

## CAI Zonghuan

<b>Stock Price</b> at 11/10/2024:	<b>\$ 82,92</b>
<b>52 week Range</b>	<b>81,85 44,12</b>
<b>Market Cap (million \$):</b>	<b>\$ 44 940,00</b>
<b>EV (million \$):</b>	<b>\$ 57 090,00</b>
<b>Avg. Daily N° shares traded (million)</b>	<b>4,16(3 month)</b>
<b>Free Float (%)</b>	<b>82,05%</b>
<b>Beta (2Y Weekly):</b>	<b>1,2</b>
<b>Rating by Moody</b>	<b>Baa1</b>

Stock Market Ratios	2023A	2024E	2025E
P/E	36,2	45,0	39,6
PEG	1,1	3,0	2,9
EV/EBITDA	36,7	40,9	37,2
Dividend Yield	0	0	0

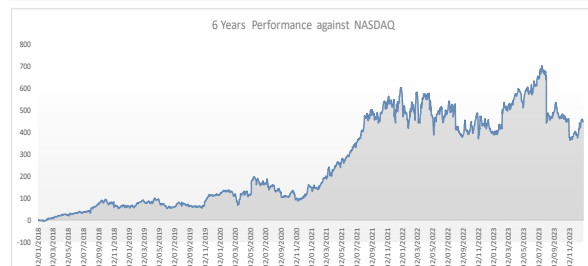
Profitability factors %	2023A	2024E	2025E
ROA	17%	22%	24%
ROE	-268%	-417%	-518%
ROIC	41%	52%	57%
WACC ROIC>WACC	5,17%		
Operating Margin	23%	28%	28%
FCF YIELD (FCF/EV)	2,4%		

Solvency Factors	2023A	2024E	2025E
Total Debt/Total Assets	13,7%	13,9%	14,2%
LT Debt/Total Equity	-214%	-265%	-302%
TIE RATIO (interest cover)	5910%	7575%	8414%
OCF/Total Liabilities	22,6%	19,7%	21,8%
FCF/Total Liabilities	18,1%	18,4%	18,8%

Asset Turnover	2023A	2024E	2025E
Acc Receivable turnover	4,0	4,2	4,6
Days Receivable Held	91,6	87,8	79,3
Inventory Turnover	3,3	2,5	2,8
Days Inventory held	110,5	144,5	130,6
Acc. Payable Turnover	6,5	6,1	6,7
Days Payable Held	56,1	60,2	54,4
Networking Capital Days	146,1	172,1	155,4
Cash turnover	3,4	4,2	4,5
DOS Held in Cash	106,0	87,9	80,2

Liquidity Ratio	2023A	2024E	2025E
Current Ratio	1,19	1,19	1,20
Quick Ratio	1,06	1,06	1,07
OCF to Current Liability	0,47	0,41	0,45

CAGR	15Y	10Y	5Y
Revenues	22,26%	23,74%	24,11%
Net Profit	35,55%	37,39%	30,83%



## Company: Fortinet

### Fortinet stock is a Buy

Current price: \$82.92 Price target: \$80.02

#### Reason to buy:

Fortinet has demonstrated consistent revenue growth and increasing operating income

Fortinet maintains a conservative capital structure, with a low debt-to-equity ratio of 3.73% and interest coverage ratio of 75.50 shows that it can easily meet its debt obligations

Expected increase in value per share.

Fortinet consistently exceeded its estimated

#### Core competences:

Fortinet possesses core competencies in several key areas, particularly in network security technology. Its network security and firewall technology play a crucial role in the integration of the FortiGate firewall solution with security platforms like Fortinet Security Fabric, which provides a comprehensive, unified system of protection across various endpoints, networks, and cloud environments. This reduces the need for enterprises to purchase and maintain separate products to meet different security needs.

Fortinet is also a major player in optimizing network performance through ASIC technology, which offers AI-driven threat intelligence and cloud security. Additionally, Fortinet's ESG rating is BBB (Good).

#### Corporate Growth Are Sustainable:

Fortinet focuses on growing by developing its own technologies through R&D and innovation, especially in areas like

cybersecurity and network security. They also grow externally by making acquisitions and forming partnerships with other tech companies to expand their offerings. To fund this, they use their own cash flow and sometimes take on external financing, like debt, to support their strategies.

**Important issue of industry:**

The cybersecurity industry is facing several significant challenges. One of the main concerns is rising inflation, which might cause companies to cut back on their IT budgets, leading to reduced spending on cybersecurity solutions. Additionally, the industry's cyclical nature can create fluctuations in revenue and market instability.

On top of that, geopolitical issues, such as the Russia-Ukraine war and conflicts in the

Middle East, have increased the demand for cybersecurity services due to the rise in cyber threats. However, these tensions also bring difficulties, including trade restrictions and disruptions in supply chains. The situation between China and Taiwan, in particular, could greatly affect the global supply chain for tech products, making it harder to produce and distribute cybersecurity solutions.

**Key risk factors:**

Fortinet primarily faces several major risks (specific reasons will be discussed in the Risk section):

- Macroeconomic and Exchange Rate Risks
- Geopolitical Risks
- Industry Competition Risks
- Financial Risk

## **Company Overview:**

➤ **Key Business Areas**

- Fortinet generates revenue primarily through a combination of product sales, subscription-based services, and support contracts:
  - Secure Networking: Fortinet's secure networking solutions focus on integrating networking and security via products like firewalls, switches, and access points. FortiOS is Fortinet's unified operating system, enabling over 30 features across physical, virtual, cloud, or SaaS platforms, accelerated by Fortinet's proprietary ASIC technology. Key products include FortiGate, FortiSwitch, FortiAP, and FortiExtender.
  - SASE (Secure Access Service Edge): Fortinet's unified SASE solution supports secure access through firewalls, SD-WAN, and other features deployed either via the cloud or ASIC-based devices.
  - Security Operations (SecOps): Fortinet's SecOps solutions adhere to the NIST Cybersecurity Framework and accelerate detection and response through automation. Products include FortiAI, FortiSIEM, and FortiSOAR, among others.

### ➤ Business Model

Fortinet typically sells its security solutions to distributors who then sell to networking security-focused resellers, certain service providers, and managed security service providers (MSSPs). These intermediaries, in turn, sell to end customers or use Fortinet's products and services to provide hosted solutions to other enterprises. Occasionally, Fortinet also sells directly to large enterprise customers, large service providers, and major systems integrators. Additionally, Fortinet offers its software licenses and services via various cloud service provider platforms, both directly and through channel partners.

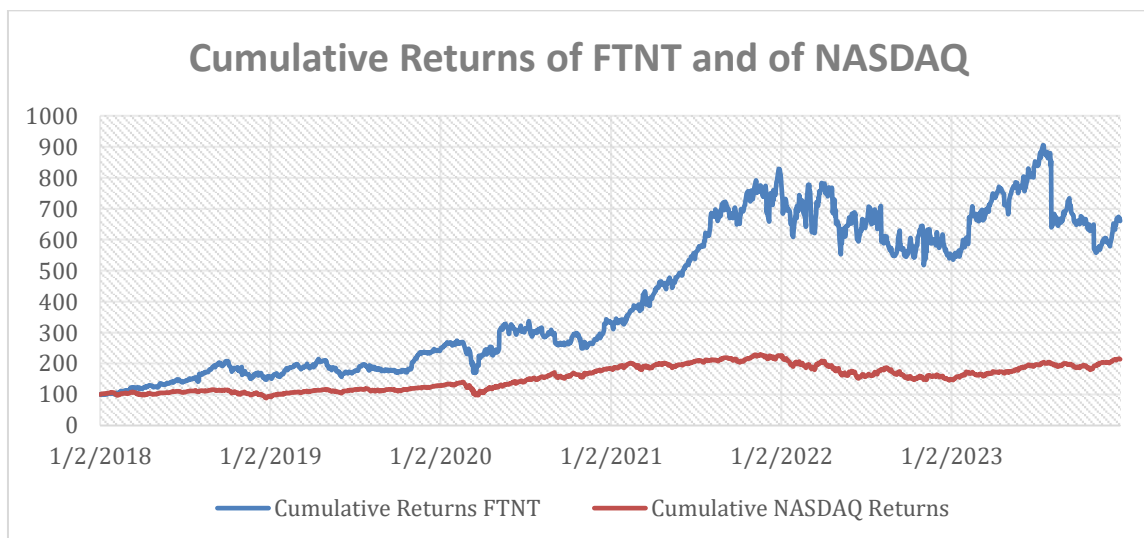
Fortinet also hosts its products in its own data centers, Points of Presence (PoPs), and through co-location with major cloud service providers like Amazon Web Services, Microsoft Azure, and Google Cloud. Furthermore, Fortinet generates revenue from customers who deploy its products through a bring-your-own-license (BYOL) arrangement with cloud service providers or private clouds. In a BYOL setup, the customer purchases a software license through Fortinet's channel partners and deploys the software in a cloud provider's environment, third-party clouds, or their private cloud.

### ➤ Manufacturing and Supply Chain

Fortinet outsources the manufacturing of its security appliances to contract manufacturers. About 95% of the hardware is made in Taiwan. It sources key components, such as ASICs, CPUs, and memory devices, from limited suppliers.'

### ➤ Performance

For the fiscal year ending December 31, 2023, Fortinet achieved \$5.3 billion in total revenue and \$1.15 billion in net income. Fortinet became a leader in the industry.



This table shows that if an investor had invested in purchasing Fortinet's stock in 2018, by 2023, the investor's assets could have quadrupled. This clearly demonstrates the company's

strong market performance and the growing confidence of investors in it. Additionally, this stock has consistently outperformed the market.

Here are some Financial Highlights:

- Total revenue was \$5.30 billion in 2023, an increase of 194% compared to \$1.80 billion in 2018.
- Total gross profit was \$4.07 billion in 2023, an increase of 200% compared to \$1.354 billion in 2018.
- Operating income was \$1.24 billion in 2023, an increase of 429% compared to \$234.4 million in 2018.

In the same time, As of December 31, 2023, Fortinet's total workforce was 13,568 employees worldwide, with the majority of research and development conducted in the U.S. and Canadas of which approximately 30% worked in the United States and approximately 70% worked outside the United States. Fortinet also has 1,299 issued U.S. and foreign patents and 252 pending U.S. and foreign patent applications.

#### ➤ **Conclusion (SWOT)**

This is just a summary; the specific reasons will be analyzed in detail in the following sections.

### **Strengths**

- Fortinet has shown consistent growth in revenue and operating income, mainly due to its innovative products and services. This growth strengthens its position in the cybersecurity market.
- The company is a leader in network security and firewall technology. Products like the AI-powered FortiGate firewall give Fortinet a significant competitive edge in the market.
- Fortinet maintains a low debt-to-equity ratio, showing that it manages its finances carefully. This financial stability helps the company withstand market fluctuations.

### **Weaknesses**

- Fortinet heavily relies on Taiwan for hardware production, with 95% of its hardware manufactured there. This dependency could be a risk if geopolitical issues, especially between China and Taiwan, disrupt the supply chain.
- The company has boosted its share price through stock buybacks, but this has reduced its cash reserves and increased financial leverage. This could be risky in the long term, especially in uncertain market conditions.

- While SASE (Secure Access Service Edge) is a growing market, Fortinet's solutions in this area have seen limited adoption, which could restrict its expansion in this segment.

### **Opportunities**

- With the rise in cyberattacks and the trend towards remote work, global demand for cybersecurity solutions is increasing. This trend gives Fortinet the chance to expand further.
- Fortinet has opportunities to grow in regions like the Middle East, Europe, and Asia, where demand for cybersecurity is rising due to geopolitical tensions and digital transformation.
- Fortinet's investments in cloud security and new technologies, such as through acquisitions, offer it additional market opportunities and could increase its market share.

### **Threats**

- Global instability, like the Russia-Ukraine conflict and issues in the Middle East, increases cybersecurity needs but also brings risks like trade restrictions and supply chain disruptions.
- The cybersecurity industry is highly competitive, with major players like Cisco and Palo Alto Networks constantly innovating. Fortinet must keep investing in R&D to stay competitive, or it risks losing market share to these rivals.

## **Industry Analysis**

Investment in cyber-resilience remained a top priority for organizations in 2023 as threat levels continued to rise. Overall, the global cybersecurity market size was valued at USD 172.24 billion in 2023. This market is projected to grow from USD 193.73 billion in 2024 to USD 562.72 billion by 2032, exhibiting a CAGR of 14.3% during the forecast period, despite ongoing macroeconomic uncertainty and constrained IT budgets.

### **➤ Porter's five forces model**

- **Supplier Bargaining Power (4/5):** The bargaining power of suppliers in the cybersecurity industry is high. For example, several of Fortinet's core products, such as FortiGate, rely on specialized hardware components like NPUs and CPUs. These products depend on semiconductors and other hardware, which are crucial for the company's offerings. Given the high barriers to entry in the semiconductor industry and the global demand across various sectors, the company faces potential price increases and supply chain disruptions. This could impact costs and profit margins.

- **Buyer Bargaining Power (4/5):** The buyers in this industry are primarily large enterprises and governments, with high order volumes, giving them strong bargaining power. With numerous cybersecurity vendors to choose from, such as Cisco, Palo Alto Networks, and Check Point, buyers can leverage these competing solutions to drive prices down.
- **Threat of New Entrants (2/5):** The threat of new entrants in the cybersecurity market is relatively low due to the significant R&D investment required and the high entry barriers for cybersecurity solutions.
- **Threat of Substitutes (1/5):** The threat of substitutes for Fortinet's solutions is low. Cybersecurity is essential for protecting company data and infrastructure, and there are few viable alternatives to complex security systems.
- **Industry Competition (5/5):** Competition in the cybersecurity field is very intense. As more companies migrate to the cloud, they must continuously increase their research investments to avoid being outpaced in the market. Major players such as Cisco, Palo Alto Networks, and Trend Micro are engaged in an arms race.

## **Historical Financial Performance Analysis and Forecast**

### **1. Income Statement Analysis**

#### **➤ Historical Income and Cost Analysis**

Fortinet's total revenue in 2023 increased by 20% compared to 2022, reaching \$5.3 billion.

<b>Annually</b>	<b>2020</b>	<b>2021</b>	<b>2022</b>	<b>2023</b>	<b>CAGR</b>
Product	916,4	1255	1780,5	1927,3	<b>28,12%</b>
<b>Change Ratio</b>	<b>35,3%</b>	<b>37,6%</b>	<b>40,3%</b>	<b>36,3%</b>	
Service	1678	2087,2	2636,9	3377,5	<b>26,26%</b>
<b>Change Ratio</b>	<b>64,7%</b>	<b>62,4%</b>	<b>59,7%</b>	<b>63,7%</b>	
<b>Total Revenue</b>	<b>2594,4</b>	<b>3342,2</b>	<b>4417,4</b>	<b>5304,8</b>	<b>26,92%</b>
Product	352,4	487,7	691,3	763,6	
Service	217,6	295,3	393,6	473,6	
<b>COGS</b>	<b>570</b>	<b>783</b>	<b>1084,9</b>	<b>1237,2</b>	<b>29,48%</b>
Product	564	767,3	1089,2	1163,7	<b>27,31%</b>
<b>Gross Profit Ratio of Product</b>	<b>61,5%</b>	<b>61,1%</b>	<b>61,2%</b>	<b>60,4%</b>	
Service	1460,4	1791,9	2243,3	2903,9	<b>25,75%</b>
<b>Gross Profit Ratio of Service</b>	<b>87,0%</b>	<b>85,9%</b>	<b>85,1%</b>	<b>86,0%</b>	
<b>Gross Profit</b>	<b>2024,4</b>	<b>2559,2</b>	<b>3332,5</b>	<b>4067,6</b>	<b>26,19%</b>

Based on this table and Fortinet's annual report, it can be concluded that the growth in service revenue is the core driver of Fortinet's current business expansion, particularly the significant growth of FortiGuard security subscription services and other related security services. The growth rate of 26.26% indicates a strong market demand for Fortinet's subscription-based cybersecurity solutions (as reflected in the revenue by region table below).

Therefore, the company's revenue growth is primarily driven by the following two factors:

#### **Internal Factors:**

- Fortinet has combined its own development strategy with the "black swan" event of COVID-19, continuously innovating and optimizing its products. For example, the company has significantly increased R&D investment over the past few years, from \$225.9 million in 2018 to \$576.0 million in 2023. This investment in R&D has enhanced the company's technological advantage, enabling its cybersecurity products to meet the increasingly complex security needs, especially in the context of remote work and distributed working environments.

OPERATING PERFORMANCE:	2019	2020	2021	2022	2023
Gross Profit / Revenues	76,6%	78,0%	76,6%	75,4%	76,7%

- The company is actively transforming towards selling services rather than physical products. The revenue growth driven by service income has become the core driver of Fortinet's current business expansion, particularly with the notable growth of FortiGuard security subscription services and other related security services. This subscription model not only increases recurring revenue but also improves the stability of Fortinet's income, provides greater financial flexibility, and enhances the company's gross profit margin (the gross profit margin of service revenue is over 85%). In 2023, product revenue accounted for 36.33%, while service revenue rose to 63.67%. This shift not only diversified the revenue stream but also significantly improved the company's overall gross profit margin. The gross profit margin of service revenue reached 86%, higher than the 60.4% for product revenue. From a financial perspective, the high gross margin of the service business directly boosts the overall gross profit margin of the company, helping it maintain competitiveness in the market.

#### **External Factors:**

- With the increasing number and complexity of global cyberattacks, especially during the pandemic, more enterprises and government organizations require stronger cybersecurity protection. This trend has driven demand for Fortinet's products, particularly with the widespread adoption of distributed work and cloud computing. Notably, the company's gross profit margin reached its highest level in 2020, thanks to COVID-19. Due to reduced travel for employees in most countries and the cancellation, postponement, or transition of in-person sales and marketing activities to virtual formats, travel expenses significantly decreased.

Therefore, by considering the previous table of cumulative returns for FTNT and NASDAQ, it can be seen that after the pandemic, the company's market value has increased significantly.

Revenues by Segment	2021	2022	2023
<b>Americas:</b>	<b>1358,8</b>	<b>1785</b>	<b>2175,2</b>
Growth rates		31,4%	21,9%
Contribution	40,7%	40,4%	41,0%
<b>Europe, Middle East and Africa</b>	<b>1275,9</b>	<b>1691</b>	<b>2072,9</b>
Growth rates		32,5%	22,6%
Contribution	38,18%	38,29%	39,08%
<b>Asia Pacific</b>	<b>707,5</b>	<b>940,6</b>	<b>1056,7</b>
Growth rates		32,9%	12,3%
Contribution	21,2%	21,3%	19,9%
<b>Revenues</b>	<b>3342,2</b>	<b>4416,6</b>	<b>5304,8</b>
Growth rates		<b>32,1%</b>	<b>20,1%</b>

This table reflects another internal factor: Fortinet has strengthened its global market expansion, particularly its penetration into large enterprises and emerging markets.

The largest contribution came from the Americas, which is the result of the significant appreciation of the U.S. dollar and strong growth in subscription services and product revenue. Additionally, EMEA contributed the largest percentage increase, thanks to strong demand for Fortinet's security products and services. The growth in this region can be attributed to geopolitical instability, especially the heightened security concerns due to the Russia-Ukraine conflict, as well as the digital transformation efforts across various industries in Europe and the Middle East.

Year	2018	2019	2020	2021	2022	2023
Capital expenditure to revenue ratio	2,94%	4,26%	4,85%	8,85%	6,37%	3,85%
Rate of Change		45,14%	13,85%	82,44%	-28,10%	-39,56%
Net CAPEX	\$ 53,0	\$ 92,2	\$ 125,9	\$ 295,9	\$ 281,2	\$ 204,1

This ratio has continued to decrease after COVID-19, indicating that the company's dependence on fixed assets has diminished, as this model typically requires less support from physical equipment. This further supports the aforementioned point: the company has caught up with the trend and is gradually shifting its revenue structure from traditional hardware sales to higher-margin services and software, demonstrating a reduced reliance on fixed assets. Therefore, I believe that the reduction in capital expenditures is the result of the company optimizing resource allocation, which helps alleviate cash flow pressure while supporting future business growth.

Year	2018	2019	2020	2021	2022	2023
Asset	3078,00	3879,20	4044,50	5919,10	6228,00	7258,90
Rate of Change		<b>26,0%</b>	<b>4,3%</b>	<b>46,3%</b>	<b>5,2%</b>	<b>16,6%</b>
Equity	1010,20	1342,40	856,00	798,40	-281,60	-463,40
Rate of Change		<b>32,9%</b>	<b>-36,2%</b>	<b>-6,7%</b>	<b>-135,3%</b>	<b>64,6%</b>
Net Income	334,90	331,70	488,50	606,70	856,60	1147,80
Rate of Change		<b>-1,0%</b>	<b>47,3%</b>	<b>24,2%</b>	<b>41,2%</b>	<b>34,0%</b>
ROA		0,10	0,13	0,13	0,16	0,18
Rate of Change			<b>33,0%</b>	<b>-2,7%</b>	<b>22,3%</b>	<b>15,3%</b>



The table shows that the company's ROA has generally achieved growth, which reflects improvements in its financial management and asset utilization. After reading the company's annual report, it can be concluded that on the one hand, as mentioned earlier, the company's net profit margin is steadily increasing. On the other hand, it relies on Fortinet's global business operations and economies of scale in raw material production. For example, the company has outsourced approximately 95% of its hardware production to manufacturing partners located in Taiwan. By doing so, the company has optimized its manufacturing and logistics operations through outsourcing, thereby reducing costs and improving efficiency. Through these two aspects, the company has successfully increased the net profit generated per unit of assets.

### ➤ Explanation For Future Income and Cost

As global digital transformation accelerates, demand for cybersecurity products and services will continue to increase, expanding the market further. In particular, with the widespread adoption of remote work, the surge in IoT devices, and the growing use of cloud computing, companies will need better security solutions. These trends have driven Fortinet's core product sales growth. However, competition in this market will intensify, and revenue may not sustain the previous annual growth rate of 27%.

Revenues by Segment	Year +1	Year +2	Year +3	Year +4	Year +5	Year+6
<b>Americas:</b>	<b>2392,7</b>	<b>2703,8</b>	<b>3109,3</b>	<b>3637,9</b>	<b>4329,1</b>	<b>5238,3</b>
Growth rates	10,0%	13,0%	15,0%	17,0%	19,0%	21,0%
Contribution	40,4%	40,1%	39,7%	39,4%	39,0%	38,7%
<b>Europe, Middle East and Africa</b>	<b>2363,1</b>	<b>2741,2</b>	<b>3234,6</b>	<b>3881,5</b>	<b>4735,5</b>	<b>5872,0</b>
Growth rates	14,0%	16,0%	18,0%	20,0%	22,0%	24,0%
Contribution	39,9%	40,6%	41,3%	42,0%	42,7%	43,3%
<b>Asia Pacific</b>	<b>1162,4</b>	<b>1301,9</b>	<b>1484,1</b>	<b>1721,6</b>	<b>2031,5</b>	<b>2437,7</b>
Growth rates	10,0%	12,0%	14,0%	16,0%	18,0%	20,0%
Contribution	19,6%	19,3%	19,0%	18,6%	18,3%	18,0%
<b>Revenues</b>	<b>5918,2</b>	<b>6746,8</b>	<b>7828,1</b>	<b>9241,0</b>	<b>11096,1</b>	<b>13548,0</b>
Growth rates	11,6%	14,0%	16,0%	18,1%	20,1%	22,1%

Forecasting revenue growth by region, the weakening of the U.S. dollar would be a significant boost for Fortinet's product exports. In the future, revenue from the EMEA region is expected to grow faster and account for a larger share, primarily due to geopolitical instability, particularly the Russia-Ukraine conflict and security concerns in the Middle East. These factors are prompting governments and enterprises to increase their investment in cybersecurity. Additionally, digital transformation efforts in the Middle East and Europe are driving demand for Fortinet's products and services. The growth rate in the **Asia-Pacific region may be slightly lower than in the Americas and EMEA**. As for the Americas, **revenue growth is expected to maintain current levels**.

Year	Year +1	Year +2	Year +3	Year +4	Year +5	Year +6
<b>Revenues</b>	<b>5918,2</b>	<b>6746,8</b>	<b>7828,1</b>	<b>9241,0</b>	<b>11096,1</b>	<b>13548,0</b>
Cost of goods sold	-1242,8	-1416,8	-1565,6	-1755,8	-1997,3	-2438,6
Common size	21%	21%	20%	19%	18%	18%
<b>Gross Profit</b>	<b>4675,4</b>	<b>5330,0</b>	<b>6262,5</b>	<b>7485,2</b>	<b>9098,8</b>	<b>11109,4</b>
<b>Gross Profit / Revenues</b>	<b>79%</b>	<b>79%</b>	<b>80%</b>	<b>81%</b>	<b>82%</b>	<b>82%</b>
Research and Development	-645,1	-735,4	-853,3	-1007,3	-1209,5	-1476,7
common size	11%	11%	11%	11%	11%	11%

The company will intensify its global market expansion and penetration efforts to capture more market share. And rising supply chain costs and labor expenses may put pressure on Fortinet's COGS. Those will increase the company's COGS, and it is assumed that COGS will account for 21% of revenue in the first two years. After that, this percentage is expected to decline due to market saturation and the company's transition toward a service-based revenue structure, leading to higher gross margins (discussed after).

Additionally, the company must increase investment in R&D, as this is a highly competitive industry. Fortinet's R&D spending has consistently accounted for 11% of revenue, and this ratio is expected to remain stable or increase in the future to maintain competitiveness.

Since the company will continue its transition to selling services rather than physical products, service revenue is highly predictable and sustainable, particularly due to Fortinet's high customer renewal rate and an increase in long-term contracts. The company expects service revenue to account for 68% of total revenue in 2024, with a projected annual growth rate of 3%. In five years, this share could rise to around 75%. Because service revenue has higher margins, the company expects its overall gross margin to increase, with a 79.0%-80.0% margin forecast for 2024, and ultimately stabilize between 83%-85%.

## **2. M&A Activities**

Fortinet's revenue growth over the past six years, as previously analyzed, has been driven by product innovation and global market expansion, particularly with the increasing demand for cybersecurity solutions in distributed work environments. Through its R&D investments and product optimization, Fortinet has introduced security solutions that are well-suited to current market needs, such as firewalls, SD-WAN, and SASE products. The company has also actively transitioned to increase the share of service revenue in its total revenue.

Fortinet's mergers and acquisitions (M&A) activity strongly supports this conclusion. The company has expanded through a series of acquisitions, particularly in the areas of cloud security, AI-driven security solutions, and SASE:

- In 2018, Fortinet acquired Bradford Networks, a company specializing in access control and IoT security. Later, Fortinet also acquired ZoneFox, a threat analysis company, to enhance its capabilities in data protection and threat detection.

- In 2019, Fortinet further expanded its cybersecurity capabilities by acquiring enSilo and CyberSponse, strengthening its endpoint security and security incident automation management, respectively.
- In 2020, Fortinet acquired OPAQ Networks, a cloud provider focused on SASE (Secure Access Service Edge), marking an important step in its expansion into the SASE market. That same year, they also acquired Panopta, an automated incident management company.
- In 2021, Fortinet purchased 75% of Alaxala Networks, expanding its market share in Japan, and also acquired Sken. Ai, a company specializing in application security testing.
- In 2024, Fortinet completed two major acquisitions: Lacework and Next DLP. Lacework, an AI-based cloud-native application protection platform, will be integrated into Fortinet's security platform to offer more comprehensive cloud security solutions. Next DLP, focused on data protection and insider risk management, will help Fortinet further enhance its SASE and endpoint security product lines.

The company subsequently integrated the technologies and products from these acquisitions into its own offerings. For example, nearly all of the acquisitions have been incorporated into Fortinet's core Security Fabric, a platform that provides comprehensive security solutions for networks and cloud environments.

In addition, company strengthened its SASE solutions through these acquisitions, particularly in the context of remote work environments and multi-cloud architectures. This has enabled Fortinet to offer customers unified security protection from endpoints to the cloud. These efforts have not only increased the share of service revenue but also boosted the overall competitiveness of Fortinet's products.

### **3. Balance Sheet Analysis and debt structure**

#### **➤ Asset**

Assets	2018	2019	2020	2021	2022	2023
Cash and cash equivalents	1112,4	1222,5	1061,8	1319,1	1682,9	1397,9
Accounts and notes receivable - net	444,5	544,3	720	807,7	1261,7	1402
Inventories	90	117,9	139,8	175,8	264,6	484,8
Property, plant, and equipment - at cost	36,8	41,2	43,3	65,4	73,1	101,1
<b>Total Assets</b>	<b>3078</b>	<b>3879,2</b>	<b>4044,5</b>	<b>5919,1</b>	<b>6228</b>	<b>7258,9</b>

The company's assets have increased year by year, but this doesn't necessarily mean it's a good thing. Let's analyze these four items:

**Cash and Cash Equivalents:** In 2023, this decreased from \$1.6829 billion in 2022 to \$1.3979 billion, indicating a decline in the company's cash flow. This was mainly due to strategic investments and acquisitions, particularly in the cybersecurity and cloud security sectors

(see M&A Activity). Additionally, the company spent a significant amount on stock buybacks. In 2023, Fortinet repurchased 16.8 million shares of common stock at an average price of \$53.29 per share, totalling \$895 million. In January 2024, the board approved an additional \$500 million for stock repurchases, bringing the available repurchase amount to \$1.03 billion by February 2024.

Property, Plant, and Equipment (PP&E): The CAGR of 29.61% reflects continuous investment in infrastructure and equipment, as the company expands its production capacity.

Assets:	Year + 1	Year + 2	Year + 3	Year + 4	Year + 5	Year + 6
Cash and cash equivalents	1453,8	1512,0	1572,4	1635,3	1700,8	1768,8
Accounts and notes receivable - net	1444,1	1487,4	1532,0	1578,0	1625,3	1674,1
Inventories	499,3	514,3	529,8	545,6	562,0	578,9
Property, plant, and equipment - at cost	1566,9	1707,7	1824,6	1921,7	2002,4	2062,4
<b>Total Assets</b>	<b>7490,9</b>	<b>7688,3</b>	<b>7858,4</b>	<b>8007,1</b>	<b>7710,2</b>	<b>7958,5</b>

### Prediction Based on Historical Data:

Although the company's revenue is expected to increase, Fortinet will likely continue to spend a significant amount of cash on stock buybacks. As a result, the company's cash reserves will not grow substantially, so I am projecting a 4% growth rate for cash.

Regarding accounts receivable, as the company is actively transitioning to a subscription-based model, service revenue will account for a larger portion of total income. Since service revenue often involves subscription payments, the accounts receivable balance is not expected to rise sharply, so I set a 3% growth rate for this item.

The company's inventory is not expected to increase significantly, as Fortinet was negatively impacted by excess inventory in 2023. Additionally, with the company's ongoing transformation, it is unlikely to purchase large amounts of inventory in the near future.

As for Property, Plant, and Equipment (PP&E), Fortinet does not currently need to expand its production capacity. The company will likely only need to purchase more servers to support the maintenance of its subscription services, so the growth rate for this item is expected to remain modest.

### ➤ Liability

Accrued liabilities and accrued payroll and compensation increased from \$98.4 million in 2018 to \$242.3 million in 2023. This likely indicates rising employee-related costs, driven by business growth or expanded business activities. As stated in the annual report, the company has been scaling up and increasing its employee headcount, with plans to hire more employees in the future.

Deferred revenue grew from \$965.9 million in 2018 to \$2.8487 billion in 2023, with significant growth during the COVID-19 period. This indicates a continuous increase in

revenue that the company has yet to earn, corroborating the growth of its subscription-based services.

Debt Issues and Maturities:	Face Value Amounts	Proportion of Total	Effective Interest Rates	Weighted Average Interest Rates	Date of Maturity
2026 Senior Notes	\$ 500,0	50,4%	1,300%	0,6550%	15/03/2026
2031 Senior Notes	\$ 500,0	50,4%	2,300%	1,1589%	15/03/2031
Unamortized discount and debt issuance costs	\$ (7,7)				
<b>Totals</b>	<b>\$ 992,3</b>	<b>100%</b>		<b>1,8140%</b>	
Weighted Average Interest Rate Used in Forecasts:				<b>1,8140%</b>	

The company's long-term debt has increased after 2021. This table above represents all the debt issued at their maturities in 2023, The reason for this is that the company has engaged in substantial stock buybacks, which will be discussed in detail below.

## ➤ Equity

In 2018, the company's net assets grew from \$1,010.2 million to \$1,342.4 million in 2019, but then sharply declined, turning negative in 2022 and 2023, reaching -\$281.6 million and -\$463.4 million, respectively. This phenomenon is primarily due to the company's substantial stock buybacks, with the repurchase amount reaching \$1,500.5 million in 2023, returning capital to shareholders. The company is even expected to expand its stock buyback program in the future. As of January 2024, the board of directors approved a \$500 million increase in the authorized stock repurchase amount, bringing the total authorized amount to \$7.25 billion. Additionally, in February 2024, the board extended the repurchase program to February 28, 2025. The company cancelled all repurchased shares after the repurchase.

Since the company does not pay dividends, this approach can be seen as returning capital to shareholders through the stock repurchase plan. This strategy increases EPS by reducing the number of outstanding shares, but at the same time, it reduces the company's retained earnings. This also explains why the company's long-term debt rose rapidly in 2021, as it became more reliant on external financing to support business expansion and daily operations, thus increasing financial leverage.

## ➤ Debt Structure

	2019	2020	2021	2022	2023	Year +1	Year +2	Year +3	Year +4	Year +5	Year +6
Debt-to-Asset	0,00	0,00	0,17	0,16	0,14	0,14	0,14	0,15	0,15	0,16	0,16
Debt-to-Equity	0,00	0,00	1,24	-3,52	-2,14	-2,65	-3,02	-3,15	-3,05	-1,44	-1,47
Long term Debt	0	0	988	990	992	1042	1094	1149	1206	1266,45	1304,45
Total Debt	0	0	988	990	992	1042	1094	1149	1206	1266,45	1304,45
Asset	3879	4045	5919	6228	7259	7491	7688	7858	8007	7710,20	7958,52
Equity	1010	1342	856	798	-282	-393	-362	-365	-396	-878,59	-887,94

Since 2021, Fortinet's debt-to-asset ratio has risen from 0.00% to 0.17%, indicating that the company has shifted towards debt financing. As mentioned earlier, this shift is due to changes in the company's financing structure, moving partly from equity financing to debt financing. By increasing liabilities, the company can support capital expansion and operations. However, because the company faces various risks—particularly liquidity risks caused by significant stock buybacks with cash—it is unlikely to take on a large amount of debt. Given the earlier analysis suggesting that the company's assets will continue to grow, the debt-to-asset ratio may even slightly decline.

After 2022, the debt-to-equity ratio turned negative. This is typically caused by significant stock buybacks, which reduce shareholder equity. As stock buybacks decrease the company's equity, the debt-to-equity ratio can fluctuate significantly and even become negative. If the company continues repurchasing stock, this ratio may remain negative. However, if the company slows down its buybacks and focuses on increasing shareholder equity, the ratio could return to positive territory, depending on the company's strategy.

Year	2021	2022	2023
<b>TIE RATIO</b>	43,3	53,6	58,9
Moody's Rating	Baa1	Baa1	Baa1
S&P's Rating	BBB+	BBB+	BBB+

Fortinet's Times Interest Earned (TIE) ratio has shown robust strength from 2018 to 2023, reflecting its high profitability and low debt burden. In 2022, the TIE ratio exceeded 50x, demonstrating excellent financial health. However, despite this kind performance, Fortinet's credit rating remains below the "A" category, primarily due to its aggressive stock buybacks. According to S&P, Fortinet could face a rating downgrade if it adopts a more aggressive financial strategy or increases leverage, keeping its adjusted net leverage ratio above 1.5x. According to Moody, If Fortinet were to adopt a more conservative financial policy, or reduce leverage, the rating could potentially improve in the future.

As a result, the company needs to reduce its debt levels or improve its capital structure by increasing equity to ensure financial stability and flexibility, thus avoiding this high-risk situation. If left unchecked, this high debt level could pose a threat to future growth and shareholder returns.

#### **4. Ratio Analysis**

<b>LIQUIDITY:</b>	<b>2 019</b>	<b>2 020</b>	<b>2 021</b>	<b>2 022</b>	<b>2 023</b>
Current Ratio	1,9	1,5	1,55	1,24	1,19
<b>Change Ratio</b>		<b>-21%</b>	<b>3%</b>	<b>-20%</b>	<b>-4%</b>
Quick Ratio	1,79	1,4	1,16	0,8	1,03
<b>Change Ratio</b>		<b>-22%</b>	<b>-17%</b>	<b>-31%</b>	<b>29%</b>
Days Receivables Held	83	89	83	85	92
<b>Change Ratio</b>		<b>7%</b>	<b>-6%</b>	<b>2%</b>	<b>7%</b>
Days Payables Held	62	73	65	61	56
<b>Change Ratio</b>		<b>17%</b>	<b>-12%</b>	<b>-6%</b>	<b>-8%</b>
Days Inventory Held	75	83	74	74	111
<b>Change Ratio</b>		<b>10%</b>	<b>-11%</b>	<b>1%</b>	<b>49%</b>

For the cybersecurity industry, according to the data, the average current ratio typically ranges from 1.60 to 1.83, and the quick ratio is generally around 1.76. This means that Fortinet's current ratio of 1.19 and quick ratio of 1.03 in 2023 are both below the industry average. This is mainly due to the following factors:

- **Stock repurchases:** Fortinet has been actively repurchasing its shares, which reduced its cash reserves and led to a decline in liquidity ratios. For example, in 2023, the company spent \$1.5 billion on stock repurchases.
- **Increasing Liabilities:** Due to the substantial stock repurchases, the company gradually used debt as a financing method. With the increase in accounts payable and accrued liabilities, this affects both the current and quick ratios.
- **Slow Inventory Turnover:** Although the current ratio increased by 0.2, the quick ratio did not improve, which also confirms the previously mentioned rise in inventory turnover, indicating slow inventory movement.

However, on the other hand, despite spending \$1.5 billion on stock buybacks in 2023, Fortinet still managed to maintain a strong cash position overall. Additionally, the quick ratio remained unchanged from 2022 to 2023, indicating solid liquidity management. Nevertheless, the company should remain cautious with its financial management to prevent potential liquidity shortages.

### ➤ **Turnover Ratios**

In 2023, Fortinet's operating cash flow reached \$1.9355 billion, marking continuous growth due to the company's transition to a subscription-based revenue model, which enhanced profitability. Since 2018, Fortinet's operating cash flow has steadily increased, showcasing the company's growing flexibility in meeting debt obligations and providing returns to shareholders through actions like stock buybacks.

Fortinet's accounts receivable turnover ratio was approximately 4.0, higher than Palo Alto Networks' 2.40. This reflects Fortinet's more efficient collection process within the industry. One key reason, as noted in financial reports, is Fortinet's reliance on a few major distributors, with six key distribution customers accounting for 70% of its total accounts receivable. This concentrated management allows Fortinet to monitor and manage credit risks effectively.

Additionally, as Fortinet increasingly adopts a subscription service model, the company benefits from more stable revenue streams and simplified payment collections, further improving its cash flow management efficiency. Subscription services often involve regular payments, reducing uncertainty in accounts receivable.

Fortinet's inventory turnover ratio increased significantly in 2023. The company's inventory primarily includes cybersecurity equipment such as FortiSwitch, FortiGate, and FortiAP devices. Due to macroeconomic factors, the network firewall market experienced a downturn, leading to a decline in hardware revenue for the first time since Fortinet's IPO. This slowdown caused the management to lower expectations for 2023 regarding billings and CAPEX. In this context, the rise in inventory turnover reflects pressure in its hardware business.

An increasing inventory turnover ratio could indicate the risk of inventory buildup, especially during periods of declining demand. This accumulation not only raises operating costs but also introduces the risk of future asset impairments. Fortinet must manage its inventory carefully to avoid further buildup and potential losses

While Fortinet maintains strong cash flow and accounts receivable turnover efficiency, the increase in its inventory turnover ratio signals challenges in the hardware segment. Additionally, stock buybacks and changes in the company's financing structure have reduced its liquidity. Moving forward, Fortinet must prioritize financial prudence and inventory management to mitigate risks during market volatility.

## **5. Guidance Quarterly and Full Year**

Full Year Guidance 2020-2023	2020	2021	2022	2023
Actual Revenue	2594,4	3342,2	4417,4	5304,8
Guidance from company	2525-2555	3025-3075	4275-4325	5370-5430
Actual Net Income	488,5	606,7	856,6	1147,8
Estimate diluted EPS	3,35	1,14	1,19	1,47
Actual diluted EPS	2,91	3,63	1,06	1,46
Beat or Miss	miss	beat	miss	miss

Quarterly Guidance	3Q23	4Q23	1Q24	2Q24	3Q24
Revenue	1330	1420	1350	1430	Expect: \$1445 - \$1505
Estimate diluted EPS	0,36	0,42-0,44	0,38	0,41	Expect \$0.50 and \$0.52
Actual diluted EPS	0,41	0,40	0,39	0,57	
Beat or Miss	beat	miss	beat	beat	beat

Despite missing full-year EPS guidance in some years (such as 2020 and 2023), Fortinet has a strong track record of exceeding revenue expectations in most years. In 2021, the company achieved robust revenue growth and surpassed its guidance. However, in 2023, due to inventory buildup, actual revenue came in lower than expected, which aligns with my earlier conclusions in the Turnover section.

From a quarterly perspective, Fortinet often exceeds both revenue and EPS estimates, with 4Q23 being the only quarter where EPS missed expectations.

Overall, Fortinet's management is highly capable of driving revenue growth and meeting targets, as evidenced by their ability to meet or exceed expectations in most quarters.

## **6. Snapshot of latest quarterly result and next quarter expectations**



Quarterly	3Q2024		
	1Q2024	2Q2024	(estimated)
Total Revenue	1350	1430	1445 - 1505
Operating income	321,2	437,2	447,95-466,55
Diluted EPS	0,39	0,57	0,56-0,58

- **Russia-Ukraine Conflict:** The Russia-Ukraine war significantly heightened global concerns about cybersecurity, driving increased demand for Fortinet's services. Governments and businesses have been working to strengthen their cybersecurity infrastructure in response to the rising risks of cyberattacks. As a result, within six months after the invasion, Fortinet's stock price rose (from \$57.76 to \$66.45), reflecting increased investor confidence in the company's growth potential during periods of geopolitical tension.
- **Rising Interest Rates:** The Federal Reserve's interest rate hikes had a widespread effect on tech stocks, causing some fluctuations in Fortinet's stock price. However, since Fortinet has a low reliance on debt, the company was not directly impacted by the rise in interest rates, unlike companies with higher leverage.
- **Economic Recession:** During times of economic uncertainty, Fortinet's stock increased rather than decreased. This is because cybersecurity is seen as an essential service. During an economic slowdown, companies aim to cut costs by increasing remote work, and businesses and governments continue to invest in cybersecurity solutions. As a result, Fortinet's revenue remained strong and continued to grow.

## Valuation

### ➤ Intrinsic valuation

Equity risk factor (market beta)	1
Risk free rate	3,74%
Market risk premium	4,60%
Required rate of return on common equity:	8,34%

Cost of Equity: Fortinet's cost of equity is 8.34%, based on the following factors:

- The stock's beta value is 1.
- The company is based in California, and using average data for the region and the U.S., the risk-free rate is 3.74%, and the market risk premium is 4.60%.

WACC computation:	2023
Rf	3,74%
beta	1,00
MRP	4,60%
Re	8,34%
E/EV	1,04
Rd	5,00%
D/EV	3,73%
Effective tax rate	13,84%
WACC	8,00%

In the cybersecurity industry, the average WACC for 2023 typically ranged between 6.5% and 9.5%, with a median of around 8.0%. Fortinet's WACC aligns with this median due to its conservative use of debt; its debt-to-asset ratio in 2023 remained at 0.13. This capital structure helps to mitigate financial risk. Changes in the capital markets, such as rising interest rates, have slightly increased both the cost of equity and debt. However, given Fortinet's low reliance on debt, its WACC remains primarily influenced by the cost of equity.

Free Cash Flows for Common Equity	Year +1	Year +2	Year +3	Year +4	Year +5	Year +6
Net Cash Flow from Operations	1 552,5	1 757,4	2 087,6	2 520,7	3 185,0	4 029,8
Decrease (Increase) in Cash Required for Operations	-55,9	-58,2	-60,5	-62,9	-65,4	-68,0
Net Cash Flow from Investing	-227,7	-200,7	-178,6	-160,7	-146,1	-127,5
Net CFs from Debt Financing	49,6	52,1	54,7	57,4	60,3	38,0
Net CFs into Financial Assets	0,0	0,0	0,0	0,0	0,0	0,0
Net CFs - Pref. Stock and Noncontrolling Interests	0,0	0,0	0,0	0,0	0,0	0,0
Free Cash Flow for Common Equity	1318,48	1550,63	1903,19	2354,55	3033,77	3872,23
Present Value Factors	0,923	0,852	0,786	0,726	0,670	0,618
Present Value Free Cash Flows	1 217,0	1 321,1	1 496,6	1 709,0	2 032,5	2 394,6
Sum of Present Value Free Cash Flows	10 170,8					
Present Value of Continuing Value	48 582,0					
Total	58 752,9					
Adjust to midyear discounting	1,042					
Total Present Value Free Cash Flows to Equity	61 202,9					
Shares Outstanding	763,0					
Estimated Value per Share	80,21					
Current share price	\$ 77,46					
Percent difference	4%					

The Discounted Cash Flow model indicates that Fortinet's current stock price is close to its intrinsic value, with some upward potential, though not significant. However, I believe it is still a good opportunity to buy the stock due to the company's solid capital structure and its leadership position in the industry. If the company stops stock buybacks and focuses on strengthening shareholder equity, this could improve its capital structure and provide greater upside potential for the stock price.

Thus, I suggest that if you already hold Fortinet's stock, it is advisable to continue holding it, as the company's market position is solid, its capital structure is healthy, and it has long-term growth potential. If the company stops its stock buybacks in the future, it may further enhance stock price performance. If you do not currently hold the stock, I recommend waiting for a while to observe any potential changes in the company's strategy (such as its stock buyback plan) before deciding whether to buy.

## ➤ Relative valuation

**ROIC:** Fortinet's ROIC is 41%, far exceeding its weighted average cost of capital (WACC) of 8.0%. This indicates that Fortinet's returns are significantly higher than its capital costs, reflecting efficient capital allocation and strong profitability.

**WACC:** Fortinet's WACC is 8.0%, reflecting its low reliance on debt. The large gap between ROIC and WACC shows that the company is creating significant value for shareholders.

**Debt-to-Equity Ratio:** Compared to competitors like Cisco (70.93%) and Palo Alto (27.28%), Fortinet's debt-to-equity ratio is very low, at 3.73%, indicating that the company primarily relies on equity financing. This low leverage reflects Fortinet's lower financial risk.

**Free Cash Flow Yield:** Fortinet's Free Cash Flow (FCF) yield stands at 2.49%, a healthy cash flow yield that indicates the company can continue funding operations and growth without increasing debt.

**Dividend Yield:** Currently, Fortinet does not pay dividends. However, competitors like Cisco have a dividend yield of 3.03%. Fortinet's strategy focuses more on growth and reinvestment, as well as stock buybacks and subsequent share cancellations, providing returns to shareholders through stock price appreciation rather than dividends.

COMP WORLD	Fortinet	Competitors			
		Palo Alto	Cisco	CrowdStrike	Check Point
Market Cap (million)	59670	111470	210510	71640	21330
Enterprise Value (million)	57410	110240	223620	68390	19670
Trailing P/E	46,16	47,03	20,77	423,54	26,79
Forward P/E	33,9	54,05	14,81	69,93	19,27
PEG Ratio (5 yr expected)	1,64	2,49	2,55	0,17	1,93
Price/Sales (ttm)	10,93	15,1	3,98	20,64	8,97
Price/Book (mrq)	207,05	21,56	4,63	25,11	7,54
Enterprise Value/Revenue	10,35	13,73	4,15	19,45	7,91
Enterprise Value/EBITDA	33,83	86,37	14,2	161,14	19,13
Beta (5Y Monthly)	1	1,13	0,82	1,1	0,62
52-Week Change <sup>3</sup>	0,3265	0,3265	0,3265	0,3265	0,3265
Forward Annual Dividend Yield <sup>4</sup>			1,6 (3,03%)		
Trailing Annual Dividend Yield <sup>3</sup>			1,58 (3,01%)		
Payout Ratio <sup>4</sup>			0,622		
Interest coverage ratio	75,50239234	206,8958333	13,1610338	135,318722	417,347826
Debt to Equity (net debt/total equity%)	3,7342	0,2728	0,7093	0,274	0,0127

Source: Yahoo Finance

## key valuation

- Fortinet's P/E ratio of 46.16 is quite high, but still lower than Palo Alto's 47.03 and far below CrowdStrike's extreme value of 423.54. In my view, this indicates that Fortinet's valuation is reasonable compared to its peers and not as overvalued as

CrowdStrike. The company's forward P/E ratio of 33.9 ranks third, highlighting Fortinet's strong growth potential and the market's confidence in it.

- Fortinet's P/S ratio of 10.93 is higher than Cisco's 3.98, suggesting that Fortinet is valued more highly in relation to its sales, reflecting greater growth potential. However, this ratio is far lower than CrowdStrike's 20.64, indicating that investors are willing to pay a higher price for Fortinet's revenue than for Cisco and Check Point, but not as high as for CrowdStrike, which aligns with the trend seen in the P/E ratios.
- Fortinet's EV/EBITDA ratio of 33.83 is significantly lower than CrowdStrike's 161.14, but much higher than Cisco's 14.2. This indicates that Fortinet is in a high-growth phase, and investors are willing to pay a premium for its earnings potential.
- Fortinet's debt-to-equity ratio of 373% is the highest, mainly due to its significant stock buybacks, which have resulted in negative equity.
- Fortinet's interest coverage ratio of 75.50 is very strong, indicating that the company can easily cover its interest expenses. Compared to competitors like Cisco (13.16), this shows that Fortinet has strong profitability and lower financial risk.

## **Risk Factors**

### **➤ Macroeconomic and Exchange Rate Risks**

Fortinet's valuation is influenced by global economic conditions.

- Rising interest rates: Fortinet has some long-term debt (amounting to \$992.3M in 2023), and as borrowing occurred during a period of rising U.S. interest rates, the cost of financing has increased. However, the recent drop in U.S. interest rates is favorable for the company, reducing its financing costs and improving its free cash flow and profitability. Changes in interest rates also affect Fortinet's discount rate, which can significantly impact its DCF valuation results. If discount rates continue to decrease, the company's current valuation will increase.
- Foreign exchange fluctuations: Fortinet operates globally, with revenues coming from multiple countries and regions, making its performance directly affected by currency fluctuations. In 2023, with the strengthening of the U.S. dollar, non-U.S. revenues may be adversely affected when converted back into dollars, and this can also impact the company's product exports overseas.
- Inflation and supply chain issues: In 2023, Fortinet has already faced challenges stemming from supply chain disruptions and an economic downturn. The annual report explicitly mentions plans to expand operations. If the macroeconomic environment worsens, it could lead to lower profit margins and liquidity issues for Fortinet.

➤ **Geopolitical Risks**

- Fortinet faces a significant issue as 95% of its hardware supply comes from Taiwan. The potential for conflict between China and Taiwan poses a major risk. If tensions escalate, the company's supply chain could suffer severe disruption.

➤ **Industry Competition Risks**

As mentioned in the Porter's Five Forces analysis, the industry is highly competitive.

- Technological innovation risks: The cybersecurity industry evolves rapidly, with competitors frequently introducing new products. If Fortinet fails to keep pace with technological changes or respond effectively to emerging threats, it risks losing market share. Although Fortinet made significant investments in R&D in 2023 (increasing R&D spending from \$225.9M in 2018 to \$576.0M in 2023, representing 12% of operating expenses), staying at the forefront of technology will require continued capital investment, which could impact its profitability and free cash flow. For example, in 2023, Palo Alto Networks spent approximately \$1.6 billion on R&D (around 35% of its operating expenses), underscoring the fierce competition in the industry.
- Pricing pressure: Due to intense competition, rivals may lower prices to capture market share, which could squeeze Fortinet's profit margins. In such a scenario, Fortinet must maintain its competitiveness while preserving high profitability, which may lead to revenue volatility.

➤ **Financial Risks**

Fortinet's capital structure and financial leverage could also impact its valuation, especially considering the company's large-scale stock buyback program.

- Debt and leverage risks: The company's debt-to-equity ratio increased significantly in 2023, with shareholders' equity turning negative. As emphasized earlier, Fortinet's extensive stock buybacks have led to short-term stock price appreciation but have also increased debt pressure. If the company's future cash flow falls short of expectations, its ability to service debt could be affected. The negative shareholders' equity makes Fortinet reliant on external financing, increasing financial leverage risk and potentially raising financing costs, which would compress future profits.
- Liquidity risks: While Fortinet's current cash flow situation is strong, its inventory turnover rate has been higher than the industry average, and its current ratio has been declining (from 1.8 in 2019 to 1.0 in 2023). Combined with the company's aggressive stock buyback program, liquidity is tightening. If Fortinet faces large-scale debt repayments or capital expenditures in the future, liquidity could come under pressure.

# APPENDIX

N°	HEADLINE	LINK
1	Fortinet Annual Report 2023	<a href="https://investor.fortinet.com/annual-reports-and-proxies/">https://investor.fortinet.com/annual-reports-and-proxies/</a>
2	Fortinet Annual Report 2022	<a href="https://investor.fortinet.com/annual-reports-and-proxies/">https://investor.fortinet.com/annual-reports-and-proxies/</a>
3	Fortinet Annual Report 2021	<a href="https://investor.fortinet.com/annual-reports-and-proxies/">https://investor.fortinet.com/annual-reports-and-proxies/</a>
4	Fortinet Annual Report 2020	<a href="https://investor.fortinet.com/annual-reports-and-proxies/">https://investor.fortinet.com/annual-reports-and-proxies/</a>
5	Fortinet Annual Report 2019	<a href="https://investor.fortinet.com/annual-reports-and-proxies/">https://investor.fortinet.com/annual-reports-and-proxies/</a>
6	Fortinet Annual Report 2018	<a href="https://investor.fortinet.com/annual-reports-and-proxies/">https://investor.fortinet.com/annual-reports-and-proxies/</a>
7	Fortinet Acquires ZoneFox	<a href="https://www.fortinet.com/products/fortinet-acquires-zonefox">https://www.fortinet.com/products/fortinet-acquires-zonefox</a>
8	Fortinet Acquires CyberSponse	<a href="https://www.fortinet.com/products/fortinet-acquires-cybersponse">https://www.fortinet.com/products/fortinet-acquires-cybersponse</a>
9	Fortinet Acquires OPAQ	<a href="https://www.fortinet.com/products/fortinet-acquires-opaq">https://www.fortinet.com/products/fortinet-acquires-opaq</a>
10	Fortinet Acquires Panopta	<a href="https://www.fortinet.com/products/fortinet-acquires-panopta">https://www.fortinet.com/products/fortinet-acquires-panopta</a>
11	enSilo is Now Fortinet FortiEDR	<a href="https://www.fortinet.com/products/fortinet-acquires-ensilo">https://www.fortinet.com/products/fortinet-acquires-ensilo</a>
12	Fortinet to Acquire Lacework	<a href="https://www.fortinet.com/corporate/about-us/newsroom/press-releases/2024/fortinet-to-acquire-lacework">https://www.fortinet.com/corporate/about-us/newsroom/press-releases/2024/fortinet-to-acquire-lacework</a>
13	PANW detail financial information	<a href="https://finance.yahoo.com/quote/PANW/">https://finance.yahoo.com/quote/PANW/</a>
14	CSCO detail financial information	<a href="https://finance.yahoo.com/quote/CSCO/">https://finance.yahoo.com/quote/CSCO/</a>
15	FTNT detail financial information	<a href="https://finance.yahoo.com/quote/FTNT/">https://finance.yahoo.com/quote/FTNT/</a>
16	CRWD detail financial information	<a href="https://finance.yahoo.com/quote/CRWD/">https://finance.yahoo.com/quote/CRWD/</a>
17	CHKP detail financial information	<a href="https://finance.yahoo.com/quote/CHKP/">https://finance.yahoo.com/quote/CHKP/</a>
18	Interest Coverage Ratio for Fortinet Inc	<a href="https://finbox.com/NASDAQGS:FTNT/explorer/interest_coverage/">https://finbox.com/NASDAQGS:FTNT/explorer/interest_coverage/</a>
19	Fortinet Inc. Assigned 'BBB+' Issuer Credit Rating; Outlook Stable	<a href="https://disclosure.spglobal.com/ratings/en/regulatory/article/-/view/type/HTML/id/2598719">https://disclosure.spglobal.com/ratings/en/regulatory/article/-/view/type/HTML/id/2598719</a>

## Income statement

INCOME STATEMENT										
	Actuals					Forecasts				
Year	2021	2022	2023	Year +1	Year +2	Year +3	Year +4	Year +5	Year +6	
Revenues	3 342,2	4 417,4	5 304,8	5 918,2	6 746,8	7 828,1	9 241,0	11 096,1	13 548,0	
<Purchased transportation>	-783	-1 085	-1 237	-1 243	-1 417	-1 566	-1 756	-1 997	-2 439	
Gross Profit	2 559,2	3 332,5	4 067,6	4 675,4	5 330,0	6 262,5	7 485,2	9 098,8	11 109,4	
<Research and Development>	-396,1	-477,6	-576,0	-645,1	-735,4	-853,3	-1007,3	-1209,5	-1476,7	
<Sles and Marketing>	-1317,6	-1651,3	-1968,2	-2071,4	-2361,4	-2739,8	-3234,4	-3883,6	-4000,1	
<Depreciation and Amortization>	-84,4	-104,3	-113,4	-131,1	-142,8	-152,6	-160,7	-175,3	-192,5	
<Selling, General and Administrative Expenses>	-115,4	-134,2	-173,5	-195,3	-222,6	-258,3	-305,0	-366,2	-377,2	
Other operating expenses (1)	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	
Other operating expenses (2)	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	
Income from equity investees	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	
Gain on intellectual property matter	4,6	4,6	4,6	5,9	6,7	7,8	9,2	11,1	13,5	
Operating Profit	650,4	969,6	1 241,1	1 638,5	1 874,5	2 266,3	2 787,2	3 075,3	4 676,4	
Interest income - NET	-10,4	-0,6	98,7	110,8	114,8	118,9	123,2	127,6	131,4	
Other expense - NET	-11,6	-13,5	-6,1	-18,5	-19,4	-20,3	-21,4	-22,4	-23,1	
Income <Loss> from equity affiliates	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	
Other income or gains <Other expenses or losses>	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	
Income before Tax	628	956	1 334	1 731	1 970	2 365	2 889	3 180	4 785	
Provision for (Benefit from) Income Taxes (+Benefit, - Provision)	-14,1	-30,8	-143,8	-294,2	-334,9	-402,0	-491,1	-540,7	-813,4	
Income <Loss> from discontinued operations (+Income, - Loss)	-7,6	-68,1	-42,1	-47,3	-54,0	-62,6	-73,9	-88,8	-108,4	
Extraordinary gains <losses>	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	
Net Income	606,7	856,6	1 147,8	1 389,3	1 581,0	1 900,2	2 323,9	2 551,0	3 862,9	
Less: Net loss attributable to non-controlling interestsm net of tax (- and loss = +)	0,1	0,7	0,0	0,0	0,0	0,0	0,0	0,0	0,0	
Net Income attributable to common shareholders	606,8	857,3	1 147,8	1 389,3	1 581,0	1 900,2	2 323,9	2 551,0	3 862,9	
Other comprehensive income (loss)	-5,4	-14,7	1,3	3,0	3,4	3,9	4,6	5,5	6,8	
Comprehensive Income	601,3	841,9	1 149,1	1 392,2	1 584,4	1 904,1	2 328,5	2 556,6	3 869,7	

## Balance Sheets

BALANCE SHEET										
	Actuals					Forecasts				
Year	2021	2022	2023	Year +1	Year +2	Year +3	Year +4	Year +5	Year +6	
ASSETS:										
Cash and cash equivalents	1319,1	1682,9	1397,9	1453,8	1512,0	1572,4	1635,3	1700,8	1768,8	
Short-term investments	1194,0	502,6	1021,5	1052,1	1083,7	1116,2	1149,7	1184,2	1219,7	
Accounts and notes receivable - net	807,7	1261,7	1402,0	1444,1	1487,4	1532,0	1578,0	1625,3	1674,1	
Inventories	175,8	264,6	484,8	499,3	514,3	529,8	545,6	562,0	578,9	
Prepaid expenses and other current assets	65,4	73,1	101,1	104,1	107,3	110,5	113,8	117,2	120,7	
Marketable equity securities	38,6	25,5	21,0	21,6	22,3	22,9	23,6	24,3	25,1	
Current Assets	3600,6	3810,4	4428,3	4575,1	4726,9	4883,8	5046,1	5213,8	5387,2	
Long-term investments	440,8	45,5	0,0	0,0	0,0	0,0	0,0	0,0	0,0	
Equity and cost investments	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	
Property, plant, and equipment - at cost	899,3	1178,7	1397,4	1566,9	1707,7	1824,6	1921,7	2002,4	2062,4	
<Accumulated depreciation>	-211,7	-280,2	-353,0	-491,0	-641,3	-801,9	-971,1	-1576,7	-1624,0	
Deferred Tax assets	342,3	569,4	868,8	894,9	921,7	949,4	977,8	1007,2	1037,4	
Other assets	659,1	720,2	755,6	778,3	801,6	825,7	850,4	875,9	902,2	
Other intangible assets - Net	63,6	56,0	35,3	36,4	37,4	38,6	39,7	40,9	42,2	
Goodwill	125,1	128,0	126,5	130,3	134,2	138,2	142,4	146,6	151,0	
Total Assets	5919,1	6228,0	7258,9	7490,9	7688,3	7858,4	8007,1	7710,2	7958,5	
LIABILITIES:										
Accounts payable	148,4	243,4	204,3	210,4	216,7	223,2	229,9	236,8	243,9	
Accrued liabilities	197,3	266,3	423,7	436,4	449,5	463,0	476,9	491,2	505,9	
Notes payable and short-term debt	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	
Current maturities of long-term debt	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	
Deferred tax liabilities - current	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	
Accrued payroll and compensation	195,0	219,4	242,3	249,6	257,1	264,8	272,7	280,9	289,3	
Income taxes payable	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	
Deferred revenue - current	1777,4	2349,3	2848,7	2934,2	3022,2	3112,9	3206,2	3302,4	3401,5	
Current Liabilities										
Long-term debt	988,4	990,4	992,3	1041,9	1094,0	1148,7	1206,1	1266,5	1304,4	
Long-term accrued liabilities	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	
Income taxes liabilities	79,5	67,8	0,0	0,0	0,0	0,0	0,0	0,0	0,0	
Other noncurrent liabilities (1)	59,2	82,0	124,7	124,7	124,7	124,7	124,7	124,7	128,4	
Deferred revenue - noncurrent	1675,5	2291,0	2886,3	2886,3	2886,3	2886,3	2886,3	2886,3	2972,9	
Total Liabilities	5120,7	6509,6	7722,3	7883,5	8050,5	8223,6	8402,9	8588,8	8846,5	
SHAREHOLDERS' EQUITY										
Preferred stock	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	
Common stock + Additional paid in capital	1254,4	1285,0	1417,2	1459,7	1503,5	1548,6	1595,1	1642,9	1692,2	
Accumulated retained earnings <deficit>	-467,9	-1546,4	-1861,7	-1833,4	-1846,8	-1894,9	-1972,0	-2502,6	-2568,0	
Accum. other comprehensive income <loss>	-4,8	-20,2	-18,9	-18,9	-18,9	-18,9	-18,9	-18,9	-12,1	
<Treasury stock> and other equity adjustments	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	
Total Common Shareholders' Equity	781,7	-281,6	-463,4	-392,6	-362,2	-365,2	-395,9	-878,6	-887,9	
Noncontrolling interests	16,7	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	
Total Equity	798,4	-281,6	-463,4	-392,6	-362,2	-365,2	-395,9	-878,6	-887,9	
Total Liabilities and Equities	5919,1	6228,0	7258,9	7490,9	7688,3	7858,4	8007,1	7710,2	7958,5	

## Cash-flow statement

STATEMENT OF CASH FLOWS		Actuals				Forecasts			
Year		2022	2023	Year +1	Year +2	Year +3	Year +4	Year +5	Year +6
<b>Net Income</b>		<b>856,60</b>	<b>1147,80</b>	<b>1389,27</b>	<b>1581,03</b>	<b>1900,18</b>	<b>2323,91</b>	<b>2551,03</b>	<b>3862,88</b>
Add back depreciation expense (net)		68,50	72,80	137,95	150,35	160,64	169,19	605,55	47,30
Add back amortization expense (net)		0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00
<Increase> Decrease in receivables - net		-454,00	-140,30	-42,06	-43,32	-44,62	-45,96	-47,34	-48,76
<Increase> Decrease in inventories		-88,80	-220,20	-14,54	-14,98	-15,43	-15,89	-16,37	-16,86
<Increase> Decrease in prepaid expenses		-7,70	-28,00	-3,03	-3,12	-3,22	-3,31	-3,41	-3,52
<Increase> Decrease in other current assets (1)		0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00
<Increase> Decrease in other current assets (2)		0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00
Increase <Decrease> in accounts payable - trade		95,00	-39,10	6,13	6,31	6,50	6,70	6,90	7,11
Increase <Decrease> in current accrued liabilities		69,00	157,40	12,71	13,09	13,49	13,89	14,31	14,74
Increase <Decrease> in insurance reserves		24,40	22,90	7,27	7,49	7,71	7,94	8,18	8,43
Increase <Decrease> in stored value card liabilities		0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00
Increase <Decrease> in other current liabilities (2)		571,90	499,40	85,46	88,02	90,67	93,39	96,19	99,07
Net change in deferred tax assets and liabilities		-225,70	-362,70	-26,69	-27,49	-28,32	-29,17	-30,04	-30,95
Increase <Decrease> in long-term accrued liabilities		0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00
Increase <Decrease> in other noncurrent liabilities (1)		22,80	42,70	0,00	0,00	0,00	0,00	0,00	3,74
Increase <Decrease> in other noncurrent liabilities (2)		615,50	595,30	0,00	0,00	0,00	0,00	0,00	86,59
<b>Net Cash Flows from Operations</b>		<b>1547,50</b>	<b>1748,00</b>	<b>1552,46</b>	<b>1757,37</b>	<b>2087,59</b>	<b>2520,68</b>	<b>3184,99</b>	<b>4029,77</b>
<Increase> Decrease in property, plant, & equip. at cost		-279,40	-218,70	-169,51	-140,78	-116,92	-97,10	-80,65	-60,07
<Increase> Decrease in short-term investments		691,40	-518,90	-30,65	-31,56	-32,51	-33,49	-34,49	-35,53
<Increase> Decrease in long-term investments		395,30	45,50	0,00	0,00	0,00	0,00	0,00	0,00
<Increase> Decrease in amortizable intangible assets (net)		7,60	20,70	-1,06	-1,09	-1,12	-1,16	-1,19	-1,23
<Increase> Decrease in goodwill and nonamort. intangibles		-2,90	1,50	-3,80	-3,91	-4,03	-4,15	-4,27	-4,40
<Increase> Decrease in other assets		-61,10	-35,40	-22,67	-23,35	-24,05	-24,77	-25,51	-26,28
<Increase> Decrease in other noncurrent assets (2)		0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00
<b>Net Cash Flows from Investing Activities</b>		<b>750,90</b>	<b>-705,30</b>	<b>-227,68</b>	<b>-200,69</b>	<b>-178,63</b>	<b>-160,67</b>	<b>-146,11</b>	<b>-127,50</b>
Increase <Decrease> in short-term debt		0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00
Increase <Decrease> in long-term debt		2,00	1,90	49,62	52,10	54,70	57,44	60,31	37,99
Increase <Decrease> in preferred stock		0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00
Increase <Decrease> in common stock + paid in capital		30,60	132,20	42,52	43,79	45,11	46,46	47,85	49,29
Increase <Decrease> in accum. OCI		-15,40	1,30	0,00	0,00	0,00	0,00	0,00	6,77
Increase <Decrease> in treasury stock and other equity adj.		0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00
Dividends and share repurchases		-1935,80	-1463,10	-1361,00	-1594,42	-1948,29	-2401,01	-3081,62	-3928,29
Increase <Decrease> in noncontrolling interests		-16,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00
<b>Net Cash Flows from Financing Activities</b>		<b>-1934,60</b>	<b>-1327,70</b>	<b>-1268,86</b>	<b>-1498,53</b>	<b>-1848,49</b>	<b>-2297,12</b>	<b>-2973,46</b>	<b>-3834,24</b>
<b>Net Change in Cash</b>		<b>363,80</b>	<b>-285,00</b>	<b>55,92</b>	<b>58,15</b>	<b>60,48</b>	<b>62,90</b>	<b>65,41</b>	<b>68,03</b>
<b>Cash and cash equivalents, beginning of year</b>		<b>1319,10</b>	<b>1682,90</b>	<b>1397,90</b>	<b>1453,82</b>	<b>1511,97</b>	<b>1572,45</b>	<b>1635,35</b>	<b>1700,76</b>
<b>Cash and cash equivalents, end of year</b>		<b>1682,90</b>	<b>1397,90</b>	<b>1453,82</b>	<b>1511,97</b>	<b>1572,45</b>	<b>1635,35</b>	<b>1700,76</b>	<b>1768,79</b>

# CAI ZONGHUAN

CFM Student at SKEMA Seeking a 6-Month End-of-Studies Internship in Paris, Starting in May

Tel : 06 60 63 35 28 E-mail : caizonghuan0801@gmail.com

## PROJECT EXPERIENCE

**BrandPro Business Simulation Competition - Information Director** **Oct. 2023 – Jan. 2024**

**Project Description:** Simulated a smartphone manufacturer with two products, A and B, competing against three major rivals, aiming to enhance professionalism, convenience, and affordability, increase market share, and improve company value

**Project Responsibilities:** Analyzed market trends and customer needs to adjust market positioning and product strategies. Reallocated resources from product A to enhance product B as the flagship for high-end markets, and managed the budget to support upgrades and expansion

**Project Outcomes:** After five rounds, performance improved significantly:

- ✓ Pre-tax income rose from \$1.3 million to \$4.1 million, a 215.38% increase
- ✓ Market share for Product A jumped from 6.2% to 53%, a 754.84% increase
- ✓ Market share for Product B climbed from 13.1% to 58%, a 342.75% increase

**Entrepreneurship Course Assessment - Data Search and Analysis** **Mar. 2024 – Apr. 2024**

**Project Description:** In response to the changing emotional needs of young people, our group initiated a company aimed at the untapped dating app market, intending to develop a platform akin to Tinder

**Project Responsibilities:** Analyzed industry dynamics and competitors like Tinder and Bumble to assess market entry. Utilized surveys and data analysis to comprehend user needs and develop competitive strategies. Collaboratively established product strategies and produced detailed reports and presentations

**Project Outcomes:** In three weeks, our team successfully simulated a dating app company, culminating in a comprehensive project report and presentation that received high praise from our instructor and a score of 16/20

## VOLUNTEER EXPERIENCE

**Clermont-Ferrand Chinese Student and Scholar Association – Volunteer** **Sep. 2019 – Sep. 2022**

**Services and Support:** Provided support to Chinese students and researchers in France, aiding in academic, cultural, and societal integration

**Event Support:** Handled event budgets and reported expenses clearly

## EDUCATION

**Master Degree:**

**SKEMA Business School, Suresnes | Corporate Financial Management** **Sep. 2023 - Jun. 2025**

Courses: Corporate Finance (20/20), Financial Analysis and Reporting (17.2/20), GPA 3.5/4

**Bachelor Degree:**

**University Paris Cité, Paris | Economics** **Sep. 2022 - Jun. 2023**

**University Clermont Auvergne, Clermont-Ferrand | Economics** **Sep. 2020 - Jun. 2022**

Courses: Macroeconomics (16.35/20) Microeconomics (17.25/20), Accounting (17.5/20)

## OTHER SKILLS AND INTERESTS

**Language:** Chinese (Native), French (DEL F B2), English (TOEIC 905)

**Skills:** Word, Excel, PowerPoint, Python

**Hobbies:** Basketball, Fitness, Reading, Traveling