

## **Table of contents**

Introduction	2
Company Overview	3
Industry Outlook	6
Macroeconomic Outlook	7
LBO Analysis	9
Transaction assumptions	9
Operational and capital markets assumptions	10
Core LBO Model	11
Equity returns schedule	12
Recommendation and Risks	13
References	15

### Introduction

With the current tight capital markets as a result of rising interest rates, a leveraged buyout (hereby referred to as LBO) is challenging. This is because banks and other institutions are less willing to provide loans, and the cost of debt has risen significantly. However, our analysts believe that there are still opportunities for such acquisition. This being said, we heavily emphasise on the importance of due diligence and quality analysis, in order to recommend our sponsors to put equity in the LBO.

Upon in-depth analysis of the markets, our analysts have recognized the potential for *Check Point Software Technologies* as a potential candidate. This American-Israeli multinational focused on software and combined hardware for IT security, our analysts believe in the opportunities of the industry, company and the long-term favourable correction of the valuation.

As such, this report will highlight the company, the industry, and finally, the investment thesis and LBO model. This report highlights the viable sponsor returns and the associated risks.

### Company overview

#### **Business model**

Check Point is a multinational provider of software security products for multiple industries based in California and Tel Aviv. Recent data states that the company has around 6000 employees worldwide and revenues are generated mostly in the Americas (45%) and Europe (43%). Their products are sold both B2B as well as B2C and are focused on cybersecurity, an industry with a compounded yearly growth rate of 10% (Check Point Technologies, 2019).

### **Business history**

Check Point started in 1993 and created one of the first VPNs. The focus on security software came from a founder that was working in the Israelian army. The company already had its first big contract in 1995 from HP. Check point has acquired 17 other software security businesses over the course of 24 years, including Nokia's network security business unit in 2009. As of now the firm has over 100,000 businesses and several millions of users as its clients. The company was at some point in the 90s leader in firewalls (Financial Times, 2022). Firewalls protect a company (physical building) against information from outside. Over the years Check Point lost this market leadership to others (Check Point Technologies, 2021).

### Services provided

Check Point states that they identify and prevent over 7,000 new never-before-seen attacks from compromising our customers' systems every day. They do this with 3 products: Quantum (used for network security), CloudGuard (used for securing the Cloud) and Harmony (used for remote user security). With these products all aspects of a system are protected, and Check Point states that they are the only company worldwide that provides all of this broad range of products (Check Point Technologies, 2021). This full coverage is also the main selling point they use.

#### **Key competitors** (Companies Market Cap, 2022)

Company	Headquarters	Valuation (\$) 2022	% of market (1) 2022	Times larger (2)	Revenue 2021 (\$) (3)	EBITDA 2021 (\$) (4)	Employees
Palo Alto	Santa Clara, CA, USA	50,1B	18,38%	3,1x	4,256B	0,455B	12,500
Fortinet	Sunnyvale, CA, USA	40,03B	14,69%	2,49x	3,342B	0,918B	12,000
CrowdStrike	Austin, TX, USA	25,94B	9,5%	1,6x	0,874B	0,015B	5,000
Zscaler	San Jose, CA, USA	18,16B	6,67%	1,12x	0,673B	-0,079B	5,000
Check Point	Tel Aviv, Israel	16,2B	5,94%	-	2,17B	0,959B	6,000

- (1) Total market cap of the IT Security industry is \$272,59B.
- (2) Based on market cap.
- (3) & (4) 2021 was chosen as not all companies disclosed enough information to present the numbers for 2022.

#### Industrial rival: Palo Alto vs Check Point

#### 1. Growth Strategy:

Palo Alto focused on revenue growth (25,4% average per year over 5 years) and spends around 50% of revenue on sales and marketing. The firm stated that it did almost 1900 7-figure deals in 2021, which could have given the revenue a good boost (although it's not disclosed what percentage of their total revenue came out of these deals). The firms' stock performed this well, even though their outstanding shares increased 8,4% over the last 5 years (0,273B to 0,296B). It can be concluded that Palo Alto's focus evolves most attention around top line growth.

Check Point, on the other hand, spends less than 25% of their revenue on sales and marketing. This could be a cause for their limited growth, which was only 5,26% average per year over 5 years. It is also estimated that Check Point only had around 600 7-figure deals in 2021. This limited growth in stock price is especially weird as Check Point has been buying back shares, resulting in a 22,62% decrease over the last 5 years (0,168B to 0,130B). It can thus be

concluded that Check Point sacrificed double digit revenue gains for a slow and more stable growth with less risk (Macotrends, 2022) (Robb, 2022).

#### 2. Product specialisation vs diversification

Palo Alto introduced its new XSIAM technology. This is a new malware attack resolution system that can resolve attacks in under 1 minute. This is groundbreaking, as most cybersecurity companies (including Palo Alto until recently) could take days to do this, meaning that they 'shut the door after the thief is already inside'. Experts expect this to be a big competitive advantage for Palo Alto in the future. It is clear that Palo Alto doubles down on its already existing market leadership in the firewall part of the industry.

Check Point is more focused on diversifying. It did not announce major new products and technologies regarding firewalls the last 3 years. The firm did however acquire Odo Security, which resulted in the launch of their Harmony product. As this product is more specialised in remote user security, it is clear that Check Point is focusing to offer a more diverse range of products (Ryan, 2021) (Cappuccino Finance, 2022).

#### 3. Customers

Palo Alto received the FEDRAMP status in 2021. This means that they can work with US federal agencies to protect their IoT devices. This seems like a logical development, as the company already works with other government agencies around the world. As it is expected for government agencies to increase demand substantially in the future, this can be very profitable for Palo Alto. Check Point on the other hand is just focused on businesses, and shows no sign of having an

check Point on the other hand is just focused on businesses, and shows no sign of having an interest in working together with governments. It is not sure if this is the case because there is simply no interest in doing this, or whether the Israelian government prohibits Check Point from doing so (2022 Unique Finance).

In short, it can be concluded that Palo Alto is more focused on revenue growth, specialisation in its main product and diversifying its target audience, while Check Point's financial strategy is more conservative, with an increased focus on diversifying its product offerings and keeping the same target audience.

### **Industry Outlook**

The security software industry is mainly comprised of four main sections; network security, internet security, endpoint security, cloud security and application security.

The industry represented a worldwide revenue of 60.88 billion dollars in 2021, an increase of 22.51% since 2020. Much of this success can be linked to remote working culture's implementation, growth and success. Companies implementing remote working, even after COVID-19, have faced great difficulties in assuring safe networks, as employees use their personal computers and network connections. These leave large targets on the back of the companies security and privacy, creating demand for security software companies and their service.

The market size of the cyber security industry is estimated to be 184.93 billion dollars, with an expected growth rate of 12% from 2022 to 2030. Industry growth can be associated with changes in company cultures, which have continued adopting hybrid (remote and in-office) working practices post-covid, seen in a 21% (29% to 50%) change in the number of workers with the option of working from the home.

The services segment of the industry accounts for more than 50% of overall revenue, and its growth is related to an increase in demand for consultation, maintenance and upgrade services. Meanwhile, artificial intelligence and hardware innovations are expected to lead the growth of the industry, due to increasing numbers of cyber attacks in recent years.

The rising security threat from cyber-attacks poses many problems for security companies and their clients while creating parallel demand. Cyber attacks were nearly double the numbers in 2022 compared to 2021, mainly including malware, password and phishing attacks, posing threats towards corporations and their privacy safety. This increases customer expectations for cyber security companies to rise above the attacks, putting pressure and challenge to come up with risk-free alternative services.

In addition to this, the industry is facing large talent shortages, with widening skill gaps. While the demand for cybersecurity software is increasing, companies are on the hunt for skilled IT workers. While there are an estimated 4.7 million professionals in the industry, the global shortage remains over 3.4 million workers in the field, in 2022 (Sydney Lake, 2022). According to Gartner, a technological research and consulting firm, a skilled IT workforce is the largest problem challenging the development of new technologies.

### **Macroeconomic Outlook**

While global inflation is on the rise and a recession is predicted to set sail in 2023 by 83% of organizations, companies continue to increase IT spending. The less-than-ideal economic predictions do not seem to have any effect on the demand for IT services, with 51% of companies planning to boost their spending, focusing on cyber security specifically. Meanwhile, inflationary pressures on IT spending should not be disregarded, as gasoline prices, and food and energy rise rates sit at a 40-year high. In order to help sustain growth for companies, budget deviations and reconsiderations on how to spend their money have taken place, with trends of reducing non-essential spending according to the Spiceworks Ziff Davis' 2023 State of IT survey. Companies were 30% to describe re-evaluating vendors and contracts, 29% decreasing infrastructure and 27% planning hiring freezes or slowdowns (Doug Bonderud, 2022). Despite interest rate reactions, there are anticipated increases in spending in 2023, with a focus on application security acquisition (24.7%), data privacy and security purchases (16.9%) and cloud security investment (26.8%).

The macroeconomic outlook can be reflected upon using the PESTEL analysis on the security software industry, more specifically regarding the Political and Technological aspects of the industry.

The political and legal aspect of the industry is one of the most prominent ones, due to regulations on the part of the government, with regard to security and data privacy. Due to the high frequency of cyber-attacks and their risks, all governments have some sort of cyber laws regarding cybercrime and cyber terrorism. In the United States, cyber-attacks have started to prominently target small businesses (SMBs) due to their low capacity to intervene or defend themselves. 58% of attacks targeted SMBs in 2018, with SMB employees receiving more dangerous emails than larger company employees (Ladeau J, 2019). In response, congress introduced the Small Business Development Center Cyber Training Act in 2019, which requires SMBs to hire certified cyber security counsellors to prevent and protect enterprises from such dangers (Ladeau J, 2019). This would as a goal push companies to hire more antivirus and firewall services, related to the recent legal responses, driving demand in the cybersecurity industry. In addition to the United States act, the European Union introduced the GDPR in 2016, regulating the processing of individual citizens' personal information by companies, organizations, and other individuals (GDPR, 2016).

Laws that require the application of special security and software services drive demand for cyber security companies worldwide, a key element which is built on trust and efficiency in the market.

The technological aspect of the cyber security industry is mainly driven by innovation, playing a large role in keeping up with customer expectations and demand. Through virtualisation, cloud and mobile computing, and the explosion of data use in the last ten years, cyber security has continued to innovate, with high market growth correlated. Innovation is a constant requirement for the industry to fight cybercrime, which is on its own growing its capabilities.

Regulations and innovation are two key drivers which have and will continue to lead growth in the cybersecurity industry. A market which is expected to grow to 317 billion dollars by 2027, registering a CAGR of 13.37% in the 2022-2027 forecasted period (Mordor, 2022)

### **LBO** Analysis

We will separate our LBO analysis into 4 parts: the transaction assumptions, the operational and capital markets assumptions, the LBO model and the equity returns summary. We ensured that this report will follow a similar procedure as taken by our analysts.

Our figures utilise USD millions unless stated otherwise.

### **Transaction assumptions**

Firstly, we created our entry assumptions. We assumed that our entry would occur on **December 31st, 2022**. This simplifies our LBO analysis as the fiscal year end of CHKP is on December 31st.

Our exit will take place within **5 years** as we believe that CHKP will yield satisfactory returns during this period.

Utilising Bloomberg Terminal which computes the average comparable company EV/EBITDA multiples, we subsequently selected our entry EV/EBITDA to be **18.00x**. For simplicity and conservatism, we will forecast an exit EV/EBITDA to also be **18.00x**. Using a 2022 partially forecasted EBITDA value of **\$865.16 million**, we obtain the following purchase price assumptions:

Enterprise Value	
Entry EV/EBITDA	18.00
2022 EBITDA	865.16
Enterprise Value	15,573
Equity Value	
Enterprise Value	15,573
Less: Total Debt	-
Plus: Cash	963
Equity Value	16,536
Shares Outstanding (million)	125.4
Offer US\$/Share	131.85
Current share price	126.93
Offer premium	4%

Provided this, our analysts built a 'sources and uses of cash schedule'.

Sources and Uses		
Sources of Cash	Multiple	Amount
Cash (Target)	1.1x	963
Revolving Credit Facility	0.9x	800
First Lien Term Loan A	5.5x	4,750
Second Lien Term Loan B	4.9x	4,250
Sponsor Equity	7.2x	6,200
Total Sources	19.6x	16,962
Use of Cash		Amount
Acquisition of Target Equity		16,536
Refinancing of Existing Debt		-
Debt Fiancing Fees		392
Advisory Costs		35
Total Uses		16,962

For the uses, our analysts expect a debt financing fee of 4% of total debt, and advisory costs 4% of the 2022 EBITDA. To fund the acquisition, we will rely on 5 sources of cash. Our debt instruments will be the revolving credit line (hereby referred to as RCL), the 5-year first lien term loan A (hereby referred to as loan A), and the 7-year second lien term loan B (hereby referred to as loan B) with a bullet maturity payment. Other sources will be the cash of target company and sponsor equity. The following are analyst expectations of the loan fees, coupon and amortisation assumptions:

Financing Assumptions					
Loan Fees and Coupon Assuptions					
Туре	Issuancd Fee %	Issuance Fee	Standby Fee %	Floating Coupon	Cash Sweep
Revolving Credit Facility	4%	32	2%	B+200bps	N/A
First Lien Term Loan A	4%	190	N/A	B+350bps	50%
Second Lien Term Loan B	4%	170	N/A	B+425bps	50%
Loan Amortization Assumptions					
Туре	Year 1	Year 2	Year 3	Year 4	Year 5
Revolving Credit Facility	N/A	N/A	N/A	N/A	N/A
First Lien Term Loan A	20%	20%	20%	20%	20%
Second Lien Term Loan B	1%	1%	1%	1%	1%

We avoided the utilisation of high-yield instruments such as junk bonds and even subordinated debts. Current capital markets make this an unfavourable option. This is also why our sponsor equity also represents 36% of the source for this transaction—a fairly high fraction for an LBO.

### Operational and capital markets assumptions

Following our transaction assumptions, our analysts focused on important operational inputs. As our team is focused on simplicity rather than complexity, it was our priority to simplify our assumptions. This means that most of our assumptions are based on the percentage of sales.

We emphasise that our 2022 Q4 income statement forecast was made separately, as we had sufficient information (from Q1 to Q3 and Q4 estimates) to make a fairly realistic forecast.

For the years from 2023 to 2027, to ensure that our fund will be aware of potentially varying future economic outlooks, we decided to implement 3 cases: bear, base and bull cases. Here are some underlying expectations in the 3 cases.

#### Base case

- Revenue growth is 2% below the average consensus CAGR of the cybersecurity sector
- Cost assumptions are in-line or slightly below historical outcomes
- Moderate deceleration of capital expenditures
- Moderately improving capital markets with SOFR rates peaking at **500 bps** (at 2023)
- Other assumptions in-line with historic trends

We expect revenue growth of CHKP to be slower than industry, as their relatively smaller market size (compared to its competitors) and clients tend to face large costs to change cybersecurity systems. Furthermore, we expect slower capital expenditures as interest rates are unfavourable in the current economic environment.

#### Bear case

- Revenue growth is 4% below the average consensus CAGR of the cybersecurity sector
- Cost assumptions are higher than historical outcomes
- Slower deceleration of capital expenditures
- Disappointing improvement of capital markets with SOFR rates peaking at **600 bps** (at 2023)
- Other assumptions better than historic trends

#### **Bull case**

- Revenue growth is in-line with the average consensus CAGR of the cybersecurity sector
- Cost assumptions are below historical outcomes
- Faster deceleration of capital expenditures
- Satisfactory improvement of capital markets with SOFR rates peaking at **400 bps** (at 2023)
- Other assumptions worse than historic trends

Based on these general assumptions, our analysts have built the model. The specific assumptions are included in our Appendix.

#### **Core LBO Model**

We present to you our simplified LBO model for base cases. Our model indicates that the company's net income is expected to grow fairly strongly. We expect inflation to subside slowly and the firm to be much more efficient as revenue expands. We also noticed a fairly healthy financing structure that ensures that a bulk of financing is gradually paid off.

Year	2022F	2023F	2024F	2025F	2026F	2027F
Total Revenue	2,299.00	2,436.94	2,607.53	2,868.28	3,212.47	3,630.09
Cost of Revenue	284.67	341.17	338.98	315.51	353.37	363.01
Gross Profit	2,014.33	2,095.77	2,268.55	2,552.77	2,859.10	3,267.08
Research & development	298.89	341.17	365.05	344.19	385.50	399.31
Selling and marketing	625.69	682.34	704.03	745.75	803.12	871.22
General and Administrative	74.04	87.73	93.87	97.52	109.22	123.42
Stock based compensatoin	138.36	146.22	153.84	172.10	199.17	235.96
Amort. of intangibles & acquisition expenses	25.08	24.37	26.08	28.68	32.12	36.30
EBIT	852.27	813.94	925.67	1,164.52	1,329.96	1,600.87
Finance income, net	43.89	36.63	46.28	52.40	53.20	48.03
Interest expense	-	(817.67)	(646.93)	(468.72)	(302.56)	(156.25)
EBT	896.16	1,668.23	1,618.88	1,685.64	1,685.73	1,805.14
Taxes	181.87	333.65	323.78	337.13	370.86	415.18
Net Income	714.29	1,334.58	1,295.11	1,348.51	1,314.87	1,389.96
Plus: Depreciation and Amortization	12.90	17.69	23.23	30.29	39.22	44.32
Less: Change in Net Working Capital	160.93	121.85	78.23	28.68	-32.12	-108.90
Plus: Other Operating Cash Flows	149.44	158.40	169.49	186.44	208.81	235.96
Cash flow from operating activities	715.69	1,388.83	1,409.60	1,536.56	1,595.03	1,779.14
Plus: CAPEX and Others	(24.65)	(87.64)	(95.02)	(107.43)	(123.45)	(124.35)
Plus: Other financing cash flows	-	-	(78)	(143)	(321)	(363)
Cash flow available for debt services	691.03	1,301.19	1,236.36	1,285.71	1,150.33	1,291.78
Plus: Debt Issuance (Repyament)	-	(1,573.09)	(1,211.91)	(992.50)	(992.50)	(992.50)
Net Change in Cash	691.03	(271.90)	24.45	293.21	157.83	299.28
Beginning Cash	271.9	963	691	715	1,009	1,167
Ending Cash	963	691	715	1,009	1,167	1,466

Note: Forecasted from historical data using simple ratios. Adapted from: Check Point Software Technologies Ltd. (2022)

As analysts, especially with the current capital market situation, we believe that it is crucial to ensure debt covenants are satisfied. Specifically, we assume a debt/EBITDA target covenant of below **4.00x** by the end of 2025. Likewise, we expect the debt service coverage ratio to be more than **1.00x** by the end of 2025.

CREDIT METRICS SCHEDULE							
Debt/EBITDA						Target Year	Year 3
Covenant	5.00x	4.50x	4.00x	4.00x	4.00x	Target Covenant	4.0x
Total Debt / EBITDA	9.89x	6.81x	3.73x	1.93x	0.51x	<b>Covenant Reduction</b>	0.5x
Problem?	Yes	Yes	No	No	No	First Year Covenant	5.0x
Debt Service Coverage						Target Year	Year 3
Covenant	0.80x	0.90x	1.00x	1.00x	1.00x	Target Covenant	1.0x
Debt Service Coverage Ratio	0.64x	0.78x	1.05x	1.34x	1.79x	Covenant Increase	0.1x
Problem?	Yes	Yes	No	No	No	First Year Covenant	0.8x

### **Equity returns schedule**

We believe this section is the most valuable for our readers – the equity returns. From our analysis, we believe that strong equity returns will be promised. Below shows the internal rate of return (hereby referred to as IRR) and the multiple on invested capital (hereby referred to as MOIC) for investors with various investment horizons (2023 - 2025).

Base Case					
Sponsor Horizon	IRR	MOIC			
5-Year Horizon	37%	4.88			
4-Year Horizon	39%	3.74			
3-Year Horizon	43%	2.91			
2-Year Horizon	35%	1.83			
1-Year Horizon	20%	1.20			

Bull Case					
Sponsor Horizon	IRR	MOIC			
5-Year Horizon	43%	6.05			
4-Year Horizon	48%	4.74			
3-Year Horizon	53%	3.60			
2-Year Horizon	56%	2.44			
1-Year Horizon	68%	1.68			

Bear Case					
Sponsor Horizon	IRR	MOIC			
5-Year Horizon	29%	3.55			
4-Year Horizon	30%	2.82			
3-Year Horizon	27%	2.06			
2-Year Horizon	11%	1.23			
1-Year Horizon	-27%	0.73			

### **Recommendation and Risks**

Provided generally decent IRRs and MOICs, we recommend the buyout of Check Point Software Technologies. From our scenario analyses, our analysts believe that the exit at the end of the 3rd year, 2025, is the ideal recommendation. This ensures the highest IRR in the base case, and the second highest IRR for the bull case. This should guarantee either a 27%, 43% or 53% IRR for bear case, base case and bull case, respectively.

We also focus on the sensitivity analysis of our inputs. Primarily, we want to see the changes in both IRR and MOIC under different weighting of debt utilisation, as well as various entry and exit EV/EBITDA multiples. We assume the base case with a 3-year sponsor horizon.

	Sponsor IRR (Entry Premium vs Exit Multiple)								
	Exit Multiple								
	_	16.00x	17.00x	18.00x	19.00x	20.00x			
<u>e</u>	16.00x	52%	56%	59%	63%	66%			
lţi	17.00x	43%	47%	50%	53%	56%			
Σ	18.00x	36%	40%	43%	46%	49%			
ţ	19.00x	30%	34%	37%	40%	42%			
Entr	20.00x	25%	29%	32%	34%	37%			

	Sponsor IRR (Term Loan A vs Term Loan B)						
	Term Loan B						
		3750	4000	4250	4500	4750	
٧	4250	39%	40%	41%	43%	44%	
Loan	4500	39%	41%	42%	43%	45%	
ă	4750	40%	41%	43%	44%	46%	
Term	5000	41%	42%	44%	45%	47%	
_	5250	41%	43%	45%	46%	48%	

We also emphasise the importance and value of add-on acquisitions. This could further increase the internal rate of return on our investments and enable the company to create long-term growth. In particular, we recommend looking into **Perimiter 81.** This is also an Israeli, America-based cybersecurity company with similar products. We believe this acquisition can enable further dominance in the market share while benefiting the young minds of Perimeter

81. Their top-of-the-market VPN products for businesses will be a beneficial addition to Check Point's future endeavours (Rimkiene, 2022).

We also believe that management can pursue different strategies to further create value. For instance, we believe that there is a strong potential in developing markets like Africa or South East Asia, as internet usages become more abundant and entrepreneurial activities in these areas rise. In fact, Africa has a mere 22% internet penetration (Benson, 2022). We believe that CHPK can benefit from first-mover advantages.

We also recommend further investment into R&D to continuously innovate their products. As Check Point's products are not focused on low cost but rather on high quality and usability, we believe that quality must remain at the top-of-the-market. Combining this with smart improvements of selling and marketing strategies which focus on the uniqueness of their quality, we believe that all margins such as the EBITDA margin can be improved. Subsequently, this will provide a higher IRR for our investors.

However, our analysts also note a few risks with this buyout. For instance, high-interest rates and further increases may cause a massive devaluation in the exit of 2025. This is especially true for a technology company like CHKP, which means that the potential IRR could be much lower. Furthermore, our analysts question the viability of this transaction, due to their high current market capitalization and the tight capital markets. We believe the former can be dealt with, but the latter may make this investment more attractive after capital markets return to normal. There are also operational risks such as inflationary forces on our EBITDA margin, and a competitive market causing a deterioration in the market share of CHKP. All these factors cause a decline in the exit value. Lastly, we also recognize potential shocks such as geopolitical issues regarding Israel or successful cyber attacks that cause reputational damages. All these lead to a potentially massive impact on our investment outlooks.

Despite these risks, our analysts believe that many of these factors are unlikely or recoverable in the near future. The expected payoff, therefore, is satisfactory. As such, we recommend the leveraged buyout of Check Point Software Technologies.

### References

Financial Times. (2022, Nov 29). *Check Point Software Technologies Ltd.* Financial Times. <a href="https://markets.ft.com/data/equities/tearsheet/profile?s=CHKP:NSQ">https://markets.ft.com/data/equities/tearsheet/profile?s=CHKP:NSQ</a>

Check Point Technologies. (2021, Apr 14). *Company Overview*. Check Point Technologies. <a href="https://www.checkpoint.com/about-us/company-overview/">https://www.checkpoint.com/about-us/company-overview/</a>

Brugger, T. (2018, Jan 21). *Better Buy: Palo Alto Networks, Inc. vs. Check Point Software*. Fool.com <a href="https://www.fool.com/investing/2018/01/21/better-buy-palo-alto-networks-inc-vs-check-point-s.aspx">https://www.fool.com/investing/2018/01/21/better-buy-palo-alto-networks-inc-vs-check-point-s.aspx</a>

Companies Market Cap (2022, Nov 30). *Largest IT security companies by market cap*. Companies Market Cap.

https://companiesmarketcap.com/it-security/largest-companies-by-market-cap/

Macrotrends (2022, Nov 28). *Check Point Software Technologies*. Macrotrends. <a href="https://www.macrotrends.net/stocks/charts/CHKP/check-point-software-technologies/shares-outstanding">https://www.macrotrends.net/stocks/charts/CHKP/check-point-software-technologies/shares-outstanding</a>

Robb, D. (2022, Oct 11). Check Point vs Palo Alto Networks. eSecurity Planet.

https://www.esecurityplanet.com/products/check-point-vs-palo-alto-networks/

Ryan, P. (2021, Mar 21). Check Point vs. Palo Alto Network: Which Cybersecurity Stock is a Better Buy?. Stocknews.com.

https://stocknews.com/news/panw-chkp-check-point-vs-palo-alto-network-which-cybersecurity-stock-is/

Cappuccino Finance (2022, Apr 26). Palo Alto Networks: New Generation Cybersecurity. Seeking Alpha.

https://seekingalpha.com/article/4503530-palo-alto-networks-new-generation-cybersecurity

Unique Finance (2022, Mar 17). Better Buy: Check Point Software Technologies vs. Palo Alto Networks. Unique Finance.

https://unique.finance/better-buy-check-point-software-technologies-vs-palo-alto-networks/

Benson, E.A. (2022, Jul 6). *15 countries with the lowest internet penetration in Africa*. Business Insider Africa. <a href="https://africa.businessinsider.com/local/markets/15-countries-with-the-lowest-internet-penetration-in-">https://africa.businessinsider.com/local/markets/15-countries-with-the-lowest-internet-penetration-in-</a>

africa/gpm8kc7#:~:text=This%20may%20come%20as%20a,information%20gleaned%20from%20var i ous%20sources

Check Point Software Technologies Ltd.. (2022). Annual report 2022. https://www.checkpoint.com/downloads/investor/2021-CHKP-form-20F.pdf

Rimkiene, R. (2022, Nov 8). *Perimeter 81 VPN review*. Cybernews. <a href="https://cybernews.com/best-vpn/perimeter-81-review/">https://cybernews.com/best-vpn/perimeter-81-review/</a>

Ladeau, J. (2019). Legislation highlights why cyber market should keep watch on small business risk. Insurance Journal. Web.

Lake, Sydney. "Cybersecurity Hiring Remains Red-Hot-the Industry to Surpass \$400 Billion Market Size by 2027." Fortune, Fortune, 22 July 2022,

 $\underline{https://fortune.com/education/business/articles/2022/07/22/cybersecurity-hiring-remains-red-hot-the-industry-to-surpass-400-billion-market-size-by-2027/.}$ 

Sava, Justina Alexandra. "Topic: Security Software." Statista, <a href="https://www.statista.com/topics/2208/security-software/#dossierKeyfigures">https://www.statista.com/topics/2208/security-software/#dossierKeyfigures</a>.

Bourne, Will. "The Biggest Challenges Software Companies Face Today." LinkedIn, 23 May 2022, <a href="https://www.linkedin.com/pulse/biggest-challenges-software-companies-face-today-will-bourne/?trk=articles\_directory">https://www.linkedin.com/pulse/biggest-challenges-software-companies-face-today-will-bourne/?trk=articles\_directory</a>.

"Pest Factors and Pest Analysis in Cybersecurity Industry: Free Essay Example." StudyCorgi.com, 15 Sept. 2022, <a href="https://studycorgi.com/pest-factors-and-pest-analysis-in-cybersecurity-industry/">https://studycorgi.com/pest-factors-and-pest-analysis-in-cybersecurity-industry/</a>.

# **Appendix**

### Appendix A

Sales Growth Rate (1)		6%	7%	10%	12%	13%	
Bull Case		7%	8%	11%	14%	15%	11,00
Base Case		6%	7%	10%	12%	13%	9,60
Bear Case	=	4%	5%	8%	9%	10%	7,20
COGS/Total Sales		14%	13%	11%	11%	10%	
Bull Case	B=	12%	11%	10%	9%	9%	10,20
Base Case		14%	13%	11%	11%	10%	11,80
Bear Case		16%	15%	14%	12%	12%	13,80
Selling & Marketing/Total Sales		28%	27%	26%	25%	24%	
Bull Case		26%	25%	24%	23%	22%	24,00
Base Case		28%	27%	26%	25%	24%	26,00
Bear Case		30%	29%	28%	27%	26%	28,00
R&D/Total Sales		14%	14%	12%	12%	11%	
Bull Case		13%	13%	11%	11%	10%	11,60
Base Case Bear Case		14% 15%	14% 15%	12% 13%	12% 13%	11½ 12½	12,60 13,60
							15,6
General & Admin./Total Sales	L	4%	4%	3%	3%	3%	
Bull Case		3,4%	3,4%	3,2%	3,2%	3,2%	3,2
Base Case		3,6%	3,6%	3,4%	3,4%	3,4%	3,48
Bear Case		4,0%	4,0%	3,8%	3,8%	3,8%	3,8
SBC/Total Sales	L	6%	6%	6%	6%	7%	
Bull Case		5,0%	4,8%	5,0%	5,2%	5,3%	5,0
Base Case Bear Case		6,0% 6,5%	5,9% 6,5%	6,0% 6,5%	6,2% 6,7%	6,5% 6,9%	6,1
bear Case		0,5%	6,5%	6,5%	0,174	6,3%	6,6
Amort. of intangibles & acquisition expenses		1%	1%	1%	1%	1%	
1-case	*****	1,0%	1,0%	1,0%	1,0%	1,0%	1,00
Finance Income/EBIT		5%	5%	5%	4%	3%	
Bull Case		8,0%	8,5%	8,0%	7,5%	6,5%	7,70
Base Case		4,5%	5,0%	4,5%	4,0%	3,0%	4,20
Bear Case		4,0%	4,5%	4,0%	3,0%	2,0%	3,50
Effective Tax Rate		20%	20%	20%	22%	23%	

S Related Assumptions							
CAPEX							
PF&E/Total Sales	2%	2%	3%	3%	4%	4%	
Bull Case	1,7%	2,2%	2,7%	3,2%	3,7%	3,7%	3,10%
Base Case=	2,0%	2,5%	3,0%	3,5%	4,0%	4,0%	3,40%
Bear Case	2,3%	2,8%	3,3%	3,8%	4,3%	4,3%	3,70%
D&A/FF&E	33%	33%	33%	33%	33%	33%	
Bull Case	33%	33%	33%	33%	33%	33%	33,00%
Base Case	547.	34%	34%	34%	34%	34%	34,00%
Bear Case	37%	37%	37%	37%	37%	37%	37,00%
Change in Working Capital (% of Rev)	7%	5%	3%	1%	-1%	-3%	
Bull Case	- 7%	5%	3%	1%	-1%	-3%	1,00%
Base Case	<b>5</b> %	3%	1%	-1%	-3%	-5%	-1,00%
Bear Case	3%	1%	-1%	-3%	-5%	-7%	-3,00%
/S Related Assumptions							-3,00%
/S Related Assumptions Others CFO	7%	7%	7%	7%	7%	7%	-3,00%
/S Related Assumptions	7%						
/S Related Assumptions Others CFO	7%	7%	7%	7%	7%	7%	
/S Related Assumptions Others CFO 1-case	7% 6,5%	7% 6,5%	7% 6,5%	7% 6,5%	7% 6,5%	7% 6,5%	6,50%
/S Related Assumptions Others CFO 1-case Others CFI	7% 6,5%	7% 6,5% -3%	7% 6,5% -3%	7% 6,5% -3%	7% 6,5% -3%	7% 6,5% -3%	6,50%
/S Related Assumptions Others CFO 1-case Others CFI 1-case	7% 6,5% -3% -3,0%	7% 6.5% -3% -3,0%	7% 6,5% -3% -3,0%	7% 6,5% -3% -3,0%	7% 6,5% -3% -3,0%	7% 6,5% -3%	* 6,50% * -3,00%
/S Related Assumptions Others CFO 1-case Others CFI 1-case Others CFF	7% 6,5% -3% -3,0% 0%	7% 6,5% -3% -3,0%	7% 6,5% -3% -3,0%	7% 6,5% -3% -3,0%	7% 6,5% -3% -3,0%	7% 6,5% -3% -3,0% -10%	F 6,50%
/S Related Assumptions Others CFO 1-case Others CFI 1-case Others CFF 1-case	7% 6,5% -3% -3,0% 0%	7% 6,5% -3% -3,0%	7% 6,5% -3% -3,0%	7% 6,5% -3% -3,0%	7% 6,5% -3% -3,0%	7% 6,5% -3% -3,0% -10%	* 6,50% * -3,00%
/S Related Assumptions Others CFO 1-case Others CFI 1-case Others CFF 1-case  MANCIAL INPUTS	7% 6,5% -3% -3,0% 0%	7% 6,5% -3% -3,0% 0% 0,0%	7% 6,5% -3% -3,0% -3,0%	7% 6,5% -3% -3,0% -5% -5,0%	7% 6,5% -3% -3,0% -10% -7,0%	7% 6,5% -3% -3,0% -10% -10,0%	6,50%
/S Related Assumptions Others CFO 1-case Others CFI 1-case Others CFF 1-case  NANCIAL INPUTS Floating-Rate Benchmark (bps) (SOFR rates)	7% 6,5% -3% -3,0% 0% 0,0%	7% 6,5% -3% -3,0% 0% 0,0%	7% 6,5% -3% -3,0% -3% -3,0%	7% 6,5% -3% -3,0% -5% -5,0%	7% 6,5% -3% -3,0% -10% -7,0%	7% 6,5% -3% -3,0% -10,0% -10,0%	, 6,50% , -3,00% , -5,00%