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Economic and Market Outlook

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(Return to Keynesian Ideas)

Section I. Infrastructure—The Great Rebuilding

Part A. Stalemate Broken

In the most divisive election in memory, there was perhaps one thing every American could agree upon:

The whole damn country is falling apart.

--Randall W. Forsyth

Editor-in Chief

The Wall Street Journal Digital Network

Noah Smith, Bloomberg Columnist, wrote on November 18, 2016, “A half-century-long challenge to Keynesian ideas is over.”

He pointed out that, during the Great Depression of the 1930s, John Maynard Keynes argued that government spending could boost the economy by increasing aggregate demand. In effect, since economic growth depends on spending by Business, the Consumer, and State-Local-and-Federal Government, increases in government spending through tax rebates or (preferably) infrastructure outlays could fill the gap of declines elsewhere. In fact, Keynes argued, “Such spending would prompt other people to spend the money in turn, creating a virtuous cycle. Spend enough government cash, and you could put all of society’s unused resources to work, ending a recession. This was the theory of fiscal stimulus [our emphasis].”

Beginning about fifty years ago, economists began declaring that Keynes’s basic ideas were flawed (i.e., that central problems of preventing recession could be solved without any need of government spending).

In the past decade, however, economists have turned again to Keynes. The onset of the Great Recession of 2007-09 in the U.S., across Europe, and beyond put to rest the anti-Keynesian thesis that reducing budget deficits (i.e., austerity policies) could right the economic ship.

The Obama-fiscal-package (greater than \$850 billion) permitted an earlier and stronger recovery than occurred in the rest of the world. As Noah Smith said, “Plenty of macroeconomists have written down models in which stimulus works just fine, and done empirical studies that back up the conclusion.”

In short, the fiscal policy of Obama spared the U.S. from another 1930s Depression.

With the recent election, we are about to witness a concerted shift back to Keynesian ideas of government stimulus.

From what we have read of President-Elect Trump’s economic proposals, we believe that he intends to use government fiscal policy (i.e., spending) to assist economic growth, not only in times of recession, but when the rate of growth is below norm.

It is somewhat ironic, but his economic policies are likely to increase Government’s role in the economy, not reduce it, as Republicans like Paul Ryan champion.

President-Elect Trump’s plans to use Keynes’s infrastructure spending and tax reduction stimulus ideas have potentially broken the back of the do-nothing Congress—we shall see!

With all three elected sectors of the Federal Government—House, Senate, and the Presidency—unified, at least for the moment, we are very likely to see Keynes’s fiscal spending theories fully tested.

Since the Democratic platform also contained planks for major infrastructure expenditures, we expect a spending package to be approved in the early months of the Trump administration.

From what we hear and read, the size of the infrastructure-spending program is likely to be at least a trillion dollars.

Barron’s magazine suggests that the trillion dollars be funded by cities and states raising the funds through the issuance of Build America Bonds and/or by the U.S. Government issuing 100-year Bonds together with 30-Year U.S. Savings Bonds.

The Center on Budget and Policy Priorities points out:

Across the United States, years of neglect have resulted in crumbling roads, bridges in need of repair, inadequate public transport, outdated school buildings, and other critical infrastructure needs.

In its most recent report card on the condition of America’s infrastructure, the American Society of Civil Engineers (ASCE) gave U.S. infrastructure a D+ or “poor” rating. The engineers estimated the cost of bringing America’s infrastructure to a state of good repair (a grade of B) by 2020 at \$3.6 trillion, of which only about 55 percent has been committed. Improving roads and bridges alone would require almost \$850 billion more than states, localities, and the federal government have allocated. Schools need another \$270 billion beyond what’s been invested.

Chart-1 (Filling In Potholes) illustrates the magnitude of the spending need. Chart-2 (Building Shortfall) points to the dramatic decline in infrastructure investment as a percentage of our Gross Domestic Product (GDP). Just since the year 2000, spending’s share of GDP has fallen 26% from 3.5% of GDP to 2.6%.

Table 1 (State and Local Governments Account for Nearly 75% of *Public* Infrastructure Spending [Billions, 2004]) presents two concerns. The first is direct. Note that Federal spending is the smallest of the three spending sources. The second, implied, concern arises

because President-Elect Trump's promise to spend on infrastructure is, in fact, a larger issue than Federal spending. Specifically, the Trump administration is going to need additional support from State and Local and Private entities.

Table 2 (Cumulative Infrastructure Needs by System Based on Current Trends Extended to 2020 [Dollars in 2010 Billions]) informs us that the Funding Gap as estimated in 2013 was more than \$200 billion per year through 2020. Well, that estimate was made four years ago. The gap is now considerably larger due to Congress having blocked President Obama's initiatives.

Part B. What Would Hamilton Do?

Randall W. Forsyth, in his article, entitled "Taming Federal Debt: The Case for 100-Year Bonds" (*Barron's* 11/09/2016), said:

Trump could use a modern Hamilton as he contemplates America's heavy debt burden and its need for faster economic growth. The federal government today has \$14 trillion in debt owed to the public. If the Trump administration were to add no spending programs and cut no taxes, the rising costs of existing programs like Medicare and Medicaid would likely push the national debt to \$45 trillion in 20 years' time. So says the nonpartisan Congressional Budget Office.

The annual interest on a \$45 trillion debt load would be about \$750 billion at today's super-low interest rates. If rates rise to a more typical level, the interest on a \$45 trillion debt would be about \$1.5 trillion a year. That's right, \$1.5 trillion a year in interest payments, as much as the federal government's total spending over the past five months.

And that's before President-elect Trump launches his ambitious spending programs and tax cuts, which are expected to add \$6 trillion to the national debt over the coming decade. We expect some, but not all, of the proposals will be blocked by the Republican Congress.

Given the incoming administration's ambitious plans, and the nation's already high debt, the president-elect might ask: What would Hamilton do?

With long-term interest rates hovering near their lowest levels since the founding of the republic, Hamilton might well answer, take advantage by issuing Treasury bonds now—and for the longest term possible.

Forsyth went on to suggest that State and Local governments could assist by issuing 30-year Build America Bonds, while Private sources could issue 30-to-100-year bonds, depending on the strength of the entity, like, for example, companies that have already issued 100-year bonds—Walt Disney, Coca-Cola, Norfolk Southern, etc.

If the incoming Trump administration were to issue Savings Bonds as the government did in World War II, their use might well trigger an emotional appeal of letting everyone make a contribution to Trump's theme of making America Great again.

Additionally, the new administration could establish a National Infrastructure Bank capitalized (i.e., funded) by a one-time Repatriation Tax Holiday of, say, 10% vs. the normal corporate income tax which averages 38.9%.

Such a one-time low tax could also stimulate corporate investment, in that up to \$2 trillion might return for spending in the U.S. instead of being locked-up in foreign banks to avoid U.S. tax.

Chart-3 (The U.S. Is No. 1—In Corporate Tax Rates) shows the current corporate tax rate. Lowering that rate could have far-reaching effects on American-business competitiveness.

President-Elect Trump earlier proposed slashing the 35% (or 38.9% with local tax add-ons) to 15%.

The Republican Congress might well balk at such a large decline considering the size of the net loss to the Federal Government—hence, increase in projected deficits. We say net loss of revenue for the simple reason that, while businesses will do more hiring and capital spending with the excess funds from lowered taxes, income received by the government from taxes paid by others is unlikely to match or make up for the direct decline of the tax revenues from businesses.

To summarize Part B, we believe that the economy would be helped to the extent corporate taxes are lowered at least by a significant amount. Secondly, we believe infrastructure spending is capable of being the primary tool to reverse the decline, seen in Chart-2, in National Investment. Thirdly, we believe very long bonds should be issued to lower the cost of our existing and rather dominant short-term financing, as well as to fund the infrastructure spending.

Note that a long period of above-normal economic growth followed the massive infrastructure investments made first by the Eisenhower Administration (1953-61) and then by the Kennedy Administration (1961-63).

Part C. The Annualized Growth of GDP Now Normal

The revised third quarter GDP at 3.16% has returned near the historic 3.23% level, and as the fourth quarter began, the unemployment rate fell to 4.6%--the lowest since August of 2007.

The upward revision to GDP in the third quarter was the result of a large revision to Consumer Spending (i.e., revised up from 2.1% to 2.97%).

So far in the fourth quarter, normal growth continues despite the drag on GDP growth arising from the aging of the War Baby Boomers (i.e., their retirement and lower spending pattern). The aging problem was reviewed in our last report, entitled Deconstructing Growth. The drag amounts to -1.2% annually for another three years and then continues at -0.6% for each of the ten years beyond 2020.

As we indicated in our above-mentioned client letter, we argue that the drag will be more than fully offset by the exponential growth of technology in the years between 2020 and 2030 and will compensate for the drag over the balance of this decade.

Part D. The Seven Indicators Supporting Expansion

Chart-4 (Civilian Unemployment Rate), at 4.6%, presents the first of the seven key indicators forecasting continuing expansion ahead. The 4.6% rate was the lowest in nine years.

Chart-5 (Real Retail and Food Sales) shows that the second key indicator, Inflation-Adjusted Retail and Food Sales, rose sharply to start the final quarter of 2016. In fact, the year-over-year change matched the best such change since late 2015.

The third key forecasting tool is illustrated by Chart-6 (Industrial Production Index). This is the one negative indicator among the critical seven. A careful look, however, shows that the worst year-over-year weakness has passed. In fact, looking at U.S. Manufacturing through the Index depicted in Chart-7 (Markit: US Manufacturing Purchasing Managers' Index), we see that purchasing managers for the U.S. Manufacturing sector of the economy are indicating that there has been a sharp increase in activity in the last two months, which supports the upward trend seen in Chart-6. We believe this sharp upward change is a forecast of soon-to-be-positive year-over-year Industrial Production. The Industrial Production Index has not been positive on a year-over-year basis since September 2015. The primary cause of the weakness in Industrial Production has been the dramatic decline in Energy prices.

Chart-8 (Real Personal Income Excluding Transfer Payments) depicts our fourth critical forecasting tool. The Chart shows a continuation of a positive trend. At a 2.5% gain, year-over-year, the growth rate is clearly within levels that support economic expansion.

While not one of the seven key forecasting tools, Chart-9 (Recession/Recovery), illustrates that the recovery seen in the Unemployment Rate (Chart-4) and in Personal Income (Chart-8) has been horribly uneven!

Note that, during the Great Recession (2007-2009), the damage to Employment differed sharply depending on the education level of the workers. Furthermore, look at the Employment recovery for each education level. Those who held a high school diploma or less education not only saw the greatest loss of jobs (over 6 million), but they have endured the poorest recovery (i.e., 4.5 million still remain unemployed). We also note that recovery for this group did not even begin until four years after the Great Recession ended.

The middle performance group of those with some college education clearly fared better, but has gained only 1.3 million over levels of 2008.

Clearly, only graduates from college with a Bachelor's degree or higher have shown major growth since 2008 (i.e., 8.8 million).

Chart-9 is the strongest evidence that the nature of our economy has changed, and those with greater education are the beneficiaries.

The desire to go backward in time (i.e., recreate lower education requirements for jobs) is misplaced. In our opinion, the incoming Trump administration's highest priority for job creation must be Education.

Chart-10 (All Employees: Total Nonfarm Payrolls/Civilian Labor Force) depicts the fifth critical economic forecasting tool. The current level is again positive after a one-month reading that was negative. This indicator will be watched closely, but is currently positive in our count of the seven keys to a continuation of economic expansion.

Chart-11 (10-Year Treasury Constant Maturity Minus 2-Year Treasury Constant Maturity) illustrates our sixth economic forecasting tool. What the Chart depicts is a positive yield curve. A positive yield curve results when the yield on long-term U.S. Treasury bonds is higher than the yield on short-term Treasury instruments, like the 2-Year Treasury.

In most periods, the yield curve is positive because investors, as you would expect, demand higher returns to provide funds for a longer period.

When the reverse is true, and yields on short-term investments exceed returns on long-term investments, the condition is called a negative, or inverted, curve.

An inverted curve is very rare. As the economic outlook grows more uncertain, the difference, or spread, between long and short rates narrows towards zero. If they invert (i.e., short exceeds long), it reliably forecasts a recession. In fact, there has never been a recession in U.S. history without the presence of a negative yield curve (i.e., meaning the 2-Year Treasury rate becomes greater than the 10-Year Treasury rate). Note the inverted yield curve (i.e., below the zero line) before prior recessions. In Chart-11, we would need to see a reading below zero to predict a significant economic downturn.

Chart-12 (Smoothed U.S. Recession Probabilities) provides the seventh of the key forecasting tools. The Chart is the Federal Reserve's own forecast of recession. Note that as the Chart rises sharply to reach above 20%, recessions are declared, but the graph currently shows a reading well within a solid economic advance.

Chart-13 (Excess Reserves of Depository Institutions) and Chart-14 (Conference Board Consumer Confidence Index) are presented to show the rising confidence of both the Lending sector (i.e., banks) and the Consumer Spending sector (i.e., 70% of Gross Domestic Product). The most encouraging point is the fact that banks are finally willing to lend rather than hoard reserves.

To summarize Part D, we can say that six of the seven of our economic forecasting tools remain positive. Until we find that less than half are positive, we will continue in our opinion that both the economy's and the stock market's outlooks remain healthy.

Part E. Is This Bull Market Just Getting Started?

Barry Ritholtz, writing in his blog, called The Big Picture, on November 4, 2016, said:

Are we in a short-term cyclical bull market, one that is already long in the tooth and coming to an end? Or are we in the early years of a secular bull market, one that might last a decade or more?

The answer could have a significant impact on how your portfolios perform during the next few years. A few examples, definitions and some data points will help provide some context for this discussion.

Markets regularly go through long phases—bullish, bearish and sideways—lasting anywhere from years to decades. The 20th century saw three secular bull markets: The first lasted from 1921 to 1929, when the Dow Jones Industrial Average gained 367 percent. After World War II, the next bull market lasted about 20 years, more or less from 1946 to 1966. It is a somewhat subjective determination. The Dow had gains of about 350 percent during that stretch. The most recent bull market began in 1982, with the Dow starting at about 1,000 and ending in 2000 at 11,750—a whopping gain of more than 1,000 percent.

Ritholtz continues:

The average secular bull market lasted 21.2 years and produced a total return of 17.2 percent in nominal terms and 15.9 percent in real terms. The market's P/E more or less doubled, from 10.1 at the start to 20.5 at the end.

The average secular bear market lasted 14.5 years and had a nominal total return of 1 percent and a real return of -2.3 percent. The market's P/E compressed by an average of nine points, from 20.5 at the start to 11.3 at the end.

Chart-15 (Secular Trends) shows the four prior Secular Bull Markets, and since 2013, the current and fifth one since 1871. Also note the four boxed Secular Bear Markets in recorded history since 1871.

In each of the prior four Secular Bull Markets, they began with a Cyclical Bull cycle within a continuing Secular Bear Market, but in each case, there came a point called a Breakout—see Chart-16 (S&P 500 Index from 2000-2014) showing the most recent example of the Breakout from a Cyclical to a Secular Bull Market. The Breakout in 2013 ended the previous Secular Bear Market (2000-2013).

Relative to these historical Secular cycles, the thirteen years ending in May of 2013 fits the profile of a Secular Bear Market perfectly. Since the Breakout in May of 2013, the S&P has risen steadily, as seen in Chart-15, to a level of more than 2200 at this writing.

In summary, the first phase of a Secular Bull Market is called a Cyclical Bull cycle within a Secular Bear Market until the Breakout point is decisively broken. Chart-16 shows that, by the end of 2013, many market analysts, including ourselves, concluded the Cyclical Bull Market had become the beginning of history's fifth Secular Bull Market, which means that the market's rise may have a long way to go on the upside.

In our last several reports, we have discussed the advent of the exponential acceleration in innovation. It is this acceleration which lies at the heart of why we believe the fifth Secular Bull Market is underway.

Barry Ritholtz put it this way:

Long secular bull markets occur for a specific reason: waves of industrial, technological and economic progress make their way into employees' wages, consumers' pockets and corporate profits. Improving standards of living are reflected in the psychology of an era. Not surprisingly, markets do well, as investors become willing to pay more for a dollar of earnings as the cycle progresses. Multiple expansion, in the form of rising price-to-earnings ratios, drives returns even more than rising profits.

The rise in this market from its lows back in March of 2009 has been disbelieved all the way. The Bull Market has been called the most unloved rise in history.

Even the most recent part of the advance related to the election of Donald Trump has carried with it a heavy barrage of pessimism.

Yes, there will be corrections, both short and intermediate, but we are confident this is a Secular, not a Cyclical, Bull Market, which means the odds of continuation after any such correction are high.

The pessimistic commentators point to an above-average Price-to-Earnings (P/E) ratio based on forward 2017 estimates. Chart-17 (S&P 500 Forward P/E) illustrates both the rise from the 2009 market low and the fact that, at 16.2 X (i.e., price 16.2 times 2017 expected earnings), the ratio is above average. The rise above average is normal in a Secular Bull

Market. Observe that, in the last Secular Bull Market (1982-2000), the P/E ratio rose for nearly five more years after reaching similar levels to those we see today.

In addition, as we have argued in many past quarterly Economic and Market Outlook letters, there are many other justifications as well for today's above-average P/E ratio—from low interest rates, to low inflation, to higher-than-historical profit margins, to greater-than historical cash flow (see [Chart-18](#) [Free Cash Flow Translation from Net Income], to greater dividend returns on stocks over bonds (see [Chart-19](#) [S&P 500 Total Shareholder Yield vs. 20-Year BAA Corporate Yield]).

What follows in Section II, called “Why Conviction Matters,” is the final chapter in our year-long effort to report to clients on how our investment decisions are made concerning the economy—the market—and specific investments.

In this final chapter, we discuss our approach to portfolio construction, given the economic environment and possible selections.

The concern of Portfolio construction yet to be covered discusses the questions surrounding the subjects both of concentration vs. diversification, and of duration of holdings.

Section II. Why Conviction Matters

Part A. “Over-Diversification” and “Short-Termism”—What Not to Do!

We begin our discussion of Concentration vs. Diversification with the following quote from Charlie Munger, Vice Chairman of Berkshire Hathaway:

The Berkshire-style investors tend to be less diversified than other people. The academics have done a terrible disservice to intelligent investors by glorifying the idea of diversification. Because I just think the whole concept is literally almost insane. It emphasizes feeling good about not having your investment results depart very much from average investment results. But why would you get on the bandwagon like that if somebody didn't make you with a whip and a gun?

Some 50 years ago, most professional investment managers began shifting from creating investment portfolios that were concentrated in small numbers of high-conviction stocks, to holding widely-diversified portfolios.

The change resulted from academic economists—like Harry Markowitz, Merton Miller, William F. Sharpe, and others—who demonstrated that through diversification a portfolio's overall risk could be reduced. This conclusion was a part of what became known as Modern Portfolio Theory (MPT).

Gradually, the use of wide-spread diversification came to dominate both portfolio theory and practice.

Those who believed in portfolio concentration versus wide-diversification—like John Maynard Keynes, Jesse Livermore, Benjamin Graham, Warren Buffett, Charlie Munger, Phil Fisher, George Soros, Bill Ackman, and more—fell out of favor, despite their personal success.

From our perspective, it is not that Modern Portfolio Theory (MPT) is wrong in concluding that portfolio risk, as measured by standard deviation, can be minimized through

diversification, but that the growing error in portfolio construction is over-diversification (i.e., a good thing taken to absurdity).

Jason Voss, CFA, in a July 2016 article published by the CFA Institute, indicates that it is over-diversification that has become the key drag on portfolio performance. He writes that over-diversifying “destroys excess returns generated via superior stock picking.” For a portfolio manager to break from the “tag” of being an underperformer, he suggests following narrowly defined equity strategies armed with high-conviction positions (i.e., concentrating).

Before reviewing recent studies supporting a greater degree of concentration (i.e., a low number of portfolio holdings), there is a second drag on portfolio performance that deserves attention—namely, “short-termism.”

Exhibit 1 (Average Holding Period of Stocks on the NYSE Has Steadily Declined) shows the long and persistent decline in how long a given stock is held in a portfolio.

The average holding period for a listed stock on the New York Stock Exchange (NYSE) has fallen from more than 8 years (97 months) to just 7 months. In other words, the turnover rate within portfolios has risen dramatically.

Empirical research shows the dual problems of “over-diversification” and “short-termism” have combined to become the worst enemy of performance.

In a study entitled “The Case for High-Conviction Investing,” by R S Investments (2012), the author says, “In fact two key inputs that define a high-conviction approach, concentration and holding periods appear to impact the dispersion of returns between top and bottom quartile managers [our emphasis].”

The following list of recent studies all argue for the same conclusion: concentration and longer holding periods are superior to wide-diversification and high turnover.

First, “High Conviction Improves Risk-Adjusted Returns”—Joint Study by Harvard Business School, London School of Economics, and Goldman Sachs Group (2008).

Second, “Diversification versus Concentration . . . and the Winner Is?”— University of Technology, Sydney, Australia (2012).

Third, “Academic Validation”—Provident Investment Management (2015).

Fourth “Collective Intelligence Market Model”—Joint Study by University of Denver and Athena Invest, Inc. (2015).

Fifth, “Less Is More: A Case for Concentrated Portfolios”—Lazard Asset Management (2016).

In an article written for the *Financial Times* (London, Sept. 28, 2013), entitled “Concentration: The Case for Putting All Your Eggs in One Basket,” the authors say, “Is diversification the best way to invest in the market today? Not really. The portfolios of major investors worldwide make the case for another, often-ignored strategy: Concentration.” They continue, “Despite mitigating stock-specific risk, the method of diversification cannot fortify the portfolio against market risks [our emphasis].”

The issues the authors raise are concerned with, first, over-diversification, and second, limits to the use of stock-specific diversification in combating systemic, or market, risk. The only way to deal with systemic, or market, risk is through an inclusion of other-than-equity assets, such as money-market instruments, bonds, etc.

We now briefly return to the problem of “short-termism.” Alfred Rappaport, of Northwestern University, in his paper, “The Economics of Short-Term Obsession,” published in the *Financial Analysts Journal* (May 2005), said, “There is no greater enemy of stock market allocation efficiency than earnings obsession.”

Writing on the same topic, Adi Ignatius, editor of *The Harvard Business Review*, in the January 2014 issue, said, “The centurions of capitalism seem to agree on two things. First, that we have a horrible problem of ‘short-termism’ in management; and second, that the problem is insoluble.” While he speaks directly to corporate managers, he might as well be speaking about investment managers, as Exhibit 1 clearly reveals.

Before presenting what seems a reasonable level of diversification, we can summarize Part A by saying that evidence in recent years has found that a longer holding period, coupled with a greater degree of concentration, not only can, but does, improve portfolio performance against the broad benchmarks of U.S. Stock Market achievement. Part B will offer proof that the value of diversification has had widespread abuse!

Part B. Less is More

In the working paper mentioned earlier, “Diversification versus Concentration . . . and the Winner Is?” (2012), the authors of the study say that they have analyzed results from 4723 diversified U.S. equity mutual funds with different styles and asset levels. They sorted positions, or holdings, of each fund by weight (i.e., percent of portfolio) from largest to smallest. The resulting scale was interpreted as a fund manager’s conviction level. In effect, the authors ranked the size of positions in each fund and then created portfolios from each fund based on the top 5 positions, the top 10, etc., to the top 30 positions by percentage weight to the entire portfolio. The study period covered 1999 to 2009.

This procedure was applied to all 4723 funds. For each fund, the top 30 positions were used to create six separate portfolios (i.e., the top 5, 10, 15, 20, 25, 30 positions). Then each portfolio was examined and ranked by performance and risk characteristics. Finally, all 4723 portfolios of each grouping (i.e., 5 stocks ... etc.) were analyzed.

The results were remarkable in that they convincingly illustrated that the returns from concentrated portfolios outperformed the more diversified portfolios at every level—see Exhibit 2 (Total Returns—Full Sample).

The authors concluded the following:

First, “The total return or performance improved as the funds became more and more concentrated.”

Second, “The standard deviation (a measure of risk) of the concentrated portfolios did increase as the number of holdings grew smaller, but so did the Sharpe Ratio (the excess return over the risk-free rate per unit of standard deviation).”

To translate this, the Total Return Column indicates that concentration results in superior performance. The Standard Deviation (i.e., measure of risk) column shows what might be expected: higher returns involve accepting higher risk.

But the column headed as Sharpe Ratio is one of the two surprises provided by the study.

The Sharpe Ratio (i.e., Total Return of the portfolio less the risk-free return of Treasury Bills divided by the Standard Deviation) shows the first surprise. The ratio rises at each level of greater concentration (i.e., level of fewer holdings). Thus, the Sharpe Ratio says that concentration produces not only higher absolute returns, but higher risk-adjusted returns, as well. Surprise!

The second surprise can be seen in the Standard Deviation level itself. Note that the rate of decline in the level of the Standard Deviation (i.e., risk) attached to each portfolio shows nearly no change between the portfolio that is created from the top 30 stocks of all funds and the Standard Deviation associated with the record of all funds that hold hundreds of stocks or the record of the same funds excluding the top 30 (i.e., called Own Index).

This point can be more easily seen in Exhibit 3 (Risk Reduction Rate Slows with More Stocks), which charts a portfolio's Standard Deviation against the number of stocks in a portfolio.

Note that after 30 holdings, there is no real benefit in adding more stocks.

Therefore, diversifying against stock-specific risk is not beneficial beyond about a 30-stock portfolio and, in fact, is not greatly benefited beyond 20 stocks.

Exhibits 2 and 3 explain the primary cause of what was earlier called "portfolio drag" (i.e., over-diversification).

Moreover, in our earlier discussion, we heard that portfolio drag is one of the most important reasons why funds underperform the market as a whole.

The conclusion we can reach from the foregoing is that beyond 30 holdings, any additional diversification has minimal value (i.e., diversification's benefits have been achieved).

This also means that investment managers should spend more time on analyzing market risk and picking stocks of high conviction only.

The final study we will review draws an identical conclusion that concentrating is superior to over-diversification. This study, "The Case for High-Conviction Investing," was released in 2012, covering the performance of 1000 actively managed funds between 2000 and 2010. The study was conducted by R S Investments, Division of The Guardian Life Insurance Company of America.

Two notes for interpretation:

--By "actively managed funds" the authors mean that no Index Funds were included.

--By "High-Conviction," they mean funds with about 30 stocks, and by "Low-Conviction," they mean funds with more than 100 stocks.

This study, unlike all others, also selected funds based on a low-turnover rate, where *turnover* is defined as being in the lowest half of actively managed funds.

The results appear in Exhibit 4 (Median Excess Returns for Concentrated and Diversified Active Equity Managers, April 2000 to March 2010). "Median Excess Returns" means returns over the benchmark (annualized).

Note how much better was the performance of high-active-risk managers (i.e., managers selecting concentration and low turnover) over low-active-risk managers (i.e., managers selecting high diversification and high turnover rates).

As “high-active-risk” managers, meaning concentration in the number of holdings and low turnover of holdings, Clutinger, Williams & Verhoye, Inc., continues to select investments that are high-conviction, and we hold positions based on our analysis of both economic fundamental trends and the stock market’s internal strength, as set forth in our quarterly Economic and Market Outlook letters. Simply put, our high-conviction selections are held as long as economic, market, and company-specific fundamentals support retention.

Section III. Wishes for the New Year

Earlier in our report, we presented Chart-9 (Recession/Recovery). In that Chart, we saw that what differentiated job growth from job loss, both during and after the Great Recession (2007-09), was Education (which in our view includes skills training).

President-Elect Trump believes that bringing back manufacturing jobs will answer the problem of job losses. We contend that the problem is actually much larger than preventing jobs from being exported by U.S. corporations or than the U.S. engaging in “unfair” trade deals. There is, most importantly, a skills crisis.

President-Elect Trump is correct when he says manufacturing jobs matter. Every 100 jobs in manufacturing create an additional 250 jobs in other sectors of the economy.

The Manufacturing Institute estimates that over the next decade nearly 3.5 million manufacturing jobs will be needed to be filled; however, because of the lack of potential employee skills, an expected 2.0 million of those jobs are expected to go unfilled.

The estimate of a need for 3.5 million is solid, since over 2.7 million must be replaced due to baby-boomer retirements, plus at least 800,000 jobs can be expected to be needed due to normal business growth.

Truly, the manufacturing industry does not expect to find the employees needed within the potential U.S. workforce, due to a lack of skills. The answer has been, and will remain—a need to raise the skill levels of the labor pool—which, in turn, requires Education!

Unless Congress and President-Elect Trump come to clearly recognize the need for more Education of our workforce, rather than just attempts to block the immigration of those with skills or to block the outsourcing of jobs to those with skills in other countries, the problem of skilled labor shortages will only get worse. The skills of the baby boomers (2.7 million) are depleting, and depleting at an extraordinary pace as they retire. This aspect of the problem needs urgently to be recognized so those skilled workers can be used to teach their skills before they retire.

What President Trump can do is to pressure U.S. companies to outline and implement plans to retrain the skills of their workforces.

Paula Dwyer, writing for Bloomberg.net, on December 8, 2016, said that President Trump could work with manufacturers to develop apprenticeships. Throughout Europe, trade apprenticeships have existed for centuries. U.S. businesses have generally been unwilling to develop (i.e., pay for) such programs, but it could be encouraged with a government-paid earnings subsidy for apprentices. Trump might consider scrapping, or consolidating, the fifty or more Federal job-training programs in favor of redirecting more than the \$15 billion now spent in

government training programs to money spent on direct training by corporations for the specific skills needed. The money would go to apprenticeship wage subsidies.

Paula Dwyer also suggested that Federal Grants could go directly to Community Colleges for programs tailored to the needs of local manufacturers.

Finally, she suggested setting up the following three programs:

One—“The Trump Administration could connect those looking for work with companies advertising jobs, by creating a national system similar to Germany’s online database.

Two—“It would help if local governments offered solutions to reduce commuting times. They might be encouraged to do this if some of Trump’s hoped-for infrastructure budget goes toward expanding bus service from outer suburbs into and within commercial centers via dedicated bus lanes.”

Third—“The federal government might even consider assistance to encourage workers to move to where the jobs are. Australia reimburses people up to \$6,000 if they relocate for work reasons.”

The American Enterprise Institute has another suggestion: “Allow the unemployed to replace their jobless benefits with relocation grants, possibly in combination with low-interest loans, whose repayments could be capped as a share of future earnings.”

Clearly, much can be done beyond jawboning Carrier Corp., Ford Motor, Boeing, Lockheed, etc.

The job-skills problem can be solved! And our wish is for such solutions to become an immediate and major focus of the new Trump administration.

There is a second significant problem contributing to the general sense of many that they are being left behind. The malaise is born from the rather rapid development of wealth inequality. This problem can be solved through education (i.e., retraining and development of skills), but the gap between the have and have-nots is so large that it will take time.

We began this quarterly Economic & Market Outlook letter by quoting Randall Forsyth (see page 1). His statement is really concerned with the material falling apart of our physical infrastructure; however, we presented the quote without comment because it could just as well apply to the many deepening divisions that have developed in society.

We conclude our report with three Charts, labeled Summary Charts A, B, and C, which will shed light on so many voters’ unhappiness with the status quo, as well as society’s general malaise.

Summary Chart A (Real Total Net Worth per Capita Households and Nonprofit Organizations) shows the apparent recovery of Net Worth (Assets less Liabilities since the Great Recession [2007-09]). The improvement seen is more than mere recovery, for the level reached is that of a new all-time high.

But a closer look at Net Worth can be found in Summary Charts B and C, and their view is not a pretty picture.

Summary Chart B (Have and Have-Nots) begins to answer the question: Just whose net worth has recovered?

If we combine the first three groups of people, which account for 77% of the total U.S. net worth, we find that the same three groups account for only 10% of the population. Note that the bottom 60% of the population accounts for only 3% of U.S. net worth, with the bottom 40%

having 0% net worth. (For the math noticers, the rounding of percentages results in a total in the Chart of 101%, not the more precise 100%)—the message, however, is clear.) The improvement of net worth to new all-time highs has obviously not been spread evenly over society as a whole, nor felt significantly by more than 60% of the population.

Furthermore, Summary Chart C (Median Net Worth) shows a dramatic decline in net worth when related to classes of income levels. Note the decline of the past 15 years. The lower class, working class, and middle class have all experienced terrible declines in their net worth, with the working class suffering the most dramatic damage (i.e., 52.7% decline).

Charts B and C say everything we need to know about the chief source of the widespread expressions of anger and desire for change. Again, we wish for a concerted effort to improve the education of our workforce to gain the skills needed to help mitigate the problem of Wealth Inequality.

As we begin the New Year, we certainly wish our incoming President the very best. On the positive side, the economy to be inherited is growing and is, in fact, finally returning to its historic growth rate of 3%; however, the structural problems of declining job skills relative to need and the problem of Wealth Inequality are both structural and need intensive focus. Both problems can be traced to our declining education system, and we wish for much improvement from many approaches there.

To our clients, we wish the best of health and the brightest of New Years! To each we offer a thought of Henry David Thoreau:

Live each season as it passes;
breathe the air, drink the drink,
taste the fruit, and resign
yourself to the influence of each.

Scott B. Williams, CFA, CFP
Thomas H. Clutinger
Kent Stone
Thomas M. Clutinger