

## CDW Corp

# Netted down items helping; Are core margins growing? Yes, but at slower pace

Reiterate Rating: NEUTRAL | PO: 250.00 USD | Price: 241.37 USD

## Core margins have ticked up, but at a slowing pace

Cloud and SaaS based revenue streams for CDW once again outpaced overall net sales growth in F4Q23 and represented a high of 35.4% of gross profit. As shown in Fig 1, this implies gross margin of the core business (ex-netted down items) at 16.2% which is flat y/y. In our opinion, this represents healthy margins which have continued to tick up throughout 2022 and 2023; albeit at a slowing y/y pace. As usual, management continues to execute well, and their team of co-workers remains a competitive advantage. Our caution stems from weak end markets, cautious enterprise spend, and pace of recovery, and not CDW's ability to take share. Reiterate Neutral as n-t headwinds from weaker macro are balanced by l-t mix shift to higher margin software and services. PO to \$250 (from \$230) on 22x C25 EPS of \$11.56 (prior 21x C24 EPS). We roll-over to a C25 based valuation and use a slightly higher multiple on better margins.

## Is CDW's 2024 guidance conservative enough?

Given the company had to guide down in 2023, the question is whether CDW's 2024 guide is conservative enough. It is understandable that management is taking a cautious approach to guiding 2024 revenues. CDW guided for a slow start to the year for IT spending, and for full year 2024 U.S. IT spend growth in the low-single digits y/y. It seems reasonable that IT spending would grow low-single digits y/y after a year of high-single digit y/y decline (as per CDW's last guidance for 2023). On top of that, the company maintains its 200-300bps premium (constant currency) which we believe is also reasonable given CDW's scale and breath of offerings, and growth in services helped by the Sirius acquisition.

## 2025 should be a stronger year for revenue growth

In the years when CDW benefits from a hardware refresh, it sees stronger rev growth with the premium to market at the upper end of the 200-300 bps range. 2025 should benefit on the client devices side from a PC refresh tied to both Win11 and increased adoption of AI PCs/co-pilot. It should also benefit on the datacenter side from increased adoption of AI servers, and a recovery in networking (after inventory digestion this year). While we expect Cloud and SaaS revs to continue to grow, interestingly, CDW likely benefits from a resurgence in on-prem spend given cost of operating in the Cloud.

Estimates (Dec) (US\$)	2022A	2023A	2024E	2025E	2026E
EPS	9.79	9.88	10.36	11.56	12.77
GAAP EPS	8.13	8.11	8.80	9.94	11.10
EPS Change (YoY)	22.8%	0.9%	4.9%	11.6%	10.5%
Consensus EPS (Bloomberg)			10.48	11.50	13.01
DPS	2.07	2.35	2.57	3.08	3.70
Revenue - North America	NA	NA	NA	NA	NA
Valuation (Dec)					
P/E	24.7x	24.4x	23.3x	20.9x	18.9x
GAAP P/E	29.7x	29.8x	27.4x	24.3x	21.7x
Dividend Yield	0.9%	1.0%	1.1%	1.3%	1.5%
EV / EBITDA*	18.3x	18.4x	17.8x	16.3x	15.0x
Free Cash Flow Yield*	3.7%	4.5%	3.7%	4.1%	4.5%

\* For full definitions of *IQmethod*<sup>SM</sup> measures, see page 10.

20 February 2024

### Equity

#### Key Changes

(US\$)	Previous	Current
Price Obj.	230.00	250.00
2024E Rev (m)	22,638.7	22,332.6
2025E Rev (m)	23,897.6	23,804.8
2026E Rev (m)	NA	25,420.5
2024E EPS	10.91	10.36
2025E EPS	12.10	11.56
2026E EPS	NA	12.77

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### Stock Data

Price	241.37 USD
Price Objective	250.00 USD
Date Established	20-Feb-2024
Investment Opinion	B-2-7
52-Week Range	160.66 USD - 247.63 USD
Mkt Val (mn) / Shares Out (mn)	32,334 USD / 134.0
Free Float	99.7%
Average Daily Value (mn)	190.66 USD
BofA Ticker / Exchange	CDW / NAS
Bloomberg / Reuters	CDW US / CDW.OQ
ROE (2024E)	57.8%
Net Dbt to Eqty (Dec-2023A)	247.5%
ESGMeter™	High

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Abbreviations on page 7

# iQprofile<sup>SM</sup> CDW Corp

## iQmethod<sup>SM</sup> – Bus Performance\*

(US\$ Millions)	2022A	2023A	2024E	2025E	2026E
Return on Capital Employed	18.5%	18.2%	17.6%	18.5%	19.2%
Return on Equity	116.2%	73.9%	57.8%	47.5%	40.4%
Operating Margin	8.6%	9.5%	9.4%	9.6%	9.8%
Free Cash Flow	1,208	1,451	1,211	1,326	1,458

## iQmethod<sup>SM</sup> – Quality of Earnings\*

(US\$ Millions)	2022A	2023A	2024E	2025E	2026E
Cash Realization Ratio	1.0x	1.2x	1.0x	1.0x	1.0x
Asset Replacement Ratio	0.4x	0.5x	0.6x	0.6x	0.6x
Tax Rate	25.7%	25.6%	26.0%	26.0%	26.0%
Net Debt-to-Equity Ratio	349.7%	247.5%	154.9%	94.8%	56.6%
Interest Cover	8.7x	9.0x	10.1x	12.6x	15.1x

## Income Statement Data (Dec)

(US\$ Millions)	2022A	2023A	2024E	2025E	2026E
Sales	23,749	21,376	22,333	23,805	25,420
% Change	14.1%	-10.0%	4.5%	6.6%	6.8%
Gross Profit	4,687	4,652	4,889	5,238	5,594
% Change	31.3%	-0.7%	5.1%	7.2%	6.8%
EBITDA	2,051	2,039	2,109	2,293	2,491
% Change	24.6%	-0.6%	3.4%	8.7%	8.6%
Net Interest & Other Income	(246)	(231)	(212)	(185)	(169)
<b>Net Income (Adjusted)</b>	<b>1,341</b>	<b>1,347</b>	<b>1,404</b>	<b>1,560</b>	<b>1,718</b>
<b>% Change</b>	<b>19.8%</b>	<b>0.4%</b>	<b>4.2%</b>	<b>11.2%</b>	<b>10.1%</b>

## Free Cash Flow Data (Dec)

(US\$ Millions)	2022A	2023A	2024E	2025E	2026E
Net Income from Cont Operations (GAAP)	1,115	1,104	1,192	1,342	1,493
Depreciation & Amortization	291	273	274	284	286
Change in Working Capital	(167)	(69)	(197)	(238)	(255)
Deferred Taxation Charge	NA	NA	NA	NA	NA
Other Adjustments, Net	97	290	98	105	112
Capital Expenditure	(128)	(148)	(156)	(167)	(178)
<b>Free Cash Flow</b>	<b>1,208</b>	<b>1,451</b>	<b>1,211</b>	<b>1,326</b>	<b>1,458</b>
<b>% Change</b>	<b>76.5%</b>	<b>20.1%</b>	<b>-16.5%</b>	<b>9.5%</b>	<b>10.0%</b>
Share / Issue Repurchase	30	(418)	(169)	(100)	(100)
Cost of Dividends Paid	(284)	(321)	(348)	(416)	(498)
Change in Debt	(850)	(308)	57	(1,175)	0

## Balance Sheet Data (Dec)

(US\$ Millions)	2022A	2023A	2024E	2025E	2026E
Cash & Equivalents	315	589	1,339	974	1,835
Trade Receivables	4,950	5,038	5,706	6,094	6,544
Other Current Assets	1,298	1,078	1,222	1,416	1,653
Property, Plant & Equipment	189	196	238	280	332
Other Non-Current Assets	6,379	6,384	6,224	6,064	5,904
<b>Total Assets</b>	<b>13,132</b>	<b>13,285</b>	<b>14,730</b>	<b>14,829</b>	<b>16,268</b>
Short-Term Debt	56	613	40	40	40
Other Current Liabilities	4,891	4,829	5,456	5,778	6,168
Long-Term Debt	5,866	5,032	5,662	4,487	4,487
Other Non-Current Liabilities	715	768	756	778	820
<b>Total Liabilities</b>	<b>11,528</b>	<b>11,242</b>	<b>11,914</b>	<b>11,083</b>	<b>11,514</b>
<b>Total Equity</b>	<b>1,603</b>	<b>2,043</b>	<b>2,816</b>	<b>3,746</b>	<b>4,754</b>
<b>Total Equity &amp; Liabilities</b>	<b>13,132</b>	<b>13,285</b>	<b>14,730</b>	<b>14,829</b>	<b>16,268</b>

\* For full definitions of iQmethod<sup>SM</sup> measures, see page 10.

## Company Sector

IT Hardware

## Company Description

CDW is a provider of multi-brand technology solutions to business, government, education and healthcare organizations in the U.S., U.K. and Canada. CDW's product portfolio includes over 100,000 products from 1,000+ brands and encompasses a broad range of hardware and software offerings. CDW is able to provide IT solutions to 150+ countries and serves 250,000+ customers. CDW operates in four business segments - Public, Corporate, Small Business and Other, and has approx. 13,900 coworkers globally.

## Investment Rationale

Our Neutral rating is based on expected weak Enterprise IT spend, where a recovery of PC demand in F2H23 remains uncertain, while there is possibility of increasing demand weakness in data center equipment including servers and storage. Management has an excellent track record of beating consensus estimates and management continues to target outperformance vs. U.S. IT spending, driven by diverse end-markets, wide breadth of products, and deep customer relationships.

## Stock Data

Average Daily Volume 789,893

## Quarterly Earnings Estimates

	2023	2024
Q1	2.03A	2.17E
Q2	2.56A	2.63E
Q3	2.72A	2.81E
Q4	2.57A	2.75E

## Core margins growing, but y/y growth slowed during 2023

Netted down revenues represent revenue recognized on a net basis, which equals gross profit. Netted down revenues result when CDW is not primarily responsible for fulfillment and acceptability of the product or service and, therefore, is acting as an agent. CDW acts as an agent for software-as-a-service (SaaS), software assurance and warranty solutions. Agent commission fees are also netted down revenues.

**Figure 1: Estimating CDW's gross margin ex netted down items**

In F4Q23, we estimate gross margin of the core business at 16.2%

	F1Q22	F2Q22	F3Q22	F4Q22	F1Q23	F2Q23	F3Q23	F4Q23	F22	F23
Revenue Reported (\$mn)	\$5,949.1	\$6,145.8	\$6,215.5	\$5,438.3	\$5,103.1	\$5,626.1	\$5,628.3	\$5,018.5	\$23,748.7	\$21,376.0
Reported gross profit (\$mn)	\$1,104.1	\$1,168.2	\$1,233.2	\$1,181.1	\$1,089.4	\$1,181.5	\$1,227.7	\$1,153.8	\$4,686.6	\$4,652.4
Netted down items % of Gross Profit	31.0%	28.0%	31.0%	30.7%	32.0%	31.0%	32.6%	35.40%	30.2%	32.7%
Netted down revenues (\$mn)	\$342.3	\$327.1	\$382.3	\$362.6	\$348.6	\$366.3	\$400.2	\$408.4	\$1,414.3	\$1,523.5
Gross profit, minus netted down items (\$mn)	\$761.8	\$841.1	\$850.9	\$818.5	\$740.8	\$815.2	\$827.5	\$745.4	\$3,272.3	\$3,128.9
Reported rev, minus netted down rev (\$mn)	\$5,606.8	\$5,818.7	\$5,833.2	\$5,075.7	\$4,754.5	\$5,259.8	\$5,228.1	\$4,610.1	\$22,334.4	\$19,852.5
Reported Total gross margin (%)	19.0%	19.0%	19.8%	19.8%	21.0%	21.0%	21.8%	21.8%	21.8%	21.8%
Gross margin of Core (ex netted down items) (%)	13.6%	14.5%	14.6%	16.13%	15.6%	15.5%	15.8%	16.17%	14.7%	15.8%
y/y change in gross margin of Core business (ex netted down items)					199 bps	104 bps	124 bps	4 bps		110 bps

Source: Company reports, BofA Global Research estimates

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In F4Q23, netted down items represented 35.4% of gross profit, which compared to 32.6% in F3Q24 and 30.7% in F4Q22. Backing this out, we estimate gross margin of the core business (ex netted down items at 16.2% which is mostly flat y/y). As in 2022, in 2023, gross margin of the core business grew every quarter; albeit at a slowing y/y pace.

In F4Q23, CDW did not see the level of stabilization in hardware sales that it had expected and net sales of its hardware portfolio declined high single-digits y/y. This included double-digit y/y decline of NetComm and CDW's backlog has normalized. Over the next few quarters, CDW faces tough y/y compares in NetComm as the first few quarters of 2023 saw growth between 20-40% y/y. We expect revenues from NetComm to remain weak for the next few quarters.

Client devices saw a low single-digit decline in F4Q23.

CDW expects a modest recovery in hardware in the 2H24.

Software revenues in F4Q23 grew high single-digits y/y with strong growth in security, virtualization and application suites. Cloud spend increased across all end markets with about half the spend from commercial customers. Infrastructure as a service (IaaS), productivity and security were the top three cloud workloads during the period. Revenues from Security increased low single digits y/y.

Services revenues were strong with double-digit y/y growth in professional and managed services.

In our opinion, AI can be a strong driver for future revenue growth for CDW, especially on the Services side. Management gave an example of a leading semiconductor and software design company for which it implemented a custom platform to support training and inference workloads for Generative AI. The customer did not want to use Hyperscale LLM and cloud-based compute and storage resources given the proprietary nature of the company's designs and intellectual property concerns. This opportunity is potentially a multi-million dollar engagement for CDW. As more corporates and SMB start using Generative AI (likely more for inferencing vs. training), we see CDW benefiting from the demand for its expertise in designing and implementing such solutions specific to the needs of the customer. Today, AI is benefiting CDW's revenues more on the consultation and services side which can help margins. Over time, management believes it can offer a full stack solution, including hardware and software.



CDW's AI practice was enhanced by its acquisition of companies IGMW and Sirius Computer Solutions.

CDW management does not view AI as cannibalistic to other IT spending. Customers are running pilots to go through use cases to see what efficiencies they can derive. CDW feels that budgets may come from other departments like HR, finance and marketing as these functional areas may see improvement and business transformation.

## Some facts about CDW

CDW has about 15,100 co-workers (about 11,700 based in the US, and about 3,400 in International markets). About 10,00 of its coworkers are customer facing, and about 6,500 are technical coworkers including pre-sales specialists and advanced services delivery engineers. The company offers 100,000+ products and services from 1,000+ brands to more than 250,000 customers in the U.S., UK and Canada. CDW is able to provide IT solutions to 150+ countries.

As per management, CDW's current addressable market is about \$440bn, and CDW holds a high single-digit market share. The majority of this market is fragmented across thousands of value-added resellers (VARs). CDW's "sweet spot" is customers with less than 5,000 employees.

Capital return priorities: 1) increase dividends annually (targets about 25% payout of non-GAAP net income), 2) maintain net leverage ratio in the range 2.0 to 3.0x, and committed to maintaining investment grade credit rating, 3) supplement organic growth with M&A, and 4) target returning 50-75% of free cash flow to shareholders (dividends + buybacks).

In the last 5 years, CDW has closed on 10 acquisitions: Apris and Scalar in 2019; IGW, Aeritae, and Southern Dakota Solutions in 2020; Amplified IT, Focal Point, and Sirius Computer Solutions in 2021; and, Locus and Enquize in 2023. Prior to that it acquired Kelway (UK) in 2015, Berbee Information Networks in 2006, and North American assets of Micro Warehouse in 2003 (which became CDW Canada).

### Has CDW's revenue growth outpaced IT market spending by 200-300bps?

Based on IDC and CDW's internal estimates as of Dec 2023, IT spending grew 2018-2023 at a CAGR of 4.2%. In that timeframe, CDW's reported revenues grew at a CAGR of 5.6% (140bps delta to IT spending growth). However, investors need to keep in mind that netted down items dampen revenue growth and fall to the gross profit line at almost 100% margin. Between 2018-2023, CDW's gross profit dollars grew at a CAGR of 11.4%.

Let's look at a longer time-frame. Based on IDC and CDW's internal estimates as of Dec 2023, IT spending grew 2009-2023 at a CAGR of 5.1%. CDW's 2019 investor presentation stated 2009 revenues at \$7.2bn. Based on that CDW has grown reported revenues at a CAGR of about 8.1% (300bps delta to IT spending) in that timeframe. CDW has not disclosed netted down revenues prior to 2016 (2015 and prior years have not been updated to reflect the adoption of Topic 606). However, it is reasonable to assume that software and services were likely a smaller part of the business mix in 2009.

# Takeaways from the earnings call

- Customer spending remains cautious. Priorities remain operating efficiency and expense elasticity. These are increasingly met by services, and consumption based on cloud and SaaS.
- Not surprising then, CDW continued to see strong growth in Cloud and SaaS, items that are commonly net down on a revenue basis. Combined with weakness in traditional hardware categories, revenues in F4Q23 declined 7.7% y/y, while margins were strong (gross margin/operating margin at 23%/10.3%, respectively).
- FCF was strong at \$503mn for F4Q23 and \$1.45bn for F23
- While only the U.S. Government end market grew revenues y/y, CDW saw gross margin increase across all customer end markets
- Corporate sales declined 8% y/y driven by an increase in netted down items as well as weaker demand for hardware. CDW saw less year over year decline in client devices (down mid-single y/y vs down double-digits y/y in the first three quarters). Backlog normalized in Netcomm as customers focus on inventory digestion.
- SMB customers remain cautious and focused on projects that need to get done. CDW sales from this end market declined 13% y/y. Spending remained focused on Cloud and Security (hardware, software, and services).
- Public end markets combined saw sales decline 4% y/y
  - Government sales grew 4% y/y. This included sales to U.S. Federal up double-digits y/y with demand for Cloud remaining strong, and demand for NetComm up strong double-digits y/y. Revenue from U.S. State and Local grew mid-single y/y including triple-digit y/y growth in Cloud revenues as well as some growth in client devices.
  - Healthcare sales declined 5% y/y with cloud and security remaining strong.
  - Education revenues declined 12% y/y with mid-single digit y/y decline in K-12 and mid-teens y/y decline in higher education sales. For K-12, CDW saw double digit growth in cloud offset by double-digit decline in NetComm. Higher Ed saw double digit growth in Cloud, stability in Client devices and decline in NetComm.
- CDW' s "Other" category (its UK and Canada businesses) saw revenues decline 14% y/y with double-digit y/y decline in both in local currency.
- The uneven market conditions we experienced throughout 2023 have persisted into 2024. Customer decisions remain deliberate and restrained with ongoing project scrutiny, pursuit of short-term return-on-investment (ROI) and continued buying hesitancy particularly around hardware.
- CDW expects the U.S. IT market to grow by low single digits in 2024 on a customer spend basis, including the expectation of a slow start to the year.
- CDW expects to continue its track record of profitably outpacing U.S. IT market growth by 200 to 300 basis points.
- As per management, possible areas for M&A include security, cloud and AI
- Over the past 5 years, CDW's cloud business has grown at 30% CAGR



- CDW's security business has doubled over the past 3 years.
- As CDW sells more Software and Services, these higher margin items help gross margins. However, typically, these are items that get netted down. And so the spread between what a customer spends and reported net sales is widening. Management mentioned that that delta is over 7 basis points now.
- Pricing: The pricing environment remains stable. CDW is not seeing any activity from partners or customers that suggest sharp price movements up or down. ASPs have largely held firm. The competitive environment remains rational on the pricing and margin front.
- In F4Q23, CDW took some charges related to transformation initiatives. This includes strategic transformation initiatives focused on optimizing various operations and systems. It also took some workplace optimization charges that related to its workforce reduction program, and charges related to the reduction of its real estate lease portfolio.
- Gross margins in 2023 grew about 200bps y/y on three core drivers: 1) mix shift to netted down items particularly SaaS and Cloud, 2) less mix of hardware and particularly PCs, and 3) product margins were stable. Over time, in hardware, customers moving up the value chain and buying richer configurations can help hardware margins.
- Growth drivers: The need for CDW's services is driven by the proliferation of data, expanding cyber threats, expanding workloads, hardware obsolescence, growth of new technology such as AI, digital transformation, need for network modernization, and aging of client devices.

## Guidance for F1Q24 and F24

- Management expects U.S. IT spending to grow low single-digits y/y in 2024. It feels CDW's revenues can continue to outpace U.S. IT growth by 200-300bps (all growth rates in constant currency).
- Currency is expected to be approximately neutral for the full year.
- Given the increasing mix of netted down items, and inherent accounting differences that result from a different business mix, management believes gross profit has become a more effective barometer for gauging growth expectations.
- For F1Q24, management expects gross profit dollars to grow low single-digits y/y and gross margin to be comparable to F1Q23. Gross profit dollar growth y/y should accelerate in future quarters with 2024 full year gross profit dollar growth averaging low to mid single-digits y/y. We expect higher y/y gross profit growth in 1H24 driven by netted down revenues, and less in 2H as hardware becomes a greater part of the mix.
- Non-GAAP EPS is expected to grow mid-single digits y/y in 2024
- Annual depreciation and amortization expenses in 2024 are expected to be \$270-275mn
- Annual interest expense is expected to be \$210-215mn
- Tax rate is expected to be between 25.5-26.5%
- 2024 capex is expected to be in the range \$140-170mn

- CDW expects to achieve cash conversion cycle within target range of high teens to low 20 days
- FCF for 2024 is expected to be 80-90% of Net Income. Last two years, CDW delivered more than 100% of NI. That was due to strong cash profit, but also given the counter cyclical nature of the business as given the slower revenue growth. As revenues grow y/y in 2024, CDW may need to use more working capital.

## Abbreviations

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AI: Artificial Intelligence  
FCF: Free Cash Flow  
IaaS: Infrastructure as a Service  
LLM: Large Language Model  
NI: Net Income  
SaaS: Software as a Service  
SMB: Small Medium Business





# Model

**Figure 2: CDW Income Statement**

We model F24 rev/EPS of \$22.3bn/\$10.36

(\$ Millions Except Per Share Data)

(\$ Millions Except Per Share Data)	F2023				F2024E								
	3/23	6/23	9/23	12/23	3/24E	6/24E	9/24E	12/24E	2022	2023	2024E	2025E	2026E
Income Statement													
Revenue	\$5,103.1	\$5,626.1	\$5,628.3	\$5,018.5	\$5,010.0	\$5,621.7	\$5,919.7	\$5,781.2	\$23,748.7	\$21,376.0	\$22,332.6	\$23,804.8	\$25,420.5
Corporate	2,203.7	2,245.0	2,226.5	2,285.6	2,331.3	2,657.7	2,923.5	3,069.6	10,350.1	8,960.8	10,982.1	12,504.1	13,843.7
Small Business	411.4	396.2	378.4	370.0	377.4	434.0	460.1	478.5	1,938.9	1,556.0	1,749.9	1,951.3	2,174.2
Public	1,812.8	2,295.1	2,422.1	1,775.7	1,687.6	1,885.7	2,000.3	1,731.3	8,551.3	8,305.7	7,304.9	7,239.0	7,197.8
Other	675.2	689.8	601.3	587.2	613.6	644.3	535.9	501.9	2,908.4	2,553.5	2,295.7	2,110.5	2,204.9
Cost of Goods	4,013.7	4,444.6	4,400.6	3,864.7	3,915.3	4,396.1	4,617.4	4,515.1	19,062.1	16,723.6	17,444.0	18,566.6	19,826.7
Gross Profit	1,089.4	1,181.5	1,227.7	1,153.8	1,094.7	1,225.5	1,302.3	1,266.1	4,686.6	4,652.4	4,888.6	5,238.3	5,593.8
Operating Expenses	655.1	651.7	671.4	635.1	643.2	690.6	734.4	711.4	2,636.1	2,613.3	2,779.5	2,945.2	3,102.8
Selling and admin expenses	655.1	651.7	671.4	635.1	601.2	556.5	587.8	576.4	2,636.1	2,613.3	2,322.0	1,945.5	2,077.4
Advertising expenses	0.0	0.0	0.0	0.0	42.0	134.0	146.6	135.0	0.0	0.0	457.5	999.8	1,025.5
Operating Income (excl. stock comp.)	434.3	529.8	556.3	518.7	451.5	535.0	567.9	554.7	2,050.5	2,039.1	2,109.2	2,293.0	2,490.9
Stock comp. expense	20.8	24.8	26.0	22.1	22.1	24.8	26.1	25.5	91.1	93.7	98.3	104.8	111.9
Op. Income (incl. stock comp.)	413.5	505.0	530.3	496.6	429.5	510.2	541.9	529.3	1,959.4	1,945.4	2,010.8	2,188.2	2,379.0
Total interest and other income (expense)	(59.0)	(58.8)	(58.6)	(54.3)	(53.1)	(53.1)	(53.1)	(53.1)	(245.8)	(230.7)	(212.3)	(185.4)	(169.1)
Interest Income (expense)	(57.7)	(58.2)	(57.4)	(53.3)	(52.1)	(52.1)	(52.1)	(52.1)	(235.7)	(226.6)	(208.3)	(181.4)	(165.1)
Other Income (expense)	(1.3)	(0.6)	(1.2)	(1.0)	(1.0)	(1.0)	(1.0)	(1.0)	(10.1)	(4.1)	(4.0)	(4.0)	(4.0)
Pretax Income (excl. stock comp.)	375.3	471.0	497.7	464.4	398.4	481.9	514.9	501.7	1,804.7	1,808.4	1,896.8	2,107.6	2,321.8
Pretax Income (incl. stock comp.)	354.5	446.2	471.7	442.3	376.4	457.1	488.8	476.2	1,713.6	1,714.7	1,798.5	2,002.8	2,209.9
Taxes	96.6	122.0	128.3	115.3	103.6	125.3	133.9	130.4	463.3	462.2	493.2	548.0	603.7
Minority Interest	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Pref. Dividends (c)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Non-GAAP Net Income (excl. stock comp.)	278.7	349.0	369.4	349.1	294.8	356.6	381.0	371.2	1,341.4	1,346.2	1,403.6	1,559.6	1,718.2
Non-GAAP Net Income (incl. stock comp.)	257.9	324.2	343.4	327.0	272.8	331.8	354.9	345.8	1,250.3	1,252.5	1,305.3	1,454.8	1,606.2
Net Income, Discnt. Ops.	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Extraordinary Items (a)	(27.8)	(61.6)	(27.9)	(30.9)	(28.3)	(28.3)	(28.3)	(28.3)	(135.8)	(148.2)	(113.1)	(113.1)	(113.1)
GAAP Net Income (excl. stock comp.)	250.9	287.4	341.5	318.2	266.6	328.3	352.7	343.0	1,205.6	1,198.0	1,290.6	1,446.5	1,605.1
Options Expense	(20.8)	(24.8)	(26.0)	(22.1)	(22.1)	(24.8)	(26.1)	(25.5)	(91.1)	(93.7)	(98.3)	(104.8)	(111.9)
GAAP Net Income (incl. stock comp.)	230.1	262.6	315.5	296.1	244.5	303.6	326.7	317.5	1,114.5	1,104.3	1,192.2	1,341.7	1,493.1
Non-GAAP diluted EPS (excl. stock comp.)	\$2.03	\$2.56	\$2.72	\$2.57	\$2.17	\$2.63	\$2.81	\$2.75	\$9.79	\$9.88	\$10.36	\$11.56	\$12.77
Diluted Shares Outstdg. (MM)	137.3	136.1	135.9	135.9	135.8	135.6	135.4	135.2	137.0	136.3	135.5	135.0	134.6
Basic Shares Outstdg. (MM)	135.6	134.6	134.1	134.1	134.0	133.8	133.6	133.4	135.2	134.6	133.7	133.2	132.8
Income Statement (Cont'd)													
% of Revenue													
Gross Profit	21.3%	21.0%	21.8%	23.0%	21.9%	21.8%	22.0%	21.9%	19.7%	21.8%	21.9%	22.0%	22.0%
Adj Operating Expense	12.8%	11.6%	11.9%	12.7%	12.8%	12.3%	12.4%	12.3%	11.1%	12.2%	12.4%	12.4%	12.2%
Selling and admin expenses	12.8%	11.6%	11.9%	12.7%	12.0%	9.9%	9.9%	10.0%	11.1%	12.2%	10.4%	8.2%	8.2%
Advertising expenses	0.0%	0.0%	0.0%	0.0%	0.8%	2.4%	2.5%	2.3%	0.0%	0.0%	2.0%	4.2%	4.0%
Stock-based Comp. (SBC) Expense	0.4%	0.4%	0.5%	0.4%	0.4%	0.4%	0.4%	0.4%	0.4%	0.4%	0.4%	0.4%	0.4%
Operating Income (excl. stock comp.)	8.5%	9.4%	9.9%	10.3%	9.0%	9.5%	9.6%	9.6%	8.6%	9.5%	9.4%	9.6%	9.8%
Op. Income (incl. stock comp.)	8.1%	9.0%	9.4%	9.9%	8.6%	9.1%	9.2%	9.2%	8.3%	9.1%	9.0%	9.2%	9.4%
Pretax Income (incl. stock comp.)	6.9%	7.9%	8.4%	8.8%	7.5%	8.1%	8.3%	8.2%	7.2%	8.0%	8.1%	8.4%	8.7%
Tax Rate	25.7%	25.9%	25.8%	24.8%	26.0%	26.0%	26.0%	26.0%	25.7%	25.6%	26.0%	26.0%	26.0%
Non-GAAP Net Income (excl. stock comp.)	5.5%	6.2%	6.6%	7.0%	5.9%	6.3%	6.4%	6.4%	5.6%	6.3%	7.8%	6.6%	6.8%
Non-GAAP Net Income (incl. stock comp.)	5.1%	5.8%	6.1%	6.5%	5.4%	5.9%	6.0%	6.0%	5.3%	5.9%	5.8%	6.1%	6.3%
% Growth Rates (Y/Y)													
Revenues	(14%)	(8%)	(9%)	(8%)	(2%)	(0%)	5%	15%	14.1%	(10.0%)	4.5%	6.6%	6.8%
Gross Profit	(1%)	1%	(0%)	(2%)	0%	4%	6%	10%	31%	(1%)	5%	7%	7%
Adj Operating Expense	2%	(0%)	(2%)	(3%)	(2%)	6%	9%	12%	37%	(1%)	6%	6%	5%
Operating Income (excl. stock comp.)	(6%)	3%	1%	(1%)	4%	1%	2%	7%	25%	(1%)	3%	9%	9%
Op. Income (incl. stock comp.)	(6%)	2%	2%	(1%)	4%	1%	2%	7%	25%	(1%)	3%	9%	9%
Pretax Income (excl. stock comp.)	(7%)	3%	3%	1%	6%	2%	3%	8%	21%	0%	5%	11%	10%
Taxes	(7%)	3%	3%	(1%)	7%	3%	4%	13%	23%	(0%)	7%	11%	10%
Non-GAAP Net Income (excl. stock comp.)	(8%)	3%	3%	2%	6%	2%	3%	6%	20%	0%	4%	11%	10%
Non-GAAP Net Income (incl. stock comp.)	(8%)	3%	4%	1%	6%	2%	3%	6%	19%	0%	4%	11%	10%
Diluted EPS	(8%)	3%	4%	3%	7%	3%	4%	7%	23%	1%	5%	12%	10%

Source: Company reports, BofA Global Research estimates

BofA GLOBAL RESEARCH



## Price objective basis & risk

### CDW Corp (CDW)

Our PO of \$250 is based on 22x our C25E EPS. Our target multiple is above the median 19x of historical range 14x to 23x. CDW is a cyclical stock and we believe that this multiple balances the risk from near-term weakness in Enterprise spending and weaker end markets, against the longer-term opportunity to have margins benefit from a higher mix of netted down items.

Upside risks to our price objective include a faster than expected demand recovery, outsized share gains, and increased cost takeout to stabilize earnings. Downside risks are continued demand weakness, slower mix shift to higher margin software and services, a more competitive pricing environment, continued high exposure to hardware as a percent of revenue, continued shift of infrastructure to the public cloud, and any risk to key suppliers in this weaker macro environment.

## Analyst Certification

I, Ruplu Bhattacharya, 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
<b>BUY</b>				
	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
	Flex Ltd.	FLEX	FLEX US	Ruplu Bhattacharya
	HP Inc.	HPQ	HPQ US	Wamsi Mohan
	International Business Machines Corp.	IBM	IBM US	Wamsi Mohan
	Jabil Inc.	JBL	JBL US	Ruplu Bhattacharya
	Nutanix Inc.	NTNX	NTNX US	Wamsi Mohan
	Roku, Inc.	ROKU	ROKU US	Ruplu Bhattacharya
	Seagate Technology	STX	STX US	Wamsi Mohan
	Super Micro Computer Inc.	SMCI	SMCI US	Ruplu Bhattacharya
	TD Synnex Corp.	SNX	SNX US	Ruplu Bhattacharya
	TE Connectivity Ltd.	TEL	TEL US	Wamsi Mohan
	Western Digital Corporation	WDC	WDC US	Wamsi Mohan
<b>NEUTRAL</b>				
	Arrow Electronics Inc.	ARW	ARW US	Ruplu Bhattacharya
	Avnet Inc.	AVT	AVT US	Ruplu Bhattacharya
	CDW Corp	CDW	CDW US	Ruplu Bhattacharya
	Concentrix Corporation	CNXC	CNXC US	Ruplu Bhattacharya
	Hewlett-Packard Enterprise	HPE	HPE US	Wamsi Mohan
	Pure Storage	PSTG	PSTG US	Wamsi Mohan
	Sensata Technologies Holdings Plc	ST	ST US	Wamsi Mohan
	Teradata Corporation	TDC	TDC US	Wamsi Mohan
<b>UNDERPERFORM</b>				
	DigitalOcean	DOCN	DOCN US	Wamsi Mohan
	NetApp Inc.	NTAP	NTAP US	Wamsi Mohan
	Sanmina Corporation	SANM	SANM US	Ruplu Bhattacharya
	Vishay Intertechnology, Inc.	VSH	VSH US	Ruplu Bhattacharya
	Vizio	VZIO	VZIO US	Wamsi Mohan



## iQmethod<sup>SM</sup> 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 &amp; 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

iQmethod<sup>SM</sup> 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 validations. 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.

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# Disclosures

## Important Disclosures

### CDW Corp (CDW) Price Chart



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 31 Dec 2023)

Coverage Universe	Count	Percent	Inv. Banking Relationships <sup>R1</sup>	Count	Percent
Buy	215	53.09%	Buy	111	51.63%
Hold	97	23.95%	Hold	45	46.39%
Sell	93	22.96%	Sell	24	25.81%

### Equity Investment Rating Distribution: Global Group (as of 31 Dec 2023)

Coverage Universe	Count	Percent	Inv. Banking Relationships <sup>R1</sup>	Count	Percent
Buy	1895	53.62%	Buy	1083	57.15%
Hold	832	23.54%	Hold	454	54.57%
Sell	807	22.84%	Sell	383	47.46%

<sup>R1</sup> 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.

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

<sup>R2</sup> 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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