

Autonomous Autos

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Q3-2015 Letter to Investors

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The Next Big Thing

"Everything, from how we move goods to how we move ourselves around, is ripe for change." –KPMG

The technology revolution of the 1980s, driven by the personal computer, accelerated the rate of advancement for society. Today, we have wearables - such as the Apple watch that are far more powerful, 3D printers, space travel, energy sufficiency, mobile phone payments, GPS mapping, Uber (taxi), cloud computing, streaming media, Airbnb (lodging), and an economy that has become digital.

Yogi Berra said, "It's tough to make predictions, especially about the future." With that said, I would like to share my subjective view on how

The new technology could provide solutions to some of our most intractable social problems—the high cost of traffic crashes and transportation infrastructure, the millions of hours wasted in traffic jams, and the wasted urban space given over to parking lots.

things may change as the autonomous, or self-driving car achieves critical mass.

Self-driving vehicles are in effect **robots** on wheels. Once the coordinates are set, the smart machine drives itself to the global positioning system (GPS) destination. Workers spend on average 200 hours commuting to and from work each year. For the most part, those hours are unproductive. In the not too distant future, that may change.

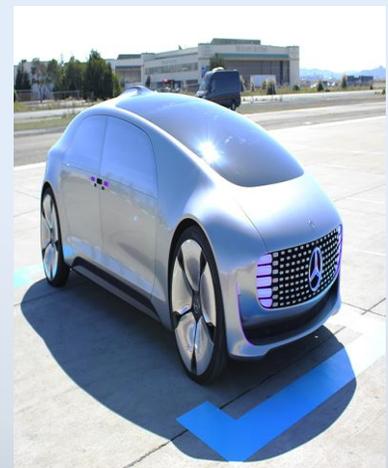
Self-driving cars can become virtual moving offices equipped with workspace, wifi, digital media screens, sound systems, recliners and refrigerators. Travelers of tomorrow are sure to have an endless selection of self-driving vehicles from which to choose.

Those who enjoy saving money may prefer a pay-for-use option, similar to those in effect by Uber, Amazon, or Netflix. A pay-for-use option may

Innovators

Apple, Audi, Ford, GM, Google, Honda, Mercedes, Nissan, Tesla, Toyota, Uber

The best of the best in technology and automobile manufacturing are shifting into overdrive when it comes to developing self-driving cars. What this means to our way of living is sure to be front page news for the years to come.



provide members with the opportunity to choose autonomous cars from a variety of models, such as an everyday no-frills model for daily commutes and a more upscale selection for nights out on the town.

Fashion in the autonomous auto space is looking to be James Dean cool. Mercedes has featured a prototype of its concept luxurious self-driving car equipped with all the bells and whistles. Need a truck to haul a few things around, or a van for a larger group outing? It will be as easy as opening the app on your mobile device and making the selection. How about theatre seating with a digital library of movies and games for trips taking a few hours or more? That certainly would make the trip more enjoyable. Vacationers choosing to journey by way of a self-driving motor coach will see more sights and have more time to interact with each other.

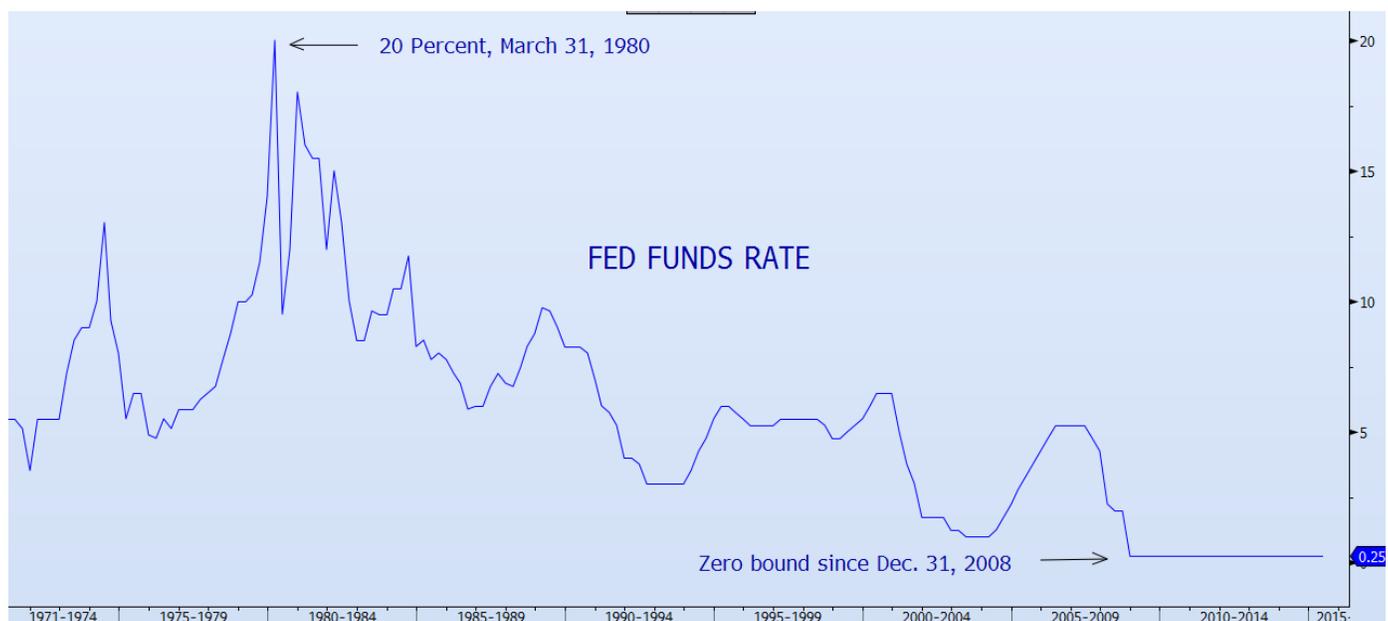
The economic benefit from computerized cars is another big plus. Think about it. Why own? You don't need a car because, in reality, one is as close as your iPhone. The savings of not owning can be significant. A typical car sits idle 22 hours a day, all the while depreciating in value. From the moment we buy them, cars are worth less than we paid and they are costly to maintain. Wouldn't it be nice to never pay automobile insurance again? What about not having to deal with repairs, maintenance or gas station fill-ups? There's a lot to be said about the pay-as-you-go model. In the business world leasing or renting is often a better means of capital allocation.

How about adding more square living space to your home by converting an unnecessary garage into an extra guest room or den? Instead of a driveway, a vegetable or Zen garden might spruce things up.

Henry Ford mass produced cars enabling the average person to own one; the Wright Brothers gave us flight. Both of these transformed transportation. What will autonomous travel do for mankind? I believe it will free up the most important commodity of all – time.

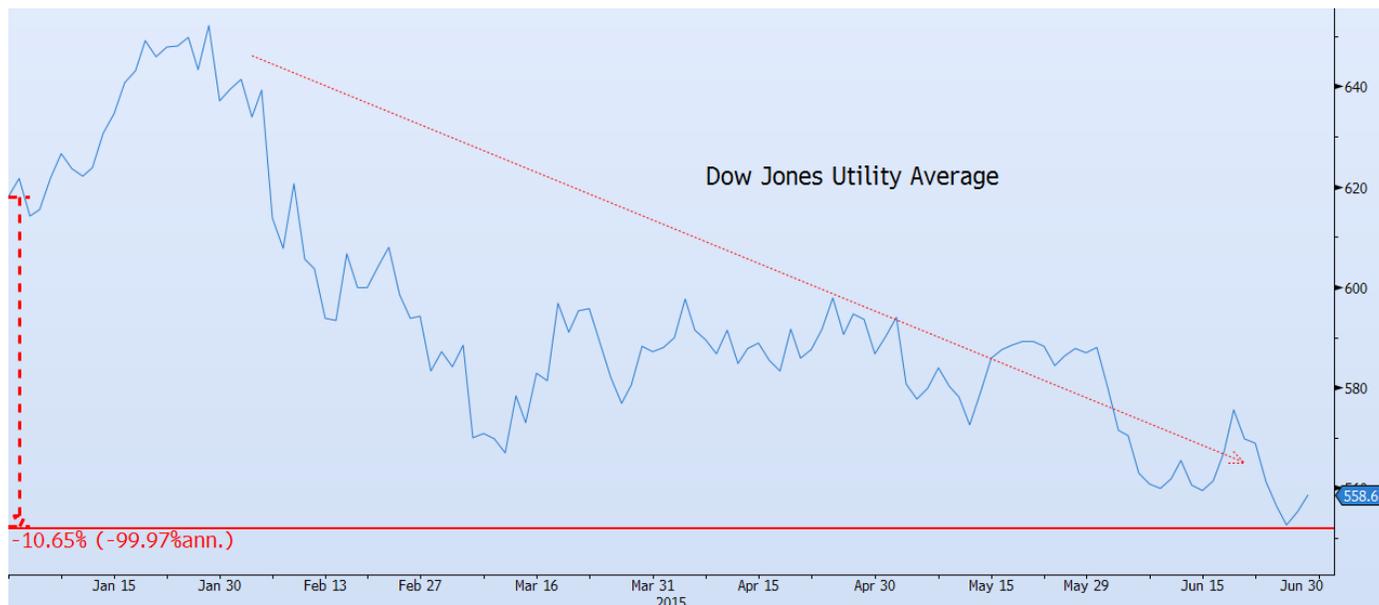
Investment Markets Update

Thus far, in 2015 the economic winds are shifting. For 78 consecutive months dating back to December 2008 the Federal Open Market Committee has maintained its zero interest-rate policy (ZIRP). In March, the Fed removed the word "patient" from its forward guidance clearing the way for rate hikes in the future. In turn, financial markets, especially on the fixed-income side, have felt the ripples.



Year-to-date: rates have risen 30 basis points and 50 basis points respectively on 10 and 30 year U.S. government securities. Prices during this period have declined 3.7% for the 10 year note and 9.1% for the 30 year bond. Treasuries are backed by the full-faith of the U.S. government; there is essentially no credit risk.

Utility stocks as a group have fallen into correction territory. The Dow Jones Utility Average (DJUA) closed the quarter minus 10.96%; ironically, the DJUA led the market in 2014. Utilities have a theoretical duration of 23 years. The longer the duration the more vulnerable fixed-income assets are to interest rate moves. Clearly the FED's dialogue has put bond and income oriented investors on alert.



As of this writing, stocks are off marginally and have been trading in a narrow range throughout the year. As we enter summer's swelter, there are signs the market may cool down. Dow Theory is a century old stock-market technical analysis tool. Dow Theory assumes for an economic trend to continue it should be confirmed by both the Dow Jones Industrial Average (DJIA) and Dow Jones Transportation Average (DJTA) moving in the same direction. Simply, if the DJIA rises, so should the DJTA and vice versa. Theory argues that as long as the indexes rise and fall together the economic trend will respond accordingly. In May, the two indexes diverged – while the industrial sector reached new highs, transports were falling to yearly lows. Since then, both averages have been drifting downward.



Sam Stovall, S&P Capital IQ Chief Investment strategist, cites the Rule of 20 for determining the stock market valuation. The formula is 20 minus CPI (projected at 1.9% less food and energy) multiplied by the S&P 500 2015 EPS estimate of \$118.52, which equals 2,145. As of June 30th the index closed at 2,063.11, making it roughly 4% undervalued.

Headwinds to economic gains at this point are as follows: a stronger dollar, rising interest rates, Eurozone uncertainty – Greece, escalating lawlessness, corporate profit deceleration, a tightening employment picture, rising housing costs and slower global growth. On the flip side, historically low interest rates, an accommodative Fed, tame inflation, cheaper gas prices, reasonable stock market valuations, 8 year high consumer sentiment, over 3 million workers added to the job market in the past 12 months, and household net worth at \$84.9 trillion, indeed are tailwinds. Since 1945, Q-3 has been the worst performing quarter of the year. As of this writing, the situation in Greece has investors moving out of risk assets. At a glance, Greece's GDP equates to 1.4% of the United States; it equates to 0.3% of world GDP. The size of Greece alone makes it unlikely to disrupt the global economy. So, if stocks do in fact sell off during the weak months ahead, it looks to me more like an opportunity to buy in versus jump out. Where do I forecast the market to be at year's end? Higher.

Have a spectacular summer!

—Chip