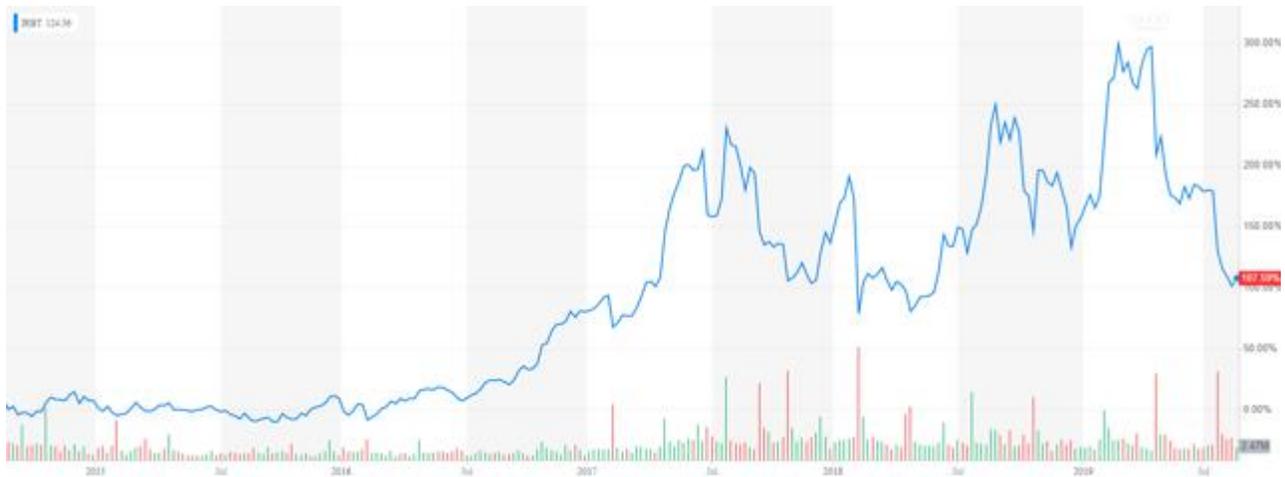


iRobot

I like situations when a great companies are undervalued because of strong sell-off. I think it's the right time to get in and pick up some shares to my portfolio. Recently, this happened with shares of iRobot ([IRBT](#)).

iRobot Corporation is an american company which was founded in 1990 and the headquarters of the company is in Bedford, Massachusetts, USA. iRobot designs, makes and sells automatic robots for the consumer market worldwide. It offers a great variety of Roomba floor vacuuming robots, family of Braava automatic floor mopping robots and Mirra Pool Cleaning Robot. The company sells its robots via various distribution channels including chain stores and other national retailers as well as via online stores and value-added distributors and resellers.

As seen in the chart bellow, which indicates a fluctuations of iRobot's stock price during the last 5 years, the perfect growth trend in share price ended in second half of 2017. There is already 2 years a significant volatility which was caused by increasing competition in consumer robot market. The first big fall of stock price appeared between July 2017 and April 2018 when the price dropped off almost by 50%. Subsequently, the shares of iRobot were able to reach all-time highs. Then iRobot's stock sold off after peaking around \$130 in March 2019. iRobot's sell-off occurred on fears of a slower pace of growth and increasing competition. iRobot is currently a much more attractive because of its valuation and growth prospects.

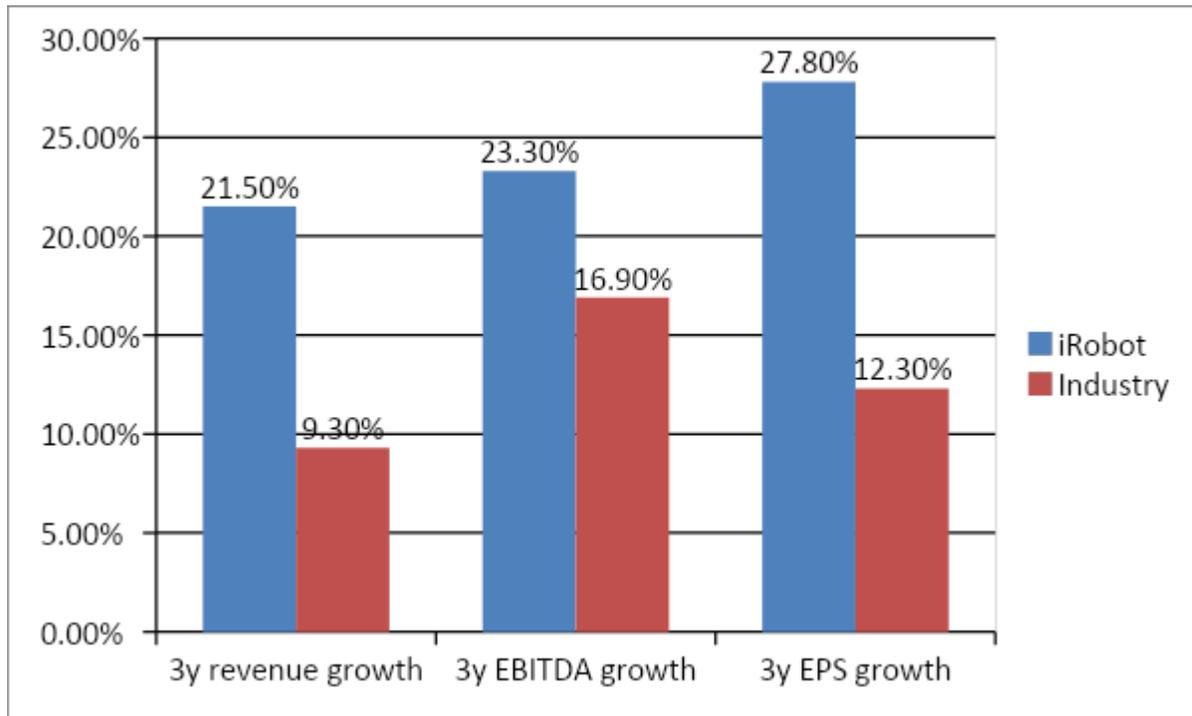


Source: Data provided by Finance Yahoo

Remarkable past growth

Over the past three years management of iRobot have been able to make a successful results in all key metrics. As seen in the chart bellow, iRobot was able to rapidly increase sales from \$0.66

billion to \$1.09 billion in 3 years (21,5% annual growth). Despite of fear from rising competition, the company was able to improve profitability even more than sales. EBITDA growth rate is on the level of 23,30% and grow rate of earnings-per-share (EPS) is on the level of 27,80%. iRobot achieved a perfect results that are above the average results recored by industry as whole. In addition, the company has been able to achieve this excellent numbers with very solid financial strength and only negligible debt.



Source: www.gurufocus.com/stock/irbt/summary

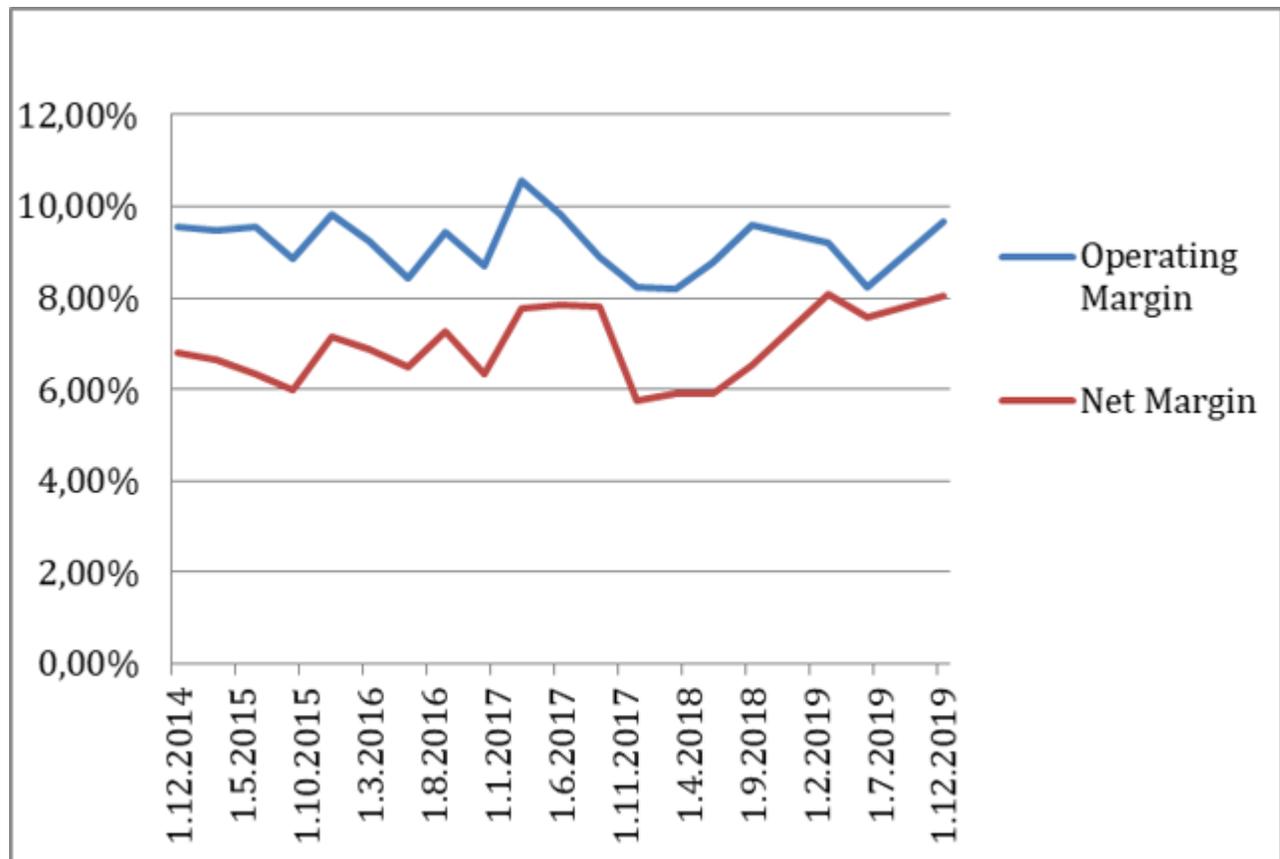
But last quarter results indicated that it will be hard task for management to keep this growth rate in the future. Top management of iRobot revealed that the company was negatively affected by tariffs in US-China trade war. Tariffs resulted in slower growth of 15% in revenue in Q2 and unstable full-year expectations. Company representatives are now expecting full-year revenue of \$1.2 billion to \$1.25 billion (+10 to +14% year-over-year). Colin Angle (CEO of iRobot) also claims that company is trying to get exclusion from the tariffs and he seems to be confident about getting the exemption but the date of the final decision has not been revealed yet. Due to tariffs the company has been forced to increase product prices in order to maintain margins and profitability.

Robust potential expansion

Despite of fact that there are some headwinds and difficult challenges for the company, I think that following facts about iRobot convinced me enough to believe that company can make it

through. iRobot has excellent history, the best products on the market, branding, product awareness, customer loyalty, rising margins, new products or increasing sales in consumer robot market. Moreover, iRobot has more than 500 patents which protects intellectual property of the company.

Another chart shows the trend of operating and net margin over the past 5 years. The operating margin oscillates between 8,2% and 10,55% whereas the net margin has a better expanding trend (growth from 6,03% in 2014 to 8,05% in 2018). I expect the operating margin to grow only minimally in the coming years (from current 9,69% to 9,85% in 2023 and 10%). Slight increase is caused by competition pressures in consumer robot market. The higher increase may be expected in net margins due to economic of scale and decreasing proportion of R&D costs to sales. In my calculations I work with the net margin of 9,15% in 2023 and 9,30% in 2025.



Source: IRobot Profit Margin 2006-2019 | IRBT

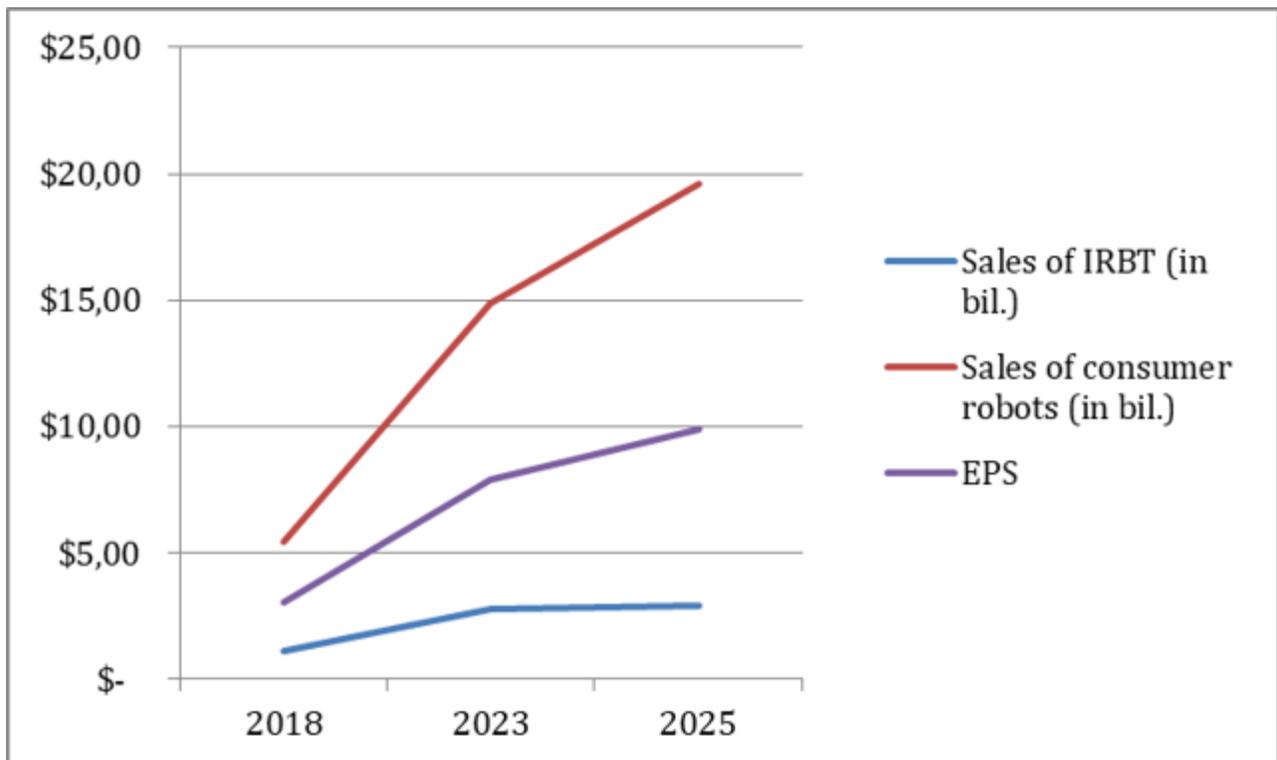
The analysis by Tractica and Research shows that worldwide sales of consumer robots reached \$5.438 billion in 2018. iRobot's market share is currently on 20% level. Analysts from Tractica and Research expect strong growth of market in the future. Sales of consumer robots should reach \$14.91 billion in 2023 and \$19 billion by the end of 2025. If iRobot is able to hold market share on similar levels as they do now, shareholders could expect strong returns in the future.

The market share of iRobot can be expected to decline in coming years due to increasing competition. As I already mentioned iRobot is market leader with market share around a 20 % level. I expect that management will be able to hold market share of company on level of 16,25% in 2023 and 15% in 2025.

In the table below are calculated sales and EPS of iRobot in coming years. EPS we calculated as $(\text{Sales of iRobot} \times \text{Net margin}) / \text{Shares outstanding}$

Indicator	2018	2023	2025
Sales of consumer robots (in bil. \$)	5,438	14,91	19,6
Sales of iRobot (in bil. \$)	1,09	2,76	2,94
EPS	3,07	7,88	9,88

Source: Author's calculations



Source: Author's calculations

Obviously, sales of iRobot could triple in the next 7 years what represents a 15,5% annual growth rate. Considering the estimated net margin and sales the EPS is expected to be 9,88 in 2025 (18% annual growth rate).

In the table below is indicated price range of iRobot's shares in the future on the basis of various P/E levels. History P/E for the company is 32,18 and trailing P/E is 21,45.

	2019	2023	2025
P/E = 21,5	\$62,00	\$169,42	\$212,42
P/E = 25	\$76,75	\$197,00	\$247,00
P/E = 32	\$98,24	\$252,16	\$316,16

Source: Author's calculations

The table shows that investors may expect an increase of share price from current price level of \$62 to \$212 or \$316 what means the relative growth from 242% to 409% in the next 6 years.

New products

Analysts have high expectations about launching of new products that could be a new source of income in the future. The company successfully launched two revolutionary cleaning robots in May 2019 Roomba s9/s9+ and Braava jet m6 taking multiple rooms with advanced navigation and mapping capabilities. Robots use so-called 'Link Technology' in order to communicate so that there is no extra effort from the user and the whole process is automatic (vacuuming as well as mopping).

One of the latest products is a robotic lawnmower called Terra. The company is going to start selling Terra robots in Germany in Q3 2019. The representatives of iRobot claim that lawnmower Terra is important for the company from a business perspective due to fact that lawnmower market is already well established. He also claims that robot lawn mowers are a \$300 million worth on the European market whereas the U.S. market has much bigger potential. However, the lawnmower market is already penetrated by similar products made by different companies, for instance, Husqvarna, Honda or John Deere. Still, there is a huge interest from potential beta participants and buyers.



Source: iRobot website

Summary

So far iRobot has represented a successful business story and I expect it will continue in the future due to its significant potential, great management and the quality products. Main valuation indicators shows that shares of iRobot could be undervalued for example trailing P/E is only 21,45 in comparison with history P/E of 32,18. Peter Lynch's valuation seems even better because PEG ration is on the level of 0,91 what indicates that company is undervalued.

I suppose it is the right time to load up some shares because investors might experience a huge jump from 242% to 409% in the price of stock in the next 6 years.