CLUTINGER, WILLIAMS & VERHOYE, Inc.

REGISTERED INVESTMENT ADVISORS

6398 Del Cerro Blvd - Suite 3 - San Diego, CA 92120

SCOTT B. WILLIAMS, CFA, CFP THOMAS H. CLUTINGER KENT STONE THOMAS M. CLUTINGER LOUIS E. WILLIAMS JR. (1934-2008) KARL E. VERHOYE (1931-1994)

TELEPHONE: 619-326-0900

Economic and Market Outlook

June 30, 2017

Facts-on-the-Ground

Section I. <u>Until the Alarm Goes Off</u>

Part A. "Know What You Own and Why You Own It"

The above quotation, used as the title for this Part, comes from Peter Lynch (Manager of the Magellan Fund—1977-1990), considered one of the greatest investors of the 20th century.

Lynch continued the above quotation by saying "... if you don't get that one right, you won't hold any investment long enough to reap the benefits of time and compounding."

He went on to say something that is very important relative to today's political chaos:

There is always something to worry about. Avoid weekend thinking and ignore the latest dire predictions of the newscasters.

Today's political chaos has become so significant that some financial commentators have concluded that President Trump's economic agenda is dead and, thus, a recession is surely at hand.

Never mind that unemployment has fallen to a 16-year low, or that corporate profits are surging, or that the overall economy is accelerating—not decelerating!

Never mind that both Business and Consumer Confidence has risen dramatically in the quarter just ended, despite the growing presence of President Trump's mainly self-inflicted political crises.

It remains our view that, until there is an important change in the economic facts-on-the-ground (i.e., the key measures of our country's economic health), we should <u>not conclude</u> that a delay, or even the failure, in passing one or more of the Administration's economic proposals will result in the onset of recession.

Directly put, <u>until four of the seven leading economic indicators turn negative</u>, <u>along with the 40-week Moving Average of the S&P 500 Index's having exceeded the then current S&P 500 Index level</u>, we remain positive on both the direction of the economy and measures of the stock market.

The positive status of economic and market fundamentals does not imply that short-term stock-market contractions (i.e., declines of 3-to-5%), or even a correction (i.e., a decline of about 10%), cannot happen. In fact, they are normal!

What we are saying is that the long-term outlook for both the economy and market remains fundamentally positive.

Successful investors must be patient—let the facts-on-the-ground determine decisions, not speculation about hypothetical outcomes.

As investors, we must be patient—let facts present themselves. Until changing facts result in the alarm going-off, Peter Lynch's advice should be followed: "Avoid weekend thinking and ignore the latest dire predictions of the newscasters."

Urging patience, however, does not mean that we are unconcerned by the current political chaos. Especially concerning for the economy are the facts that there has been no signing of an improved health plan, nor that of an infrastructure plan, nor a tax plan; moreover, a budget bill has yet to be approved.

The above agenda of the Administration has clearly been delayed, in part because each promised target area mentioned above involves many complex considerations, which raise the question—Where do we even start?

Larry Kudlow, a senior economic analyst to CNBC, suggested an answer to unlocking the economic gears of the Administration. On June 9, 2017, Kudlow suggested, in an interview for CNBC, to start with three of the five tax issues:

- 1. Reduce the Corporate Tax Rate from 35% to 15%.
- 2. Grant immediate expensing for <u>all</u> new business investments.
- 3. Pass a onetime 10% tax on repatriation of foreign cash built-up from profits.

Kudlow also suggested that the larger issues of personal tax reform and a tax system overhaul be deferred until 2018. He believes the three less-contentious pieces of legislation could be done in short order. His Charge—Get Something Done!

Barry Ritholtz—of Ritholtz Wealth Management, as well as columnist, blogger, and author—in a May 2017 interview with the Vanguard Group, said he worries "a once-in-a-generation opportunity is slipping away." He added, concerning the absence of important economic legislation:

What's astonishing is that every misstep has been an unforced error. The President has served every ball into the net, blown every opportunity, and never encountered a situation that he couldn't make worse.

It is incredibly frustrating to witness this sort of gross incompetency.

In a second interview with the Vanguard Group, published June 6, 2017, Barry Ritholtz outlined his overriding philosophy that counters the transitory problems we face as investors. He said, about investing:

Essentially, you're betting on human ingenuity. Stop and think about how humans progress and how technology and societies move forward. One of the main purposes of Wall Street is to bring together the people who create new inventions and have new ideas with the people who have the capital. The stock market is essentially the place where ideas get funded, and those ideas subsequently change the world.

Think about the standard of living that has consistently risen over the past century and a half, that typically takes place because some idea is funded and that funded idea becomes a company, and that company continues accessing the capital markets to grow. It's how prices for food and manufactured goods have fallen so significantly over the past century. And the pace of this is accelerating.

It reflects all of the various growth engines of the economy of the country, of the world, and it's most likely to generate the highest return relative to the risk you assume over the course of your lifetime.

We live in an age of wonders. I love the idea that capital plus invention equals a raised standard of living with a side dish of dividends and economic growth.

His statement reminds us that we invest in people who create new inventions and ideas, not in political figures.

Part B. The Health of the Economy Has Not Faltered!

Summary Table of Charts A-G

Indicator No.	<u>Chart</u>	Indicator Name	<u>Status</u>
(1)	Chart-A	Civilian Unemployment Rate	Positive
		(Current vs. 12 Months Moving Average)	
(2)	Chart-B	Real Retail and Food Service Sales	Positive
		(Percentage Change from Year Ago)	
(3)	Chart-C	Industrial Production	Positive
		(Percentage Change from Year Ago)	
(4)	Chart-D	Real Personal Income Excluding Transfer Payments	Positive
		(Percentage Change from Year Ago)	
(5)	Chart-E	All Employees: Total Nonfarm Payments/Civilian	Positive
		Labor Force (Percentage Change from Year Ago)	
(6)	Chart-F	10-Year Treasury Constant Maturity Minus	Positive
		2-Year Treasury Constant Maturity	
(7)	Chart-G	Smoothed U.S. Recession Probabilities	Positive
		(Percent)	(low prob.)

Note: We present the above Summary Table to show that all of the Indicators we use to forecast the health of the economy remain Positive. The <u>Charts</u> for each Indicator can be reviewed individually at the end of this report.

Related Comments

<u>First</u>—The Unemployment Rate cited in Indicator (1) above, and seen in <u>Chart-A</u>, is at the lowest level in 16 years. This shows recovery from the Great Recession (December 2007 to June 2009).

<u>Second</u>—Real Retail and Food Service Sales are supported by the fact that Household Debt Services Payments as a Percent of Disposable Personal Income (see <u>Chart-H</u>) are at the best (i.e., lowest percent) since data began being shown in 1980.

What follows in Section II is the first Sub-section (II.A) of a two-part White Paper: Aspects of Investing, whose purpose is to pull together solutions for security selection and portfolio construction in an era dominated by the use of intangible-assets and increasing passive-management.

The second Sub-section of the White Paper will be presented in the final Section of the September 30, 2017, Economic and Market Outlook report.

Section II. White Paper: Aspects of Investing

Life is an unfoldment, and the further we travel, the more truth we can comprehend.

To understand the things that are at our door is the best preparation for understanding those that lie beyond.

--Hypatia of Alexandria

(c. 335 – c. 415)

Preface

Jesse Livermore, one of the greatest investors in history (1877-1940), once said about having discovered one of the secrets to being a successful investor, "Be bullish in a bull market and bearish in a bear market."

Absolutely great advice, but there is a problem—How do we know?

How do we know that a <u>normal decline</u> of 3-to-5 percent, which happens at least three times a year, or that a <u>normal correction</u> of about 10 percent, which happens about once a year, will or will not morph into a Bear Market (average 35% decline)?

There is no indicator or set of indicators that will, with perfection, guarantee that the worst can't happen; however, as <u>Benjamin Franklin once said</u>, "By failing to prepare, you are preparing to fail."

In presenting the following study, we offer the patterns and indicators of our preparation to recognize the quality of a corporation and to mitigate the harm of Bear Markets.

Sub-Section II.A. Investment Decisions in the Era of Intangible Assets

Segment 1. The Controlling Importance of Intangible Assets

Part A. The Sixth Perspective—The Problem of GAAP

In our last letter we presented five significant perspectives on the usefulness (or lack) of the P/E Ratio in forming judgments about stock valuations. We said that the examples, or perspectives, offered make our case that all ratios, when compared to history, become useful, if at all, only when adjusted to take into account differing circumstances in differing periods of history. Otherwise, whether a P/E Ratio is above or below the historical average, the comparison is meaningless.

<u>The Sixth Perspective is a function of the failure of Generally Accepted</u>
Accounting Principles (GAAP) to adequately categorize Intangible Assets.

In a major study entitled, <u>Valuing Companies with Intangible Assets</u> (September 2009), published by New York University's Stern School of Business, the authors basically declare that Generally Accepted Accounting Principles (GAAP) continue to be stuck in the wrong century because <u>our economy has radically changed from manufacturing to service-based</u>, and increasingly we derive value from a firm's investments in Intangible Assets.

The following extended quotations from that study more fully develop the problems in GAAP today. (Note that all underlined passages are our emphasis.) The authors begin:

In the last twenty years, we have seen a shift away from manufacturing firms to service and technology firms in the global economy, with the magnitude of the change greatest in the United States. As we value more and more pharmaceutical, technology, and service companies, we are faced with two realities. The first is that the assets of these firms are often intangible and invisible—patents, know-how, and human capital. The second is that the way in which accounting has dealt with investments in these assets is inconsistent with its treatment of investments in tangible assets at manufacturing firms. As a result, many of the basic inputs that we use in valuations—earnings, cash flows, and return on capital—are contaminated.

Furthermore, the authors say:

Accounting first principles suggest a simple rule to separate capital expenses from operating expenses. Any expense that creates benefits over many years is a capital expense, whereas expenses that generate benefits only in the current year are operating expenses. Accountants hew to this distinction with manufacturing firms, putting investments in plant, equipment, and building in the

capital expense column and labor and raw material expenses in the operating expense column. However, they seem to ignore these first principles when it comes to firms with intangible assets. The most significant capital expenditures made by technology and pharmaceutical firms is in R&D, by consumer product companies in brand name advertising, and by consulting firms in training and recruiting personnel. Using the argument that the benefits are too uncertain, accountants have treated these expenses as operating expenses. . . .

The authors continue:

We generally draw on the current earnings and current book value of a firm to derive a value for existing assets. The flawed accounting treatment of intangible assets renders both numbers unreliable, since the reported earnings for a technology firm represent the earnings after reinvestment in R&D, rather than true operating earnings, and the book value of assets (and equity) will be understated because the biggest assets for these firms are off the books; if you expense an item, you cannot show it as an asset. This has consequences not only for discounted cash flows valuation, where these numbers become the base from which we forecast, but also in relative valuation, where we compare multiples of accounting earnings and book values across companies.

If growth is a function of how much firms reinvest and the quality of that reinvestment, the accounting treatment of expenditures on intangible assets makes it difficult to gauge either number. The reinvestment made by the firm is often buried in the operating expenses (rather than showing up separately as capital expenditures), and the failure to record the book values of intangible assets makes measures like return on equity and capital, widely used to determine the quality of a firm's investments, unreliable.

The authors conclude:

How do analysts deal with the valuation issues that characterize firms with intangible assets? In many cases they ignore them and trust historical data or management-provided forecasts of the numbers. In some cases, they fall back on the defense that all of the firms in a sector should be equally impacted by these accounting rules and that comparisons across the firms should therefore not be affected. . . .

The biggest problem with treating capital expenses (such as R&D, training, and brand advertising expenses) as operating expenses is that we lose the most potent tool that we have for not only estimating growth but also for checking for internal consistency; the growth rates we use for a firm have to be consistent with our estimates of reinvestment and return on capital for that firm. If we use conventional accounting measures of capital expenditures and capital invested for firms with intangible assets, we will get measures of the reinvestment rate and return on capital that are meaningless.

Amazingly, to this day, GAAP rules, used to manage business and report to investors, continue to treat Intangible Assets as expenses of the single year in which the investment takes place.

Some concern, however, has been shown. According to the *CFO Journal* (March 2016), after years of extensive studies on how to value the types of Intangible Assets, the Financial Accounting Standards Board (FASB) has begun to set rules for each type of asset. Yet the rules have been fully agreed upon for just one type of Intangible Asset, <u>Lease</u> accounting, which will go into effect at the end of 2018. The *CFO Journal* states: "Correcting the Balance Sheets and the Profit and Loss Statements will take years" [our emphasis]. Further Rules await Intangibles, such as:

- 1. Goodwill
- 2. Research and Development
- Patents, Copyrights, Trademarks, Processes that can be used for Royalty Income
- 4. Big Data and Analytics capabilities
- 5. Digital capture of User Behavior contributions (e.g. postings of "likes" on Facebook), and Social Profiles
- Customer/Client lists—Customer Satisfaction
- 7. Noncompete Covenants
- 8. Employment Contracts for key employees
- 9. Stock-based Compensation for employees
- 10. Franchises, Leases, Licenses
- 11. Organization Costs for new branches, divisions, subsidiaries
- 12. Trade Secrets (i.e., unpatented know-how)
- 13. Collaboration Agreements (i.e., Networking/Outsourcing)
- 14. Brand Identification
- 15. Workforce Training costs
- 16. Knowledge-based Capital (e.g., Digital Capital)
- 17. Software and Software-Development capabilities
- 18. Employee Satisfaction

Part B. Are Intangibles Really That Important?

As the Stern School of Business indicated in their 36-page study (referenced above), the <u>bulk of the value</u> of today's publicly-traded firms is <u>derived from Intangible Assets.</u>

Check-out <u>Chart-1</u> (Components of S&P 500 Market Value) and <u>Chart-2</u> (Intangible Investment). The scope of the change in what drives value is quite telling. <u>Chart-1</u> shows that, in 1975, Tangible Assets (i.e., physical assets) accounted for <u>83%</u> of the market value of the S&P 500 companies. <u>Today</u>, there has been a complete reversal, as Intangible Assets (i.e., like those depicted in 1 through 18, above) <u>account for 87% of the total market value of the S&P 500</u>.

<u>Chart-2</u> clearly shows that the growth of Intangible Assets has accelerated to 14.3% of GDP, or nearly double the rate of 1977, while the growth rate of Tangibles has fallen to 9.5% of GDP, from a peak of 15% in 1979.

Taken together, these <u>Charts</u> clearly answer the question posed—Are Intangibles Really That Important? Obviously, the answer is *Yes!*

Segment 2. How, then, Shall Investment Decisions Proceed to Be Made?

We began to frame a response to the above question as far back as the June 2016 report entitled, <u>Assessing the Approximate Likelihood</u>, <u>Part II</u>, and in still greater detail in our September 2016 report entitled, <u>Deconstructing Growth</u>.

In these two reports, we presented aspects of the Fisher/Munger approaches to investment decisions. Their approaches sought to analyze the <u>Quality of a Company</u>, which centered in analysis less dominated by math-models, including algorithms.

Drawing from our earlier reports, we said:

Charlie Munger saw the value of an investment as coming from companies with "entrenched competitive advantages and business models that produce significant and growing volumes of distributable cash flow." Munger's approach was to seek out measures of the <u>Quality of a company</u>. His approach is tied closely to that of Phil Fisher (one of the most influential investors of all time, who died in 2004).

Munger has been quoted as saying, <u>"Once quality is made part of the valuation of business, the investing process is very different than when it is mostly about accounting and finance [our emphasis]."</u>

The Phil Fisher/Charlie Munger model is basically to evaluate companies based on the analyst's perception of a corporation's long-term growth potential. In other words, they advised to buy <u>not</u> on the basis of a trailing earnings P/E ratio or a low price-to-book ratio, <u>but</u> instead on the basis of such things as having <u>high-quality management</u>, being a leader in an evolving industry, and having solid prospects for the long-term.

We added:

Briefly, Philip Fisher was one of the most influential investors of <u>all time</u>. His greatest book, *Common Stocks and Uncommon Profits* (1958), is an investment classic that is still widely studied.

Charlie Munger is Warren Buffett's partner (i.e., Vice-Chairman of Berkshire Hathaway). Their partnership has been extraordinary because of the great success that has followed the two somewhat different approaches they have utilized in making their investment decisions.

Most people think of Warren Buffett's investment success, but it is less well known that his partner, Charlie Munger, had a key role in converting Buffett in the direction of "Growth Investing" over "Value Investing."

Munger's influence on Buffett has, indeed, been strong. It was Munger's urging that led Buffett away from looking for "cheap" assets (i.e., using Ben Graham's "intrinsicvalue" calculations approach), and, instead, investing in great businesses based on their "Quality." Buffett said, in a 1988 interview for a Carol Loomis article in *Forbes*, "Boy, if I had listened to Ben [Graham], would I ever be a lot poorer." Carol Loomis wrote about the interview:

Buffett would likely still have been quite successful if he had stuck to Graham's investing style, a so-called "cigar butt" approach based on finding businesses trading for less than the liquidation value of their assets, like finding a cigar butt on the sidewalk with one or two puffs left. While this is a proven method for generating returns, it doesn't provide for the kind of huge returns Buffett and Munger have generated by focusing on great businesses first, and paying fair value for them.

Munger's approach can be summed in a ten-point check list, while Fisher's involves a fifteen-point list. Both appear below.

Munger's "10-Point Check List" has been taken from *Business Insider* (October 26, 2016):

- 1. Measure Risk, especially reputational (i.e., Customer Loyalty).
- 2. Be Independent—mimicking the herd invites regression to the mean.
- 3. Prepare Ahead.
- 4. Have Intellectual Humility.
- 5. Analyze Rigorously—be a business analyst, not a securities analyst.
- 6. Allocate Assets Wisely—be situation-dependent and opportunity-driven.
- 7. Have Patience—"Compound interest is the eighth wonder of the world" (Einstein); never interrupt it unnecessarily.
- 8. Be Decisive—act with conviction.
- 9. Be Ready for Change—continually challenge and willingly amend your best-loved ideas.
- 10. Stay Focused—keep it simple and remember what you set out to do.

Not to be outdone, Phillip Fisher's list of "15 Points to Look for in a Common Stock" comes from *Business Insider* (November 4, 2011):

- Does the company have products or services with sufficient market potential to make possible a sizeable increase in sales for at least several years?
- 2. Does the management have a determination to continue to develop products or processes that will still further increase total sales potentials when the growth potentials of currently attractive product lines have largely been exploited?

- 3. How effective are the company's research and development efforts in relation to its size?
- 4. Does the company have an above-average sales organization?
- 5. Does the company have a worthwhile profit margin?
- 6. What is the company doing to maintain or improve profit margins?
- 7. Does the company have outstanding labor and personnel relations?
- 8. Does the company have outstanding executive relations?
- 9. Does the company have depth to its management?
- 10. How good are the company's cost analysis and accounting controls?
- 11. Are there other aspects of the business, somewhat peculiar to the industry involved, which will give the investor important clues as to how outstanding the company will be in relation to its competition?
- 12. Does the company have a short-range or long-range outlook in regard to profits?
- 13. In the foreseeable future, will the growth of the company require sufficient equity financing so that the larger number of shares then outstanding will largely cancel the existing stockholders' benefit from this anticipated growth?
- 14. Does the management talk freely to investors about its affairs when things are going well but "clam-up" when troubles or disappointments occur?
- 15. Does the company have a management of unquestionable integrity?

We can all see that Fisher's list is more of a direct group of questions about companies of possible interest, while Munger's incorporates a guide to the investor's behavior.

Both men believed that, among the top concerns, the following should be included: revenue growth, not earnings growth; operating cash flow (i.e., the ability to stay solvent); Research and Development; peer opinions of management; and uniqueness of the company's products and/or services.

Segment 3. <u>Deconstructing Lists</u>

Note: In each of the first three Parts of Segment 3 that follows, we present <u>links</u> between certain inclusions of the Fisher and/or Munger lists and stock performance.

Part A. From Charlie Munger's List—#1 (Customer Satisfaction)

In our December 2015 report, <u>Section III—Investment Decisions in an Era of Exponential Innovation</u>, we introduced two measures of management's success in achieving a high level of brand loyalty.

The measures introduced were:

- 1. Net Promoter Score (NPS)
- 2. American Customer Satisfaction Index (ACSI)

Since then, we have examined a number of studies that reveal the <u>greater value</u> of the ACSI survey over that of the NPS.

In a 2012 study entitled, <u>Customer Satisfaction</u>, <u>Future Earnings</u>, and <u>Market Mispricing</u>, published by National Cheng Kung University, Taiwan, the authors linked high customer satisfaction ratings in the ACSI survey directly to superior stock performance.

In a second study by the same group, in 2015, published by the *European Journal of Marketing*, the authors again concluded:

This paper finds that customer satisfaction is a valuable <u>intangible asset that generates positive abnormal returns</u>. On average, investing in the Strong-ACSI Portfolio is superior to investing in the market index (S&P 500). Even when the stock market holds pessimistic beliefs [i.e., a bear market], investors can beat the market by investing in firms that score well on customer satisfaction. [Our emphasis and clarification.]

The authors continue:

Finance research has further documented evidence of the stock market under-reacting to <u>intangible information</u>. For example, firms with <u>higher research</u> and <u>development expenditures</u>, <u>advertising</u>, <u>patent citations</u>, <u>and employee satisfaction all</u> earn superior returns [our emphasis].

Still more recently, in an extensive article entitled, "Stock Returns on Customer Satisfaction Do Beat the Market: Gauging the Effect of a Marketing Intangible," in the September 2016 issue of the *Journal of Marketing*, the authors said:

A debate about whether firms with superior customer satisfaction earn superior stock returns has been persistent in the literature. <u>Using 15 years of audited returns</u>, the authors find convincing empirical evidence that stock returns on customer satisfaction do beat the market. <u>The recorded cumulative returns were 518% over the years studied (2000-2014), compared with a 31% increase for the S&P 500</u>. Similar results using back-tested instead of real returns were found in the United Kingdom. The effect of customer satisfaction on stock price is, at least in part, channeled through earnings surprises. Consistent with theory, customer satisfaction has an effect on earnings themselves. [Our emphasis.]

The results of their study can be seen in <u>Chart-3</u> (Cumulative Returns on \$100 Invested in Customer Satisfaction Portfolio versus the S&P 500, April 2000-June 2014). The portfolio was constructed with data from the ACSI. The authors point out that the returns are not due to "spectacular performance in a few years and under-performance in others. The returns were higher than the S&P 500 in <u>14 of the 15 years</u> [our emphasis]."

We are quoting the following extensively to show the background of their finding. (Note that all underlined passages are our emphasis.)

First:

Major shifts in economic activity over the past several decades have <u>caused intangible assets</u> to become a <u>major force for value creation</u>, <u>economic growth</u>, <u>and performance assessment</u> (e.g., Katsikeas et al. 2016). These assets loom large in the modern economy and are often valued higher than the assets on balance sheets. <u>They are generally not</u>, <u>however</u>, <u>capitalized like other investments</u>, thereby disconnecting the timing of income from expenditure in financial statements.

Second:

Perhaps more than any other intangible, satisfied customers are essential for any seller in a competitive market if repeat business is a significant portion of total revenue. Accordingly, customer satisfaction occupies a central place in both micro and macro analysis. At the micro level, it is a leading indicator of favorable (high level/low volatility) net cash flows (e.g., Gruca and Rego 2005). At the macro level, it is related to economic growth through consumer spending and to the efficiency by which capital is allocated (e.g., Fornell, Rust, and Dekimpe 2010).

Third:

Most consumer markets are characterized by numerous purchase alternatives and by repeat sales as a large portion of firm revenue. High customer satisfaction, relative to competition, is associated with repeat purchase, market share protection, lower price elasticity, lower transaction costs, and lower selling/marketing costs (Anderson, Fornell, and Lehmann 1994). Satisfied customers are therefore important for earnings, return on investments, return on assets, and cash flows (Aksoy et al. 2008; Anderson, Fornell, and Mazvancheryl 2004; Fornell et al. 2006; Gruca and Rego 2005; Tuli and Bharadwaj 2009). Because of its influence on buyer loyalty, customer satisfaction is also beneficial for risk reduction.

Fourth:

Although there is substantial empirical support for many of the aforementioned effects, the <u>most fundamental finding</u> has to do with <u>repeat business</u>. There is a large body of literature on <u>customer lifetime value (CLV)</u>, or customer equity, whereby the economic value of repeat business is determined by the discounted net present value of future cash flows from current customers. Consistent with the proposition that customer satisfaction has a positive impact on stock price, research has shown that an <u>increase in CLV</u> can lead to an <u>increase in stock price</u> (Kumar and Shah 2009, 2011) and to <u>higher future profits</u> (Venkatesan and Kumar 2004).

The authors concluded with the comment, "We may well be at a point when one can envision a debate between marketing and finance about whether earnings or

<u>customer satisfaction belongs among the risk factors in asset-pricing models</u> [our emphasis]."

Interestingly enough, the three authors of the study went further in late 2016, by opening an ETF (Electronically Traded Fund) in November. The ETF is called the ACSI Funds' American Customer Satisfaction Core Alpha ETF, listed under the symbol (ACSI). The ETF holds securities that have high ACSI scores and that represent large capitalized value companies, like Apple, Alphabet, Johnson & Johnson, etc.

In our <u>December 2015 report</u>, we surveyed the ACSI data and chose to select companies with a score of 75 or more. Their cutoff point must be under 75 because all 81 companies listed in our selection were included in the new ETF, which has 170 issues.

Part B. From Phillip Fisher's List—#7 and #8 (Employee Satisfaction)

In an article published in the *Harvard Business Review* (March 24, 2016) entitled, "Does Employee Satisfaction Improve Firm Value?" the author, Alex Edmans, answers with a resounding, <u>Yes!</u> He says, "I studied 28 years of data and found that firms with high employee satisfaction outperform their peers by 2.3% to 3.8% per year; in long-run stock returns, 89% to 184% cumulative—<u>even after controlling for other factors that drive returns [our emphasis]."</u>

Edmans measured satisfaction by using a survey of the 100 Best Companies to Work For in America, conducted annually by the Great Place to Work Institute. The Institute selects 250 workers at random from the chosen firms, and "asks employees 57 questions, spanning credibility, respect, fairness, pride, and camaraderie."

The Institute's survey is extremely well regarded by both managers and employees alike.

The Institute's annual report is available as <u>Fortune's List of 100 Best Companies</u>, and can be called up on Google or seen in the May 23-26 issue of *Fortune* magazine.

Edmans goes on to say, "The results have implications for both managers and investors. For managers, they imply that companies that treat their workers better, do best." As for the implication for investors, he says:

I find that it takes the market four to five years before it fully incorporates the information. While the market is good at valuing tangible assets such as profits and dividends, it is very slow valuing intangibles such as employee satisfaction—perhaps because it wrongly thinks that employee-friendly companies are distracted from the bottom line.

Clearly, the time lag indicated by Edmans represents an opportunity.

A study released in March 2015 entitled, <u>Does Company Culture Pay Off?</u> was done by the Glassdoor Institute, which, like the Great Place to Work Institute (i.e., the

source of *Fortune*'s <u>100 Best</u> issue), conducts Best Places to Work surveys. Glassdoor's Chief Economist, Andrew Chamberlain, nearly simultaneously with the Great Place to Work Institute, conducted a similar study to determine the link, if any, between company intangibles, such as employee satisfaction, and the broader financial performance among publicly held companies listed in their own survey of the <u>50 Best Places to Work</u> list.

Comparison of Glassdoor's list and the S&P 500 for the years 2009 through 2014 (these surveys only began in 2008) were measured through <u>three</u> possible portfolios, as they report (again note that the underlining is our emphasis):

In the <u>first portfolio</u>, stocks of public companies on the inaugural 2009 Glassdoor list were bought in 2009 and held through 2014, the original class portfolio, investors would see an outperformance of 122.3 percent compared to the S&P 500. This portfolio of companies returned 243.3 percent versus the S&P 500 return of 121 percent during the same period. If you were to invest \$1,000 into the "original class" portfolio it would yield \$3,470 by [the end of] 2014.

A <u>second portfolio</u> consisting of buying each new class of public company winners and holding them for one year, the rebalancing portfolio, would result in an outperformance of 97.5 percent compared to S&P 500 results. If \$1,000 was invested into this "rebalancing" portfolio in 2009, by 2014 an investor would see a return of \$3,185.

And in a <u>third portfolio</u>, the elimination portfolio, investing in only repeat public company winners on the Glassdoor lists, investors would see outperformance of 58.7 percent compared to the overall market, yielding \$2,797 by [the end of] 2014 had they invested \$1,000 into this portfolio.

The data above are illustrated in <u>Chart-4</u> (Relative Value of "Best Places to Work" Stock Portfolios vs S&P 500).

Chamberlain adds:

In <u>another study</u>, the 30 publicly traded companies on Glassdoor with the lowest overall company ratings as of January 31, 2015, were evaluated for stock returns. The report shows lower rated companies significantly underperform the market. Between 2009 and [the end of] 2014, the S&P 500 earned a return of 121 percent. By contrast, a ratings-weighted portfolio of low-rated companies earned just 91.5 percent, underperforming the S&P 500 by 29.5 percent.

These studies of employee satisfaction, together with those concerning customer satisfaction ratings, clearly suggest that both Intangibles are important parts of the risk factors that security analysts should include in making judgments about stock valuations.

Part C. <u>From Munger's List--#6, and from Fisher's List— #2 and #12</u> (Allocation of Capital)

In the March-April 2017 issue of the *Harvard Business Review*, a study entitled, "Strategy in the Age of Superabundant Capital," was presented by the team of Michael Mankis, Karen Harris, and David Harding, from Bain & Company (a Global Management Consulting Firm).

The team of three presented what we believe to be another Intangible Asset (i.e., management skills in utilizing capital) that can be linked to stock performance.

The authors introduced the subject by saying the following (again, note that all underlined passages are our emphasis):

For most of the past 50 years, business leaders viewed financial capital as their most precious resource. They worked hard to ensure that every penny went to funding only the most promising projects. A generation of executives was taught to apply hurdle rates that reflected the high capital costs prevalent for most of the 1980s and 1990s. And companies like General Electric and Berkshire Hathaway were lauded for the discipline with which they invested.

Today financial capital is no longer a scarce resource—it is abundant and cheap. Bain's Macro Trends Group estimates that global financial capital has more than tripled over the past three decades and now stands at roughly 10 times global GDP. As capital has grown more plentiful, its price has plummeted. For many large companies the after-tax cost of borrowing is close to the rate of inflation, meaning that real borrowing costs hover near zero. Any reasonably profitable large enterprise can readily obtain the capital it needs to buy new equipment, fund new product development, enter new markets, and even acquire new businesses. To be sure, leadership teams still need to manage their money carefully—after all, waste is waste. But the allocation of financial capital is no longer a source of sustained competitive advantage.

The authors continue:

Strategy in the new age of <u>capital superabundance demands a fundamentally different approach</u> from the traditional models anchored in long-term planning and continual improvement. <u>Companies must lower hurdle rates and relax the other constraints that reflect a bygone era of scarce capital. They should move away from making a few big bets over the course of many years and start making numerous small and varied investments, knowing that not all will pan out. They must learn to quickly spot—and get out of—losing ventures, while aggressively supporting the winners, nurturing them into successful new businesses. This is the path already taken by firms innovating in rapidly evolving markets, but <u>in an era of cheap capital</u>, it will become the dominant model across the business <u>economy</u>. Companies that practice this strategy will have the edge so long as capital remains superabundant—and according to our analysis, that could be the case for the next 20 years or more.</u>

In this new age of abundant availability of capital, the cost of capital has fallen by more than two-thirds, from 16.4% in 1980 to 5.3% in 2015, according to the above study. Chart-5 (How the Cost of Capital Has Evolved) depicts their findings. We would add that the cost of capital remains approximately the same today as in 2015.

At low costs of capital, management can justify most projects, which raises a <u>critical separating issue for investors—which managements choose a strategy of Profitability (i.e., Operating Margin) and which choose Growth?</u>

In <u>Chart-6</u> (Choosing a Strategy: Profitability or Growth?), we see the significance of a lower cost of capital in the question of allocation choices. The authors quoted above created this <u>Chart</u> using the Value Line Index of 1600 corporations covering the period of 1980 to 2015. (*Growth* refers to increases in a corporation's intrinsic value [i.e., current market value in Bain & Co. study].)

Note that, at a lower weighted cost of capital (a 6% rate is used for example in the <u>Chart</u>), the return on an investment aimed at growth is, as the authors say, "<u>extraordinarily high: a 1% improvement in a company's long-term growth rate will increase a firm's value by a staggering 27%, whereas a sustained improvement in operating margins of 1% will boost value by only 6%."</u>

Also note that, conversely, when the cost of capital averaged about 15%, a 1% increase in a company's <u>operating margin</u> resulted in a 6% gain in value (same as at a 6% cost of capital), but a 1% increase in the company's <u>growth rate</u> actually had a <u>1% reduction</u> in value.

<u>Lesson</u>: <u>Look for companies that alter their capital allocation between growth and operating margin as the cost of capital changes.</u>

Note that *operating margin* is found by <u>dividing profit</u>—after operating expenses, such as cost of goods sold and wages—<u>by</u> sales, or revenue.

At today's cost of capital (i.e., under 5.5%), the greatest return for its use is for projects involving growth versus those involving operating margin improvement.

Despite what we might expect, far, far too many corporate managers have failed to seek growth projects. They have instead opted to hold too much cash, or chosen to buy-back stock and/or increase dividends.

Is it any wonder that a company like <u>Amazon</u> (emphasizing growth and clearly a Disruptor) may up-end the entire retail-sales industry?

In the same *Harvard Business Review* article cited above, the authors pointed to a report by Reuters that surveyed 3,297 publicly-traded nonfinancial companies in 2016 and found that 60% of those had bought back shares annually between 2010 and 2015. Furthermore, for companies with stock repurchase actions, spending on buybacks and dividends exceeded not just investments in research and development, but also the total of capital spending.

We also note that neither Charlie Munger's nor Phillip Fisher's list finds support for such use of cash.

The message to investors is that management's decision concerning capital allocation is a clear link to stock performance—it is a clear investment separator, as are customer and employee satisfaction ratings.

As an aside, we note that Amazon is a clear example of the significance of capital allocation to growth projects.

In an article for CNBC (April 25, 2017), Tae Kim says that Goldman Sachs pointed out, in its latest research report on Amazon, that investors should buy or add to existing positions <u>each time</u> that the trailing 12-month capital expenditure spending growth first increases from a leveling or declining period. Goldman Sachs points out that in Amazon's <u>three previous investment cycles</u>, <u>purchases made at the start of a cycle returned about 44%</u>, versus a 12% return if shares were bought when investment spending growth had gone flat and/or declined.

Note: Even though Amazon does participate in a stock buyback program, the money is going toward counteracting the dilutive effects of stock-based compensation, rather than as an effort to return capital to shareholders. Without such expenditures for the Intangible Asset called stock-based compensation, the number of shares would importantly rise.

Part D. <u>Nonfinancial Measures Used for Stock Selection</u> (High Sustainability)

There are numerous inclusions in both the Fisher and Munger Lists that collectively offer aid in selecting corporate managements of high quality (i.e., High Sustainability). What is more, many of these nonfinancial measures have proven to provide superior performance versus a buy-and-hold strategy, using the S&P 500 Index.

In a working paper from Harvard Business School entitled, "The Impact of a Corporate Culture of Sustainability on Corporate Behavior and Performance" (November 25, 2011), the authors say:

Our overarching thesis in this article is that organizations voluntarily adopting environmental and social policies represent a fundamentally distinct type of the modern corporation that is characterized by a governance structure that takes into account the environmental and social performance of the company, in addition to financial performance, a long-term approach towards maximizing inter-temporal profits, and an active stakeholder management process [our emphasis].

In their paper, the authors provide strong evidence that <u>companies</u> that have voluntarily adopted environmental and social policies (termed as High Sustainability

companies) significantly outperformed their counterparts over the long-term, both in terms of stock market and accounting performance.

High Sustainability is a multi-faceted concept involving "companies that have explicitly put a high level of emphasis on employees, customers, products, the community, and the environment as part of their strategy and business model," according to the working paper.

They continue:

Moreover we need to find firms that have adopted these policies for a significant number of years prior to the present to allow for such policies, in turn, to reinforce the norms and values upon which a sustainability culture is based.

Perhaps Toby Heaps, editor-in-chief of Corporate Knights, defines sustainability a little more fully in a *Forbes* interview (January 22, 2014), when he said:

...[S]ustainability is when what is good for a company is also good for the planet, and vice-versa. "It means creating more wealth than we destroy. It means that a company is on balance increasing our overall stock of wealth, grounded in human, produced, financial, natural, and social capital. Sustainable firms are those doing the best job at creating net wealth—economic, social, and ecological—as compared to their peers."

The Harvard working paper's proof of superior <u>performance</u> of High Sustainability Companies over Low Sustainability Companies can be seen both absolutely as compared to each other and relatively to the stock market.

In Harvard's study, the authors constructed both value-weighted (i.e., capweighted, meaning shares outstanding times market price) and equal-weighted portfolios (i.e., equal dollar commitments per asset selected).

In <u>Figure-1</u> (Evolution of \$1 invested in the stock market in value-weighted portfolios) and <u>Figure-2</u> (Evolution of \$1 invested in the stock market in equal-weighted portfolios), both <u>Figures</u> (1 and 2) document that firms in the High Sustainability group <u>significantly outperform</u> firms in the Low Sustainability group as well as the stock market (i.e., S&P 500 Index).

As reported in the Harvard study (note that the results show two weightings: value-weighted and, in parentheses, equal weighted—the difference explained above):

Investing \$1 in the beginning of 1993 in a value-weighted (equal-weighted) portfolio of <u>sustainable firms</u> would have grown to \$22.6 (\$14.3) by the end of 2010, based on market prices. In contrast, investing \$1 in the beginning of 1993 in a value-weighted (equal-weighted) portfolio of <u>traditional firms</u> would have only grown to \$15.4 (11.7) by the end of 2010 [our emphasis].

Additionally, they found High Sustainable firms outperform Low when they considered corporate financial performance as seen through <u>comparative rates of return</u> (i.e., <u>Return-on-Assets</u>):

Figure 3 shows the cumulative performance of \$1 of assets based on Returnon-Assets (ROA). Investing \$1 of assets in the beginning of 1993 in a valueweighted (equal-weighted) portfolio of <u>sustainable firms</u> would have grown to \$7.1 (\$3.5) by the end of 2010. In contrast, investing \$1 of assets in the beginning of 1993 in a value-weighted (equal-weighted) portfolio of <u>traditional firms</u> would have grown to \$4.4 (\$3.3) by the end of 2010 [our emphasis].

Figure 4 shows the cumulative performance of \$1 of equity-based on Return-on-Equity (ROE). Investing \$1 in book value of equity in the beginning of 1993 in a value-weighted (equal-weighted) portfolio of <u>sustainable firms</u> would have grown to \$31.7 (\$15.8) by the end of 2010. In contrast, investing \$1 in book value of equity in the beginning of 1993 in a value-weighted (equal-weighted) portfolio of <u>traditional firms</u> would have grown to \$25.7 (\$9.3) by the end of 2010 [our emphasis]. [In relative performance, the value-weighted portfolio exceeded the S&P 500 performance 8.48 times, while the equal-weighted portfolio exceeded the S&P 500 by 5.37 times.]

(Note: <u>Figures-1</u> through <u>-4</u> from the Harvard working paper come between <u>Charts-6</u> and <u>-7</u> in the <u>Charts</u> group at the back of this report.)

Along with reviewing corporate financials, Parts A through D above clearly show that stock selections can be made based on surveys of customers, employees, asset allocation decisions, and nonfinancial measures of corporate decisions (i.e. all related to High Sustainability).

In each case, investment decisions based on the <u>ranking of management</u> <u>performance</u> proved superior to <u>indexed</u> investing (i.e., buy-and-hold).

In Segment 4, we turn to considerations of the second of two investment risks all investors face—Systematic Risk (i.e., risks that impact the market as a whole).

Segment 4. <u>Enter, Stay, or Leave?—Judging Market Risk, or "Systematic Risk"</u>

In the prior three Segments of this <u>White Paper</u>, we presented the critical need to exercise caution when utilizing popular financial ratios, such as the Price-to-Earnings (P/E) Ratio. The caution was directed at making final judgments concerning the Specific Risks (i.e., "Unsystematic Risks") that are tied directly to the performance of a particular security.

This same caution concerning the use of financial ratios applies equally to the second category of risks faced by investors—namely, the Market Risks (i.e., "Systematic Risks").

Sources of such Risks include <u>recessions</u>, <u>political turmoil</u>, <u>changes in Fiscal</u> and/or Monetary Policy, natural disasters, terrorist attacks, etc.

Because such sources of Risk impact the market as a whole, they affect stocks independently of a company's separate fundamental circumstances.

In this Segment 4, we explore the Market Risk, or "Systematic Risk," in an attempt to answer the question: <u>Are the sources of Market Risk, in fact, economically benign or a growing problem?</u>

Part A. <u>Impact of Intangible Assets on Market Valuation</u>

As we saw in Segment 1, the treatment of Intangible Assets by the financial community is flawed. "As a result, many of the basic inputs that we use in valuation—earnings, cash flows, and return on capital—are contaminated" [this quotation is from the Stern School of Business study, discussed earlier].

The authors of the study continue by saying that the "miscategorization" of Intangible Assets "has consequences not only for discounted cash flows valuation, where these numbers become the base from which we forecast, but also in relative valuation, where we compare multiples of accounting earnings and book values across companies."

The same flaws that they conclude render most "conventional accounting measures" of value "meaningless" apply as well to measures of valuation for the market of stocks as a whole.

Based on the Stern School of Business work, we can conclude that all eight of the financial indicators listed below (i.e., the ones most frequently used to judge the stock market's valuation) have been, in their words, "contaminated" by the "miscategorization" of Intangible Assets.

- 1. <u>CAPE Rates</u>—Robert Shiller's 10-year <u>cyclically adjusted and inflation adjusted P/E</u>.
- 2. <u>P/E Rates</u>—based on either trailing 12-month's earnings or forward-estimated 12-month's earnings (i.e., both GAAP and Operating Earnings).
- 3. <u>PEG Ratio</u>—<u>P/E</u> Ratio adjusted for expected earnings <u>growth</u> over a future period of 5 or 10 years.
- 4. <u>Price-to-Book Value</u> (P/B Ratio or TobinQ-Ratio)—Market Capitalization ÷ net worth.
- 5. <u>Market Capitalization ÷ Gross National Product (GDP)</u>—favored by Warren Buffett.
- 6. <u>Earning's Yield (E/P Ratio) vs. 10-Year Treasury Yield</u>—called the Fed model.
- 7. P/CF Ratio—Price ÷ Cash Flow.
- 8. DCF—Discounted Cash Flow, or the present value of future cash flow.

In Segments 2 and 3, we offered an approach that improves analysis of Specific, or "Unsystematic," security Risk. What follows in Part-B of this Segment 4 is our approach to judging Market, or "Systematic," Risk, in order to answer the question: Should Investors Enter, Stay, and/or Leave the stock market in whole or in part?

Part B. The Link between the Stock Market and the Business Cycle

When we look at Market Risk, we are primarily concerned with the sources mentioned earlier. In particular, we should care about the business cycle. We should care because Bear Markets (i.e., declines of 20% or more), with an average loss of 35%, and a range extended beyond 50%, are dominantly linked to recessions. Wharton Professor of Finance, Jeremy Seigel, said, "Out of the 47 recessions since 1802, 43 of them (9 out of 10) have been preceded (or accompanied) by declines in the stock market" [taken from his book, Stocks for the Long Run, 3rd ed., 2002].

In an article written for <u>Seeking Alpha</u> (a content service provided to financial markets), contributor Erik Conley said, in a piece entitled, "How Situational Awareness Can Significantly Boost Portfolio Returns" (January 2016):

The average lead time between a stock market top and a business cycle peak is 5.7 months. The average lead time between a market bottom and a cycle trough is 4.8 months. This brings up an interesting question. If one could anticipate, with even a modicum of accuracy, the onset of a cycle peak, would that help investors to protect their portfolios by "getting out of the way" of the recession? [Our emphasis.]

In our March 2016 <u>Economic and Market Outlook</u> letter entitled, "Assessing the Approximate Likelihood," we introduced the seven economic indicators we use to predict both recessions and Bear Markets. For review, we repeat them here:

- 1. Civilian Unemployment Rate vs. 12-Month Moving Average
- 2. Real Retail & Food Services Sales, Year-Over-Year Change (YOY)
- 3. Industrial Production (YOY)
- 4. Real Personal Income Excluding Transfer Payments (YOY)
- 5. All Employees: Total Nonfarm Payrolls/Civilian Labor Force (YOY)
- 6. Inverted Yield Curve (10-Year Treasury Yield Less 2-Year Treasury Yield)
- 7. Smoothed U.S. Recession Probabilities (20% Threshold Line)

All seven of these indicators are <u>individually and collectively</u> outstanding forecasters of GDP and the stock market.

<u>Chart-7</u> (Perfect Recession Timing) illustrates the importance of the <u>history of key economic indicators</u>. The <u>Chart covers</u> the period 1947 through 2015. There have been eleven recessions since 1947. The <u>Chart</u>, first shown by us in our March 2016 report, simply says that, had an investor <u>perfectly foreseen</u> the turns in the business cycle <u>before they happened</u>, his or her performance would have outstripped the S&P 500 Index (shown in the <u>Chart</u> as the **Buy & Hold [RISK]** strategy) by about 2.8 times (shown as the dotted line).

In <u>Chart-8</u> (Growth-Trend Timing vs. Perfect Recession Timing), the dotted line again represents the level of outperformance of Perfect Timing over the S&P.

But things get really interesting when we closely examine <u>Chart-8</u>, which also shows the performance of investor-timing decisions based on just two of the seven economic indicators listed above. The two economic indicators chosen by the group, Philosophical Economics, for the timing study they conducted in January 2016, were Real Retail & Food Services Sales (YOY) and Industrial Production (YOY). Note the remarkable result of timing entry into and exit from the S&P 500 Index. The result was called the Growth-Trend Timing record (or GTT).

Additionally, in <u>Chart-8</u>, S&P 500 Buy & Hold is compared to both Perfect Timing (PRT) and Growth-Trend Timing (GTT). The S&P is not directly charted; instead, dotted lines convey the performance of PRT and GTT to the S&P 500.

The results are nearly astonishing. While not matching the 2.8 times greater performance than the S&P 500 of the Perfect Timing (PRT) line, the GTT (lower dotted-line) still outperformed the S&P 500 by a wide margin of 2.2 times.

Clearly, the use of leading economic indicators not only helps investors by "getting [them] out of the way" of Bear Markets, <u>as Erik Conley hoped could happen, but also by leading them to dramatically outperform the market (S&P 500)</u>.

What follows is consideration of two more of the seven leading economic indicators we use, as well as the Leading Economic Index (LEI), based on ten components, provided by the Conference Board (which we discuss later).

We have chosen to discuss, using the next two <u>Charts</u> and <u>Tables</u>, first, the <u>Unemployment Rate versus its 12-Month Moving Average</u>, and, second, the <u>Inverted Yield Curve</u>. Each of these indicators not only forecasts developing recessions, but also convincingly outperforms the S&P 500.

<u>Chart-9</u> (Unemployment Rate [%] – MA Line [12]) plots both the Unemployment Rate and the 12-Month Moving Average of the Rate. Note the circled crossing points, where the Moving Average goes above or below the <u>actual</u> Unemployment Rate. Since it concerns <u>Unemployment</u>, a <u>rise</u> in the Rate is <u>negative</u> and, thus, a <u>decline</u> is <u>positive</u>. The circles at the low points show the crossing point predicting recession, while those at the top show the crossing point declaring recovery is on the way.

In <u>Table-I</u> (Lead Time), we see that the historical average lead time from the point when Unemployment turned up to the start of a recession is 3.45 months.

Both <u>Chart-9</u> and <u>Table-I</u> come from the February 2016 report of <u>Philosophical Economics</u> entitled, "In Search of the Perfect Recession Indicator." Their study took the employment data back to 1930. Between 1930 and 2017, the <u>Unemployment Rate vs. its 12-Month Moving Average</u> outperformed the S&P 500 Index by more than <u>three times</u>, with a record of correctly predicting that a recession was imminent at 96.74% of

the time. Furthermore, although it was not the focus of their study, the turns at the top were concurrent or near the end of recessions.

The next separate indicator to be reviewed is the <u>Inverted Yield Curve</u> (i.e., the 2-Year Treasury Yield exceeds the 10-Year Treasury Yield).

An Inversion is a rare event, but when it takes place – pay attention!

What an Inversion warns is that the economic expansion is deteriorating toward recession.

In <u>Chart-10</u> (10-Year Treasury Constant Maturity Minus 2-Year Treasury Constant Maturity), we see one of the three standard constructions of the Inverted Yield Curve; the other two compare the 10-Year Treasury to the 1-Year, and the 10-Year Treasury to the 3-Month Treasury Bill. In each case, the waving flag predicting recession goes up at the point where the short-rate exceeds the long-rate.

It is important to know that there <u>has never been a recession without a prior Inversion</u> (shown in <u>Chart-10</u> as occurring when the line passes below zero).

<u>Table II</u> (Inverted Yield Curve [10-Yr minus 1-Yr] and Recessions [1956-Present]) shows that the average lead-time from Inversions to recessions is 14 months. Such a long lead-time makes the point of Inversion an ideal forecaster of the S&P 500's coming decline.

In effect, an Inversion forecasts:

First—a Bear Market to commence about eight months out;

Second—a Recession to follow some six months after the Bear Market begins.

<u>Chart-11</u> (Yield Curve Inversions Mark Stock Market Peaks—Treasury Yield Curve [10-Year Yield Minus 3-Month Yield] vs. S&P 500 Index) and <u>Chart-12</u> (Russell 3000 Total Market Index vs. 10-Year Treasury Constant Maturity Minus 2-Year Treasury Constant Maturity) both show Yield Curve Inversions marking both market peaks, then recessions.

While there has never been a recession not preceded by an Inversion, there have been a few times in history where an Inversion was not followed by a Bear Market and Recession.

The lack of perfection is why we make our final action decision based on a <u>preponderance of evidence</u>. This means that four of our seven forecasting indicators must turn negative and the 40-week Moving Average of the S&P 500 Index must be greater than the current week's closing for us to begin moving out of the stock market.

As a final support to our discussion of forecasting tools, Shin-Sheng Chen authored a study entitled, "Predicting the Bear Stock Market: Macroeconomic Variables as Leading Indicators," published in the *Journal of Banking & Finance* (February 2009). In his 40-year study, he examined the following for ability to predict Bear Markets:

- 1. Yield Spreads (Inversions)
- 2. Inflation Price Indexes (Consumer Price Index [CPI] and Personal Consumption Expenditures [PCE])
- 3. Money Stocks (M1 and M2)
- 4. Aggregate Output (Industrial Production)
- 5. Unemployment Rates
- 6. Federal Funds Rates
- 7. Nominal Effective Exchange Rates
- 8. Federal Government Debt

While the study's results showed that all measures were effective in predicting recessions, some were late-date in calling for a bear market (i.e., occurred after market's peak).

However, both the <u>Inverted Yield</u> and the <u>Unemployment Rate</u> signaled bear markets and recessions most effectively. The study showed that, by using these signals to get out of the market, each measure outperformed the Buy-and-Hold strategy (S&P 500) by a wide margin—by over seven times for the Inverted Yield and approximately four times for the Unemployment Rate.

The last forecasting tool to be presented is the Leading Economic Index (LEI) compiled by the Conference Board:

The <u>ten components</u> [our emphasis] of The Conference Board Leading Economic Index for the U.S. include:

Average weekly hours, manufacturing

Average weekly initial claims for unemployment insurance

Manufacturers' new orders, consumer goods and materials

ISM Index of New Orders

Manufacturers' new orders, nondefense capital goods excluding aircraft orders

Building permits, new private housing units

Stock prices, 500 common stocks

Leading Credit Index

Interest rate spread, 10-year Treasury bonds less federal funds

Average consumer expectations for business conditions

The LEI is, in our view, more of a co-incident indicator of recession because it provides only a slight lead time over recessions, but not over Bear Markets that typically precede recessions.

As the Index crosses zero, one can bet the National Bureau of Economic Research is about to declare an official recession has begun. The announcement alone normally accelerates the decline in the stock market.

Section III. <u>Summarizing Facts-on-the Ground</u>

After reviewing the state of the economy, about which we continued to observe a well-defined expansion, we turned our attention to the first of two installments of a White Paper: Aspects of Investing.

The subject of the first installment concerns making individual selections among alternative investments in an era when the financial protocols historically used to make such judgments have gathered a rather dramatically diminished credibility.

As an answer to the GAAP problem (miscategorization of Intangibles as Operating Expenses rather than appropriate categorization as Capital Expenses), we presented four alternative approaches to security selection—all of which outperformed the S&P 500 Index materially. The four are restated below with their ranking sources.

	Selection Method	Source of Ranking
1.	Customer Satisfaction	ACSI, NPS, and ACSI (ETF)
2.	Employee Satisfaction	Fortune and Glassdoor (annual surveys)
3.	Allocation of Capital	Value Line
	(between Profitability or Growth)	
4.	High Sustainability	Forbes (annual survey of corporate
		knights) and Morningstar Sustainability
		Ratings

The four approaches collectively can be considered part of a single transitional investment theory based on Behavioral Finance. There will be more!

The financial community has undergone major analytical transitions before. The three profound changes, before the still-evolving fourth, are:

	Previous Transitional Theories	Early Founders
1.	Value Investing	Benjamin Graham/Warren Buffet
2.	Growth Investing	Philip Fisher/Charlie Munger
3.	Modern Portfolio Theory (MPT)	Harry Markowitz/Burton Malkiel

The fourth transitional theory, based on Behavioral Finance, has, among its earliest founders, Richard Thaler and Robert Shiller.

The transition involving Behavioral Finance has moved in two distinct but related directions:

<u>First</u>, making stock selections based on the ranking of corporate management's performance in at least the four areas we presented in this report;

Second, making appropriate selections for the individual from qualifying alternatives. The approach is called Goals-Based Investing. We will be discussing this direction at length as part of the second installment of our White Paper, presented as a major Section in our September Economic and Market Outlook report.

Finally, moving from stock selection to market valuation, we presented three powerful studies that demonstrate that Market, or "Systematic," Risk can be overcome through investor avoidance (see Section II, Segment 4).

The studies, each using one or more of the seven leading indicators that we utilize in forecasting recessions, were able to outperform the S&P Index by avoiding most, or all, of the damage to performance caused by Bear Markets.

Based on these studies and our experience, it is clear that the economy is the primary cause of Bull and Bear Markets. Because the economy is the key driving force for the market, we argue that the stock market should not be considered overvalued or undervalued based on ratio analyses (including the market's P/E Ratio). Likewise, in evaluating companies, the economy is the most important consideration, while ratio analyses have become unreliable considering their severe contamination by the flawed accounting treatment of Intangible assets as Operating Expenses versus being depreciated as Capital assets.

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