Quarterly Update
First Quarter 2017

2017 First Quarter Review
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Opening Thoughts

BlackRock is the world’s largest asset manager. The firm manages approximately $5.1 trillion more than GKV Capital. When you manage that much it is hard to do it very well, although much of the assets managed by BlackRock are actually in unmanaged, low cost, passive, exchange traded funds (ETFs). The firm has an active management unit, which is still very large, totaling $275 billion in assets at the end of 2016, down from $317 billion at the end of 2013. The active management unit depends on money managers using traditional stock-picking, and unfortunately their performance has been mediocre. It’s no surprise then that investors have been withdrawing assets seeking alternatives to weak performance and high fees. In response to the lagging performance, BlackRock management decided to make some changes. They decided that since it is difficult for human beings to beat market benchmarks with traditional bets on large U.S. stocks, and because portfolio managers don’t come cheap, they fired most of them and put greater emphasis on computer models and algorithms. The financial industry is calling this roboadvising.

Forget globalization and cheap foreign labor. Jobs aren’t just moving overseas, they are being digitized. Good algorithms, once coded are really cheap labor. They cost nothing to feed, clothe or house and they don’t take breaks. Whether it’s Amazon automating grocery shopping, Uber replacing taxi drivers, Apple producing automated vehicles, or Google defeating Go champions, the capabilities of technology is accelerating. Since the Intel 4004 microprocessor was introduced in 1971, the cost has declined as computing power has grown in geometric progression.

To be clear, GKV brings a very different value proposition to our clients than a behemoth such as BlackRock. We do considerably more than simply pick stocks for a particular fund, trying to beat an index benchmark. We manage whole portfolios moving between stocks, bonds and cash as the economic and capital markets outlook warrants. We will always be a client-centric firm focused on customized portfolios. Keeping up with promising new products and technologies is a particularly exciting part of our job and this quarter we wanted to highlight some of the technologies we are following.

GKV Capital Management is an independent registered investment advisor. For more information about us please call (805) 497-2616 or visit gkvcapital.com
First Quarter Review

The first quarter of 2017 started out with solid but uneven gains. All the major indexes gained ground with the technology focused NASDAQ gaining the most. The quarter began with optimism for the economy, with expectations of strong earnings growth and the real prospect of favorable economic policies from Washington. The S&P 500 closed the quarter up 5.5%. The Dow Jones Industrial Average ended the quarter up 4.6% while the NASDAQ Composite finished up 9.8%. From the market’s bottom during the financial crisis on March 9, 2009, the S&P 500 has increased 249%.

Headlines in the March quarter were dominated by Washington and the machinations of the new administration. The market enjoyed low volatility and steady gains until near the end of the quarter when several events collectively ended the upward momentum. On March 14th, the Federal Reserve raised its benchmark rate for the second time in three months a quarter point to a range of 0.75 percent and 1.0 percent. While the fiscal tightening was not a surprise and the market reacted favorably, it is worth noting that the rate hike was followed by commentary from the Fed’s chairwoman, Janet Yellen, that the Fed did not share the optimism of stock market investors and some business executives that economic growth is gaining speed. Furthermore, the Fed is not yet forecasting any likely benefit of economic reform waiting to see what might get enacted. Less than two weeks later the Trump Administration and the Republican House of Representatives failed to pass the repeal and replace of the Affordable Care Act (ACA) casting some doubt on the prospect of tax reform in 2017.

Fourth quarter corporate earnings were marginally below expectations resulting in combined S&P 500 earnings of $106.26 for 2016 and represents 6% year-over-year growth. Going into the quarter, estimates called for earnings of $108.84. Despite the shortfall, 337 “beat” analyst expectations, 110 missed and 54 met expectations. This is more a testament to how adept management has become at managing analyst expectations rather than a true sign of strength. Much of the earnings growth for the S&P 500 came from rebounding earnings from the energy sector after a dismal 2014 and 2015 as energy prices were in freefall. Earnings for the energy sector grew 26% in 2016 over 2015.

After a strong recovery for the energy sector in 2016 from two years of malaise, investors proved how fickle they can be, and abandoned the sector yet again despite the prospect of reduced government regulation with the new administration. Energy prices dipped, with crude oil declining 5.8% for the first quarter. Natural gas declined even further, down 13.4% through the end of March. As a result, after 23% gains in 2016, the energy sector was the worst sector to start 2017, recording a loss of 7.2%. Telecommunications was the only other sector down for the first three months of the year with a 4.2% loss. Strong earnings growth and attractive relative valuations encouraged investment in technology, making it the best performer, up 12% for the first quarter. The technology sector was followed by health care which rewarded investors with an 8.1% gain.

The global equities markets, excluding the US, showed strong gains in the March quarter. The financial crisis in 2008 and 2009 was a global phenomenon. While the U.S. has experienced a slow recovery since the worst of the recession, the rest of the world has largely yet to recover. This appears to be changing and equity markets outside the U.S. are beginning to forecast an accelerating global recovery. The MSCI EAFE (Europe, Australasia, Far East) recorded a 6.5% gain for the first quarter of 2017. To put this gain in perspective, the 10-year performance of the index is -1.8%.

We are increasingly looking to foreign markets to diversify and capture gains after focusing solely on domestic equities.
for the last 8 years. The MSCI Europe index gained 6.7% for the quarter and the MSCI Emerging Markets Index gained 11.1% for the quarter.

Global economic growth projections continue to call for gradual improvement. In the January update of the International Monetary Fund’s global forecast, world GDP growth expectations remain at 3.4% in 2017, up from expected growth of 3.1% in 2016. Last fall, the IMF had forecast 3.6% global GDP growth for 2016. The forecast for 2017 is for U.S. GDP growth of 2.2%, which would be an improvement over the slow growth of 2016. The fourth quarter reading of real GDP showed growth at an annual rate of 2.1%, down from the 3.5% pace set in the third quarter. The slower pace of GDP growth was largely driven by lower net exports, which detract from GDP. We like President Trump’s stated goal of 4% GDP growth. We hope it happens, but confess we are deeply skeptical.

The U.S. labor markets remained healthy as the unemployment rate held steady at 4.7% and the economy added an average 209,000 jobs per month over the prior three months. Improving data from the Institute for Supply Management’s economic indices continued to indicate an expanding economy. Consumer spending improved, and remains a strong growth engine for the U.S. economy. Consumer confidence continued to improve and sits at its highest levels since 2001.

The 10-year Treasury yield declined slightly despite the Fed’s rate increase in mid-March. The 10-year treasury ended the quarter with a yield of 2.4%, down 0.1% from year-end. The stable 10-year treasury enabled the bond markets to move slightly higher. The Barclays Capital Aggregate Bond Index gained 0.8% for the first quarter. Our fixed income portfolio remains significant with 40% of assets under management in bonds across all accounts at GKV. We continue to threaten to reduce our exposure to interest rate risk by reducing the duration of our portfolio. Low and stable interest rates, slow economic growth and high equity valuation have kept us from making any aggressive changes.

We ended the March quarter nearly fully invested with only 5% of total assets under management in cash. We remain cautiously optimistic that earnings growth will hold up in 2017. We are encouraged by the improving outlook for a stronger global recovery which will benefit U.S. companies. Geopolitical risks remain and are often unpredictable however we find the likelihood of an event that will substantively curtail economic activity unlikely. Unfortunately, there is always the possibility.
The Future of Growth

“The illiterate of the 21st century will not be those who cannot read and write, but those who cannot learn, unlearn and relearn.”

-Alvin Toffler

Innovation has stagnated. Productivity growth has plateaued. The impacts of innovation and changes in our society have slowed markedly from 1970 to 2017 relative to the spectacular changes from 1870 to 1970. This is the thesis of economic historian Robert J. Gordon. In his recent book *The Rise and Fall of American Growth*, he makes a compelling case that the information technology revolution is far less significant than any one of what he calls the five Great Inventions that powered economic growth from 1870 to 1970. The Great Inventions all came during the late 19th century and spurred unprecedented economic growth through the first half of the 20th century as they were refined and necessary infrastructure was put in place. The Great Inventions include electricity, urban sanitation, chemicals, pharmaceuticals, the internal combustion engine, and modern communication. As Gordon points out, “daily life for every American changed beyond recognition between 1870 and 1940.”

Certainly, there have been many important innovations since 1970 but none have been as transformative as the five Great Inventions Gordon highlights and the pace of growth since 1970 in America reflects this. Sure, information technology has made business more efficient and the Internet has created new industry segments, such as social media, but these changes pale in comparison to the truly transformative ones of a century ago.

Innovation is critical to long-term growth and important for long-term investment strategy. Stagnant living standards for most Americans will have numerous deleterious effects. Rising inequality, a plateau in education levels, aging population, and crumbling infrastructure will all become bigger problems without growth. Americans have an expectation of constant progress. The social and political consequences of another generation of stagnation or decline in working-class incomes will be difficult. With significant economic growth, these seemingly intractable issues disappear. Economic growth cures all.

Many transformative innovations have been anticipated for years but the technology has not been far enough along to realize expectations. Like Jules Verne’s novel *From the Earth to the Moon* in 1865 or Dick Tracy’s watch from 1931, the fantasy of the future can become reality given enough time and investment. Whether the innovations of the last several decades can become truly transformative to reaccelerate growth for decades to come remains to be seen. Information technologies have been developing for some time but only recently has the confluence of cheap computing power, connected and portable made new applications available now. Whether they can be as transformative as any of the innovations of the late 19th century remains to be seen, but it is too early to dismiss the impact of information technology.

Automated Vehicles

Self-driving vehicles are coming to a road near you. And while at first blush a self-driving vehicle may seem like a novelty, the economic and societal repercussions will be tremendous if self-driving technology reaches a critical mass. There are still hurdles to be overcome but the basics have been figured out and the necessary components are rapidly coming down in price. A few years ago, a state-of-the-art LIDAR system cost $75,000. Today it costs less than $1,000.

One of the more interesting questions raised by the possibility of the combination of driverless cars and ride share services is, why own a car at all? To most of us a car means freedom. The migration from cities to suburban sprawl was enabled by the automobile and the thought of not owning a car or losing one’s license to drive due to consequences of age can cause a panic. But talk to an adolescent growing up in the age of Uber. Rather than ask a parent or older sibling for a ride to the mall, simply open your app on the phone and call a car for you and your friends. Cars are expensive and require fuel, maintenance, insurance and a parking space. Car ownership is an unnecessary burden. The same generation that is growing up on ride sharing services will be perfectly comfortable riding in a driverless car ordered to the curb on-demand. If driverless cars can get to a certain critical mass, theoretically the roads can hold a greater volume of traffic at greater speeds, more safely than they do today. Adoption will take time after the technology is proven, but the day is coming.

Certainly, automated vehicles will have an impact on the massive trucking industry. As long as self-driving trucks require a driver to remain on board, the 1.7 million driving jobs seem safe for now, but a truck loaded with sensors could be safer.
and more fuel efficient, and easier for the driver to operate for long periods of time. In the long-term shipping could be a lot less expensive and a lot faster with a robot in charge of the driving. This is happening now.

Artificial Intelligence
Artificial intelligence (AI) has long been a fantasy of science fiction, but continual increases in computing power and complex algorithms have enabled recent leaps forward. Machines are beginning to be able to learn, reason, judge, predict, infer and initiate action.

Reinforcement learning is now enabling a machine to learn by trial and error. While the concept is not new, large neural networks now provide the power to work on complex problems, like the game Go. Google is applying reinforcement learning to address problems of automated driving and industrial robotics. The company has already used the technology to make its data centers more efficient and has dramatically improved the capability of Google Translate for foreign language translation.

AI still has a long way to go, but continued advances in computing power and with the promise of quantum computing, we may see dramatic advances in AI over the next 10 years.

Quantum Computing
At the heart of quantum computing is the quantum bit, or qubit, a basic unit of information analogous to the 0s and 1s represented by transistors in your computer. Qubits have much more power than classical bits because of two unique properties: they can represent both 1 and 0 at the same time, and they can affect other qubits via a phenomenon known as quantum entanglement. That lets quantum computers take shortcuts to the right answers in certain types of calculations.

Intel, Microsoft, Google and IBM are all making significant investment in the development of quantum computing and unstable prototypes are already in operation today. Quantum computers could be exponentially faster at running artificial-intelligence programs and handling complex simulations and scheduling problems. In the next 10 years we expect quantum computing to push forward the capabilities of AI dramatically.

Networked Everything
Everything electronic is becoming interconnected. Ubiquitous sensors are enabling things like buildings, transport systems, machinery, homes and even our clothes to be connected through the cloud, turning them into mini-devices that can not only send data but also receive instructions. Two things to consider, the network of things is creating a tremendous quantity of data which can be analyzed to make better decisions, increase efficiency and create better products, and secondly improvements in AI will make it possible to monitor and manage environments efficiently.

To take it a step further, Elon Musk, the founder and CEO of Tesla and Space X recently announced the creation of Neuralink, which is designing tiny electrodes to interface the human brain to computer systems. The initial goal will be to help patients with brain disorders such as epilepsy or Parkinson’s disease. Musk has openly mused about the productivity enhancements of being able to interface the human brain directly to computer systems and his long-term goal for the technology is well beyond treating medical conditions.

One last related capability of the “networked everything” theme is the promise of virtual reality. Take the idea of not needing a car discussed earlier one step further. If you can “meet” up with your friends at the virtual mall why leave the house at all? Go see a movie “together”, try on a new outfit, or even go to work and take a meeting all from the comfort of your own home. This experience is not as far away as you think. Ask any male adolescent how many friends he has from around the country that he made while playing xBox or PlayStation for hours on end.

Genomics
The sequencing of the human genome was officially completed in 2003 after 13 years and about $2.7 billion of accelerating work through international cooperation. Today you can get your own entire genome mapped for $999 in a mail order kit. Fixing rare diseases, impressive in its own right, could be just the start of what is possible. Researchers are studying gene therapy in clinical trials for about 40 to 50 different diseases. That’s up from just a few conditions 10 years ago. And in addition to treating disorders caused by malfunctions in single genes, researchers are looking to engineer these therapies for more common diseases, like Alzheimer’s, diabetes, heart failure, and cancer. Someday, everyone may be able to take gene therapy to combat the effects of aging.

Price of Energy is Declining
The last few years we have seen a tremendous decline in the cost of energy. In North America, fracking has led to the discovery of massive natural gas deposits and we have watched what is likely to be the end of the coal industry. The cost to generate a kWh of electricity continues to decline. Environmental concerns aside, solar is now nearly on par with coal and natural gas and the cost to manufacture photovoltaic cells has been declining by 20% with each doubling of global manufacturing capacity. The dependence on fossil fuels is likely to
In the first half of the second quarter, we expect the market to be driven by earnings guidance as companies release their first quarter results. Beyond the expectation of more favorable economic policies, the strength of the market has been predicated on accelerating earnings growth in 2017. As of the close of the March quarter, earnings for the combined S&P 500 is forecast to increase 22% over the 2016 results to $129.78. Since 2014, the earnings forecasts have proven overly optimistic with companies reducing analyst forecasts with the passing of each quarter. While the 2017 forecast has been reduced from the original estimate of $141 made a year ago, 22% growth over 2016 would be very positive. If the 2017 forecast can hold up it would give credence to the $146 estimate for 2018. Although 2018 may seem a bit too far into the future, the market is discounting that far forward and while 18x earnings for 2017 does not appear cheap, 16x 2018 earnings is reasonable. The question is, are these forecasts reasonable? Will geopolitical risks slow global demand and put these forecasts at risk? Or will simulative economic policy push demand higher enabling these forecasts to be exceeded? The first step will be the March quarter guidance.

Some of Wall Street’s optimism has tempered after the failure to repeal the Affordable Care Act (ACA) coupled with increasing geopolitical risks. Also, weighing on the market is the coming French election and the anticipation of tighter monetary policy by the Federal Reserve. Stocks were driven higher in the first quarter with the expectation of favorable economic policy out of Washington, namely tax cuts, and accelerating earnings growth in 2017. The failure of the ACA raises questions as to whether the more substantive economic policies will be enacted anytime soon. Combined with increased potential of geopolitical risk and tighter monetary policy, we expect investors to reassess the outlook. This does not mean that we are due for a correction or that the eight-year bull market is “tired”. Stock prices are valued based on earnings and the outlook for earnings has been very positive going into 2017. Concerns about geopolitical risk, for example, don’t directly or immediately impact earnings, but if they blow up into a real global crisis that reduces demand or makes operating business more expensive, then future earnings are affected and equity prices need to be readjusted accordingly.

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Looking Forward

S&P 500 Earnings

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<td>S&amp;P 500 EPS</td>
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<td>Index y/y return</td>
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Independent Investment Advisory

GKV Capital Management is a registered advisory firm operating since 1975. We manage separate accounts for families, charities and retirement. Four of the largest asset bubbles have occurred in the last 25 years. Volatility has taken a significant toll on investment assets requiring new strategies to protect and grow wealth. As an independent portfolio management firm making direct investments on our clients’ behalf, GKV Capital has the flexibility and expertise to respond to the changing investment environment to reduce risk, minimize losses and grow wealth.

Our Investment Philosophy

We take a dynamic view of the macro economy to determine expected returns in the near-term of various asset classes. Within these classes individual investments are selected for clients’ accounts on an account by account basis.

We do not buy and hold, but seek to take advantage of changes in market sentiment and fundamentals to avoid losses and create opportunity. As an independent portfolio manager we have the flexibility to adjust investment exposure rapidly.

We make direct investments on behalf of our clients buying individual securities, generally stocks and bonds eliminating costly mutual fund fees. We are a fee-only advisor, we do not receive commission and we do not sell any financial products. Client assets are held at an unaffiliated brokerage firm.