

GICS Sector Information Technology
Sub-Industry IT Consulting \& Other Services*

Summary IBM's global offerings include information technology services, software, computer hardware equipment, fundamental research, and related financing.

## Key Stock Statistics

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52-Wk Range 116.9-165.00
TTM EPS 12.24
TTM P/E 13.14
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Beta 0.87
Market Cap 153.3B
Dividend Yield (\%) 3.41

ROA 10.55
P/B 9.0
ROE 78.10 EV/EBITDA 10.54

P/S 1.9
P/CF 8.4


## Investment Thesis

- IBM is undervalued as an IT Consulting company. It will transition to a software services company during our 3-5year investment horizon. We estimate that it will generate $55.4 \%$ of total revenues from its Strategic Imperatives cloud, data analytics, mobile, social, and security by 2020.
- We expect a profitable transition given IBM's 100+ year history of successful technological adaptations.
- A growing dividend yield of $3.5 \%$ annually provides stable returns while we wait for the market to realize the proper value of Strategic Imperatives.

| Revenue Data |  |  |  |
| :---: | :---: | :---: | :---: |
|  | 2015 | 2014 | 2013 |
| Services | 49911 | 55673 | 57665 |
| Sales | 29967 | 35063 | 40049 |
| Financing | 1864 | 2057 | 2047 |
| Total | 81741 | 92793 | 99751 |
| EPS | 13.42 | 11.90 | 14.94 |
| Dividend Data |  |  |  |
|  | 2015 | 20142 |  |
| Q1 1 | 1.10 | 0.95 |  |
| Q2 | 1.30 | 1.10 |  |
| Q3 | 1.30 | 1.10 |  |
| Q4 1 | 1.30 | 1.10 |  |

- Strong US dollar diminishing international sales
- Considerable competition and pricing pressures
- Potential for transition to go less smoothly than expected
- CEO Ginny Rommetty has been unable to turn IBM around as projected


## Business Summary

## Cognitive Solutions

Includes units that address many of firm's strategic areas, including analytics, commerce, and security, the new Watson Platform initiatives, Watson Health, Watson Internet of Things and Transaction Processing Software.

## Technology Services \& Cloud Platforms

This segment includes the cloud infrastructure, platform capabilities and provides IT infrastructure services. To create business value for clients through integrated services, IBM incorporates intellectual property within its global delivery model. By leveraging insights and experience drawn from IBM's global scale, skills and technology, clients gain access to high-quality services with improved productivity, flexibility, cost and outcomes.

## Global Business Services

Delivers predictable business outcomes to the company's clients across: Consulting and Systems Integration, Application Management Services and Process Services. GBS drives initiatives that integrate IBM content and solutions and drive the progress of the company's strategic imperatives.

## Systems Segment

Consists of middleware and operating systems software. Middleware serves as a software layer that connects operating systems to applications across a standard software platform. Operating systems are the software engines that run computers. Approximately 70 percent of external Software segment revenue is annuity based, coming from recurring license charges, software sold "as-a-Service" and ongoing post-contract support.

## Global Financing

Facilitates IBM clients' acquisition of information technology systems, software and services by providing financing solutions. The financing arrangements are predominantly for products or services that are critical to the end users' business operations.

| Revenues by Segment (New 2016): |  | 2016 | 2017 | 2018 | 2019 | 2020 | 2021 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Cognitive Solutions Gross Margin |  | $\begin{gathered} 17,124.0 \\ 15.40 \% \end{gathered}$ | 17,857.4 | 18,716.6 | 19,722.1 | 20,629.8 | 21,076.0 |
| Global Business Services Gross Margin |  | $\begin{array}{r} 16,769.0 \\ 9.40 \% \end{array}$ | 15,713.4 | 14,971.0 | 14,779.4 | 14,894.5 | 14,949.9 |
| Technology Services \& Cloud Platforms Gross Margin |  | $34,777.0$ $10.60 \%$ | $36,868.0$ | 39,085.9 | 41,375.8 | 43,292.1 | 44,234.1 |
| Systems Gross Margin |  | $\begin{array}{r} 6,742.0 \\ 6.10 \% \end{array}$ | 6,425.1 | 6,187.4 | 6,113.1 | 6,113.1 | 6,113.1 |
| Global Financing Gross Margin |  | 1,657.0 | 1,524.4 | 1,433.0 | 1,354.2 | 1,286.5 | 1,254.3 |
| Gross Margin |  | 46.70\% |  |  |  |  |  |
| Total |  | 77,069.4 | 78,388.4 | 80,393.9 | 83,344.6 | 86,216.0 | 87,627.4 |
| Declining old business Revenues: |  |  |  |  |  |  |  |
| Global Technology Services | (9.7\%) | \%) (8.50\%) | ) (8.00\%) | (6.50\%) | (2.50\%) | 0.00\% | 0.00\% |
| Global Business Services | (12.0\%) | \%) (8.50\%) | ) (8.00\%) | (6.50\%) | ) (2.50\%) | 0.00\% | 0.00\% |
| Software | (9.8\%) | ) (5.40\%) | ) (4.70\%) | (3.70\%) | ) (1.20\%) | 0.00\% | 0.00\% |
| Systems Hardware | (24.2\%) | \%) (8.50\%) | ) (8.00\%) | (6.00\%) | (5.50\%) | (5.00\%) | (2.50\%) |
| Global Financing | (9.5\%) | \%) (10.00\%) | ) (8.00\%) | (6.00\%) | (5.50\%) | (5.00\%) | (2.50\%) |
| Other | (44.9\%) | \%) (35.00\%) | ) (25.00\%) | (15.00\%) | (12.50\%) | (10.00\%) | (5.00\%) |
| Stragtegic Imperatives Revenues: | 2015 | 2016 | 2017 | 2018 | 2019 | 2020 | 2021 |
| Data and Analytics | 18,000.0 20 | 20,520.0 23 | 23,085.0 25 | 25,624.4 27 | 27,930.5 | 29,746.0 | 30,638.4 |
| Cloud | 10,000.0 11, | 11,400.0 12, | 12,825.0 14 | 14,235.8 | 15,517.0 | 16,525.6 | 17,021.3 |
| Mobile | 200.0 | 300.0 | 375.0 | 450.0 | 490.5 | 524.8 | 540.6 |
| Security | 400.0 | 456.0 | 513.0 | 569.4 | 620.7 | 661.0 | 680.9 |
| Social | 400.0 | 456.0 | 513.0 | 569.4 | 620.7 | 661.0 | 680.9 |
| Total | 29,000.0 33, | 33,132.0 37 | 37,311.0 41 | 41,449.0 | 45,179.4 | 48,118.5 | 49,562.0 |
| Strategic Imperatives as \% of Revenues: | 35.48\% | 41.62\% | 47.60\% | 51.56\% | 54.21\% | 55.81\% | 56.56\% |
| Strategic Imperatives Revenues Growth: |  |  |  |  |  |  |  |
| Data and Analytics | 16.0\% | 14.00\% | 12.50\% | 11.00\% | 9.00\% | 6.50\% | 3.00\% |
| Cloud | 57.0\% | 14.00\% | 12.50\% | 11.00\% | 9.00\% | 6.50\% | 3.00\% |
| Mobile | 250.0\% | 50.00\% | 25.00\% | 20.00\% | 9.00\% | 7.00\% | 3.00\% |
| Security | 12.0\% | 14.00\% | 12.50\% | 11.00\% | 9.00\% | 6.50\% | 3.00\% |
| Social | 21.0\% | 14.00\% | 12.50\% | 11.00\% | 9.00\% | 6.50\% | 3.00\% |

IBM's deep value is derived from the fact that it is currently categorized and valued as an IT Consulting company because approximately $60 \%$ of revenues come from related businesses. Its newer digital initiatives including data analytics and the cloud began in 2014 and have grown to approximately $40 \%$ of revenues in Q3 2016. We estimate that Strategic Imperatives will account for $55.4 \%$ of revenues by 2020. Then, IBM would mostly profit from software and related services, essentially making it a software company.

Despite its rundown in the market, IBM has strong future prospects in its Strategic Imperatives. For example, IBM's cloud accounted for 8\% of market share in Q2 2016, putting it in 3 rd place behind Amazon and Microsoft. A footprint in legacy IT solutions and management is a strong predictor of private cloud vendor success, as private cloud solutions are typically the first step toward hybrid IT environments.

Declining revenues in all segments have shaken investors who are skeptical about the transition. However, operating cash flows Given IBM's longstanding history and success in surviving technological revolutions, we expect the company to complete most its transition during our investment horizon.

| Cloud <br> Price to Revenue Analysis |  |
| :---: | :---: |
| 2015 Cloud Revenues | 10,000.0 |
| NTNX Nutanix | 8.72 |
| CRM Salesforce | 6.78 |
| Average of Price to Revenue | 7.75 |
| Value of IBM Cloud: | 77,500.0 |
| Data Analytics <br> Price to Revenue Analysis |  |
| 2015 Analytics Revenue | 18,000.0 |
| ACN Accenture | 2.27 |
| Value of IBM Analytics: | 40,860.0 |
| Total Valuation | 118,360.0 |
| IBM Market Capitalization | 147,000.0 |
| \% of Market Capitalization | 80.52\% |

IBM Dividend Growth


## Competitive Advantages

## Watson

IBM's Watson computer system provides the company's segments with advanced cognitive computing features. For example, Watson is used in the healthcare industry to analyze a patient's data points to predict the likelihood of an illness and give treatment recommendations based on their history, genetics, etc. The platform is able to interpret unstructured data and interact with users in natural languages. About $80 \%$ of all data is unstructured and Watson's superior capabilities give IBM a strategic advantage. Additionally, the platform has advanced data processing capabilities. For example, it can sift through 500 gigabytes of data (equivalent to 1 M books) per second. Watson is the only platform of its kind in the world and its integrative abilities mean superior data analytics for IBM's customers.

## Patents

In 2015, IBM was awarded 7,355 US patents; the most of any company for 23 consecutive years. Some of the company's technologies are for internal use, but many are licensed. IBM's stellar track record in successful patents gives it the ability to safeguard its intellectual property.

## Research \& Development and Strategic Acquisitions

The company has invested over \$15 billion in the growing field of the cloud and big data analytics since 2010. This included the acquisition of 20 companies including SoftLayer, which now forms the core of the company's infrastructure as a services (laaS) platform. Additionally, IBM's high net margins have allowed the company to invest significantly into its new product segments, the Strategic Imperatives. In 2015 the firm invested $\$ 13$ billion in R\&D and acquisitions, $54 \%$ of which was focused in the growing Strategic Imperatives segment.

## Cloud Infrastructure

Unlike its competitors, Microsoft and Salesforce, IBM can design and deliver integrated server, storage and software solutions. Meaning that clients receive holistic cloud integration, rather than just storage or analytics separately, for example. The company has been able to reengineer its mainframes to include mobile transaction processing and data analytics acceleration. This integrated approach should prove to be the industry standard in the near future. IBM has been able to standardize its product offerings across whole industries in the past, and this should prove no different.


## Competitors

## Amazon

The e-commerce and cloud computing company pioneered the cloud laaS (Infrastructure as a Service) market in 2006. Through its Amazon Web Services (AWS) subsidiary, the company offers cloud storage and computing services. AWS has a diverse range of customers ranging from startups such as Uber and Instagram, to large scale federal institutions such as the CIA. Additionally, AWS has the largest market share of paying customers using their cloud computation services. IBM on the other hand has broader features in its cloud laaS offerings that make it appealing to both traditional firms looking to leverage the cloud and startups.

Which cloud computing service does your company use the most?


Source: Clutch: study includes data from 300 enterprises with $101-5,000+$ employees

## Salesforce

Salesforce is a cloud computing company focused on Customer Relations Management (CRM) products. Through their Salesforce 1 platform they provide clients with well designed Uls for interacting with their customers on various platforms including social networking sites. Despite the popularity of Salesforce 1, IBM is ramping up efforts to improve its CRM division through acquisitions. In April 2016, IBM announced plans to acquire Bluewolf Group. This would give IBM the largest team of Salesforce technical specialists.

## Accenture

Accenture is a leading provider of management consultancy and outsourcing services. Through strategic acquisitions they have developed the competency to offer laaS services to their clients. In late 2015 the company acquired Cloud Sherpas, a global cloud advisory and technology services company. This acquisition provided Accenture with 1,100 professionals with expertise in delivering cloud services. Additionally, with TTM Net Income of $\$ 4.8$ billion in 2016 the company has the financial muscle to compete with IBM for acquisitions. Despite this, IBM has
 kept up with the pace as in the case of their 2016

## Industry Outlook

## Software Publishing

Projected Revenue (2016): \$205B
Project Profit (2016): \$42.6B
Projected Annual Growth (16-21): 2.8\%
Software publishers market, distribute, and design software products. They also issue licenses to consumers for the right to execute software on their computers. The industry averaged $3 \%$ in annual growth in the past five years and is projected to grow by an an average annual rate of $2.8 \%$ from 2016- 2021. IBM commands $4.5 \%$ of the market share, behind Microsoft and Oracle. In this industry, IBM primarily develops middleware and operating systems software. Middleware software increases the efficiency of software applications by carrying out processes absent in the operating system.

## Database, Storage \& Backup Software Publishing

Projected Revenue (2016): \$43.4B
Project Profit (2016): \$12.9B
Projected Annual Growth (16-21): 2.8\%
This industry develops and distributes database management, storage, and remote backup software systems. Some companies also provide after-sales services in order to assist in the installation and maintenance of these systems. IBM is a major player in the industry, commanding a $4.6 \%$ market share. IBM's industry brand names include IBM DB2, InfoSphere and Netezza.

## Data Processing \& Hosting Services

Projected Revenue (2016): \$144.4B
Project Profit (2016): \$21.1B
Projected Annual Growth (16-21): 4.8\%
Data processing services provide specialized reports based off information supplied by clients. Hosting services include web and applications hosting. The company competes in this industry through its Technology Services \& Cloud Platforms segment (TSC) and Systems division. TSC provides IT infrastructure services and business process services. The industry generates over \$100B in revenue a year and has averaged an annual growth rate of $6.8 \%$ in the past five years. Additionally, it's projected to grow by $4.8 \%$ in the next five years. IBM commands the largest market share in the industry with $11.3 \%$, ahead of Hewlett Packard. This amounts to about \$2.38B in revenues for the company.

## Business Analytics \& Enterprise Software Publishing

Projected Revenue (2016): \$37.9B
Project Profit (2016): \$8.6B
Projected Annual Growth (16-21): 4.5\%
Companies in this industry develop, market, and distribute enterprise software focused on Business Analytics, Customer Relationship Management (CRM), Business Intelligence and other related software. The industry generates annual revenue above \$30B and is projected to grow by an annual average growth rate of $4.5 \%$ for the next five years. IBM commands $7.5 \%$ of the market, behind SAP SE, Microsoft Corp, Salesforce and Oracle. IBM earned $\$ 2.8$ billion in revenue from this industry and it is expected to grow at an average annual rate of $0.6 \%$.

## Valuation

|  | Dividend Discount Model |  |  |  |  |  |  |  |  | $\mathbf{2 0 1 9}$ |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | $\mathbf{2 0 1 6}$ | $\mathbf{2 0 1 7}$ | $\mathbf{2 0 1 8}$ | $\mathbf{2 0 1 9}$ | $\mathbf{2 0 2 0}$ | $\mathbf{2 0 2 1}$ |  |  |  |  |
| Dividends |  |  |  |  |  |  |  |  |  |  |
| Growth Rate | 5.60 | 6.10 | 6.59 | 6.99 | 7.37 | 7.58 |  |  |  |  |
|  |  | $9.00 \%$ | $8.00 \%$ | $6.00 \%$ | $5.50 \%$ | $2.80 \%$ |  |  |  |  |
| Discounted Values | $\mathbf{5 . 2 1}$ | $\mathbf{5 . 2 8}$ | $\mathbf{5 . 3 1}$ | $\mathbf{5 . 2 3}$ | $\mathbf{1 5 6 . 6 7}$ |  |  |  |  |  |


| Discount Rate | $7.51 \%$ |
| :--- | :---: |
| Terminal Value | 161.06 |
| Intrinsic Value | $\mathbf{1 7 7 . 7 0}$ |


| Beta | 0.84 |
| :--- | ---: |
| Market Risk Premium | $6.39 \%$ |
| Risk Free Rate | $2.14 \%$ |
| CAPM Expected Return | $\mathbf{7 . 5 1 \%}$ |

IBM has been growing their dividends consistently for 16 years. IBM's revenues decreased due to their transition to their strategic imperatives. We assumed IBM would continue growing their dividend at $9.0 \%$ initially, and have growth level off at a constant rate of $2.8 \%$ into perpetuity. We calculated CAPM based on the S\&P 500 return as the market risk premium, and current 10 treasury-bill yield as the risk free rate. IBM currently has a beta of 0.84 in relation to the S\&P 500. Our intrinsic value from the dividend discount model shows the current stock price is at a discount of $10.19 \%$. We expect our return to be higher given the receipt of dividends over our holding period.

| Select Operating Data |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 2016 | 2017 | 2018 | 2019 | 2020 | 2021 |
| Net Income | 11,113.5 | 10,774.2 | 11,156.6 | 11,690.4 | 12,221.2 | 12,432.4 |
| Depreciation | 1,123.0 | 1,184.3 | 1,255.3 | 1,330.7 | 1,410.5 | 0.0 |
| Net Capital Expenditures | $(1,500.0)$ | $(1,542.1)$ | $(1,795.4)$ | $(1,525.4)$ | (1,714.1) | $(1,000.0)$ |
| Changes in Net Working Capital | (1,249.0) | 1,245.8 | 411.6 | 1,942.3 | 745.8 | 165.8 |
| New Debt | 2,135.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Debt Repayment | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| FCFE | 11,622.5 | 11,662.2 | 11,028.1 | 13,438.0 | 12,663.3 | 11,598.2 |


| Discount Rate | $8.01 \%$ |
| :--- | ---: |
| Terminal value per share | $\$ 177.70$ |
| Intrinsic Value for FCFE | $205,656.96$ |
| Number of shares | 902.9 |
| Intrinsic Value per share | $\mathbf{\$ 2 2 7 . 7 8}$ |


| Discounted Values |  |  |  |  |
| :--- | :--- | :--- | :--- | :--- |
| $10,761.0$ | $\mathbf{9 , 9 9 7 . 4}$ | $8,753.1$ | $9,875.3$ | $\mathbf{1 6 6 , 2 7 0 . 2}$ |

Our FCFE model shows IBM's intrinsic value at an amount of \$227.78 per share. The current stock price for IBM is discounted by $40.46 \%$ according to our research. We calculated the FCFE from the amounts we projected for our pro forma financial statements. IBM is a mature company with massive cash flows which will sustain business operations and dividend payments while they transition to their strategic imperatives. We expect that 2016 will show similar values to the amounts listed on the third quarter income statement and balance sheet, because there is only one quarter left in the year. We also assumed that we should increase the discount rate calculated by CAPM by $0.5 \%$ to account for the uncertainty related to their transition. IBM has consistently increased their dividends for 16 years, but their strategic imperatives are new business ventures. According to our research and calculations, even with increased uncertainty, there is still a sufficient margin of safety to call IBM deeply undervalued to the current stock price.

| Consolidated Statement of Earnings - USD (\$) in Millions | 12 Months Ended December 31 |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 | 2017 | 2018 | 2019 | 2020 | 2021 |
| Revenue: |  |  |  |  |  |  |  |  |  |  |  |
| Services | 60,721.0 | 59,453.0 | 57,655.0 | 55,673.0 | 49,911.0 | 51,546.0 | 53,593.3 | 55,903.6 | 59,446.2 | 62,489.2 | 63,632.7 |
| Sales | 44,063.0 | 43,014.0 | 38,666.0 | 35,063.0 | 29,967.0 | 23,866.0 | 24,334.8 | 24,948.2 | 25,685.7 | 26,580.7 | 27,020.6 |
| Financing | 2,132.0 | 2,040.0 | 2,047.0 | 2,057.0 | 1,864.0 | 1,657.0 | 1,524.4 | 1,433.0 | 1,354.2 | 1,286.5 | 1,254.3 |
| Total Revenue | \$106,916.0 | \$104,507.0 | \$98,368.0 | \$92,793.0 | \$81,742.0 | \$77,069.0 | \$79,452.5 | \$82,284.7 | \$86,486.1 | \$90,356.3 | \$91,907.6 |
| Cost of Goods Sold: |  |  |  |  |  |  |  |  |  |  |  |
| Services | 40,740.0 | 39,166.0 | 37,564.0 | 36,034.0 | 33,126.0 | 33,504.9 | 34,835.6 | 36,337.3 | 38,640.0 | 40,618.0 | 41,361.2 |
| Sales | 14,973.0 | 13,956.0 | 11,009.0 | 9,312.0 | 6,920.0 | 5,369.9 | 5,353.7 | 5,363.9 | 5,394.0 | 5,449.0 | 5,539.2 |
| Financing | 1,065.0 | 1,087.0 | 1,110.0 | 1,040.0 | 1,011.0 | 894.8 | 823.2 | 773.8 | 731.2 | 694.7 | 677.3 |
| Total Cost of Goods Sold | 56,778.0 | 54,209.0 | 49,683.0 | 46,386.0 | 41,057.0 | 39,769.5 | 41,012.5 | 42,475.0 | 44,765.3 | 46,761.7 | 47,577.8 |
| Gross Profit | 50,138.0 | 50,298.0 | 48,685.0 | 46,407.0 | 40,685.0 | 37,299.5 | 38,440.0 | 39,809.7 | 41,720.8 | 43,594.6 | 44,329.8 |
| Expense and other (income): |  |  |  |  |  |  |  |  |  |  |  |
| Selling, general and administrative | 23,594.0 | 23,553.0 | 23,451.0 | 23,180.0 | 20,430.0 | 20,825.0 | 19,863.1 | 20,571.2 | 21,621.5 | 22,589.1 | 22,976.9 |
| Research, development and engineering | 6,258.0 | 6,302.0 | 5,743.0 | 5,437.0 | 5,247.0 | 5,717.0 | 4,767.2 | 4,937.1 | 5,189.2 | 5,421.4 | 5,514.5 |
| Intellectual property and custom development income | $(1,108.0)$ | (1,074.0) | (822.0) | (742.0) | (682.0) | $(1,638.0)$ | (635.6) | (658.3) | (691.9) | (722.9) | (735.3) |
| Other (income) and expense | (20.0) | (843.0) | (333.0) | $(1,938.0)$ | (724.0) | 273.0 | 273.0 | 273.0 | 273.0 | 273.0 | 273.0 |
| Interest expense | 411.0 | 459.0 | 402.0 | 484.0 | 468.0 | 631.0 | 631.0 | 631.0 | 631.0 | 631.0 | 631.0 |
| Total expense and other (income) | 29,135.0 | 28,397.0 | 28,441.0 | 26,421.0 | 24,739.0 | 25,808.0 | 24,898.7 | 25,754.0 | 27,022.8 | 28,191.6 | 28,660.1 |
| Income from continuing operations before income taxes | 21,003.0 | 21,901.0 | 20,244.0 | 19,986.0 | 15,946.0 | 11,491.5 | 13,541.4 | 14,055.8 | 14,698.0 | 15,403.0 | 15,669.7 |
| Provision for income taxes | 5,148.0 | 5,298.0 | 3,363.0 | 4,234.0 | 2,581.0 | 378.0 | 2,708.3 | 2,811.2 | 2,939.6 | 3,080.6 | 3,133.9 |
| Income from continuing operations | 15,855.0 | 16,603.0 | 16,881.0 | 15,752.0 | 13,365.0 | 11,113.5 | 10,833.1 | 11,244.6 | 11,758.4 | 12,322.4 | 12,535.8 |
| Loss from discontinued operations, net of tax | 0.0 | 0.0 | (398.0) | $(3,729.0)$ | (174.0) | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 1.0 |
| Net income | 15,855.0 | 16,603.0 | 16,483.0 | 12,023.0 | 13,191.0 | 11,113.5 | 10,833.1 | 11,244.6 | 11,758.4 | 12,322.4 | 12,536.8 |


| Common Size Consolidated Statement of Earnings - As a Percent of Total Revenues | 12 Months Ended December 31 |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 | 2017 | 2018 | 2019 | 2020 | 2021 |
| Revenue: |  |  |  |  |  |  |  |  |  |  |  |
| Services | 56.79\% | 56.89\% | 58.61\% | 60.00\% | 61.06\% | 66.88\% | 67.45\% | 67.94\% | 68.73\% | 69.16\% | 69.24\% |
| Sales | 41.21\% | 41.16\% | 39.31\% | 37.79\% | 36.66\% | 30.97\% | 30.63\% | 30.32\% | 29.70\% | 29.42\% | 29.40\% |
| Financing | 1.99\% | 1.95\% | 2.08\% | 2.22\% | 2.28\% | 2.15\% | 1.92\% | 1.74\% | 1.57\% | 1.42\% | 1.36\% |
| Total Revenue | 100.00\% | 100.00\% | 100.00\% | 100.00\% | 100.00\% | 100.00\% | 100.00\% | 100.00\% | 100.00\% | 100.00\% | 100.00\% |
| Cost of Goods Sold: | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% |
| Services | 38.10\% | 37.48\% | 38.19\% | 38.83\% | 40.53\% | 43.47\% | 43.84\% | 44.16\% | 44.68\% | 44.95\% | 45.00\% |
| Sales | 14.00\% | 13.35\% | 11.19\% | 10.04\% | 8.47\% | 6.97\% | 6.74\% | 6.52\% | 6.24\% | 6.03\% | 6.03\% |
| Financing | 1.00\% | 1.04\% | 1.13\% | 1.12\% | 1.24\% | 1.16\% | 1.04\% | 0.94\% | 0.85\% | 0.77\% | 0.74\% |
| Total Cost of Goods Sold | 53.11\% | 51.87\% | 50.51\% | 49.99\% | 50.23\% | 51.60\% | 51.62\% | 51.62\% | 51.76\% | 51.75\% | 51.77\% |
| Gross Profit | 46.89\% | 48.13\% | 49.49\% | 50.01\% | 49.77\% | 48.40\% | 48.38\% | 48.38\% | 48.24\% | 48.25\% | 48.23\% |
| Expense and other (income): | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% |
| Selling, general and administrative | 22.07\% | 22.54\% | 23.84\% | 24.98\% | 24.99\% | 27.02\% | 25.00\% | 25.00\% | 25.00\% | 25.00\% | 25.00\% |
| Research, development and engineering | 5.85\% | 6.03\% | 5.84\% | 5.86\% | 6.42\% | 7.42\% | 6.00\% | 6.00\% | 6.00\% | 6.00\% | 6.00\% |
| Intellectual property and custom development income | (1.04\%) | (1.03\%) | (0.84\%) | (0.80\%) | (0.83\%) | (2.13\%) | (0.80\%) | (0.80\%) | (0.80\%) | (0.80\%) | (0.80\%) |
| Other (income) and expense | (0.02\%) | (0.81\%) | (0.34\%) | (2.09\%) | (0.89\%) | 0.35\% | 0.34\% | 0.33\% | 0.32\% | 0.30\% | 0.30\% |
| Interest expense | 0.38\% | 0.44\% | 0.41\% | 0.52\% | 0.57\% | 0.82\% | 0.79\% | 0.77\% | 0.73\% | 0.70\% | 0.69\% |
| Total expense and other (income) | 27.25\% | 27.17\% | 28.91\% | 28.47\% | 30.26\% | 33.49\% | 31.34\% | 31.30\% | 31.25\% | 31.20\% | 31.18\% |
| Income from continuing operations before income taxes | 19.64\% | 20.96\% | 20.58\% | 21.54\% | 19.51\% | 14.91\% | 17.04\% | 17.08\% | 16.99\% | 17.05\% | 17.05\% |
| Provision for income taxes | 4.81\% | 5.07\% | 3.42\% | 4.56\% | 3.16\% | 0.49\% | 3.41\% | 3.42\% | 3.40\% | 3.41\% | 3.41\% |
| Income from continuing operations | 14.83\% | 15.89\% | 17.16\% | 16.98\% | 16.35\% | 14.42\% | 13.63\% | 13.67\% | 13.60\% | 13.64\% | 13.64\% |
| Loss from discontinued operations, net of tax | 0.00\% | 0.00\% | (0.40\%) | (4.02\%) | (0.21\%) | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% |
| Net income | 14.83\% | 15.89\% | 16.76\% | 12.96\% | 16.14\% | 14.42\% | 13.63\% | 13.67\% | 13.60\% | 13.64\% | 13.64\% |


| Consolidated Statement of Financial Position - USD (\$) in Millions | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 | 2017 | 2018 | 2019 | 2020 | 2021 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Current Assets: |  |  |  |  |  |  |  |  |  |  |  |
| Cash and cash equivalents | 11,922.0 | 10,412.0 | 10,716.0 | 8,476.0 | 7,686.0 | 9,039.0 | 8,926.5 | 9,420.6 | 10,601.7 | 11,219.2 | 11,391.1 |
| Marketable securities | 0.0 | 717.0 | 350.0 | 0.0 | 508.0 | 929.0 | 850.1 | 832.5 | 866.5 | 875.9 | 890.7 |
| Notes and accounts receivable - trade (net of allowances) | 11,179.0 | 10,667.0 | 10,465.0 | 9,090.0 | 8,333.0 | 8,291.0 | 8,288.9 | 8,434.7 | 8,899.1 | 9,246.0 | 9,401.4 |
| Short-term financing receivables (net of allowances) | 16,901.0 | 18,038.0 | 19,787.0 | 19,835.0 | 19,020.0 | 16,032.0 | 17,002.8 | 17,526.6 | 18,735.0 | 19,465.2 | 19,792.5 |
| Other accounts receivable (net of allowances) | 1,481.0 | 1,873.0 | 1,584.0 | 2,906.0 | 1,201.0 | 873.0 | 1,062.7 | 1,095.4 | 1,170.9 | 1,216.6 | 1,237.0 |
| Inventories | 2,595.0 | 2,287.0 | 2,310.0 | 2,103.0 | 1,551.0 | 1,729.0 | 1,806.6 | 1,862.2 | 1,990.6 | 2,068.2 | 2,103.0 |
| Prepaid expenses and other current assets | 5,249.0 | 4,024.0 | 4,488.0 | 4,967.0 | 4,205.0 | 4,539.0 | 4,569.5 | 4,644.6 | 5,573.7 | 5,571.9 | 5,665.6 |
| Total Current Assets | 49,327.0 | 48,018.0 | 49,700.0 | 47,377.0 | 42,504.0 | 41,432.0 | 42,507.1 | 43,816.6 | 46,837.6 | 48,663.0 | 49,481.2 |
| Property, plant and equipment | 40,124.0 | 40,501.0 | 40,475.0 | 39,034.0 | 29,342.0 | 30,842.0 | 32,384.1 | 34,179.5 | 35,704.8 | 37,418.9 | 38,418.9 |
| Less: Accumulated depreciation | 26,241.0 | 26,505.0 | 26,654.0 | 28,263.0 | 18,615.0 | 19,738.0 | 20,922.3 | 22,177.6 | 23,508.3 | 24,918.8 | 24,918.8 |
| Property, plant and equipment - net | 13,883.0 | 13,996.0 | 13,821.0 | 10,771.0 | 10,727.0 | 11,104.0 | 11,461.8 | 12,001.8 | 12,196.6 | 12,500.2 | 13,500.2 |
| Long-term financing receivables | 10,776.0 | 12,812.0 | 12,755.0 | 11,109.0 | 10,013.0 | 8,936.0 | 8,221.1 | 7,727.9 | 7,302.8 | 7,137.7 | 7,159.2 |
| Prepaid pension assets | 2,843.0 | 945.0 | 5,551.0 | 2,160.0 | 1,734.0 | 3,487.0 | 1,734.0 | 1,734.0 | 1,734.0 | 1,734.0 | 1,734.0 |
| Deferred taxes | 5,104.0 | 5,388.0 | 4,702.0 | 6,675.0 | 4,822.0 | 4,289.0 | 4,822.0 | 4,822.0 | 4,822.0 | 4,822.0 | 4,822.0 |
| Goodwill | 26,213.0 | 29,247.0 | 31,184.0 | 30,556.0 | 32,021.0 | 36,401.0 | 36,401.0 | 36,401.0 | 36,401.0 | 36,401.0 | 36,401.0 |
| Intangible assets - net | 3,392.0 | 3,787.0 | 3,871.0 | 3,104.0 | 3,487.0 | 4,881.0 | 4,881.0 | 4,881.0 | 4,881.0 | 4,881.0 | 4,881.0 |
| Investments and sundry assets | 4,895.0 | 5,021.0 | 4,639.0 | 5,520.0 | 5,187.0 | 5,075.0 | 5,075.0 | 5,075.0 | 5,075.0 | 5,075.0 | 5,075.0 |
| Total Assets | 116,433.0 | 119,214.0 | 126,223.0 | 117,272.0 | 110,495.0 | 115,605.0 | 115,103.0 | 116,459.3 | 119,250.0 | 121,213.8 | 123,053.7 |
|  |  |  |  |  |  |  |  |  |  |  |  |
| Taxes | 3,313.0 | 4,948.0 | 4,633.0 | 5,084.0 | 2,847.0 | 2,137.0 | 2,391.5 | 2,562.3 | 2,647.8 | 2,733.2 | 2,733.2 |
| Short-term debt | 8,463.0 | 9,181.0 | 6,862.0 | 5,731.0 | 6,461.0 | 6,920.0 | 7,174.6 | 7,174.6 | 7,174.6 | 7,174.6 | 7,174.6 |
| Accounts payable | 8,517.0 | 7,952.0 | 7,461.0 | 6,864.0 | 6,028.0 | 5,271.0 | 5,466.3 | 5,637.2 | 5,808.0 | 5,978.8 | 5,978.8 |
| Compensation and benefits | 5,099.0 | 4,745.0 | 3,893.0 | 4,031.0 | 3,560.0 | 3,958.0 | 3,758.1 | 3,758.1 | 3,758.1 | 3,758.1 | 3,758.1 |
| Deferred income | 12,197.0 | 11,952.0 | 12,557.0 | 11,877.0 | 11,021.0 | 10,815.0 | 10,591.0 | 10,505.6 | 10,420.2 | 10,134.8 | 10,134.8 |
| Other accrued expenses and liabilities | 4,535.0 | 4,847.0 | 4,748.0 | 5,994.0 | 4,353.0 | 5,346.0 | 4,783.0 | 4,526.8 | 4,356.0 | 4,185.2 | 4,185.2 |
| Total Current Liabilities | 42,124.0 | 43,625.0 | 40,154.0 | 39,581.0 | 34,270.0 | 34,447.0 | 34,164.6 | 34,971.0 | 35,891.7 | 36,846.1 | 37,482.1 |
| Long-term debt | 22,857.0 | 24,088.0 | 32,856.0 | 34,991.0 | 33,428.0 | 35,563.0 | 35,563.0 | 35,563.0 | 35,563.0 | 35,563.0 | 35,563.0 |
| Retirement and nonpension PBO | 18,374.0 | 20,418.0 | 16,242.0 | 18,261.0 | 16,504.0 | 16,688.0 | 16,688.0 | 16,688.0 | 16,688.0 | 16,688.0 | 16,688.0 |
| Deferred income | 3,847.0 | 4,491.0 | 4,108.0 | 3,691.0 | 3,771.0 | 3,611.0 | 3,611.0 | 3,611.0 | 3,611.0 | 3,611.0 | 3,611.0 |
| Other liabilities | 8,996.0 | 7,607.0 | 9,934.0 | 8,733.0 | 8,099.0 | 8,138.0 | 8,138.0 | 8,138.0 | 8,138.0 | 8,138.0 | 8,138.0 |
| Total Liabilities | 96,198.0 | 100,229.0 | 103,294.0 | 105,257.0 | 96,072.0 | $\mathbf{9 8 , 4 4 7 . 0}$ | 98,164.6 | 98,971.0 | 99,891.7 | 100,846.1 | 101,482.1 |
| Contingencies and commitments | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| IBM Stockholders' Equity: |  |  |  |  |  |  |  |  |  |  |  |
| Common stock, par value \$0.20 per share, and APIC | 48,129.0 | 50,110.0 | 51,594.0 | 52,666.0 | 53,262.0 | 53,759.0 | 53,759.0 | 53,759.0 | 53,759.0 | 53,759.0 | 53,759.0 |
| Retained earnings | 104,857.0 | 117,641.0 | 130,042.0 | 137,793.0 | 146,124.0 | 151,027.0 | 156,058.0 | 160,278.6 | 164,487.8 | 168,530.4 | 172,802.9 |
| Treasury stock, at cost | (110,963.0) | $(123,131.0)$ | $(137,242.0)$ | $(150,715.0)$ | $(155,518.0)$ | $(158,170.0)$ | $(163,420.6)$ | $(167,091.3)$ | $(169,430.6)$ | $(172,463.7)$ | $(175,533.3)$ |
| Accumulated other comprehensive income/(loss) | $(21,885.0)$ | $(25,759.0)$ | $(21,602.0)$ | $(27,875.0)$ | $(29,607.0)$ | $(29,607.0)$ | $(29,607.0)$ | $(29,607.0)$ | $(29,607.0)$ | $(29,607.0)$ | $(29,607.0)$ |
| Total IBM stockholders' equity | 20,138.0 | 18,861.0 | 22,792.0 | 11,869.0 | 14,261.0 | 17,009.0 | 16,789.4 | 17,339.3 | 19,209.2 | 20,218.7 | 21,421.6 |
| Noncontrolling interests | 97.0 | 124.0 | 137.0 | 146.0 | 162.0 | 149.0 | 149.0 | 149.0 | 149.0 | 149.0 | 150.0 |
| Total Equity | 20,235.0 | 18,985.0 | 22,929.0 | 12,015.0 | 14,423.0 | 17,158.0 | 16,938.4 | 17,488.3 | 19,358.2 | 20,367.7 | 21,571.6 |
| Total Liabilities and Equity | 116,433.0 | 119,214.0 | 126,223.0 | 117,272.0 | 110,495.0 | 115,605.0 | 115,103.0 | 116,459.3 | 119,250.0 | 121,213.8 | 123,053.7 |











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## Management




#### Abstract

Ginni Rometty Chairman, President, and CEO Ginni Rometty began her career with IBM in 1981 in Detroit. Since then she has held a series of leadership positions, most recently as senior vice president and group executive, IBM sales, marketing, and strategy. Earlier she served as senior vice president, IBM Global Business Services, where she led the successful integration of PricewaterhouseCoopers Consulting. This acquisition was the largest in professional services history, creating a global team of more than 100,000 business consultants and services experts.


## Martin Schroeter

Senior Vice President and Chief Financial Officer
Martin Schroeter was named Senior Vice President and Chief Financial Officer on January 1, 2014. He was previously General Manager of IBM Global Financing, a position he held since April 2011, where he led the world's largest captive IT financier with a total asset base in excess of $\$ 37$ billion and 125,000 customers in 50 countries.Mr. Schroeter also served as IBM Treasurer, responsible for the company's balance sheet, cash flow, capital structure, interest rate and currency risk management and treasury operations. He has also held


#### Abstract

Dr. John E. Kelly III Senior Vice President, Cognitive Solutions and IBM Research As IBM senior vice president, Cognitive Solutions and IBM Research, Dr. John E. Kelly III is focused on the company's investments in several of the fastestgrowing and most strategic parts of the information technology market. His portfolio includes IBM Analytics, IBM Commerce, IBM Security and IBM Watson, as well as IBM Research and the company's Intellectual Property team. He also oversees the development of units devoted to serving clients in specific industries, beginning with the April 2015 launch of IBM Watson Health.


## Mark Foster <br> Senior Vice President, Global Business Services IBM

Mark Foster is Senior Vice President, IBM Global Business Services, responsible for the strategy, client value and business performance of IBM's consulting, systems integration, digital agency, business process outsourcing and application management services businesses across all industries. GBS brings clients the expertise of more than 100,000 consultants and practitioners creating value at the intersection of business insight and information technology.

Robert J. LeBlanc
Senior Vice President, Cloud
Robert LeBlanc is Senior Vice President, IBM Cloud. In this role, he has global responsibility for IBM's industry leading cloud portfolio of technology and services, including strategy, product design, offering development, marketing, sales, and service. Previously, Mr. LeBlanc served as Senior Vice President, IBM Software and Cloud Solutions Group, managing the strategy, development, and delivery of IBM's industry leading middleware and software solutions portfolio.

