ROBOGLOBAL®

INVESTING IN THE ROBOTICS & AI REVOLUTION

SECOND QUARTER IN REVIEW

Jeremie Capron, Director of Research, ROBO Global

SUMMARY

After ten consecutive quarters of gains, the ROBO Global Robotics & Automation Index declined by 4% in 2Q18, primarily due to weakening economic momentum in Europe and Asia, a stronger dollar, and US tariffs that sent manufacturing and industrial automation stocks tumbling, especially in the Far East. At the same time, healthcare, energy, security, and consumer robotics delivered positive returns. Despite the decline, ROBO index members reported the strongest earnings growth since inception (+29% YoY) with many members increasing investments in R&D—a reflection of continued corporate confidence. ROBO is currently in line with its long-term average valuation of 22x P/E, compared to 27x a year ago.

Robotics, automation, and AI maintain strength in the face of global economic shifts

Global equities rose marginally in 2Q18, with the MSCI AC World Index up 2%, recouping 1Q losses. Weakening economic momentum and a stronger dollar pressured emerging markets, particularly China, as well as Japan and Europe, as interest rates rose and the US slapped tariffs on metals. While economists continued to upgrade US growth forecasts, markets were quick to discount risks of rising short-term rates, a stronger dollar, and fears of a trade war stifling global growth. All eyes are now on the yield curve, which continued to flatten in 2Q.

Enthusiasm for big technology stocks appears unabated, as reflected in the Nasdaq's continued outperformance. In fact, big gains in Amazon, Microsoft, Netflix, Facebook, Nvidia, and Alphabet accounted for the entire gain in the S&P500 year-to-date. While we are concerned that a stumble in tech-stocks could raise the risk of market contagion, we remain confident in the growth outlook for robotics, automation, and AI companies. We expect economic growth in major regions to pick up again in coming quarters, as consumer confidence remains elevated and corporate investments continue to accelerate on a combination of tax reform and deregulation.

Amid this landscape, we were not surprised to see a small decline in the ROBO Global Robotics & Automation Index in 2Q18 to -4%. More than half of the decline was due to foreign currency headwinds. By region, global export powerhouses Japan (-19%) and Taiwan (-16%) were the largest detractors for the ROBO Global Index in 2Q18 as investors continued to trim exposure to industrial companies. Meanwhile, the US (+4%) and Europe (+2%) contributed positively. By sector, energy (+40%), security (+35%), consumer products (+18%), and healthcare (+8%) delivered the strongest returns, while manufacturing-oriented sectors such as actuation (-15%) and industrial automation (-15%) were the largest detractors.

2Q PERFORMANCE

Total return by subsector (%)	2Q18	Past 12m
3D Printing	4	(15)
Actuation	(15)	20
Computing, Processing, & AI	(4)	15
Consumer Products	18	(3)
Energy	40	29
Food & Agriculture	(9)	3
Healthcare	8	28
Integration	(7)	7
Logistics Automation	(8)	22
Manufacturing & Industrial Automation	(15)	16
Security	35	45
Sensing	(1)	32

MOVERS & SHAKERS

Top performers were Aerovironment (+57%), ISRA Vision (+46%) and Helix Energy (+44%). Aerovironment, the largest drone supplier to the US military, rose to new all-time highs after strong orders of Tactical Missile Systems boosted revenue and orders, the divestiture of its underperforming energy and environmental systems business, and bullish comments around the recent start of a JV with Softbank for high altitude pseudo satellites for telecoms. ISRA, the German provider of surface inspection and machine vision systems for factory automation, rose to new highs after reporting continued double-digit revenue growth, a major order for the 3D inspection of smartphone housings, and the launch of new 3D robot automation and 3D measurement products at Automatica.

Daifuku (-26%) and Harmonic Drive (-26%) were the largest drags on performance in 2Q18. Recall that the Japanese companies had led gains in the ROBO index throughout 2017, rising 155% and 136% respectively in terms of US dollars. We see these slides as a temporary correction.

ROBOGLOBAL®
INVESTING IN THE ROBOTICS & AI REVOLUTION

MOVING FORWARD

Earnings for ROBO index members remain very healthy. In fact, median EPS growth hit a record 29% in 1Q18, the **strongest EPS growth since inception** of the index in 2013. Adjusting for the temporary effect of the US Tax Cuts and Jobs Act, the ROBO Global Robotics & Automation Index has remained on a clear 20%+ earnings growth trajectory for the past five quarters.

There has been a clear acceleration in M&A and funding activity, with more than 40 deals announced by ROBO index members so far this year. Of particular note is the $1B investment in PTC by Rockwell Automation—with both companies being high-performing members of the ROBO Global Robotics & Automation Index. For details on this and other notable deals, see the **ROBO Global M&A Report for Q2 2018**. This, and the fact that the 2Q18 pullback in the index has left it trading in line with its long-term average valuation of 22x forward PE, compared to 27x a year-ago, should give investors confidence as we head into the second half of the year.

MEDIAN EPS GROWTH (%)