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Economic and Market Outlook

December 31, 2017

The Transformation of Investment Analysis

Section I. Expanding the Challenge to Portfolio Practices

Part A. <u>Dynamic Rebalancing</u>

In reports presented over the past year, particularly in our June and September 2017 letters, we presented our thoughts concerning the best approaches to <u>asset</u> <u>selection</u> (i.e., The Buy Decision), and the best practices for constructing investor-centered portfolios (i.e., The Asset-Allocation Decision).

Also, in the September report, we began the discussion of findings based on Behavioral-Finance research that offers help for investors, as well as their advisors, in mitigating mistakes made by investors through time.

In this current report, we extend our discussion of Behavioral Finance by challenging the practice of most investment advisors to recommend the use of a Buyand-Hold strategy as the best way to achieve investors' long-term financial goals.

Through our challenge of Buy-and-Hold as the best workable strategy, we set forth what we believe to be an alternative methodology for successfully reaching an investor's financial goals.

We begin our discussion concerning the concept of Buy-and Hold by saying that to achieve financial goals clearly requires careful consideration of many factors. <u>The choice of investments is one such factor</u>. Such a choice requires a sub-set of decisions involving asset allocations between asset classes, such as stocks, bonds, cash, etc., as well as choices of individual assets within each class.

The most commonly held opinion among Investment Advisors is to create a portfolio to meet long-term client objectives through diversification within and among asset classes that are consistent with client circumstances, including their needs, preferences, and ability to bear risk.

Once set, the current practice is to urge that the portfolio be <u>maintained for the</u> <u>long-term</u> (i.e., to follow what is called the Buy-and-Hold Strategy). Again, according to

this strategy, changes to the portfolio's asset allocations and individual asset selections are expected to be <u>infrequently made</u> and are to be based either on relative price changes (Rebalancing) or on needed responses to changes in the investor's circumstances, including their objectives.

According to advocates of the Buy-and-Hold Strategy, as a part of the way to reach the client's financial goals, close attention is to be given to maintaining the <u>original</u> <u>asset allocations.</u>

<u>Advocates of Behavioral Finance, on the other hand, challenge both the concept</u> of Buy-and-Hold and the static nature of how the portfolio is to be maintained.

In effect, advocates of Behavioral Finance seek to alter static planning (Buy-and-Hold) to active planning, <u>which we will call Dynamic Rebalancing</u>.

Such Dynamic Rebalancing embraces <u>active changes</u> in a portfolio's <u>original</u> asset-allocation construction. Under Dynamic Rebalancing, to best reach long-term financial goals requires <u>constant attention</u> to changes in the economy—changes in the relative Risk within and among asset classes—changes in the investor's financial circumstances, goals, attitudes towards risk-bearing, etc.

Advocates of Behavioral Finance seek to mitigate investment errors. They believe that by actively responding to changes, investors will make <u>fewer, not more,</u> <u>behavioral errors.</u>

Through a <u>Dynamic Rebalancing</u>, or reallocating, policy, panic decisions can be mitigated. Why? Because investors <u>expect to take action</u> when needed, rather than <u>ride through</u> the few, but serious, economic recessions that are accompanied by Bear Markets.

One of the critical conclusions of Behavioral Finance concerning investor behavior is that Fear of Loss is of greater importance to decisions than the prospects of Gain.

Therefore, while the strategy of Buy-and-Hold seems sound because of the actual long-term record of the market's return, the short-term <u>fear of loss</u> can overpower (i.e., Hold becomes a demand to Sell), and the result becomes the destruction of planning.

We believe that, if investors think of planning as <u>not "once and done"</u> (i.e., static), but continuously in transit toward objectives (i.e., dynamic), the probability of reaching financial goals is greatly enhanced.

Part B. Evidence Supporting Dynamic Rebalancing

In our last report entitled, <u>Perceptions</u> (September 2017), we provided the annual investor-performance survey conducted by Dalbar & Associates. The study presents the performance-record of investors in mutual funds for various periods over the past 30 years.

In their latest annual issue (October 2017) of results, ending December 31, 2016, they present, for the 23rd year, evidence which shows, <u>without question</u>, that investors

<u>fail</u> to earn the return of the investments they acquire. The failure is not in their decision of choice, but in their decisions not to "Hold" or maintain over time.

In <u>Chart-1</u> (Investor Returns), we see the <u>dramatic</u> under-performance of investors <u>in every time period</u>.

The Dalbar study is based on data from the Investment Company Institute, which collects performance statistics from all Equity and Fixed-Income Mutual Funds.

<u>Chart-2a</u> (Dalbar: 30 Years of Average Equity Fund Investor vs. Indexes—30 Years [1/1/1987–12/31/2016]) <u>compares</u> the Average Equity Fund Investor's <u>record</u> to that of the S&P 500 Index, the Global Equity Index, and the 1-Yr US Treasury Note Index.

<u>Chart-2b</u> (Growth of \$100,000) converts the percentage performance, shown in <u>Chart-2a</u>, through the same 30 years to one based on dollars.

Here are the remarkable results:

- 1. Investors in Equity Funds saw \$100,000 grow to \$322,474 over a 30-year period, while \$100,000 would have actually grown to \$1,822,711 if invested in the S&P 500 Index, and to \$2,162,803 if invested in the Global Equity Index.
- 2. Note that investors' Equity Fund investment even underperformed the accumulated return of the 1-Yr US Treasury Note Index, where \$100,000 went to \$323,405 in 30 years.
- Look again at <u>Chart-1</u>. What is truly discouraging is that conservative investors' 30-year Fixed Income (Bond) average annualized return was only 0.57%, while the Barclays Aggregate Bond Index earned 6.34%.
- 4. Also note that the Investors' Bond return is even less than the average annual <u>rate of Inflation</u>.
- Inescapable conclusion: Conservative investors lost money in real time (i.e., inflation-adjusted) over the 30 years.

Key point:

If investors could actually have followed a Buy-and-Hold strategy, they would have had a very satisfactory return that matched, or exceeded, or came close to the actual returns available.

The fact that investors failed so greatly to earn the returns available is absolute proof that the level of behavioral error is very high.

Buy-and-Hold is a frame of reference that proves only that an asset performed. <u>As a strategic approach to achieving a financial goal, it is an abject failure</u>, which can be seen through the actual record of the average investor's return. It can also be seen through the record of the investor's average holding period. According to the Investment Company Institute, <u>the average holding period of Equity Funds is 2.5 years</u>—so much for Buy-and-Hold.

It need not be this way!

Once a plan has been constructed and a portfolio put in place that is consistent with an investor's goals, financial and personal circumstances, attitude towards risk-bearing, etc., <u>a methodology must be presented to mitigate behavioral error</u>.

There is no such thing as a successful "Set-It-and-Forget-It" investment strategy.

In order to outline an <u>operational procedure to mitigate behavioral error</u>, we present in what follows a more complete understanding of Dynamic Rebalancing and the "Nowcasting" tools.

Part C. Dynamic Rebalancing and Its Expanded Role

Rebalancing a portfolio's composition is a form of risk management that will, if properly followed, enhance an investor's risk-adjusted investment return.

In an article entitled, "Portfolio Rebalancing: Theory and Practice," presented by *Forbes* back in October of 2014, Gregg S. Fisher writes:

Let's say you've established strategic (i.e., long-term) asset allocations of 60% stocks, 30% bonds, and 10% commodities as part of an investment policy statement that reflects both your desired exposure to risk factors (size and value, e.g.) and the risk (volatility) and return goals of your portfolio. <u>If you fail to rebalance</u>, the more volatile asset classes in the portfolio—equities and commodities in this case—will tend to take over and increase portfolio risk, hence the <u>need for periodic rebalancing</u> [our emphasis].

In Fisher's study, covering the period 1926 to 2014, investors with a 60% stock – 40% 5-year Treasury bond portfolio were able to earn 90% of the return on the portfolio of the S&P 500 Index and of the 5-Year Treasury Bond Index with a Rebalanced portfolio, while dramatically reducing volatility by more than 30%.

Fisher goes on to say:

Not only is the risk-adjusted return better, but an investor is far more likely to stick with stocks and other volatile assets through bearish markets if total portfolio volatility is moderated.

In fact, a rebalancing discipline is very much a struggle against human nature. In basic terms, it forces investors to buy low and sell high. That sounds like wise investing, but we know from behavioral finance research (for instance, *loss aversion*, wherein <u>humans feel losses twice as powerfully as equivalent</u> gains) and from experience in the trenches with investors that most people are afraid to invest in assets that have recently experienced steep losses or to sell winners that appear to be rising in value. That's just how we're wired: Rebalancing runs counter to our instincts. Note the difference between a <u>naïve</u> buy-and-hold strategy, with no trading or rebalancing, and the long-horizon investing strategy that I am describing. Rebalancing requires a continual process of buying and selling assets over time to return strategic allocations to <u>predetermined levels</u>. [Our emphasis.]

We share Fisher's view that Rebalancing will lower the volatility of a portfolio that has become gradually concentrated in assets and/or asset classes of greater volatility than called for by the client's financial profile.

However, we disagree with his two chief conclusions:

<u>One</u>: Rebalancing to reduce volatility will make investors more likely to stay with their investments.

<u>We counter</u>: The performance evidence shown in <u>Charts-1, 2a, and 2b</u> strongly suggest that investors <u>need something more</u> than simple rebalancing to some predetermined asset mix, which reduces volatility.

Two: A portfolio should be rebalanced to its predetermined levels.

<u>We counter</u>: Our use of the term *rebalancing*, once changed to *Dynamic Rebalancing*, takes on an expanded role, for <u>it involves the determination of the</u> <u>appropriateness of all asset allocations—at all times</u>.

Such appropriateness must be determined in light of the state of the economy. We repeat from our September letter:

"Nowcasting" is a reasonable addition to asset allocation decisions because the tools to know important information about the status of the economy on a real-time basis has become abundantly available and because <u>the strategy of</u> <u>working with the business cycle is superior to Buy-and Hold</u>. It is superior, at the very least, because it helps investors avoid behavioral mistakes, including the worst, called <u>panic</u>, in Bear Markets (i.e., Recessionary environments).

It is crucial to remember that, in the final analysis, <u>what matters most is not to</u> <u>beat the market, but to earn an achievable long-term goal, which will not be</u> <u>possible with major behavioral mistakes</u>.

Before moving to our Operational Procedure for using the expanded role of Dynamic Rebalancing in mitigating behavioral error, we turn to the difficult, but current, need to review that part of Rebalancing that is Traditional (i.e., altering allocations that have become inconsistent with a client's desired exposure to risk and return goals of the portfolio).

Part D. <u>Selling into Strength—The Traditional Rebalancing</u>

We begin with this anonymous mantra, which has often been repeated:

The difference between mediocre returns and successful investing is quite often the difference between selling out of fear and selling into strength. Traditional Rebalancing—lowering volatility through adjusting for changes in the relative value of asset classes or selections within an asset class has its own important justification, and so is made as needed.

But as we envision Dynamic Rebalancing, it requires both the traditional role of adjustments to the relative weighting among assets within a portfolio, and in its expanded capacity, Rebalancing becomes Dynamic as it requires change, as well, due to the state of the business cycle (i.e., in Expansion or in Contraction).

Both types of change require <u>selling into strength</u> (i.e., taking gains when the trend of price is rising).

Such a process of selling into strength is doubly hard, particularly when the investor and the advisor are <u>not worried</u> about a developing recession. Why? Because such action involves encountering the fear of missing out on some part of the rise in price.

However, as Gregg Fisher pointed out, an <u>un-Rebalanced portfolio</u> will, over time, become increasingly allocated to both its highest-returning individual asset as well as asset class, and, thus, the <u>risk profile</u> of an investor's portfolio is <u>certain to change</u>.

So we come to the critical question: When is it time to rebalance the portfolio for changes in the economy and/or for the relative value between asset classes and individual asset selections?

We currently know, from "Nowcasts" (note: more on "Nowcasts" in **Part E**) and from our own proprietary forecasting tools (note: covered in **Section III**) that, at this time, <u>The Economy is Expanding!</u> Therefore, there is <u>absolutely no current need</u> for that part of Rebalancing we call Dynamic (i.e., based on the state of the economy).

<u>However</u>, the market's performance in 2017 has been strong enough to <u>alter the</u> <u>risk-profile of portfolios</u> (i.e., the relative weighting of both asset classes and individual asset selections).

<u>Therefore, changes in the general risk-profile of portfolios have and continue to</u> <u>be subject to selling into strength</u> (i.e., Rebalancing due to shifts in the weighting of assets and asset classes).

The current reasons for the consideration to sell into strength are summarized below:

<u>First</u>— The outsized return from common stocks during 2017, relative to investments in other asset classes (i.e., bonds, commodities, REITs, gold, cash equivalents, etc.), has resulted in an important shift in the risk-profile of portfolios. In many cases, the shift is sizeable enough to have altered the comfort level connected to the risk-bearing assessments of individual investors.

- <u>Second</u>—The equity market (i.e., the stock market) is <u>overdue</u> for what we have described in prior reports as a <u>normal correction</u>, which is defined as a decline between 10% and 20%, with an average drop of 13.3% over an average 4-month period (i.e., high to low). Since such corrections occur, on average, every 18 months, the fact that it has been 25 months since the last normal correction (Nov. 2015 through Feb. 2016) strongly suggests such a decline will occur.
- <u>Third</u>— The equity market is <u>temporarily Overbought</u> (i.e., defined as the price of a stock or the stock-market as having advanced to levels not supported by fundamentals). Simply put, the price of stocks has run ahead of the growth in corporate earnings, revenues, sales, etc.

We now return to presenting our <u>Operational Procedure</u> to mitigate behavioral error.

Part E. <u>The "Nowcast"—The Importance of Now</u>

As we have said, "Nowcasts" currently tell us the economy is expanding. Our economic forecasting tools concur (note: to be discussed in **Section III—Peering into the Present—an Update**).

<u>Chart-3</u> (Chicago Fed National Activity Index) and <u>Chart-4</u> (Aruoba-Diebold-Scotti Business Conditions Index) are the two most prominent "Nowcasting" Indexes. Note that neither <u>Chart</u> shows conditions that would warrant concern about a shift in economic direction to one of contraction.

Using these two <u>Charts</u>, by themselves, will <u>mitigate</u> the performance seen in <u>Charts-1, -2a, and -2b</u> *if* an investor sold stocks for bonds when a "Nowcast" indicated Recession and sold bonds for stocks when the indicator was one of Expansion.

It is comforting to remember that Recessions and Bear Markets occur infrequently.

Historically, <u>eleven of the thirteen Bear Markets</u>, or 85%, since 1926 were accompanied by Recessions. Only two Bear Markets, or 15%, were not accompanied or followed by Recessions (i.e., 1961-62 and 1987). The first involved the Cuban Missile Crisis, and the second, the Crash of 1987 (i.e., a liquidity failure).

With a probability of 85% of Bear Markets since 1926 being accompanied by Bear Markets, it makes sense to ignore stock-market declines (i.e., typically corrections) not involving a "Nowcast" of economic contraction.

Unfortunately, as the Dalbar Study shows (see again <u>Charts-1, -2a, and -2b</u>), such corrections (i.e., declines of 10% but less than 20%), which happen approximately every 18 months, have typically <u>not been ignored</u> by investors.

There have been four Bear Markets (accompanied by Recessions, except for the one in 1987) and 13 corrections in the 30 years of the Dalbar Study. The average

<u>decline</u> of the four Bear Markets was 43.2%, and the average <u>decline</u> of the 13 corrections was 13.2%.

Behavioral analysis, supported by the Dunbar performance study, clearly points to the link between market declines and investors' behavioral mistakes. However, simply showing that a link exists <u>solves nothing</u>. Telling investors that Buy-and-Hold works by pointing to the actual performance of the investments <u>does not reduce the fear of loss</u>.

This problem of fear of loss can be mitigated if an investor can see <u>how to avoid</u> <u>the worst part of the decline associated with Bear Markets</u> and how they can also avoid most of the still-more-frequent mistakes connected to normal market corrections.

<u>An Operational Procedure</u> can be created that will mitigate investment errors if the following two points are followed:

- 1. An investor uses the declaration of "Nowcasting" that the economy is either <u>expanding</u> or <u>contracting</u>; and
- 2. An investor uses the knowledge that there is an 85% probability that Bear Markets are linked to Recessions.

Since there are numerous normal corrections, and just a few Bear Markets, knowing the current state of the economy (i.e., in expansion or contraction) dictates the appropriate Operational response:

- In an economic expansion, an investor's appropriate allocation between asset classes, and the selections within asset classes, should <u>be maintained and/or</u> <u>Traditionally Rebalanced</u> to reach the investment goal. <u>The objective is</u> <u>principal enhancement, while staying within risk tolerances.</u>
- In an economic contraction, an investor's appropriate allocation between asset classes, and the selections within asset classes, <u>must be Dynamically</u> <u>Rebalanced</u>. <u>The objective is principal protection</u>.

<u>The critical call to action is the direction of the economy.</u> Knowing that the economy is expanding permits an investor <u>to ignore all market corrections</u> except those that will morph into Bear Markets, most typically because of a developing Recession.

Section II. How Facts Can Mislead

Having discussed the failure of the Buy-and-Hold strategy to work in practice due to behavioral mistakes by investors, we now turn our attention to the exploration of the chief claim by advocates of that strategy that market timing of any kind is not a reasonable alternative approach to reach long-term goals. It is clear from our discussion in **Section I** that we believe <u>market timing through</u> <u>economic "Nowcasting," is an approach that will overcome or mitigate investment</u> <u>mistakes</u>.

What follows is the presentation of a study that, once understood, entirely supports economic timing as not only a competitive strategy vs. Buy-and-Hold, but a superior one.

Part A. Only Part of the Story

A study, first released in 2001 by Birinyi & Associates, provides evidence that a Buy-and-Hold strategy is superior to trading (i.e., timing the market, using their assumptions).

That part of their study comparing Buying-and-Holding the S&P 500 Index over the 36-year test period (Feb. 1966 to Oct. 29, 2001) was, indeed, dramatically superior when compared to <u>missing just the 5 Best Days</u> in market performance each year. By making such a comparison, Birinyi & Associates was demonstrating that market timing carried great risk to the 36-years' performance result.

However, advocates of the Buy-and-Hold strategy picked-up on <u>only one</u> of Birinyi & Associates' comparisons (i.e., <u>missing the 5 Best Days</u>) to make their argument against all market-timing approaches.

Birinyi & Associates' data are shown in <u>Chart-5</u> (The Good, the Bad and the Beautiful). The advocates of Buy-and-Hold apparently missed *the Beautiful*. This miss will be covered shortly. But let us examine each of the three results of their study:

<u>First—The Good:</u> Note that, for an investment in the S&P 500 Index, \$1 goes to \$11.71 using Buy-and-Hold. To illustrate, \$1,000 would go to \$11,710.

<u>Second—The Bad:</u> Here, Birinyi & Associates' data show what happens if an investor simply <u>missed the 5 Best Days</u> of each of the 36 years. The result of our illustration is that the \$1,000 investment would fall to \$150 (i.e., \$1 goes to 15¢ in <u>Chart-5</u>). Clearly, this *Bad* result is actually horrible and would not be acceptable to the Risk-Averse Investor; therefore, even the poor actual performance of average investors in equities or bonds seen in <u>Charts-1, 2a, and 2b</u> would be far more preferable.

<u>Third—The Beautiful</u>: In this result, Birinyi & Associates tell us that had the investor <u>missed the 5 Worst Days</u> of each of the 36 years, an investment of \$1,000 would have grown to \$987,120 (i.e., \$1 goes to \$987.12 in <u>Chart-5</u>).

<u>Even to a Risk-Averse Investor</u>, the risk of \$1,000 going to \$150 vs. the opportunity of \$1,000 going to \$987,120 might be tempting.

For the moment, let us simply say that the opportunity presented in such a *Beautiful* outcome is <u>dramatically superior</u> to both the *Good* outcome of Buy-and-Hold and the *Bad* outcome.

In <u>Chart-6</u> (Cost of Timing the Market: DJIA – 2000-3Q 2015), we find the results of a more recent study from Birinyi & Associates.

The outcome is the same!

The original \$1,000 would go to \$1,420 under the Buy-and-Hold approach, while it would fall to \$120 if the investor missed the 5 Best Days. However, the \$1,000 would rise to \$25,320 if the investor missed the 5 Worst Days.

Once again, missing the Worst Days was dramatically more important than missing the Best Days.

As telling as the Birinyi studies are, <u>it is not our purpose</u> to attempt to capture the dramatic results from missing just the 5 Worst Days each year.

Our purpose is to find, in such studies, additional points of support for the Operational Procedure presented in **Section I**, aimed at mitigating behavioral errors.

The effort, in the balance of **Part B** to follow, will specifically be to justify our view that, if we modify the concept of Buy-and-Hold to <u>Buy-and-Hold Except During</u> <u>Recessions</u>, the Operational Procedure presented earlier will achieve similar, or better, results than the stock market, at a dramatically lower level of volatility.

Part B. <u>The Rest of the Story</u>

In 2009, Invesco, Ltd., a publicly owned Investment Manager, issued a report entitled, <u>Rethinking Risk: The Tale of 10 Days</u>.

In their study, which covered a period of more than 80 years (between the start of 1928 and March of 2009) the authors found the following four key points:

- <u>First</u>— They fully confirmed Birinyi's data concerning the effect on performance of missing the Best Days and the Worst Days.
- <u>Second</u>—They found that <u>returns increased overall and volatility decreased</u> if an investor found a way to miss <u>both</u> the Best and Worst Days.
- <u>Third</u>— The Best and Worst Days have often occurred in proximity (Volatility Clustering).
- <u>Fourth</u>— <u>Most</u> of the largest of the Best- and Worst-performing Days occurred during <u>Bear Markets</u>.

Another six studies, between 2009 and 2012, confirmed both Birinyi and Invesco studies. The six were reviewed in an article entitled, "Don't Let 'Best Market Days' Mantra Derail Your Tactical Investing" (June 9, 2012 in *Seeking Alpha*).

One of the studies reviewed in the same *Seeking Alpha* report on Best- and Worst-Days, was done by the Assured Group. Their report is entitled, <u>Best Day's Argument: Factor or Fiction?</u> The author said:

It is well documented that Bear Markets are characterized by substantially higher volatility than Bull Markets. Therefore, one might expect that more of the 'best' and 'worst' days would occur in Bear Markets than in Bull Markets. But the degree of lopsided-ness is shocking....

Thus, the Best- and Worst-Days are not only more likely to occur during Bear Markets than during Bull Markets, but <u>overwhelmingly</u> more likely!

Because of the overwhelming concentration of Best- and Worst-Days in Bear Markets, the Assured Group concludes:

<u>If major Bear Markets can be avoided</u>, the Worst Days will be mostly avoided and the Best Days will be mostly missed, and the results will be similar to Buy-and-Hold, but with <u>less volatility</u> [our emphasis].

<u>Since</u> 11 of 13 (84.6%) <u>Recessions</u> between 1926 and today, and 43 of 47 (91.5%) Recessions between 1802 and today, have been preceded by or accompanied by <u>Bear Markets</u>, <u>knowing the state of the economy</u> (i.e., whether expanding or contracting) <u>will permit the avoidance of most Bear Markets</u> (i.e., 85-to-90% probability).

To see an example of what results when Bear Markets are avoided because "Nowcasting" correctly determines the direction of the economy, we return to the 36 years of the Birinyi study, using our own analysis.

When Bear Markets linked to Recessions are avoided, the following result would have taken place: \$1,000 goes to \$35,370 (i.e., \$1.00 goes to \$35.37).

The result triples that of Buy-and-Hold (i.e., S&P 500 Index = \$11.71).

This result takes place despite missing the Best as well as the Worst Days during Bear Markets over the 36 years, and despite including the 1987 Crash, which was one of the two Bear Markets since 1926 that was not connected to a Recession.

The result of \$1,000 going to \$35,370 takes place under the revised Operational Procedure—to Buy-and-Hold except during Bear Markets linked to Recessions.

Applying this Procedure will, in our view, mitigate behavioral mistakes related to both Bear Markets linked to Recessions and the many, many normal corrections that occur as investors move through time towards the achievement of their financial objectives.

Section III. <u>Peering into the Present—An Update</u>

Part A. Productivity Pushes Gross Domestic Product (GDP)

U.S. Labor Productivity jumped 3.0% in the third quarter of 2017, which was far beyond expectations.

<u>Chart-7</u> (Productivity Growth) was first presented in our September report. This long-term <u>Chart</u> shows that Productivity had fallen to a level only a little above zero.

On a quarterly basis, <u>Chart-8</u> (U.S. Non-Farm Productivity & Costs) illustrates that four of the quarterly reports since the middle of 2014 were zero or negative. The consensus fear was that the zero level reported in the first quarter of 2017 had forecast a continuation of GDP growth below the historically normal level of 3.2%.

However, in our September report entitled, <u>Perceptions</u>, we argued that Productivity was on the verge of a boom. We predicted the jump in Productivity would permit GDP growth to return to, and possibly exceed, the 3.2% norm. <u>Chart-8</u> clearly shows that Productivity has reached a level of 3% and, because of that surge, GDP growth has exceeded 3% in both the second and third quarters of 2017. We expect the fourth quarter will show GDP growing at <u>approximately 3.5% to as much as 4%</u>.

Recent data on both Consumer Confidence and Personal Savings only add to our confidence that the fourth quarter of 2017, when reported in late January of 2018, will be the best in years.

It has been 17 years since Consumer Confidence has been this high—see <u>Chart-</u> <u>9</u> (Conference Board Consumer Confidence Index).

The latest update of the Personal Saving Rate adds support to the Consumer Confidence level—see <u>Chart-10</u> (Personal Saving Rate). The current rate is 3.2%. However, such a low level is a two-edged event. On the one hand, it echoes the Confidence level, but on the other, it tells us that consumers are more dependent on income and job growth for future spending.

As it relates to job growth, note in <u>Chart-11</u> (Total Unfilled Job Vacancies for the United States), that, while not as good as 2015, it remains at a solid 10% growth rate year-over-year.

As a further job growth support, note the 17-year-low Unemployment Rate—see <u>Chart-12</u> (Civilian Unemployment Rate).

As for the Income component of Consumer Confidence, jump ahead to <u>Chart-15</u> (Real Personal Income Excluding Current Transfer Receipts). Income growth remains a problem that we must carefully watch. It is, however, still advancing.

Part B. <u>State of the Economy</u>

In what follows, we update the state of the economy and the stock market.

The current status of the seven economic indicators, or forecasting tools, used to predict both Recessions and Bear Markets are given below (repeating the Summary Table from our June and September reports, with updated Charts):

Indicator No.	<u>Chart</u>	Indicator Name	<u>Status</u>
(1)	Chart-12	Civilian Unemployment Rate	Positive
		(Current vs. 12 Months Moving Average)	
(2)	<u>Chart-13</u>	Real Retail and Food Service Sales	Positive
		(Percentage Change from Year Ago)	
(3)	<u>Chart-14</u>	Industrial Production	Positive
		(Percentage Change from Year Ago)	
(4)	<u>Chart-15</u>	Real Personal Income Excluding Transfer Payments	Positive
		(Percentage Change from Year Ago)	
(5)	Chart-16	All Employees: Total Nonfarm Payments/Civilian Labor	Positive

Summary Table of Charts 8-14

		Force (Percentage Change from Year Ago)	
(6)	<u>Chart-17</u>	10-Year Treasury Constant Maturity Minus	Positive
		2-Year Treasury Constant Maturity	
(7)	<u>Chart-18</u>	Smoothed U.S. Recession Probabilities	Positive
		(Percent)	(low prob.)

Concerning the indicators listed in the Table above (see Charts 12-18), it is important that any decision to reduce the allocation to stocks due to an expected Recession depends on sell signals from a majority of the seven indicators.

In effect, four of the seven must be negative and, at the same time, the market direction must be negative (i.e., the 40-Week Moving Average of the S&P 500 Index must be greater than the current week).

It is clear from the Table above, we are nowhere near meeting the required forecast for a Recession and, by derivation—a Bear Market.

We close our review of the State of the Economy by showing, once again, the economy's very close link to the stock market's direction--see <u>Chart-19</u> (Side by Side)

Lastly, <u>Chart-20</u> (Asset Class Performance Across Business Cycle Phases) is a direct reminder that shifting from stocks during the expansion phases of a business <u>to</u> <u>bonds and cash (cash equivalents) during Recessions</u> is critical to our financial and behavioral health.

Section IV. <u>Concluding Remarks</u>

This past year, we have dedicated our research, and its reporting, to our clients. Our research has concentrated on the <u>Utility of Active Management</u>.

In our September 2017 report—Sub-Section II.B entitled, "Make Portfolio Construction Mean Something!" we said:

Given the research that is available concerning Best Practices for portfolio construction, we ask why such a large percentage of Actively-Managed Funds underperform the S&P 500 and Passively- or Indexed-Managed Funds?

We answered, "<u>It Does Not Have to Be!</u>" We said:

The greatest opportunity for an advisor is not outperforming the market by some (X) amount (i.e., alpha), but by planning and preparing a client to stay with the plan.

In our June 2017 report, we discussed "making individual security selections among alternative investments in an era when the financial <u>protocols historically used to</u> <u>make such judgments</u> have gathered a rather dramatically diminished credibility."

Throughout the past two years, but especially in 2017, we have increasingly come to believe that nothing short of a dramatic transformation is taking place in the field of Investment Analysis.

The rise of the role of <u>Intangible Assets</u> (i.e., patents, brands, IT, R&D, media content, business process, copyrights, Royalty Income, Big Data, analytics capabilities, franchises, leases, licensing, collaboration agreements, workforce training, employee satisfaction, customer satisfaction, etc.) <u>in creating corporate value has greatly diminished the usefulness of Earnings analysis to investors!</u>

Yet most security analysts continue to follow accounting principles stuck in the wrong century, not taking into account that our economy has radically changed from manufacturing-based to one that is service-based.

In a very recent report entitled, <u>Time to Change Your Investment Model</u>, by Feng Gu and Baruch Leu, of the State University of New York at Buffalo, and the Stern School of Business, New York University, published in the Q-4 2017 issue of the *Financial Analysts Journal*, the authors have identified the key reasons for the loss of the relevance of Earnings-based analysis. As they state, "The evidence presented clearly indicates that reported earnings have ceased to 'move markets.'"

They go on to say:

Finally, we realize that changing the focus of security analysis and valuation from earnings to a broader, long-term competitive analysis, based primarily on non-GAAP [Generally Accepted Accounting Principles] data, is not easy. In addition to the retooling of analysts, it requires a shift away from the deeply rooted primacy of an earnings "state of mind." We believe, however, that the time is ripe for our proposed change. The disappointing returns on managed funds in recent years should raise doubts about the continued usefulness of conventional security analysis. Our extensive empirical evidence on the loss of relevance of GAAP numbers, in both this article and our recent book, confirms these doubts. Certain major investors have already departed from the status quo. A front-page article in the Wall Street Journal recently reported that in the wake of protracted disappointing performance, "BlackRock Inc. [the world's largest asset manager] has started a shakeup of its stock-picking business, relying more on robots rather than humans to make decisions on what to buy and sell.... Many other firms that specialize in handpicking stocks are also struggling with low returns." We propose a different course: Rather than replace analysts with robots, substitute an improved investment methodology for an outdated one. [Our emphasis.]

Concerning the transformation of Investment Analysis, we can say that we have seen enough evidence to convince us that the future utility of the security analysts and the investment advisor depends on the willingness to retool as stated in the quote above.

To us, the utility of advisors can be found in the planning, preparing, and reviewing of the client's financial health.

It is clear from all data that meeting financial goals is more dependent on investing behavior than on a carefully constructed financial plan that fails to be defended by a Dynamic Rebalancing methodology linked to economic timing.

The true utility of advisors is to assist investors in mitigating behavioral error errors that cripple most plans.

This is our mission.

We wish all the best of Holidays and a Happy and Prosperous New Year!

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