

# THIRD QUARTER IN REVIEW

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## SUMMARY

The ROBO Global Robotics & Automation Index rose 4.3% in 3Q18, recouping its 2Q loss. While weakening economic momentum continued to weigh on Asian and European equities, US Robotics, Automation and AI stocks soared 16%. Computing and AI, consumer robotics, security, and 3D printing all led with positive returns, while actuation, manufacturing, and industrial automation declined. Overall, the fundamentals remain attractive: ROBO index members reported a sixth consecutive quarter of double-digit earnings growth, leaving the index forward PE at 21x, below its long-term average of 22x PE, a level unseen since July 2016.

### **Robotics, automation, and AI accelerate in the US to overshadow regional declines**

Global equities rose in 3Q18, with the MSCI AC World Index up 4%, but dispersion remained high. US equities had their best quarter in 5 years, up 7%, and remain in a world of their own, as European stocks were left behind as rising rates pressured emerging markets and the escalation of the trade dispute between the US and China sent Chinese stocks tumbling. Economists continue to forecast a robust run for the US economy, but all eyes are on rising rates and the yield curve, which continued to flatten in 3Q.

The ROBO Global Robotics & Automation Index rose 4.3% in 3Q18. By region, industrial and engineering powerhouses Japan (-5%), Germany (-11%), and Taiwan (-11%) were the largest detractors for the ROBO Global Index in 3Q18, as investors continued to trim exposure to industrial export companies. Meanwhile, the US (+16%) and Canada (+25%) contributed positively. By sector, computing and AI (+13%), consumer robotics (+45%), security (+35%), 3D printing (+16%), and healthcare (+7%) delivered the strongest returns, while manufacturing-oriented sectors such as actuation (-14%) and industrial automation (-1%) declined.

## 3Q PERFORMANCE

Total return by subsector (%)	Q3 2018	Past 12m
3D Printing	16	8
Actuation	(14)	(15)
Computing, Processing, & AI	13	21
Consumer Products	45	43
Energy	12	24
Food & Agriculture	5	2
Healthcare	7	30
Integration	4	(1)
Logistics Automation	6	9
Manufacturing & Industrial Automation	0	(1)
Security	21	39
Sensing	(1)	14

## MOVERS & SHAKERS

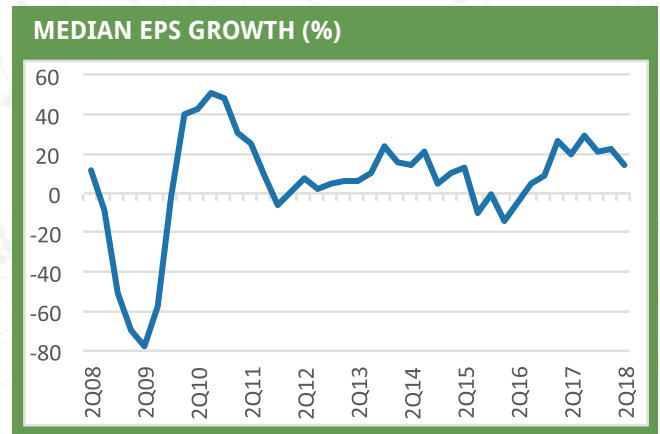
Top performers were Aerovironment (+57%) for a second consecutive quarter, iRobot (+45%), and 3D Systems (+38%). Aerovironment, the largest drone supplier to the US military, rose to new all-time highs after the company reported a more than doubling in revenue and order backlog. Management also made bullish comments around the recent joint venture with Softbank to fund development and production of solar-powered high-altitude unmanned aircraft systems designed to deliver 5G IoT connectivity to 7 billion people around the world.

iRobot's robotic vacuum cleaner sales blew past expectations in Europe and Japan, and the company introduced its next generation Roomba, which empties its bin by itself and responds to voice commands. IPG Photonics (-29%) and Hiwin (-27%), among the most exposed to China, were the largest drags on performance in 3Q18. IPG Photonics warned of a slowdown in China orders in July. Hiwin, the leading linear motion control equipment provider in China, was hit by the same concerns, as was Airtac (-31%). However, we expect the downturn in purchase orders from Chinese manufacturers to be short-lived and we see the moves as a temporary correction. China's industrial policy is forcing a significant upgrade in manufacturing technology, and the summer downturn is largely due to trade-friction related delays, in our view. Recall that Hiwin and IPG Photonics were among the best performing ROBO Global index members in 2017, up 140% and 117% respectively.

## MOVING FORWARD

Earnings trends for ROBO Index members remain very solid, with a sixth consecutive quarter of double-digit earnings growth. Learn more in our most recent [Earning Trends report](#). With management teams generally upgrading their outlooks for the year, earnings estimates have stabilized and resumed their upward trajectory. Consensus estimates now point to 17% EPS growth for the year and 15% for 2019, according to Factset. We note a clear acceleration in M&A activity, with more than 40 deals announced by ROBO index members so far this year, as discussed in details the recent report [Follow the Money in Robotics, Automation, and AI: M&A and Fundings Accelerate in 2018](#).

Finally, we note that the ROBO index is currently trading on a 21x forward PE, 1x below its long-term average valuation of 22x—a level unseen since July 2016. This compares to 27x one year ago.



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