

International Business Machines Corp.

Takeaways from IBM CEO Arvind Krishna’s podcast discussing AI and Quantum

Maintain Rating: BUY | PO: 315.00 USD | Price: 301.78 USD

IBM CEO Arvind Krishna: Low odds of LLMs driving to AGI

IBM CEO Arvind Krishna believes there is no AI bubble, though he acknowledges some of the debt capital funding AI growth could be at risk. He draws parallel to the fiber world, where only 2-3 players ultimately captured significant returns. Similar dynamics could play out in AI given the capital intensity & the need for extraordinary profits to cover the spend. CEO Krishna assigns “really low odds, like 0-1%” that today’s known tech will lead to AGI because to do so would require breakthroughs beyond current LLMs. Quantum could be a critical enabler as it can tackle problems classical systems cannot, unlocking capabilities never seen before. We maintain Buy on optionality from Quantum and continued mix shift toward high margin software driving strong FCF growth.

Meaningful traction in IBM Quantum Platform

Today, IBM’s quantum client base comprises ~300 organizations in research mode, with one-third commercial, one-third focused on materials and medicine, and one-third in academic research. Key proof points today include HSBC (bond pricing), Daimler (EV battery), & Boeing (material corrosion). CEO Krishna also shared how he sees traction in IBM’s open-source quantum software, Qiskit, which has 650K global users. During IBM’s Quantum Day in October, IBM also disclosed IBM Quantum Platform serves more than 220K users as of 10/28/25 ([see our detailed takeaway note here for more details](#)).

QPUs are distinct by nature & deliver computing value

CEO Krishna believes QPUs will deliver value by solving problems that CPUs & GPUs cannot address economically in the n-t. This view aligns with [our note on QPU positioning in the compute world](#). Krishna referenced 3P estimates of ~\$400-700bn in annual early-stage value creation. IBM’s aims to capture 20-30% of that opportunity.

Reiterated IBM’s 5-year horizon to reach utility-grade QC

As for timeline on quantum ROI, CEO Krishna reiterated the 5yr horizon IBM has laid out historically. CEO Krishna also emphasized the need robust networking & control across all moving parts. This point ties to IBM’s recent announcement with Cisco ([see Quantum Spin No. 4 for details](#)), aimed at advancing quantum networking and system integration.

Estimates (Dec) (US\$)	2023A	2024A	2025E	2026E	2027E
EPS	9.61	10.32	11.39	12.14	12.87
GAAP EPS	8.12	6.42	9.04	9.95	10.18
EPS Change (YoY)	5.3%	7.4%	10.4%	6.6%	6.0%
Consensus EPS (Bloomberg)			11.36	12.20	12.92
Consensus EPS (Visible Alpha)			9.12	10.38	11.12
DPS	6.63	6.67	6.71	6.75	6.79
Valuation (Dec)					
P/E	31.4x	29.2x	26.5x	24.9x	23.4x
GAAP P/E	37.2x	47.0x	33.4x	30.3x	29.6x
Dividend Yield	2.2%	2.2%	2.2%	2.2%	2.2%
EV / EBITDA*	22.3x	21.6x	18.0x	16.7x	15.6x
Free Cash Flow Yield*	4.3%	4.2%	5.6%	5.4%	5.8%

* For full definitions of *IQmethod*SM measures, see page 7.

03 December 2025

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Stock Data

Price	301.78 USD
Price Objective	315.00 USD
Date Established	22-Oct-2025
Investment Opinion	B-1-7
52-Week Range	214.50 USD - 324.90 USD
Mkt Val (mn) / Shares Out (mn)	281,114 USD / 931.5
Free Float	99.1%
Average Daily Value (mn)	1742.54 USD
BofA Ticker / Exchange	IBM / NYS
Bloomberg / Reuters	IBM US / IBM.N
ROE (2025E)	37.1%
Net Dbt to Eqty (Dec-2024A)	149.0%

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Timestamp: 03 December 2025 01:59AM EST

iQprofileSM International Business Machines Corp.

iQmethodSM – Bus Performance*

(US\$ Millions)	2023A	2024A	2025E	2026E	2027E
Return on Capital Employed	9.1%	9.0%	10.3%	10.2%	9.7%
Return on Equity	39.7%	38.7%	37.1%	33.7%	25.6%
Operating Margin	17.9%	17.9%	21.1%	21.8%	22.4%
Free Cash Flow	12,121	11,761	15,670	15,068	16,425

iQmethodSM – Quality of Earnings*

(US\$ Millions)	2023A	2024A	2025E	2026E	2027E
Cash Realization Ratio	1.6x	1.4x	1.6x	1.4x	1.5x
Asset Replacement Ratio	0.4x	0.4x	0.3x	0.3x	0.3x
Tax Rate	14.0%	13.6%	15.7%	15.0%	15.0%
Net Debt-to-Equity Ratio	192.2%	149.0%	146.2%	94.9%	44.6%
Interest Cover	6.9x	6.6x	7.3x	7.1x	7.2x

Income Statement Data (Dec)

(US\$ Millions)	2023A	2024A	2025E	2026E	2027E
Sales	61,860	62,753	66,970	69,726	72,714
% Change	2.2%	1.4%	6.7%	4.1%	4.3%
Gross Profit	34,932	36,274	39,834	41,942	44,171
% Change	6.9%	3.8%	9.8%	5.3%	5.3%
EBITDA	15,450	15,928	19,201	20,688	22,161
% Change	4.8%	3.1%	20.6%	7.7%	7.1%
Net Interest & Other Income	(741)	(55)	(1,321)	(1,465)	(1,562)
Net Income (Adjusted)	8,861	9,671	10,804	11,653	12,501
% Change	6.4%	9.1%	11.7%	7.9%	7.3%

Free Cash Flow Data (Dec)

(US\$ Millions)	2023A	2024A	2025E	2026E	2027E
Net Income from Cont Operations (GAAP)	7,502	6,024	8,578	9,561	9,894
Depreciation & Amortization	4,396	4,667	5,061	5,501	5,891
Change in Working Capital	900	(1,669)	1,922	(123)	238
Deferred Taxation Charge	0	0	0	0	0
Other Adjustments, Net	1,133	4,424	1,737	1,850	2,216
Capital Expenditure	(1,810)	(1,685)	(1,628)	(1,722)	(1,814)
Free Cash Flow	12,121	11,761	15,670	15,068	16,425
% Change	43.2%	-3.0%	33.2%	-3.8%	9.0%
Share / Issue Repurchase	0	0	401	0	0
Cost of Dividends Paid	(6,040)	(6,147)	(6,255)	(6,378)	(6,493)
Change in Debt	4,497	(880)	4,683	0	0

Balance Sheet Data (Dec)

(US\$ Millions)	2023A	2024A	2025E	2026E	2027E
Cash & Equivalents	13,089	14,161	18,082	26,772	36,704
Trade Receivables	14,008	13,963	13,490	12,988	13,685
Other Current Assets	5,811	6,359	9,110	9,128	7,391
Property, Plant & Equipment	5,501	5,731	5,476	4,020	2,429
Other Non-Current Assets	96,830	96,961	108,041	109,329	107,384
Total Assets	135,239	137,175	154,200	162,236	167,592
Short-Term Debt	6,426	5,089	7,942	7,942	7,942
Other Current Liabilities	27,695	28,054	31,675	31,139	14,486
Long-Term Debt	50,121	49,884	55,174	55,174	55,174
Other Non-Current Liabilities	28,384	26,757	28,613	29,682	30,841
Total Liabilities	112,626	109,784	123,405	123,937	108,443
Total Equity	22,614	27,392	30,795	38,300	59,234
Total Equity & Liabilities	135,240	137,176	154,200	162,236	167,677

* For full definitions of iQmethodSM measures, see page 7.

Company Sector

IT Hardware

Company Description

International Business Machines (IBM) is a leading provider of enterprise solutions, offering a broad portfolio of IT hardware, business and IT services, and a full suite of software solutions. The company integrates its hardware products with its software and services offerings in order to provide high value solutions. IBM is comprised of four major segments: (1) Infrastructure, (2) Consulting, (3) Software, and (4) Financing.

Investment Rationale

We view IBM as a defensive investment given its high exposure to recurring sales, cost cutting levers, solid balance sheet, potential share gains, and relatively stable margins. We believe IBM will embark on further cost cutting, and enhance its services and software offerings through acquisitions. Longer term, we expect IBM to take share in IT spending with its Cloud and AI initiatives.

Stock Data

Average Daily Volume 5,774,198

Quarterly Earnings Estimates

	2024	2025
Q1	1.68A	1.60A
Q2	2.43A	2.80A
Q3	2.30A	2.65E
Q4	3.92A	4.33E



Quantum Computing Exhibits

DARPA's QBI: 11 companies remain at Stage B, no changes

DARPA's Quantum Benchmarking Initiative was announced in 07/24 as an expansion of the Underexplored Systems for Utility-Scale Quantum Computing program which was announced in 01/23. For further details on QBI stages and related companies, see Fig 1.

Figure 1: 11 out of the 15 companies that were in Stage A of DARPA's QBI have moved to Stage B

QC companies noted under DARPA's QBI per most recent PR from November 2025

Stage A			Stage B			Stage C		
Company	Public/Private	Modality	Company	Public/Private	Modality	Company	Public/Private	Modality
Google Quantum AI*	NASDAQ: GOOGL	Superconducting Transmon Qubits	IBM	NYSE: IBM	Superconducting Qubits	PsiQuantum	Private	Photonics
HPE	NYSE: HPE	Partnerships**	IonQ***	NYSE: IONQ	Trapped Ions	Microsoft	NASDAQ: MSFT	Topological
Rigetti	NASDAQ: RGTI	Superconducting	Nord Quantique	Private	Superconducting Qubits			
Alice & Bob	Private	Superconducting Cat Qubits	Photonic Inc.	Private	Silicon Spin Qubits (Photonically Linked)			
			Quantum Motion	Private	Spin Qubits			
			QuEra	Private	Neutral Atoms			
			Silicon Quantum Computing	Private	Spin Qubits			
			Xanadu	Private	Photonics			
			Atom Computing	Private	Neutral Atoms			
			Diraq	Private	Silicon Spin Qubits			

Source: DARPA, BofA Global Research

Note: *GOOGL acquired Atlantic Quantum in October 2025, a QBI Stage A startup, furthering strengthening its in-house quantum division; **DARPA outlines HPE as a Stage A company & we note HPE has partnered with others to oversee research efforts in full-stack quantum-HPC integration; ***IonQ acquired Oxford Ionics in June 2025, a QBI Stage A startup; Microsoft & PsiQuantum were in the second phase of US2QC when QBI started

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QPU Progress Tracker

Figure 2: Today, there are various modalities being pursued by public and private players and a wide range of progress with qubit counts and gate fidelity.

Proprietary tracker of QC progress

Company	Public / Private	Architecture	Latest System	Physical Qubits	1Q Fidelity	2Q Fidelity	Logical Qubits	SW Stack
Amazon	NASDAQ: AMZN	Superconducting (cat qubit)	Ocelot chip	N/A	N/A	N/A	5*	Braket SDK
D-Wave	NYSE: QBTS	Superconducting	Advantage2 system	4,400+	N/A	N/A	N/A	Ocean
Google	NASDAQ: GOOGL	Superconducting	Willow chip	105	99.9650%	99.6700%	N/A	Cirq & Qualtran
IBM	NYSE: IBM	Superconducting	Nighthawk QPU	N/A	N/A	99.9500%**	120	Qiskit
Infleqtion	Going public via SPAC deal	Neutral Atom	Sqale	1600	N/A	99.730%	8	Superstaq
Intel	NASDAQ: INTC	Silicon Spin	Tunnel Falls chip	12	N/A	N/A	N/A	Intel Quantum SDK
IonQ	NYSE: IONQ	Trapped Ion	Forte Enterprise	36	N/A	99.9900%	N/A	IonQ Quantum OS & Hybrid Services
Microsoft	NASDAQ: MSFT	Topological	Majorana 1 chip	N/A	N/A	N/A	N/A	QDK
Quantum Computing Inc.	NASDAQ: QUBT	Photonic	DIRAC-3	N/A	N/A	N/A	N/A	N/A
Rigetti	NYSE: RGTI	Superconducting	Cepheus-1-36Q	36	99.9000%	99.5000%	N/A	QCS stack
Xanadu	Going public via SPAC deal	Photonic	X-Series	216	N/A	99.9900%	N/A	PennyLane & Catalyst + Lightning
Alice & Bob	Private	Superconducting (cat qubit)	Boson 4	1***	N/A	N/A	N/A	N/A
Alpine Quantum Technologies	Private	Trapped Ion	Marmot	20	99.9600%	98.4700%	N/A	ARNICA supports major SDKs
Anyon Systems	Private	Superconducting	Qube	24	N/A	N/A	N/A	Snowflurry
Atom Computing	Private	Neutral Atom	AC1000	1,200+	99.9000%+	99.6000%+	N/A	N/A
Diraq	Private	Silicon Spin	N/A	N/A	N/A	N/A	N/A	N/A
EeroQ	Private	Superfluid Helium	N/A	N/A	N/A	N/A	N/A	N/A
eleQtron	Private	Ion-based with microwaves	Quantum computer with magnetic gradient induced coupling	N/A	N/A	N/A	N/A	N/A
IQM	Private	Superconducting	Halocene (IQM Crystal 150 QPU)	150	N/A	99.7000%	5	Crisp + supports Qiskit, Cirq, & Cuda Quantum
Nord Quantique	Private	Superconducting	N/A	N/A	N/A	N/A	N/A	N/A
OQC	Private	Superconducting	Genesis	N/A	N/A	N/A	16	OQC Cloud



Figure 2: Today, there are various modalities being pursued by public and private players and a wide range of progress with qubit counts and gate fidelity.
Proprietary tracker of QC progress

Company	Public / Private	Architecture	Latest System	Physical Qubits	1Q Fidelity	2Q Fidelity	Logical Qubits	SW Stack
ORCA Computing	Private	Photonic	ORCA PT-2	N/A	N/A	N/A	N/A	N/A
Pasqal	Private	Neutral Atom	Orion Gamma	140	N/A	N/A	N/A	Pasqal Software Suite
Photonic Inc.	Private	Silicon Spin (Photonically-Linked)	N/A	N/A	N/A	N/A	N/A	N/A
PsiQuantum	Private	Photonic	Omega chipset	N/A	99.9900%	>99%	N/A	Construct
Qolab	Private	Superconducting	N/A	N/A	N/A	N/A	N/A	N/A
Quandela	Private	Photonic	Belenos	12	N/A	N/A	N/A	Perceval
Quantum Brilliance	Private	Diamond	Gen1	N/A	N/A	N/A	N/A	Qristal
Quantum Circuits Inc	Private	Superconducting	Aqumen Seeker	N/A	N/A	N/A	N/A	Aqumen SDK
Quantum Motion	Private	Silicon Spin	300mm CMOS quantum computer	4	N/A	N/A	N/A	Compatible with Qiskit & Cirq
QuEra	Private	Neutral Atom	Gemini-Class Gate-Model Quantum Computer	260	99.9000%	99.2000%	N/A	Bloqade
QuiX Quantum	Private	Photonic	Universal Quantum Computer	64	N/A	N/A	N/A	N/A
SemiQon	Private	Silicon Spin	SemiQit	N/A	N/A	N/A	N/A	N/A
Silicon Quantum Computing	Private	Silicon Spin	Jalapeño 1	3	99.9900%	99.9500%	N/A	N/A
SpinQ	Private	Superconducting	SPINQ QPU C Series - C25	25	99.8000%	98.0000%	N/A	SpinQit & QEDA
Universal Quantum	Private	Trapped Ion	N/A	N/A	N/A	N/A	N/A	N/A

Source: Company websites, BofA Global Research

Note: Numbers and QPU generations are constantly changing, non-exhaustive list of current QC companies, N/A represents either data unavailable or unknown, IQM 2QG is a target & Halocore supports up to 5 logical qubits, Willow fidelity is based on quantum error correction; *Ocelot has five data qubits (the cat qubits), five buffer circuits for stabilizing the data qubits, and 4 qubits for detecting errors on the data qubits; **2QG mentioned during IBM quantum day regarding Heron r3 as Nighthawk QPU 2QG not disclosed yet; ***refers to cat qubit

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Abbreviations

QC: quantum computing

QPU: quantum processing unit

GPU: graphics processing unit

CPU: central processing unit

QNU: Quantum networking unit

AI: artificial intelligence

QBI: Quantum Benchmarking Initiative

US2QC: Utility-Scale Quantum Computing

DARPA: Defense Advanced Research Projects Agency

Qrtly: Quarterly

Revs: Revenue

Semi: Semiconductor

SW: Software

Qubit: Quantum bit

Fig: Figure

QG: Quantum gate

QDE: Quantum development environment

Algo: Algorithm



SDK: Software development kit

IDE: Integrated development environment

EDA: Electronic design automation

Comm: Communications

Infra: Infrastructure

OS: Operating system

N-t: near-term

AGI: artificial general intelligence

LLMs: large-language-models

AI: artificial intelligence

EV: electric vehicle

3P: third-party

ROI: return on investment



Price objective basis & risk

International Business Machines Corp. (IBM)

Our PO of \$315 is based on 23x EV/FCF. Our target multiple for IBM exceeds the high end of the historical range 8-22x, with median 13x. We believe a multiple at the high end/exceeding the historical range is justified given the company's improving growth and FCF trajectory with Red Hat.

Downside risks to our price objective are (1) failure to execute on the company's growth roadmap, (2) inability to realize expected cost savings from restructuring, (3) technology/competitor risk in hardware, software, and services, (4) unforeseen currency impacts on revenue and profits, (5) acquisition integration, given IBM's acquisitive nature, and (6) increased concern of economic uncertainty and tightening corporate IT budgets.

Upside risks to our price objective are (1) faster reacceleration of topline, (2) faster improvement in margins, (3) better-than-expected accretion from M&A, and (4) delivery of upside to FCF.

Analyst Certification

I, Wamsi Mohan, hereby certify that the views expressed in this research report accurately reflect my personal views about the subject securities and issuers. I also certify that no part of my compensation was, is, or will be, directly or indirectly, related to the specific recommendations or view expressed in this research report.

US - IT Hardware and Technology Supply Chain Coverage Cluster

Investment rating	Company	BofA Ticker	Bloomberg symbol	Analyst
BUY				
	Amphenol	APH	APH US	Wamsi Mohan
	Apple Inc.	AAPL	AAPL US	Wamsi Mohan
	Corning Inc.	GLW	GLW US	Wamsi Mohan
	Dell Technologies Inc.	DELL	DELL US	Wamsi Mohan
	DigitalOcean	DOCN	DOCN US	Wamsi Mohan
	Flex Ltd.	FLEX	FLEX US	Ruplu Bhattacharya
	Hewlett-Packard Enterprise	HPE	HPE US	Wamsi Mohan
	Ingram Micro Holding Corporation	INGM	INGM US	Ruplu Bhattacharya
	International Business Machines Corp.	IBM	IBM US	Wamsi Mohan
	Jabil Inc.	JBL	JBL US	Ruplu Bhattacharya
	Nutanix Inc	NTNX	NTNX US	Wamsi Mohan
	Sandisk Corporation	SNDK	SNDK US	Wamsi Mohan
	Seagate Technology	STX	STX US	Wamsi Mohan
	TD Synnex Corp	SNX	SNX US	Ruplu Bhattacharya
	TE Connectivity Plc.	TEL	TEL US	Wamsi Mohan
	Western Digital Corporation	WDC	WDC US	Wamsi Mohan
NEUTRAL				
	CDW Corp	CDW	CDW US	Ruplu Bhattacharya
	Concentrix Corporation	CNXC	CNXC US	Ruplu Bhattacharya
	HP Inc.	HPQ	HPQ US	Wamsi Mohan
	NetApp Inc.	NTAP	NTAP US	Wamsi Mohan
	Pure Storage	PSTG	PSTG US	Wamsi Mohan
	Sanmina Corporation	SANM	SANM US	Ruplu Bhattacharya
	Sensata Technologies Holdings Plc	ST	ST US	Wamsi Mohan
UNDERPERFORM				
	Arrow Electronics Inc.	ARW	ARW US	Ruplu Bhattacharya
	Avnet Inc.	AVT	AVT US	Ruplu Bhattacharya
	Super Micro Computer Inc.	SMCI	SMCI US	Ruplu Bhattacharya
	Teradata Corporation	TDC	TDC US	Wamsi Mohan
	Vishay Intertechnology, Inc.	VSH	VSH US	Ruplu Bhattacharya



US - IT Hardware and Technology Supply Chain Coverage Cluster

Investment rating	Company	BofA Ticker	Bloomberg symbol	Analyst
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iQmethodSM Measures Definitions**Business Performance**

Return On Capital Employed

Return On Equity

Operating Margin

Earnings Growth

Free Cash Flow

Numerator

NOPAT = (EBIT + Interest Income) × (1 – Tax Rate) + Goodwill Amortization

Net Income

Operating Profit

Expected 5 Year CAGR From Latest Actual

Cash Flow From Operations – Total Capex

Denominator

Total Assets – Current Liabilities + ST Debt + Accumulated Goodwill

Amortization

Shareholders' Equity

Sales

N/A

N/A

Quality of Earnings

Cash Realization Ratio

Asset Replacement Ratio

Tax Rate

Net Debt-To-Equity Ratio

Interest Cover

Numerator

Cash Flow From Operations

Capex

Tax Charge

Net Debt = Total Debt – Cash & Equivalents

EBIT

Denominator

Net Income

Depreciation

Pre-Tax Income

Total Equity

Interest Expense

Valuation Toolkit

Price / Earnings Ratio

Price / Book Value

Dividend Yield

Free Cash Flow Yield

Enterprise Value / Sales

Numerator

Current Share Price

Current Share Price

Annualised Declared Cash Dividend

Cash Flow From Operations – Total Capex

EV = Current Share Price × Current Shares + Minority Equity + Net Debt +

Other LT Liabilities

Enterprise Value

Denominator

Diluted Earnings Per Share (Basis As Specified)

Shareholders' Equity / Current Basic Shares

Current Share Price

Market Cap = Current Share Price × Current Basic Shares

Sales

Basic EBIT + Depreciation + Amortization

iQmethodSM is the set of BofA Global Research standard measures that serve to maintain global consistency under three broad headings: Business Performance, Quality of Earnings, and valuations. The key features of iQmethod are: A consistently structured, detailed, and transparent methodology. Guidelines to maximize the effectiveness of the comparative valuation process, and to identify some common pitfalls.

iQdatabase[®] is our real-time global research database that is sourced directly from our equity analysts' earnings models and includes forecasted as well as historical data for income statements, balance sheets, and cash flow statements for companies covered by BofA Global Research.

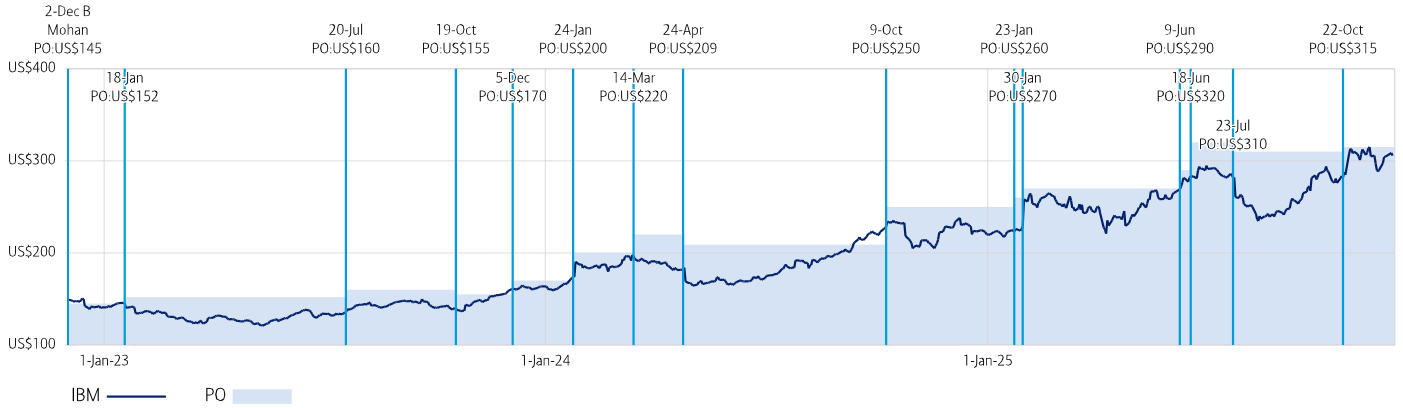
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Disclosures

Important Disclosures

Int Business Machine (IBM) Price Chart



IBM — PO

B: Buy, N: Neutral, U: Underperform, PO: Price Objective, NA: No longer valid, NR: No Rating

The Investment Opinion System is contained at the end of the report under the heading "Fundamental Equity Opinion Key". Dark grey shading indicates the security is restricted with the opinion suspended. Medium grey shading indicates the security is under review with the opinion withdrawn. Light grey shading indicates the security is not covered. Chart is current as of a date no more than one trading day prior to the date of the report.

Equity Investment Rating Distribution: Technology Group (as of 30 Sep 2025)

Coverage Universe	Count	Percent	Inv. Banking Relationships ^{R1}	Count	Percent
Buy	195	51.72%	Buy	99	50.77%
Hold	103	27.32%	Hold	52	50.49%
Sell	79	20.95%	Sell	23	29.11%

Equity Investment Rating Distribution: Global Group (as of 30 Sep 2025)

Coverage Universe	Count	Percent	Inv. Banking Relationships ^{R1}	Count	Percent
Buy	1816	53.11%	Buy	1062	58.48%
Hold	825	24.13%	Hold	480	58.18%
Sell	778	22.76%	Sell	385	49.49%

^{R1} Issuers that were investment banking clients of BofA Securities or one of its affiliates within the past 12 months. For purposes of this Investment Rating Distribution, the coverage universe includes only stocks. A stock rated Neutral is included as a Hold, and a stock rated Underperform is included as a Sell.

FUNDAMENTAL EQUITY OPINION KEY: Opinions include a Volatility Risk Rating, an Investment Rating and an Income Rating. **VOLATILITY RISK RATINGS**, indicators of potential price fluctuation, are: A - Low, B - Medium and C - High. **INVESTMENT RATINGS** reflect the analyst's assessment of both a stock's absolute total return potential as well as its attractiveness for investment relative to other stocks within its Coverage Cluster (defined below). Our investment ratings are: 1 - Buy stocks are expected to have a total return of at least 10% and are the most attractive stocks in the coverage cluster; 2 - Neutral stocks are expected to remain flat or increase in value and are less attractive than Buy rated stocks and 3 - Underperform stocks are the least attractive stocks in a coverage cluster. An investment rating of 6 (No Rating) indicates that a stock is no longer trading on the basis of fundamentals. Analysts assign investment ratings considering, among other things, the 0-12 month total return expectation for a stock and the firm's guidelines for ratings dispersions (shown in the table below). The current price objective for a stock should be referenced to better understand the total return expectation at any given time. The price objective reflects the analyst's view of the potential price appreciation (depreciation).

Investment rating	Total return expectation (within 12-month period of date of initial rating)	Ratings dispersion guidelines for coverage cluster ^{R2}
Buy	≥ 10%	≤ 70%
Neutral	≥ 0%	≤ 30%
Underperform	N/A	≥ 20%

^{R2} Ratings dispersions may vary from time to time where BofA Global Research believes it better reflects the investment prospects of stocks in a Coverage Cluster.

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