The ISE Cybersecurity UCITS Index™ (HUR™): Strong fundamentals in a challenging macroeconomic environment

Today, cybersecurity is not merely a technology risk but a business risk. When a risk to business continuity emerges, it ascends the hierarchy of business needs and often spurs additional investment in sophisticated solutions. In recent months, industry experts and technology vendors have been regularly commenting on the resilient nature of cybersecurity spending. Surveys by leading firms such as Gartner lend credence to the story that cybersecurity is now a business essential, unlikely to be cut even in a recessionary environment. According to a CIO Survey done by Morgan Stanley[1], security software is pegged as least likely to be cut should the economy worsen in 2022. Whereas in the past, security was considered critical following a breach, the focus has now shifted towards shoring up security even before a breach occurs. The pandemic made digital transformation front and center of business decisions, with this trend expected to gain further momentum. The survey further revealed that even in a slowing market, CIOs expect to increase spending in areas of IT, most notably in cloud computing and security software.

Enterprises, governments, and consumers are facing cyberthreats that have increased in velocity, variety, and complexity, prompting a steady procession of new regulations in the US and Europe. Additionally, the rise of artificial intelligence has created unique challenges for CIOs who must now wrestle with the rise of automated cyberattacks. These CIOs increasingly find themselves in the position of deploying AI to mitigate threats, necessitating a sea change in strategy and leadership approaches. Thus, it comes as no surprise that spending on cybersecurity is expected to increase going forward. Gartner predicts that security spending will reach $187 billion in 2023, an increase of 11 percent from 2022[2]. Job openings further validate the growing demand for cybersecurity with an estimated 600,000 open security positions throughout the US.[3]

Two developments acting as major tailwinds for cybersecurity spending include the recent shift to remote work and the ongoing migration of legacy IT environments to the cloud. More customers now adopt solutions from public cloud providers such as Microsoft, Google and Amazon, which are enhancing IT productivity but are also more complex to secure. Cybersecurity challenges in a cloud-first world are essentially very different from traditional on-premise security[4]. In the cloud-first world, customers do not have full control over their environments and security, necessitating new solutions and opportunities for newer participants to disrupt incumbents whose solutions were tailored towards on-premise environments. The shift to remote work in recent years has undoubtedly accelerated the adoption of cybersecurity solutions. Companies have had to upgrade legacy systems and secure their distributed workforces from the increased incidence of cyber-attacks.

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[1] https://www.techrepublic.com/article/recession-cios-cut-increase-spending/
[2] https://www.gartner.com/en/newsroom/press-releases/2022-06-07-gartner-highlights-three-ways-security-leaders-can-prepare-for-the-evolution-of-cybersecurity-strategy-roles-and-technology
[3] https://www.bloomberg.com/news/articles/2022-03-30/hackers-path-is-eased-as-600-000-cybersecurity-jobs-sit-empty
[4] https://www.weforum.org/agenda/2022/07/cloud-computing-cybersecurity/

Relatedly, the model of 'zero trust' has been widely adopted over the past decade. Essentially, 'zero trust' centers around the philosophy that no user or application should be trusted by default. As more organizations implement SaaS and cloud storage offerings, cybersecurity solutions have had to evolve to adhere to the principles of 'zero trust'. The implementation of 'zero trust' is likely to shape end-user behavior as well as the nature of cybersecurity offerings.

The ISE Cyber Security UCITS Index™ (HUR™) is designed to track public companies that are actively involved in providing cyber security technology and services. The constituents that make up the index have shown significant strength in their financial fundamentals as the year has progressed. With two quarters of earnings data nearly complete, approximately 50% of the index (by weight, and by count of constituents) is on track for full-year earnings growth in 2022, and was already profitable in 2021 (non-GAAP basis). (An additional 8% of the index weight is associated with companies that are forecast to end the year with negative net income, but with smaller losses than in 2021.) Approximately 80% of the index (by weight, and by count of constituents) is forecasted to grow revenues in 2022, pointing to strong underlying demand for cybersecurity solutions. A sizable percentage of the end-user base is renewing their subscriptions even in a challenging macroeconomic environment, as evinced by the y-o-y increases in annual recurring revenue in the most recent quarter

While economic concerns weighed heavily across tech companies during the second-quarter earnings season, cybersecurity held up strongly. This was reflected in the relative outperformance of the HUR index versus other broad-based benchmarks. For the month of July, the HUR index was up 9.3% versus the Nasdaq-100 up 6.6% and S&P 500 up 4.4%. For the month of August, the HUR index was up 3.5% versus the Nasdaq-100 down 5.2% and S&P 500 down 4.2%

## Key takeaways from earnings

The second quarter of 2022 saw a healthy percentage of companies that make up the index beat revenue and earnings expectations. To get a sense of the current strength of the industry, it is useful to look at the percentage of companies that beat/missed estimates for the quarter. Constituents that beat revenue estimates comprise 70% of index weight, a sizable number, while companies that beat earnings estimates comprise 64% of index weight. Companies that missed revenue estimates comprise only 15% of index weight while those that missed earnings estimates comprise 21% of index weight. [5] Companies that reported revenues above consensus estimates beat by 3.5%, on average, while those that missed, did so by only 1.5%, on average. On the earnings front, companies that beat estimates did so by 47.5%, on average, while those that missed, did so by 34.0%, on average. While the index contains a handful of companies that report semiannually and/or did not receive estimates from the equity analyst community, the overall takeaway from the most recent earnings season was broadly positive. Many more of the index constituents beat on both their top and bottom lines, while the magnitude of beats was greater, on an absolute value basis, than the magnitude of misses.

Growth drivers varied across companies. For example, Palo Alto Networks reported stronger than expected results, largely crediting the ongoing shift to the cloud. Cyberark Software saw increased demand for its privileged access management software due to the heightened threat landscape. Cloudflare saw large deal momentum and win rates, noting that direct competitors are now using Cloudflare for DDoS mitigation. Checkpoint Software initiated price increases. While the earnings story was largely positive, a small percentage of companies missed revenue and earnings expectations. For example, JAMF Holdings reported worse than expected operating losses. MicroFocus reported lower revenue growth even after excluding the impact of

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[5] Companies that did not have consensus revenue estimates and earnings estimates, as per FactSet for CYQ2022 made up around 15% of index weight

suspension of operations in Russia. Overall, companies acknowledged the tough macroeconomic environment they were operating in, while remaining cautiously optimistic about the second half of 2022.

Revenue and correlation to performance
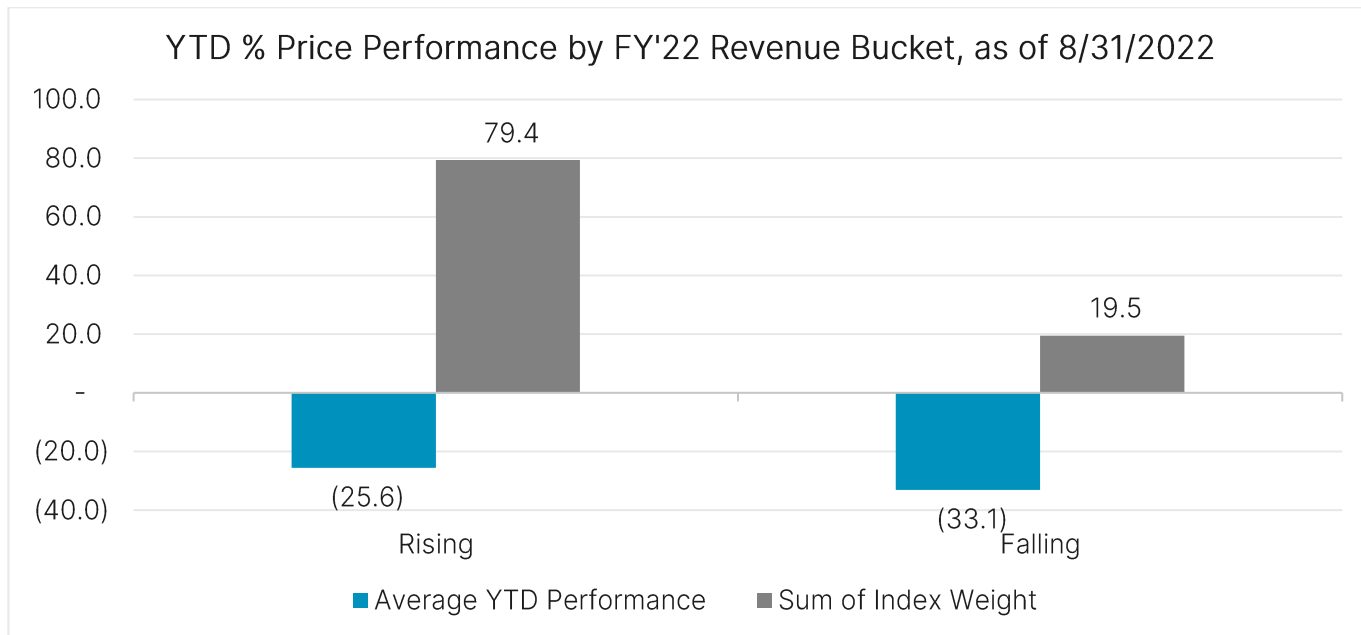
Companies such as Palo Alto Networks, Okta, Zscaler and Crowdstrike have seen revenues accelerate steeply since 2019. These companies have grown revenues in double-digits at a yearly average rate of 25%-70% since 2019. The threat landscape continues to intensify with CheckPoint Software citing a 32% increase in overall cyber-attacks and a 59% increase in sophisticated attacks like ransomware, with one out of every 40 organizations impacted by ransomware. Statistics validate what has now become common knowledge among market participants in the cybersecurity community: that cyberattacks continue to increase in velocity, variety, and complexity.

In the most recent quarter Q22022, 32 of the 45 companies tracked by the index grew their revenues by 26% on average y-o-y due to strong demand for cybersecurity products, despite headwinds in Asia, continued supply chain challenges, and fluctuations in buying patterns. For example, A10 Networks saw revenue grow at a healthy rate of 15% y-o-y due to strong demand for cybersecurity solutions and productivity measures which offset supply chain related headwinds. Booz Allen Hamilton saw strong demand for cybersecurity products with revenues growing at 13% year-over-year as it continues to help agencies implement Zero Trust Architecture, resulting in double-digit sales growth. Other companies in the index were weighed down more heavily by both macro headwinds and company-specific headwinds including a stronger dollar, weakness in Europe, and delays in cloud migrations. For example, annual recurring revenues (ARR) of Splunk missed consensus expectations as cloud migrations and expansions were pushed out by some of its customers. Akamai Technologies saw growth slow primarily due to its exposure to the international segment and FX-related headwinds.

For full-year 2022, revenues of 35 of the 45 index constituents are projected to grow overall, with revenues of 22 companies projected to grow by double digits. Only 9 companies have revenues projected to decline in 2022, representing approximately 20% of index weight[6]. For the rest of the year and CY2023, the outlook for revenue growth is largely positive, primarily due to cybersecurity now being a must-have versus a nice-to have.

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[6] Ahnlab does not have consensus revenues estimated for 2022, as per FactSet.

Additionally, companies have taken measures to mitigate pressures from macroeconomic headwinds. For example, Cisco Systems has taken steps to reduce the impact of the global supply chain crisis. Almost all companies have acknowledged the uncertainties in the macroeconomic environment, including potentially longer sales cycles, pressure on budgets, and challenging FX markets. Among select participants, it is worth noting there is a sense of strong optimism in weathering the challenges of the second half of 2022 and 2023. This is mainly due to visibility into a strong pipeline for the rest of the year, large deal sizes, muted impact from a strong dollar and a shift to the cloud.

In terms of fundamentals leading performance, companies with revenues projected to decline in 2022 have thus far underperformed companies with revenues projected to grow, by an average of about 8 percentage points as of August 31, 2022.

Earnings and correlation to performance
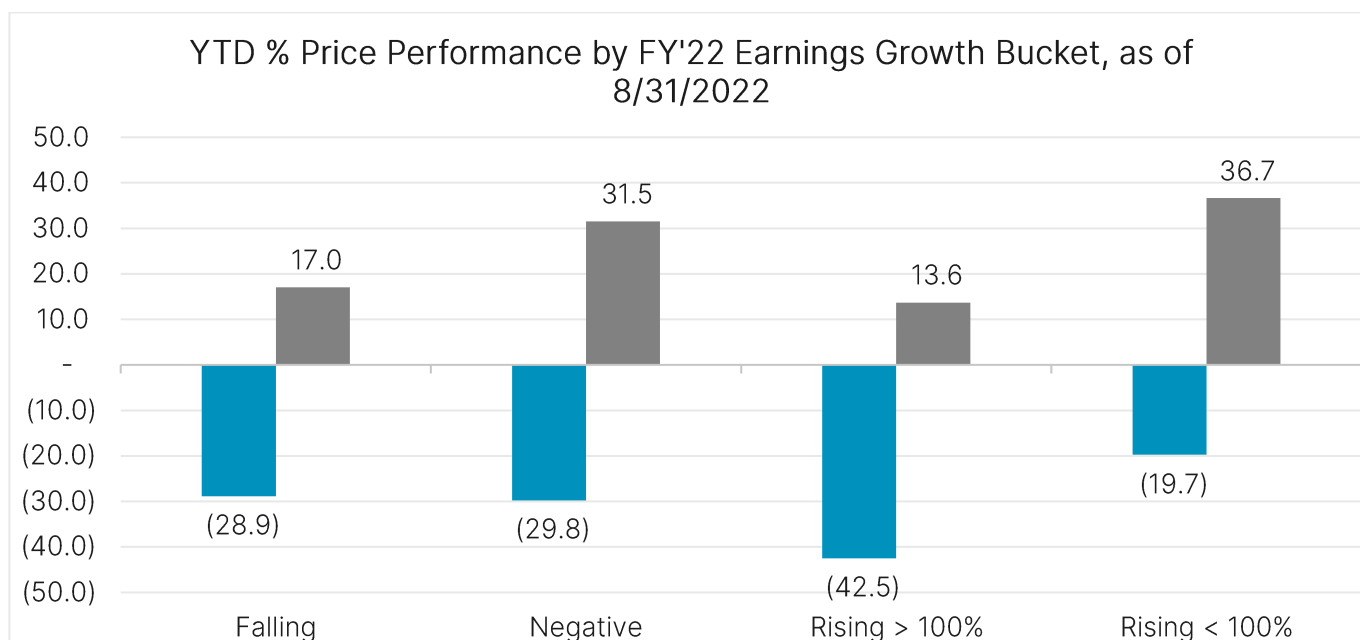
For full-year 2022, 22 of 45 companies (62% of index weight) have earnings forecast to grow, with 13 companies forecast to grow by double-digits. This represents a significant percentage of the index and is likely to send a signal to investors that the overall earnings story for the rest of the year remains optimistic. 9 companies are expected to see earnings decline in 2022, while remaining profitable overall. 13 companies are forecast to post losses for the year 2022, reversing their gains from the previous year or reporting losses that are worse than 2021[7]. Despite tracking a relatively young industry with one-third of its constituents conducting their IPOs within the past five years, the HUR Index is already substantially tilted towards profitable companies. With an ongoing shift by several constituents to a subscription-based business model, there is good reason to expect an acceleration in bottom-line growth in the coming years.

In terms of fundamentals leading performance, there is an obvious disconnect when comparing the performance of HUR constituents with full-year 2022 earnings growing at the fastest rates (>100%) vs. all others. On average, these names were down 42.5% YTD as of August 31, 2022. Companies with earnings growing at a slower rate in 2022 (<100%) were down only 19.7%, on average, while companies with an expected drop in earnings were down 28.9% on average. Most tellingly, companies with negative forecasted full-year earnings were down 29.8%, on

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[7] Ahnlab does not have consensus earnings estimated for 2022, as per FactSet

average. This disconnect implies that investors have been too pessimistic about some of the higher growth names. Given that most index constituents have reported earnings through the first half of the year and updated their full-year guidance at least twice YTD, this suggests the potential for a continuation of the recovery in index performance that has been observed in July and August.

Free cash flow and correlation to performance

YTD % Price Performance by FY'22 Free cash flow Bucket, as of 8/31/2022
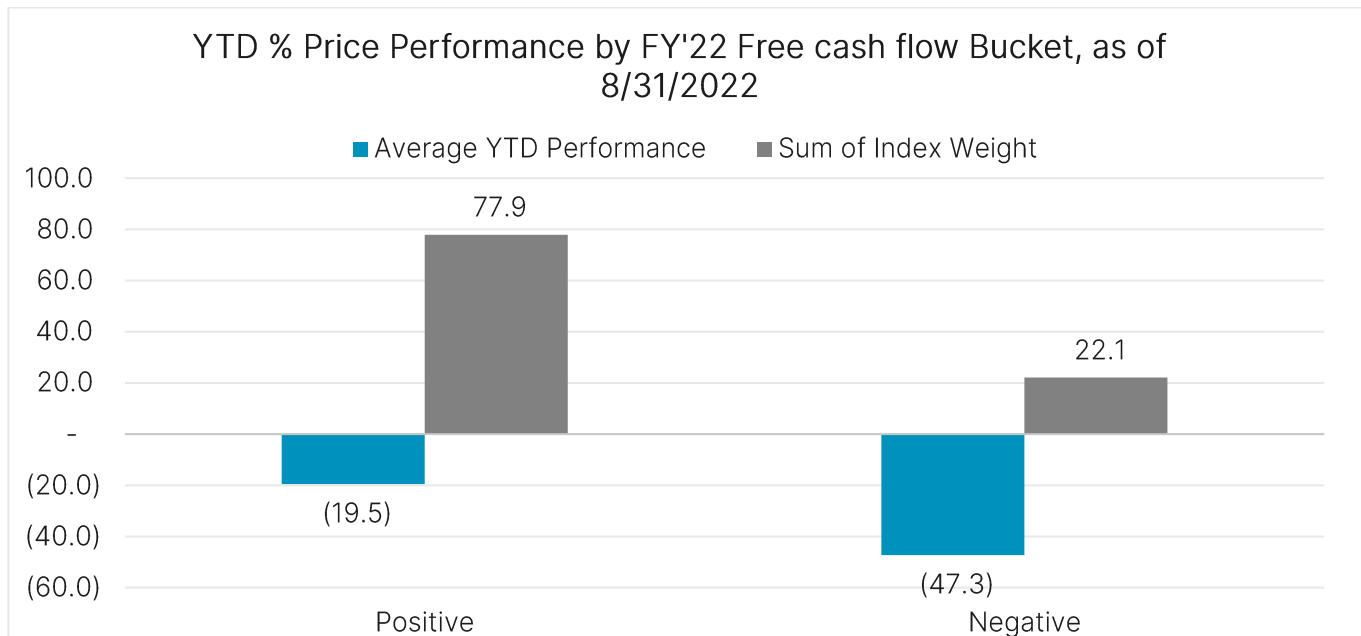
Most companies that make up the index (approximately 36 of 45 companies) are forecast to be free cash flow (FCF) positive for the year 2022. 20 of 45 companies have been FCF positive since 2019 while other companies have had fluctuations between positive and negative.

In the most recent quarter Q22022, there was a variation in results with roughly the same number of companies reporting positive FCF as those reporting negative FCF. Cisco Systems was the clear outlier, generating roughly $3.5 billion for the quarter; FCF declined year-over-year due to ongoing investments in inventories weighing on working capital. Akamai Technologies, Fortinet, Checkpoint Software, NortonLifeLock, and Palo Alto Networks also generated healthy free cash flows in the range of $200-$400 million. Other companies such as Juniper Networks and Sentinel One generated negative FCF.

Companies that are forecasted to be FCF positive for full-year 2022 make up about 78% of index weight. As a group, they are down 19.5% on average YTD, outperforming companies that are forecasted to be FCF negative, which are down 47.3% YTD, on average. Given investors' acute focus on cash flow generation in today's macroeconomic environment, it is certainly reassuring to observe the vast majority of the index is on track to meet the hurdle this year, despite the prevalence of many younger, still fast-growing constituents.

Gross margin and correlation to performance

YTD % Price Performance by FY'22 Gross Margin Bucket, as of 8/31/2022

■ Average YTD Performance ■ Sum of Index Weight
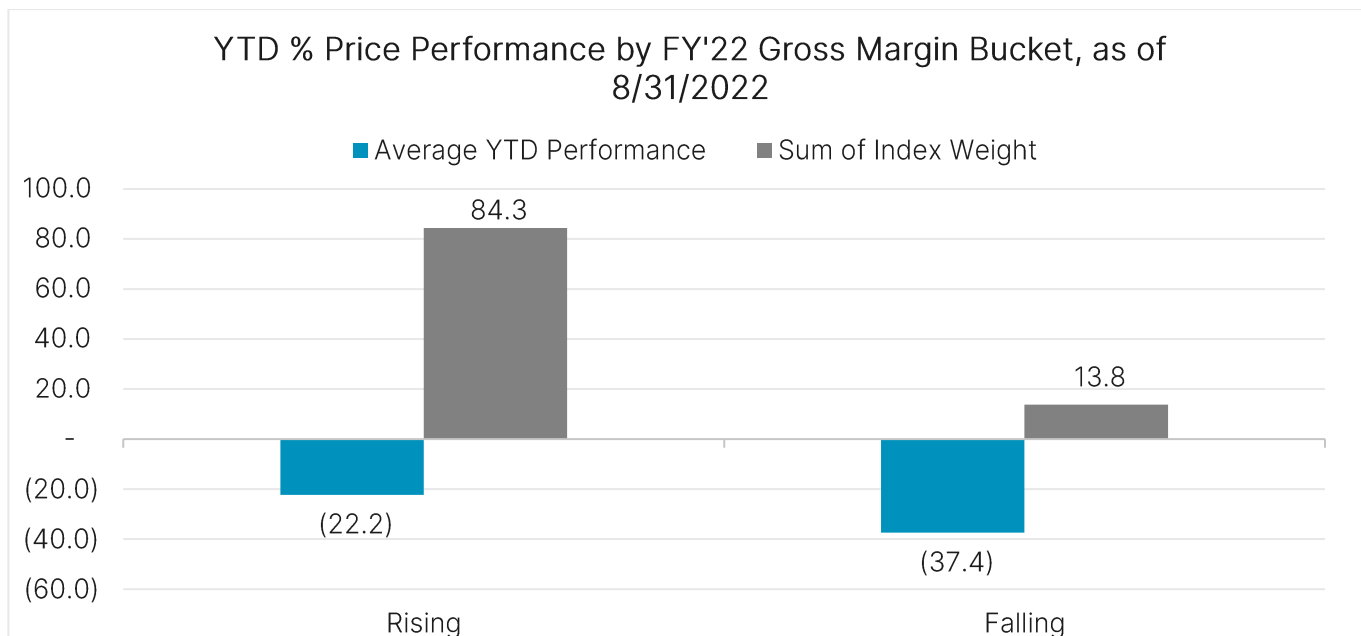
The strong trends observed in revenues, earnings, and free cash flow largely extend to key measures of profitability across the income statements of HUR constituents. Gross margins of most of the index (36 out of 45 companies) are forecasted to grow in full-year 2022, while gross margins of only 7 companies are forecasted to decline. This suggests that topline growth – via new bookings as well as pricing power – is strong enough across most of the index to offset inflationary pressures from rising input costs.

For the most recent quarter Q22022, a sizable percentage of companies reported gross margins that were up year-over-year and above consensus estimates. This was particularly noteworthy given the headwinds from inflation and supply-chain pressures. For example, A10 Networks reported gross margins of 80% largely due to a strong product mix and successful navigation of short-term input cost pressures. Checkpoint Software reported strong gross margins of 88%, which was impressive considering higher material costs and higher shipping costs. A small percentage of companies reported declining gross margins. For example, Telos' gross margin declined to 39%, and the company guided to a lower gross margin of 34%-36%, due to a less favorable mix versus competitors. Cisco Systems was another company that reported gross margins below guidance, due to supply chain headwinds and inflationary cost pressures (but still strong at 63%). Going forward, almost all companies have acknowledged that they expect challenges from supply chain and inflation to persist for the rest of the year, while staying committed to cost discipline and possible shifts in product mix to higher margin products.

Companies with gross margins forecasted to grow in 2022 make up 84.3% of the index weight. As a group, they are down 22.2% YTD on average. Companies with gross margins forecasted to decline are down 37.4% YTD on average and make up only 13.8% of index weight.

Operating margin and correlation to performance

YTD % Price Performance by FY'22 Operating Margin Bucket, as of 8/31/2022
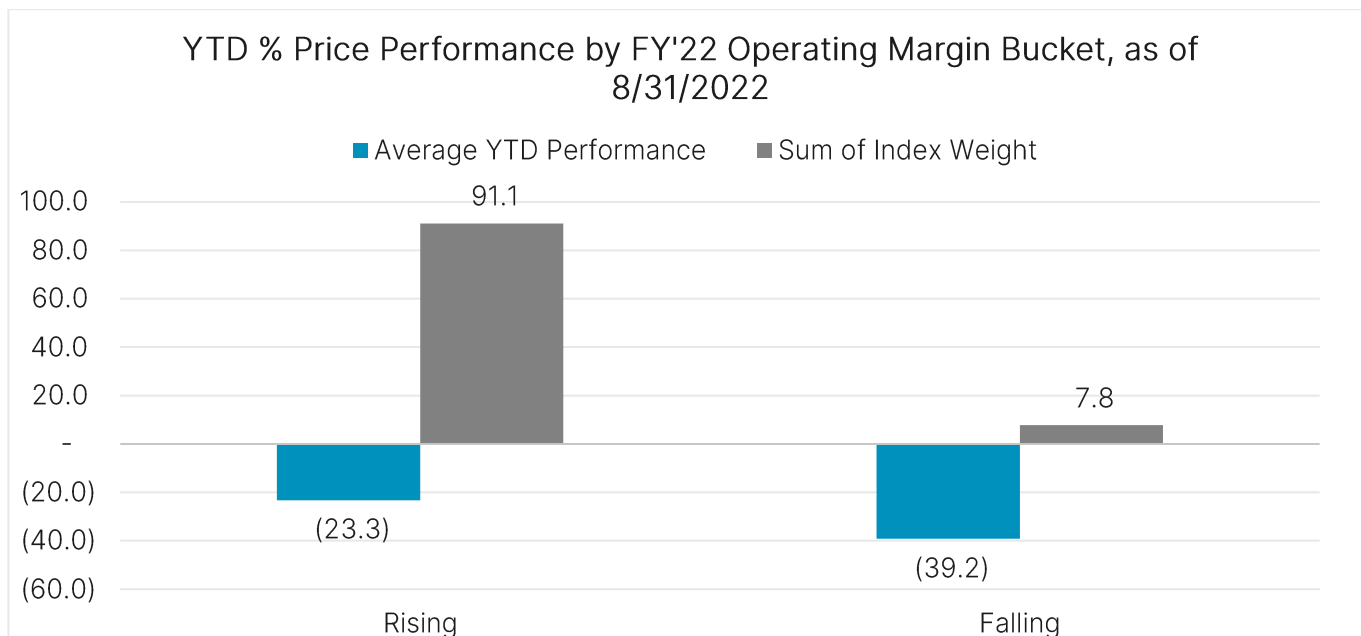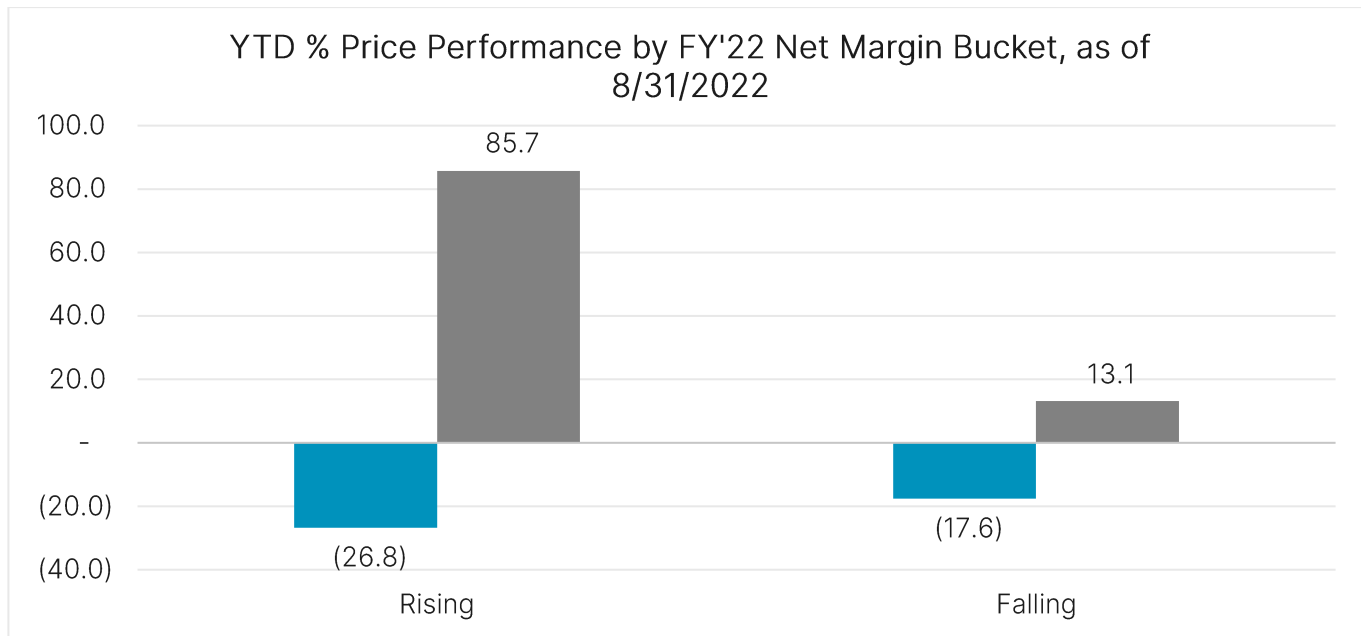

Operating margins of most of the index (39 of 45 companies) are forecasted to grow in 2022 with 22 of 45 companies forecast to grow by double digits. Operating margins of only 5 companies are expected to decline.

Operating margins of companies that are forecasted to grow in 2022 make up 91% of index weight. As a group, they are down 23.3% YTD on average, outperforming companies with operating margins expected to decline, which are down 39.2% YTD on average and make up only 7.8% of index weight. The index is heavily concentrated towards companies with rising operating margins in 2022. This reinforces the idea that the cash-generating ability of the index, in aggregate, will remain strong and potentially improve.

During the most recent quarter, there was a variation in results with companies such as Cloudflare approaching operating margin breakeven, on one end of the spectrum, and other companies such Cisco Systems and Checkpoint Software reporting operating margins in the range of 30%-40%, on the other end of the spectrum. What was encouraging was that a sizable percentage of companies in the index beat consensus estimates for operating margins despite macroeconomic headwinds. Some of the notable companies that beat operating margin consensus estimates include Booz Allen Hamilton, Zscaler, Sentinel One, Splunk and Fortinet. Margins for Booz Allen Hamilton beat estimates largely due to strong profitable contract level performance and product mix. A few hardware-related companies including Cisco Systems and Checkpoint Software saw some pressure on otherwise healthy operating margins due to higher material costs and lower than expected gross margins. Going forward, the upside to operating margins appears to be predicated upon how well companies manage headcount related expenses and investment-related opportunities.
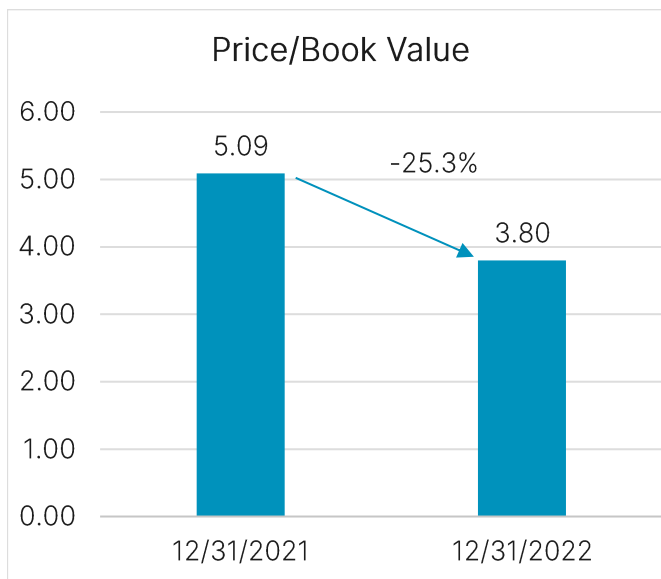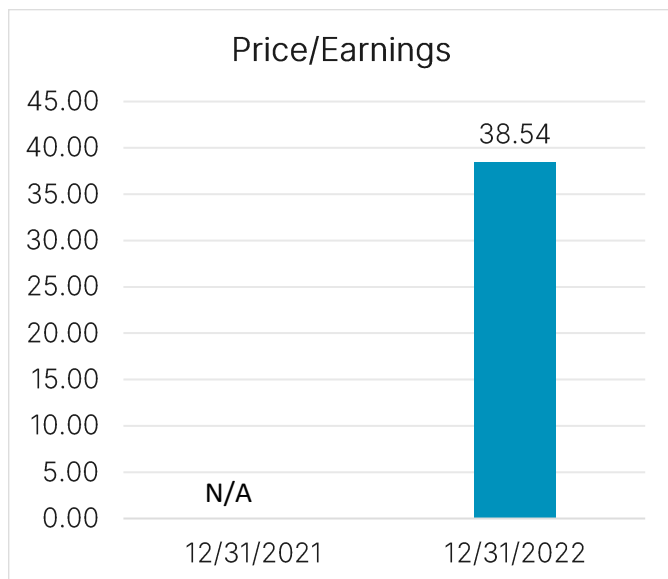
Net margin and correlation to performance

YTD % Price Performance by FY'22 Net Margin Bucket, as of 8/31/2022
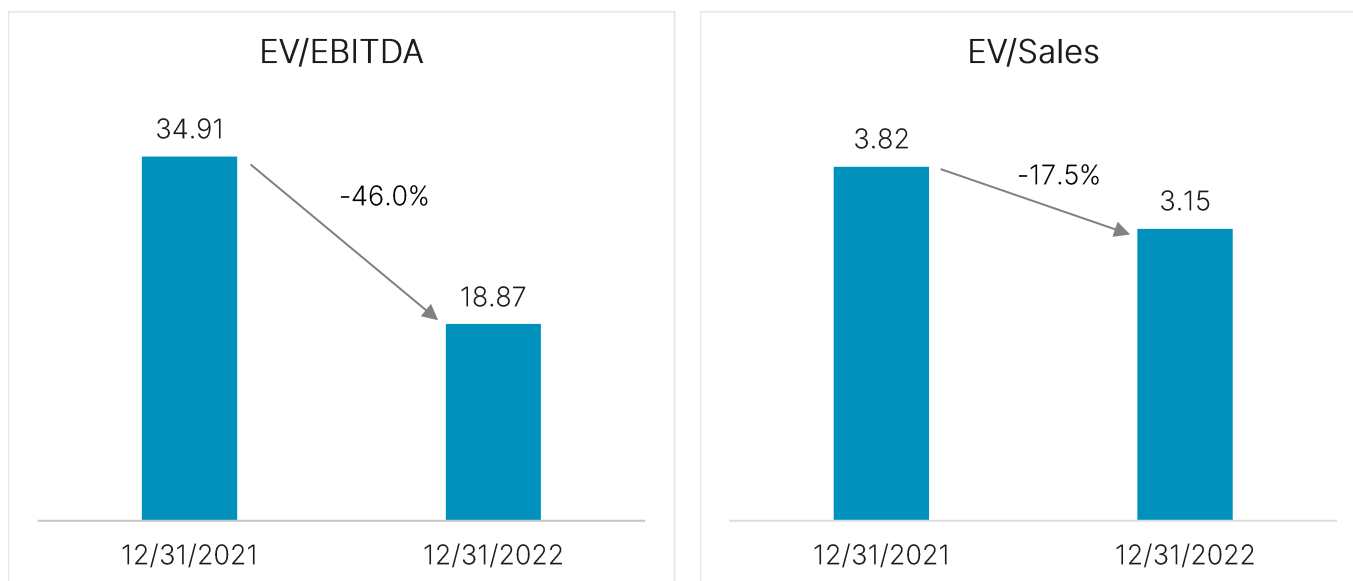
Net margins of most of the index (36 of 45 companies) are forecasted to grow in 2022, with 24 companies forecasted to improve by double digits. Net margins of only 7 companies are forecasted to decline in 2022.

Net margins of companies that are forecasted to grow in 2022 make up 86% of index weight. As a group, they are down 26.8% YTD on average, and are underperforming companies with net margins forecasted to decline, suggesting some disconnect between performance and fundamentals. Companies with net margins forecasted to decline in 2022 make up 13.1% of the index weight and are down 17.6% YTD, on average.

HUR Index Valuations (Source: Bloomberg as of September 23, 2022)

Price/Earnings

Price/Book Value

EV/EBITDA

34.91

-46.0%

18.87

12/31/2021   12/31/2022

EV/Sales

3.82

-17.5%

3.15

12/31/2021   12/31/2022

Over the course of 2022, the ISE Cyber Security UCITS Index has become significantly cheaper on a wide variety of index-weighted valuation metrics, including price-to-book (P/B), enterprise value-to-sales (EV/Sales), and enterprise value-to-EBITDA (EV/EBITDA). Concerns around the macroeconomic environment, company-specific headwinds, and negative sentiment towards high-growth technology stocks in general have weighed heavily on multiples this year. It is worth noting that while the index P/E for the year ending 12/31/2021 was not meaningful (i.e., overall negative), P/E for the year ending 12/31/2022 is expected to be 38.5, after factoring in all available consensus earnings estimates. That includes the subset of index constituents that are still expected to produce negative earnings for the full year; for those companies with positive earnings, the forecasted P/E ratio at year-end is expected to be approximately 22, well within reason compared to a tech-heavy benchmark such as the Nasdaq-100. Given that some of the newer companies in the high-growth stage have more room to run in terms of growth and profitability, they are likely to command elevated P/E ratios in the near-term vs. their more mature counterparts. Looking beyond next year into 2023, the latest consensus estimates anticipate the entire index to normalize to a P/E of approximately 28.

Conclusion

Companies that make up the ISE Cyber Security UCITS Index have weathered the challenges in the macroeconomic environment while continuing to show strength in fundamentals. A healthy percentage of index constituents posted strong results in the latest quarter beating consensus revenue and earnings estimates while committing to margin expansion and free cash flow generation. More importantly, demand for cybersecurity products appears to be robust and likely to outweigh other factors that might act as a headwind. The shift to the cloud and remote work are also significant tailwinds that are likely to create accelerated demand for cybersecurity solutions. While it is difficult to forecast individual company performance and macroeconomic conditions in the short-term, the fundamentally strong underpinnings of the HUR Index – combined with an overall growing and defensive industry backdrop – may warrant cautious optimism in the face of continued global headwinds.

Investors looking to gain exposure to companies that provide cybersecurity solutions can invest in the product tracking the ISE Cyber Security UCITS Index, the Legal & General Cyber Security UCITS ETF (London: ISPY/USPY).