



Quacks & Quarks

Despite the wildfires, hurricanes and turbulence caused by Trump's tweets, the \$18 trillion U.S. economy continues to surge ahead. Our **Fortress America** strategy did well, with most accounts up in the range of 11% to 13 % for the first 9 months of the year. Whether it's the result of 10 years of healing, restructuring and stimulus; the benefits of decreased regulation from Washington; or anticipation of the benefits from lower tax rates, we'll take it! Going forward, we anticipate continued strengthening in the overall economy and will maintain a steady course focusing on our core of **Fortress** holdings, supplemented by our "**Cloud Cartel**" stocks and recent increases in alternative energy holdings.

It's been seven years since we shared our vision of a "**Cloud Cartel**" divvying up the global economy. Fast forwarding to the present, the concentrated power of the **Amazon's, Apple's, Alibaba's and Alphabet's** of the **Cloud** is becoming reminiscent of the old Oil, Steel and Rubber "Trusts" of the early days of the 20th Century. And folks, we ain't seen nothin' yet. The digitalization of the economy is actually occurring faster than all but a few experts had envisioned just a few years ago. Yesterday's trickle of **e-commerce** transactions has accelerated into a torrent. Witness Amazon Prime's devastation of Main Street retailers. Now we're seeing e-commerce morph into **V-commerce** as Cartel members extend their reach vertically. Again, just look at Amazon's mushrooming distribution network and its acquisition of **Whole Foods**. It has he knocked the global logistics juggernaut **Walmart** onto its heels and has it scrambling to stay in the game. Amazon is just the most visible example, and is not alone in its unbridled growth. There are at least ten to fifteen companies with aspirations of global dominance of their sectors. It's certainly happening faster than legislators can or want to respond to. Meanwhile, with every elected pol in America groveling for their state to be the site of **Amazon's** recently announced **HQ2**, who is left to protect the Middle Class which is getting slammed here?

A torrent of technological innovation is pushing numerous industries to the tipping point of abandoning their traditional business models and rolling the dice on high risk radical transformations. Look at the *auto industry's* mad rush to suddenly abandon the internal combustion engine and go "*all electric*". Some are even proclaiming the "*Death of Diesel*" as more governments publish emission restrictions. Does empiric evidence indicate that the tipping point has been reached when we see that there are already more Tesla charging stations in Manhattan than gas stations?

We'll be following the auto industries transformation over the next several years. However, the rapid pace of scientific discovery is causing tremors that could topple the foundations of the *entire energy sector*. Accounting for annual expenditures of about \$9 trillion for fuel, distribution, and infrastructure, radical innovations here could disrupt the entire global economy. The first innovation tremors came about five years ago when new horizontal fracking technologies cracked the stranglehold of OPEC. The unlocking of additional fuel supply precipitated a sudden 60% drop in world oil prices, which was effectively a global tax cut. Concurrently, a sharp increase in the adoption of wind and solar power has further increased the supply of energy. *Supply of renewable energy* is being added more than twice as fast as world experts projected just a few years ago. In 2010 the IEA estimated that it would take fourteen years for global renewable energy production to reach 180 gigawatts. The shocking reality is that global renewable energy output reached 290 gigawatts in just seven years! And, the pace of adaption is increasing. This change amounts to a permanent decrease in the demand for oil and natural gas. The sudden consumer demand for electric cars could amplify this movement. The impact? *Econ 101* says that if supply increases (from fracking) and demand falls (due to increased renewables), the price of oil should fall over the long term.

What has precipitated the sudden emergence of alternative energy? Surprisingly, the catalyst has not been Adam Smith's invisible hand, or "market forces", but rather the heavy iron fist of *China's centrally planned economy*. With *pollution* ranked as the #2 political risk to the current regime, China's politburo has dictated massive investments in *solar energy and battery industries*. The result? Over the past five years, excess supply of batteries and panels has caused a 70% plunge in prices. At these prices solar energy becomes much more competitive with fossil fuels. Who cares if companies are losing buckets of money and Western companies can't come close to competing? It's all for the greater good, Comrade! From virtually nothing, in less than a decade, China now has six of the ten largest solar panel makers and 33% of the worlds installed solar capacity. China's excess supply of panels and batteries has rippled over to the U.S., slashing the prices of installed solar home systems by 50% over the past 2 years. Concurrently with cheap electricity, China stoked up electric car production last year to 500,000

vehicles versus just 77,000 in the U.S. In fact, last year China sold more electric cars than the rest of the world combined! Look for this to accelerate in the West at a closer pace over the next several years.

Exploring the rapidly changing world of alternative energy has led us to delve deeper into the dark sciences surrounding *nuclear fusion*. Long the *Holy Grail* of the clean energy world, *nuclear fusion* promises unlimited low cost pollution free electricity and heat, and a world beyond the imagination of Jules Verne, H.G. Wells or Stan Lee.

The world of fusion can be divided into two *very different* schools. The first is "*hot fusion*", where the daunting challenge is to create and contain a reaction as hot as the core of the Sun in order to fuse two atoms together. When this happens, a large amount of energy is released. If your favorite bedside reading is *Popular Science*, things are getting pretty exciting with new "breakthrough" announcements nearly every month. In August, *MIT* announced a new fuel formula that increases the efficiency of a hot fusion reaction by several fold. Meanwhile, *Google* and Paul Allen's *Tri-Alpha* have announced "*Optometrist*", an algorithm which harnesses Google's massive computing power in order to run modifications of extremely complex nuclear reactor designs in days that previously took months. Think of this as being similar to the race to map the Human Genome twenty years ago. When feasibility is proven, the race towards commercialization will begin and a flood of capital will appear.

A number of credible nuclear physicists tout the possibility of envisioning a commercially viable hot fusion reactor within the next five years. Imagine a modular unit about the size of a pickup truck which would be able to plug into the grid and power about 25,000 homes. Or, a self-contained power source for an industrial plant. Presently, all of the hot fusion companies are privately owned except for *Lockheed Martin (LMT- up 26%)*, whose legendary "*Skunk Works*" R&D lab has been actively working on a fusion reactor and says significant milestones have been met. With Lockheed we have a solid defense and aerospace holding with a free hot fusion lottery ticket.

The other school of fusion research is "*Cold Fusion*", or "*Low Energy Nuclear Reactors (LENR)*", which many consider to be the lunatic fringe of scientific theory. Here the claims are for "net energy gain" at essentially normal industrial temperatures, and we should add, in conflict with the existing Laws of Physics. This is the real life stuff of *Marvel Comics meets the X-Files* with ego-centric scientists working out of glorified garage labs and paranoid that either Big Brother or Big Energy is trying to steal their research and invention. Right now there are about 115 private companies, each with a resident would-be Tony Stark tinkering on *LENR* reactors. There are also a few X Files Fox Mulders running around, but independent verification has been

inconclusive at best. Regardless, our Spidey senses are tingling leading us to suspect there might actually be something here. Why? Because in September none other than **NASA** submitted a patent application for a cold fusion process. Some very serious scientists have done some very serious research (presumably with very serious budgets) and put NASA's name on what had previously been derided as "junk science". While debating anomalies in the Laws of Physics is well beyond our pay grade, our interest is more basic. If, on the off chance, cold fusion has been achieved, how close is anyone to bringing the commercially viable LENR reactor to market? We may find out soon enough as close to a half dozen companies claim they will have a commercially available product within two years! ***The Truth is out there.***

If we've piqued your interest there are two very colorful Cold Fusion promoters you can peek into via the internet. The first is **Andrea Rossi** who claims that his **ECAT QX** reactor has a 5X net energy gain and will be commercially available in 2018. Making even bolder claims is **Brilliant Light Power** who's "**Sun Cell**" reactor alleges a 1000X net energy gain and also claims to have entered into licensing agreements with major electric utility and energy companies to commence by early 2019. If this isn't enough, **BLP** trademarked the "**Hydrino**", a new dark matter particle it claims to have discovered that explains this purported phenomena. We can snicker down our sleeves, but if utilities start signing up we'll know soon enough.

The implications of virtually cost free and pollution free energy are staggering. This would not only throw the entire global geo-political landscape into an upheaval, but would also wreak havoc on global financial markets. Right now, since there is no way to play cold fusion, we are just observers. But, it's certainly something we want to be ahead of.

Here are some thoughts on other more immediate issues:

- 1) After about eight years of sputtering along, at long last we finally see a strengthening in the U.S. economy. This will continue to be favorable for both higher corporate profits and a higher stock market. Even though the market has likely already factored in a reduction of the corporate rate to 25%, there is plenty of room to the upside for real growth. We will continue with our core **Fortress America** strategy with its emphasis on **Cloud Computing** along with the recent addition of alternative energy holdings.
- 2) Interest rates and the bond market remain a concern. Yellen is in a bit of a box as she wants to drain liquidity out of the system. But, she is reluctant to because it will drive up the value of the Dollar and potentially stall the recovery.

- 3) Despite the EU's claims of a recovery, nothing has abated the considerable political and economic pressures there. A quick solution for the EU immigrant situation crisis looms large. And, at the same time, the EU's massive trade imbalance with China continues, and will continue, to stunt job creation. Unless both of these issues are resolved, the pressures to fragment the EU will continue to grow. Sure, France elected Macron, but look at the resurgence of far right wing movements in both the recent German and Austrian elections, and the secession movement in Catalan. Greece and Italy remain problems, and so on and so on... The overall risk/return tradeoff isn't favorable relative to the opportunities present in the U.S. from the pent up energy in the US.
- 4) We have significant exposure to the **Cloud**, which has performed very well. Our **Internet ETF (PNQI)** – up 35% YTD) provides ownership of **Amazon, Facebook, Netflix and Google**. Our other cloud holdings include **Microsoft (MSFT)** – up 21%), **Cisco (CSCO)** – up 14%) and **Internet Security (HACK)** – up 13%). We also gain additional cloud exposure through **Berkshire Hathaway (BRKB)** – up 12%) which is now one of the largest shareholders of **Apple**. Longer term risk comes not so much from competition, but from regulators. Look for rumblings about anti-competitive issues to grow louder in both Washington and Brussels. We'll continue riding this powerful wave until some of the **New Economy Trust Busters** appear. But, since this will likely require first draining "**The Swamp**", don't hold your breath.
- 5) Last quarter, we increased our alternative energy positions for most accounts to about 5% - 7% as the shift to electric cars accelerates. Our new position in the **Lithium Ion Battery** sector (**LIT** – up 15% in the past month) should continue to excel for the near term, as currently every e-car and home solar system needs a hefty battery pack. However, because batteries comprise about 50% of the weight and cost an electric car, competition will push innovation to find a more efficient alternative.
- 6) The **hydrogen fuel cell** is one intriguing alternative, offering an 80% weight and space reduction. To play this sector, we've established positions in four fuel cell companies. Our entry point into the hydrogen sector was well timed, as last month **Ballard Power BLPD** – up 70% in the past month) spiked from about \$2.75 a share to as high as \$5.00 on the news of a new lower cost design that uses a smaller amount of precious metals. Our hope is that if automakers start a scramble for fuel cell technology these companies will get gobbled up. Recently, none other than **Fox News' Stuart Varney** said there are "whispers" of a pending major fuel cell announcement coming from **GM**.
- 7) Just because we've focused on alternative energy over the past several months doesn't mean we've forgotten **global deflationary pressures** as the single largest factor impacting the world economy. The Fed has now reported 60 straight quarters with "below target inflation", which is just media spin-speak for "deflation remains stubbornly persistent".

While excess supply from China accounts for a big chunk of this, a second major source just beginning to kick in is deflationary pressure caused by the digital economy. Digital delivery and the streamlining of physical distribution are exerting downward pressures on *produce prices*. More ominously, even as the economy grows, there is downward pressure on *wages* as middlemen are cut out of the distribution cycle. Just as Amazon is disrupting employment in the retail sector, analogous disruptions are occurring in virtually every sector of the economy. The challenge is to create new digital economy jobs faster than old economy jobs are lost. The Fed is watching this very carefully and will likely err on the side of being “too loose” (reluctant to raise rates) in order to encourage the creation of new replacement jobs. However, this is uncharted territory and it’s impossible to gauge the full long term impact here.

- 8) And what of *China*? What has gone largely unreported by the lock step mass Press is that after the wild stock and currency market disruptions in the summer of 2015, Chairman Xi has quietly increased the Communist Party’s control over Big Industry and only paid lip service to market reforms. When it comes to maintaining power, jobs are more important than profits. The Communist Party cannot afford to deal with the potential political consequences of cyclical adjustments. Meanwhile, China’s 6% growth rate comes at the expense of the rest of the world’s unemployment. While Trump has pushed back with some success, the EU and the rest of the world remains fragmented in protests. Absent any opposition, it’s steady as she goes for China. The inescapable conclusion is that Chinese exports will continue to swamp markets especially in targeted industries such as solar, batteries, autos and steel.
- 9) In the past, we’ve discussed China’s geo-political “One Belt & One Road” global infrastructure plan where China uses its own labor and materials to build roads, ports, dams and airports around the world. Just when America exited the international stage, China has stepped in by funding over 900 projects to the tune of \$1.4 trillion, which is said to be the equivalent of 12 Marshall Plans. Do you think this buys a little silence from the emerging market pols who have benefited?
- 10) While we haven’t been fans of the real estate sector for some time, Toll Brothers (*TOL*- up 34.6% YTD) has been a pleasant surprise and has now caught up after lagging over the past couple of years. Recall how Toll gobbled up real estate inventory from cash strapped developers following the 2008 crash? Toll is now selling in 300 communities, and forecasts delivery of 7,000 luxury homes next year at an average price of \$800,000. With over \$950 million in cash on hand, Toll’s balance sheet remains much stronger than any of the other national builders. If housing goes into another boom cycle, we’re willing to sacrifice a couple of points of upside for the downside provided by this very well managed company.

11) Need some late night reading and confused by the resistance Trump gets from both the Democrat and Republican leadership? Pick up a copy of *"This Town"* by the former Washington Post columnist Mark Leibovich. While now several years old and written before the Trump election, this is an excellent explanation of the incestuous relationships between the power elite of both the Republican and Democrat parties, the K Street lobbyists and the Media. Simply substitute Trump's term of "The Swamp" for every time Leibovich uses "This Town".

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