company expects revenue recognition for its broad portfolio of hardware, software and services offerings to remain largely unchanged. However, the guidance is expected to change the timing of revenue recognition in certain areas, including accounting for certain software licenses. These impacts are not expected to be material. The company expects to continue to recognize revenue for term license (recurring license charge) software arrangements on a monthly basis over the period that the client is entitled to use the license due to the contractual terms in these arrangements.

Since the company currently expenses sales commissions as incurred, the requirement in the new standard to capitalize certain in-scope sales commissions will result in an accounting change for the company. However, the impact to the consolidated financial statements is not expected to be material, with no impact to cash flows.

The company continues to assess all potential impacts of the guidance and given normal ongoing business dynamics, preliminary conclusions are subject to change.

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Notes to Consolidated Financial Statements (continued)

Standards Implemented

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 is effective January 1, 2018 and early adoption is 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 is effective January 1, 2018 and early adoption is 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 credit 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. There was no impact in the consolidated financial results for the three months ended September 30, 2017. 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. See note 5, Stock-Based Compensation, for additional information. 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. Prior to adoption, the company reported this activity as an operating cash outflow and as a result, prior periods have been reclassified as required. The FASB also issued guidance in May 2017, which relates to the accounting for modifications of share-based payment awards. The company adopted the guidance in the second quarter of 2017. The guidance had no impact in the consolidated financial results.

In September 2015, the FASB issued guidance eliminating the requirement that an acquirer in a business combination account for a measurement-period adjustment retrospectively. Instead, an acquirer will recognize a measurement-period adjustment during the period in which the amount of the adjustment is determined. In addition, the portion of the amount recorded in current-period earnings by line item that would have been recorded in previous reporting periods if the adjustment to the provisional amounts had been recognized as of the acquisition date should be presented separately on the face of the income statement or disclosed in the notes. The guidance was effective January 1, 2016 on a prospective basis. The guidance did not have a material impact in the consolidated financial results.

In May 2015, the FASB issued guidance which removed the requirement to categorize within the fair value hierarchy all investments for which fair value is measured using the net asset value per share practical expedient. The amendments also removed the requirement to make certain

disclosures for all investments that are eligible to be measured at fair value using the net asset value per share practical expedient. Rather, those disclosures are limited to investments for which the entity has elected to measure the fair value using that practical expedient. The guidance was effective January 1, 2016. The guidance was a change in disclosure only and did not have an impact in the consolidated financial results.

In April 2015, the FASB issued guidance about whether a cloud computing arrangement includes a software license. If a cloud computing arrangement includes a software license, then the customer should account for the software license element of the arrangement consistent with the acquisition of other software licenses. If a cloud computing arrangement does not include a software license, the customer should account for the arrangement as a services contract. All software licenses recognized under this guidance will be accounted for consistent with other licenses of intangible assets. The guidance was effective January 1, 2016 and the company adopted it on a prospective basis. The guidance did not have a material impact in the consolidated financial results.

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Notes to Consolidated Financial Statements (continued)

3. 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 financial assets are measured at fair value on a nonrecurring basis. These assets include equity method investments that are recognized at fair value at the measurement date to the extent that they are deemed to be other-than-temporarily impaired. 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 equity investments that are deemed to be other-than-temporarily impaired. In the event of an other-than-temporary impairment of a financial investment, fair value is measured using a model described above.

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. During the nine months ended September 30, 2016, a pre-tax impairment charge related to certain property, plant and equipment of $218 million was recorded. There were no material impairments of non-financial assets for the nine months ended September 30, 2017.

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.

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, 2017 and December 31, 2016.

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Notes to Consolidated Financial Statements (continued)

(Dollars in millions) At September 30, 2017	Level 1	Level 2	Level 3	Total
Assets:				
Cash equivalents (1)				
Time deposits and certificates of deposit	$	$ 5,553	$	$ 5,553
Money market funds	1,375			1,375
U.S. government securities		200		200
Canadian government securities		460		460
Total	1,375	6,214		7,589(6)
Debt securities - current (2)		599		599(6)
Debt securities - noncurrent (3)	4	7		11
Available-for-sale equity investments (3)	5			5
Derivative assets (4)				
Interest rate contracts		517		517
Foreign exchange contracts		416		416
Equity contracts		23		23
Total		957		957(7)
Total assets	$ 1,384	$ 7,775	$	$ 9,159(7)
Liabilities:				
Derivative liabilities (5)				
Foreign exchange contracts	$	$ 333	$	$ 333
Equity contracts		4		4
Interest rate contracts		15		15
Total liabilities	$	$ 352	$	$ 352(7)

(1) Included within cash and cash equivalents in the Consolidated Statement of Financial Position.

(2) U.S. government securities reported as marketable securities in the Consolidated Statement of Financial Position.

(3) Included within investments and sundry assets 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, 2017 were $269 million and $687 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, 2017 were $332 million and $20 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 $274 million.

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Notes to Consolidated Financial Statements (continued)

(Dollars in millions) At December 31, 2016	Level 1	Level 2	Level 3	Total
Assets:				
Cash equivalents (1)				
Time deposits and certificates of deposit	$	$ 3,629	$	$ 3,629
Money market funds	1,204			1,204
Total	1,204	3,629		4,832(6)
Debt securities - current (2)		699		699(6)
Debt securities - noncurrent (3)	1	6		8
Available-for-sale equity investments (3)	7			7
Derivative assets (4)				
Interest rate contracts		555		555
Foreign exchange contracts		560		560
Equity contracts		11		11
Total		1,126		1,126(7)
Total assets	$ 1,212	$ 5,460	$	$ 6,672(7)
Liabilities:				
Derivative liabilities (5)				
Foreign exchange contracts	$	$ 188	$	$ 188
Equity contracts		10		10
Interest rate contracts		8		8
Total liabilities	$	$ 206	$	$ 206(7)

(1) Included within cash and cash equivalents in the Consolidated Statement of Financial Position.

(2) U.S government securities reported as marketable securities in the Consolidated Statement of Financial Position.

(3) Included within investments and sundry assets 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, 2016 were $532 million and $594 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, 2016 were $145 million and $61 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 $116 million.

There were no transfers between Levels 1 and 2 for the nine months ended September 30, 2017 and the year ended December 31, 2016.

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, 2017 and December 31, 2016, 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.

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Notes to Consolidated Financial Statements (continued)

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 $41,327 million and $34,655 million, and the estimated fair value was $43,623 million and $36,838 million at September 30, 2017 and December 31, 2016, 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.

Debt and Marketable Equity Securities

The company s cash equivalents and current debt securities are considered available-for-sale and recorded at fair value, which is not materially different from carrying value, in the Consolidated Statement of Financial Position.

The following tables summarize the company s noncurrent debt and marketable equity securities which are considered available-for-sale and recorded at fair value in the Consolidated Statement of Financial Position.

(Dollars in millions) At September 30, 2017:	Adjusted Cost	Gross Unrealized Gains	Gross Unrealized Losses	Fair Value
Debt securities noncurrent(1)	$ 7	$ 3	$	$ 11
Available-for-sale equity investments(1)	$ 1	$ 4	$ 0	$ 5

(1) Included within investments and sundry assets in the Consolidated Statement of Financial Position.

(Dollars in millions) At December 31, 2016:	Adjusted Cost	Gross Unrealized Gains	Gross Unrealized Losses	Fair Value
Debt securities noncurrent(1)	$ 5	$ 3	$	$ 8
Available-for-sale equity investments(1)	$ 3	$ 5	$ 0	$ 7

(1) Included within investments and sundry assets in the Consolidated Statement of Financial Position.

Sales of debt and available-for-sale equity investments during the period were as follows:

(Dollars in millions) For the three months ended September 30:	2017	2016
Proceeds	$ 0	$ 1
Gross realized gains (before taxes)	0	1
Gross realized losses (before taxes)		

(Dollars in millions) For the nine months ended September 30:	2017	2016
Proceeds	$ 5	$ 150
Gross realized gains (before taxes)	1	1
Gross realized losses (before taxes)	2	37

The after-tax net unrealized holding gains/(losses) on available-for-sale debt and equity securities that have been included in other comprehensive income/(loss) for the period and after-tax net (gains)/losses reclassified from accumulated other comprehensive income/(loss) to net income were as follows:

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Notes to Consolidated Financial Statements (continued)

(Dollars in millions) For the three months ended September 30:	2017	2016
Net unrealized gains/(losses) arising during the period	$ 1	$ (1)
Net unrealized (gains)/losses reclassified to net income*	0	(1)

*There were no writedowns for the three months ended September 30, 2017 and 2016, respectively.

(Dollars in millions) For the nine months ended September 30:	2017	2016
Net unrealized gains/(losses) arising during the period	$ 1	$ (22)
Net unrealized (gains)/losses reclassified to net income*	0	22

* There were no writedowns for the nine months ended September 30, 2017 and 2016, respectively.

The contractual maturities of substantially all available-for-sale debt securities are less than one year at September 30, 2017.

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, 2017 and December 31, 2016 was $45 million and $11 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 as of September 30, 2017 and December 31, 2016 was $957 million and $1,126 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 $274 million and $116 million at September 30, 2017 and December 31, 2016, respectively, of liabilities included in master netting arrangements with those counterparties. Additionally, at September 30, 2017 and December 31, 2016, this exposure was reduced by $123 million and $141 million of cash collateral, respectively, and $35 million of non-cash collateral in U.S. Treasury securities at December 31, 2016. There were no non-cash collateral balances in U.S. Treasury securities at September 30, 2017. At September 30, 2017 and December 31, 2016, the net exposure related to derivative assets recorded in the Consolidated Statement of Financial Position was $559 million and $834 million, respectively. At September 30, 2017 and December 31, 2016, the net position related to derivative liabilities recorded in the Consolidated Statement of Financial Position was $78 million and $90 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

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Notes to Consolidated Financial Statements (continued)

against the fair values of the related derivative instruments. No amount was recognized in other receivables at September 30, 2017 or December 31, 2016 for the right to reclaim cash collateral. The amount recognized in accounts payable for the obligation to return cash collateral was $123 million and $141 million at September 30, 2017 and December 31, 2016, respectively. The company restricts the use of cash collateral received to rehypothecation, and therefore reports it in prepaid expenses and other current assets in the Consolidated Statement of Financial Position. No amount was rehypothecated at September 30, 2017 and December 31, 2016.

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 uses 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, 2017 and December 31, 2016, the total notional amount of the company s interest rate swaps was $9.1 billion and $7.3 billion, respectively. The weighted-average remaining maturity of these instruments at September 30, 2017 and December 31, 2016 was approximately 5.0 years and 6.2 years, respectively.

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, 2017 and December 31, 2016.

At December 31, 2016, net gains of less than $1 million (before taxes) were recorded in accumulated other comprehensive income/(loss) in connection with cash flow hedges of the company s borrowings. During 2017, all gains and losses associated with this program that were recorded in other comprehensive income/(loss) were reclassified to net income and there are no gains and losses remaining in accumulated other comprehensive income/(loss) at September 30, 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, 2017 and December 31, 2016, the total notional amount of derivative instruments designated as net investment hedges was $8.8 billion and $6.7 billion, respectively. At September 30, 2017 and December 31, 2016, the weighted-average remaining maturity of these instruments was approximately 0.1 years and 0.2 years, respectively.

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Notes to Consolidated Financial Statements (continued)

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, 2017 and December 31, 2016, the total notional amount of forward contracts designated as cash flow hedges of forecasted royalty and cost transactions was $7.9 billion and $8.3 billion, respectively. The weighted-average remaining maturity of these instruments at September 30, 2017 and December 31, 2016 was 0.7 years at both periods.

At September 30, 2017 and December 31, 2016, in connection with cash flow hedges of anticipated royalties and cost transactions, the company recorded net losses of $70 million and net gains of $462 million (before taxes), respectively, in accumulated other comprehensive income/(loss). Within these amounts, $161 million of losses and $397 million of gains, respectively, are expected to 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 nine years. At September 30, 2017 and December 31, 2016, the total notional amount of cross-currency swaps designated as cash flow hedges of foreign currency denominated debt was $1.4 billion at both periods.

At September 30, 2017 and December 31, 2016, in connection with cash flow hedges of foreign currency denominated borrowings, the company recorded net gains of $16 million and net gains of $29 million (before taxes), respectively, in accumulated other comprehensive income/(loss). Within these amounts, $34 million of gains and $27 million of gains, respectively, are expected to 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, 2017 and December 31,

2016, the total notional amount of derivative instruments in economic hedges of foreign currency exposure was $10.8 billion and $12.7 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, 2017 and December 31, 2016, the total notional amount of derivative instruments in economic hedges of these compensation obligations was $1.2 billion at both periods.

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Notes to Consolidated Financial Statements (continued)

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, 2017 and December 31, 2016.

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, 2017 and December 31, 2016.

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 in other (income) and expense in the Consolidated Statement of Earnings. At September 30, 2017 and December 31, 2016, 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 as of September 30, 2017 and December 31, 2016, as well as for the three and nine months ended September 30, 2017 and 2016, respectively.

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Notes to Consolidated Financial Statements (continued)

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

As of September 30, 2017 and December 31, 2016

	Fair Value of Derivative Assets			Fair Value of Derivative Liabilities		
(Dollars in millions)	**Balance Sheet Classification**	**9/30/2017**	**12/31/2016**	**Balance Sheet Classification**	**9/30/2017**	**12/31/2016**
Designated as hedging instruments:						
Interest rate contracts:	Prepaid expenses and other current assets	$	$	Other accrued expenses and liabilities	$ 1	$
	Investments and sundry assets	517	555	Other liabilities	15	8
Foreign exchange contracts:	Prepaid expenses and other current assets	208	421	Other accrued expenses and liabilities	272	46
	Investments and sundry assets	170	17	Other liabilities	5	35
	Fair value of derivative assets	$ 896	$ 993	**Fair value of derivative liabilities**	$ 292	$ 89
Not designated as hedging instruments:						
Foreign exchange contracts:	Prepaid expenses and other current assets	$ 38	$ 100	Other accrued expenses and liabilities	$ 56	$ 89
	Investments and sundry assets		22	Other liabilities		18
Equity contracts:	Prepaid expenses and other current assets	23	11	Other accrued expenses and liabilities	4	10
	Investments and sundry assets			Other liabilities		
	Fair value of derivative assets	$ 61	$ 133	**Fair value of derivative liabilities**	$ 60	$ 117
Total Derivatives		$ 957	$ 1,126		$ 352	$ 206
Total debt designated as hedging instruments(1):						
Short-term debt		N/A	N/A		$ 377	$ 1,125
Long-term debt		N/A	N/A		11,469	7,844
		N/A	N/A		$ 11,846	$ 8,969
Total		$ 957	$ 1,126		$ 12,198	$ 9,175

N/A - not applicable

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

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Notes to Consolidated Financial Statements (continued)

The Effect of Derivative Instruments in the Consolidated Statement of Earnings

For the three months ended September 30, 2017 and 2016

(Dollars in millions) For the three months ended September 30:	Consolidated Statement of Earnings Line Item	Gain (Loss) Recognized in Earnings Recognized on Derivatives 2017	2016	Attributable to Risk Being Hedged(2) 2017	2016
Derivative instruments in fair value hedges(1)(5):					
Interest rate contracts	Cost of financing	$ (3)	$ (20)	$ 20	$ 40
	Interest expense	(3)	(21)	20	43
Derivative instruments not designated as hedging instruments:					
Foreign exchange contracts	Other (income) and expense	(35)	30	N/A	N/A
Interest rate contracts	Other (income) and expense		0	N/A	N/A
Equity contracts	SG&A expense	31	45	N/A	N/A
	Other (income) and expense		0	N/A	N/A
Total		$ (10)	$ 34	$ 41	$ 83

(Dollars in millions) For the three months ended September 30:	Gain (Loss) Recognized in Earnings and Other Comprehensive Income: Effective Portion Recognized in OCI 2017	2016	Consolidated Statement of Earnings Line Item	Effective Portion Reclassified from AOCI 2017	2016	Ineffectiveness and Amounts Excluded from Effectiveness Testing(3) 2017	2016
Derivative instruments in cash flow hedges:							
Interest rate contracts	$	$	Interest expense	$ (7)	$ (7)	$	$
Foreign exchange contracts	(70)	35	Other (income) and expense	64	(6)	(1)	(1)
			Cost of sales*	1	(7)		
			Cost of services*	20	3		
			SG&A expense	(6)	2		
Instruments in net investment hedges(4):							
Foreign exchange contracts	(507)	(131)	Cost of financing			0	
			Interest expense			8	25
Total	$ (577)	$ (96)		$ 73	$ (15)	$ 7	$ 24

* Reclassified to conform to 2017 presentation

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 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 amount of gain/(loss) recognized in income represents ineffectiveness on hedge relationships.

(4) Instruments in net investment hedges include derivative and non-derivative instruments.

(5) For the three month periods ended September 30, 2017 and 2016, fair value hedges resulted in a loss of less than $1 million and a loss of $3 million in ineffectiveness, respectively.

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Notes to Consolidated Financial Statements (continued)

The Effect of Derivative Instruments in the Consolidated Statement of Earnings

For the nine months ended September 30, 2017 and 2016

(Dollars in millions) For the nine months ended September 30:	Consolidated Statement of Earnings Line Item	Gain (Loss) Recognized in Earnings Recognized on Derivatives 2017	2016	Attributable to Risk Being Hedged(2) 2017	2016
Derivative instruments in fair value hedges(1)(5):					
Interest rate contracts	Cost of financing	$ 37	$ 195	$ 22	$ (127)
	Interest expense	34	214	20	(140)
Derivative instruments not designated as hedging instruments:					
Foreign exchange contracts	Other (income) and expense	74	335	N/A	N/A
Interest rate contracts	Other (income) and expense		0	N/A	N/A
Equity contracts	SG&A expense	88	87	N/A	N/A
	Other (income) and expense		(1)	N/A	N/A
Total		$ 233	$ 830	$ 42	$ (267)

(Dollars in millions) For the nine months ended September 30:	Gain (Loss) Recognized in Earnings and Other Comprehensive Income: Effective Portion Recognized in OCI 2017	2016	Consolidated Statement of Earnings Line Item	Effective Portion Reclassified from AOCI 2017	2016	Ineffectiveness and Amounts Excluded from Effectiveness Testing(3) 2017	2016
Derivative instruments in cash flow hedges:							
Interest rate contracts	$	$	Interest expense	$ (21)	$ (17)	$	$
Foreign exchange contracts	(198)	(221)	Other (income) and expense	275	6	2	(1)
			Cost of sales*	23	(5)		
			Cost of services*	47	(9)		
			SG&A expense	23	(1)		
Instruments in net investment hedges(4):							
Foreign exchange contracts	(1,513)	(1,071)	Cost of financing			0	
			Interest expense			34	51
Total	$ (1,712)	$ (1,292)		$ 347	$ (26)	$ 37	$ 49

* Reclassified to conform to 2017 presentation.

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 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 amount of gain/(loss) recognized in income represents ineffectiveness on hedge relationships.

(4) Instruments in net investment hedges include derivative and non-derivative instruments.

(5) For the nine month periods ended September 30, 2017 and 2016, fair value hedges resulted in a loss of less than $1 million and a gain of less than $1 million in ineffectiveness, respectively.

For the three and nine months ending September 30, 2017 and 2016, there were no significant gains or losses excluded from the assessment of hedge effectiveness (for fair value 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)

4. Financing Receivables: The following table presents financing receivables, net of allowances for credit losses, including residual values.

(Dollars in millions)	At September 30, 2017	At December 31, 2016
Current:		
Net investment in sales-type and direct financing leases	$ 3,092	$ 2,909
Commercial financing receivables	8,563	9,706
Client loan and installment payment receivables (loans)	6,395	6,390
Total	$ 18,050	$ 19,006
Noncurrent:		
Net investment in sales-type and direct financing leases	$ 3,579	$ 3,950
Client loan and installment payment receivables (loans)	4,879	5,071
Total	$ 8,459	$ 9,021

Net 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. Net investment in sales-type and direct financing leases includes unguaranteed residual values of $567 million and $585 million at September 30, 2017 and December 31, 2016, respectively, and is reflected net of unearned income of $459 million and $513 million, and net of allowance for credit losses of $118 million and $133 million at those dates, respectively.

Commercial financing receivables, net of allowance for credit losses of $21 million and $28 million at September 30, 2017 and December 31, 2016, respectively, 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), net of allowance for credit losses of $215 million and $276 million at September 30, 2017 and December 31, 2016, respectively, are loans that 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 loan and installment payment financing contracts are priced independently at competitive market rates. The company has a history of enforcing the terms of these financing agreements.

The company utilizes certain of its financing receivables as collateral for nonrecourse borrowings. Financing receivables pledged as collateral for borrowings were $640 million and $689 million at September 30, 2017 and December 31, 2016, respectively.

The company did not have any financing receivables held for sale as of September 30, 2017 and December 31, 2016.

Financing Receivables by Portfolio Segment

The following tables present financing receivables on a gross basis, excluding the allowance for credit losses and residual value, by portfolio segment and by class, excluding commercial financing receivables and other miscellaneous financing receivables at September 30, 2017 and December 31, 2016. 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. This portfolio segmentation was changed from growth markets and major markets in 2017 as the company no longer manages the business under those market delineations. There was no impact to segment reporting or the company s Consolidated Financial Statements.

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Notes to Consolidated Financial Statements (continued)

(Dollars in millions) At September 30, 2017	Americas	EMEA	Asia Pacific	Total
Financing receivables				
Lease receivables	$ 3,541	$ 1,297	$ 1,304	$ 6,142
Loan receivables	6,180	3,120	2,189	11,489
Ending balance	$ 9,721	$ 4,417	$ 3,493	$ 17,631
Collectively evaluated for impairment	$ 9,581	$ 4,386	$ 3,391	$ 17,358
Individually evaluated for impairment	$ 140	$ 31	$ 102	$ 273
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	$ (49)	$ 0	$ (63)	$ (112)
Recoveries	0	0	0	0
Provision	11	9	(4)	16
Other	12	5	2	19
Ending balance at September 30, 2017	$ 197	$ 36	$ 100	$ 333
Lease receivables	$ 77	$ 6	$ 35	$ 118
Loan receivables	$ 120	$ 29	$ 65	$ 215
Collectively evaluated for impairment	$ 66	$ 12	$ 6	$ 85
Individually evaluated for impairment	$ 131	$ 23	$ 94	$ 248

(Dollars in millions) At December 31, 2016:*	Americas	EMEA	Asia Pacific	Total
Financing receivables:				
Lease receivables	$ 3,830	$ 1,171	$ 1,335	$ 6,336
Loan receivables	6,185	3,309	2,243	11,737
Ending balance	$ 10,015	$ 4,480	$ 3,578	$ 18,073
Collectively evaluated for impairment	$ 9,847	$ 4,460	$ 3,419	$ 17,726
Individually evaluated for impairment	$ 168	$ 20	$ 159	$ 347
Allowance for credit losses				
Beginning balance at January 1, 2016				
Lease receivables	$ 52	$ 17	$ 143	$ 213
Loan receivables	122	55	200	377
Total	$ 175	$ 72	$ 343	$ 590
Write-offs	$ (36)	$ (48)	$ (154)	$ (237)
Recoveries	2	0	0	2
Provision	65	(1)	(6)	58
Other	17	(1)	(18)	(3)
Ending balance at December 31, 2016	$ 223	$ 22	$ 165	$ 410
Lease receivables	$ 54	$ 4	$ 76	$ 133
Loan receivables	$ 169	$ 18	$ 89	$ 276
Collectively evaluated for impairment	$ 62	$ 13	$ 15	$ 90
Individually evaluated for impairment	$ 161	$ 9	$ 150	$ 320

* Reclassified to conform to 2017 presentation.

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. 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.

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Notes to Consolidated Financial Statements (continued)

Financing Receivables on Non-Accrual Status

The following table presents the recorded investment in financing receivables which were on non-accrual status at September 30, 2017 and December 31, 2016.

(Dollars in millions)	At September 30, 2017	At December 31, 2016*
Americas	$ 25	$ 23
EMEA	0	2
Asia Pacific	4	14
Total lease receivables	$ 30	$ 40
Americas	$ 79	$ 128
EMEA	53	5
Asia Pacific	10	12
Total loan receivables	$ 142	$ 145
Total receivables	$ 172	$ 185

* Reclassified to conform to 2017 presentation.

Impaired Receivables

The company considers any receivable with an individually evaluated reserve as an impaired receivable. Depending on the level of impairment, receivables will also be placed on non-accrual status.

The following tables present impaired receivables. This presentation includes both loan and lease receivables.

	At September 30, 2017		At December 31, 2016*	
(Dollars in millions)	Recorded Investment	Related Allowance	Recorded Investment	Related Allowance
Americas	$ 140	$ 131	$ 168	$ 161
EMEA	31	23	20	9
Asia Pacific	102	94	159	150
Total	$ 273	$ 248	$ 347	$ 320

* Reclassified to conform to 2017 presentation.

(Dollars in millions) For the three months ended September 30, 2017:	Average Recorded Investment	Interest Income Recognized	Interest Income Recognized on Cash Basis
Americas	$ 156	$ 0	$
EMEA	31	0	
Asia Pacific	101	0	
Total	$ 288	$ 0	$

(Dollars in millions) For the three months ended September 30, 2016:*	Average Recorded Investment	Interest Income Recognized	Interest Income Recognized on Cash Basis
Americas	$ 182	$ 0	$
EMEA	61	0	
Asia Pacific	302	0	
Total	$ 545	$ 0	$

* Reclassified to conform to 2017 presentation.

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Notes to Consolidated Financial Statements (continued)

(Dollars in millions) For the nine months ended September 30, 2017:	Average Recorded Investment	Interest Income Recognized	Interest Income Recognized on Cash Basis
Americas	$ 165	$ 0	$
EMEA	27	0	
Asia Pacific	131	0	
Total	$ 323	$ 0	$

(Dollars in millions) For the nine months ended September 30, 2016:*	Average Recorded Investment	Interest Income Recognized	Interest Income Recognized on Cash Basis
Americas	$ 158	$ 0	$
EMEA	65	0	
Asia Pacific	322	0	
Total	$ 545	$ 0	$

* Reclassified to conform to 2017 presentation.

Credit Quality Indicators

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 net recorded investment for each class of receivables, by credit quality indicator, at September 30, 2017 and December 31, 2016. 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.

	Lease Receivables			Loan Receivables		
(Dollars in millions) At September 30, 2017:	Americas	EMEA	Asia Pacific	Americas	EMEA	Asia Pacific
Credit Ratings:						
Aaa Aa3	$ 358	$ 52	$ 56	$ 626	$ 124	$ 94
A1 A3	715	126	543	1,251	302	908
Baa1 Baa3	807	404	329	1,412	968	550
Ba1 Ba2	762	415	172	1,333	993	289

Ba3	B1	421	197	86	736	473	143
B2	B3	345	83	69	604	200	116
Caa	D	56	13	15	98	31	25
Total		$ 3,465	$ 1,290	$ 1,269	$ 6,059	$ 3,091	$ 2,124

At September 30, 2017, the industries which made up Global Financing s receivables portfolio consisted of: Financial (33 percent), Government (14 percent), Manufacturing (14 percent), Services (13 percent), Retail (8 percent), Communications (7 percent), Healthcare (6 percent) and Other (5 percent).

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Notes to Consolidated Financial Statements (continued)

(Dollars in millions) At December 31, 2016:*	Lease Receivables			Loan Receivables		
	Americas	EMEA	Asia Pacific	Americas	EMEA	Asia Pacific
Credit Ratings:						
Aaa Aa3	$ 447	$ 51	$ 53	$ 712	$ 143	$ 90
A1 A3	782	113	486	1,246	318	832
Baa1 Baa3	772	366	330	1,230	1,032	565
Ba1 Ba2	822	350	185	1,309	987	316
Ba3 B1	574	208	106	914	585	182
B2 B3	297	71	84	472	201	143
Caa D	83	9	15	133	25	25
Total	$ 3,776	$ 1,167	$ 1,259	$ 6,016	$ 3,291	$ 2,154

* Reclassified to conform to 2017 presentation.

At December 31, 2016, the industries which made up Global Financing s receivables portfolio consisted of: Financial (34 percent), Government (14 percent), Manufacturing (13 percent), Services (12 percent), Retail (8 percent), Communications (7 percent), Healthcare (6 percent) and Other (6 percent).

Past Due Financing Receivables

(Dollars in millions) At September 30, 2017:	Total Past Due > 90 days (1)	Fully Reserved Financing Receivables	<90 Days or Unbilled Financing Receivables	Total Financing Receivables	Recorded Investment > 90 Days and Accruing (2)
Americas	$ 28	$ 51	$ 3,463	$ 3,541	$ 255
EMEA	9	4	1,283	1,297	15
Asia Pacific	5	32	1,266	1,304	19
Total lease receivables	$ 42	$ 87	$ 6,012	$ 6,142	$ 290
Americas	$ 43	$ 80	$ 6,057	$ 6,180	$ 401
EMEA	26	19	3,076	3,120	46
Asia Pacific	6	61	2,122	2,189	9
Total loan receivables	$ 75	$ 160	$ 11,255	$ 11,489	$ 456
Total	$ 117	$ 247	$ 17,267	$ 17,631	$ 746

(1) Only the portion of a financing receivable which is greater than 90 days past due, excluding amounts that are fully reserved.

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

	Fully	<90 Days	Recorded

(Dollars in millions) At December 31, 2016:*	Total Past Due > 90 days (1)	Reserved Financing Receivables	or Unbilled Financing Receivables	Total Financing Receivables	Investment > 90 Days and Accruing (2)
Americas	$ 17	$ 20	$ 3,793	$ 3,830	$ 66
EMEA	2	10	1,159	1,171	6
Asia Pacific	12	59	1,264	1,335	40
Total lease receivables	$ 31	$ 89	$ 6,216	$ 6,336	$ 111
Americas	$ 19	$ 90	$ 6,075	$ 6,185	$ 80
EMEA	5	5	3,299	3,309	15
Asia Pacific	6	87	2,150	2,243	46
Total loan receivables	$ 31	$ 182	$ 11,524	$ 11,737	$ 141
Total	$ 62	$ 271	$ 17,740	$ 18,073	$ 253

(1) Only the portion of a financing receivable which is greater than 90 days past due, excluding amounts that are fully reserved.

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

* Reclassified to conform to 2017 presentation.

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Notes to Consolidated Financial Statements (continued)

Troubled Debt Restructurings

The company did not have any significant troubled debt restructurings during the nine months ended September 30, 2017 or for the year ended December 31, 2016.

5. Stock-Based Compensation: 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.

(Dollars in millions)	Three Months Ended September 30, 2017	2016	Nine Months Ended September 30, 2017	2016
Cost	$ 22	$ 23	$ 68	$ 67
Selling, general and administrative	88	105	277	295
Research, development and engineering	13	14	43	41
Pre-tax stock-based compensation cost	123	142	388	403
Income tax benefits	(41)	(47)	(128)	(131)
Total net stock-based compensation cost	$ 82	$ 95	$ 260	$ 272

Pre-tax stock-based compensation cost for the three months ended September 30, 2017 decreased $19 million compared to the corresponding period in the prior year. This was due to decreases related to performance share units ($11 million), the conversion of stock-based awards previously issued by acquired entities ($7 million) and restricted stock units ($2 million).

Pre-tax stock-based compensation cost for the nine months ended September 30, 2017 decreased $15 million compared to the corresponding period in the prior year. This was due to decreases related to the conversion of stock-based awards previously issued by acquired entities ($20 million) and performance share units ($17 million), partially offset by an increase in restricted stock units ($22 million).

The implementation of the new FASB guidance for share-based payment transactions resulted in an immaterial impact to income tax benefits as of the three months and nine months ended September 30, 2017. Refer to note 2, Accounting Changes, for additional information.

As of September 30, 2017, the total unrecognized compensation cost of $905 million related to non-vested awards was expected to be recognized over a weighted-average period of approximately 2.6 years.

There was no significant capitalized stock-based compensation cost at September 30, 2017 and 2016.

6. Segments: The tables on pages 29 and 30 reflect the results of continuing operations 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.

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Notes to Consolidated Financial Statements (continued)

SEGMENT INFORMATION

(Dollars in millions)	Cognitive Solutions & Industry Services: Cognitive Solutions	Cognitive Solutions & Industry Services: Global Business Services	Technology Services & Cloud Platforms	Systems	Global Financing	Total Segments
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	$ 1,649	$ 453	$ 1,192	$ 339	$ 244	$ 3,876
Revenue year-to-year change	2.6%	(2.3)%	(3.4)%	12.3%	(8.5)%	(0.6)%
Pre-tax income year-to-year change	4.8%	(16.8)%	(7.5)%	149.7%	(31.4)%	(0.5)%
Pre-tax income margin	32.8%	10.8%	13.8%	17.4%	34.9%	18.9%
For the three months ended September 30, 2016:						
External revenue	$ 4,235	$ 4,191	$ 8,748	$ 1,558	$ 412	$ 19,145
Internal revenue	667	93	180	176	352	1,468
Total revenue	$ 4,902	$ 4,284	$ 8,929	$ 1,734	$ 763	$ 20,613
Pre-tax income from continuing operations	$ 1,574	$ 544	$ 1,288	$ 136	$ 355	$ 3,897
Pre-tax income margin	32.1%	12.7%	14.4%	7.8%	46.5%	18.9%

Reconciliations to IBM as Reported:

(Dollars in millions) For the three months ended September 30:	2017	2016
Revenue:		
Total reportable segments	$ 20,482	$ 20,613
Eliminations of internal transactions	(1,384)	(1,468)
Other revenue	56	81
Total consolidated revenue	$ 19,153	$ 19,226
Pre-tax income from continuing operations:		
Total reportable segments	$ 3,876	$ 3,897
Amortization of acquired intangible assets	(238)	(265)
Acquisition-related (charges)/income	0	(4)
Non-operating retirement-related (costs)/income	(306)	(139)
Eliminations of internal transactions	(126)	(185)
Unallocated corporate amounts	(141)	(42)

Total pre-tax income from continuing operations	$	3,065	$	3,263

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Notes to Consolidated Financial Statements (continued)

SEGMENT INFORMATION

(Dollars in millions)	Cognitive Solutions & Industry Services: Cognitive Solutions	Cognitive Solutions & Industry Services: Global Business Services	Technology Services & Cloud Platforms	Systems	Global Financing	Total Segments
For the nine months ended September 30, 2017:						
External revenue	$ 13,021	$ 12,196	$ 25,079	$ 4,863	$ 1,246	$ 56,405
Internal revenue	2,001	271	497	571	925	4,265
Total revenue	$ 15,022	$ 12,467	$ 25,576	$ 5,434	$ 2,171	$ 60,670
Pre-tax income from continuing operations	$ 4,539	$ 1,065	$ 2,888	$ 227	$ 836	$ 9,555
Revenue year-to-year change	1.4%	(3.3)%	(3.6)%	(6.0)%	(16.0)%	(3.1)%
Pre-tax income year-to-year change	12.4%	(12.0)%	2.2%	(35.9)%	(30.7)%	(0.8)%
Pre-tax income margin	30.2%	8.5%	11.3%	4.2%	38.5%	15.7%
For the nine months ended September 30, 2016:						
External revenue	$ 12,889	$ 12,578	$ 26,029	$ 5,184	$ 1,245	$ 57,926
Internal revenue	1,929	310	501	594	1,340	4,673
Total revenue	$ 14,818	$ 12,888	$ 26,530	$ 5,778	$ 2,585	$ 62,599
Pre-tax income from continuing operations	$ 4,039	$ 1,210	$ 2,825	$ 354	$ 1,208	$ 9,636
Pre-tax income margin	27.3%	9.4%	10.6%	6.1%	46.7%	15.4%

Reconciliations to IBM as Reported:

(Dollars in millions) For the nine months ended September 30:	2017	2016
Revenue:		
Total reportable segments	$ 60,670	$ 62,599
Eliminations of internal transactions	(4,265)	(4,673)
Other revenue	192	223
Total consolidated revenue	$ 56,597	$ 58,149
Pre-tax income from continuing operations:		
Total reportable segments	$ 9,555	$ 9,636
Amortization of acquired intangible assets	(731)	(742)
Acquisition-related (charges)/income	(19)	(1)
Non-operating retirement-related (costs)/income	(1,065)	(444)
Eliminations of internal transactions	(515)	(873)

Unallocated corporate amounts		(294)		(230)
Total pre-tax income from continuing operations	$	6,931	$	7,345

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Notes to Consolidated Financial Statements (continued)

7. Equity Activity:

Reclassifications and Taxes Related to Items of Other Comprehensive Income

(Dollars in millions) For the three months ended September 30, 2017:	Before Tax Amount	Tax (Expense)/ Benefit	Net of Tax 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 8, 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) For the three months ended September 30, 2016:	Before Tax Amount	Tax (Expense)/ Benefit	Net of Tax Amount
Other comprehensive income/(loss):			
Foreign currency translation adjustments	$ (99)	$ 50	$ (49)
Net changes related to available-for-sale securities:			
Unrealized gains/(losses) arising during the period	$ (1)	$ 0	$ (1)
Reclassification of (gains)/losses to other (income) and expense	(1)	0	(1)
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	$ 35	$ (14)	$ 21
Reclassification of (gains)/losses to:			
Cost of sales*	7	(3)	4
Cost of services*	(3)	1	(2)
SG&A expense	(2)	(1)	(3)
Other (income) and expense	6	(2)	4
Interest expense	7	(3)	4
Total unrealized gains/(losses) on cash flow hedges	$ 50	$ (22)	$ 29
Retirement-related benefit plans(1):			
Net (losses)/gains arising during the period	$ 11	$ (5)	$ 6
Curtailments and settlements	4	(1)	3
Amortization of prior service (credits)/costs	(28)	9	(19)
Amortization of net (gains)/losses	696	(225)	471
Total retirement-related benefit plans	$ 683	$ (222)	$ 461
Other comprehensive income/(loss)	$ 632	$ (192)	$ 440

* Reclassified to conform to 2017 presentation.

(1) These AOCI components are included in the computation of net periodic pension cost. (See note 8, 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) For the nine months ended September 30, 2017:	Before Tax Amount	Tax (Expense)/ Benefit	Net of Tax 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 8, 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) For the nine months ended September 30, 2016:	Before Tax Amount	Tax (Expense)/ Benefit	Net of Tax Amount
Other comprehensive income/(loss):			
Foreign currency translation adjustments	$ (109)	$ 411	$ 303
Net changes related to available-for-sale securities:			
Unrealized gains/(losses) arising during the period	$ (36)	$ 14	$ (22)
Reclassification of (gains)/losses to other (income) and expense	36	(14)	22
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	$ (221)	$ 82	$ (139)
Reclassification of (gains)/losses to:			
Cost of sales*	5	(4)	2
Cost of services*	9	(3)	5
SG&A expense	1	(3)	(1)
Other (income) and expense	(6)	2	(4)
Interest expense	17	(6)	10
Total unrealized gains/(losses) on cash flow hedges	$ (195)	$ 68	$ (127)
Retirement-related benefit plans(1):			
Net (losses)/gains arising during the period	$ (57)	$ 20	$ (37)
Curtailments and settlements	19	(7)	12
Amortization of prior service (credits)/costs	(81)	29	(52)
Amortization of net (gains)/losses	2,079	(735)	1,344
Total retirement-related benefit plans	$ 1,960	$ (693)	$ 1,267
Other comprehensive income/(loss)	$ 1,656	$ (213)	$ 1,442

* Reclassified to conform to 2017 presentation.

(1) These AOCI components are included in the computation of net periodic pension cost. (See note 8, 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 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)	0	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.

(Dollars in millions)	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, 2016	$ 100	$ (3,463)	$ (26,248)	$ 5	$ (29,607)
Other comprehensive income before reclassifications	(139)	303	(25)	(22)	117
Amount reclassified from accumulated other comprehensive income	12	0	1,292	22	1,326
Total change for the period	(127)	303	1,267	0	1,442
September 30, 2016	$ (28)	$ (3,161)	$ (24,981)	$ 4	$ (28,164)

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

8. Retirement-Related Benefits: 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 tables provide the pre-tax cost for all retirement-related plans.

(Dollars in millions)	Yr. to Yr. Percent

For the three months ended September 30:	2017	2016	Change
Retirement-related plans cost			
Defined benefit and contribution pension plans cost	$ 592	$ 421	40.6%
Nonpension postretirement plans cost	61	64	(5.9)
Total	$ 653	$ 486	34.4%

(Dollars in millions) For the nine months ended September 30:	2017	2016	Yr. to Yr. Percent Change
Retirement-related plans cost			
Defined benefit and contribution pension plans cost	$ 1,915	$ 1,315	45.6%
Nonpension postretirement plans cost	182	185	(1.6)
Total	$ 2,097	$ 1,500	39.8%

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

Cost/(Income) of Pension Plans

(Dollars in millions)	U.S. Plans		Non-U.S. Plans	
For the three months ended September 30:	**2017**	**2016**	**2017**	**2016**
Service cost	$	$	$ 106	$ 108
Interest cost	478	512	215	257
Expected return on plan assets	(753)	(922)	(340)	(468)
Amortization of prior service costs/(credits)	4	3	(25)	(28)
Recognized actuarial losses	334	328	387	357
Curtailments and settlements			2	4
Multi-employer plans/other			(74)	8
Total net periodic pension (income)/cost of defined benefit plans	63	(79)	271	239
Cost of defined contribution plans	156	159	102	103
Total defined benefit and contribution plans cost recognized in the Consolidated Statement of Earnings	$ 219	$ 79	$ 373	$ 342

(Dollars in millions)	U.S. Plans		Non-U.S. Plans	
For the nine months ended September 30:	**2017**	**2016**	**2017**	**2016**
Service cost	$	$	$ 308	$ 318
Interest cost	1,435	1,536	622	787
Expected return on plan assets	(2,260)	(2,767)	(985)	(1,419)
Amortization of prior service costs/(credits)	12	8	(73)	(79)
Recognized actuarial losses	1,003	985	1,120	1,062
Curtailments and settlements			3	19
Multi-employer plan/other			(46)	64
Total net periodic pension (income)/cost of defined benefit plans	190	(238)	950	751
Cost of defined contribution plans	475	484	301	318
Total defined benefit and contribution plans cost recognized in the Consolidated Statement of Earnings	$ 665	$ 246	$ 1,250	$ 1,069

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. As a result of the ruling, the company recorded a pre-tax retirement-related obligation of $162 million in the fourth quarter of 2012 in selling, general and administrative expense in the Consolidated Statement of Earnings. As a result of the final Court of Appeal ruling received in August 2017, the company adjusted its obligation under the plan. This adjustment resulted in a gain of $91 million recorded in selling, general and administrative expense in the Consolidated Statement of Earnings for the three and nine months ended September 30, 2017. This gain is reflected in Non-U.S. Plans - Multi-employer plans/other in the tables above. See note 12, Contingencies for additional information.

In March 2017, the company initiated a change to the investment strategy of its U.S. defined benefit plan. The 2017 target asset allocation was modified by reducing equity securities from 20 percent to 12 percent, increasing debt securities from 70 percent to 79 percent and other investments largely remained unchanged at 10 percent of total plan assets. This change was designed to reduce the risk associated with the potential negative impact that equity markets might have on the funded status of the U.S. defined benefit plan. The change is expected to reduce the 2018 expected long-term rate of return on assets from 5.75 percent to approximately 5.25 percent. See note S, Retirement-Related Benefits, on page 144 in the company s 2016 Annual Report for additional information regarding the company s investment strategy.

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Notes to Consolidated Financial Statements (continued)

In 2017, 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 Japan, Spain and the UK. This amount generally represents the legally mandated minimum contribution. 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. Total net contributions to the non-U.S. plans in the first nine months of 2016 were $261 million, of which $97 million was in cash and $164 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.

The following tables provide the components of the cost/(income) for the company s nonpension postretirement plans.

Cost of Nonpension Postretirement Plans

(Dollars in millions)	U.S. Plan		Non-U.S. Plans	
For the three months ended September 30:	**2017**	**2016**	**2017**	**2016**
Service cost	$ 4	$ 4	$ 1	$ 1
Interest cost	38	41	14	15
Expected return on plan assets			(2)	(2)
Amortization of prior service costs/(credits)	(2)	(2)	0	(1)
Recognized actuarial losses	5	5	2	2
Curtailments and settlements			0	0
Total nonpension postretirement plan cost recognized in Consolidated Statement of Earnings	$ 45	$ 49	$ 16	$ 16

(Dollars in millions)	U.S. Plan		Non-U.S. Plans	
For the nine months ended September 30:	**2017**	**2016**	**2017**	**2016**
Service cost	$ 11	$ 13	$ 4	$ 4
Interest cost	115	124	43	37
Expected return on plan assets			(6)	(5)
Amortization of prior service costs/(credits)	(6)	(6)	0	(4)
Recognized actuarial losses	15	15	5	7
Curtailments and settlements			0	0
Total nonpension postretirement plan cost recognized in Consolidated Statement of Earnings	$ 135	$ 146	$ 47	$ 39

The company contributed $259 million in U.S. Treasury securities to the U.S. nonpension postretirement benefit plan during the nine months ended September 30, 2017, and $200 million in U.S. Treasury securities and $40 million in cash during the nine months ended September 30, 2016. The contribution of U.S. Treasury securities is considered a non-cash transaction in the Consolidated Statement of Cash Flows.

9. Acquisitions/Divestitures:

Acquisitions: During the nine months ended September 30, 2017, the company completed four acquisitions at an aggregate cost of $128 million.

The Technology Services & Cloud Platforms segment completed acquisitions of three businesses: in the first quarter, Agile 3 Solutions, LLC (Agile 3 Solutions), a privately held business; in the third quarter, the cloud and managed hosting services business from a large U.S. telecommunications company, and Cloudigo Ltd. (Cloudigo), a privately held business. The Cognitive Solutions segment completed the acquisition of one privately held business: in the second quarter, XCC Web Content & Custom Apps Extension (XCC) from TIMETOACT Software & Consulting GmbH.

Each acquisition is expected to enhance the company s portfolio of product and services capabilities. Agile 3 Solutions is a developer of software used by C-Suite and senior executives to better visualize, understand and manage risks associated with the protection of sensitive data and adds capabilities to the company s security portfolio. The acquisition of the cloud and managed hosting services business strengthens the company s services portfolio and aligns with its cloud strategy. Cloudigo brings talent and technology that aligns closely with the company s cloud platform investments in advanced

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Notes to Consolidated Financial Statements (continued)

network processing. XCC s technology enhances IBM s Connections Cloud platform by providing a single, accessible engagement center for sharing content.

Purchase price consideration for all acquisitions as reflected in the following table, was paid in cash. All acquisitions are reported in the Consolidated Statement of Cash Flows net of acquired cash and cash equivalents.

The following table reflects the purchase price related to these acquisitions and the resulting purchase price allocations as of September 30, 2017.

(Dollars in millions)	Amortization Life (in yrs.)	Total Acquisitions
Current assets		$ 18
Fixed assets/noncurrent assets		69
Intangible assets:		
Goodwill	N/A	16
Completed technology	5	9
Client relationships	7	62
Patents/trademarks	1-5	1
Total assets acquired		175
Current liabilities		(47)
Total liabilities assumed		(47)
Total purchase price		$ 128

N/A - not applicable

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 primary items that generated the goodwill are the value of the synergies between the acquired businesses and IBM and the acquired assembled workforce, neither of which qualify as an amortizable intangible asset.

The overall weighted-average life of the identified amortizable intangible assets acquired is 6.6 years. These identified intangible assets will be amortized on a straight-line basis over their useful lives. Goodwill of $13 million has been assigned to the Technology Services & Cloud Platforms segment and goodwill of $3 million has been assigned to the Cognitive Solutions segment. It is expected that approximately 50 percent of the goodwill will be deductible for tax purposes. Each of the acquisitions was for 100 percent of the acquired businesses.

On October 4, 2017, the company announced its intent to acquire Vivant Digital (Vivant), a boutique digital and innovation agency. The acquisition extends the strategy and design expertise of IBM Interactive Experience (IBM iX) and will help accelerate clients digital transformations. The transaction is expected to close in the fourth quarter of 2017 and the business will be integrated within the GBS segment.

Divestitures:

Microelectronics On October 20, 2014, IBM and GLOBALFOUNDRIES announced a definitive agreement in which GLOBALFOUNDRIES would acquire the company s Microelectronics business, including existing semiconductor manufacturing assets and operations in East Fishkill, NY and Essex Junction, VT. The commercial OEM business acquired by GLOBALFOUNDRIES includes custom logic and specialty foundry, manufacturing and related operations. The transaction closed on July 1, 2015.

At September 30, 2014, the company concluded that the Microelectronics business met the criteria for discontinued operations reporting. The disposal group constituted a component under accounting guidance. The continuing cash inflows and outflows with the discontinued component are related to the manufacturing sourcing arrangement and the transition, packaging and test services. These cash flows are not direct cash flows as they are not significant and the company has no significant continuing involvement.

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Notes to Consolidated Financial Statements (continued)

All assets and liabilities of the business, classified as held for sale at June 30, 2015, were transferred at closing. The company transferred $515 million of net cash to GLOBALFOUNDRIES in the third quarter of 2015. This amount included $750 million of cash consideration, adjusted by the amount of working capital due from GLOBALFOUNDRIES and other miscellaneous items. A second cash payment in the amount of $500 million was transferred in December 2016. The remaining cash consideration of $250 million is expected to be transferred in December 2017.

Summarized financial information for discontinued operations is immaterial.

Industry Standard Server On January 23, 2014, IBM and Lenovo Group Limited (Lenovo) announced a definitive agreement in which Lenovo would acquire the company s industry standard server portfolio (System x) for an adjusted purchase price of $2.1 billion, consisting of approximately $1.8 billion in cash, with the balance in Lenovo common stock. The stock represented less than 5 percent equity ownership in Lenovo. The company sold to Lenovo its System x, BladeCenter and Flex System blade servers and switches, x86-based Flex integrated systems, NeXtScale and iDataPlex servers and associated software, blade networking and maintenance operations. As of March 31, 2016, all Lenovo common stock was sold.

The initial closing was completed on October 1, 2014. A subsequent closing occurred in most other countries in which there was a large business footprint on December 31, 2014. The remaining countries closed on March 31, 2015. An assessment of the ongoing contractual terms of the transaction resulted in the recognition of pre-tax gains of $63 million, $57 million and $13 million in 2015, 2016 and the first nine months of 2017, respectively.

Overall, the company expects to recognize a total pre-tax gain on the sale of approximately $1.6 billion, which does not include associated costs related to transition and performance-based costs. Net of these charges, the pre-tax gain was approximately $1.3 billion, of which the cumulative gain recorded as of September 30, 2017 is $1.2 billion. The balance of the gain is expected to be recognized in 2019 upon conclusion of the maintenance agreement.

Others In the first quarter of 2017, the company completed one research-related divestiture. The company completed two Cognitive Solutions divestitures in the second quarter of 2017 and one Cognitive Solutions divestiture in the third quarter of 2017. The financial terms related to these transactions were not material. Overall, the company recognized a pre-tax gain of $25 million related to these transactions in 2017.

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Notes to Consolidated Financial Statements (continued)

10. Intangible Assets Including Goodwill: The following table details the company s intangible asset balances by major asset class:

(Dollars in millions) Intangible asset class	At September 30, 2017 Gross Carrying Amount	Accumulated Amortization	Net Carrying Amount
Capitalized software	$ 1,586	$ (750)	$ 835
Client relationships	2,416	(1,054)	1,363
Completed technology	2,872	(1,562)	1,310
Patents/trademarks	707	(267)	440
Other*	52	(19)	32
Total	$ 7,633	$ (3,652)	$ 3,981

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

(Dollars in millions) Intangible asset class	At December 31, 2016 Gross Carrying Amount	Accumulated Amortization	Net Carrying Amount
Capitalized software	$ 1,537	$ (661)	$ 876
Client relationships	2,831	(1,228)	1,602
Completed technology	3,322	(1,668)	1,654
Patents/trademarks	730	(205)	525
Other*	46	(15)	31
Total	$ 8,466	$ (3,778)	$ 4,688

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

The net carrying amount of intangible assets decreased $707 million during the first nine months of 2017, primarily due to intangible asset amortization, partially offset by additions resulting from capitalized software. The aggregate intangible amortization expense was $383 million and $1,161 million for the third quarter and first nine months of 2017, respectively, versus $403 million and $1,148 million for the third quarter and first nine months of 2016, respectively. In addition, in the first nine months of 2017, the company retired $1,255 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, 2017:

	Capitalized	Acquired

(Dollars in millions)	Software	Intangibles	Total
2017 (for Q4)	$ 144	$ 216	$ 359
2018	441	811	1,252
2019	202	671	873
2020	48	559	607
2021		446	446

The change in the goodwill balances by reportable segment, for the nine months ended September 30, 2017 and for the year ended December 31, 2016 are as follows:

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Notes to Consolidated Financial Statements (continued)

(Dollars in millions) Segment	Balance 01/01/17	Goodwill Additions	Purchase Price Adjustments	Divestitures	Foreign Currency Translation And Other Adjustments*	Balance 9/30/17
Cognitive Solutions	$ 19,484	$ 3	$ (36)	$ (15)	$ 243	$ 19,679
Global Business Services	4,607		4		186	4,797
Technology Services & Cloud Platforms	10,258	13	(3)		175	10,444
Systems	1,850				13	1,863
Total	$ 36,199	$ 16	$ (36)	$ (15)	$ 618	$ 36,782

* Primarily driven by foreign currency translation.

(Dollars in millions) Segment	Balance 01/01/16	Goodwill Additions	Purchase Price Adjustments	Divestitures	Foreign Currency Translation And Other Adjustments*	Balance 12/31/16
Cognitive Solutions	$ 15,621	$ 3,821	$ 5	$ (12)	$ 48	$ 19,484
Global Business Services	4,396	303	4	(1)	(95)	4,607
Technology Services & Cloud Platforms	10,156	119	(12)	(5)	(1)	10,258
Systems	1,848		(4)		5	1,850
Total	$ 32,021	$ 4,244	$ (7)	$ (18)	$ (42)	$ 36,199

* Primarily driven by foreign currency translation.

There were no goodwill impairment losses recorded during the first nine months of 2017 or the full year of 2016 and the company has no accumulated impairment losses.

Purchase price adjustments recorded in the first nine months of 2017 and full year 2016 were related to acquisitions completed on or prior to June 30, 2017 or September 30, 2016, respectively, and 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 of $36 million were recorded during the first nine months of 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. Net purchase price adjustments of $7 million were recorded during 2016, with the primary drivers being deferred tax assets, accounts receivable, deferred income, inventory and other current liabilities.

11. Borrowings:

Short-Term Debt

(Dollars in millions)	At September 30, 2017	At December 31, 2016
Commercial paper	$	$ 899
Short-term loans	407	375
Long-term debt current maturities	3,892	6,239
Total	$ 4,299	$ 7,513

The weighted-average interest rate for commercial paper at December 31, 2016 was 0.7 percent. The weighted-average interest rate for short-term loans was 5.4 percent and 9.5 percent at September 30, 2017 and December 31, 2016, respectively.

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Notes to Consolidated Financial Statements (continued)

Long-Term Debt

Pre-Swap Borrowing

(Dollars in millions)	Maturities	Balance 9/30/2017	Balance 12/31/2016
U.S. dollar debt (average interest rate at September 30, 2017):*			
2.7%	2017	$ 2	$ 5,104
3.0%	2018 2019	10,208	8,856
2.0%	2020 2021	7,416	4,941
2.4%	2022	3,492	1,901
3.4%	2023	1,529	1,500
3.6%	2024	2,000	2,000
7.0%	2025	600	600
3.5%	2026	1,350	1,350
4.7%	2027	969	469
6.5%	2028	313	313
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
		$ 31,408	$ 30,563
Other currencies (average interest rate at September 30, 2017, in parentheses):*			
Euros (1.5%)	2019 2029	$ 10,342	$ 7,122
Pound sterling (2.7%)	2020 2022	1,409	1,296
Japanese yen (0.9%)	2017 2026	1,669	1,576
Canadian (2.2%)	2017		373
Other (7.4%)	2018 2020	694	215
		$ 45,522	$ 41,145
Less: net unamortized discount		833	839
Less: net unamortized debt issuance costs		99	82
Add: fair value adjustment**		627	669
		$ 45,218	$ 40,893
Less: current maturities		3,892	6,239
Total		$ 41,327	$ 34,655

* 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. 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. 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 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.

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Notes to Consolidated Financial Statements (continued)

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 maturities of long-term debt outstanding at September 30, 2017, are as follows:

(Dollars in millions)	Total
2017 (for Q4)	$ 468
2018	5,140
2019	7,034
2020	6,155
2021	5,155
2022 and beyond	21,569
Total	$ 45,522

Interest on Debt

(Dollars in millions) For the nine months ended September 30:	2017	2016
Cost of financing	$ 496	$ 432
Interest expense	485	523
Net investment derivative activity	(34)	(51)
Interest capitalized	(1)	3
Total interest paid and accrued	$ 947	$ 907

Lines of Credit

In 2016, the company increased the size of its five-year Credit Agreement (the Credit Agreement) from $10 billion to $10.25 billion and extended the term by one year to November 10, 2021. The Credit Agreement permits the company and its Subsidiary Borrowers to borrow up to $10.25 billion on a revolving basis. Borrowings of the Subsidiary Borrowers will be unconditionally backed by the company. The company may also, upon the agreement of either existing lenders, or of the additional banks not currently party to the Credit Agreement, increase the commitments under the Credit Agreement up to an additional $1.75 billion. Subject to certain terms of the Credit Agreement, the company and Subsidiary Borrowers may borrow, prepay and reborrow amounts under the Credit Agreement at any time during the Credit Agreement term. Interest rates on borrowings under the Credit Agreement will be based on prevailing market interest rates, as further described in the Credit Agreement. The Credit Agreement contains customary representations and warranties, covenants, events of default, and indemnification provisions. The company believes that circumstances that might give rise to breach of these covenants or an event of default, as specified in the Credit Agreement, are remote. As of September 30, 2017, there were no borrowings by the company, or its subsidiaries, under the Credit Agreement.

The company also has other committed lines of credit in some of the geographies which are not significant in the aggregate. Interest rates and other terms of borrowing under these lines of credit vary from country to country, depending on local market conditions.

On July 20, 2017, the company and IBM Credit LLC, (the Borrowers), entered into a $2.5 billion 364-Day Credit Agreement, and a $2.5 billion Three-Year Credit Agreement (the New Credit Agreements, and together with the Credit Agreement, the Credit Facilities). IBM also entered into the Third Amendment to its Credit Agreement. The New Credit Agreements permit the Borrowers to borrow up to an aggregate of $5 billion on a revolving basis. Neither Borrower is a guarantor or co-obligor of the other Borrower under the New Credit Agreements. Subject to certain conditions stated in the New Credit Agreements, the Borrowers may borrow, prepay and re-borrow amounts under the New Credit Agreements at any time during the term of the New Credit Agreements. Funds borrowed may be used for the general corporate purposes of the Borrowers. Interest rates on borrowings under the New Credit Agreements will be based on prevailing market interest rates, as further described in the New Credit Agreements. The New Credit Agreements contain customary representations and warranties, covenants, events of default, and indemnification provisions. The Amendment to the Credit Agreement adds and restates various provisions in order to provide the company with the opportunity in 2018 to request that the lenders extend the termination date of the Credit Agreement to July 20, 2023.

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Notes to Consolidated Financial Statements (continued)

12. 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 changes to such liabilities for the quarter ended September 30, 2017 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

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Notes to Consolidated Financial Statements (continued)

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. IBM appealed to the Indiana Court of Appeals 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. The case is pending in the Middle District of Tennessee.

On April 16, 2014, Iusacell SA de C.V. (Iusacell) sued IBM, claiming that IBM made fraudulent misrepresentations that induced Iusacell to enter into an agreement with IBM Mexico. Iusacell claimed damages for lost profits. Iusacell s complaint related to a contractual dispute in Mexico, which was the subject of a pending arbitration proceeding in Mexico initiated by IBM Mexico against Iusacell for breach of the underlying agreement. On August 31, 2017, the parties entered into an agreement releasing all claims against each other, resolving both the lawsuit and the arbitration proceeding.

IBM United Kingdom Limited (IBM UK) initiated legal proceedings in May 2010 before the High Court in London against the IBM UK Pensions Trust (the UK Trust) and two representative beneficiaries of the UK Trust membership. IBM UK sought a declaration that it acted lawfully both in notifying the Trustee of the UK Trust that it was closing its UK defined benefit plans to future accruals for most participants and in implementing the company s new retirement policy. In April 2014, the High Court acknowledged that the changes made to its UK defined benefit plans were within IBM s discretion, but ruled that IBM breached its implied duty of good faith both in implementing these changes and in the manner in which it consulted with employees. Proceedings to determine remedies were held in July 2014, and in February 2015 the High Court held that for IBM to make changes to accruals under the plan would require a new consultation of the participants, but other changes (including to early retirement policy) would not require such consultation. IBM UK appealed both the breach and remedies judgments. In August 2017, the Appeal Court reversed the High Court, holding that IBM UK was not in breach of its implied duties of good faith and that the changes made to the plans were lawful. The time to appeal has expired and the Appeal Court judgment is final. In addition, IBM UK is a

defendant in approximately 290 individual actions brought since early 2010 by participants of the defined benefits plans who left IBM UK. These actions, which allege constructive dismissal and age discrimination, are pending before the Employment Tribunal in Southampton UK.

In early 2012, IBM notified the SEC of an investigation by the Polish Central Anti-Corruption Bureau involving allegations of illegal activity by a former IBM Poland employee in connection with sales to the Polish government. IBM cooperated with the SEC and Polish authorities in this matter. In April 2013, IBM learned that the U.S. Department of Justice (DOJ) was also investigating allegations related to the Poland matter, as well as allegations relating to transactions in Argentina, Bangladesh and Ukraine. The DOJ was seeking information regarding the company s global FCPA compliance program and its public sector business. The company cooperated with the DOJ in this matter. In June 2017, the DOJ and the SEC each informed IBM that based on the information to date, they closed their respective investigations into these matters without pursuing any enforcement action against the company.

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). The company,

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Notes to Consolidated Financial Statements (continued)

management s Retirement Plans Committee, and three current or former IBM executives were named as defendants. On September 7, 2016, the Court granted the company s motion to dismiss the plaintiffs claims. On October 21, 2016, the plaintiffs filed an amended complaint, dropping the company as a defendant. On September 29, 2017, the Court granted the defendants motion to dismiss. Plaintiffs have filed a notice of appeal to the Second Circuit Court of Appeals and the matter remains pending.

In August 2015, IBM learned that the SEC is 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 is cooperating with the SEC in this matter.

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 $1.1 billion. The company believes it will prevail on these matters and that this amount is not a meaningful indicator of liability.

13. Commitments: The company s extended lines of credit to third-party entities include unused amounts of $8,016 million and $6,542 million at September 30, 2017 and December 31, 2016, 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 $3,063 million and $2,463 million at September 30, 2017 and December 31, 2016, 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 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 $21 million and $34 million at September 30, 2017 and December 31, 2016, respectively. The fair value of the guarantees recognized in the Consolidated Statement of Financial Position is not material.

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Notes to Consolidated Financial Statements (continued)

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)	2017	2016
Balance at January 1	$ 156	$ 181
Current period accruals	107	107
Accrual adjustments to reflect actual experience	(3)	4
Charges incurred	(126)	(132)
Balance at September 30	$ 134	$ 160

Extended Warranty Liability

(Dollars in millions)	2017	2016
Aggregate deferred revenue at January 1	$ 531	$ 538
Revenue deferred for new extended warranty contracts	175	176
Amortization of deferred revenue	(198)	(198)
Other*	24	12
Aggregate deferred revenue at September 30	$ 533	$ 528
Current portion	$ 258	$ 287
Noncurrent portion	$ 275	$ 241

* Other primarily consists of foreign currency translation adjustments.

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Notes to Consolidated Financial Statements (continued)

14. 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, 2017 and 2016.

	For the Three Months Ended	
	September 30, 2017	**September 30, 2016**
Number of shares on which basic earnings per share is calculated:		
Weighted-average shares outstanding during period	929,437,441	953,995,828
Add Incremental shares under stock-based compensation plans	2,236,234	2,357,365
Add Incremental shares associated with contingently issuable shares	1,553,754	964,091
Number of shares on which diluted earnings per share is calculated	933,227,429	957,317,284
Income from continuing operations (millions)	$ 2,726	$ 2,854
Loss from discontinued operations, net of tax (millions)	0	(1)
Net income on which basic earnings per share is calculated (millions)	$ 2,726	$ 2,853
Income from continuing operations (millions)	$ 2,726	$ 2,854
Net income applicable to contingently issuable shares (millions)	0	
Income from continuing operations on which diluted earnings per share is calculated (millions)	$ 2,726	$ 2,854
Loss from discontinued operations, net of tax, on which basic and diluted earnings per share is calculated (millions)	0	(1)
Net income on which diluted earnings per share is calculated (millions)	$ 2,726	$ 2,853
Earnings/(loss) per share of common stock:		
Assuming dilution		
Continuing operations	$ 2.92	$ 2.98
Discontinued operations	0.00	0.00
Total	$ 2.92	$ 2.98
Basic		
Continuing operations	$ 2.93	$ 2.99
Discontinued operations	0.00	0.00
Total	$ 2.93	$ 2.99

Stock options to purchase 399,844 shares and 29,033 shares were outstanding as of September 30, 2017 and 2016, 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)

	For the Nine Months Ended	
	September 30, 2017	**September 30, 2016**
Number of shares on which basic earnings per share is calculated:		
Weighted-average shares outstanding during period	935,600,777	957,693,385
Add Incremental shares under stock compensation plans	3,213,758	2,258,854
Add Incremental shares associated with contingently issuable shares	1,394,930	771,943
Number of shares on which diluted earnings per share is calculated	940,209,466	960,724,182
Income from continuing operations (millions)	$ 6,811	$ 7,375
Loss from discontinued operations, net of tax (millions)	(3)	(4)
Net income on which basic earnings per share is calculated (millions)	$ 6,807	$ 7,371
Income from continuing operations (millions)	$ 6,811	$ 7,375
Net income applicable to contingently issuable shares (millions)	(2)	
Income from continuing operations on which diluted earnings per share is calculated (millions)	$ 6,809	$ 7,375
Loss from discontinued operations, net of tax, on which basic and diluted earnings per share is calculated (millions)	(3)	(4)
Net income on which diluted earnings per share is calculated (millions)	$ 6,806	$ 7,371
Earnings/(loss) per share of common stock:		
Assuming dilution		
Continuing operations	$ 7.24	$ 7.67
Discontinued operations	0.00	0.00
Total	$ 7.24	$ 7.67
Basic		
Continuing operations	$ 7.28	$ 7.70
Discontinued operations	0.00	0.00
Total	$ 7.28	$ 7.70

Stock options to purchase 146,795 shares and 533,089 shares (average of first, second and third quarter share amounts) were outstanding as of September 30, 2017 and 2016, 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.

15. Subsequent Events: On October 31, 2017, the company announced that the Board of Directors approved a quarterly dividend of $1.50 per common share. The dividend is payable December 9, 2017 to shareholders of record on November 10, 2017.

On October 31, 2017, the company announced that the Board of Directors authorized $3.0 billion in additional funds for use in the company s stock repurchase program.

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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, 2017

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:	2017	2016	Yr. to Yr. Percent/ Margin Change
Revenue	$ 19,153	$ 19,226	(0.4)%*
Gross profit margin	45.9%	46.9%	(0.9)pts.
Total expense and other (income)	$ 5,735	$ 5,751	(0.3)%
Total expense and other (income)-to-revenue ratio	29.9%	29.9%	0.0pts.
Income from continuing operations, before income taxes	$ 3,065	$ 3,263	(6.1)%
Provision for income taxes from continuing operations	$ 339	$ 409	(17.1)%
Income from continuing operations	$ 2,726	$ 2,854	(4.5)%
Income from continuing operations margin	14.2%	14.8%	(0.6)pts.
Loss from discontinued operations, net of tax	$ 0	$ (1)	(79.3)%
Net income	$ 2,726	$ 2,853	(4.5)%
Earnings per share from continuing operations:			
Assuming dilution	$ 2.92	$ 2.98	(2.0)%
Basic	$ 2.93	$ 2.99	(2.0)%
Consolidated earnings per share - assuming dilution	$ 2.92	$ 2.98	(2.0)%
Weighted-average shares outstanding:			
Assuming dilution	933.2	957.3	(2.5)%
Basic	929.4	954.0	(2.6)%

* (1.0) percent adjusted for currency.

Organization of Information:

In October 2014, the company announced a definitive agreement to divest its Microelectronics business and manufacturing operations. The operating results of the Microelectronics business are reported as discontinued operations. The transaction closed on July 1, 2015.

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. See Currency Rate Fluctuations on page 81 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. For acquisitions, operating 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 & Analysis, the impact of acquisitions over the prior 12-month period may be a driver of higher expenses 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, amortization of prior service cost and the cost of defined contribution plans in operating earnings. Non-operating retirement-related cost includes defined benefit plan and nonpension postretirement benefit plan interest cost, expected return on plan assets, amortized actuarial gains/losses, the impacts of any plan curtailments/settlements and multi-employer plan costs, 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 comparisons 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 2017 and 2016.

(Dollars in millions except per share amounts) For the three months ended September 30:	2017	2016	Yr. to Yr. Percent Change
Net income as reported	$ 2,726	$ 2,853	(4.5)%
Loss from discontinued operations, net of tax	0	(1)	(79.3)
Income from continuing operations	$ 2,726	$ 2,854	(4.5)%
Non-operating adjustments (net of tax):			
Acquisition-related charges	159	197	(19.1)
Non-operating retirement-related costs/(income)	193	99	96.1

Operating (non-GAAP) earnings*	$	3,079	$	3,149	(2.2)%
Diluted operating (non-GAAP) earnings per share	$	3.30	$	3.29	0.3%

* See page 85 for a more detailed reconciliation of net income to operating earnings.

Financial Performance Summary Three Months Ended September 30:

In the third quarter of 2017, the company reported $19.2 billion in revenue, $2.7 billion in income from continuing operations and $3.1 billion in operating (non-GAAP) earnings, resulting in diluted earnings per share from continuing operations of $2.92 as reported and $3.30 on an operating (non-GAAP) basis. The company generated $3.6 billion in cash from operations and $2.5 billion in free cash flow in the third quarter of 2017 and shareholder returns of $2.3 billion in gross common stock repurchases and dividends.

Total consolidated revenue decreased 0.4 percent year to year as reported and 1.0 percent adjusted for currency in the third quarter of 2017, with sequential improvement of 4.3 points as reported and 2.3 points adjusted for currency from the second-quarter year-to-year rates. The Cognitive Solutions segment and the Systems segment both had revenue growth year to year in the third quarter as reported and adjusted for currency. The year-to-year effect of currency in the third quarter (0.6 points help) improved from the second quarter impact (1.4 points hurt).

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Management Discussion (continued)

The company is embedding cloud and cognitive capabilities across the business and the strategic imperatives are a signpost of the progress being made in helping enterprise clients extract value from data and become digital businesses. In the third quarter of 2017, the company continued to deliver solid revenue growth in its strategic imperatives - cloud, analytics, mobile, security and social, which together generated $8.8 billion of revenue and grew 11 percent as reported and 10 percent adjusted for currency, with double-digit growth in cloud and security. Strategic imperatives growth in the third quarter largely represented organic growth as the acquisitive content has leveled on a year-to-year basis. Total Cloud revenue of $4.1 billion increased 20 percent as reported and adjusted for currency, with as-a-Service revenue up 25 percent (24 percent adjusted for currency). The annual exit run rate for as-a-Service revenue increased to $9.4 billion in the third quarter of 2017 compared to $7.5 billion in the third quarter of 2016. Analytics revenue of $5.0 billion increased 5 percent both as reported and adjusted for currency. Mobile revenue increased 7 percent as reported and adjusted for currency and Security revenue increased 51 percent (49 percent adjusted for currency), driven by security software solutions and strong demand for the pervasive encryption capabilities in the new z14 mainframe.

From a segment perspective, in the third quarter, Cognitive Solutions revenue increased 3.9 percent as reported and 3 percent adjusted for currency with growth in Solutions Software and Transaction Processing Software as reported and adjusted for currency. Performance in the third quarter included growth in annuity revenue, including as-a-Service solutions, as well as growth in software transactional performance. Global Business Services (GBS) revenue decreased 2.3 percent as reported and 2 percent adjusted for currency, primarily driven by declines in both Application Management and Global Process Services, partially offset by growth in Consulting. The GBS business continued to shift resources and move into the high-value strategic areas of digital, cloud and analytics. GBS strategic imperatives revenue increased 10 percent (11 percent adjusted for currency) year to year. Technology Services & Cloud Platforms revenue decreased 3.3 percent as reported and 4 percent adjusted for currency, primarily driven by a decline in Infrastructure Services. However, within Technology Services & Cloud Platforms, strategic imperatives revenue was up 12 percent as reported and adjusted for currency year to year, driven by hybrid cloud services, security and mobile. Systems revenue increased 10.4 percent as reported and 10 percent adjusted for currency driven by strong contribution from the new z14 mainframe and continued growth in Storage Systems.

From a geographic perspective, Americas revenue decreased 2.0 percent (2 percent adjusted for currency) year to year, with the U.S. down 2.6 percent and Latin America down 1.5 percent (2 percent adjusted for currency). Canada was up 2.1 percent as reported, but down 2 percent adjusted for currency. Europe/Middle East/Africa (EMEA) revenue increased 2.4 percent as reported, but decreased 1 percent adjusted for currency, with growth in France, Germany and Spain and a decline in the UK. Asia Pacific revenue decreased 1.2 percent as reported, but increased 2 percent adjusted for currency. Within Asia Pacific, Japan decreased 4.0 percent as reported, but increased 4 percent adjusted for currency, and China increased 3.9 percent (4 percent adjusted for currency).

The consolidated gross profit margin of 45.9 percent decreased 0.9 points year to year driven by continued investments, mix and higher retirement-related costs, partially offset by benefits from productivity. The operating (non-GAAP) gross margin of 47.6 percent decreased 0.4 points compared to the prior year driven primarily by the same factors, excluding the impact of higher non-operating retirement-related costs. The consolidated gross margin and the operating (non-GAAP) gross margin both improved 0.4 points compared to the second-quarter 2017 gross margins.

Total expense and other (income) decreased 0.3 percent in the third quarter of 2017 compared to the prior year. The year-to-year decrease was primarily the result of lower operational spending (4 points), largely offset by lower intellectual property income (4 points) and spending related to acquisitions completed in the prior 12 months. The expense dynamics reflect continued efficiency in the underlying spending offset by continued investment to build and reinvent new solutions and platforms. Total operating (non-GAAP) expense and other (income) decreased 0.8 percent year to year driven primarily by the same factors.

Pre-tax income from continuing operations of $3.1 billion in the third quarter of 2017 decreased 6.1 percent year to year and the pre-tax margin was 16.0 percent, a decrease of 1.0 points compared to the third quarter of 2016. The continuing operations effective tax rate for the third quarter of 2017 was 11.0 percent, a decrease of 1.5 points compared to the third quarter of 2016, driven by an increase in foreign tax credits, partially offset by a benefit related to tax audit activity in the prior year period. Income from continuing operations of $2.7 billion decreased 4.5 percent and the net income margin was 14.2 percent, a decrease of 0.6 points. Losses from discontinued operations, net of tax, were $0.2 million in the third quarter of 2017 and $1.0 million in the third quarter of 2016. Net income of $2.7 billion decreased 4.5 percent year to year. Operating (non-GAAP) pre-tax income from continuing operations of $3.6 billion decreased 1.7 percent year to year. Operating (non-GAAP) pre-tax margin from continuing operations decreased 0.2 points to 18.8 percent. Operating (non-GAAP) income from continuing operations of $3.1 billion decreased 2.2 percent and the operating (non-GAAP) income

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Management Discussion (continued)

margin from continuing operations of 16.1 percent decreased 0.3 points. The operating (non-GAAP) effective tax rate from continuing operations in the third quarter of 2017 was 14.7 percent versus 14.2 percent in the prior year.

Diluted earnings per share from continuing operations of $2.92 in the third quarter of 2017 decreased 2.0 percent year to year. In the third quarter of 2017, the company repurchased 6.6 million shares of its common stock at a cost of $0.9 billion and had $1.5 billion remaining in the share repurchase authorization at September 30, 2017. Operating (non-GAAP) diluted earnings per share of $3.30 increased 0.3 percent versus the third quarter of 2016.

The company generated $3.6 billion in cash flow from operating activities in the third quarter of 2017, a decrease of $0.5 billion compared to the third quarter of 2016. Net cash used in investing activities of $1.9 billion was $1.0 billion higher than the prior year, primarily driven by a reduction in cash sourced from non-operating finance receivables ($0.4 billion) and an increase in cash used from net purchases of marketable securities and other investments ($0.4 billion). Net cash used in financing activities of $2.8 billion decreased $1.4 billion compared to the prior year, primarily driven by higher net debt issuances ($1.6 billion).

In January 2017, the company disclosed that it expected GAAP earnings per share from continuing operations of at least $11.95 and operating (non-GAAP) earnings of at least $13.80 per diluted share for 2017. The company also disclosed that it expected 2017 free cash flow to be consistent with 2016. Refer to page 82 in the Liquidity and Capital Resources section for additional information on this non-GAAP measure. In October 2017, the company disclosed that it continues to maintain these expectations. Refer to the Looking Forward section on pages 80 and 81 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:		2017		2016	Yr. to Yr. Percent/ Margin Change
Revenue	$	56,597	$	58,149	(2.7)%*
Gross profit margin		44.8%		47.1%	(2.3)pts.
Total expense and other (income)	$	18,434	$	20,056	(8.1)%
Total expense and other (income)-to-revenue ratio		32.6%		34.5%	(1.9)pts.
Income from continuing operations, before income taxes	$	6,931	$	7,345	(5.6)%
Provision for/(benefit from) income taxes from continuing operations	$	120	$	(31)	nm%
Income from continuing operations	$	6,811	$	7,375	(7.7)%
Income from continuing operations margin		12.0%		12.7%	(0.6)pts.
Loss from discontinued operations, net of tax	$	(3)	$	(4)	(17.5)%
Net income	$	6,807	$	7,371	(7.6)%
Earnings per share from continuing operations:					
Assuming dilution	$	7.24	$	7.67	(5.6)%
Basic	$	7.28	$	7.70	(5.5)%
Consolidated earnings per share - assuming dilution	$	7.24	$	7.67	(5.6)%

Weighted-average shares outstanding:			
Assuming dilution	940.2	960.7	(2.1)%
Basic	935.6	957.7	(2.3)%

		9/30/17		12/31/16	
Assets	$	121,636	$	117,470	3.5%
Liabilities	$	101,879	$	99,078	2.8%
Equity	$	19,757	$	18,392	7.4%

* (2.2) percent adjusted for currency

nm - not meaningful

The following table provides the company s (non-GAAP) operating earnings for the first nine months of 2017 and 2016.

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Management Discussion (continued)

(Dollars in millions except per share amounts) For the nine months ended September 30:		2017		2016	Yr. to Yr. Percent Change
Net income as reported	$	6,807	$	7,371	(7.6)%
Loss from discontinued operations, net of tax		(3)		(4)	(17.5)
Income from continuing operations	$	6,811	$	7,375	(7.7)%
Non-operating adjustments (net of tax):					
Acquisition-related charges		537		542	(0.7)
Non-operating retirement-related costs/(income)		777		338	129.9
Operating (non-GAAP) earnings*	$	8,125	$	8,255	(1.6)%
Diluted operating (non-GAAP) earnings per share	$	8.64	$	8.59	0.6%

* See page 86 for a more detailed reconciliation of net income to operating earnings.

Financial Performance Summary Nine Months Ended September 30:

In the first nine months of 2017, the company reported $56.6 billion in revenue, and delivered $6.8 billion in income from continuing operations, resulting in diluted earnings per share from continuing operations of $7.24 as reported and $8.64 on an operating (non-GAAP) basis. The company generated $11.0 billion in cash from operations and $6.2 billion in free cash flow in the first nine months of 2017 and shareholder returns of $7.8 billion in gross common stock repurchases and dividends.

Total consolidated revenue decreased 2.7 percent year to year as reported and 2.2 percent adjusted for currency in the first nine months of 2017.

In the first nine months of 2017, the company s strategic imperatives revenue grew 9 percent year to year as reported and 10 percent adjusted for currency. Total Cloud revenue of $11.6 billion was up 22 percent year to year as reported and 23 percent adjusted for currency, with as-a-Service revenue up 36 percent (37 percent adjusted for currency). Analytics revenue of $14.5 billion increased 5 percent as reported and 6 percent adjusted for currency. Mobile revenue was up 17 percent year to year (19 percent adjusted for currency) and Security revenue increased 21 percent as reported and adjusted for currency.

From a segment perspective, for the first nine months, Cognitive Solutions revenue increased 1.0 percent as reported and 1 percent adjusted for currency. On an as reported and adjusted for currency basis, Solutions Software increased year to year, while Transaction Processing Software declined. GBS revenue decreased 3.0 percent as reported and 2 percent adjusted for currency with declines in Application Management , Consulting and Global Process Services. GBS strategic imperatives revenue increased 10 percent (11 percent adjusted for currency) year to year. Technology Services & Cloud Platforms revenue decreased 3.7 percent as reported and 3 percent adjusted for currency, primarily driven by Infrastructure Services which declined 4.4 percent (4 percent adjusted for currency). Technology Services & Cloud Platforms strategic imperatives revenue was up 20 percent (21 percent adjusted for currency) year to year, led by hybrid cloud services. Systems revenue decreased 6.2 percent as reported (6 percent adjusted for currency) with declines in z Systems and Power Systems, both due to product refresh cycle dynamics, partially offset by growth in Storage Systems.

From a geographic perspective, Americas revenue decreased 1.8 percent (2 percent adjusted for currency) year to year with the U.S. down 3.0 percent, partially offset by growth in Latin America (4.5 percent as reported, 1 percent adjusted for currency). EMEA revenue decreased 4.7 percent (3 percent adjusted for currency) driven primarily by declines in the UK and Germany. Asia Pacific revenue decreased 1.9 percent (1 percent adjusted for currency), with Japan down 1.8 percent as reported, but up 2 percent adjusted for currency.

The consolidated gross margin of 44.8 percent decreased 2.3 points year to year and reflects investments, mix and higher retirement-related costs, partially offset by benefits from productivity. The operating (non-GAAP) gross margin of 46.5 percent decreased 1.7 points versus the prior year primarily driven by the same factors, excluding the impact of higher non-operational retirement-related costs.

Total expense and other (income) decreased $1.6 billion or 8.1 percent in the first nine months of 2017 compared to the prior year. The year-to-year decrease was primarily the result of continued focus on efficiency in spending and reduced expenses for workforce transformation. This included a lower level of workforce rebalancing charges (4 points), a prior-year charge for real estate actions (2 points) and lower operational spending (2 points). In addition, the effects of currency (1 point) contributed to the year-to-year decline. The year-to-year decrease in expense and other (income) was partially offset by

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Management Discussion (continued)

spending related to acquisitions (2 points) completed in the prior 12 months. Total operating (non-GAAP) expense and other (income) decreased 9.9 percent year to year, driven primarily by the same factors.

Pre-tax income from continuing operations of $6.9 billion decreased 5.6 percent and the pre-tax margin was 12.2 percent, a decrease of 0.4 points versus the first nine months of 2016. The continuing operations effective tax rate for the first nine months of 2017 was 1.7 percent compared to (0.4) percent in the prior year. The tax rate in the first nine months of 2017 benefitted from discrete tax items, including the first-quarter intra-entity transfer of assets ($0.6 billion) and certain second-quarter discrete items. The prior year negative tax rate was primarily the result of a refund ($1.2 billion) of previously paid non-U.S. taxes plus interest in the first quarter of 2016. Income from continuing operations of $6.8 billion decreased 7.7 percent and the net income margin was 12.0 percent, a decrease of 0.6 points compared to the first nine months of 2016. Losses from discontinued operations, net of tax, were $3.5 million in the first nine months of 2017 and $4.2 million in the prior-year period. Net income of $6.8 billion decreased 7.6 percent year to year. Operating (non-GAAP) pre-tax income from continuing operations of $8.7 billion increased 2.5 percent year to year and the operating (non-GAAP) pre-tax margin from continuing operations increased 0.8 points to 15.5 percent. Operating (non-GAAP) income from continuing operations of $8.1 billion decreased 1.6 percent and the operating (non-GAAP) income margin from continuing operations of 14.4 percent increased 0.2 points. The operating (non-GAAP) effective tax rate from continuing operations in the first nine months of 2017 was 7.1 percent versus 3.2 percent in the first nine months of 2016.

Diluted earnings per share from continuing operations of $7.24 decreased 5.6 percent year to year. In the first nine months of 2017, the company repurchased 22.9 million shares of its common stock and had $1.5 billion remaining in the current share repurchase authorization at September 30, 2017. Operating (non-GAAP) diluted earnings per share of $8.64 increased 0.6 percent versus the prior year.

At September 30, 2017, the balance sheet remains strong, and with the newly reorganized financing entity, IBM Credit LLC, the company is better positioned to support the business over the long term. Cash and marketable securities at quarter end were $11.5 billion, an increase of $3.0 billion from December 31, 2016. Key drivers in the balance sheet and total cash flows were:

Total assets increased $4.2 billion (decreased $0.4 billion adjusted for currency) from December 31, 2016 driven by:

- Increases in cash and marketable securities ($3.0 billion), deferred taxes ($2.1 billion), retirement plan assets ($1.5 billion) and goodwill ($0.6 billion); partially offset by

- Decreases in total receivables ($2.7 billion) and intangible assets ($0.7 billion).

Total liabilities increased $2.8 billion (decreased $1.5 billion adjusted for currency) from December 31, 2016 driven by:

- Increases in total debt ($3.5 billion); partially offset by

- Decreases in accounts payable ($0.8 billion).

Total equity of $19.8 billion increased $1.4 billion from December 31, 2016 as a result of:

- Increases from net income ($6.8 billion), retirement-related ($1.4 billion) and equity translation adjustments ($0.8 billion); partially offset by

- Decreases from dividends ($4.1 billion) and share repurchases ($3.7 billion).

The company generated $11.0 billion in cash flow provided by operating activities, a decrease of $2.1 billion compared to the first nine months of 2016, driven primarily by the prior-year tax refund and a decrease in cash provided by financing receivables. Net cash used in investing activities of $3.3 billion was $4.0 billion lower than the prior year, primarily driven by a decrease in cash used for acquisitions ($5.0 billion). Net cash used in financing activities of $5.5 billion increased $0.9 billion compared to the first nine months of 2016, driven primarily by increased gross common share repurchases ($1.0 billion).

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Management Discussion (continued)

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 2017 versus the third quarter and first nine months of 2016 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:	2017	2016	Yr. to Yr. Percent/Margin Change	Yr. to Yr. Percent Change Adjusted For Currency
Revenue:				
Cognitive Solutions	$ 4,400	$ 4,235	3.9%	3.0%
Gross margin	78.7%	80.4%	(1.7)pts.	
Global Business Services	4,093	4,191	(2.3)%	(2.2)%
Gross margin	27.3%	28.8%	(1.5)pts.	
Technology Services & Cloud Platforms	8,457	8,748	(3.3)%	(4.1)%
Gross margin	41.1%	42.0%	(1.0)pts.	
Systems	1,721	1,558	10.4%	9.6%
Gross margin	53.6%	51.1%	2.6pts.	
Global Financing	427	412	3.7%	2.8%
Gross margin	25.2%	37.8%	(12.6)pts.	
Other	56	81	(31.8)%	(32.8)%
Gross margin	(511.4)%	(279.2)%	(232.2)pts.	
Total consolidated revenue	$ 19,153	$ 19,226	(0.4)%	(1.0)%
Total consolidated gross profit	$ 8,800	$ 9,013	(2.4)%	
Total consolidated gross margin	45.9%	46.9%	(0.9)pts.	
Non-operating adjustments:				
Amortization of acquired intangible assets	114	129	(12.2)%	
Retirement-related costs/(income)	203	79	158.7%	
Operating (non-GAAP) gross profit	$ 9,116	$ 9,221	(1.1)%	
Operating (non-GAAP) gross margin	47.6%	48.0%	(0.4)pts.	

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Management Discussion (continued)

(Dollars in millions) For the nine months ended September 30:	2017	2016	Yr. to Yr. Percent/Margin Change	Yr. to Yr. Percent Change Adjusted For Currency
Revenue:				
Cognitive Solutions	$ 13,021	$ 12,889	1.0%	1.3%
Gross margin	78.4%	81.5%	(3.1)pts.	
Global Business Services	12,196	12,578	(3.0)%	(1.9)%
Gross margin	25.3%	27.0%	(1.7)pts.	
Technology Services & Cloud Platforms	25,079	26,029	(3.7)%	(3.3)%
Gross margin	40.2%	41.5%	(1.3)pts.	
Systems	4,863	5,184	(6.2)%	(5.9)%
Gross margin	51.5%	55.1%	(3.6)pts.	
Global Financing	1,246	1,245	0.1%	(0.4)%
Gross margin	29.2%	39.6%	(10.4)pts.	
Other	192	223	(14.2)%	(14.3)%
Gross margin	(456.0)%	(295.2)%	(160.8)pts.	
Total consolidated revenue	$ 56,597	$ 58,149	(2.7)%	(2.2)%
Total consolidated gross profit	$ 25,365	$ 27,401	(7.4)%	
Total consolidated gross margin	44.8%	47.1%	(2.3)pts.	
Non-operating adjustments:				
Amortization of acquired intangible assets	349	371	(5.7)%	
Retirement-related costs/(income)	591	238	148.2%	
Operating (non-GAAP) gross profit	$ 26,305	$ 28,010	(6.1)%	
Operating (non-GAAP) gross margin	46.5%	48.2%	(1.7)pts.	

Cognitive Solutions

(Dollars in millions) For the three months ended September 30:	2017	2016	Yr. to Yr. Percent Change	Yr. to Yr. Percent Change Adjusted For Currency
Cognitive Solutions external revenue:	$ 4,400	$ 4,235	3.9%	3.0%
Solutions Software	$ 3,029	$ 2,919	3.8%	2.9%
Transaction Processing Software	1,371	1,316	4.2	3.2

(Dollars in millions) For the nine months ended September 30:	2017	2016	Yr. to Yr. Percent Change	Yr. to Yr. Percent Change Adjusted For Currency
Cognitive Solutions external revenue:	$ 13,021	$ 12,889	1.0%	1.3%
Solutions Software	$ 9,015	$ 8,842	2.0%	2.3%
Transaction Processing Software	4,006	4,048	(1.0)	(0.8)

Cognitive Solutions revenue of $4,400 million grew 3.9 percent as reported and 3 percent adjusted for currency in the third quarter of 2017 compared to the prior year with growth in both Solutions Software and Transaction Processing Software. For the first nine months of the year, Cognitive Solutions revenue of $13,021 million grew 1.0 percent as reported and 1 percent adjusted for currency with growth in Solutions Software, partially offset by declines in Transaction Processing Software both as reported and adjusted for currency.

Cognitive Solutions third-quarter annuity revenue grew as reported and adjusted for currency including strong Software-as-a-Service (SaaS) performance with continued double-digit revenue growth as reported and adjusted for currency. There was growth, as reported and adjusted for currency, in software services which support solutions offerings through industry and product expertise. Transactional revenue also grew this quarter as reported and adjusted for currency compared to the

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Management Discussion (continued)

prior year as clients commit to the platform long term. Within the segment, third-quarter revenue growth was driven by organic performance as acquisitive content has leveled on a year-to-year basis.

In the third quarter, Solutions Software revenue of $3,029 million grew 3.8 percent as reported (3 percent adjusted for currency) compared to the prior year. Transaction Processing Software revenue of $1,371 million grew 4.2 percent as reported (3 percent adjusted for currency) compared to the third quarter of 2016. Within Solutions Software, third quarter year-to-year growth was led by offerings in security and analytics. Security software grew double digits as reported and adjusted for currency year to year in the third quarter with strong performance across the portfolio as cognitive capabilities continue to be embedded into these offerings. Analytics revenue growth was broad-based as the company continues to reinvent these offerings. With new offerings and new clients added to the platform this quarter, Internet of Things (IoT) revenue grew double digits in the third quarter both as reported and adjusted for currency. Within Transaction Processing Software, the year-to-year growth reflects clients ongoing long-term commitment and the value the company s platform provides to them. This portfolio predominately runs on-premise mission critical workloads running on z Systems in industries such as banking, airlines and retail.

Cognitive Solutions total third-quarter strategic imperatives revenue of $2.9 billion grew 5 percent year to year as reported and adjusted for currency. Cloud revenue of $0.6 billion grew 10 percent as reported and adjusted for currency, with an as-a-Service exit run rate of $2.0 billion. For the first nine months of the year, total strategic imperatives revenue of $8.5 billion grew 4 percent as reported and adjusted for currency year to year. Cloud revenue of $1.8 billion grew 24 percent as reported and adjusted for currency.

(Dollars in millions) For the three months ended September 30:	2017	2016	Yr. to Yr. Percent/ Margin Change
Cognitive Solutions:			
External gross profit	$ 3,465	$ 3,407	1.7%
External gross profit margin	78.7%	80.4%	(1.7)pts.
Pre-tax income	$ 1,649	$ 1,574	4.8%
Pre-tax margin	32.8%	32.1%	0.7pts.

(Dollars in millions) For the nine months ended September 30:	2017	2016	Yr. to Yr. Percent/ Margin Change
Cognitive Solutions:			
External gross profit	$ 10,207	$ 10,509	(2.9)%
External gross profit margin	78.4%	81.5%	(3.1)pts.
Pre-tax income	$ 4,539	$ 4,039	12.4%
Pre-tax margin	30.2%	27.3%	3.0pts.

Cognitive Solutions gross profit margin decreased 1.7 points to 78.7 percent in the third quarter of 2017 compared to the prior year. For the first nine months of the year, gross profit margin decreased 3.1 points to 78.4 percent. The gross profit margin decline year to year is driven by continued investment and an increasing mix toward SaaS.

In the third quarter, pre-tax income of $1,649 million increased 4.8 percent compared to the prior year with a pre-tax margin improvement of 0.7 points to 32.8 percent. For the first nine months of the year, pre-tax income of $4,539 million increased 12.4 percent compared to the prior year with a pre-tax margin improvement of 3.0 points to 30.2 percent. The company continues to embed cognitive into offerings, scale platforms and build high value vertical solutions. The year-to-year benefit in the nine-month period also reflects a lower level of charges related to workforce rebalancing and real estate actions year to year.

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Management Discussion (continued)

Global Business Services

(Dollars in millions) For the three months ended September 30:	2017	2016	Yr. to Yr. Percent Change	Yr. to Yr. Percent Change Adjusted For Currency
Global Business Services external revenue:	$ 4,093	$ 4,191	(2.3)%	(2.2)%
Consulting	$ 1,803	$ 1,799	0.2%	0.9%
Global Process Services	314	354	(11.3)	(11.9)
Application Management	1,976	2,038	(3.0)	(3.2)

(Dollars in millions) For the nine months ended September 30:	2017	2016	Yr. to Yr. Percent Change	Yr. to Yr. Percent Change Adjusted For Currency
Global Business Services external revenue:	$ 12,196	$ 12,578	(3.0)%	(1.9)%
Consulting	$ 5,394	$ 5,520	(2.3)%	(0.9)%
Global Process Services	948	1,048	(9.6)	(9.2)
Application Management	5,855	6,011	(2.6)	(1.6)

Global Business Services revenue of $4,093 million decreased 2.3 percent as reported and 2 percent adjusted for currency in the third quarter of 2017 compared to the prior year. The company continues to transform this business and shift its practices to where there is opportunity, which is around digital, cognitive, cloud and automation. GBS signings grew for the third consecutive quarter as reported and adjusted for currency, and strategic imperatives revenue grew double digits year to year as reported and adjusted for currency. However, this growth continues to be more than offset by declines in the more traditional areas that the company is shifting away from. For the first nine months of the year, Global Business Services revenue of $12,196 million decreased 3.0 percent as reported and 2 percent adjusted for currency.

In the third quarter, Consulting revenue of $1,803 million increased 0.2 percent as reported (1 percent adjusted for currency) with continued improvement on a sequential basis led by the company s digital strategy and iX platform. The Consulting backlog returned to growth as reported and adjusted for currency in the third quarter versus the prior year. Global Process Services (GPS) revenue of $314 million decreased 11.3 percent as reported (12 percent adjusted for currency) compared to the prior year. Application Management revenue of $1,976 million decreased 3.0 percent as reported (3 percent adjusted for currency). The company continues to help clients implement new cloud-centric architectures in their critical applications. Overall performance was impacted by areas of this business that are not as differentiated and are experiencing pricing pressure.

Third-quarter 2017 GBS strategic imperatives revenue of $2.5 billion grew 10 percent as reported (11 percent adjusted for currency) year to year. Cloud revenue of $1.0 billion grew 35 percent as reported and adjusted for currency, with an as-a-Service exit run rate of $1.2 billion. For the first nine months of the year, total strategic imperatives revenue of $7.2 billion grew 10 percent as reported (11 percent adjusted for currency) year to year. Cloud revenue of $2.9 billion grew 41 percent as reported (43 percent adjusted for currency).

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Management Discussion (continued)

(Dollars in millions) For the three months ended September 30:	2017	2016	Yr. to Yr. Percent/ Margin Change
Global Business Services:			
External gross profit	$ 1,117	$ 1,206	(7.4)%
External gross profit margin	27.3%	28.8%	(1.5)pts.
Pre-tax income	$ 453	$ 544	(16.8)%
Pre-tax margin	10.8%	12.7%	(1.9)pts.

(Dollars in millions) For the nine months ended September 30:	2017	2016	Yr. to Yr. Percent/ Margin Change
Global Business Services:			
External gross profit	$ 3,083	$ 3,393	(9.2)%
External gross profit margin	25.3%	27.0%	(1.7)pts.
Pre-tax income	$ 1,065	$ 1,210	(12.0)%
Pre-tax margin	8.5%	9.4%	(0.8)pts.

GBS third quarter gross profit margin decreased 1.5 points to 27.3 percent year to year with a decline similar to the second quarter 2017. In the third quarter of 2017, pre-tax income of $453 million decreased 16.8 percent year to year. The pre-tax margin declined 1.9 points to 10.8 percent, however it improved more than 3 points sequentially compared to the second quarter 2017. For the first nine months of the year, pre-tax income of $1,065 million decreased 12.0 percent and the pre-tax margin declined 0.8 points to 8.5 percent. Pre-tax income performance for the first nine months of 2017 includes a lower level of charges related to workforce rebalancing and real estate actions as compared to the prior year.

The GBS margin has been impacted by investments to drive transformation and reflects pricing and profit pressure in the more traditional IT services. The company will continue to focus on improving productivity with a streamlined practice model and new project management approaches. As it grows its practices around cloud, analytics and mobility services, the company will continue to invest in skills necessary to drive this transformation.

Technology Services & Cloud Platforms

(Dollars in millions) For the three months ended September 30:	2017	2016	Yr. to Yr. Percent Change	Yr. to Yr. Percent Change Adjusted For Currency
Technology Services & Cloud Platforms external revenue:	$ 8,457	$ 8,748	(3.3)%	(4.1)%
Infrastructure Services	$ 5,665	$ 5,901	(4.0)%	(4.8)%

Technical Support Services	1,801	1,831	(1.6)	(2.1)
Integration Software	990	1,016	(2.6)	(3.4)

(Dollars in millions) For the nine months ended September 30:	2017	2016	Yr. to Yr. Percent Change	Yr. to Yr. Percent Change Adjusted For Currency
Technology Services & Cloud Platforms external revenue:	$ 25,079	$ 26,029	(3.7)%	(3.3)%
Infrastructure Services	$ 16,695	$ 17,458	(4.4)%	(3.9)%
Technical Support Services	5,357	5,446	(1.6)	(1.5)
Integration Software	3,027	3,126	(3.2)	(2.7)

Technology Services & Cloud Platforms revenue of $8,457 million decreased 3.3 percent as reported and 4 percent adjusted for currency in the third quarter of 2017 compared to the prior year. In the third quarter, there were declines across

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Management Discussion (continued)

all lines of business, however there was double-digit growth as reported and adjusted for currency in strategic imperatives revenue. Global Technology Services (GTS) signings also grew more than 25 percent year to year. For the first nine months of the year, Technology Services and Cloud Platforms revenue of $25,079 million decreased 3.7 percent as reported and 3 percent adjusted for currency.

In the third quarter, Infrastructure Services revenue of $5,665 million declined 4.0 percent as reported (5 percent adjusted for currency) compared to the prior year. This decline reflects the continued impact associated with contract conclusions at the end of 2016 and the shift away from certain lower value work within this business. The full year-to-year benefit from certain larger contracts signed in second-quarter 2017 are not yet providing offsetting growth. However, in the third quarter, there was strong signings performance both as reported and adjusted for currency as clients contract to implement hybrid cloud environments.

Technical Support Services third-quarter revenue of $1,801 million decreased 1.6 percent as reported (2 percent adjusted for currency) year to year. Within this line of business, the company is focused on growing its multi-vendor support services which provide clients with a single source of expertise and visibility across different vendor solutions. Integration Software third quarter revenue of $990 million decreased 2.6 percent as reported (3 percent adjusted for currency) compared to the prior year. There was continued growth in SaaS across the portfolio as the company helps clients implement hybrid cloud environments. This growth was offset by declines in areas such as on premise DevOps and IT service management.

Technology Services & Cloud Platforms third-quarter 2017 strategic imperatives revenue of $2.6 billion grew 12 percent year to year as reported and adjusted for currency. Cloud revenue of $1.8 billion grew 16 percent as reported and adjusted for currency, with an as-a-Service exit run rate of $6.2 billion. For the first nine months of the year, total strategic imperatives revenue of $7.4 billion grew 20 percent as reported (21 percent adjusted for currency) year to year. Cloud revenue of $5.1 billion grew 24 percent as reported (25 percent adjusted for currency).

(Dollars in millions) For the three months ended September 30:	2017	2016	Yr. to Yr. Percent/ Margin Change
Technology Services & Cloud Platforms:			
External Technology Services gross profit	$ 2,667	$ 2,825	(5.6)%
External Technology Services gross profit margin	35.7%	36.5%	(0.8)pts.
External Integration Software gross profit	$ 805	$ 851	(5.4)%
External Integration Software gross profit margin	81.3%	83.8%	(2.4)pts.
External total gross profit	$ 3,473	$ 3,676	(5.5)%
External total gross profit margin	41.1%	42.0%	(1.0)pts.
Pre-tax income	$ 1,192	$ 1,288	(7.5)%
Pre-tax margin	13.8%	14.4%	(0.6)pts.

(Dollars in millions) For the nine months ended September 30:	2017	2016	Yr. to Yr. Percent/ Margin Change
Technology Services & Cloud Platforms:			
External Technology Services gross profit	$ 7,630	$ 8,176	(6.7)%

External Technology Services gross profit margin		34.6%	35.7%	(1.1)pts.
External Integration Software gross profit	$	2,450	$ 2,630	(6.9)%
External Integration Software gross profit margin		80.9%	84.2%	(3.2)pts.
External total gross profit	$	10,080	$ 10,806	(6.7)%
External total gross profit margin		40.2%	41.5%	(1.3)pts.
Pre-tax income	$	2,888	$ 2,825	2.2%
Pre-tax margin		11.3%	10.6%	0.6pts.

Technology Services & Cloud Platforms gross profit margin decreased 1.0 points year to year in the third quarter to 41.1 percent and pre-tax income of $1,192 million decreased 7.5 percent. The pre-tax margin declined 0.6 points year to year to 13.8 percent, but improved sequentially by 2 points compared to the second quarter of 2017. For the first nine months of the year, pre-tax income of $2,888 million increased 2.2 percent and the pre-tax margin improved 0.6 points to 11.3 percent. The

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Management Discussion (continued)

year-to-year performance in the nine months of 2017 compared to the prior year includes a lower level of charges related to workforce and real estate actions.

The company continues to yield savings from prior-year workforce transformation, is focused on delivering productivity to clients, and continues to invest to expand its cloud infrastructure which is currently impacting margin. With over sixty cloud centers across nineteen countries, the IBM Cloud provides clients with flexibility in how and where they store their data.

Services Backlog and Signings

(Dollars in billions)	At September 30, 2017	At September 30, 2016	Yr. to Yr. Percent Change	Yr. to Yr. Percent Change Adjusted For Currency
Total backlog	$ 119.3	$ 121.3	(1.6)%	(2.1)%

The estimated total services backlog at September 30, 2017 was $119 billion, a decrease of 1.6 percent as reported and 2 percent adjusted for currency with modest growth in GTS as reported (essentially flat adjusted for currency) and a decrease in GBS 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 for these businesses and therefore includes Technical Support Services. It does not include as-a-Service offerings that have flexibility in 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 is not included in signings as maintenance contracts tend to be more steady state, where revenues equal renewals.

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:	2017	2016	Yr. to Yr. Percent Change	Yr. to Yr. Percent Change Adjusted For Currency
Total signings	$ 10,385	$ 8,955	16.0%	14.8%

(Dollars in millions) For the nine months ended September 30:	2017	2016	Yr. to Yr. Percent Change	Yr. to Yr. Percent Change Adjusted For Currency
Total signings	$ 29,178	$ 30,031	(2.8)%	(1.8)%

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Management Discussion (continued)

Systems

(Dollars in millions) For the three months ended September 30:	2017	2016	Yr. to Yr. Percent Change	Yr. to Yr. Percent Change Adjusted For Currency
Systems external revenue:	$ 1,721	$ 1,558	10.4%	9.6%
Systems Hardware	$ 1,301	$ 1,128	15.3%	14.4%
z Systems			63.8	61.9
Power Systems			(7.2)	(7.8)
Storage Systems			4.9	4.3
Operating Systems Software	420	430	(2.3)	(2.9)

(Dollars in millions) For the nine months ended September 30:	2017	2016	Yr. to Yr. Percent Change	Yr. to Yr. Percent Change Adjusted For Currency
Systems external revenue:	$ 4,863	$ 5,184	(6.2)%	(5.9)%
Systems Hardware	$ 3,629	$ 3,852	(5.8)%	(5.5)%
z Systems			(13.4)	(13.3)
Power Systems			(12.7)	(12.6)
Storage Systems			6.1	6.6
Operating Systems Software	1,234	1,332	(7.4)	(7.1)

Systems revenue of $1,721 million grew 10.4 percent year to year as reported (10 percent adjusted for currency) in the third quarter of 2017 driven by a combination of strong z14 market acceptance and the third consecutive quarter of growth as reported and adjusted for currency in Storage Systems. Systems Hardware revenue of $1,301 million grew 15.3 percent as reported (14 percent adjusted for currency) with the growth in z Systems and Storage partially offset by a decrease in Power Systems as reported and adjusted for currency. Operating Systems Software revenue of $420 million decreased 2.3 percent as reported (3 percent adjusted for currency) compared to the prior year. For the first nine months of 2017, Systems revenue of $4,863 million decreased 6.2 percent as reported (6 percent adjusted for currency) with declines in both Systems Hardware and Operating Systems Software, both as reported and adjusted for currency.

Within Systems Hardware, third quarter z Systems revenue grew 63.8 percent as reported (62 percent adjusted for currency) year to year driven by the successful launch of the z14 mainframe in mid-September 2017. This success is due to strong demand for technology that helps address the growing threat of global data breaches and the need for clients to operate within regulated environments. The z14 mainframe has unprecedented encryption capabilities that are widely appealing and the company has already experienced good traction across a broad mix of industries and geographies in the quarter.

Power Systems third quarter revenue decreased 7.2 percent as reported (8 percent adjusted for currency) year to year. This reflects the company s continued shift to a growing Linux market while continuing to serve a high value, but declining UNIX market. Linux had continued revenue growth as reported and adjusted for currency in the third quarter. Although there was growth in UNIX high-end systems this quarter, overall

UNIX declined as reported and adjusted for currency.

Storage Systems third quarter revenue increased by 4.9 percent as reported (4 percent adjusted for currency) year to year with growth as reported and adjusted for currency across the major hardware product areas. There was continued growth as reported and adjusted for currency in all-flash array offerings in line with this high-growth market.

Third-quarter Systems strategic imperatives revenue of $0.9 billion grew 26 percent year to year as reported (25 percent adjusted for currency). Cloud revenue of $0.7 billion grew 24 percent as reported (23 percent adjusted for currency). For the first nine months of the year, total strategic imperatives revenue of $2.2 billion decreased 3 percent as reported and adjusted for currency year to year, primarily a reflection of product cycle dynamics. Cloud revenue of $1.7 billion decreased 5 percent as reported and adjusted for currency.

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Management Discussion (continued)

(Dollars in millions) For the three months ended September 30:	2017	2016	Yr. to Yr. Percent/ Margin Change
Systems:			
External Systems Hardware gross profit	$ 557	$ 416	33.8%
External Systems Hardware gross profit margin	42.9%	36.9%	5.9pts.
External Operating Systems Software gross profit	$ 366	$ 380	(3.7)%
External Operating Systems Software gross profit margin	87.0%	88.3%	(1.2)pts.
External total gross profit	$ 923	$ 796	16.0%
External total gross profit margin	53.6%	51.1%	2.6pts.
Pre-tax income/(loss)	$ 339	$ 136	149.7%
Pre-tax margin	17.4%	7.8%	9.6pts.

(Dollars in millions) For the nine months ended September 30:	2017	2016	Yr. to Yr. Percent/ Margin Change
Systems:			
External Systems Hardware gross profit	$ 1,432	$ 1,676	(14.6)%
External Systems Hardware gross profit margin	39.5%	43.5%	(4.0)pts.
External Operating Systems Software gross profit	$ 1,074	$ 1,182	(9.2)%
External Operating Systems Software gross profit margin	87.0%	88.7%	(1.7)pts.
External total gross profit	$ 2,506	$ 2,858	(12.3)%
External total gross profit margin	51.5%	55.1%	(3.6)pts.
Pre-tax income/(loss)	$ 227	$ 354	(35.9)%
Pre-tax margin	4.2%	6.1%	(1.9)pts.

The Systems gross profit margin increased 2.6 points to 53.6 percent in the third quarter of 2017 compared to the prior year, with sequential improvement compared to the second quarter of 2017. The overall increase year-to-year was driven by product mix primarily toward the high-margin z Systems. There was also margin improvement in z Systems and Storage Systems, with Power Systems essentially flat year to year. For the first nine months of the year, the Systems gross profit margin decreased 3.6 points to 51.5 percent compared to the prior year, with margin declines across all hardware brands and Operating Systems Software, as well as an impact from mix.

In the third quarter of 2017, pre-tax income of $339 million grew 149.7 percent and pre-tax margin increased 9.6 points year to year to 17.4 percent driven by the strong performance in z Systems. For the first nine months of the year, pre-tax income of $227 million decreased 35.9 percent compared to the prior year which also included a higher level of charges related to workforce rebalancing and real estate actions. The company remains focused on continually reinventing this portfolio to address new workloads.

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

(Dollars in millions)	Three Months Ended September 30, 2017	2016	Nine Months Ended September 30, 2017	2016
External revenue	$ 427	$ 412	$ 1,246	$ 1,245
Internal revenue	272	352	925	1,340
Total revenue	$ 698	$ 763	$ 2,171	$ 2,585
Pre-tax income	$ 244	$ 355	$ 836	$ 1,208

In the third quarter of 2017, Global Financing total revenue of $698 million decreased 8.5 percent compared to the prior year. This was due to a decline in internal revenue of 22.8 percent, driven by a decrease in internal used equipment sales (down 31.2 percent to $184 million), partially offset by an increase in internal financing (up 4.4 percent to $88 million). External revenue increased 3.7 percent as reported (2.8 percent adjusted for currency), due to an increase in external used equipment sales (up 31.6 percent to $141 million), partially offset by a decrease in external financing (down 6.1 percent to $286 million).

The decrease in total revenue in the first nine months of 2017 compared to the same period in 2016 was due to a decline in internal revenue of 30.9 percent, driven by a decrease in internal used equipment sales (down 39.9 percent to $662 million), partially offset by an increase in internal financing (up 10.1 percent to $263 million). External revenue was flat (down 0.4 percent adjusted for currency), with a decline in financing (down 6.3 percent to $877 million), partially offset by an increase in external used equipment sales (up 19.3 percent to $370 million).

The year-to-year increase in internal financing revenue in the third quarter of 2017 was due to higher average asset balances, partially offset by lower asset yields. The year-to-year increase in internal financing revenue in the first nine months of 2017 was due to higher average asset balances and higher asset yields. The decrease in external financing revenue in the third quarter of 2017, compared to the same period in 2016, was due to lower asset yields, partially offset by higher average asset balances. The decrease in external financing revenue in the first nine months of 2017, compared to the same period in 2016 was due to lower asset yields.

Total sales of used equipment represented 46.5 percent and 47.5 percent of Global Financing s revenue in the third quarter and first nine months of 2017, respectively, and 49.1 percent and 54.6 percent in the third quarter and first nine months of 2016, respectively. The decreases in both periods were due to a lower volume of used equipment sales for internal transactions. The gross profit margin on used sales was 33.2 percent and 54.6 percent in the third quarter of 2017 and 2016, respectively, and 45.4 percent and 60.8 percent in the first nine months of 2017 and 2016, respectively. The decrease in the gross profit margin was driven by a shift in mix away from higher margin internal equipment sales and declines in internal sales margins.

Global Financing pre-tax income decreased 31.4 percent to $244 million in the third quarter of 2017, compared to the same period in 2016, due to lower gross profit ($118 million), partially offset by a decrease in total expenses ($6 million). Pre-tax income decreased 30.8 percent to $836 million in the first nine months of 2017, compared to the same period in 2016, due to lower gross profit ($426 million), partially offset by a decrease in total expense ($55 million), including a decrease in financing receivables provisions ($61 million), primarily due to higher Brazil reserve requirements in the prior year.

Global Financing return on equity was 23.8 percent and 24.6 percent for the three and nine months ended September 30, 2017, respectively, compared to 27.2 percent and 30.3 percent for the three and nine months ended September 30, 2016, respectively. The decrease in return on equity in the third quarter and first nine months of 2017 compared to the same periods of 2016, was due to the decrease in net income, partially offset by a decrease in equity. See page 84 for the details of the after-tax income and return on equity calculation.

Total unguaranteed residual value of leases was $668 million as of September 30, 2017. 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 and provide protection against risk of loss arising from declines in equipment values for these assets. The aggregate asset values associated with the guarantees of sales-type leases were $79 million and $43 million for the financing

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Management Discussion (continued)

transactions originated during the quarters ended September 30, 2017 and 2016, respectively and $186 million and $201 million for the nine months ended September 30, 2017 and 2016, respectively.

Geographic Revenue

In addition to the revenue presentation by reportable segment, the company also measures revenue performance on a geographic basis. The following geographic, regional and country-specific revenue performance excludes OEM revenue.

(Dollars in millions) For the three months ended September 30:	2017	2016	Yr. to Yr. Percent Change	Yr. to Yr. Percent Change Adjusted For Currency
Total Revenue	$ 19,153	$ 19,226	(0.4)%	(1.0)%
Geographies:	$ 19,063	$ 19,159	(0.5)%	(1.1)%
Americas	8,887	9,070	(2.0)	(2.5)
Europe/Middle East/Africa (EMEA)	5,989	5,851	2.4	(1.4)
Asia Pacific	4,187	4,238	(1.2)	2.2

(Dollars in millions) For the nine months ended September 30:	2017	2016	Yr. to Yr. Percent Change	Yr. to Yr. Percent Change Adjusted For Currency
Total Revenue	$ 56,597	$ 58,149	(2.7)%	(2.2)%
Geographies:	$ 56,343	$ 57,932	(2.7)%	(2.2)%
Americas	26,727	27,229	(1.8)	(2.3)
Europe/Middle East/Africa (EMEA)	17,186	18,032	(4.7)	(3.3)
Asia Pacific	12,430	12,671	(1.9)	(0.6)

Total geographic revenue of $19,063 million decreased 0.5 percent as reported and 1 percent adjusted for currency in the third quarter of 2017 compared to the prior year. Americas revenue of $8,887 million decreased 2.0 percent as reported and 2 percent adjusted for currency. EMEA revenue of $5,989 million increased 2.4 percent as reported, but declined 1 percent adjusted for currency. Asia Pacific revenue of $4,187 million declined 1.2 percent as reported, but grew 2 percent adjusted for currency in the third quarter versus the prior year. Each of the three geographies had year-to-year revenue performance improvement (as reported and at constant currency) compared to the second-quarter 2017 year-to-year performance.

Within Americas, third-quarter revenue in the U.S. decreased 2.6 percent compared to the prior year. Canada increased 2.1 percent as reported but declined 2 percent year to year adjusted for currency. Latin America decreased 1.5 percent as reported and 2 percent adjusted for currency. Within Latin America, Brazil decreased 11.3 percent as reported and 13 percent adjusted for currency while Mexico increased 31.0 percent as reported and 27 percent adjusted for currency.

In the third quarter, within EMEA, the UK declined 9.3 percent (9 percent adjusted for currency). France increased 14.2 percent (8 percent adjusted for currency), Germany increased 8.4 percent (3 percent adjusted for currency), Spain increased 10.9 percent (5 percent adjusted for currency), Norway increased 30.0 percent (24 percent adjusted for currency) and Italy increased 7.3 percent (2 percent adjusted for currency) compared to the same period in the prior year. The Middle East and Africa region increased 3.1 percent as reported and 2 percent adjusted for currency.

Within Asia Pacific, Japan revenue decreased 4.0 percent as reported, but grew 4 percent adjusted for currency compared to the same period in the prior year. India grew 14.1 percent as reported (10 percent adjusted for currency) while Australia declined 7.8 percent (11 percent adjusted for currency). China revenue grew 3.9 percent as reported (4 percent adjusted for currency) and Taiwan grew 19.2 percent as reported (14 percent adjusted for currency).

Total geographic revenue of $56,343 million decreased 2.7 percent as reported and 2 percent adjusted for currency in the first nine months of 2017 compared to the prior year. Americas revenue of $26,727 million decreased 1.8 percent as reported and 2 percent adjusted for currency. EMEA revenue of $17,186 million decreased 4.7 percent as reported and 3 percent adjusted for currency. Asia Pacific revenue of $12,430 million decreased 1.9 percent as reported and 1 percent adjusted for currency.

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Management Discussion (continued)

Within Americas, U.S. revenue decreased 3.0 percent compared to the first nine months of the prior year. Canada increased 0.9 percent as reported, which was essentially flat year to year on an adjusted for currency basis. Latin America increased 4.5 percent as reported and 1 percent adjusted for currency. Within Latin America, Brazil increased 5.7 percent as reported, but declined 2 percent adjusted for currency while Mexico increased 11.3 percent as reported and 13 percent adjusted for currency.

Within EMEA, the UK decreased 15.6 percent as reported and 8 percent adjusted for currency compared to the first nine months of the prior year. Germany decreased 4.7 percent as reported and 5 percent adjusted for currency. Switzerland decreased 12.3 percent as reported and 12 percent adjusted for currency. Spain increased 4.4 percent (5 percent adjusted for currency). The Central and Eastern European region declined 1.7 percent (2 percent adjusted for currency) and the Middle East and Africa region was essentially flat as reported, but down 2 percent adjusted for currency.

Within Asia Pacific, Japan declined 1.8 percent as reported, but grew 2 percent adjusted for currency compared to the first nine months of the prior year. Australia decreased 6.6 percent as reported and 9 percent adjusted for currency. China decreased 7.8 percent as reported and 6 percent adjusted for currency. India increased 8.9 percent as reported and 6 percent adjusted for currency. South Korea increased 5.4 percent as reported and 3 percent adjusted for currency.

Expense

Total Expense and Other (Income)

(Dollars in millions) For the three months ended September 30:	2017	2016	Yr. to Yr. Percent Change
Total consolidated expense and other (income)	$ 5,735	$ 5,751	(0.3)%
Non-operating adjustments:			
Amortization of acquired intangible assets	$ (125)	$ (136)	(8.1)%
Acquisition-related charges	0	(4)	(101.8)
Non-operating retirement-related (costs)/income	(103)	(60)	71.9
Operating (non-GAAP) expense and other (income)	$ 5,507	$ 5,550	(0.8)%
Total consolidated expense-to-revenue ratio	29.9%	29.9%	0.0pts.
Operating (non-GAAP) expense-to-revenue ratio	28.8%	28.9%	(0.1)pts.

(Dollars in millions) For the nine months ended September 30:	2017	2016	Yr. to Yr. Percent Change
Total consolidated expense and other (income)	$ 18,434	$ 20,056	(8.1)%
Non-operating adjustments:			
Amortization of acquired intangible assets	$ (382)	$ (371)	2.8%
Acquisition-related charges	(19)	(1)	nm

Non-operating retirement-related (costs)/income		(474)	(206)	130.0
Operating (non-GAAP) expense and other (income)	$	17,559	$ 19,478	(9.9)%
Total consolidated expense-to-revenue ratio		32.6%	34.5%	(1.9)pts.
Operating (non-GAAP) expense-to-revenue ratio		31.0%	33.5%	(2.5)pts.

nm - not meaningful

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

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Management Discussion (continued)

Selling, General and Administrative Expense

(Dollars in millions) For the three months ended September 30:	2017	2016	Yr. to Yr. Percent Change
Selling, general and administrative expense:			
Selling, general and administrative other	$ 3,898	$ 3,983	(2.1)%
Advertising and promotional expense	337	341	(1.4)
Workforce rebalancing charges	17	25	(31.1)
Retirement-related costs	175	174	0.7
Amortization of acquired intangible assets	125	136	(8.1)
Stock-based compensation	88	105	(16.5)
Bad debt expense	7	(32)	nm
Total consolidated selling, general and administrative expense	$ 4,648	$ 4,732	(1.8)%
Non-operating adjustments:			
Amortization of acquired intangible assets	$ (125)	$ (136)	(8.1)%
Acquisition-related charges	0	(3)	nm
Non-operating retirement-related (costs)/income	(53)	(53)	(0.5)
Operating (non-GAAP) selling, general and administrative expense	$ 4,470	$ 4,541	(1.6)%

nm not meaningful

(Dollars in millions) For the nine months ended September 30:	2017	2016	Yr. to Yr. Percent Change
Selling, general and administrative expense:			
Selling, general and administrative other	$ 12,293	$ 12,697	(3.2)%
Advertising and promotional expense	1,090	1,051	3.7
Workforce rebalancing charges	188	1,038	(81.9)
Retirement-related costs	690	551	25.3
Amortization of acquired intangible assets	382	371	2.8
Stock-based compensation	277	295	(6.1)
Bad debt expense	40	90	(56.0)
Total consolidated selling, general and administrative expense	$ 14,959	$ 16,093	(7.0)%
Non-operating adjustments:			
Amortization of acquired intangible assets	$ (382)	$ (371)	2.8%
Acquisition-related charges	(12)	6	nm
Non-operating retirement-related (costs)/income	(326)	(183)	78.0
Operating (non-GAAP) selling, general and administrative expense	$ 14,240	$ 15,545	(8.4)%

nm - not meaningful

Total selling, general and administrative (SG&A) expense decreased 1.8 percent in the third quarter of 2017 driven primarily by the following factors:

- Lower spending from increased focus on driving expense efficiency (3 points); partially offset by
- The effects of currency (1 point); and
- The impact of acquisitions completed in the prior 12-month period (1 point).

Operating (non-GAAP) expense decreased 1.6 percent year to year driven primarily by the same factors, excluding higher non-operating retirement-related costs net of the one-time non-operating UK gain.

SG&A expense decreased 7.0 percent in the first nine months of 2017 versus the first nine months of 2016 driven primarily by the following factors:

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Management Discussion (continued)

- Lower workforce rebalancing charges (5 points);
- Lower spending (2 points); and
- The effects of currency (1 point); partially offset by
- The impact of acquisitions completed in the prior 12-month period (1 point).

Operating (non-GAAP) expense decreased 8.4 percent year to year driven primarily by the same factors.

Third-quarter SG&A reflects a year-to-year impact of $105 million related to several commercial disputes and a benefit of $91 million resulting from the favorable resolution of pension-related litigation in the UK. Operating (non-GAAP) SG&A does not include the benefit from the pension litigation.

Bad debt expense decreased $51 million year to year in the first nine months of 2017, primarily driven by increased reserves in Brazil in the prior year. The receivables provision coverage was 1.9 percent at September 30, 2017, a decrease of 10 basis points compared to December 31, 2016 and a decrease of 100 basis points from September 30, 2016. The decrease year to year in the receivables provision coverage was due primarily to write-offs of previously reserved receivables in December 2016.

Research, Development and Engineering

(Dollars in millions) For the three months ended September 30:	2017	2016	Yr. to Yr. Percent Change
Total consolidated research, development and engineering expense	$ 1,342	$ 1,397	(3.9)%
Non-operating adjustment:			
Non-operating retirement-related (costs)/income	$ (51)	$ (7)	615.0%
Operating (non-GAAP) research, development and engineering expense	$ 1,291	$ 1,390	(7.1)%

(Dollars in millions)	Yr. to Yr. Percent

For the nine months ended September 30:	2017	2016	Change
Total consolidated research, development and engineering expense	$ 4,360	$ 4,320	0.9%
Non-operating adjustment:			
Non-operating retirement-related (costs)/income	$ (148)	$ (23)	547.8%
Operating (non-GAAP) research, development and engineering expense	$ 4,212	$ 4,297	(2.0)%

Research, development and engineering (RD&E) expense was 7.0 percent and 7.7 percent of revenue in the third quarter and first nine months of 2017, respectively, compared to 7.3 percent and 7.4 percent in 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 2017 decreased 3.9 percent year to year primarily driven by:

- Lower spending, net of higher retirement-related costs (5 points); partially offset by
- The effects of currency (1 point).

Operating (non-GAAP) RD&E expense decreased 7.1 percent in the third quarter of 2017 compared to the prior year, driven primarily by the same factors, excluding higher non-operating retirement-related costs.

RD&E expense in the first nine months of 2017 increased 0.9 percent year to year primarily driven by:

- The impact of acquisitions completed in the prior 12-month period (2 points); partially offset by

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Management Discussion (continued)

- Lower spending, net of higher retirement-related costs.

Operating (non-GAAP) RD&E expense decreased 2.0 percent in the first nine months of 2017 compared to the prior year, driven primarily by the same factors, excluding higher non-operating retirement-related costs.

Intellectual Property and Custom Development Income

(Dollars in millions) For the three months ended September 30:	2017	2016*	Yr. to Yr. Percent Change
Intellectual Property and Custom Development Income:			
Licensing of intellectual property including royalty-based fees	$ 236	$ 474	(50.1)%
Custom development income	62	53	16.4
Sales/other transfers of intellectual property	10	1	607.5
Total	$ 308	$ 528	(41.7)%

* Reclassified to conform to 2017 presentation.

(Dollars in millions) For the nine months ended September 30:	2017	2016*	Yr. to Yr. Percent Change
Intellectual Property and Custom Development Income:			
Licensing of intellectual property including royalty-based fees	$ 921	$ 935	(1.5)%
Custom development income	186	158	18.2
Sales/other transfers of intellectual property	11	17	(38.4)
Total	$ 1,118	$ 1,110	0.7%

* Reclassified to conform to 2017 presentation.

Licensing of intellectual property including royalty-based fees decreased 50.1 percent year to year in the third quarter of 2017 and decreased 1.5 percent in the first nine months of 2017 compared to the prior-year period. The company entered into new partnership agreements in the first nine months of 2017, which included two transactions with period income greater than $100 million. The company is licensing IP to partners who are allocating their skills to extend the value of assets that are high value, but may be in mature markets. The licensing of intellectual property for the first nine months of 2016 included three transactions with period income greater than $100 million. 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.

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Management Discussion (continued)

Other (Income) and Expense

(Dollars in millions) For the three months ended September 30:	2017	2016	Yr. to Yr. Percent Change
Other (income) and expense:			
Foreign currency transaction losses/(gains)	$ 37	$ 93	(60.3)%
(Gains)/losses on derivative instruments	(29)	(23)	22.0
Interest income	(38)	(22)	72.7
Net (gains)/losses from securities and investment assets	(6)	(5)	20.9
Other	(79)	(51)	54.9
Total consolidated other (income) and expense	$ (114)	$ (8)	nm%
Non-operating adjustment:			
Acquisition-related charges	$ 0	$ (2)	(100.0)%
Operating (non-GAAP) other (income) and expense	$ (114)	$ (10)	nm%

nm - not meaningful

(Dollars in millions) For the nine months ended September 30:	2017	2016	Yr. to Yr. Percent Change
Other (income) and expense:			
Foreign currency transaction losses/(gains)	$ 374	$ 514	(27.2)%
(Gains)/losses on derivative instruments	(351)	(339)	3.5
Interest income	(102)	(76)	35.5
Net (gains)/losses from securities and investment assets	(16)	29	nm
Other	(123)	153	nm
Total consolidated other (income) and expense	$ (218)	$ 281	nm%
Non-operating adjustment:			
Acquisition-related charges	$ (7)	$ (7)	(1.0)%
Operating (non-GAAP) other (income) and expense	$ (225)	$ 274	nm%

nm - not meaningful

Total consolidated other (income) and expense was income of $114 million in the third quarter of 2017 compared to income of $8 million in the third quarter of 2016. The increase in income of $106 million year to year was primarily driven by:

- Lower foreign currency transaction losses ($56 million);

- Higher gains on real estate transactions (reflected in Other in the table above) ($19 million); and

- Higher interest income ($16 million).

The consolidated other (income) and expense was income of $218 million in the first nine months of 2017 compared to expense of $281 million in the first nine months of 2016. The increase in income of $499 million year over year was primarily driven by:

- Real estate capacity charges (reflected in Other in the table above) in the prior year related to workforce transformation ($328 million);

- Lower foreign currency transaction losses ($140 million);

- Reduced losses from securities and investment assets ($45 million), primarily related to the sale of Lenovo shares in the first quarter of 2016; and

- Higher interest income ($27 million); partially offset by

- Lower gains on divestitures ($42 million).

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Management Discussion (continued)

Interest Expense

(Dollars in millions) For the three months ended September 30:	2017	2016	Yr. to Yr. Percent Change
Interest expense	$ 168	$ 158	6.4%

(Dollars in millions) For the nine months ended September 30:	2017	2016	Yr. to Yr. Percent Change
Interest expense	$ 451	$ 473	(4.6)%

Interest expense increased $10 million year to year in the third quarter, but decreased $22 million in the first nine months of 2017. 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 2017 was $335 million and $947 million, respectively, an increase of $29 million and $43 million, respectively, versus the comparable prior-year periods, primarily driven by higher average interest rates and higher average debt balance.

Retirement-Related Plans

The following tables provide the total pre-tax cost for all retirement-related plans. These 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.

(Dollars in millions) For the three months ended September 30:	2017	2016	Yr. to Yr. Percent Change
Retirement-related plans cost:			
Service cost	$ 111	$ 114	(2.5)%
Amortization of prior service costs/(credits)	(22)	(28)	(21.3)
Cost of defined contribution plans	258	262	(1.4)
Total operating costs/(income)	$ 347	$ 347	(0.2)%
Interest cost	$ 746	$ 826	(9.6)%
Expected return on plan assets	(1,096)	(1,392)	(21.3)
Recognized actuarial losses	728	692	5.2
Curtailments/settlements	2	4	(55.8)
Multi-employer plan/other	(74)	8	nm
Total non-operating costs/(income)	$ 306	$ 139	121.1%
Total retirement-related plans cost	$ 653	$ 486	34.4%

nm - not meaningful

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Management Discussion (continued)

(Dollars in millions) For the nine months ended September 30:	2017	2016	Yr. to Yr. Percent Change
Retirement-related plans cost:			
Service cost	$ 323	$ 335	(3.6)%
Amortization of prior service costs/(credits)	(66)	(81)	(18.5)
Cost of defined contribution plans	776	802	(3.3)
Total operating costs/(income)	$ 1,033	$ 1,056	(2.2)%
Interest cost	$ 2,215	$ 2,483	(10.8)%
Expected return on plan assets	(3,250)	(4,190)	(22.4)
Recognized actuarial losses	2,143	2,069	3.5
Curtailments/settlements	3	19	(81.6)
Multi-employer plans/other	(46)	64	nm
Total non-operating costs/(income)	$ 1,065	$ 444	139.8%
Total retirement-related plans cost	$ 2,097	$ 1,500	39.8%

nm - not meaningful

In the third quarter of 2017, total pre-tax retirement-related plan cost increased by $167 million compared to the third quarter of 2016, primarily driven by lower expected return on plan assets ($296 million) and an increase in recognized actuarial losses ($36 million); partially offset by lower interest costs ($79 million) and a reduction in other ($83 million), driven by the pension obligation adjustment recorded related to the UK pension litigation ($91 million). Total cost for the first nine months of 2017 increased by $597 million versus the first nine months of 2016, primarily driven by lower expected return on plan assets ($940 million) and an increase in recognized actuarial losses ($73 million); partially offset by lower interest costs ($268 million) and other costs ($109 million).

As discussed in the Snapshot on page 51, 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 2017 were $347 million, flat compared to the third quarter of 2016. Non-operating costs of $306 million in the third quarter of 2017 increased $168 million year to year, driven primarily by lower expected return on plan assets ($296 million) and an increase in recognized actuarial losses ($36 million); partially offset by lower interest costs ($79 million) and other costs ($83 million). For the first nine months of 2017, operating retirement-related costs were $1,033 million, a decrease of $24 million compared to the first nine months of 2016, primarily driven by lower defined contribution plan costs ($26 million). Non-operating costs of $1,065 million increased $621 million in the first nine months of 2017 compared to the prior year, driven primarily by lower expected return on plan assets ($940 million) and an increase in recognized actuarial losses ($73 million); partially offset by lower interest costs ($268 million) and other costs ($109 million), driven by the third-quarter pension obligation adjustment in the UK.

Taxes

The continuing operations effective tax rate for the third quarter of 2017 was 11.0 percent, a decrease of 1.5 points compared to the third quarter of 2016. The continuing operations effective tax rate for the first nine months of 2017 was 1.7 percent, an increase of 2.2 points compared to the first nine months of 2016. The operating (non-GAAP) tax rate for the third quarter of 2017 was 14.7 percent, an increase of 0.5 points compared to the third quarter of 2016. The operating (non-GAAP) tax rate for the first nine months of 2017 was 7.1 percent, an increase of 3.9 points

compared to the first nine months of 2016.

The change in the continuing operations effective tax rate for the third quarter of 2017 compared to 2016 was driven by an increase in foreign tax credits, partially offset by a prior year tax benefit related to foreign tax audit activity. The change in the operating (non-GAAP) tax rate for the third quarter was driven by the same factors.

The change in the continuing operations effective tax rate for the first nine months of 2017 compared to 2016 was primarily driven by the year-to-year benefits above, as well as a discrete tax benefit related to the intra-entity transfer recognized in the first quarter of 2017 and other net discrete period impacts in the first two quarters of 2017 primarily related to foreign tax audit activity. These benefits were more than offset by a prior year tax benefit related to the Japan tax matter (a refund of $1.0 billion plus interest of $0.2 billion). The change in the operating (non-GAAP) tax rate was driven by the same factors.

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Management Discussion (continued)

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 2012. 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.

In the first quarter of 2016, the IRS commenced its audit of the company s U.S. tax returns for 2013 and 2014. The company anticipates that this audit will be completed by the end of the first quarter of 2018.

The amount of unrecognized tax benefits at December 31, 2016 increased by $108 million in the third quarter of 2017 and increased by $466 million in the first nine months of 2017 to $4,206 million. The overall increase for the nine months ended September 30, 2017 was primarily related to potential U.S. audit matters. The total amount of unrecognized tax benefits that, if recognized, would favorably affect the effective tax rate was $3,107 million at September 30, 2017.

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, 2017, the company has recorded $566 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 Indian Tax Authorities. The company believes it will prevail on these matters.

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:	2017	2016	Yr. to Yr. Percent Change
Earnings per share of common stock from continuing operations:			
Assuming dilution	$ 2.92	$ 2.98	(2.0)%
Basic	$ 2.93	$ 2.99	(2.0)%
Diluted operating (non-GAAP)	$ 3.30	$ 3.29	0.3%
Weighted-average shares outstanding: (in millions)			
Assuming dilution	933.2	957.3	(2.5)%
Basic	929.4	954.0	(2.6)%

For the nine months ended September 30:	2017	2016	Yr. to Yr. Percent Change
Earnings per share of common stock from continuing operations:			
Assuming dilution	$ 7.24	$ 7.67	(5.6)%
Basic	$ 7.28	$ 7.70	(5.5)%
Diluted operating (non-GAAP)	$ 8.64	$ 8.59	0.6%
Weighted-average shares outstanding: (in millions)			
Assuming dilution	940.2	960.7	(2.1)%
Basic	935.6	957.7	(2.3)%

Actual shares outstanding at September 30, 2017 were 925.8 million. The weighted-average number of common shares outstanding assuming dilution during the third quarter and first nine months of 2017 were 24.1 million and 20.5 million shares lower than the same periods of 2016. The decrease was primarily the result of the common stock repurchase program.

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Management Discussion (continued)

Financial Position

Dynamics

At September 30, 2017, the balance sheet remains strong, and with the newly reorganized financing entity, IBM Credit LLC, the company is better positioned to support the business over the long term. Cash and marketable securities at quarter end were $11,515 million. The company continues to manage the investment portfolio to meet its capital preservation and liquidity objectives. Total debt of $45,625 million increased $3,457 million from December 31, 2016, driven by new debt issuances of $9,336 million, partially offset by maturities of $6,259 million. Within total debt, $29,390 million, or approximately 64 percent, is in support of the Global Financing business. This includes IBM Credit LLC s first public debt issuance of $3,000 million in September 2017. In the first nine months of 2017, the company generated $10,991 million in cash from operations. The company has consistently generated strong cash flow 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.

Global Financing Financial Position Key Metrics:

(Dollars in millions)	At September 30, 2017	At December 31, 2016
Cash and cash equivalents	$ 1,919	$ 1,844
Net investment in sales-type and direct financing leases	6,700	6,893
Equipment under operating leases external clients (1)	504	548
Client loans	11,269	11,478
Total client financing assets	18,473	18,920
Commercial financing receivables	8,561	9,700
Intercompany financing receivables (2) (3)	4,897	4,959
Total assets	$ 36,498	$ 36,492
Debt	$ 29,390	$ 27,859
Total equity	$ 3,278	$ 3,812

(1) 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.

(2) Entire amount eliminated for purposes of IBM s consolidated results and therefore does not appear on pages 5 and 6.

(3) 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, 2017, substantially all client and commercial financing assets were IT related assets, and approximately 52 percent of the total external portfolio was with investment grade clients with no direct exposure to consumers. The increase in investment grade year to year (2 points) was driven primarily by rating changes within the existing portfolio, not by changing the company s approach to the market. This investment grade percentage is based on the credit ratings of the companies in the portfolio. Additionally, the company takes actions to transfer exposure to third parties. On that basis, the investment grade content would increase by 15 points to 67 percent, an increase of 2 points year to year.

The company has a long-standing practice of taking mitigation 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.

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Management Discussion (continued)

IBM Working Capital

(Dollars in millions)	At September 30, 2017	At December 31, 2016
Current assets	$ 44,742	$ 43,888
Current liabilities	31,697	36,275
Working capital	$ 13,045	$ 7,613
Current ratio	1.41:1	1.21:1

Working capital increased $5,432 million from the year-end 2016 position. The key changes are described below:

Current assets increased $854 million (decreased $1,534 million adjusted for currency) due to:

- An increase in cash and cash equivalents of $3,089 million ($2,214 million adjusted for currency); partially offset by

- A decline in receivables of $2,118 million ($3,365 million adjusted for currency) primarily as a result of collections of higher year-end balances.

Current liabilities decreased $4,578 million ($6,173 million adjusted for currency) as a result of:

- A decrease in short-term debt of $3,214 million ($3,230 million adjusted for currency) primarily as a result of maturities of $6,258 million; partially offset by reclassifications of $3,670 million from long-term debt to reflect upcoming maturities and a decrease in commercial paper of $899 million; and

- A decrease in accounts payable of $767 million ($969 million adjusted for currency) reflecting declines from typically higher year-end balances.

Receivables and Allowances

Roll Forward of Total IBM Receivables Allowance for Credit Losses

(Dollars in millions) January 1, 2017	Additions *	Write-offs **	Other***	September 30, 2017
$ 776	$ 37	$ (157)	$ 33	$ 689

* Additions for Allowance for Credit Losses are charged to expense.

** Refer to note A, Significant Accounting Policies, in the company s 2016 Annual Report on pages 98 and 99 for additional information regarding allowance for credit loss write-offs.

*** Primarily represents translation adjustments.

The total IBM receivables provision coverage was 1.9 percent at September 30, 2017, a decrease of 10 basis points compared to December 31, 2016. The majority of the write-offs during the nine months ended September 30, 2017 related to Global Financing receivables, which had been previously reserved.

Global Financing Receivables and Allowances

The following table presents external financing receivables, excluding residual values, and the allowance for credit losses.

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Management Discussion (continued)

(Dollars in millions)	At September 30, 2017	At December 31, 2016
Gross financing receivables	$ 26,405	$ 28,043
Specific allowance for credit losses	258	335
Unallocated allowance for credit losses	96	103
Total allowance for credit losses	354	438
Net financing receivables	$ 26,051	$ 27,605
Allowance for credit losses coverage	1.3%	1.6%

The percentage of Global Financing receivables reserved decreased from 1.6 percent at December 31, 2016, to 1.3 percent at September 30, 2017. The decline was driven by the 2017 write-offs of $119 million of receivables previously reserved, partially offset by the overall decline in gross receivables. Specific reserves decreased 23 percent from $335 million at December 31, 2016, to $258 million at September 30, 2017. Unallocated reserves decreased 7 percent from $103 million at December 31, 2016, to $96 million at September 30, 2017.

Roll Forward of Global Financing Receivables Allowance for Credit Losses

(Dollars in millions) January 1, 2017	Additions *	Write-offs **	Other ***	September 30, 2017
$ 438	$ 14	$ (119)	$ 20	$ 354

* Additions for Allowance for Credit Losses are charged to expense.

** Refer to note A, Significant Accounting Policies, in the company s 2016 Annual Report on pages 98 and 99 for additional information regarding allowance for credit loss write-offs.

*** Primarily represents translation adjustments.

Global Financing s bad debt expense was a release of $1 million for the three months ended September 30, 2017, compared to a release of $2 million for the same period in 2016. Global Financing s bad debt expense was $14 million for the nine months ended September 30, 2017, compared to $75 million for the same period in 2016, due to higher reserve requirements in Brazil in the prior year.

Noncurrent Assets and Liabilities

(Dollars in millions)	At September 30, 2017	At December 31, 2016
Noncurrent assets	$ 76,894	$ 73,582
Long-term debt	$ 41,327	$ 34,655
Noncurrent liabilities (excluding debt)	$ 28,856	$ 28,147

The increase in noncurrent assets of $3,313 million ($1,153 million adjusted for currency) was driven by:

- An increase of $2,065 million in deferred taxes ($1,731 million adjusted for currency) driven by increases in the U.S. ($998 million) and the first-quarter 2017 intra-entity transfer, including the cumulative effect of adoption of the new FASB guidance ($827 million); and

- An increase in retirement plans assets of $1,487 million ($1,262 million adjusted for currency) driven by the expected returns on plan assets, partially offset by interest costs; partially offset by

- A decrease of $562 million in long-term financing receivables ($888 million adjusted for currency) reflecting seasonal reductions from higher year-end balances.

Long-term debt increased $6,671 million ($5,662 million adjusted for currency) from the year-end balance primarily driven by:

- Issuances of $9,124 million; partially offset by

- Reclassification to short-term debt of $3,670 million to reflect upcoming maturities.

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Management Discussion (continued)

The increase in noncurrent liabilities (excluding debt) of $708 million (a decrease of $944 million adjusted for currency) was driven by:

- An increase in retirement and nonpension postretirement liabilities of $483 million (decreased $598 million adjusted for currency) driven by currency impacts and higher interest and service costs; partially offset by contributions.

Debt

The company s funding requirements are continually monitored and strategies are executed to manage the overall asset and liability profile. Additionally, the company maintains sufficient flexibility to access global funding sources as needed.

(Dollars in millions)	At September 30, 2017	At December 31, 2016
Total company debt	$ 45,625	$ 42,169
Total Global Financing segment debt	$ 29,390	$ 27,859
Debt to support external clients	25,433	24,034
Debt to support internal clients	3,957	3,825
Non-Global Financing debt	$ 16,235	$ 14,309

Total debt of $45,625 million increased $3,457 million from December 31, 2016.

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. The increase in debt is consistent with the company s expectations at year-end 2016 to increase leverage in the Global Financing business.

Non-Global Financing debt of $16,235 million was up $1,926 million from December 31, 2016 and down $116 million from September 30, 2016.

Consolidated debt-to-capitalization ratio at September 30, 2017 was 69.8 percent versus 69.6 percent at December 31, 2016 and 71.2 percent at September 30, 2016.

Given the significant leverage, the company also presents a debt-to-capitalization ratio which excludes Global Financing debt and equity as management believes this is more representative of the company s core business operations. This ratio can vary from period to period as the company manages its global cash and debt positions. Core debt-to-capitalization ratio (excluding Global Financing debt and equity) was 49.6 percent at September 30, 2017 compared to 49.5 percent at December 31, 2016 and 54.6 percent at September 30, 2016.

Global Financing debt-to-equity ratio

	At September 30, 2017	At December 31, 2016
Global Financing debt-to-equity ratio	9.0x	7.3x

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 substantially match the term and currency 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 65 and in Segment Information on pages 29 and 30.

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Management Discussion (continued)

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 $1,365 million from December 31, 2016 as a result of an increase in retained earnings of $2,806 million, an increase in retirement-related amounts of $1,446 million and an increase of $794 million related to currency translation, partially offset by an increase in treasury stock of $3,762 million primarily due to common stock 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.

(Dollars in millions) **For the nine months ended September 30:**	**2017**	**2016**
Net cash provided by/(used in) continuing operations:		
Operating activities	$ 10,991	$ 13,105* **
Investing activities	(3,278)	(7,289)*
Financing activities	(5,499)	(4,619)**
Effect of exchange rate changes on cash and cash equivalents	875	155
Net change in cash and cash equivalents	$ 3,089	$ 1,352

* Revised classification of certain financing receivables. Refer to note 1, Basis of Presentation, for additional information.

** Reclassified to reflect adoption of the FASB guidance on share-based compensation.

Net cash provided by operating activities decreased by $2,114 million as compared to the first nine months of 2016 driven by the following factors:

- An increase in net income tax payments of $1,211 million, driven by the prior year Japan tax refund received;

- A decrease in cash provided by financing receivables of $868 million; and

- Performance-related declines within net income; partially offset by

- Working capital improvements of $1,009 million driven by strong cash collections.

Net cash used in investing activities decreased $4,011 million as compared to the first nine months of 2016 driven by:

- A decrease in net cash used related to acquisitions of $5,002 million.

Net cash used in financing activities increased $880 million as compared to the first nine months of 2016 driven by:

- An increase in common stock repurchases of $1,043 million; partially offset by

- An increase in net cash sourced from debt transactions of $422 million primarily driven by a higher level of issuances which exceeded higher maturities.

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Management Discussion (continued)

Looking Forward

The company s strategies, investments and actions are all taken 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.

Within the IT industry, there are major shifts occurring driven by cognitive, including data and analytics, cloud and changes in the ways individuals and enterprises are engaging. The company is bringing together its cognitive technologies on cloud platforms to create industry-based solutions in order to solve enterprise clients real problems. The company continues to address the higher value areas of enterprise IT and is amassing a unique set of capabilities and is differentiating itself from other technology providers as it moves into new spaces, and in some cases, creating entirely new markets. IBM is more than a hardware, software and services company; it has emerged as a cognitive solutions and cloud platform company, focused on industry differentiation. The company s strategic imperatives represent revenue from its cloud, analytics, mobile, social and security solutions, across its segments, and are a signpost of progress in addressing these market shifts.

In 2017, the company is continuing to embed cognitive and cloud across the business, to build new platforms and solutions and reinvent core capabilities. This is fueling the shift toward strategic imperatives revenue. Consistent with the long-term model, over the course of 2017, the company has continued to acquire and integrate key capabilities, remix skills, invest in areas of growth and return value to shareholders. This is all taken into account in the full-year view. Overall, the company continues to expect GAAP earnings per share from continuing operations for 2017 to be at least $11.95. Excluding acquisition-related charges of $0.75 per share and non-operating retirement-related items of $1.10 per share, operating (non-GAAP) earnings per share is expected to be at least $13.80.

Overall, looking forward to the fourth quarter of 2017, as a result of the typical large transactional base in the fourth quarter, there is a range of possible scenarios. In 2016, the company increased revenue by $2.5 billion from third to fourth quarter. In 2017, the company expects stronger sequential performance than the typical third to fourth quarter increase, with potentially $300 million to $400 million more revenue, depending on currency, due in part to the mainframe cycle. The company s GAAP and operating (non-GAAP) gross margins have shown good progression in recent quarters, driven by mix and some moderation in the headwinds from investment. In the fourth quarter of 2017, the company expects GAAP and operating (non-GAAP) gross margins to be consistent with the sequential improvement the company has experienced the last few years of an approximate 2.5 to 3.5 point increase in gross margins from third to fourth quarter. In expense, the company expects to continue to drive efficiency in spending, however with the weaker U.S. dollar, currency hedges are expected to have an impact. The company continues to have a strong pipeline of IP income opportunities. At mid-October spot rates, the currency impact to revenue growth for the fourth-quarter 2017 is expected to be approximately a three-point tailwind, which would result in a neutral to a one-point tailwind to full-year 2017.

Free cash flow realization, defined as free cash flow to income from continuing operations (GAAP), was 96 percent over the last twelve months and is again expected to be in line with the longer-term model of over 90 percent in 2017. The company continues to expect full year free cash flow to be relatively flat year to year, as the first half year-to-year headwind shifts to a tailwind driven by lower tax and workforce rebalancing payments in 2017. This also reflects the level of profit consistent with the company s full year expectations of earnings per share.

The company s tax rate reflects its mix of business, both country and product mix. The company continues to expect that the 2017 GAAP tax rate will be approximately 3 points lower than the operating (non-GAAP) tax rate expectation. Expectations for the operating (non-GAAP) tax rate are approximately 15 percent plus or minus three points, excluding discrete items. This range was widened in 2017 due to mix variables and tax reform discussions underway in the U.S, which could result in planning actions this year. The tax rates for the first nine months of 2017, excluding discrete items, were in line with the company s January 2017 expectations. The company may have discrete tax items in the fourth quarter of 2017, however the amount and timing is unknown and any benefits may be mitigated by other actions. The rate will change year to year based on nonrecurring 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, the timing and amount of foreign dividend repatriation, state and local taxes and the effects of various global income tax strategies.

In January 2017, the company reorganized its client and commercial financing business as a wholly owned subsidiary, IBM Credit LLC. As announced, the financing business target leverage was increased from 7:1 to 9:1. The subsidiary began accessing the capital markets directly in September 2017, with its first public debt issuance. At September 30, 2017, this business continues to be leveraged at a debt-to-equity ratio of 9:1.

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Management Discussion (continued)

The company expects 2017 pre-tax retirement-related plan cost to be approximately $2.9 billion, an increase of approximately $900 million compared to 2016. This estimate reflects current pension plan assumptions at December 31, 2016. Within total retirement-related plan cost, operating retirement-related plan cost is expected to be approximately $1.4 billion, approximately flat versus 2016. Non-operating retirement-related plan cost is expected to be approximately $1.5 billion, an increase of approximately $900 million compared to 2016, driven by lower income from expected return on assets. Contributions for all retirement-related plans are expected to be approximately $2.4 billion in 2017, approximately flat compared to 2016.

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, 2017, currency changes resulted in assets and liabilities denominated in local currencies being translated into more dollars than at year-end 2016. 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 2017. Based on the currency rate movements in the first nine months of 2017, total revenue decreased 2.7 percent as reported and decreased 2.2 percent at constant currency versus the first nine months of 2016. 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) decrease of approximately $10 million in the first nine months of 2017 on an as-reported basis and a decrease of $20 million on an operating (non-GAAP) basis. The same mathematical exercise resulted in an increase of approximately $50 million in the first nine months of 2016 on an as-reported basis and an increase of $75 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.

The company continues to monitor the economic conditions in Venezuela. In mid-February 2016, changes to the currency exchange systems were announced which eliminated the SICAD exchange rate and replaced the SIMADI rate with DICOM, which is expected to be a floating exchange rate. The company recorded a pre-tax loss of $43 million in the first quarter of 2016 in other (income) and expense in the Consolidated Statement of Earnings as a result of the elimination of the SICAD and devaluation in the new exchange. Total pre-tax loss for the first nine months of 2017 was $9 million compared to $46 million in the first nine months of 2016. The company s net assets denominated in local currency were $8 million at September 30, 2017. The company s operations in Venezuela comprised less than 1 percent of total 2016 and 2015 revenue, respectively.

Liquidity and Capital Resources

In the company s 2016 Annual Report, on pages 68 to 71, there is a discussion of the company s liquidity including two tables that present five years of data. The table presented on page 68 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

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Management Discussion (continued)

ended, or as of, as applicable, September 30, 2017, those amounts are $11.0 billion for net cash from operating activities, $11.5 billion of cash and marketable securities and $10.25 billion in global credit facilities, respectively. On July 20, 2017, the company and IBM Credit entered into a $2.5 billion 364-day Credit Agreement and a $2.5 billion three-year Credit Agreement. These new agreements permit borrowings up to an aggregate of $5 billion on a revolving basis.

The major rating agencies ratings on the company s debt securities at September 30, 2017 appear in the table below. The Fitch ratings were reaffirmed on September 30, 2016 and remain unchanged from December 31, 2016. On May 3, 2017, Moody s Investors Service lowered its rating on the company s senior long-term debt from Aa3 to A1, while reaffirming its rating on commercial paper. On May 5, 2017, Standard and Poor s lowered its ratings on the company s senior long-term debt to A+ from AA- and commercial paper to A-1 from A-1+. IBM remains a strong investment grade company with significant financial flexibility to execute its strategy and capital allocation plans. 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, 2017, the fair value of those instruments that were in a liability position was $352 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.

IBM and IBM Credit LLC ratings:	STANDARD AND POOR S	MOODY S INVESTORS SERVICE	FITCH 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 79. 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, make 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.

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Management Discussion (continued)

The following is management s view of cash flows for the first nine months of 2017 and 2016 prepared in a manner consistent with the description above.

(Dollars in millions) For the nine months ended September 30:	2017	2016
Net cash from operating activities per GAAP	$ 10,991	$ 13,105* **
Less: change in Global Financing receivables	2,468	3,336*
Net cash from operating activities, excluding Global Financing receivables	8,523	9,769**
Capital expenditures, net	(2,347)	(2,801)
Free cash flow (FCF)	6,176	6,969**
Acquisitions	(442)	(5,445)
Divestitures	35	35
Share repurchase	(3,674)	(2,632)
Common stock repurchases for tax withholdings	(153)	(115)**
Dividends	(4,119)	(3,927)
Non-Global Financing debt	1,896	3,365
Other (includes Global Financing receivables and Global Financing debt)	3,270	3,523
Change in cash, cash equivalents and short-term marketable securities	$ 2,988	$ 1,773

* Revised classification of certain financing receivables.

** Reclassified to reflect adoption of the FASB guidance on share-based compensation.

In the first nine months of 2017, the company generated free cash flow of $6.2 billion, a decrease of $0.8 billion versus the prior year. The year-to-year decrease was driven primarily by a cash tax refund related to the Japan tax matter in the prior year. In addition, working capital contributed to the free cash flow performance in the first nine months of 2017. Net capital expenditures of $2.3 billion included investments to expand the company s cloud and cognitive capabilities. In the first nine months of 2017, the company continued to focus its cash utilization on returning value to shareholders including $4.1 billion in dividends and $3.7 billion in gross common stock repurchases.

Events that could temporarily change the historical cash flow dynamics discussed previously and in the company s 2016 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 12, Contingencies, in this Form 10-Q. With respect to pension funding, the company expects to make legally mandated pension plan contributions to certain non-U.S. plans of approximately $400 million in 2017. Contributions related to all retirement-related plans are expected to be approximately $2.4 billion in 2017. 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.

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 Credit Facilities, repatriating certain foreign earnings and utilizing intercompany loans with certain foreign subsidiaries.

The company does earn a significant amount of its pre-tax income outside the U.S. The company s policy is to indefinitely reinvest the undistributed earnings of its foreign subsidiaries, and accordingly, no provision for federal income taxes has been made on accumulated earnings of foreign subsidiaries. The company periodically repatriates a portion of these earnings to the extent that it does not incur an additional U.S. tax liability. Quantification of the deferred tax liability, if any, associated with indefinitely reinvested earnings is not practicable. While the company currently does not have a need to repatriate funds held by its foreign subsidiaries, if these funds are needed for operations and obligations in the U.S., the company could elect to repatriate these funds which could result in a reassessment of the company s policy and increased tax expense.

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Management Discussion (continued)

Global Financing Return on Equity Calculation

(Dollars in millions)	Three Months Ended September 30, 2017	2016	Nine Months Ended September 30, 2017	2016
Numerator				
Global Financing after-tax income*	$ 194	$ 244	$ 621	$ 829
Annualized after-tax income (a)	$ 776	$ 977	$ 828	$ 1,106
Denominator				
Average Global Financing equity (b)**	$ 3,255	$ 3,595	$ 3,372	$ 3,647
Global Financing return on equity (a)/(b)	23.8%	27.2%	24.6%	30.3%

* 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.

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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 Snapshot section on page 51 for the company s rationale for presenting operating earnings information.

(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	$ 8,800	$ 114	$ 203	$ 9,116
Gross profit margin	45.9%	0.6pts.	1.1pts.	47.6%
S,G&A	$ 4,648	$ (125)	$ (53)	$ 4,470
R,D&E	1,342		(51)	1,291
Other (income) and expense	(114)			(114)
Total expense and other (income)	5,735	(125)	(103)	5,507
Pre-tax income from continuing operations	3,065	238	306	3,609
Pre-tax margin from continuing operations	16.0%	1.2pts.	1.6pts.	18.8%
Provision for income taxes*	$ 339	$ 79	$ 113	$ 531
Effective tax rate	11.0%	1.5pts.	2.2pts.	14.7%
Income from continuing operations	$ 2,726	$ 159	$ 193	$ 3,079
Income margin from continuing operations	14.2%	0.8pts.	1.0pts.	16.1%
Diluted earnings per share from continuing operations	$ 2.92	$ 0.17	$ 0.21	$ 3.30

* 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, 2016	GAAP	Acquisition-related adjustments	Retirement-related adjustments	Operating (Non-GAAP)
Gross profit	$ 9,013	$ 129	$ 79	$ 9,221
Gross profit margin	46.9%	0.7pts.	0.4pts.	48.0%
S,G&A	$ 4,732	$ (138)	$ (53)	$ 4,541
R,D&E	1,397		(7)	1,390
Other (income) and expense	(8)	(2)		(10)
Total expense and other (income)	5,751	(140)	(60)	5,550
Pre-tax income from continuing operations	3,263	269	139	3,671
Pre-tax margin from continuing operations	17.0%	1.4pts.	0.7pts.	19.1%
Provision for income taxes*	$ 409	$ 73	$ 40	$ 521
Effective tax rate	12.5%	1.1pts.	0.6pts.	14.2%
Income from continuing operations	$ 2,854	$ 197	$ 99	$ 3,149
Income margin from continuing operations	14.8%	1.0pts.	0.5pts.	16.4%
Diluted earnings per share from				

continuing operations	$ 2.98	$ 0.21	$ 0.10	$ 3.29

* 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.

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Management Discussion (continued)

(Dollars in millions except per share amounts) For the nine months ended September 30, 2017	GAAP	Acquisition-related adjustments	Retirement-related adjustments	Operating (Non-GAAP)
Gross profit	$ 25,365	$ 349	$ 591	$ 26,305
Gross profit margin	44.8%	0.6pts.	1.0pts.	46.5%
S,G&A	$ 14,959	$ (393)	$ (326)	$ 14,240
R,D&E	4,360		(148)	4,212
Other (income) and expense	(218)	(7)		(225)
Total expense and other (income)	18,434	(401)	(474)	17,559
Pre-tax income from continuing operations	6,931	750	1,065	8,746
Pre-tax margin from continuing operations	12.2%	1.3pts.	1.9pts.	15.5%
Provision for income taxes*	$ 120	$ 212	$ 288	$ 621
Effective tax rate	1.7%	2.3pts.	3.1pts.	7.1%
Income from continuing operations	$ 6,811	$ 537	$ 777	$ 8,125
Income margin from continuing operations	12.0%	0.9pts.	1.4pts.	14.4%
Diluted earnings per share from continuing operations	$ 7.24	$ 0.57	$ 0.83	$ 8.64

* 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 nine months ended September 30, 2016	GAAP	Acquisition-related adjustments	Retirement-related adjustments	Operating (Non-GAAP)
Gross profit	$ 27,401	$ 371	$ 238	$ 28,010
Gross profit margin	47.1%	0.6pts.	0.4pts.	48.2%
S,G&A	$ 16,093	$ (365)	$ (183)	$ 15,545
R,D&E	4,320		(23)	4,297
Other (income) and expense	281	(7)		274
Total expense and other (income)	20,056	(372)	(206)	19,478
Pre-tax income from continuing operations	7,345	743	444	8,532
Pre-tax margin from continuing operations	12.6%	1.3pts.	0.8pts.	14.7%
Provision for/(benefit from) income taxes*	$ (31)	$ 201	$ 106	$ 277
Effective tax rate	(0.4)%	2.4pts.	1.3pts.	3.2%
Income from continuing operations	$ 7,375	$ 542	$ 338	$ 8,255
Income margin from continuing operations	12.7%	0.9pts.	0.6pts.	14.2%
Diluted earnings per share from continuing operations	$ 7.67	$ 0.57	$ 0.35	$ 8.59

* 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.

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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; 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 personnel 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 or herein by reference. The company assumes no obligation to update or revise any forward-looking statements.

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 12, Contingencies, on pages 44 to 46 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 2017.

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, 2017 - July 31, 2017	1,403,534	$ 149.09	1,403,534	$ 2,191,734,677
August 1, 2017 - August 31, 2017	3,167,041	$ 142.65	3,167,041	$ 1,739,970,319
September 1, 2017 - September 30, 2017	1,982,071	$ 144.56	1,982,071	$ 1,453,447,857
Total	6,552,646	$ 144.60	6,552,646	

* On October 25, 2016, 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	
4.1	Indenture dated as of October 1, 1993 between IBM and The Bank of New York Mellon, (as successor to The Chase Manhattan Bank (National Association)) as Trustee. *
4.2	First Supplemental Indenture to Indenture dated as of October 1, 1993 between IBM and The Bank of New York Mellon, (as successor to The Chase Manhattan Bank (National Association)) as Trustee, dated as of December 15, 1995. *
11	Statement re: computation of per share earnings. The statement re computation of per share earnings is note [14], 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

* Refiled by the company in electronic format in accordance with SEC Release Nos. 33-10322 and 34-80132 relating to exhibit hyperlinks, which became effective September 1, 2017.

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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 31, 2017

By: /s/ Robert F. Del Bene
Robert F. Del Bene
Vice President and Controller