

# Mitch on the Markets

# Can Too Much Innovation Kill the Economy?



By Mitch Zacks Senior Portfolio Manager

The robots are coming to take your jobs. The robots are coming to take your jobs. The robots are coming to...

OK, you get the point. Technological change is happening at a rapid pace, and it is affecting the way we communicate and the way businesses operate. We've known this for years. But what has been happening recently that has many worried is the rise of robotics—virtual reality, self-driving cars, robots working assembly lines and so on. This is the type of technology that in every sense of the word replaces the need for human labor. If replacing human labor means killing jobs, does it imply that too much innovation and automation could cripple the economy?

## **Innovation Goes Back a Long Way**

There's a decent amount of paranoia about innovation going too far, about living in a world where robots build houses and serve meals at restaurants. But imagining a world where there is a one-for-one trade-off between machines and

humans is short-sighted. Think about lessons we have from history.

During the industrial revolution, one of the big "job killing" innovations was the power loom. First built in 1785, the power loom removed the need for humans to individually weave cloth, and at its introduction was able to weave twice the amount of cloth as a human. Over the next century, it was able to weave 50 times as much as a human laborer. So that must have meant the end of the weaving profession, right? Wrong! The number of employed weavers actually grew over that time, because new technology often creates cheaper goods, more demand, and different types of needs. Not only were more weavers needed to keep up with demand, but tons of new jobs were created out of the need for new organization, more mill managers, mechanics to fix the power looms, and so on.

More recently you might think back to the introduction of the ATM machine. The ATM eliminated the need for people to walk into the bank and have an interaction with a bank teller. So the bank teller profession must have shrunk considerably then? Wrong again! More bank tellers came into the economy as a result, as banks could now use them in a "client"

Page 1 September 19, 2016

relationship" role and have them sell higher margin products to customers, like mortgages and credit cards. This involved some retraining of the workforce but ultimately grew the workforce in the financial sector.

You can look at the economy in a lot of different ways and find numerous examples of the same principle.

Innovation looks on the surface like it will kill jobs by replacing them outright, but implementing new technology is a very difficult process, and often involves a lot of manpower to do so. But once in place, the new technology can allow human labor to manage, market, sell, serve, and do a multitude of other jobs that arise in response to new demand, as well as the need to manage new technology.

## **Bottom Line for Investors**

Economies evolve. The U.S. was once an economy where 80% of the jobs were in agriculture. From an agricultural economy to an industrial and manufacturing based one, to a services and consumption based economy, to whatever is next. A software and consumption based economy possibly? One can't say for sure. But, history tells us that innovation and technological changes have brought wealth and jobs over time, and I would not bet against that changing. Just because we can't see it or understand it, does not mean it won't happen.

### -Mitch

#### **About Mitch Zacks**

Mitch is a Senior Portfolio Manager at Zacks Investment Management. Mitch has been featured in various business media including the Chicago Tribune and CNBC. He wrote a weekly column for the Chicago Sun-Times and has published two books on quantitative investment strategies. He has a B.A. in Economics from Yale University and an M.B.A in Analytic Finance from the University of Chicago.



#### Disclosure:

Past performance is no guarantee of future results. Inherent in any investment is the potential for loss.

This material is being provided for informational purposes only and nothing herein constitutes investment, legal, accounting or tax advice, or a recommendation to buy, sell or hold a security. No recommendation or advice is being given as to whether any investment or strategy is suitable for a particular investor. It should not be assumed that any investments in securities, companies, sectors or markets identified and described were or will be profitable. All information is current as of the date of herein and is subject to change without notice.

Any views or opinions expressed may not reflect those of the firm as a whole. Third-party economic or market estimates discussed herein may or may not be realized and no opinion or representation is being given regarding such estimates. This material has been prepared by Zacks Investment Research (ZIR) an affiliate of Zacks Investment Management, Inc. (ZIM) on the basis of publicly available information, internally developed data and other third party sources believed to be reliable. Neither ZIR nor ZIM has sought to independently verify information taken from public and third party sources and does not make any representation or warranty as to the accuracy, completeness or reliability of the information contained herein. Indexes are unmanaged and are not available for direct investment. Investing entails risks, including possible loss of principal.

Returns for each strategy and the corresponding Morningstar Universe reflect the annualized returns for the periods indicated. The Morningstar Universes used for comparative analysis are constructed by Morningstar (median performance) and data is provided to Zacks by Zephyr Style Advisor. The percentile ranking for each Zacks Strategy is based on the gross comparison for Zacks Strategies vs. the indicated universe rounded up to the nearest whole percentile. Other managers included in universe by Morningstar may exhibit style drift when compared to Zacks Investment Management portfolio. Neither Zacks Investment Management nor Zacks Investment Research has any affiliation with Morningstar. Neither Zacks Investment Management nor Zacks Investment Research had any influence of the process Morningstar used to determine this ranking.

### Indexes

The S&P 500 Index is a well-known, unmanaged index of the prices of 500 large company stocks, mainly blue-chip stocks, selected by Standard & Poor's. The S&P 500 Index assumes reinvestment of dividends but does not reflect advisory fees or other expenses. The volatility of the index is materially different from the individual performance obtained by a specific investor. An investor cannot invest directly in this Index.

Page 2 September 19, 2016