

CISCO SYSTEMS, INC (CSCO)

April 10, 2024

Information Technology – Communication Equipment

Stock Rating

HOLD

Investment Thesis

We recommend a HOLD rating for Cisco Systems (CSCO) with a target price range of \$50-55, showcasing an upside of 1-10% from the current price. We believe that Cisco will continue to dominate the communications equipment industry with its investments in AI, software, and cybersecurity. However, the slowdown in new orders due to previous supply chain issues along with uncertainty of macroeconomic conditions remain crucial challenges for Cisco.

Drivers of Thesis

- Cisco is strategically positioned in the industry to capitalize on the expansion in key growing industries, including AI, cybersecurity, and 5G. Its strategic investments in AI are expected to enhance its network architecture and bring \$1 billion in orders for AI infrastructure products by 2025.
- Cisco’s ability to adapt showcased by its recent shift to software has allowed it to diversify revenue streams and sustain resilience against market volatility. Its recent acquisition of Splunk is predicted to add \$4 billion in ARR and make it one of the world's largest software companies.

Risks to Thesis

- The slowdown in new orders after the strong delivery of orders in FY2023 that were backlogged due to supply chain issues could be a macroeconomic trend and not a temporary pause.
- An economic downturn could lead to cuts in IT expenditure as companies reduce or defer spending, affecting the demand for Cisco's products, significantly impacting revenue.

Earnings Estimates

Year	2021	2022	2023	2024E	2025E	2026E
EPS	\$2.51	\$2.83	\$3.08	\$2.78	\$3.06	\$3.27
HF est.				\$2.73	\$3.14	\$3.53
Growth	-5.28%	12.75%	8.83%	-11.28%	15.00%	12.39%

12 Month Performance



Target Price

\$50-60

Henry Fund DCF	\$51
Henry Fund DDM	\$58
Relative Multiple	\$63

Price Data

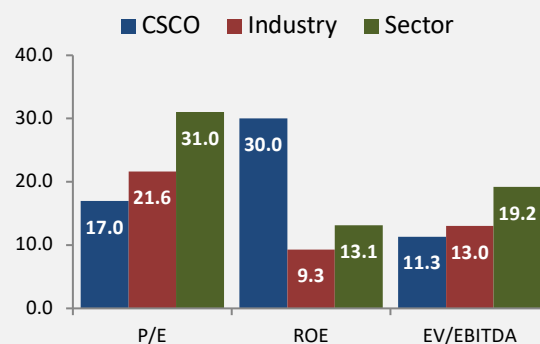
Current Price	\$49
52wk Range	\$45-58
Consensus 1yr Target	\$53

Key Statistics

Market Cap (B)	\$201.1
Shares Outstanding (M)	4049.2
Institutional Ownership	99.03%
Beta	0.772
Dividend Yield	3.30%
Est. 5yr Growth	4.19%
Price/Earnings (TTM)	16.95
Price/Earnings (FY1)	0.65
Price/Sales (TTM)	3.50
Price/Book (mrq)	4.40

Profitability

Operating Margin	26.4%
Profit Margin	26.9%
Return on Assets (TTM)	13.6%
Return on Equity (TTM)	29.99%



Company Description

Established in 1984 and headquartered in San Jose, California, Cisco Systems is a pioneer in designing, manufacturing, and selling Internet Protocol-based networking products and other technologies in the network communications and information technology industry. With a diverse product line including routers, switches, cybersecurity, and cloud services, Cisco plays a crucial role in facilitating secure and efficient digital connectivity for various businesses, governments, and service providers globally.

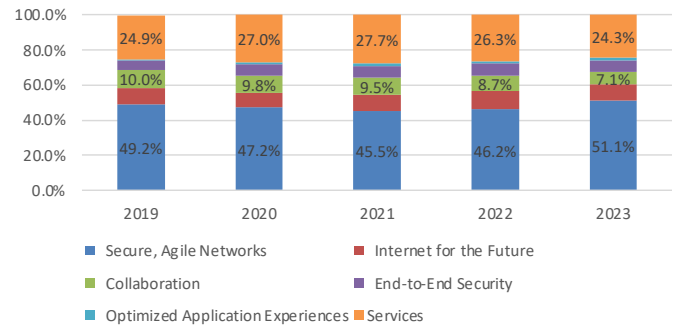
COMPANY DESCRIPTION

Cisco Systems, Inc (CSCO) is a pioneer in designing, manufacturing, and selling Internet Protocol-based networking products and other technologies in the network communications and information technology industry. Headquartered in San Jose, California, Cisco was founded in 1984 by a group of computer scientists from Stanford University. Cisco has customers that include businesses of all sizes in numerous industries, public and governmental organizations, and telecommunications service providers. Historically known for its robust networking hardware, such as routers and switches, Cisco is now strategically transitioning towards a software-centric model, emphasizing recurring revenue streams through subscription services and cloud-based solutions. The total revenue in FY2023 was \$56.99 billion, representing an 11% year-over-year growth rate, the highest in over a decade. In accordance with the restructuring over the last couple of years, Cisco's primary segments are divided into Product and Service. Products is further divided into the following segments:

- Secure, Agile Networks
- Internet for the Future
- Collaboration
- End-to-End Security
- Optimized Application Experiences

Cisco's revenue distribution over the last five years shows that the Secure, Agile Networks segment dominates the company's sales with a substantial 51.1% share in FY2023, equating to \$29.01 billion. Services is the second highest contributor at 24.3%. The smaller segments such as Internet for the Future contributed 9.3% and has remained at that average over the last five years, Collaboration has seen a decreasing trend from 10.0% to 7.0%, End-to-End Security has increased from approximately 5.0% to 7.0%, and Optimized Application Experiences category, although minor at 2%, is going to be crucial due to Cisco's focus on enhancing software capabilities. Over our forecast horizon, we predict that Secure, Agile Networks will continue to be Cisco's dominant product segment. Additionally, we believe that Security would be the fastest growing segment due to Cisco's strategic investments in this industry and Optimized Application Experience will be the second fastest growing segment driven by the growth in full-stack observability.

Revenue Breakdown by Segment 2019-2023

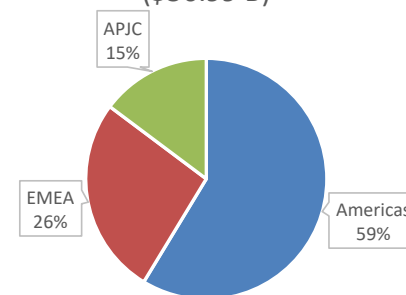


Source: CSCO 10-K

Geographic Business Segments

Operating on a global scale, Cisco serves customers in more than 90 countries highlighting the significant impact of its offerings on the world's networking and IT infrastructure. The geographic division of Cisco is divided into Americas, Europe, Middle East, and Africa (EMEA), and Asia Pacific, Japan, and China (APJC).

Revenue Breakdown by Geography FY2023
 (\$56.99 B)



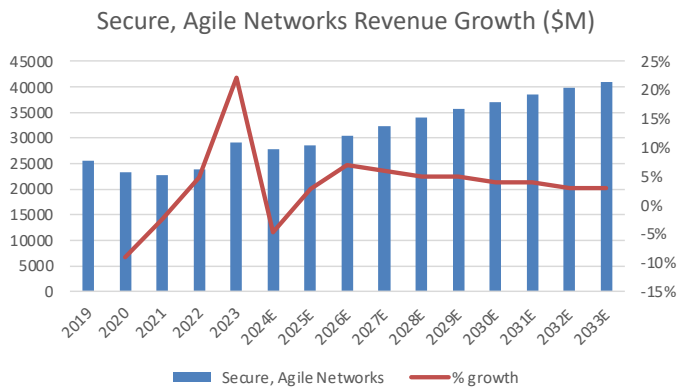
Source: CSCO 10-K

Historically, the Americas has been the biggest contributor to Cisco's total revenue, with U.S. contributing 90% of this segment's revenue. We predict that Cisco has potential to grow in the U.S. due to the large existing customer base. Additionally, Cisco's guidance showcases their focus on emerging markets. We believe that India is a strong market for Cisco because of its expanding economy and increasing expenditure on access to internet and 5G services. On the other hand, we predict a decline in growth in China and Japan due to competition and trade tensions.

Secure, Agile Networks

Secure, Agile Networks encompass Cisco’s traditional hardware networking technologies such as switching, enterprise routing, wireless, and compute products.¹ This segment offers both hardware and software, including licenses and SaaS, to support network building and data digitization. Historically, Secure, Agile Networks has been Cisco’s largest segment, contributing approximately 50% of revenue over the last five years.

In FY2023, the segment experienced strong growth of 33%, with double-digit growth in switching and wireless. After a period of exceptionally strong product delivery, where Cisco successfully cleared a significant portion of its backlog due to supply chain improvements, we predict that Cisco will see a decrease in new orders in FY2024. The bottleneck that was initially in the supply chain has now moved downstream to the customer implementation phase. This change has led to longer lead times for new orders as customers and partners take time to onboard and deploy the high volume of products they have received. While Cisco expects this phase to last for one to two quarters, impacting revenue in the short term, we project that it could have an impact for longer and have underlying reasons related to macroeconomic demand. Therefore, we forecast a 4.38% CAGR for FY2024 – 2033.



Source: CSCO 10-K, HF estimates

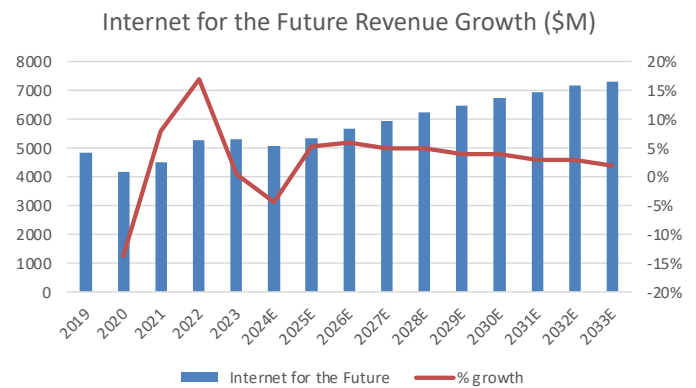
Internet for the Future

The Internet for the Future segment features a suite of routed optical networking, 5G, silicon, and optics solutions.¹ Cisco’s goal is to transform connectivity to the internet and cloud with higher speeds and low latency. This year, Cisco introduced innovations such as SD-Access technology, Catalyst 9000 switches, and SD-WAN solutions

for branch-to-cloud connectivity. They’re enhancing network security with machine learning, investing in multicloud architectures like ACI, and developing Cisco Silicon One and Cisco 8000 routers for the Internet of the Future.

The Internet of Things market is currently \$1.17 trillion with an expected CAGR of 15.12% over the next five years. North America is currently the largest market and Asia Pacific is the fastest growing market for this industry.²

While this segment was the fastest growing in FY2022 with a growth of 16.93%, it grew at only 0.53% in FY2023. Since the aim of this segment is to connect the next billion users through the internet and make it accessible and affordable to everyone, we predict that this segment has a lot of potential in emerging markets. However, due to the local competition in such countries, Cisco might not be able to gain substantial market share. Keeping this in mind, we forecast a 4.13% CAGR for FY2024 – 2033.



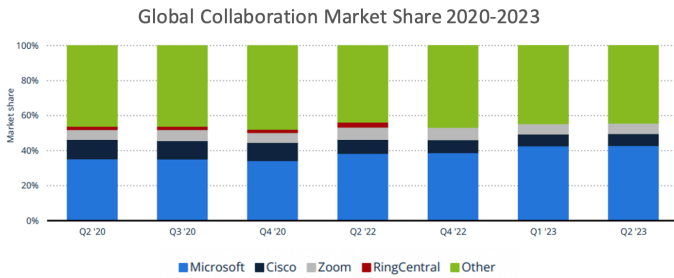
Source: CSCO 10-K, HF estimates

Collaboration

The Collaboration segment has tools for virtual meetings, specialized communication devices, and various products such as Meetings, Collaboration Devices, Calling, Contact Center and Communication Platform as a Service (CPaaS).¹ Across its Webex suite, Cisco incorporates artificial intelligence and machine learning to offer collaboration tools that are enhanced with people insights, relational and audio intelligence.

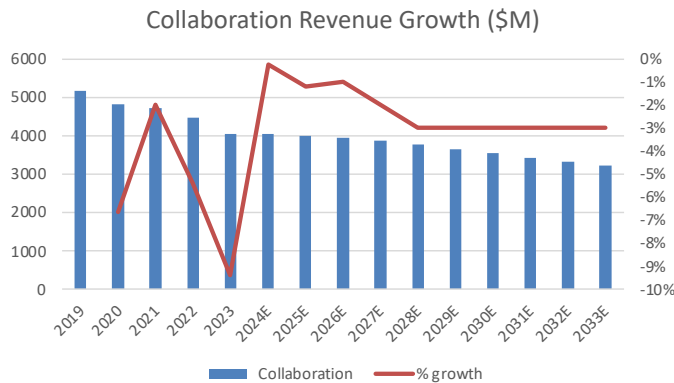
Revenue from the collaboration software market is expected to reach \$16.12 billion by 2028 with a 1.73% CAGR.³ Since the pandemic, the market leader in the collaboration software market is Microsoft with Teams

and Salesforce with Slack. Cisco with WebEx has been losing market share to Microsoft and currently has less than 10% market share as shown below.



Source: Statista

The Collaboration segment fell 9.39% in FY2023 due to the decrease in remote work as well as competition from other players in the industry. Therefore, for this segment we forecast a -1.02% CAGR for FY2024 – 2033.



Source: CSCO 10-K, HF estimates

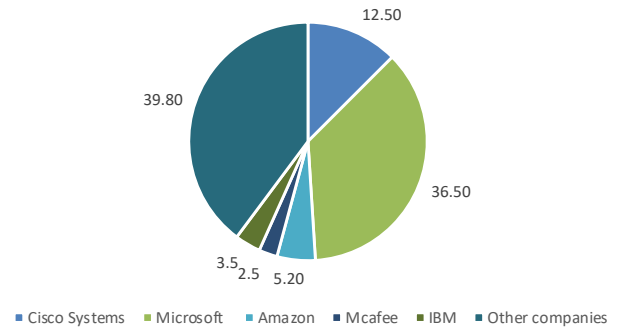
End-to-End Security

End-to-End Security is an umbrella for a range of solutions aimed at safeguarding cloud services, industrial systems, network integrity, and user devices. Committed to providing high security solutions, Cisco has invested heavily in this segment due to the strong expected growth. In March 2024, Cisco completed the acquisition of Splunk, a cybersecurity and observability software company.

The global cybersecurity market, valued at \$222.66 billion in 2023, is expected to grow at a 12.3% CAGR from 2023 to 2030.⁴ This growth is driven by an increase in cyber-attacks, the rise of e-commerce platforms, the proliferation of smart devices, and cloud deployment.

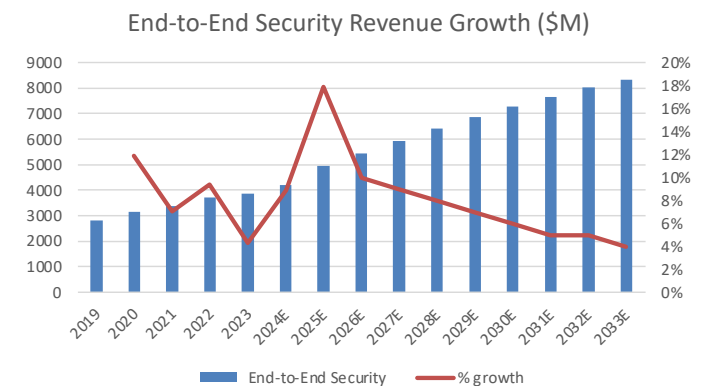
Cisco currently has a 12.5% market share which is expected to grow following the acquisition of Splunk.

Cloud Security Software Market Share 2023



Source: IBIS World

In FY2023, the segment grew by 4.33% driven by increasing demand for cybersecurity solutions. We predict that this trend will continue due to innovation in security products and strategic partnerships or acquisitions by Cisco, addressing emerging cybersecurity challenges and regulatory requirements. Therefore, we forecast a 7.92% CAGR for FY2024 – 2033.

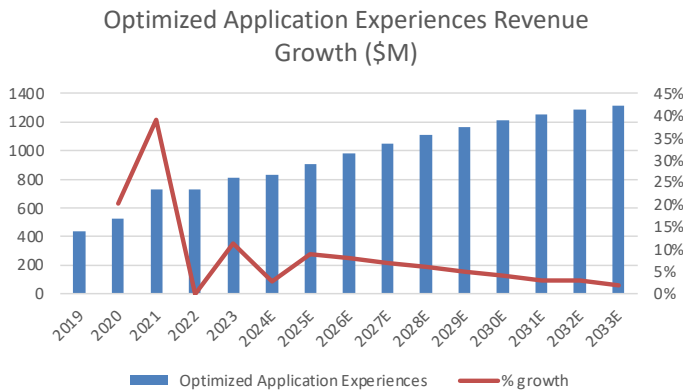


Source: CSCO 10-K, HF estimates

Optimized Application Experiences

The Optimized Application Experiences segment consists of full stack observability and network assurance offerings aimed at providing customers with visibility of environments across applications, networks, multi-cloud infrastructures, and the internet. Offerings in this segment include Intersight Infrastructure Services which provide cloud-based operations management and automation for infrastructure from data centers to the edge,

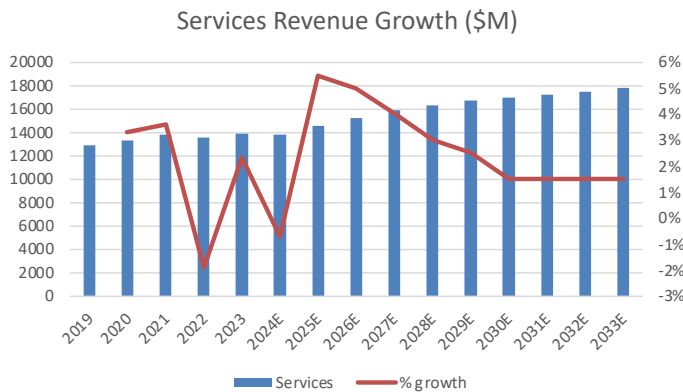
AppDynamics that focuses on application performance monitoring, and ThousandEye which provides deep network intelligence to enhance digital experiences and connectivity. In FY2023, this segment grew 11.25% driven by Cisco’s focus on shifting to recurring software revenue from traditional hardware offerings. Since Cisco’s guidance shows that this focus is crucial for their business model transformation, we predict stable growth and forecast a 5.18% CAGR for FY2024 – 2033.



Source: CSCO 10-K, HF estimates

Services

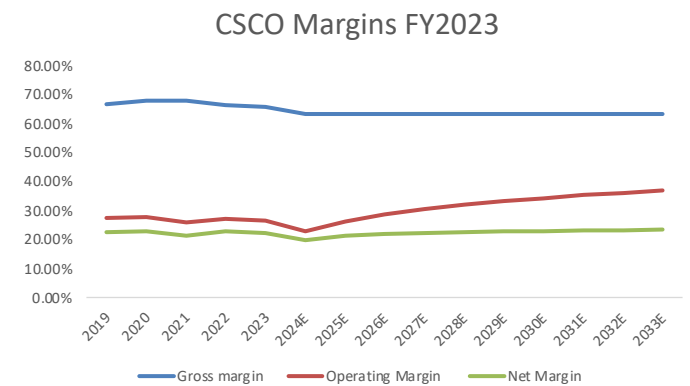
Cisco supplements its variety of products with a comprehensive suite of customer service options to ensure an end-to-end customer experience. Currently the second largest segment, Services accounted for 24.3% of the total revenue in FY2023. It grew 2.34% last fiscal mainly driven by an overall increase in products and consequently the services that come along with them. We expect services to grow at a similar rate to historical averages and therefore forecast a 2.88% CAGR.



Source: CSCO 10-K, HF estimates

Cost Structure Analysis

Cisco has maintained an average gross margin of 66.88%, operating margin of 26.85%, and net profit margin of 22.29% over the last five years. Due to the already high scale and heavy infrastructure in place, we predict margins to be similar to historic averages over our forecasting horizon. Due to the restructuring efforts by Cisco over the last five years, we predict that there will be reduced indirect costs that come along with the streamlining of Cisco’s business model. Additionally, Cisco’s shift to recurring revenue from SaaS offerings will further reduce depreciation costs. Therefore, we predict an increasing trend in operating margin. Overall, Cisco has been able to maintain strong margins and has been consistent with its portion of spending on various operating costs even with expansions across geographies and segments.



Source: CSCO 10-K, HF estimates

Debt Maturity Analysis

As of fiscal year 2023, Cisco has \$8.5 billion in total debt including long-term debt and the current portion and shown in the table below. It also had \$19.8 million in operating cash flow, demonstrating the company’s strong capability to manage its debt.

Five-Year Debt Maturity Schedule

Fiscal Year	Payment (\$M)
2024	1750
2025	500
2026	750
2027	1500
Thereafter	4000
Total	8500

Source: CSCO 10-K

We do not anticipate Cisco to have problems paying this debt given its strong liquidity ratios. It has a quick ratio of 1.27x and current ratio of 1.38x showcasing its ability to cover its current liabilities and using current assets. Compared to its peers, while Arista Networks has high ratios, it also does not have any long term debt. Additionally, Cisco has a bond rating of AA- by S&P, which is higher than most of its peers.

Company	Rating	Current Ratio	Quick Ratio
Cisco Systems	A--	1.38	1.27
Arista Network	N/A	4.39	3.31
Juniper Networks	BBB	1.80	1.35
Palo Alto Networks	AA+	0.74	0.74
Motorola Solutions	BBB-	0.99	0.84
Hewlett Packard Enterprise	BBB	0.86	0.65

Source: FactSet

RECENT DEVELOPMENTS

FY 2024 Earnings Announcement

In November 2023, Cisco announced Q1 FY2024 earnings, resulting in a significant drop of 13%. Despite beating earnings, a slowdown in product orders due to clients currently implementing previously delivered products affected guidance. On February 14, 2024, Cisco's Q2 FY2024 earnings also revealed a mix of success and challenges, with revenue reaching \$12.8 billion, aligning with the upper end of their guidance, and dividends increasing to \$0.40 per share quarterly. The company also anticipates an earlier-than-scheduled conclusion of its acquisition of Splunk. Despite these positives, there was a 6% year-over-year decline in revenue, a 5% drop in net income to \$2.6 billion, and a 3% decrease in earnings per share. CEO Chuck Robbins attributed these downturns to delays in product deployment by customers, who are still working through a backlog of inventory. This issue, intensified by economic uncertainties and geopolitical tensions affecting costs, has led Cisco to adjust its future financial outlook. Guidance for full-year forecast is \$51.5-52.5 billion, reflecting a cautious approach amidst ongoing challenges. Our model currently predicts higher revenue than these estimates (\$55.6 billion) using consensus estimates from Bloomberg for FY2024 and FY2025.

Acquisition of Splunk

In March 2024, Cisco and Splunk closed their \$28 billion merger. San Francisco-based Splunk provides software solutions that enable enterprises to gain real-time operational intelligence by harnessing the value of their data. Its offerings enable users to investigate, monitor, analyze and act on machine data and big data, irrespective of format or source, and help in operational decision-making. This move marks Cisco's largest-ever deal and comes as part of its strategic initiative to bolster its software business, particularly in the thriving domain of AI. Splunk's expertise in advanced AI-powered solutions stands to greatly enhance Cisco's AI-driven service offerings. By leveraging Splunk's capabilities, Cisco aims to accelerate the development of next-generation solutions, optimizing data value and reinforcing security analytics. The acquisition is expected to accelerate this transformation, adding approximately \$4 billion in ARR, and making Cisco one of the world's largest software companies. Cisco sold \$13.5 billion of bonds in the U.S. investment-grade debt market to partly finance this acquisition.

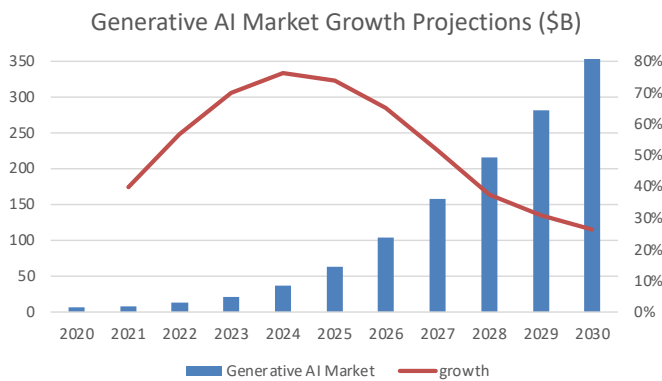
M&A Activity

In the past year, Cisco has strategically expanded its portfolio through several acquisitions. In December 2023, Cisco announced its intent to acquire Isovalent, a pioneer in cloud-native technology leveraging eBPF, aiming to integrate its Cilium Mesh into Cisco's networking solutions for multicloud environments. Working Group Two, acquired in August 2023, complements Cisco's Mobility Services Platform with its cloud-native mobile services platform. In the same month, Cisco enhanced its BGP monitoring with the acquisition of Code BGP, and with Oort, it aimed to secure identity perimeters with ITDR technology. In June 2023, Cisco completed the acquisition of SamKnows, extending ThousandEyes' network monitoring reach, and Accedian, bolstering network performance monitoring for service providers. Additionally, Cisco invested in AI with the acquisition of Armorblox's cybersecurity technology, and Smartlook was acquired to enable Real User Monitoring in Cisco's DEM offerings. Cisco's aggressive acquisition strategy has been key to its growth in the last year as they position Cisco to benefit from the high growth in industries such as generative AI, cyber security, and cloud computing.

INDUSTRY TRENDS

Growth of AI

The AI and generative AI sector is on a sharp upward trajectory with an estimated CAGR of 42%. The rapid expansion of generative AI, from content and code generation to predictive modeling, is the reason it is predicted to reach \$350 billion dollars by 2030. This surge is backed by a wave of innovation, investment, and venture capital, especially in startups focusing on AI technologies.

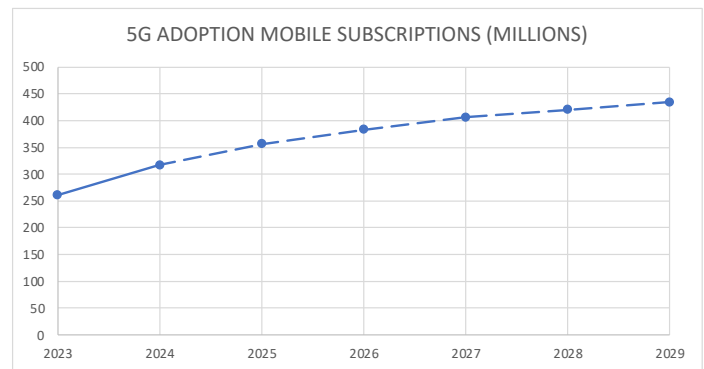


Source: Statista

The advancement of AI and generative AI significantly impacts Cisco's business strategy. Recognizing the shift towards AI reliance in enterprise infrastructure, Cisco is leveraging AI to improve efficiency, network performance, and user experiences. With its market leadership and access to vast data from network events, Cisco is pioneering AIOps to simplify IT operations and enable proactive problem-solving through enhanced visibility and intelligence. Cisco's engagement in the AI switching market is expected to surpass \$10 billion by 2027, with the company focusing on scalable AI fabric solutions powered by Cisco Silicon One. Cisco's collaborative efforts with GPU and storage partners aim to develop integrated solutions for AI infrastructure, enhancing its competitive edge. The acquisition of Splunk also showcases Cisco's commitment to expanding its AI, security, and observability capabilities. The integration of AI into products enhances Cisco's value proposition. Cisco expects to receive \$1 billion in orders for AI infrastructure products in 2025. Through these strategic initiatives, Cisco will be able to see growth in emerging fields, further diversifying its revenue stream.

Rise of 5G

Projected adoption of 5G technology in mobiles is from 250 million in 2023 to 450 million over the next five years. For Cisco, the rise of 5G presents many opportunities through its Private 5G offerings, which prioritize seamless integration with existing Wi-Fi networks, operational efficiency, and a subscription-based financial model to mitigate upfront investment for businesses. With businesses requiring high bandwidth, low latency, and improved network visibility, Cisco's 5G Private Networks cater to these needs with a service-based model that reduces initial capital expenditures and operational complexities. Cisco's offering stands out with advanced features like application awareness, identity management, and a user-friendly dashboard for seamless service and device management, alongside cloud-managed, high-performance networks that promise nearly perfect service availability. This positions Cisco advantageously in the 5G landscape, enhancing enterprise networks and providing a foundation for innovative applications and business models. The company's adoption of open radio access network technology within its 5G solutions further cements its position by offering flexible and cost-effective deployments. Cisco's vision of a hybrid networking future, where 5G and Wi-Fi coexist, aligns with broader industry trends towards diversified wireless solutions to meet the growing demands of enterprises and public services.



Source: Ericsson

MARKETS AND COMPETITION

The communication equipment industry includes companies that design and sell products and services for various networks. Cisco distinguishes itself as the predominant leader, holding a significant 68.4% share of the S&P 1500 Communications Equipment Index. It also has the highest market capitalization, which is more than

double the next big player in the industry. Cisco faces competition from Arista Networks, known for software-driven solutions in data centers; Juniper Networks, with strengths in routing and cybersecurity; Palo Alto Networks, a leader in advanced firewalls; Motorola Solutions, focusing on public safety communications; and Hewlett Packard Enterprise, which competes in enterprise networking through its Aruba subsidiary. The industry is marked by high concentration and significant barriers to entry due to the capital-intensive nature of R&D and technology complexity.

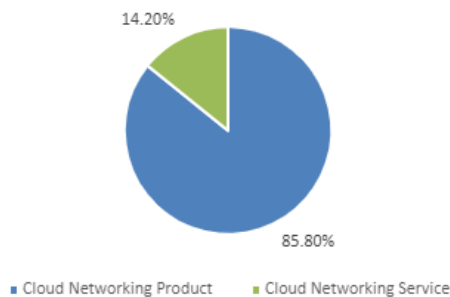
Company	Market Cap (B)	Revenue (B)
Cisco Systems	196.60	56.99
Arista Network	93.04	5.86
Juniper Networks	12.03	5.56
Palo Alto Networks	86.91	6.89
Motorola Solutions	58.53	9.98
Hewlett Packard Enterprise	23.40	29.13

Source: FactSet

Arista Networks (ANET)

Founded in 2004 and headquartered in Santa Clara, California, Arista Networks competes directly with Cisco as it specializes in providing network solutions for data centers and cloud computing networks. The company's flagship product, the Arista Extensible Operating System, powers its high-performance switches designed to meet the demanding requirements of modern data center infrastructures. Arista's focus on agility, scalability, and programmability has enabled it to compete effectively with Cisco Systems, particularly in sectors such as cloud networking and hyperscale data centers.

Arista Networks Revenue Breakdown FY2023 (\$5,860M)

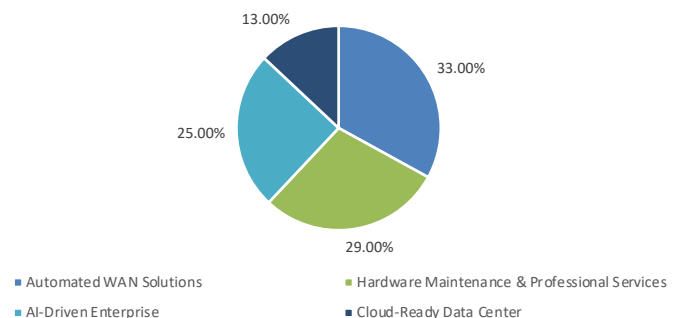


Source: FactSet

Juniper Networks (JNPR)

Founded in 1996 and headquartered in Sunnyvale, California, Juniper Networks is a leading provider of networking solutions. Unlike Cisco, which offers a range of networking equipment and solutions, Juniper distinguishes itself by integrating advanced security features directly into its networking products. This helps in guarding against cyber threats and vulnerabilities, providing an added layer of security that is highly valued in today's digital landscape. Moreover, Juniper Networks stands out for its compatibility with a broad array of third-party technologies. This compatibility makes it simpler for businesses to incorporate Juniper's products into their existing infrastructures without being locked into a specific vendor's ecosystem. This flexibility can be appealing to companies looking for solutions that can adapt to a variety of technical environments and requirements, providing Juniper with a competitive edge in certain market segments where adaptability and security are paramount.

Juniper Networks Revenue Breakdown FY2023 (\$5,565M)

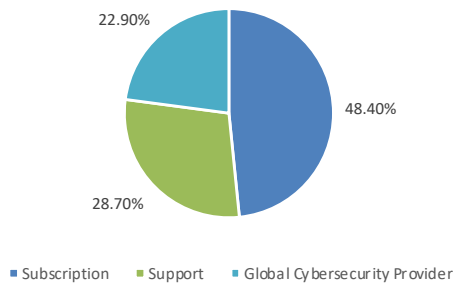


Source: FactSet

Palo Alto Networks (PANW)

Founded in 2005 and headquartered in Santa Clara, California, Palo Alto Networks is a leading cybersecurity company specializing in providing advanced security solutions. With its continuous innovation to incorporate machine learning and AI in mitigation of cyber threats, Palo Alto Networks competes with Cisco Systems in the cybersecurity market. While Cisco also offers a range of cybersecurity products, Palo Alto Networks differentiates itself through its next-generation firewall technology which provides granular control over network traffic, application visibility, and threat detection capabilities that are superior to traditional firewall solutions.

Palo Alto Networks Revenue Breakdown FY2023
(\$6,893M)

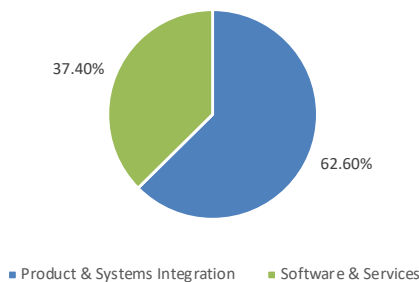


Source: FactSet

Motorola Solutions (MSI)

Motorola Solutions, founded in 1928 and headquartered in Chicago, Illinois, is a global leader in mission-critical communication solutions and services for public safety and enterprises. In networking and communication, Motorola Solutions competes with Cisco Systems in providing networking infrastructure and communication solutions for enterprises and government organizations. While Cisco offers a broader range of networking products and services, Motorola Solutions distinguishes itself through its focus on mission-critical communication and public safety. Motorola Solutions' offerings are tailored specifically for organizations that require reliable, and secure communication systems to support their critical operations and emergency response activities.

Motorola Solutions Revenue Breakdown FY2023
(\$9,978M)

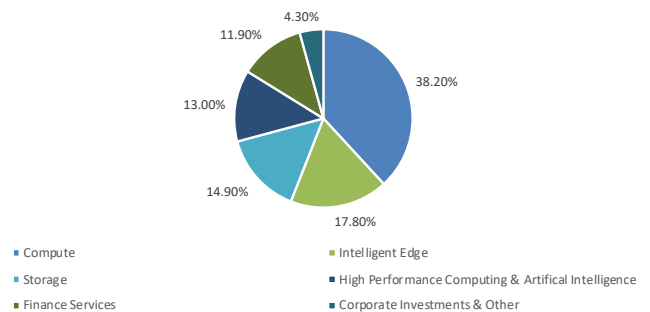


Source: FactSet

Hewlett Packard Enter (HPE)

Hewlett Packard Enterprise (HPE) was founded in 2015 after Hewlett-Packard split into two separate entities. Headquartered in San Jose, California, HPE is a multinational information technology company providing a range of enterprise-grade hardware, software, and services to support organizations in digital transformation. Its offerings include servers, storage solutions, networking equipment, cloud services, edge computing solutions, and cybersecurity products. In the realm of networking, HPE competes directly with Cisco Systems. While Cisco has historically dominated the networking market, HPE differentiates itself by offering a comprehensive portfolio of networking solutions integrated with its broader suite of IT infrastructure products and services. Additionally, HPE focuses on delivering solutions that prioritize simplicity, scalability, and security, enabling organizations to build resilient and efficient network infrastructures to support their evolving business needs.

Hewlett Packard Enterprise Revenue Breakdown FY2023
(\$29,135M)



Source: FactSet

Profitability and Ratio Analysis

While Cisco is a leader in the industry in terms of market capitalization and revenue, when it comes to efficiency, Cisco has a 29.99% ROE which is lower than that of Arista Network (34.49%) and Palo Alto Networks (44.9%), suggesting these companies are generating more profit from their shareholders' equity. Additionally, Cisco's P/E ratio is at 16.95, which is also lower than that of Arista Network and Juniper Networks, indicating that investors are paying less for each dollar of Cisco's earnings, suggesting a perception of lower growth prospects. In contrast, Palo Alto Networks has a significantly higher P/E ratio of 194.58, suggesting a higher growth expectation from investors. For dividend-seeking investors, Cisco

offers a 2.96% dividend yield, which is attractive especially when compared to Arista Network and Palo Alto Networks, which do not offer any dividends. This dividend yield is comparable to Juniper Networks (2.99%) and Hewlett Packard Enterprise (3.12%). Overall, while Cisco is the largest of the group by market capitalization and provides a reasonable dividend yield, it is less efficient than its peers.

Company	ROE (%)	P/E	Div Yield
Cisco Systems	29.99	16.95	2.96
Arista Network	34.49	35.78	0
Juniper Networks	6.92	30.97	2.99
Palo Alto Networks	44.90	194.58	0
Motorola Solutions	406.90	31.53	1.16
Hewlett Packard Enterprise	9.87	9.99	3.12

Source: FactSet

Cisco has a high operating margin (27.71%) and net margin (22.13%), indicating efficient cost management, however it's outperformed by Arista Network, which may be due to its leaner operation and focus on a niche market. Cisco's Capex to Sales ratio is low at 1.49 due to its stage as a mature company with past substantial infrastructure investments, in contrast to Hewlett Packard Enterprise, which shows a higher ratio, signaling expansion since it's relatively newly separated. With an ROA of 12.88%, Cisco is efficient in using its assets to generate earnings, but Motorola Solutions shows a slightly better utilization of assets. The lower ROAs of Juniper Networks, Palo Alto Networks, and Hewlett Packard Enterprise suggest these firms either face challenges in asset utilization or it could just be to them being in investment phases. Overall, Cisco is strong enough compared to its peers when it comes to utilizing assets and managing costs.

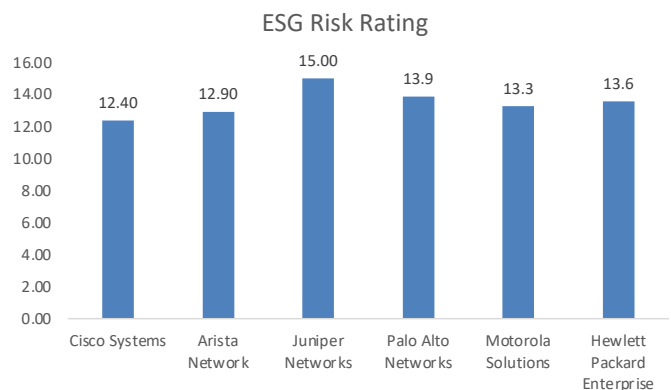
Company	Oper. Margin	Net Margin	Capex to Sales	ROA (%)
Cisco Systems	27.71	22.13	1.49	12.88
Arista Network	38.52	35.62	0.59	24.96
Juniper Networks	10.21	5.57	2.86	3.29
Palo Alto Networks	5.62	6.38	2.12	3.29
Motorola Solutions	23.87	17.13	2.54	13.07
Hewlett Packard Enterprise	8.29	6.96	9.72	3.54

Source: FactSet

ESG Analysis

In ESG scoring, a lower score suggests a company is perceived as a lower risk and potentially better positioned

regarding ESG practices. Cisco has a lower ESG risk at 12.40 compared to most of its competitors, indicating a strong commitment to environmental, social, and governance issues. Arista Network is slightly higher at 12.90, while Juniper Networks stands at the highest risk with 15.00. Cisco's "Plan for Possible" reflects a commitment to sustainability, bolstered by 91% of their facilities' electricity coming from renewable sources. Socially, Cisco's initiatives have reached over 1.1 billion people, driven by a \$461 million contribution to various programs, including the Networking Academy, which has educated over 20.5 million learners globally. Operationally, they are recognized as the best company to work for in 16 countries and second in Gartner's 2023 High Tech Supply Chain ranking. Cisco also emphasizes inclusion, with a significant increase in African American representation, underlining its commitment to diversity and ethical governance.⁵



Source: Morningstar Sustainability

ECONOMIC OUTLOOK

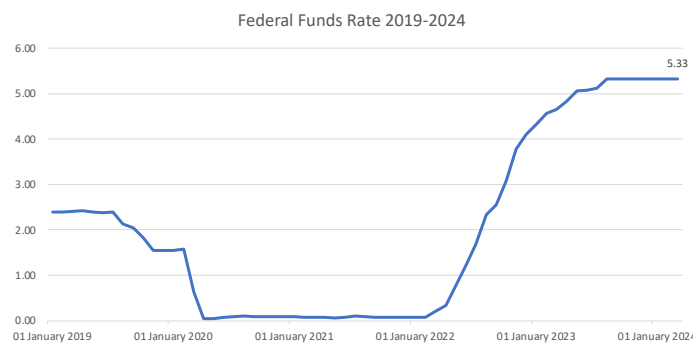
For the first half of 2024, the economic outlook presents both challenges and opportunities for Cisco. In a landscape where economic growth may be slowed by inflationary pressures and geopolitical uncertainties, enterprise spending on networking and communications technology could be delayed, potentially leading to elongated sales cycles or reduced capital expenditure in the short term. However, the push towards generative AI, remote work, cloud computing, and increased cybersecurity threats continue to drive demand for Cisco's core offerings. Moreover, supply chain constraints that previously plagued the industry are seeing a gradual relief as Cisco innovates and adapts their operations for resilience. Overall, we predict that Cisco will be able to navigate these

economic headwinds by leveraging its broad portfolio and strategic investments.

Interest Rates

As of April 2024, the Federal Reserve has maintained the federal funds rate at 5.25%-5.50% for the fifth meeting in a row despite economists predicting rate cuts early in 2024. Interest rates typically result in increased borrowing costs, which can lead to reduced spending on IT infrastructure and software upgrades. This impacts Cisco in both their traditional hardware business as well as their model which focuses on the shift to software.

The U.S. Treasury yield curve’s relatively flat to downward slope for longer maturities suggests that investors may be expecting slower economic growth or potentially lower interest rates in the future. Looking ahead, Jerome Powell’s recent press conferences indicate that the FED needs time to make sure that inflation is on its way back to the target 2% before any rate cuts. Since the economy is being strong and resilient even with the high interest rates, we predict that the FED will most likely have 1-2 rate cuts in the second half of this year. For Cisco, a reduction in rates this year could mean lower borrowing costs and potentially more robust investment in R&D. It could also signal an economic environment conducive to business expansion and increased consumer spending on technology, potentially benefiting Cisco's diverse range of products and services.

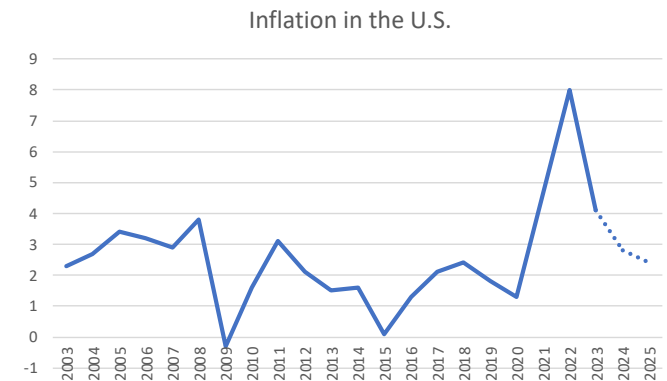


Source: Board of Governors of the Federal Reserve System

Inflation

Despite the recent uptick in inflation over the last year, the Federal Reserve officials project that the measure of underlying inflation could end at 2.4% by the end of 2024, suggesting that inflationary pressures are expected to ease over the coming years as shown in the projected data from

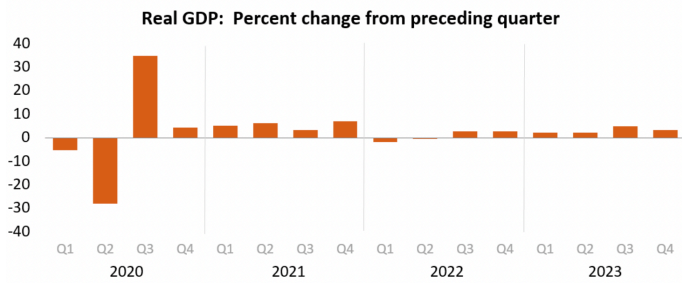
IMF. The most recent data regarding core PCI estimates was 2.5% in February, higher than the 2.4% in January. The FED said they think it might be a bump in the road and inflation is still expected to come down to the target by the end of this year. For Cisco, a stable or decreasing inflation rate can lead to a predictable business environment, potentially lower borrowing costs, and more confident consumer and enterprise spending. This could result in steadier demand for Cisco's array of products and services.



Source: International Monetary Fund

Real GDP

The Q4 GDP for 2023 in the U.S. showed an expansion at an annualized rate of 3.4%, which was higher than the forecasted rate of 2%. Following a 4.9% growth rate in Q3, this trend signals continued economic resilience despite challenges such as rising interest rates aimed at curbing inflation. The advance estimate reflects contributions from consumer spending and exports, with the overall growth rate for the year from Q4 2022 to Q4 2023 being reported at 3.1%. This growth surpasses economists' estimates and suggests that the economy is maintaining momentum, possibly easing concerns of a recession. Such economic conditions can lead to increased business and consumer spending, potentially boosting demand for Cisco's products and services. A robust GDP growth could also support Cisco's investment in new technologies and markets. We expect that this positive economic trend continues and might help mitigate risks associated with rising interest rates and contribute to steady growth for Cisco in a competitive tech landscape. While we do not forecast a recession in 2024, we project that the pace of consumer spending will diminish, contributing to a deceleration of overall GDP growth to be around 1% during the second and third quarters of the year.



Source: U.S. Bureau of Economic Analysis

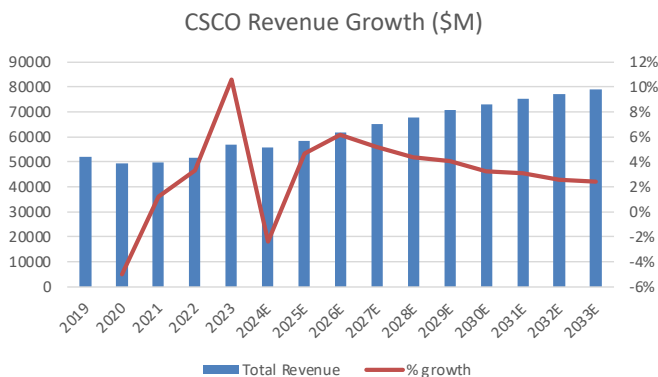
Corporate IT Spending Budget

Global IT spending is predicted to increase by 8% to \$5.1 trillion over the next year. The higher expenditure will be driven by demand for software and IT services such as AI, cloud, and security, which collectively will grab 69% of overall tech spend by 2027. The most significant growth is expected in the software and IT services sectors, particularly with a 20.4% rise in public cloud services, propelled by increased vendor prices and usage. Cybersecurity spending is also set to climb sharply, with 80% of CIOs planning to increase their investments in response to new AI-related security challenges.

VALUATION

Revenue Growth

Based on the growth of Cisco's various segments, our forecast for CAGR of total revenue for the next ten years is 3.95%. We predict that the largest segment is going to remain Secure, Agile Networks and the fastest growing segment is End-to-End security with a 7.92% CAGR. We used Bloomberg consensus estimates for FY2024 and FY2025 for each of the segments.



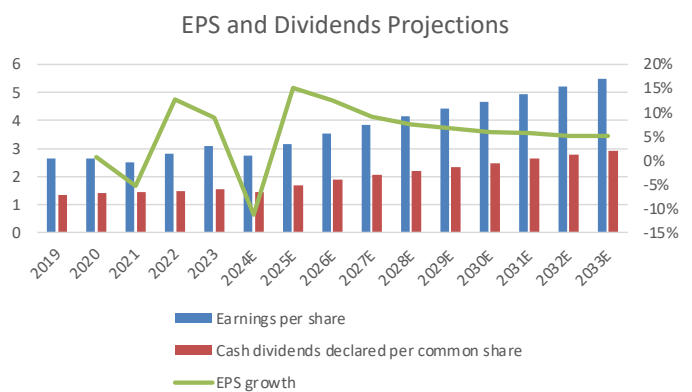
Source: CSCO 10-K, HF estimates

Cost Assumptions

We assume the gross margin for the Products segment to be the average gross margin for Products over the last five years which was 62.17%. Similarly, we assume the gross margin for the Services segment to be 66.52% over our forecast horizon. Over the last five years, margins have increased for the Products segment and remained constant for the Services segment. Historically, Cisco has spent 13.08% of its revenue on research and development and 18.12% on sales and marketing. We predict that these would remain approximately close to that average for our forecast horizon. We assume capital expenditure by Cisco in FY2024 to be the average of the last five years. Thereafter, we assume that it will be grow by the inflation rate which is assumed to be 2.5%. We also assume a depreciation rate of 77.72%, which is the average of the last five years.

Dividend and Share Repurchases

Cisco targets to return a minimum of 50% of its free cash flow annually to our stockholders through cash dividends and repurchases of common stock. In FY2023, Cisco paid a quarterly dividend of \$0.39 with a dividend yield of 3.3%. We predict a steady growth in dividends as shown in the graph below. We assume that Cisco will continue to repurchase shares as they have been and use the average of the last four years throughout our forecast horizon. Currently, Cisco has \$10.9 billion remaining in share repurchases under its current program.



Source: CSCO 10-K, HF estimates

WACC Assumptions

We calculated the Weighted Average Cost of Capital (WACC) for Cisco to be 7.97%. This is below the 8.3% estimated by consensus. To estimate the cost of equity, we used CAPM and the following assumptions:

Risk-free rate: The risk-free rate is assumed to be 4.30%, the 10-year US Treasury bond yield as of April 1, 2024.

Beta: The beta is assumed to be 0.77, the average of the 2, 3, 4, and 5-year weekly beta from Bloomberg.

Equity risk premium: The Henry Fund consensus estimate for the equity risk premium is 5.00%.

Pre-tax cost of debt: We assumed a pre-tax cost of debt of 5.00%, the yield to maturity of Cisco's 10-year corporate bond as shown in Bloomberg. We used the book value of the debt as a proxy for the market value of debt in our calculations.

Tax rate: The marginal tax rate used for the forecast horizon is 23.30%, which is the marginal tax that Cisco's financial statements use for FY2023.

Discounted Cash Flow / Economic Profit

The Discounted Cash Flow (DCF) and Economic Profit (EP) models estimated a share price of \$51.77, representing a 4.29% upside from the current stock price. The consensus price target is \$53.87 which represents a 8.5% premium. We use this model to make our recommendation as we believe that it best represents Cisco's value by incorporating specific growth rates for each revenue segment. We assumed a CV growth of NOPLAT of 2.50%.

Dividend Discount Model (DDM)

The Dividend Discount Model (DDM) estimated a target price of \$58.29, representing a 17.42% discount from the current price. We believe that this model overestimates the value of Cisco due to the high dividend yield of Cisco. The high dividend yield is one of the most attractive features of investing in Cisco. Additionally, we are forecasting EPS to decrease by 11.28% in FY2024, slightly below consensus due to the uncertainty of slowdown in new orders and economic conditions.

Relative Valuation Model

We considered P/E and PEG for our relative valuation models. Our relative P/E valuation model yielded a price of 79.10, representing a 59.35% upside and our PEG valuation model estimated a price of 63.18, which is a 27.27% upside from the current price. Our model took into account the following peers in the communications equipment industry: Arista Network, Juniper Networks, Palo Alto Networks, Motorola Solutions, and Hewlett Packard Enterprise. Since Cisco has diversified revenue streams, it competes with different companies in various segments and therefore this model's limitation is that it is hard to compare it to all competitors since each specialises in different segments.

Sensitivity Analysis

Our target price is sensitive to changes in the assumptions that we have made over our forecast horizon. Since we have used consensus estimates for revenue growth rates in FY2024 and FY2025, the main assumptions that differs from consensus is our expenses projections and WACC calculations.

	WACC							
	51.77	7.67%	7.77%	7.87%	7.97%	8.07%	8.17%	8.27%
10.02%	60.17	58.89	57.67	56.51	55.35	54.25	53.19	
11.02%	58.48	57.24	56.05	54.92	53.80	52.74	51.71	
12.02%	56.78	55.58	54.43	53.34	52.26	51.23	50.23	
13.02%	55.10	53.94	52.82	51.77	50.72	49.72	48.76	
14.02%	53.39	52.28	51.20	50.18	49.16	48.20	47.27	
15.02%	51.70	50.62	49.58	48.60	47.62	46.69	45.79	
16.02%	50.01	48.97	47.96	47.02	46.07	45.17	44.31	

Source: HF estimates

In the sensitivity table, we can see that if we assume WACC to be closer to consensus which is 8.3%, our target price falls closer to \$48, leading to a discount from the current price. Additionally, one of the biggest and most important expenses by Cisco is on R&D. Reducing expenses on R&D is hard since innovation is key to gaining first mover advantage in the technology sector. Therefore, even if Cisco decreases R&D expenditure by 1-2%, the target price will be maximum around \$55, the high end of our target range.

KEY MONITORS

In assessing Cisco's potential for future growth, we have to focus on several evolving aspects of the company's operations and monitor the following areas:

- Cisco's ability to address the slowdown in new orders by the third quarter of FY2024, as projected during recent earnings calls.
- Cisco's shift towards software and services to understand how it may mitigate the decrease in hardware sales.
- Growth in Cisco's AI and cybersecurity segments through acquisitions, which are crucial to the company's strategy to diversify its revenue sources.
- Pace of 5G deployment and the adoption of Cisco's products among Cisco's customers as key indicators of the company's long-term growth potential.
- Macroeconomic factors, such as interest rates in 2024, which could influence Cisco's revenue growth in response to broader economic trends.

Summary

We use the DCF and EP method to make our final recommendation as it provides a more detailed analysis by incorporating specific growth rates for each revenue segment, thus reflecting Cisco's diversified business model more accurately than other valuation methods. We recommend a HOLD rating for Cisco Systems, with a target price range of \$50-55, showcasing an upside of approximately 1-10% from the current price. With its strategic investments, restructuring, and comprehensive suite of networking solutions, Cisco is expected to further cement its market dominance in the communication equipment industry and enhance its competitive edge by meeting the evolving needs of the tech landscape.

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22. [International Data Corporation](#)

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Cisco Systems, Inc
Sensitivity Tables

		Cost of equity							
		51.77	5.16%	6.16%	7.16%	8.16%	9.16%	10.16%	11.16%
Pre-tax Cost of Debt	2.00%	50.35	50.69	51.03	51.37	51.71	52.05	52.38	
	3.00%	50.48	50.82	51.16	51.50	51.84	52.18	52.52	
	4.00%	50.61	50.95	51.29	51.63	51.98	52.32	52.65	
	5.00%	50.74	51.08	51.42	51.77	52.11	52.45	52.79	
	6.00%	50.87	51.21	51.56	51.90	52.24	52.58	52.93	
	7.00%	51.00	51.34	51.69	52.03	52.38	52.72	53.06	
	8.00%	51.13	51.47	51.82	52.17	52.51	52.85	53.20	

		COGS (Product) % of Revenue							
		51.77	34.83%	35.83%	36.83%	37.83%	38.83%	39.83%	40.83%
CV Growth NOPLAT	1.00%	47.78	46.71	45.64	44.57	43.50	42.44	41.37	
	1.50%	49.94	48.83	47.71	46.60	45.49	44.38	43.26	
	2.00%	52.46	51.29	50.13	48.97	47.80	46.64	45.48	
	2.50%	55.43	54.21	52.99	51.77	50.54	49.32	48.10	
	3.00%	59.01	57.72	56.42	55.13	53.83	52.54	51.25	
	3.50%	63.39	62.01	60.62	59.24	57.86	56.48	55.10	
	4.00%	68.87	67.38	65.89	64.39	62.90	61.41	59.92	

		ROI							
		51.77	3.50%	4.00%	4.50%	5.00%	5.50%	6.00%	6.50%
SGA % of Revenue	15.12%	57.52	57.20	56.86	56.51	56.14	55.75	55.35	
	16.12%	55.92	55.60	55.27	54.92	54.56	54.18	53.79	
	17.12%	54.32	54.01	53.68	53.34	52.99	52.61	52.22	
	18.12%	52.72	52.41	52.10	51.76	51.41	51.05	50.66	
	19.12%	51.12	50.82	50.51	50.18	49.84	49.48	49.10	
	20.12%	49.52	49.23	48.92	48.60	48.26	47.91	47.54	
	21.12%	47.92	47.63	47.33	47.02	46.69	46.34	45.98	

		Beta							
		51.77	0.68	0.71	0.74	0.77	0.80	0.83	0.86
Normal Cash % of Reve	10.73%	57.00	55.32	53.73	52.23	50.80	49.45	48.16	
	11.73%	56.88	55.20	53.61	52.11	50.68	49.33	48.04	
	12.73%	56.76	55.08	53.49	51.99	50.56	49.21	47.92	
	13.73%	56.64	54.96	53.37	51.87	50.44	49.08	47.80	
	14.73%	56.52	54.84	53.25	51.74	50.32	48.96	47.68	
	15.73%	56.40	54.72	53.13	51.62	50.20	48.84	47.55	
	16.73%	56.28	54.60	53.01	51.50	50.07	48.72	47.43	

		WACC							
		51.77	7.67%	7.77%	7.87%	7.97%	8.07%	8.17%	8.27%
R&D % of Revenue	10.02%	60.17	58.89	57.67	56.51	55.35	54.25	53.19	
	11.02%	58.48	57.24	56.05	54.92	53.80	52.74	51.71	
	12.02%	56.78	55.58	54.43	53.34	52.26	51.23	50.23	
	13.02%	55.10	53.94	52.82	51.77	50.72	49.72	48.76	
	14.02%	53.39	52.28	51.20	50.18	49.16	48.20	47.27	
	15.02%	51.70	50.62	49.58	48.60	47.62	46.69	45.79	
	16.02%	50.01	48.97	47.96	47.02	46.07	45.17	44.31	

		Tax Rate							
		51.77	20.30%	21.30%	22.30%	23.30%	24.30%	25.30%	26.30%
Equity Risk Premium	4.25%	60.26	59.52	58.78	58.04	57.31	56.57	55.83	
	4.50%	57.94	57.22	56.51	55.80	55.09	54.37	53.66	
	4.75%	55.78	55.09	54.40	53.71	53.02	52.33	51.64	
	5.00%	53.77	53.10	52.43	51.77	51.10	50.43	49.76	
	5.25%	51.89	51.25	50.60	49.95	49.31	48.66	48.01	
	5.50%	50.14	49.51	48.88	48.25	47.63	47.00	46.37	
	5.75%	48.49	47.88	47.27	46.66	46.05	45.44	44.83	

Cisco Systems, Inc
Income Statement

<i>Fiscal Years Ending Aug. 31</i>	2021	2022	2023	2024E	2025E	2026E	2027E	2028E	2029E	2030E	2031E	2032E	2033E
Revenue - product	36014	38018	43142	41882	43724	46569	49164	51500	53840	55875	57855	59538	61119
Revenue - service	13804	13539	13856	13759	14513	15239	15848	16324	16732	16983	17237	17496	17758
Total revenue	49818	51557	56998	55641	58237	61808	65012	67824	70572	72858	75093	77034	78878
Cost of sales - product	13300	14814	16590	15843	16540	17616	18598	19482	20367	21137	21886	22522	23121
Cost of sales - service	4624	4495	4655	4606	4858	5101	5305	5464	5601	5685	5770	5857	5945
Total cost of sales (excluding D&A)	16062	17352	19519	20449	21399	22718	23903	24946	25968	26822	27656	28379	29065
Gross margin	33756	34205	37479	35192	36839	39090	41109	42878	44604	46036	47437	48655	49813
Depreciation, amortization & other adjustments	1862	1957	1726	1620	936	798	781	793	811	831	852	873	895
Research & development	6549	6774	7551	7242	7580	8045	8462	8828	9185	9483	9774	10026	10266
Sales & marketing	9259	9085	9880	10080	10550	11197	11777	12287	12785	13199	13604	13955	14289
General & administrative	2152	2101	2478	2244	2349	2493	2622	2736	2846	2939	3029	3107	3181
Amortization of purchased intangible assets	215	313	282	875	502	154	78	39	39	39	39	39	14
Restructuring & other charges	886	6	531	169	0	0	0	0	0	0	0	0	0
Operating income (loss)	12833	13969	15031	12962	14922	16404	17388	18196	18937	19546	20140	20654	21167
Interest income	618	476	962	1307	1598	2014	2261	2477	2698	2932	3185	3445	3708
Interest expense	434	360	427	322	537	673	698	724	749	775	801	827	853
Other income (loss), net	245	392	-248	382	141	6	17	30	45	63	83	105	130
Income (loss) before provision for (benefit from) income taxes	13262	14477	15318	14329	16124	17750	18967	19978	20931	21765	22607	23377	24152
Provision for (benefit from) income taxes	2671	2665	2705	3339	3757	4136	4419	4655	4877	5071	5268	5447	5627
Net income (loss)	10591	11812	12613	10990	12367	13615	14548	15323	16054	16694	17340	17930	18524
Weighted average shares outstanding	4222	4170	4093	4022	3936	3854	3775	3701	3630	3562	3498	3436	3378
Year end shares outstanding	4217	4110	4066	3,978	3,894	3,814	3,737	3,665	3,595	3,529	3,466	3,406	3,349
Earnings per share	2.51	2.83	3.08	2.73	3.14	3.53	3.85	4.14	4.42	4.69	4.96	5.22	5.48
Cash dividends declared per common share	1.46	1.50	1.54	1.45	1.67	1.88	2.05	2.20	2.35	2.49	2.64	2.78	2.92

Cisco Systems, Inc
Balance Sheet

<i>Fiscal Years Ending Aug. 31</i>	2021	2022	2023	2024E	2025E	2026E	2027E	2028E	2029E	2030E	2031E	2032E	2033E
Cash & cash equivalents	9175	7079	10123	15131	22607	26664	30059	33507	37161	41159	45229	49306	53596
Investments	15343	12188	16023	16824	17665	18549	19476	20450	21472	22546	23673	24857	26100
Accounts receivable, net	5766	6622	5854	6273	6565	6968	7329	7646	7956	8214	8466	8684	8892
Inventories	1559	2568	3644	2231	2330	2481	2619	2744	2868	2977	3082	3172	3256
Financing receivables, net	4380	3905	3352	4708	4928	5230	5501	5739	5972	6165	6354	6518	6674
Other current assets	2889	4355	4352	4570	4798	5038	5290	5554	5832	6124	6430	6751	7089
Total current assets	39112	36717	43348	49737	58894	64930	70275	75640	81262	87184	93234	99289	105608
Total gross property & equipment	10918	10165	10058	10797	11555	12332	13128	13945	14781	15639	16517	17418	18342
Less: accumulated depreciation & amortization	8580	8168	7973	9593	10529	11327	12108	12901	13712	14543	15394	16267	17162
Property & equipment, net	2338	1997	2085	1204	1026	1005	1020	1044	1069	1096	1123	1151	1180
Financing receivables, net	4884	4009	3483	4989	5222	5542	5829	6081	6328	6533	6733	6907	7073
Goodwill	38168	38304	38535	38535	38535	38535	38535	38535	38535	38535	38535	38535	38535
Purchased intangible assets, net	3619	2569	1818	943	441	287	209	170	131	92	53	14	0
Deferred tax assets	4360	4449	6576	6737	6918	7118	7331	7555	7791	8035	8289	8552	8824
Other assets	3921	4954	5036	5288	5552	5830	6121	6427	6749	7086	7440	7812	8203
Operating lease right-of-use assets	1095	1003	971	561	478	468	475	486	498	510	523	536	549
Total assets	97497	94002	101852	107994	117066	123715	129796	135939	142362	149072	155931	162797	169972
Short-term debt	2508	1099	1733	3240	6611	6972	7327	7676	8035	8385	8746	9106	9476
Accounts payable	2362	2281	2313	2414	2569	2716	2812	2920	3073	3176	3265	3342	3424
Income taxes payable - current	801	961	4235	1950	2194	2415	2581	2718	2848	2962	3076	3181	3286
Accrued compensation	3818	3316	3984	3742	3977	4282	4408	4646	4815	4985	5140	5260	5393
Deferred revenue	12148	12784	13908	13050	13997	14966	15720	16316	16929	17555	18102	18554	18983
Other current liabilities	4620	5199	5136	5393	5662	5946	6243	6555	6883	7227	7588	7968	8366
Total current liabilities	26257	25640	31309	29788	35011	37297	39090	40832	42582	44289	45917	47411	48929
Long-term debt	9018	8416	6658	10756	10941	11242	11553	11865	12186	12500	12823	13146	13480
Income taxes payable	8538	7725	5756	9652	10862	11957	12777	13458	14100	14662	15229	15748	16270
Deferred taxes liabilities	134	55	62	19	21	23	25	26	27	28	29	30	31
Deferred revenue	10016	10480	11642	10485	11419	12276	12881	13368	13809	14362	14818	15181	15528
Other long-term liabilities	2259	1913	2072	2176	2284	2399	2519	2644	2777	2916	3061	3214	3375
Total liabilities	56222	54229	57499	62876	70538	75193	78844	82194	85481	88756	91878	94730	97612
Common stock & additional paid-in capital	42346	42714	44289	44289	44289	44289	44289	44289	44289	44289	44289	44289	44289
Retained earnings (accumulated deficit)	-654	-1319	1639	2404	3814	5808	8238	11031	14167	17602	21340	25353	29645
Accumulated other comprehensive income (loss)	-417	-1622	-1575	-1575	-1575	-1575	-1575	-1575	-1575	-1575	-1575	-1575	-1575
Total equity	41275	39773	44353	45118	46528	48522	50952	53745	56881	60316	64054	68067	72359
Total liabilities and equity	97497	94002	101852	107994	117066	123715	129796	135939	142362	149072	155931	162797	169972

Cisco Systems, Inc

Historical Cash Flow Statement

Fiscal Years Ending Aug. 31	2019	2020	2021	2022	2023
Net income (loss)	11621	11214	10591	11812	12613
Depreciation, amortization & other adjustments	1897	1808	1862	1957	1726
Share-based compensation expense	1570	1569	1761	1886	2353
Provision (benefit) for receivables	40	93	-6	55	31
Deferred income taxes	-350	-38	-384	-309	-2085
Losses (gains) on divestitures, investments & other, net	-24	-138	-354	-453	206
Accounts receivable	-84	-107	-107	-1009	734
Inventories	131	84	-244	-1030	-1069
Financing receivables	-249	-797	1577	1241	1102
Other assets	-955	96	-797	-1615	5
Accounts payable	87	141	-53	-55	27
Income taxes, net	312	-322	-549	-690	1218
Accrued compensation	277	-78	643	-427	651
Deferred revenue	1407	2011	1560	1328	2326
Other liabilities	151	-110	-46	535	48
Net cash flows from operating activities	15831	15426	15454	13226	19886
Purchases of investments	-2416	-9212	-9328	-6070	-10871
Proceeds from sales of investments	7388	5631	3373	2660	1054
Proceeds from maturities of investments	12928	7975	8409	5686	5978
Acquisitions, net of cash & cash equivalents acquired & divestitures	-2175	-327	-7038	-373	-301
Purchases of investments in privately held companies	-148	-190	-175	-186	-185
Return of investments in privately held companies	159	224	194	237	90
Acquisition of property & equipment	-909	-770	-692	-477	-849
Proceeds from sales of property & equipment	22	179	28	91	3
Other investing activities	-12	-10	-56	-15	-26
Net cash flows from investing activities	14837	3500	-5285	1553	-5107
Issuances of common stock	640	655	643	660	700
Repurchases of common stock - repurchase program	-20717	-2659	-2877	-7689	-4293
Shares repurchased for tax withholdings on vesting of restricted stock units	-862	-727	-636	-692	-597
Short-term borrowings, original maturities of 90 days or less, net	3446	-3470	-5	606	-602
Issuances of debt	2250	0	0	1049	0
Repayments of debt	-6780	-6720	-3000	-3550	-500
Dividends paid	-5979	-6016	-6163	-6224	-6302
Other financing activities	113	51	-1	-122	-32
Net cash flows from financing activities	-27889	-18886	-12039	-15962	-11626
Net increase (decrease) in cash, cash equivalents, restricted cash & restricted cash	2779	40	-1870	-1363	3048
Cash, cash equivalents, restricted cash & restricted cash equivalents, beginning of fiscal year	8993	11772	11812	9942	8579
Cash, cash equivalents, restricted cash & restricted cash equivalents, end of fiscal year	11772	11812	9942	8579	11627

Cisco Systems, Inc
Forecasted Cash Flow Statement

Fiscal Years Ending Aug. 31	2024E	2025E	2026E	2027E	2028E	2029E	2030E	2031E	2032E	2033E
Cash at beginning of period	10123	15131	22607	26664	30059	33507	37161	41159	45229	49306
Net Income	10990	12367	13615	14548	15323	16054	16694	17340	17930	18524
Depreciation, amortization, other	1620	936	798	781	793	811	831	852	873	895
Changes in Operating Activities										
Accounts receivable, net	-419	-293	-403	-361	-317	-310	-258	-252	-219	-208
Inventories	1413	-98	-152	-138	-124	-125	-108	-105	-90	-84
Financing receivables, net - current	-1356	-220	-302	-271	-238	-233	-193	-189	-164	-156
Other current assets	-218	-228	-240	-252	-264	-278	-292	-306	-321	-338
Deferred tax assets	-161	-181	-199	-213	-225	-235	-245	-254	-263	-271
Other assets	-252	-264	-278	-291	-306	-321	-337	-354	-372	-391
Financing receivables, net	-1506	-233	-320	-287	-252	-246	-205	-200	-174	-165
Accounts payable	101	156	147	96	108	153	102	89	77	82
Income taxes payable - current	-2285	244	221	166	138	130	113	115	105	105
Accrued compensation	-242	235	305	126	238	169	170	155	120	133
Deferred revenue	-858	947	969	754	596	612	626	548	451	429
Other current liabilities	257	270	283	297	312	328	344	361	379	398
Income taxes payable	3896	1210	1095	820	681	642	561	568	519	522
Deferred Tax Liabilities	-43	2	2	2	1	1	1	1	1	1
Deferred revenue	-1157	934	857	605	487	441	553	456	363	347
Net cash from operating activities	9780	15783	16399	16379	16952	17593	18357	18822	19216	19824
Changes in Investing Activities										
Investments	-801	-841	-883	-927	-974	-1022	-1074	-1127	-1184	-1243
Total gross property & equipment	-739	-758	-777	-796	-816	-837	-857	-879	-901	-923
Operating lease right-of-use assets	410	83	10	-7	-11	-12	-12	-13	-13	-13
Purchased intangible assets, net	875	502	154	78	39	39	39	39	39	14
Net cash from investing	-255	-1014	-1496	-1653	-1762	-1832	-1904	-1980	-2059	-2166
Changes in Financing Activities										
Short-term debt	1507	3371	361	355	349	358	351	361	360	370
Long-term debt	4098	185	300	311	312	321	314	323	323	334
Other long-term liabilities	104	109	114	120	126	132	139	146	153	161
Common stock & additional paid-in capital	0	0	0	0	0	0	0	0	0	0
Repurchase of common stock	-4380	-4380	-4380	-4380	-4380	-4380	-4380	-4380	-4380	-4380
Dividends paid	-5845	-6578	-7241	-7738	-8150	-8539	-8879	-9223	-9537	-9853
Net cash from financing	-4516	-7293	-10846	-11331	-11742	-12107	-12455	-12773	-13080	-13368
Change in cash	5008	7476	4057	3395	3448	3654	3998	4070	4077	4290
Cash at end of period	15131	22607	26664	30059	33507	37161	41159	45229	49306	53596

Cisco Systems, Inc

Common Size Income Statement

Fiscal Years Ending Aug. 31	2021	2022	2023	2024E	2025E	2026E	2027E	2028E	2029E	2030E	2031E	2032E	2033E
Revenue - product	72.29%	73.74%	75.69%	75.3%	75.1%	75.3%	75.6%	75.9%	76.3%	76.7%	77.0%	77.3%	77.5%
Revenue - service	27.71%	26.26%	24.31%	24.7%	24.9%	24.7%	24.4%	24.1%	23.7%	23.3%	23.0%	22.7%	22.5%
Total revenue	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%
Cost of sales - product	36.93%	38.97%	38.45%	37.83%	37.83%	37.83%	37.83%	37.83%	37.83%	37.83%	37.83%	37.83%	37.83%
Cost of sales - service	33.50%	33.20%	33.60%	33.48%	33.48%	33.48%	33.48%	33.48%	33.48%	33.48%	33.48%	33.48%	33.48%
Total cost of sales	32.24%	33.66%	34.25%	33.12%	37.83%	37.83%	37.83%	37.83%	37.83%	37.83%	37.83%	37.83%	37.83%
Gross margin	67.76%	66.34%	65.75%	63.25%	63.26%	63.24%	63.23%	63.22%	63.20%	63.19%	63.17%	63.16%	63.15%
Depreciation, amortization & other adjustments	3.74%	3.80%	3.03%	2.91%	1.61%	1.29%	1.20%	1.17%	1.15%	1.14%	1.13%	1.13%	1.13%
Research & development	13.15%	13.14%	13.25%	13.02%	13.02%	13.02%	13.02%	13.02%	13.02%	13.02%	13.02%	13.02%	13.02%
Sales & marketing	18.59%	17.62%	17.33%	18.12%	18.12%	18.12%	18.12%	18.12%	18.12%	18.12%	18.12%	18.12%	18.12%
General & administrative	4.32%	4.08%	4.35%	4.03%	4.03%	4.03%	4.03%	4.03%	4.03%	4.03%	4.03%	4.03%	4.03%
Amortization of purchased intangible assets	0.43%	0.61%	0.49%	1.57%	0.86%	0.25%	0.12%	0.06%	0.06%	0.05%	0.05%	0.05%	0.02%
Restructuring & other charges	1.78%	0.01%	0.93%	0.30%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
Total operating expenses	38.26%	35.45%	36.36%	36.45%	36.63%	36.63%	36.30%	36.47%	36.50%	36.51%	36.48%	36.45%	36.48%
Operating Margin	25.76%	27.09%	26.37%	22.74%	26.18%	28.78%	30.51%	31.92%	33.22%	34.29%	35.33%	36.24%	37.14%
Interest income	1.24%	0.92%	1.69%	2.35%	2.74%	3.26%	3.48%	3.65%	3.82%	4.02%	4.24%	4.47%	4.70%
Interest expense	0.87%	0.70%	0.75%	0.58%	0.92%	1.09%	1.07%	1.07%	1.06%	1.06%	1.07%	1.07%	1.08%
Other income (loss), net	0.49%	0.76%	-0.44%	0.69%	0.24%	0.01%	0.03%	0.04%	0.06%	0.09%	0.11%	0.14%	0.17%
Income (loss) before provision for (benefit from) i	26.62%	28.08%	26.87%	25.75%	27.69%	28.72%	29.17%	29.46%	29.66%	29.87%	30.11%	30.35%	30.62%
Provision for (benefit from) income taxes	5.36%	5.17%	4.75%	6.00%	6.45%	6.69%	6.80%	6.86%	6.91%	6.96%	7.01%	7.07%	7.13%
Net Margin	21.26%	22.91%	22.13%	19.75%	21.24%	22.03%	22.38%	22.59%	22.75%	22.91%	23.09%	23.28%	23.48%

Cisco Systems, Inc
Common Size Balance Sheet

Fiscal Years Ending Aug. 31	2021	2022	2023	2024E	2025E	2026E	2027E	2028E	2029E	2030E	2031E	2032E	2033E
Cash & cash equivalents	18.42%	13.73%	17.76%	27.19%	38.82%	43.14%	46.24%	49.40%	52.66%	56.49%	60.23%	64.01%	67.95%
Investments	30.80%	23.64%	28.11%	30.24%	30.33%	30.01%	29.96%	30.15%	30.43%	30.95%	31.53%	32.27%	33.09%
Accounts receivable, net	11.57%	12.84%	10.27%	11.27%	11.27%	11.27%	11.27%	11.27%	11.27%	11.27%	11.27%	11.27%	11.27%
Inventories	4.33%	6.75%	8.45%	5.33%	5.33%	5.33%	5.33%	5.33%	5.33%	5.33%	5.33%	5.33%	5.33%
Financing receivables, net	8.79%	7.57%	5.88%	8.46%	8.46%	8.46%	8.46%	8.46%	8.46%	8.46%	8.46%	8.46%	8.46%
Other current assets	5.80%	8.45%	7.64%	8.21%	8.24%	8.15%	8.14%	8.19%	8.26%	8.41%	8.56%	8.76%	8.99%
Total current assets	78.51%	71.22%	76.05%	89.39%	101.13%	105.05%	108.10%	111.52%	115.15%	119.66%	124.16%	128.89%	133.89%
Total gross property & equipment	21.92%	19.72%	17.65%	19.41%	19.84%	19.95%	20.19%	20.56%	20.94%	21.46%	22.00%	22.61%	23.25%
Less: accumulated depreciation & amortization	17.22%	15.84%	13.99%	17.24%	18.08%	18.33%	18.62%	19.02%	19.43%	19.96%	20.50%	21.12%	21.76%
Property & equipment, net	4.69%	3.87%	3.66%	2.16%	1.76%	1.63%	1.57%	1.54%	1.51%	1.50%	1.50%	1.49%	1.50%
Financing receivables, net	9.80%	7.78%	6.11%	8.97%	8.97%	8.97%	8.97%	8.97%	8.97%	8.97%	8.97%	8.97%	8.97%
Goodwill	76.61%	74.29%	67.61%	69.26%	66.17%	62.35%	59.27%	56.82%	54.60%	52.89%	51.32%	50.02%	48.85%
Purchased intangible assets, net	7.26%	4.98%	3.19%	1.69%	0.76%	0.46%	0.32%	0.25%	0.19%	0.13%	0.07%	0.02%	0.00%
Deferred tax assets	8.75%	8.63%	11.54%	12.11%	11.88%	11.52%	11.28%	11.14%	11.04%	11.03%	11.04%	11.10%	11.19%
Other assets	7.87%	9.61%	8.84%	9.50%	9.53%	9.43%	9.42%	9.48%	9.56%	9.73%	9.91%	10.14%	10.40%
Operating lease right-of-use assets	2.20%	1.95%	1.70%	1.01%	0.82%	0.76%	0.73%	0.72%	0.71%	0.70%	0.70%	0.70%	0.70%
Total assets	195.71%	182.33%	178.69%	194.09%	201.02%	200.16%	199.65%	200.43%	201.73%	204.61%	207.65%	211.33%	215.49%
Short-term debt	5.03%	2.13%	3.04%	5.82%	11.35%	11.28%	11.27%	11.32%	11.39%	11.51%	11.65%	11.82%	12.01%
Accounts payable	4.74%	4.42%	4.06%	4.34%	4.41%	4.39%	4.33%	4.31%	4.36%	4.36%	4.35%	4.34%	4.34%
Income taxes payable	1.61%	1.86%	7.43%	3.50%	3.77%	3.91%	3.97%	4.01%	4.04%	4.06%	4.10%	4.13%	4.17%
Accrued compensation	7.66%	6.43%	6.99%	6.72%	6.83%	6.93%	6.78%	6.85%	6.82%	6.84%	6.84%	6.83%	6.84%
Deferred revenue	24.38%	24.80%	24.40%	23.45%	24.03%	24.21%	24.18%	24.06%	23.99%	24.09%	24.11%	24.08%	24.07%
Other current liabilities	9.27%	10.08%	9.01%	9.69%	9.72%	9.62%	9.60%	9.66%	9.75%	9.92%	10.11%	10.34%	10.61%
Total current liabilities	52.71%	49.73%	54.93%	53.54%	60.12%	60.34%	60.13%	60.20%	60.34%	60.79%	61.15%	61.55%	62.03%
Long-term debt	18.10%	16.32%	11.68%	19.33%	18.79%	18.19%	17.77%	17.49%	17.27%	17.16%	17.08%	17.07%	17.09%
Income taxes payable	17.14%	14.98%	10.10%	17.35%	18.65%	19.35%	19.65%	19.84%	19.98%	20.12%	20.28%	20.44%	20.63%
Deferred taxes liabilities	0.27%	0.11%	0.11%	0.03%	0.04%	0.04%	0.04%	0.04%	0.04%	0.04%	0.04%	0.04%	0.04%
Deferred revenue	20.11%	20.33%	20.43%	18.84%	19.61%	19.86%	19.81%	19.71%	19.57%	19.71%	19.73%	19.71%	19.69%
Other long-term liabilities	4.53%	3.71%	3.64%	3.91%	3.92%	3.88%	3.87%	3.90%	3.93%	4.00%	4.08%	4.17%	4.28%
Total liabilities	112.85%	105.18%	100.88%	113.00%	121.12%	121.66%	121.28%	121.19%	121.13%	121.82%	122.35%	122.97%	123.75%
Common stock & additional paid-in capital	85.00%	82.85%	77.70%	79.60%	76.05%	71.66%	68.12%	65.30%	62.76%	60.79%	58.98%	57.49%	56.15%
Retained earnings (accumulated deficit)	-1.31%	-2.56%	2.88%	4.32%	6.55%	9.40%	12.67%	16.26%	20.07%	24.16%	28.42%	32.91%	37.58%
Accumulated other comprehensive income (loss)	-0.84%	-3.15%	-2.76%	-2.83%	-2.70%	-2.55%	-2.42%	-2.32%	-2.23%	-2.16%	-2.10%	-2.04%	-2.00%
Total equity	82.85%	77.14%	77.82%	81.09%	79.89%	78.50%	78.37%	79.24%	80.60%	82.79%	85.30%	88.36%	91.74%
Total liabilities and equity	195.71%	182.33%	178.69%	194.09%	201.02%	200.16%	199.65%	200.43%	201.73%	204.61%	207.65%	211.33%	215.49%

Cisco Systems, Inc
Value Driver Estimation

Fiscal Years Ending Aug. 31	2021	2022	2023	2024E	2025E	2026E	2027E	2028E	2029E	2030E	2031E	2032E	2033E
NOPLAT:													
Total Revenue	49818	51557	56998	55641	58237	61808	65012	67824	70572	72858	75093	77034	78878
Less: Total cost of sales (excl. D/A)	16062	17352	19519	20449	21399	22718	23903	24946	25968	26822	27656	28379	29065
Less: Research and development	6549	6774	7551	7242	7580	8045	8462	8828	9185	9483	9774	10026	10266
Less: Sales and marketing	9259	9085	9880	10080	10550	11197	11777	12287	12785	13199	13604	13955	14289
Less: General and administrative	2152	2101	2478	2244	2349	2493	2622	2736	2846	2939	3029	3107	3181
Less: Amortization of purchased intangible assets	215	313	282	875	502	154	78	39	39	39	39	39	14
Less: Restructuring and other charges	886	6	531	169	0	0	0	0	0	0	0	0	0
Less: Depreciation and amortization	1862	1957	1726	1620	936	798	781	793	811	831	852	873	895
Plus: Implied interest on operating leases	46	55	50	49	28	24	23	24	24	25	26	26	27
EBITDA	12879	14024	15081	13010	14950	16428	17411	18219	18962	19571	20165	20680	21194
Implied Marginal Tax Rate	25.20%	23.50%	23.30%	23.30%	23.30%	23.30%	23.30%	23.30%	23.30%	23.30%	23.30%	23.30%	23.30%
Adjusted Taxes													
Provision for income taxes	2671	2665	2705	3339	3757	4136	4419	4655	4877	5071	5268	5447	5627
Plus: Tax Shield on operating lease interest	12	13	12	11	7	6	5	6	6	6	6	6	6
Plus: Tax shield on interest expense	109	85	99	75	125	157	163	169	175	181	187	193	199
Less: Tax on interest income	156	112	224	305	372	469	527	577	629	683	742	803	864
Less: Tax on interest, and other income, net	108	119	67	0	0	0	0	0	0	0	0	0	0
Total adjusted taxes	2528	2531	2525	3120	3516	3829	4061	4252	4429	4575	4718	4843	4968
Deferred Tax Assets	4360	4449	6576	6737	6918	7118	7331	7555	7791	8035	8289	8552	8824
Deferred Tax Liabilities	134	55	62	19	21	23	25	26	27	28	29	30	31
Net deferred taxes	4226	4394	6514	6719	6897	7095	7306	7530	7764	8007	8260	8522	8792
Change in deferred tax assets	317	168	2120	205	179	197	212	223	234	244	253	262	270
NOPLAT	10668	11661	14676	10094	11613	12796	13562	14191	14767	15240	15701	16099	16496
Invested Capital (IC):													
Plus: Normal cash	1260	972	1390	15131	22607	26664	30059	33507	37161	41159	45229	49306	53596
Plus: Accounts receivable, net	5766	6622	5854	6273	6565	6968	7329	7646	7956	8214	8466	8684	8892
Plus: Inventories	1559	2568	3644	2231	2330	2481	2619	2744	2868	2977	3082	3172	3256
Plus: Financing receivables, net	4380	3905	3352	4708	4928	5230	5501	5739	5972	6165	6354	6518	6674
Plus: Other current assets	2889	4355	4352	4570	4798	5038	5290	5554	5832	6124	6430	6751	7089
Less: Accounts payable	2362	2281	2313	2414	2569	2716	2812	2920	3073	3176	3265	3342	3424
Less: Income taxes payable	801	961	4235	1950	2194	2415	2581	2718	2848	2962	3076	3181	3286
Less: Accrued compensation	3818	3316	3984	3742	3977	4282	4408	4646	4815	4985	5140	5260	5393
Less: Other current liabilities	4620	5199	5136	5393	5662	5946	6243	6555	6883	7227	7588	7968	8366
Net operating working capital	4253	6665	2924	19415	26825	31022	34755	38351	42170	46290	50492	54682	59038
Plus: Property & equipment, net	2338	1997	2085	1204	1026	1005	1020	1044	1069	1096	1123	1151	1180
Plus: Purchased intangible assets, net	3619	2569	1818	943	441	287	209	170	131	92	53	14	0
Plus: Other assets	3921	4954	5036	5288	5552	5830	6121	6427	6749	7086	7440	7812	8203
Less: Deferred revenue (current)	12148	12784	13908	13050	13997	14966	15720	16316	16929	17555	18102	18554	18983
Less: Income taxes payable	801	961	4235	1950	2194	2415	2581	2718	2848	2962	3076	3181	3286
Less: Deferred revenue (non current)	10016	10480	11642	10485	11419	12276	12881	13368	13809	14362	14818	15181	15528
Plus: PV of operating leases	1095	1003	971	561	478	468	475	486	498	510	523	536	549
Invested Capital	-7739	-7037	-16951	1926	6713	8955	11399	14075	17031	20196	23635	27280	31174
Free Cash Flow (FCF):													
NOPLAT	10668	11661	14676	10094	11613	12796	13562	14191	14767	15240	15701	16099	16496
Change in IC	920	702	-9914	18877	4787	2242	2444	2675	2957	3164	3439	3645	3894
FCF	9748	10958	24590	-8782	6825	10554	11118	11515	11811	12075	12261	12454	12601
Return on Invested Capital (ROIC):													
NOPLAT	10668	11661	14676	10094	11613	12796	13562	14191	14767	15240	15701	16099	16496
Beginning IC	-8660	-7739	-7037	-16951	1926	6713	8955	11399	14075	17031	20196	23635	27280
ROIC	-123.19%	-150.67%	-208.55%	-59.55%	603.08%	190.63%	151.45%	124.49%	104.92%	89.48%	77.74%	68.12%	60.47%
Economic Profit (EP):													
Beginning IC	-8660	-7739	-7037	-16951	1926	6713	8955	11399	14075	17031	20196	23635	27280
x (ROIC - WACC)	-131.16%	-158.64%	-216.52%	-67.52%	595.11%	182.66%	143.48%	116.52%	96.95%	81.51%	69.77%	60.15%	52.50%
EP	11358	12277	15237	11445	11459	12262	12849	13282	13646	13883	14091	14216	14322

Cisco Systems, Inc

Weighted Average Cost of Capital (WACC) Estimation

Cost of Equity:

Risk-Free Rate	4.30%
Beta	0.77
Equity Risk Premium	5.00%
Cost of Equity	8.16%

ASSUMPTIONS:

10-year Treasury Bond
Average of 2, 3, 4, and 5-year weekly beta
Henry Fund consensus estimate

Cost of Debt:

Risk-Free Rate	4.30%
Implied Default Premium	0.70%
Pre-Tax Cost of Debt	5.00%
Marginal Tax Rate	23%
After-Tax Cost of Debt	3.84%

10-year Treasury Bond

YTM on company's 10-year corporate bond from Bloomberg

Market Value of Common Equity:

Total Shares Outstanding	4066
Current Stock Price	\$49.64
MV of Equity	2,01,836.24

MV Weights

95.57%

Market Value of Debt:

Short-Term Debt	1733
Long-Term Debt	6658
PV of Operating Leases	971
MV of Total Debt	9,362.00

4.43%

Market Value of the Firm

2,11,198.24

100.00%

Estimated WACC

7.97%

Cisco Systems, Inc

Discounted Cash Flow (DCF) and Economic Profit (EP) Valuation Models

Key Inputs:

CV Growth of NOPLAT	2.50%
CV Year ROIC	60.47%
WACC	7.97%
Cost of Equity	8.16%

<i>Fiscal Years Ending Aug. 31</i>	2024E	2025E	2026E	2027E	2028E	2029E	2030E	2031E	2032E	2033E
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DCF Model:

Free Cash Flow (FCF)	-8782.3	6825.4	10554.5	11117.9	11515.1	11810.6	12075.3	12261.2	12454.2	12601.5
Continuing Value (CV)										289187.7
PV of FCF	-8134.2	5855.1	8385.9	8181.6	7848.5	7455.8	7060.3	6639.9	6246.7	145048.8

Value of Operating Assets:	194588.5
Non-Operating Adjustments	
Plus: Excess Cash	2296.9
Plus: Investments	16023.0
Less: ST debt	-1733.0
Less: LT debt	-6658.0
Less: PV of Oper. Leases	-971.0

Value of Equity	203546.4
Shares Outstanding	4066.0
Intrinsic Value of Last FYE	\$ 50.06
Implied Price as of Today	\$ 51.77

EP Model:

Economic Profit (EP)	11445.0	11459.2	12261.5	12848.7	13282.2	13645.6	13882.7	14091.3	14215.7	14321.9
Continuing Value (CV)										261908.0
PV of EP	10600.4	9830.2	9742.2	9455.3	9053.0	8614.2	8117.1	7631.0	7130.2	131366.0

Total PV of EP	211539.6
Invested Capital (last FYE)	-16951.1
Value of Operating Assets:	194588.5
Non-Operating Adjustments	
Plus: Excess Cash	2296.9
Plus: Investments	16023.0
Less: ST debt	-1733.0
Less: LT debt	-6658.0
Less: PV of Oper. Leases	-971.0

Value of Equity	203546.4
Shares Outstanding	4066.0
Intrinsic Value of Last FYE	\$ 50.06
Implied Price as of Today	\$ 51.77

Cisco Systems, Inc

Dividend Discount Model (DDM) or Fundamental P/E Valuation Model

Fiscal Years Ending	2024E	2025E	2026E	2027E	2028E	2029E	2030E	2031E	2032E	2033E
EPS	\$ 2.73	\$ 3.14	\$ 3.53	\$ 3.85	\$ 4.14	\$ 4.42	\$ 4.69	\$ 4.96	\$ 5.22	\$ 5.48
Key Assumptions										
CV growth of EPS	2.50%									
CV Year ROE	27.21%									
Cost of Equity	8.16%									
Future Cash Flows										
P/E Multiple (CV Year)										16.04
EPS (CV Year)										\$ 5.48
Future Stock Price										\$ 87.99
Dividends Per Share	1.45	1.67	1.88	2.05	2.20	2.35	2.49	2.64	2.78	
Discounted Cash Flows	1.34	1.43	1.49	1.50	1.49	1.47	1.44	1.41	1.37	43.44
Intrinsic Value as of Last FYE	\$ 56.36									
Implied Price as of Today	\$ 58.29									

Cisco Systems, Inc*Relative Valuation Models*

Ticker	Company	Price	EPS 2024E	EPS 2025E	P/E 24	P/E 25	Est. 5yr EPS gr.	PEG 24	PEG 25
ANET	Arista Network	\$297.60	\$7.48	\$8.56	39.79	34.77	19.4	2.60	1.79
JNPR	Juniper Networks	\$37.07	\$2.23	\$2.46	16.62	15.07	11.0	1.51	1.37
PANW	Palo Alto Networks	\$285.07	\$5.51	\$6.12	51.74	46.58	17.8	2.90	2.61
MSI	Motorola Solutions	\$347.92	\$12.73	\$13.81	27.33	25.19	9.3	2.94	2.71
HPE	Hewlett Packard Enterprise	\$17.42	\$1.88	\$2.05	9.27	8.50	2.7	3.43	3.15
			Average		28.95	26.02		2.68	2.33
CSCO	Cisco Systems, Inc	\$49.64	\$2.73	\$3.14	18.2	15.8	8.7	2.1	1.8

Implied Relative Value:

P/E (EPS24)	\$ 79.10
P/E (EPS25)	\$ 81.77
PEG (EPS24)	\$ 63.37
PEG (EPS25)	\$ 63.33

Cisco Systems, Inc
Key Management Ratios

Fiscal Years Ending Aug. 31	2021	2022	2023	2024E	2025E	2026E	2027E	2028E	2029E	2030E	2031E	2032E	2033E
Liquidity Ratios:													
Current Ratio (CA/CL)	1.49	1.43	1.38	1.67	1.68	1.74	1.80	1.85	1.91	1.97	2.03	2.09	2.16
Quick Ratio ((CA-Inv)/CL)	1.43	1.33	1.27	1.59	1.62	1.67	1.73	1.79	1.84	1.90	1.96	2.03	2.09
Cash Ratio (Cash + Mkt. Sec)/CL)	0.35	0.28	0.32	0.51	0.65	0.71	0.77	0.82	0.87	0.93	0.99	1.04	1.10
Asset-Management Ratios:													
Asset Turnover (Net Sales/Avg. Total Assets)	0.64	0.68	0.69	0.67	0.65	0.62	0.61	0.59	0.00	0.00	0.00	0.00	0.00
Inventory Turnover (COGS/Avg. Inv)	12.62	9.36	6.84	7.51	9.79	9.78	9.68	9.60	9.54	9.46	9.41	9.35	9.32
Accounts Recievable Turnover (Sales/Avg. AR)	8.87	8.32	9.14	9.18	9.07	9.13	9.09	9.06	9.05	9.01	9.00	8.98	8.98
Financial Leverage Ratios:													
Debt-to-Equity Ratio (ST debt+LT debt/TSE)	0.28	0.24	0.19	0.31	0.38	0.38	0.37	0.36	0.36	0.35	0.34	0.33	0.32
Debt-to-Asset Ratio (ST debt+LT debt/Assets)	0.12	0.10	0.08	0.13	0.15	0.15	0.15	0.14	0.14	0.14	0.14	0.14	0.14
Profitability Ratios:													
Return on Equity (NI/Beg TSE)	27.9%	28.6%	31.7%	24.8%	27.4%	29.3%	30.0%	30.1%	29.9%	29.3%	28.7%	28.0%	27.2%
Return on Assets (NI/Total Assets)	11.0%	12.3%	12.9%	10.5%	11.0%	11.3%	11.5%	11.5%	11.5%	11.5%	11.4%	11.3%	11.1%
Gross Profit Margin (Gross Profit/Sales)	67.8%	66.3%	65.8%	63.2%	63.3%	63.2%	63.2%	63.2%	63.2%	63.2%	63.2%	63.2%	63.2%
Operating Profit Margin (Oper. Profit/Sales)	25.8%	27.1%	26.4%	23.3%	25.6%	26.5%	26.7%	26.8%	26.8%	26.8%	26.8%	26.8%	26.8%
Net Profit Margin (Net Income/Sales)	21.3%	22.9%	22.1%	19.8%	21.2%	22.0%	22.4%	22.6%	22.7%	22.9%	23.1%	23.3%	23.5%
Payout Policy Ratios:													
Dividend Payout Ratio (Dividend/EPS)	58.2%	53.0%	50.0%	53.2%	53.2%	53.2%	53.2%	53.2%	53.2%	53.2%	53.2%	53.2%	53.2%
Retention Ratio (1-(Dividend/EPS))	41.8%	47.0%	50.0%	46.8%	46.8%	46.8%	46.8%	46.8%	46.8%	46.8%	46.8%	46.8%	46.8%
Total Payout Ratio ((Dividends + Repurchases)/NI)	85.4%	117.8%	84.0%	93.0%	88.6%	85.4%	83.3%	81.8%	80.5%	79.4%	78.4%	77.6%	76.8%

Cisco Systems, Inc*Effects of Share Repurchases on Common Stock Account and Number of Shares Outstanding*

Cost of Equity: 8.16%

Current Stock Price: \$49.64

<i>Fiscal Years Ending Aug. 31</i>	2024E	2025E	2026E	2027E	2028E	2029E	2030E	2031E	2032E	2033E
Share Repurchases (\$)	4,380	4,380	4,380	4,380	4,380	4,380	4,380	4,380	4,380	4,380
Expected Price of Repurchased Shares:	\$ 49.64	\$ 52.10	\$ 54.68	\$ 57.38	\$ 60.22	\$ 63.20	\$ 66.33	\$ 69.62	\$ 73.06	\$ 76.68
Number of Shares Repurchased:	88	84	80	76	73	69	66	63	60	57
Shares Outstanding (beginning of the year)	4,066	3,978	3,894	3,814	3,737	3,665	3,595	3,529	3,466	3,406
Less: Shares Repurchased in Treasury	88	84	80	76	73	69	66	63	60	57
Shares Outstanding (end of the year)	3,978	3,894	3,814	3,737	3,665	3,595	3,529	3,466	3,406	3,349