## Two Leading Indicators That

 Predict Recessions and the Stock Market Crash that Follows
## Disclosures

The presentation is being provided for informational purposes only and should not be used or construed as a recommendation of any security, sector or investment strategy.

The opinions in this presentation are as of the date of the presentation.
Stock and bond markets are volatile and can decline significantly in response to adverse issuer, political, regulatory, market, or economic developments as well as interest rate risk, inflation, credit and default rates. In addition, foreign securities are subject to interest rate, currency exchange rate, economic and political risks, all of which are magnified in emerging markets.

The S\&P 500 Index is a market capitalization weighted index of 500 widely held stocks often used as a proxy for the stock market.

Consider the investment objectives, risks, charges, expenses, and instruments used to implement a strategy before investing.

Past performance is no guarantee of future results or returns.
Investing involves risk, including risk of loss.
Delta Investment Management is a California registered investment advisor. The firm is based in San Francisco, CA. For more information, please visit www.deltaim.com or call (415) 249-6337.


## Delta Investment Management

Delta is an SEC Registered Investment Advisor (RIA) headquartered in San Francisco. Delta's wealth management services have an emphasis of avoiding major bear markets. Delta manages separately managed accounts at TD Ameritrade and Charles Schwab for qualified retirement accounts (IRAs) and non-qualified accounts for individuals, trusts and corporations.



Jackie Ann Patterson

San Francisco Team

IARs
Los Angeles
Dallas Greenville, SC
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## Delta Investment Philosophy

* We believe there are periods in market cycles to be fully invested and there are other periods not to be fully invested
* As such, we believe it is necessary to be proactive in managing money
* As active managers, we follow market-tested, proven investment disciplines
* During bullish cycles, we seek to invest in the strongest performing assets
* During bearish cycles, we seek to preserve capital by reducing exposure to risk assets
* We believe diversification in both asset type and asset allocation methodology strengthens portfolio performance through the full investment cycle


## Win by Not Losing

## Book Available On Amazon



## Weekly Newsletter

DELTA
INVESTMENT
MANAGEMENT
Delta Insights
a weekly commentary on investing

Delta Investment Management is a registered investment advisory firm headquartered in San Francisco.

## The Hidden Risks of "Safe" Assets

April 6, 2018
Dear Nick,

Money managers often advise clients who would like more safety in their portfolios to increase the weighting of bonds versus stocks. Historically, bonds have experienced lower volatility than stocks. Volatility (standard deviation) is one way risk is measured in finance.

## Stock Market Dashboard



## Delta MSI in Barron＇s

Febenary 3， 2014


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## Traditional Risk Management



## S\&P 500

60/40 Stock/Bond Portfolio 10-Year Average Annual Return: 4.01\% Maximum Drawdown: -41\%<br>60/40 Stock/Bond Composite Index (MSCI/Citi)<br>No deduction of fees, expenses, or taxes<br>Through 12/31/2017

Vs.

## S\&P 500 Index <br> 10-Year Average Annual Return: 8.13\% Maximum Drawdown: -55\%

No deduction for fees, expenses or taxes
Through 12/31/2017

## The Role of Alternatives

Traditional Portfolio Construction

Alternative Portfolio Construction


## Managing Risk Through the

Equity Like Returns
With Active
Risk Mitigation

Dynamic Portfolio Construction to Make the Most of the Opportunity

Given the
Cash


## Stocks: Risk Management

## How bad is this bear going to get?

Two ways to think about the market:

1. How the market rises
2. How the market falls

## Stock Market Stair-Steps Higher



## Stock Market Drawdowns


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## S\&P 500 Returns and

## S\&P 500 intra-year declines vs. calendar year returns

Despite average intra-year drops of $13.8 \%$, annual returns positive in 30 of 40 years
40\%

Source: JP Morgan Asset Management
$\mathbb{D} \mathbb{L} T \mathbb{A}$
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## Quantifying Drawdowns \& Recoveries

## Drawdown \% Occurences AVG Dass to Recovery AVG Days of Dedine

| $5-10$ | 40 | 34 | 24 |
| ---: | ---: | ---: | ---: |
| $10-20$ | 14 | 72 | 96 |
| $20-30$ | 4 | 182 | 260 |
| $30-40$ | 2 | 432 | 220 |
| $40+$ | 3 | 1215 | 476 |

## 1/3/1950 - 7/8/2019, Days are trading days only

## Importance of Recessions

- The 3 pullbacks of > than $40 \%$ all occurred during recessions; 1973-74, 2000-02, 2007-09.
- The 2 pullbacks of $30-40 \%$ occurred outside of recessions. The most recent was "Black Monday" in October 1987. The S\&P 500 declined by $33.5 \%$ from high to low but ended the year in positive territory and rallied another $12 \%$ the following year. The second instance was Nov. 1968 to Dec.

1970. 1968 and 1970 were positive calendar years. 1969 the S\&P 500 declined by $-11.4 \%$

- The average time to recovery on the remaining pullbacks is 3 months.

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## What We Are Trying To Avoid

## Net Stock Purchases by Mutual Funds \& ETFS

(Billion Dollars, Four Quarter Sum Right Axis, S\&P 500 In Orange Logarithmic Scale Right Axis)


Source: Federal Reserve Board Flow of Funds Accounts, yardeni.com

## What We Are Trying To Avoid

| Asset Class | Total Ret Annizd <br> 5 Yr (Mo-End) <br> Base Currency \% | Investor Ret Annlzd 5 Yr (Mo-End) \% | Performance Declines as Volatility Rises |
| :---: | :---: | :---: | :---: |
| Emerging Mkts | 2.86 | 1.47 | 51\% |
| US Fund Small Growth | 8.27 | 5.83 | 71\% |
| US Fund Large Blend | 8.80 | 7.74 | 88\% |

## Market Correction Head-Fakes

Since WW2, 70\% of the market corrections - down more than $10 \%$ but less than 20\% - were not followed by a recession. As a leading indicator of recessions, the stock market has a very poor track record.

## Avoiding Recessions

## 1. Leading Economic Index

2. Treasury Yield Curve

## Leading Economic Index (LEI)

The Ten Components of The Conference Board Leading Economic Index $®$ for the U.S. Include:

1. Average weekly hours, manufacturing
2. Average weekly initial claims for unemployment insurance
3. Manufacturers' new orders, consumer goods and materials
4. ISM® Index of New Orders
5. Manufacturers' new orders, nondefense capital goods excluding aircraft orders
6. Building permits, new private housing units
7. Stock prices, 500 common stocks
8. Leading Credit Index ${ }^{T M}$
9. Interest rate spread, 10-year Treasury bonds less federal funds
10. Average consumer expectations for business conditions

Leading Economic Index (LEI) \% Change Monthly January 2005 through February 2016
(Updated Monthly)


January 1995 through December 2004


Leading Economic Index \% Change Monthly January 1985 through December 1994


January 1975 through December 1984


## LEI 6-Month Moving Average



## Yield Curve: 10-yr. less 2-yr. Rate

U.S. yield curve steepness

Short-term yield versus long-term yield spread*


Leading Economic Index \% Change Monthly Change in the U.S. Treasury Yield Curve


## S\&P 500 Index ‘97-‘04




Leading Economic Index \% Change Monthly Change in the U.S. Treasury Yield Curve


S\&P 500 Index ‘04-‘10





## Where Are We Today?

What does the LEI and Yield Curve say about the market today?

What other factors do we see?

## Performance: Style \& Size

|  | 4 Q 2019 |  | 2019 |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Value | Blend | Growth |  | Value | Blend |  |
| $\begin{aligned} & \text { 愚 } \end{aligned}$ | 7.4\% | 9.1\% | 10.6\% | - | 26.5\% | 31.5\% | $36.4 \%$ |
| 을 | 6.4\% | 7.1\% | 8.2\% | $\frac{\square}{2}$ | 27.1\% | 30.5\% | 35.5\% |
| $\stackrel{\overline{\bar{E}}}{\text { ¢ }}$ | 8.5\% | 9.9\% | 11.4\% | $\stackrel{\text { İ5 }}{5}$ | 22.4\% | 25.5\% | 28.5\% |

## Valuation


$\mathrm{D} \mathbb{E} \mathbb{T} \mathbb{A}$
Source: JP Morgan Asset Management, FactSet, Robert Shiller, Standard \& Poor's, Thomson Reuters $\mathbb{I} \mathbb{V} \mathbb{E} \mathbb{T} \mathbb{M} \mathbb{E} \mathbb{N}$

## 2018 - 2019 In Review



U $\mathbb{E}$ L'IA

## Valuation

## Forward P/E and subsequent 1-yr. returns

S\&P 500 Total Return Index

$\mathrm{D} \mathbb{E} \mathbb{T} \mathbb{A}$

## Cumulative Fund Flows



## \% Change LEI Monthly



Source: The Conference Board
$\mathbb{D} \mathbb{L} \mathbb{T} \mathbb{A}$
$\mathbb{I} \mathbb{V} \mathbb{E} \mathbb{T} \mathbb{M} \mathbb{E} \mathbb{N}$

## Leading Economic Index



## Other Positives

## Leading Economic Index Factors

1. Average weekly hours, manufacturing
2. Average weekly initial claims for unemployment insurance
3. Manufacturers' new orders, consumer goods and materials
4. ISM $®$ new orders index

3\%
5. Manufacturers' new orders, nondefense capital goods excl. aircraft
6. Building permits, new private housing units
7. Stock prices, 500 common stocks $4 \%$
8. Leading Credit Index ${ }^{T M} \quad 8 \%$
9. Interest rate spread, 10-year Treasury bonds less federal funds 11\%
10. Avg. consumer expectations for business conditions 14\%

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## Other Positives

48,000 UAW workers went on strike at GM from September 15, 2019 to the end of October. During the strike, production was stopped at 30 GM factories costing an estimated $\$ 50$ million to $\$ 100$ million per day. GM has about 17\% market share in the global automotive industry.

Boeing stopped production of the 737 Max . Boeing is the largest U.S. manufacturing exporter. The size of the impact of Boeing's production halt represents roughly $70 \%$ of the economic output of the entire U.S. farm sector and may reduce first quarter U.S. GDP by $0.5 \%$. One half of a percent is a significant reduction of growth when total growth is only $2 \%$.

## Other Positives

## Institute for Supply Management PMI



## Treasury Yield Curve



D E LTA

## Stock Market Valuation Model

## Future Earnings (est.)

## Stock Prices

Risk-Free
Rate
$+$ Premium
(anxiety, uncertainty)

## Earnings Revisions



2019
$\mathbb{D} \mathbb{E} \mathbb{T} A$
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$\mathbb{M} \mathbb{N} \mathbb{A} G \mathbb{E} \mathbb{E} \mathbb{N} T$

## S\&P 500 Earnings



## Risk-Free Rate

## 1-Month U.S. Treasury Rate

~ $1.5 \%$

We use the one-month U.S. treasury rate as the risk-free rate. This rate is currently $1.50 \%$. At the end of October, the Fed cut the Fed Funds rate for the third time this year reversing the 2018 rate increases. They signaled that they are likely to be patient and not move rates again unless the data is highly compelling. Taking the Fed at face value, we predict no change in the risk-free rate by this time next year.

## Federal Funds Rate Expectations

## Federal funds rate expectations

FOMC and market expectations for the federal funds rate


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## Federal Funds Rate Expectations

## Federal funds rate expectations

FOMC and market expectations for the federal funds rate


Source: JP Morgan Asset Management, Bloomberg, FacttSet, Federal Reserve
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## Inflation

## CPI and core CPI

\% change vs. prior year, seasonally adjusted


Source: U.S. Bureau of Economic Analysis
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## Risk Premium

## Stock Price Earnings Risk Free Rat Risk Premium

| 2020 | 3,578.91 | 196.84 | 1.50\% | 4.0\% |
| :---: | :---: | :---: | :---: | :---: |
| 2019 | 3,220.00 | 162.06 | 1.58\% | 3.5\% |
| 2018 | 2,767.00 | 162.65 | 1.30\% | 4.6\% |
| 2017 | 2,673.61 | 131.45 | 0.54\% | 4.4\% |
| 2016 | 2,238.43 | 118.24 | 0.24\% | 5.0\% |
| 2015 | 2,043.94 | 106.32 | 0.12\% | 5.1\% |
| 2014 | 2,058.90 | 113.01 | 0.09\% | 5.4\% |
| 2013 | 1,848.36 | 107.30 | 0.16\% | 5.6\% |
| 2012 | 1,426.19 | 96.82 | 0.07\% | 6.7\% |
| 2011 | 1,257.60 | 96.44 | 0.18\% | 7.5\% |
| 2010 | 1,257.64 | 83.77 | 0.12\% | 6.5\% |
| 2009 | 1,115.10 | 56.86 | 0.16\% | 4.9\% |
| 2008 | 903.25 | 49.51 | 4.24\% | 1.2\% |
| 2007 | 1,468.36 | 82.54 | 5.24\% | 0.4\% |
| 2006 | 1,418.30 | 87.72 | 4.16\% | 2.0\% |
| 2005 | 1,248.29 | 76.45 | 2.16\% | 4.0\% |
| 2004 | 1,211.92 | 67.68 | 0.98\% | 4.6\% |
| 2003 | 1,111.91 | 54.69 | 1.24\% | 3.7\% |
| 2002 | 879.82 | 46.04 | 1.82\% | 3.4\% |
| 2001 | 1,148.09 | 38.85 | 6.40\% | -3.0\% |
| 2000 | 1,320.28 | 56.13 | 5.30\% | -1.0\% |

## S\&P 500 1-yr. Forecast



## U.S. Real Nonresidential Investment Spending



## U.S. Real Nonresidential Investment Spending




## Revenue Growth



## EBIT MARGINS




## Unemployment Claims 4-wk avg

## Recession --- Current Level _् Initial Claims (4 week moving Average)



D ELTA

## Risk Premium: High Yield Spread



## Other Positives

- Don't fight the Fed. $\$ 60$ billion of bond buying per month, 3 rate cuts, commitment to keep rates low.
- Oil Prices have fallen from about $\$ 63 /$ barrel to $\$ 50 /$ barrel year-to-date. Stimulus for the consumer.
- Consumer Confidence strong 131.6 in January from an upwardly revised 128.2 (from 126.5) in December.
- Strong demand for U.S. bonds holding rates low.


## Bond Yields vs. S\&P 500 P/E


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## Invest With Delta

* An Active and Engaged Partnership to Achieve Your Financial Goals
* Alignment of Your Interests with Our Interests: Fiduciary to build and protect your wealth
* Comprehensive Wealth Management Solutions
* Focus on Your Absolute Returns
* Pro-active Downside Risk Mitigation - We Actively Protect Your Money
* Transparency of Process and Holdings
* Personalized Service


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