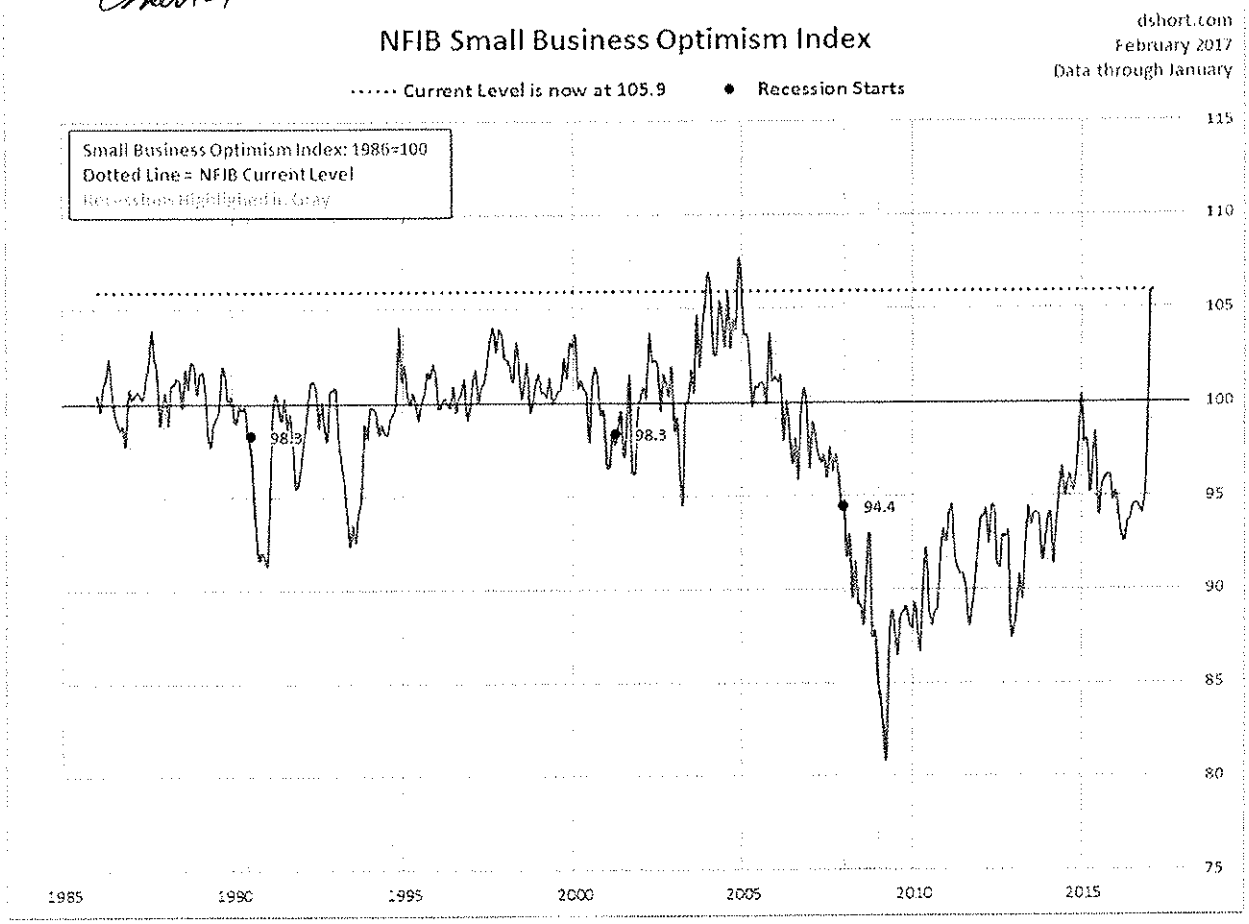
Chart-1



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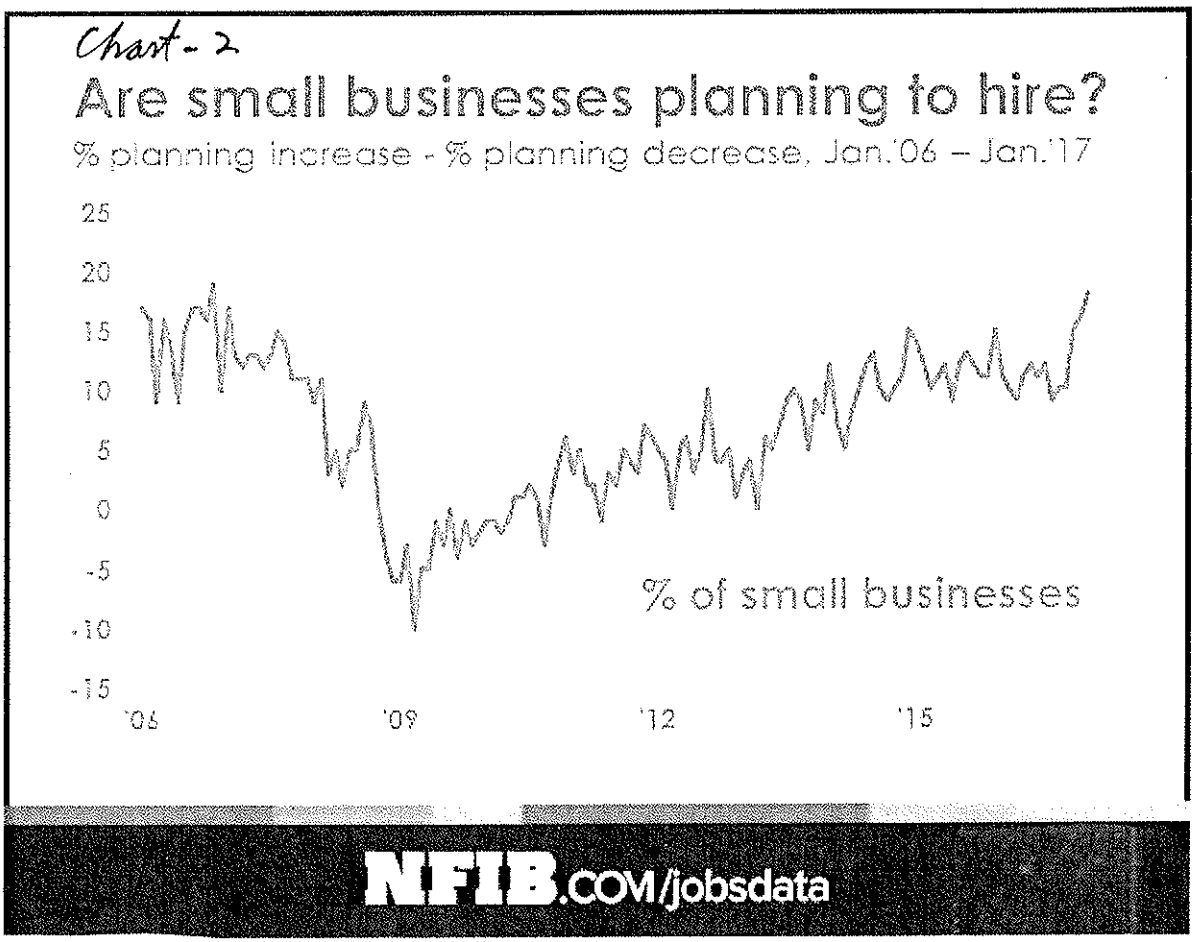

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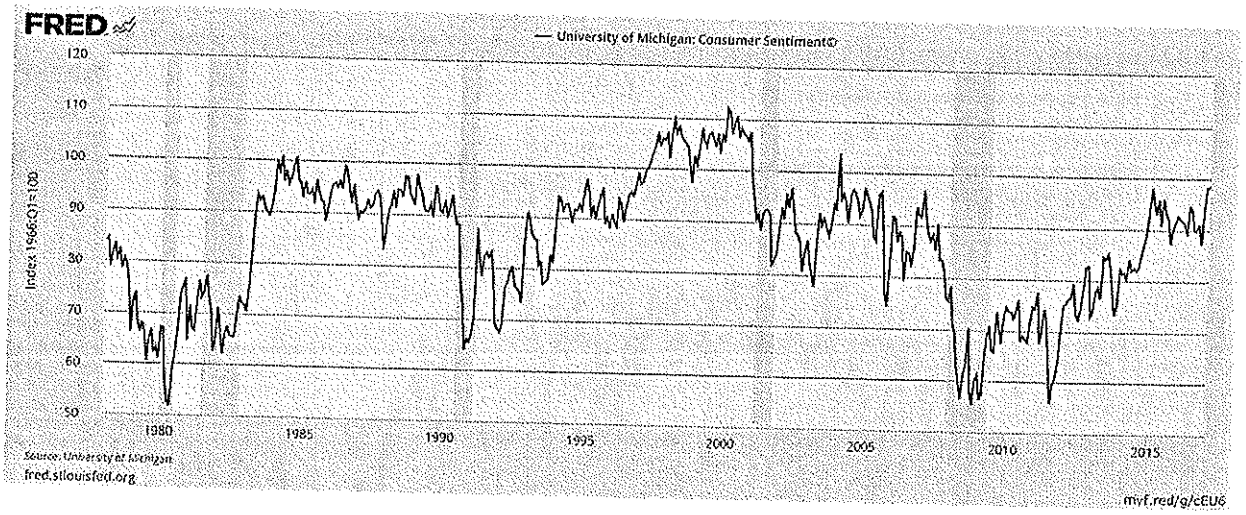

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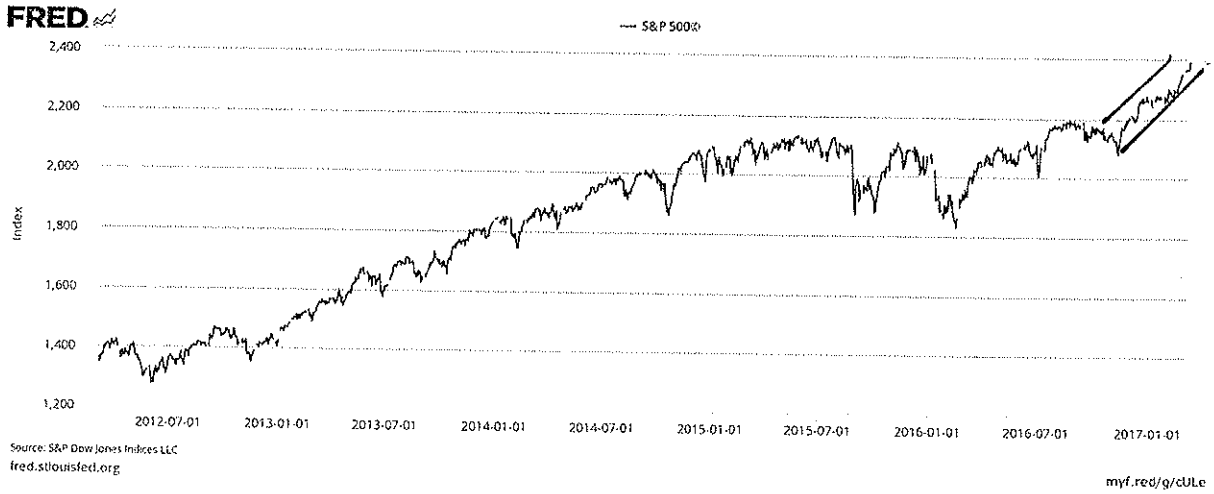

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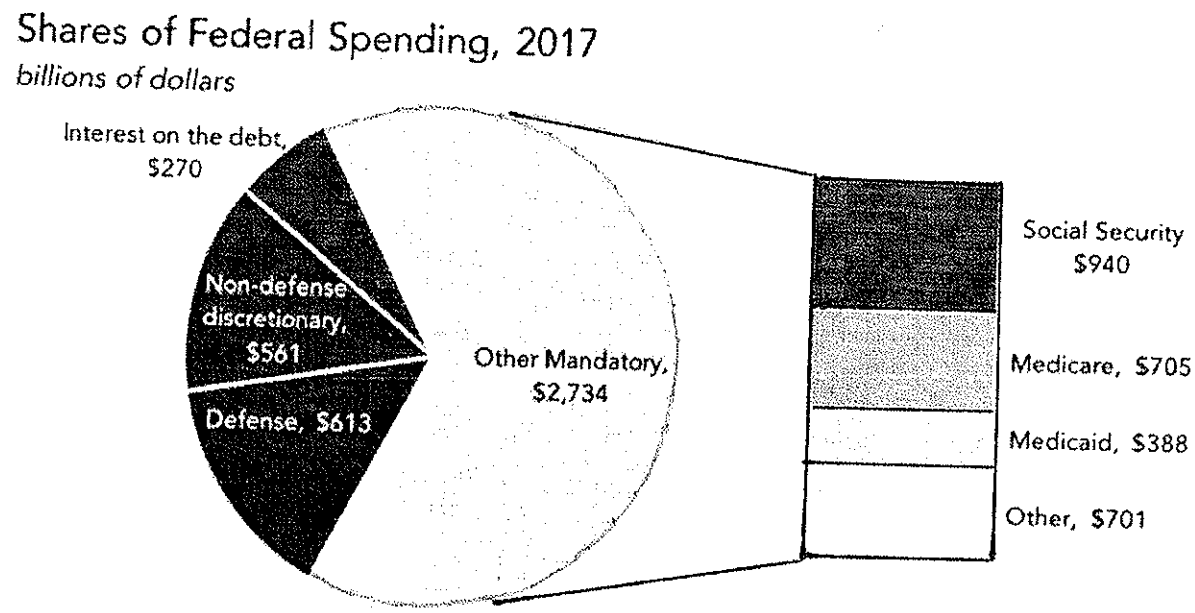


Source: Congressional Budget Office,

Chart - 6

History of U.S. Bear & Bull Markets Since 1926

This chart shows historical performance of the S&P 500 Index throughout the U.S. Bull and Bear Markets from 1926 through 2016. Although past performance is no guarantee of future results, we believe looking at the history of the market's expansions and recessions helps to gain a fresh perspective on the benefits of investing for the long-term.

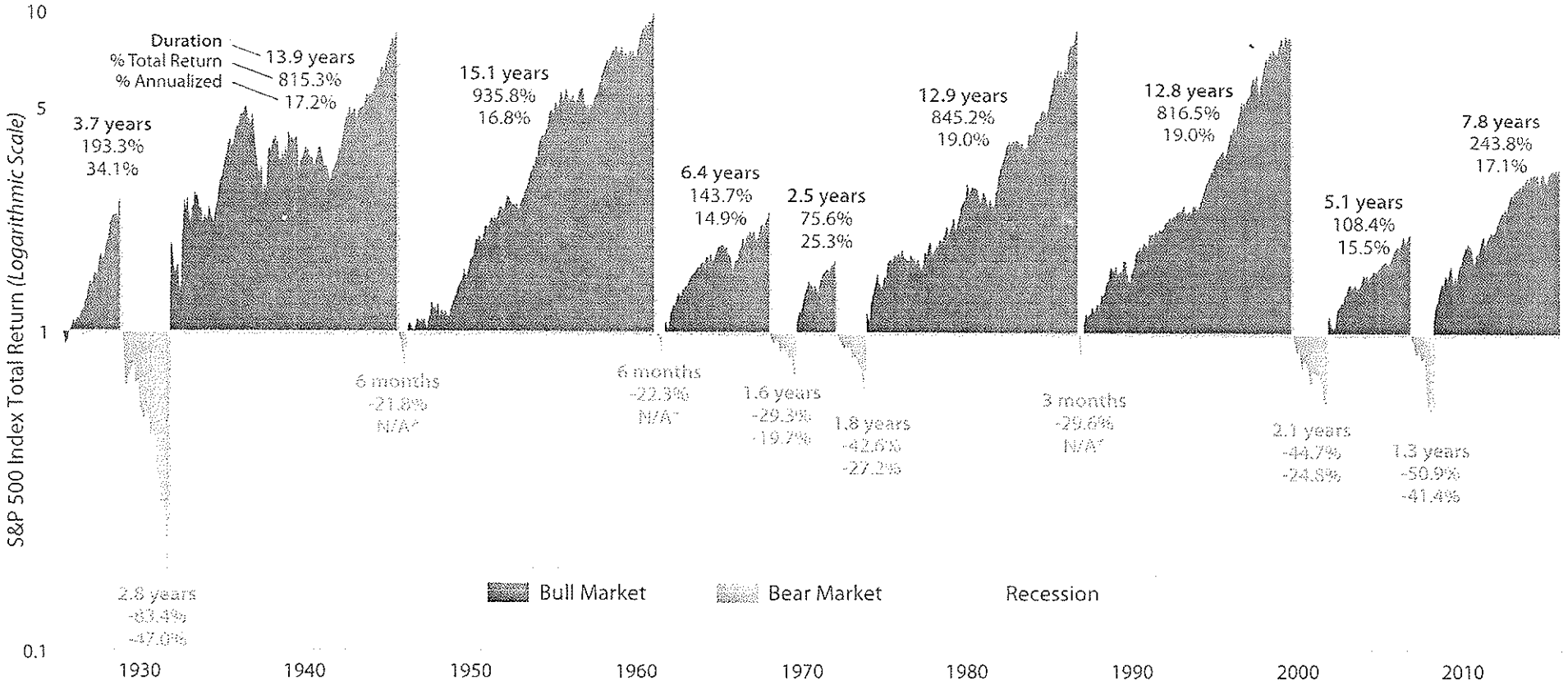
- The average **Bull Market** period lasted 8.9 years with an average cumulative total return of 490%.
- The average **Bear Market** period lasted 1.3 years with an average cumulative loss of -41%.

Bull

From the lowest close reached after the market has fallen 20% or more, to the next market high.

Bear

From when the index closes at least 20% down from its previous high close, through the lowest close reached after it has fallen 20% or more.



Source: First Trust Advisors L.P., Morningstar. Returns from 1926 - 2016. *The S&P 500 Index is an unmanaged index of 500 stocks used to measure large-cap U.S. stock market performance. Investors cannot invest directly in an index. Index returns do not reflect any fees, expenses, or sales charges. This chart is for illustrative purposes only and not indicative of any actual investment. These returns were the result of certain market factors and events which may not be repeated in the future. Past performance is no guarantee of future results.*

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First Trust

Chart 7

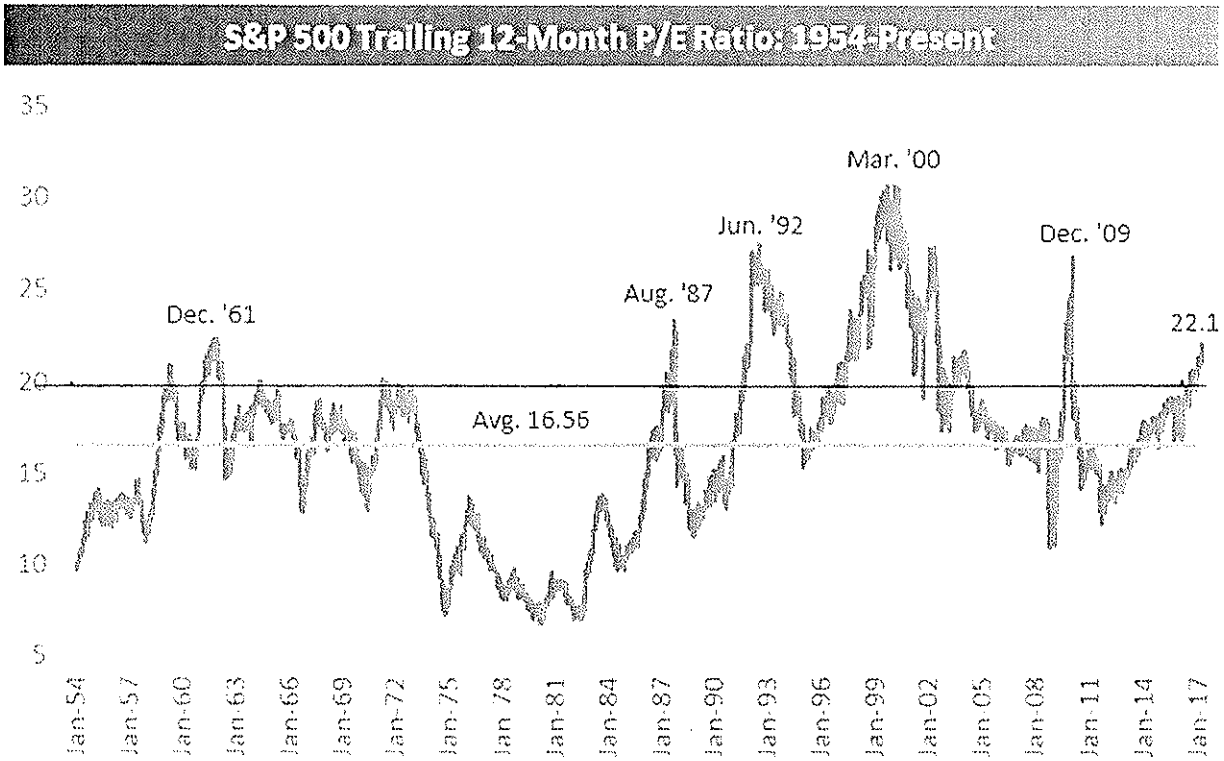


Chart 8

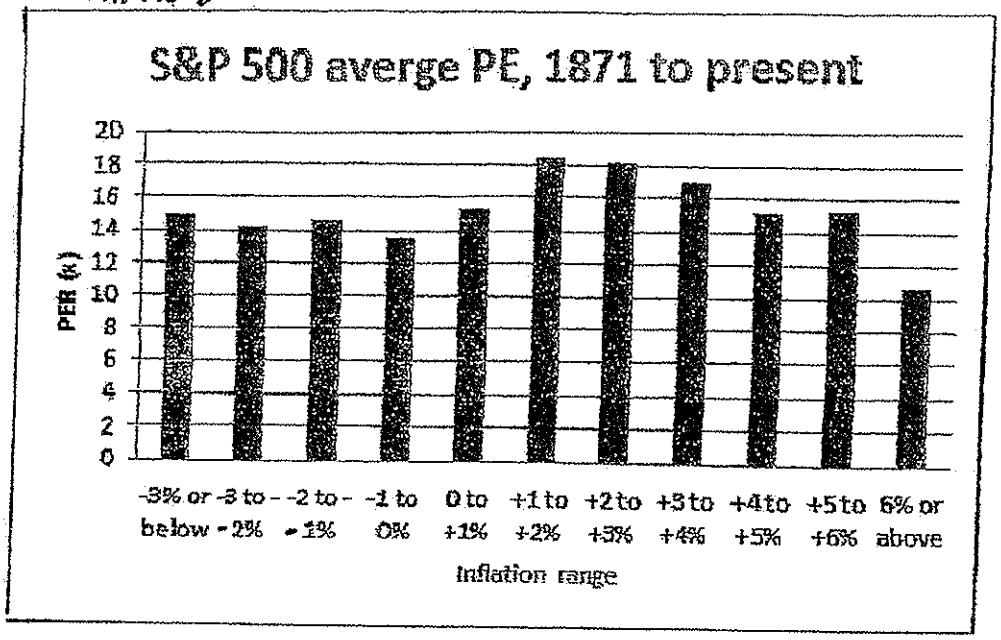
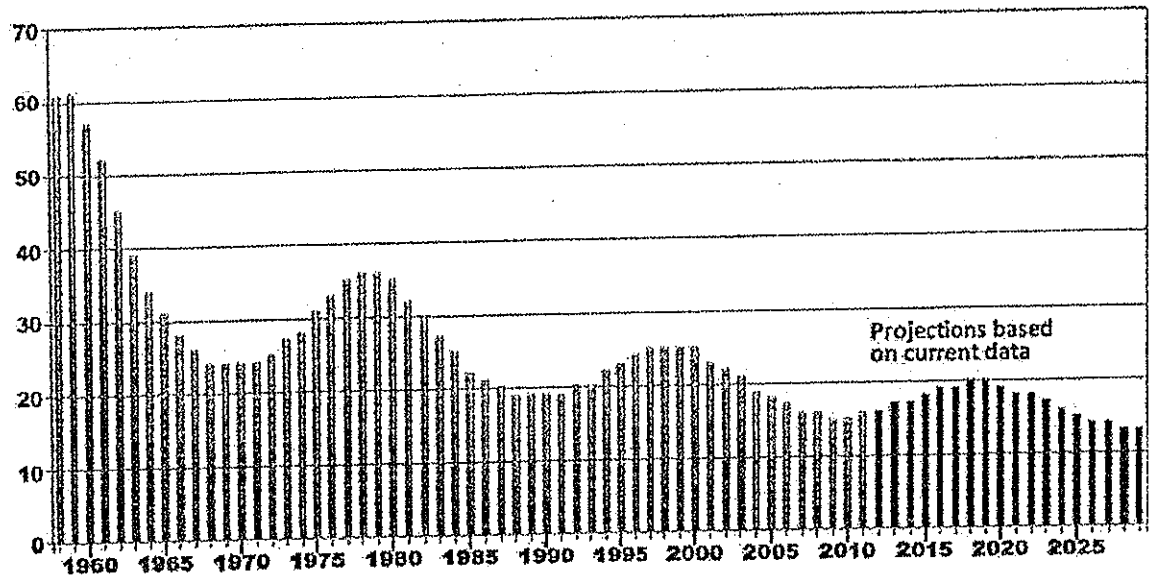


Chart-9

Average company lifespan on S&P 500 Index (in years)



Year (each data point represents a rolling 7-year average of average lifespan)

Chart-10

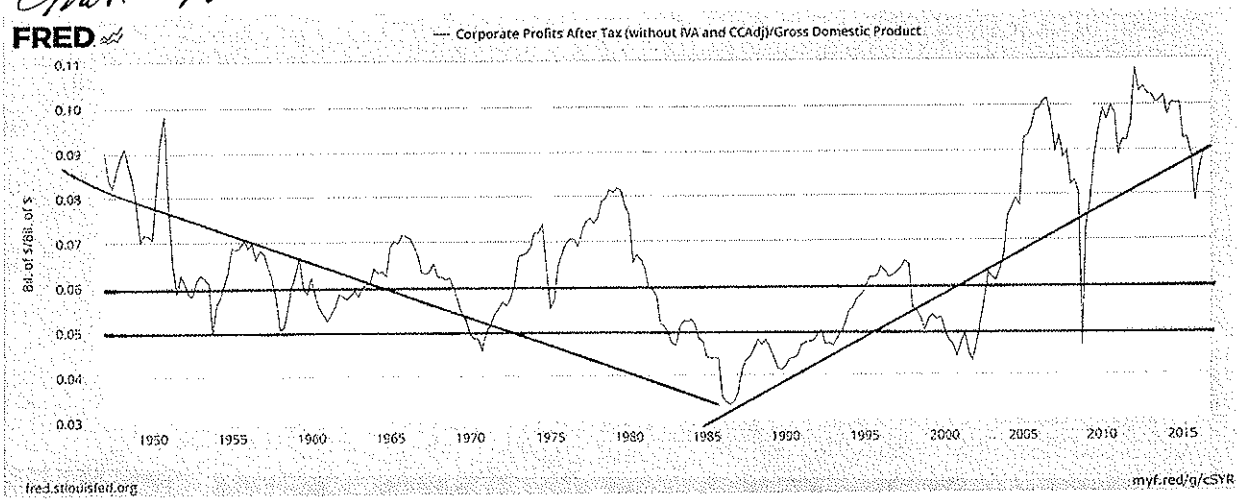
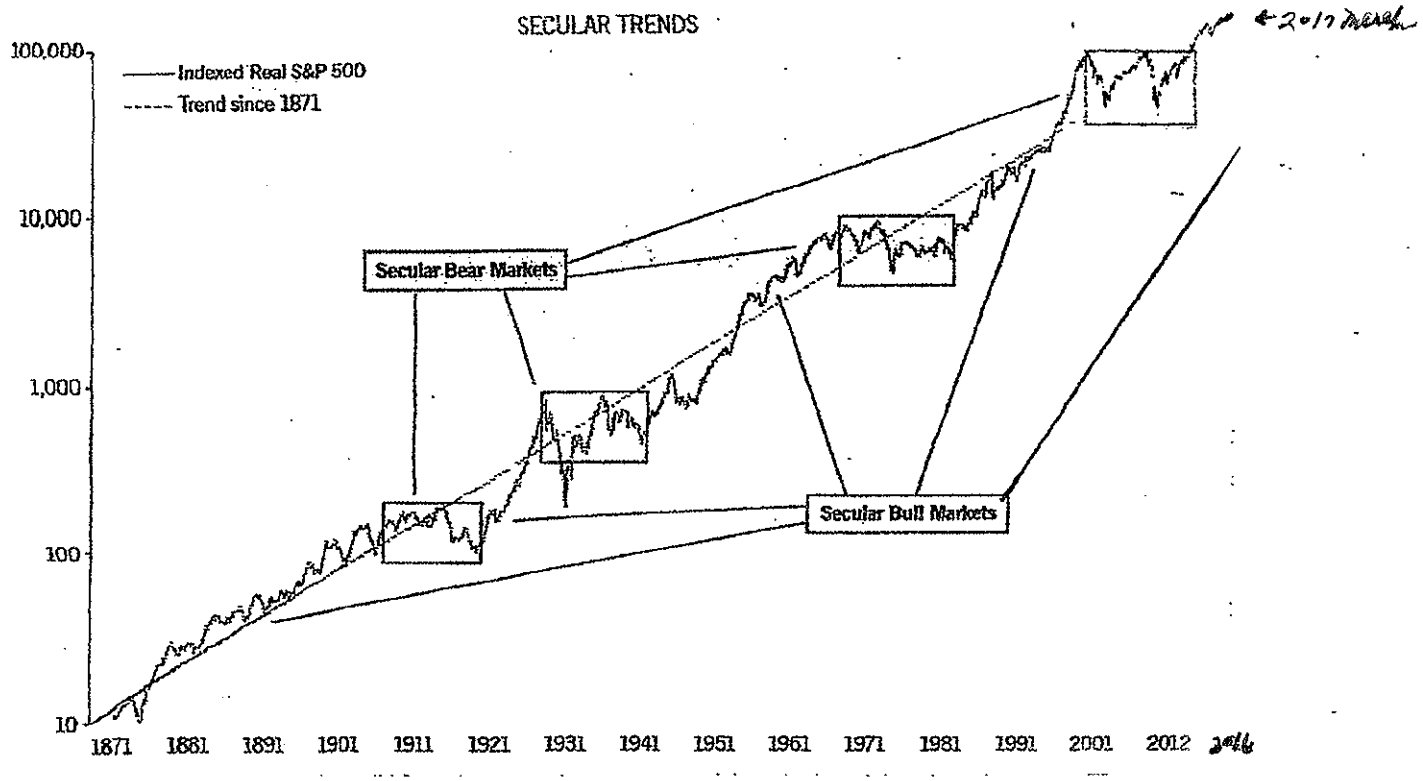


Chart - 11



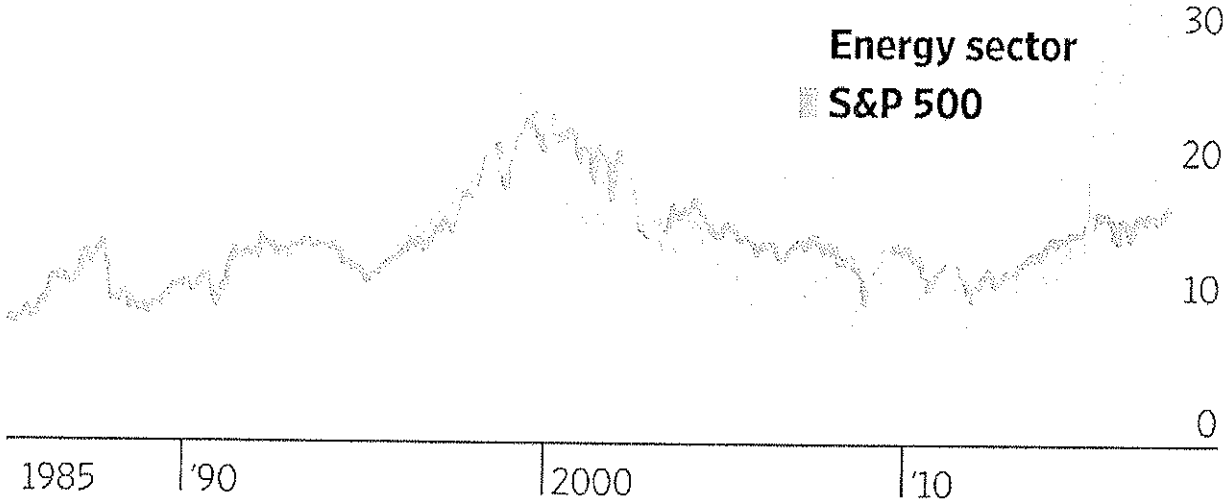
Monthly data since 1871. Source: Haver Analytics, Robert Shiller, Fidelity Investments through December 2012

Chart - 12

The Value of Energy

U.S. energy sector price-earnings multiples jumped as profits collapsed, supporting the valuation of the wider stock market.

Forward price-to-earnings ratio*



*Ratio of price to 12-month forward operating earnings

Source: Thomson Reuters IBES

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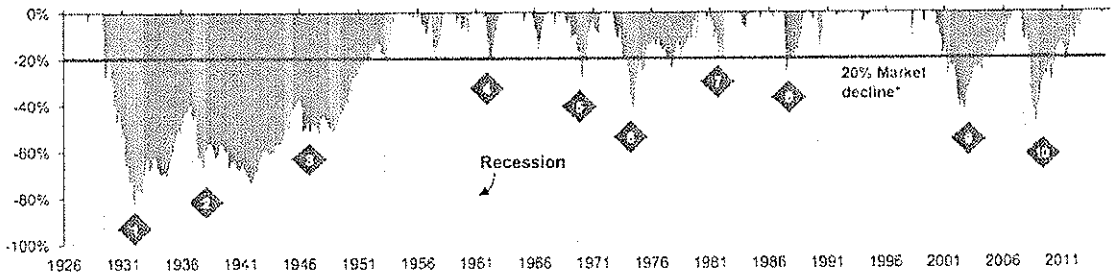
Chart - 13

S&P 500 composite declines from all-time highs



Characteristics of past bear markets

	Market Corrections	Cycle Peak	Bull Market Duration (Months)	Decline from All-time High	Recession	Commodity Spike	Aggressive Fed Tightening	Extreme Valuations	Commentary
1	Crash of 1929	Aug 1929	37	-84%	◆			◆	Excessive leverage, irrational exuberance
2	1937 Fed Tightening	Feb 1937	23	-74%	◆		◆		Premature monetary tightening
3	Post WWII Crash	May 1946	48	-54%	◆			◆	Post-war demobilization, recession fears
4	Flash Crash of 1962	Dec 1961	14	-22%				◆	Flash crash, Cuban Missile Crisis
5	Tech Crash of 1970	Dec 1968	73	-29%	◆	◆	◆		Economic overheating, civil unrest
6	Stagflation	Dec 1972	29	-43%	◆	◆			OPEC oil embargo
7	Volcker Tightening	Nov 1980	31	-19%	◆	◆	◆		Extremely high rates to rein in inflation
8	1987 Crash	Aug 1987	59	-27%					Program trading, overheated market
9	Tech Bubble	Aug 2000	113	-42%	◆			◆	Extreme valuations, mostly in tech stocks
10	Global Financial Crisis	Oct 2007	55	-51%	◆	◆	◆		Leverage, housing, Lehman collapse

Source: FactSet, NBER, Robert Shiller, Standard & Poor's, J.P. Morgan Asset Management
*A bear market represents a 20% or more decline from the previous market high using a monthly frequency.
Periods of "Recession" are defined using NBER business cycle dates. "Commodity Spikes" are defined as significant rapid upward moves in oil prices. Periods of "Extreme Valuations" are those where S&P 500 last twelve months P/E levels were approximately two standard deviations above long run averages. "Aggressive Fed Tightening" is defined as Federal Reserve monetary tightening that was unexpected and significant in magnitude.
Guide to the Markets – U.S. Data are as of June 30, 2015

J.P.Morgan

Chart - 14

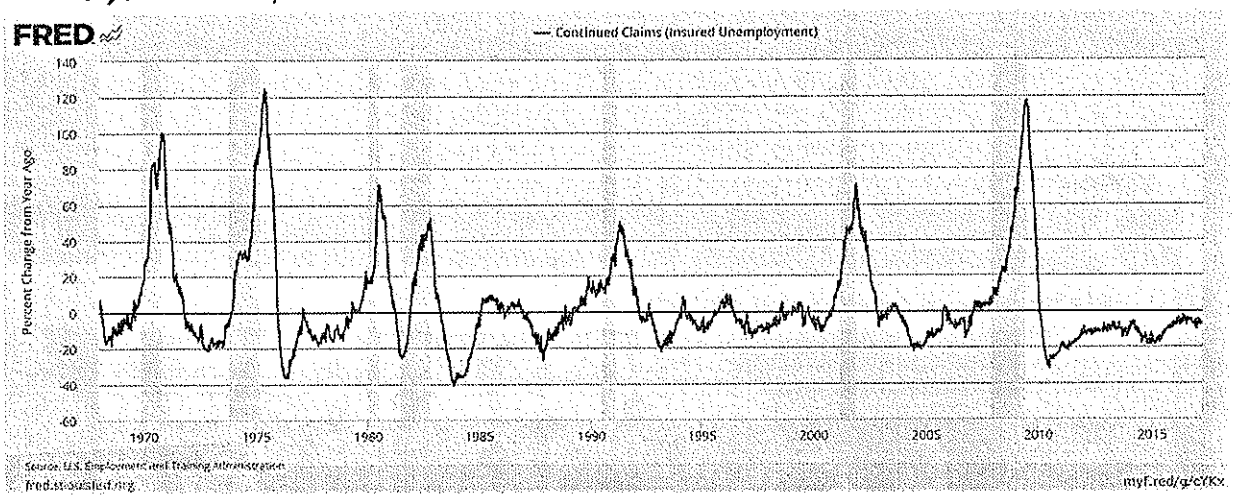


Table - I.

Unemployment Claims as a Recession Indicator

Months that Troughs Precede Recessions		
First Month of Recession	Initial Claims	Continued Claims
Dec 1969	7	6
Nov 1973	8	7
Jan 1980	14	14
Jul 1981	3	3
Jul 1990	20	20
Mar 2001	11	10
Dec 2007	22	19
Average	**12**	**11**

Months that Peaks Follow Recessions		
Last Month of Recession	Initial Claims	Continued Claims
Oct 1970	0	1
Feb 1975	0	3
Jun 1980	0	1
Oct 1982	0	1
Feb 1991	1	3
Oct 2001	0	7
May 2009	-2	1
Average	**0**	**2**

Chart-15

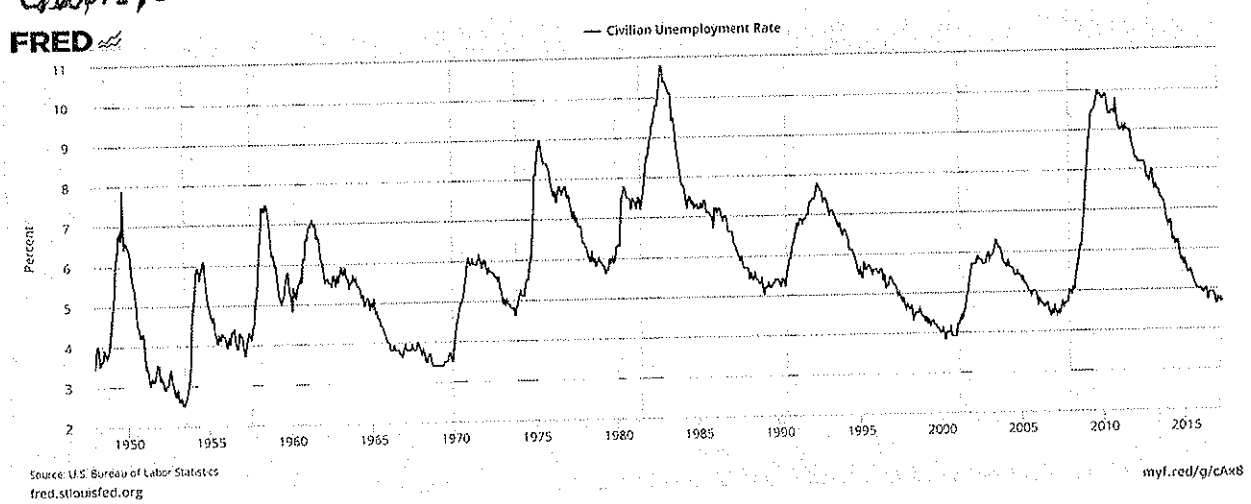
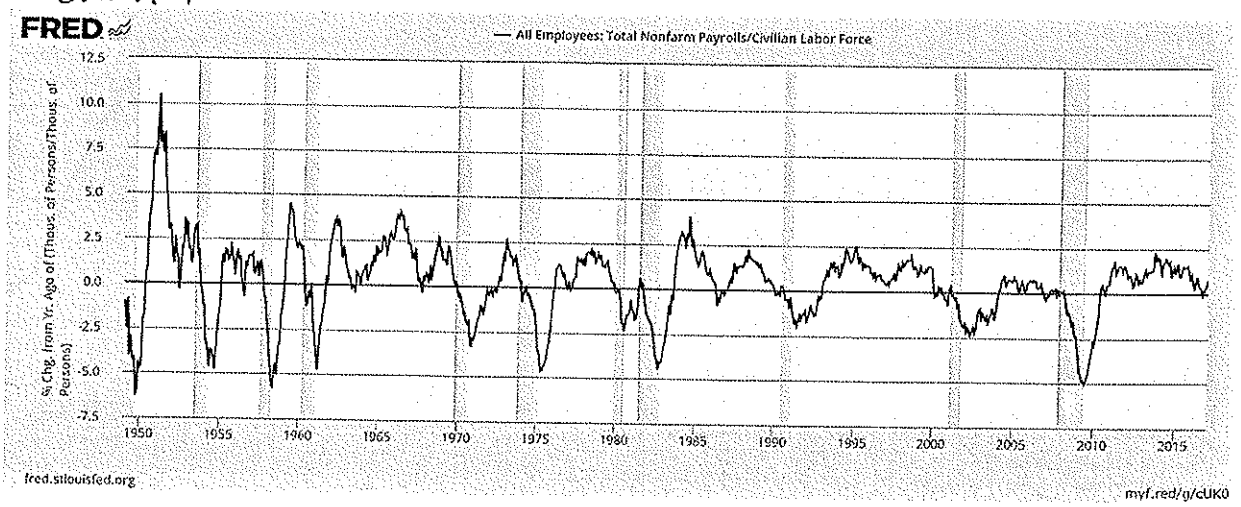


Table II — Unemployment Turns Higher

RECESSION START	UE TURNED HIGHER	LEAD
1948.11	1948.06	5
1953.07	1953.07	0
1957.08	1957.04	4
1960.04	1960.03	1
1969.12	1969.06	6
1973.11	1973.11	0
1980.01	1979.07	6
1981.07	1981.04	3
1990.07	1990.04	3
2001.03	2001.01	2
2007.12	2007.03	8
AVERAGE		3.45

Chart-16



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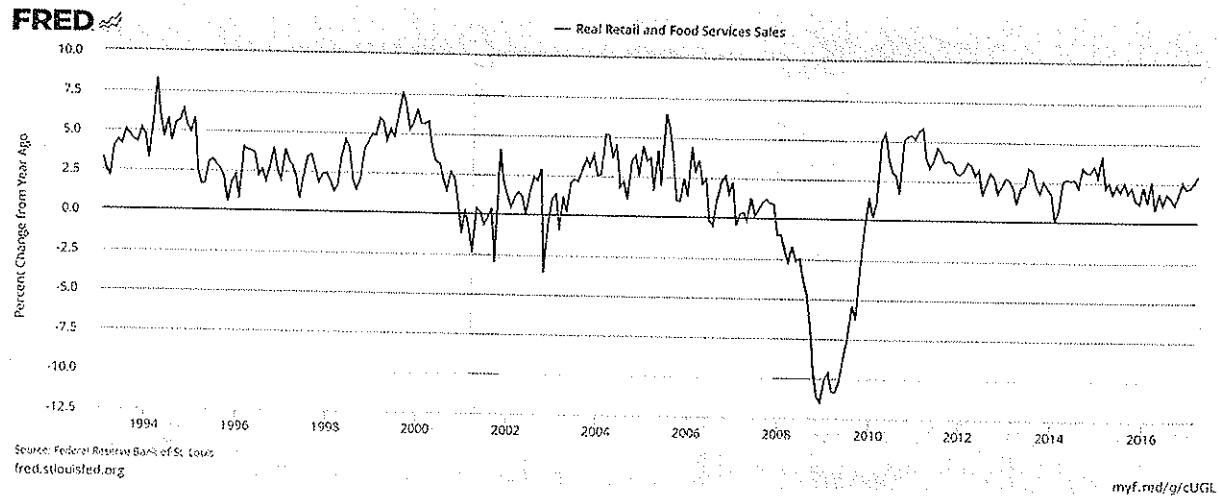

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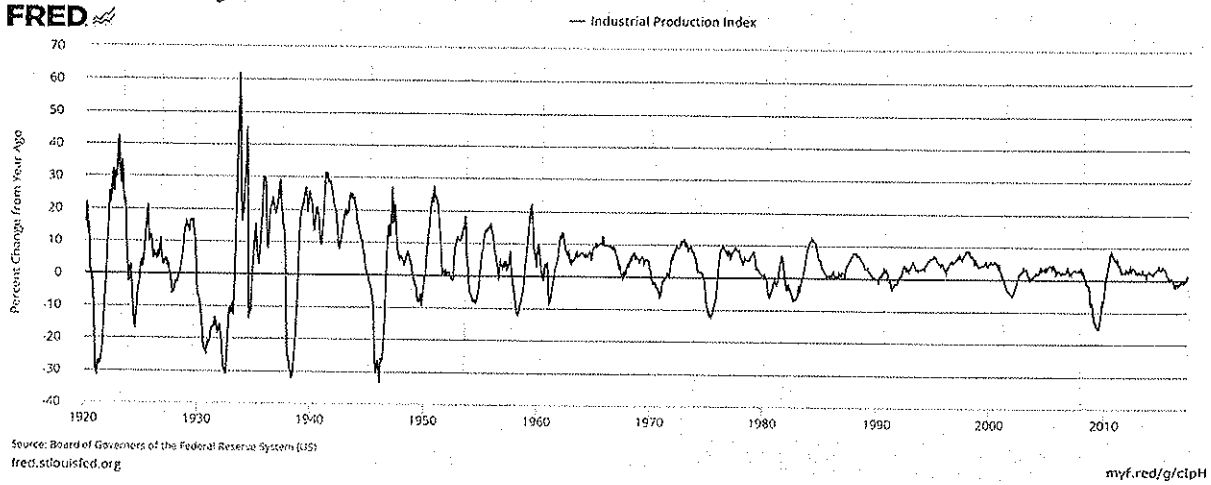

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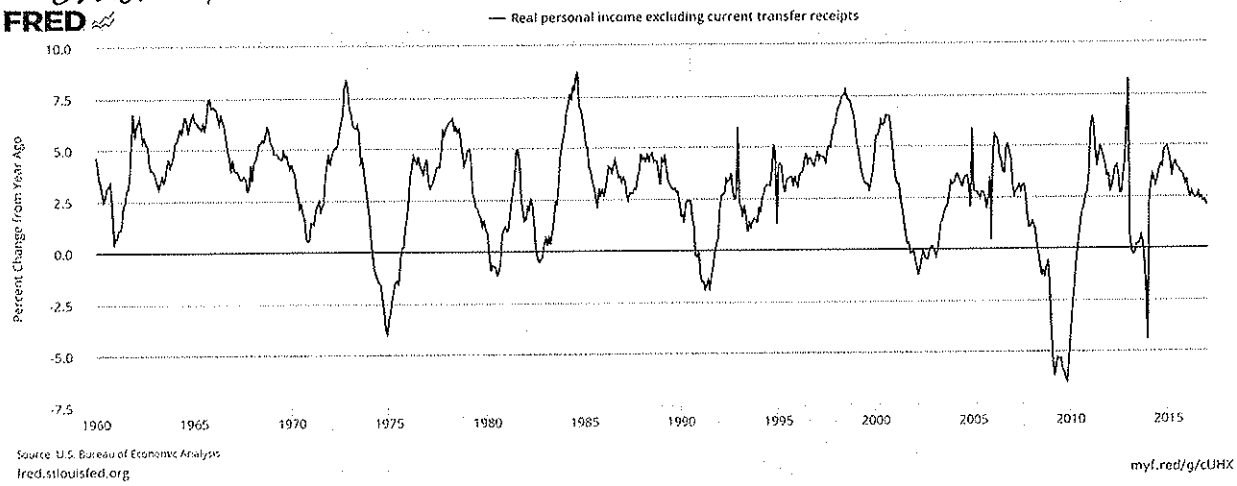

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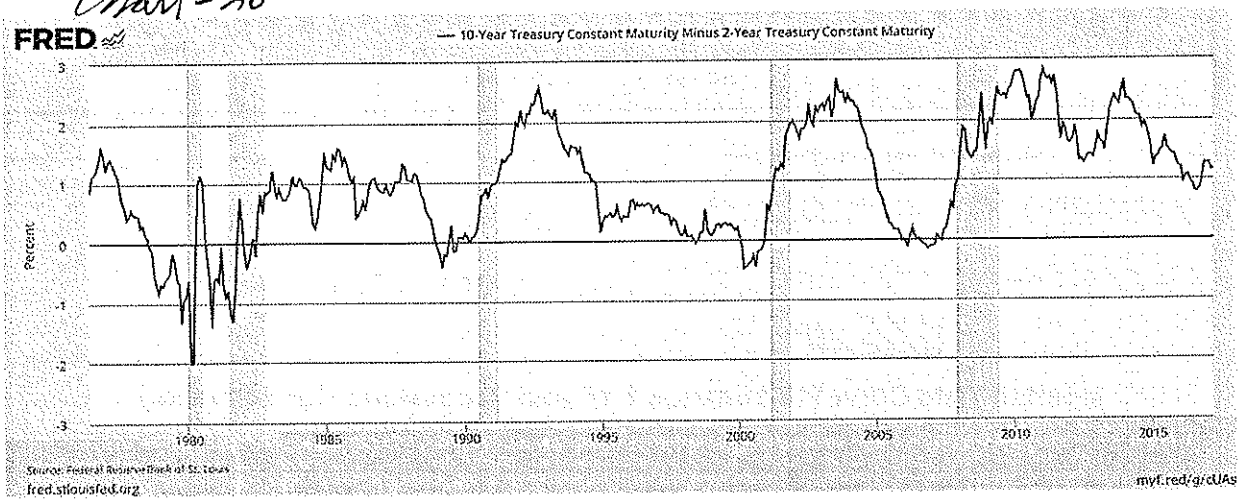

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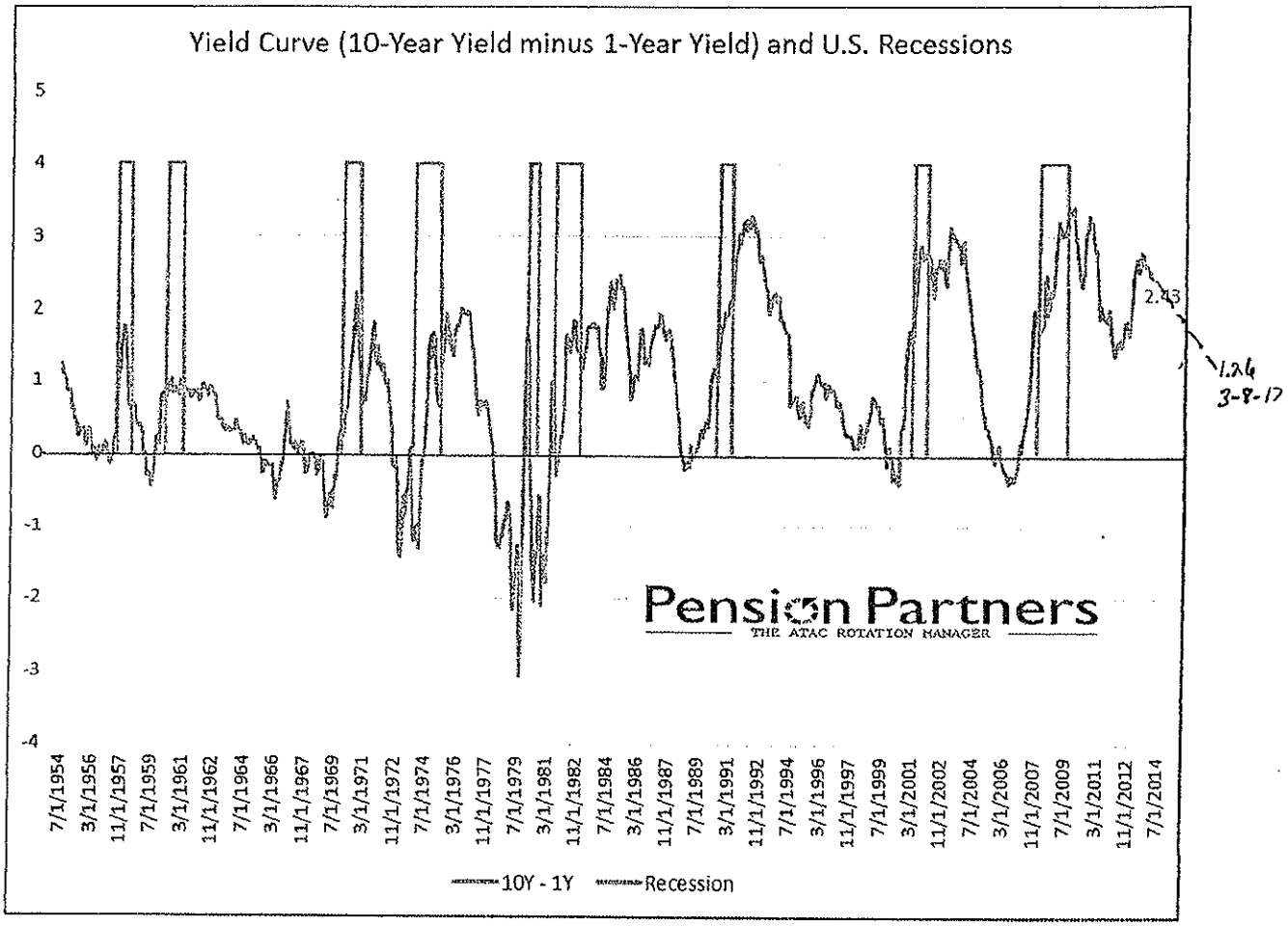


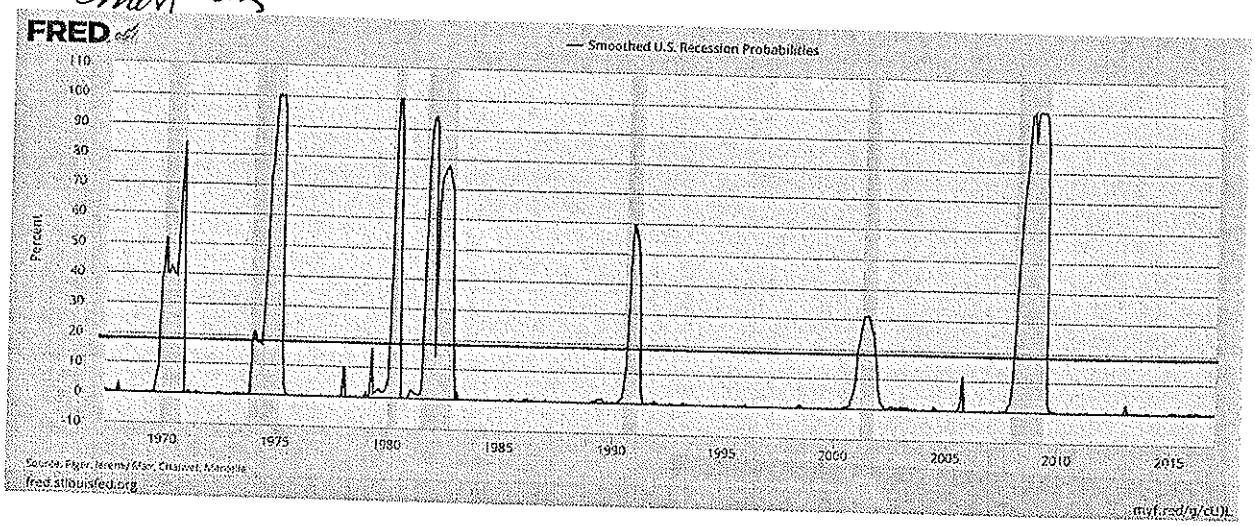
Table III

Inverted Yield Curve (10-Yr minus 1-Yr) and Recessions (1956-Present)

Recession Start	Recession End	Inverted Curve Before Recession?	First Yield Curve Inversion	Lead (Months)
Aug-57	Apr-58	Yes	Dec-56	8
Apr-60	Feb-61	Yes	Sep-59	7
Dec-69	Nov-70	Yes	Dec-67	24
Nov-73	Mar-75	Yes	Mar-73	8
Jan-80	Jul-80	Yes	Sep-78	16
Jul-81	Nov-82	Yes	Sep-80	10
Jul-90	Mar-91	Yes	Feb-89	17
Mar-01	Nov-01	Yes	Apr-00	11
Dec-07	Jun-09	Yes	Jan-06	23
Average Lead Time				**14**

Pension Partners

Chart-22



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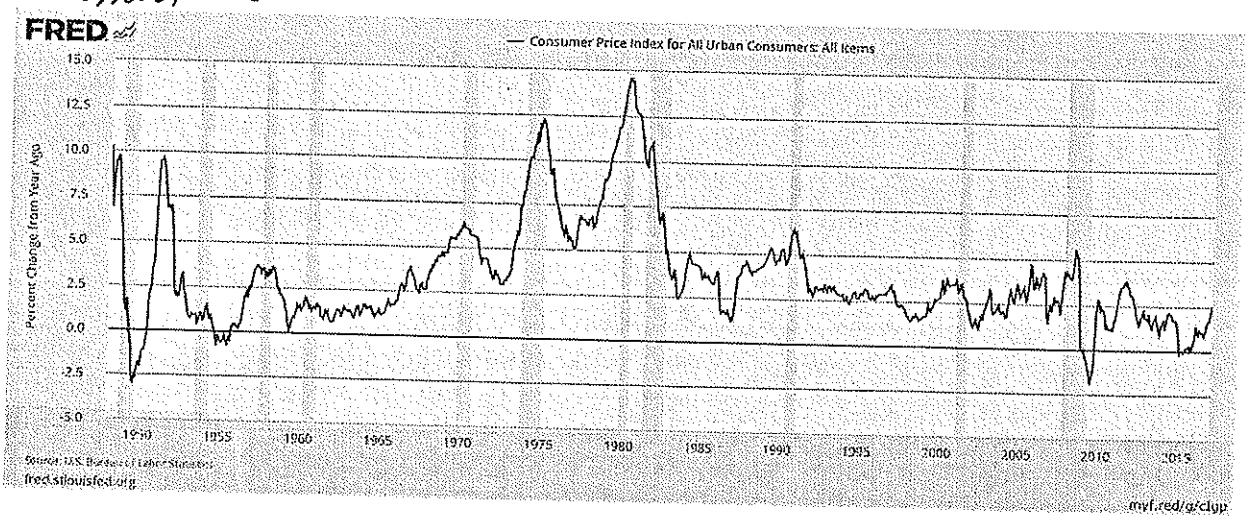
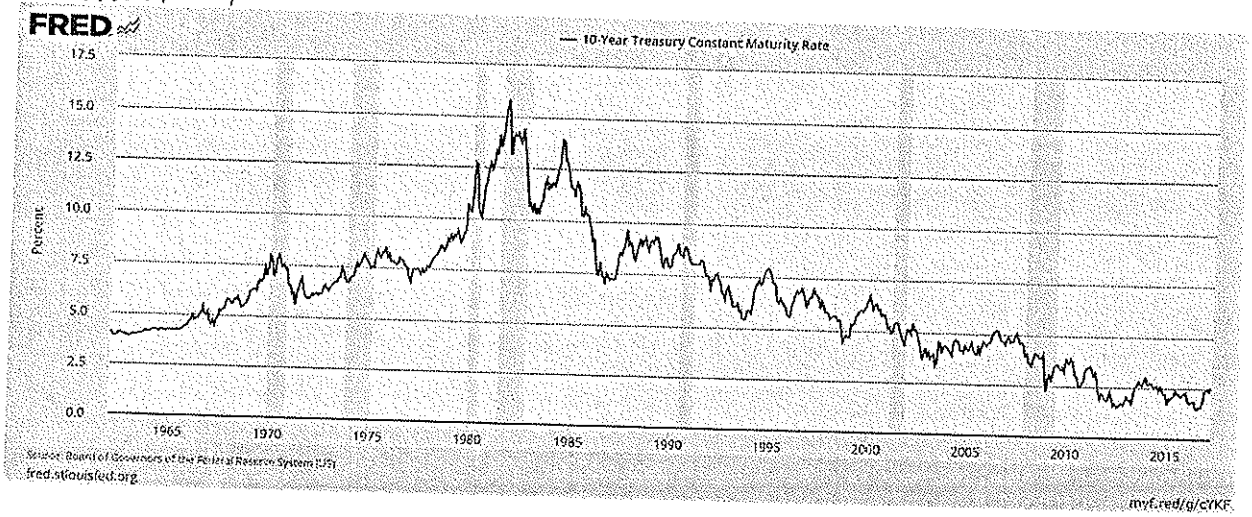
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