ROBOGLOBAL®
INVESTING IN INNOVATION

ROBOTICS, AI AND HEALTHCARE TECHNOLOGY EARNINGS TRENDS

ROBO, HTEC, and THNQ

ROBO: ROBOTICS & AUTOMATION INDEX

With the better than expected 2Q20 earnings season behind us, we review fundamentals as well as areas of strength (Artificial Intelligence) and weakness (automotive manufacturing and 3D printing). After significant downward revisions in March–June, earnings estimates have turned back up, and while the ROBO index is up 16% YTD to new all-time highs, about a quarter of its constituents remain more than 20% below prior highs.

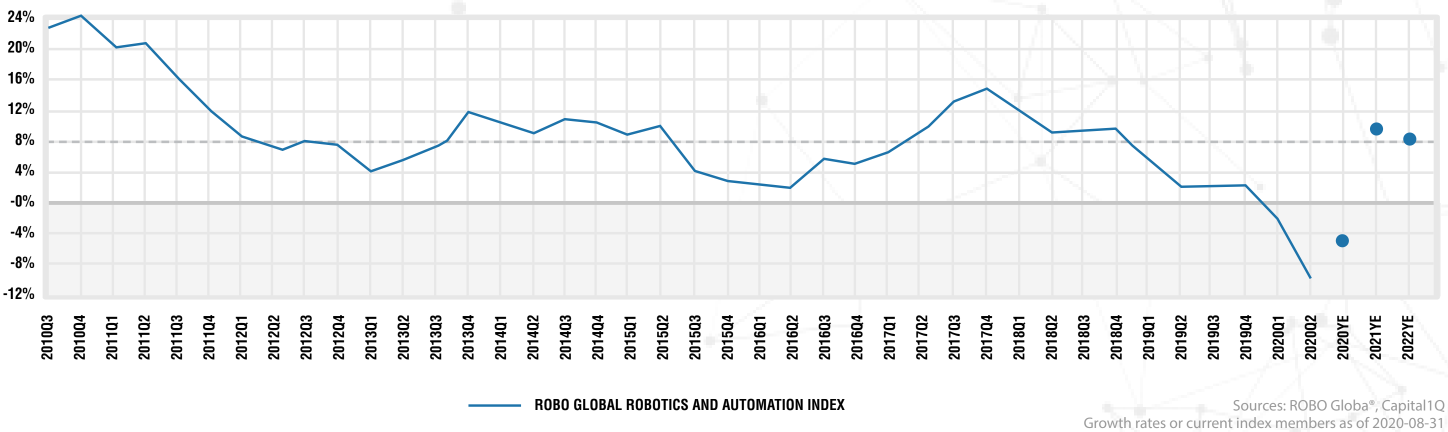
Sales contracted by 9% at the median in 2Q20 and EPS dropped 21% YoY

Nearly three-quarters of the 86 members of the ROBO Global Robotics & Automation Index experienced a contraction in sales in 2Q20, with a -9% YoY decline at the median, compared to -1% in the prior quarter and the long-term average of +8% growth.

Meanwhile, 60% of index members saw a decline in EPS, and the median EPS growth for the group was -21% YoY, compared to a 16% decline in Q1 and the 10-year average of +9%. With the vast majority of companies reporting a bottom in business activity in April and May, we expect that 2Q20 marked the bottom after the longest downcycle since the inception of the index in 2013 — see the chart below.

Median Sales Growth

Long Term Average = 8.3%



Sources: ROBO Globa®, Capital1Q
Growth rates or current index members as of 2020-08-31

Earnings beat expectations most since 2009, estimates turn back up

On aggregate, 2Q20 EPS came in 22% above expectations with 76% of companies exceeding consensus EPS estimates and 70% topping revenue estimates. Positive surprises stemmed primarily from Healthcare and Logistics Automation, which benefited from the boom in e-commerce, as well as China-exposed companies. Negative surprises were concentrated in 3D printing companies.

After a ~28% reduction in earnings estimates for 2020 during the first half of the year, the largely better than expected earnings in 2Q and positive management commentary around a bottoming out of monthly sales have sparked a stabilization and increases in profit forecasts. Estimates for 2020 have increased by 3% for EPS and 1% for sales in July and August and currently point to a median EPS decline of 13% in 2020, followed by a 28% rebound in 2021 and 18% increase in 2022.

What's hot, what's not?

Adoption of AI-powered technologies remains the strongest driver of revenue growth for the ROBO index, as reflected by the fastest-growing index members in 2Q20. Nvidia, the leading provider of graphics processing units, which have become a de facto standard for high-performance computing and the training of AI in datacenters, posted revenue growth of 50% in the second quarter, driven by a 167% surge in data-center revenue to a record $1.75B, with recently acquired Mellanox accounting for just over 30% of that. Datacenter revenue exceeded gaming revenue, which was up 26%, while gaming-related sales returned to growth for the first time since 2018. The stock is up 133% so far this year and is the best performing member of the ROBO index.

Teradyne, the semiconductor testing equipment provider and owner of Universal Robot, the global leader in collaborative robots, blew past consensus estimates in 2Q20 with revenue growth of 49% YoY and EPS more than double year-ago level. This was despite a 21% drop in Industrial Automation sales. Automated testing is booming as chip makers boost investments to cope with rising demand for AI, AR/VR, wireless, memory, and sensing.

Han's Laser, the China-based provider of laser systems for automated material processing and other industrial automation solutions, grew revenue by 40% YoY in Q2, driven by a ~50% increase in orders from Apple, which is gearing up for a strong 5G iPhone cycle. Elsewhere in China, iFlyTek, the Chinese AI technology company that focuses on natural language processing for consumer, healthcare, education, and government applications, grew revenue by 30% YoY — 20% more than expected. The company just announced new products supporting real-time voice-to-text and pen-to-text translation.

At the other end of the spectrum, companies exposed to the automotive and aerospace industries suffered the most, especially 3D printing businesses. Aptiv, the large automotive component supplier focused on making mobility safer, greener, and more connected, suffered from the temporary automotive plant closures. Auto sales have now recovered faster than initially expected, especially in China and the US. Aptiv generates over $1B in active safety revenue and produces a network of software and sensors that can be outfitted onto existing car models to make them autonomous.

Similarly, sales at 3D measurement and automated inspection specialists Koh Young Technologies (Korea) and Faro Technologies (US) declined more than 35% YoY. 3D Systems, the additive manufacturing specialist, reported a 29% drop in revenue for the quarter, led by a 39% contraction in its industrial segment, essentially automotive and aerospace. The company's new CEO announced a vast restructuring plan, including a 20% head count reduction.

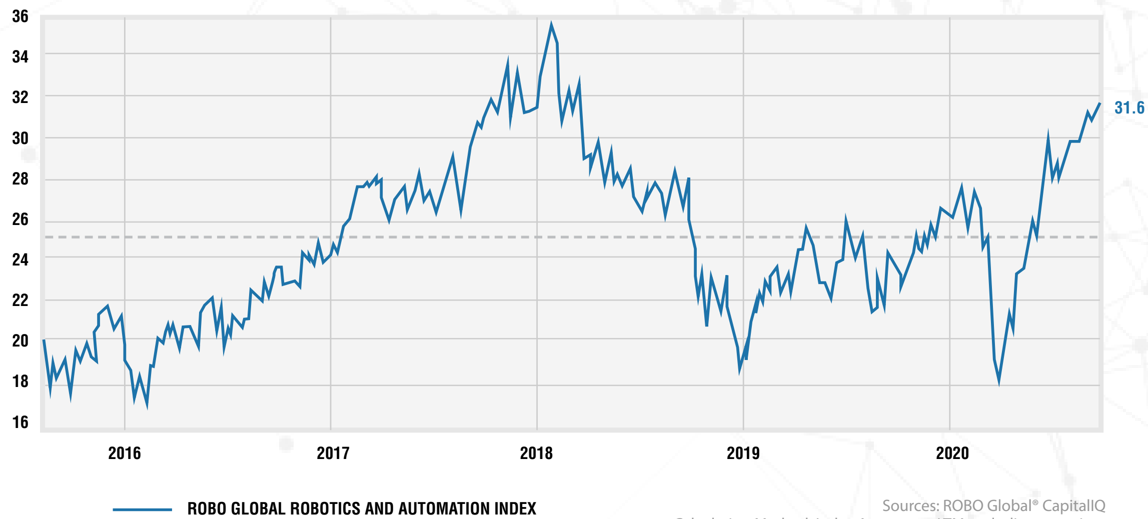
Valuations and balance sheet strength

The ROBO Index is up 16% year-to-date as of August 31 and trades on a trailing PE of 32x, compared to the 5-year average of 25x and a range of 17–35 — see chart below.

As uncertainty around near-term earnings and credit have dramatically increased this year, the focus has shifted to balance sheet strength. We note that the weighted average Net Debt to EBITDA ratio for the ROBO Index was 0.0x halfway through 2020 and that over 60% of its members held a net cash position (net debt <0), compared with approximately 15% of S&P500 index members and 22% of MSCI ACWI index members.

Trailing Price/Earnings

Long Term Average = 25.3

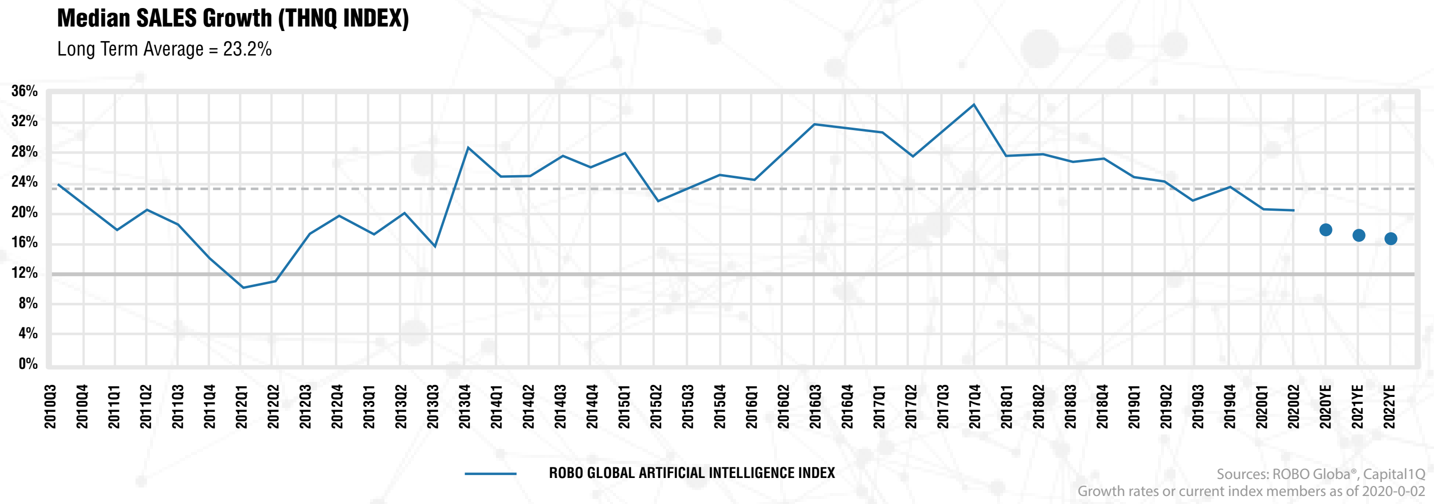


Sources: ROBO Global® CapitalIQ
Calculation Method: Index Aggregate, LTM excluding negatives

THNQ: ARTIFICIAL INTELLIGENCE INDEX

The ROBO Global Artificial Intelligence Index (THNQ) delivered solid 2Q earnings performance. Median sales growth for the 70 members of the THNQ Index was 21%, with one-quarter of index members growing sales by 40% or more during the quarter. This was driven by the explosive growth in enterprise cloud solutions and business infrastructure spending to accommodate the massive shift to remote work and online shopping. With management teams reestablishing quarterly guidance after a disappointing 1Q20 and many upgrading their outlooks for the year, 2020 estimates have mostly stabilized and resumed their upward trajectory. In terms of valuation, THNQ trades at a relatively high multiple with a forward median P/S of 8.5x. The balance sheet remains strong, with almost 70% of its members holding a net cash position.

Notably, the e-Commerce, Business Process and Semiconductor subsectors led the gains in median sales growth, while Cognitive Computing, Big Data Analytics and Healthcare experienced deceleration from the previous quarters. E-Commerce companies delivered on high expectations in 2Q, generating median sales growth of +63%, evidenced by YTD share price outperformance of 116%.



ETSY Inc, a leading e-commerce provider focused on handmade and unique merchandise, grew revenue at an impressive rate of 137% to $429M during the quarter. The adjusted EBITDA of $151M or margins of 35% is a record for the company. Accelerated by the pandemic, the shift to online shopping is here to stay and was reinforced by a strong revenue outlook for the remainder of the year. ETSY improves the buying experience by leveraging machine learning algorithms for a personalized shopping experience using its search and discovery feature. In addition, the commentary from Etsy around the sustainability of growth post-pandemic was bullish as consumers' shift in behavior has permanently increased online consumption.

The Business process and Semiconductor subsectors also demonstrated strong median sales growth during the Q. The continued momentum in digital transformation is illustrated by strong earnings performance by index members such as Salesforce, HubSpot, and Nvidia, all beating analyst expectations as enterprises across industries are modernizing their IT architecture with cloud software applications and processing chips.

HubSpot, a global leader in inbound marketing solutions, grew 2Q revenue by 26% YoY, while international grew 36% from the previous year. The company has been successful in adding advanced features and services to its existing customers and has managed to bring in thousands of new customers. Net customer additions set a company record, up 36% YoY, driven by strong demand across platforms as enterprise customers seek ways to achieve their marketing strategies in this tough macro environment.

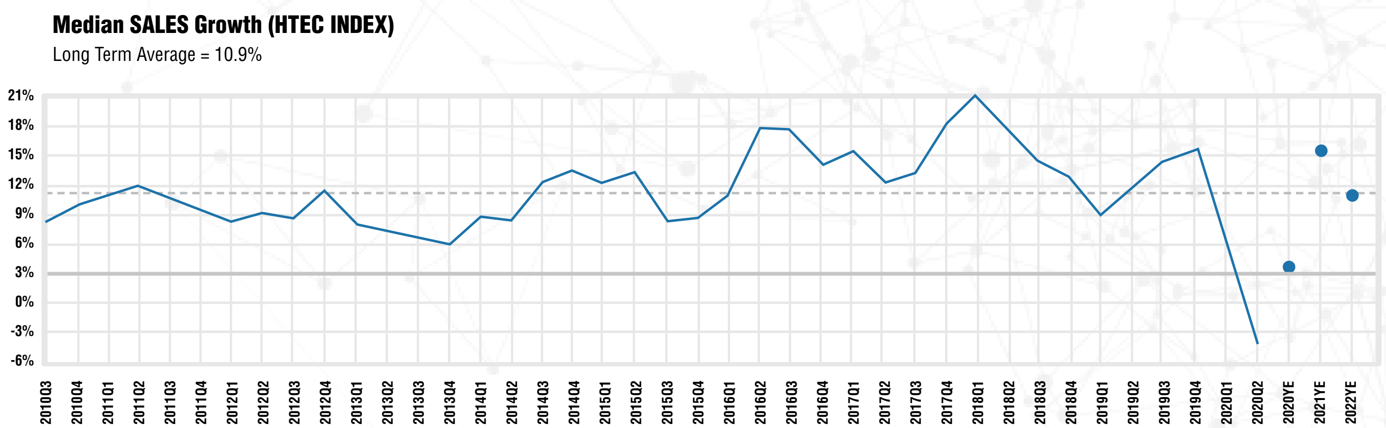
On the downside, Big Data Analytic companies such as Alteryx, Splunk, and New Relic suffered decelerating growth during the quarter as key customers pushed out their data-intensive AI projects to reallocate resources to meet challenges in remote work capabilities. Over the coming quarters, we anticipate that deployments around data analytic projects will recover when companies are forced to seek solutions to optimize cloud migration and to manage the increasing volume of data that has been created.

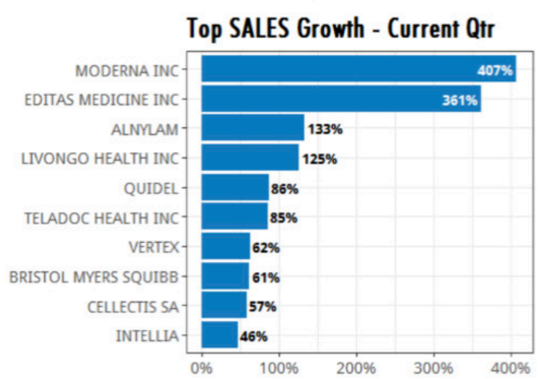
Alteryx, a leader in data analytic solutions, reported disappointing revenue growth of 17% YoY, with flat bookings. While the company exited the quarter with strong annual recurring revenue growth of 40% YoY, the company was negatively impacted by the COVID pandemic, which resulted in longer sales cycles of AI projects. Alteryx believes that in the longer term, COVID is creating a tailwind for their solutions. New customers in sectors like retail, transportation, and food service that lack the analytic rigor or data science talent have found Alteryx solutions to be indispensable as they navigate through these challenging conditions.

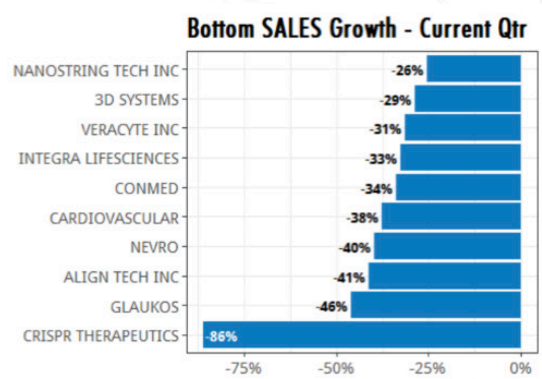
HTEC: HEALTHCARE TECHNOLOGY AND INNOVATION INDEX

2Q20 sales drop for the first time in at least a decade

The Healthcare Technology and Innovation Index (HTEC) recorded its first quarterly revenue contraction in at least 10 years, with sales declining by 4% YoY at the median, compared to 6% growth in the prior quarter and a long-term average of 11%. EPS also declined YoY for the first time in at least a decade, with a 37% drop at the median, compared with 8% growth a year ago. While Medical Instruments, Robotics, and Genomics experienced sales declines in the 17–23% range, Telehealth, Precision Medicine, and Diagnostics continued on their robust growth trajectory.





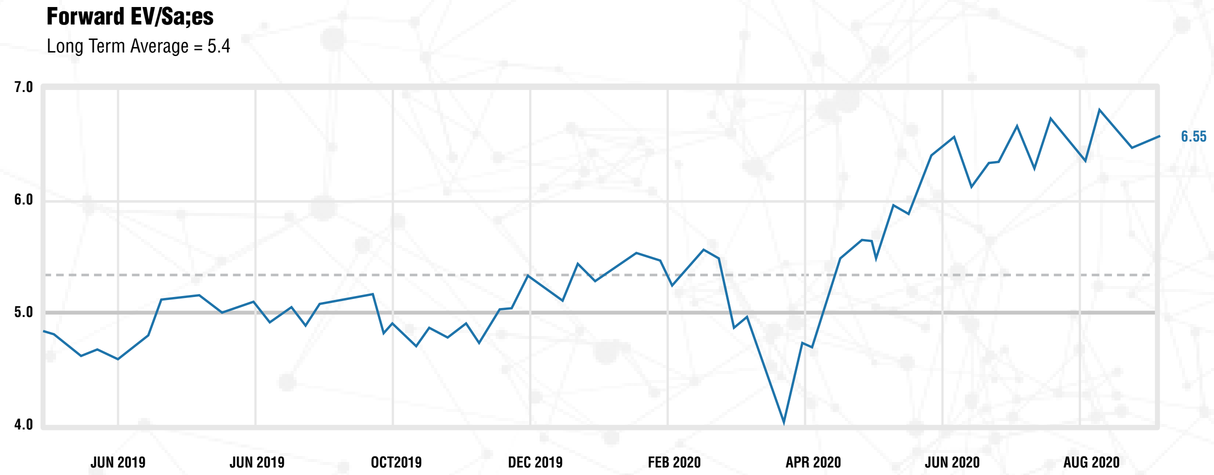


Source: S&P CapitalIQ, Data Prior to HTEC Inception on 4/30/19 is back tested.

2Q20 earnings exceed forecast by the most in a decade

Yet 2Q results came in significantly above the dire forecasts anticipated in the midst of the lockdown crisis. On aggregate, 2Q20 EPS came in 24% above expectations, with 81% of companies exceeding consensus revenue estimates. At the revenue level, 80% of companies topped revenue estimates, by an average of 7%, with the biggest positive surprises coming from genomics and telehealth companies. After a more than 20% reduction earlier in the year, EPS estimates for 2020 have stabilized and turned back up with a 4% increase in July and August, leaving annual EPS growth forecasts around -6% this year, followed by a +23% increase in 2021 and +15% in 2022.

In terms of valuation, HTEC is currently trading on a forward EV/sales of 6.5x, which compares to the year-ago level of 5x. The index has a median market cap of $6.7B, and 56% of its members hold a positive net cash position.



Data analytics was the strongest performing subsector, returning 45.6% during Q2, with Diagnostics (+42.6%) and Precision Medicine (+40.7%) close behind. All of the subsectors generated double digit returns, with the exception of Regenerative Medicine, which returned -2.6% during the quarter.

Livongo, a technology leader in remote patient monitoring and a new addition to HTEC in Q2, led the Data Analytics group with a whopping 164% return. Outperformance was driven by record new member enrollment. Last month, another HTEC member, Teladoc, announced the acquisition of Livongo for $18.5 billion. The deal is expected to close by the end of this year.

Quidel (+129%) led the diagnostics group, where the overarching theme continues to be innovation in COVID-19 testing. Quidel, a world market leader in diagnostic testing, became the first to introduce an antigen test, which brought a lower-cost alternative to the RT-PCR COVID test to the market.

Cryolife was the lowest performer of the Regenerative Medicine subsector, returning -18%. The pandemic resulted in numerous cost-cutting initiatives, and in June, the company announced a convertible offering, raising $100M in convertible senior notes. This was after the borrowing of the remainder of its revolver in March to maintain cash balances.