Socionomic Theory: an Alternative to EMH and a Foundation for Technical Analysis

Robert R. Prechter

2014 IFTA Conference
London, England
October 11, 2014

EMH is elegant and internally consistent.

It is not *externally* consistent.

Essence of EMH:

1) External cause
2) Rational reaction

Do interest rates move the stock market?

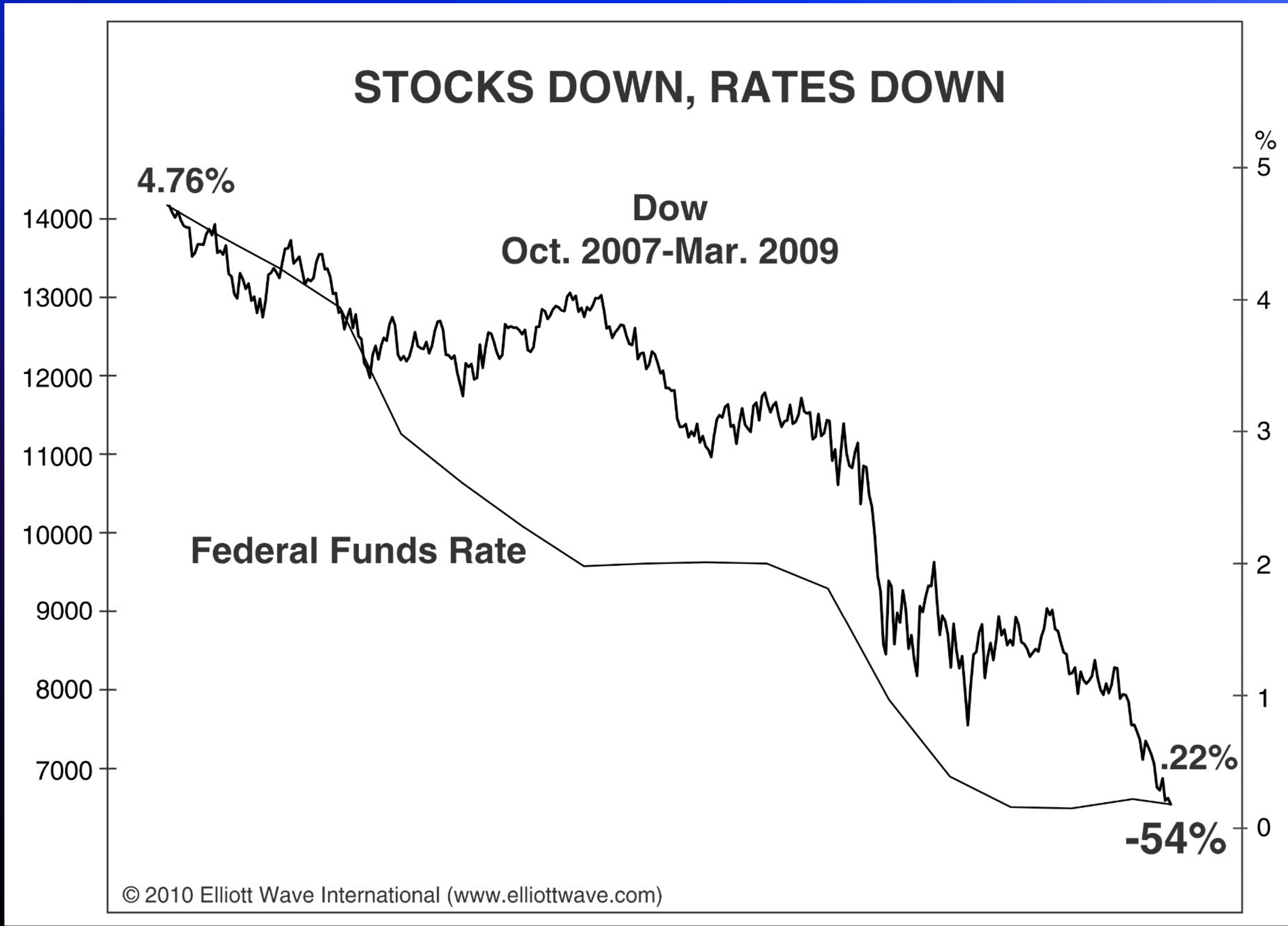
STOCKS DOWN, RATES DOWN
Dow
Oct. 2007-Mar. 2009
Federal Funds Rate
4.76%
.22%
-54%
%
14000
13000
12000
11000
10000
9000
8000
7000
5
4
3
2
1
0
© 2010 Elliott Wave International (www.elliottwave.com)

Figure 4

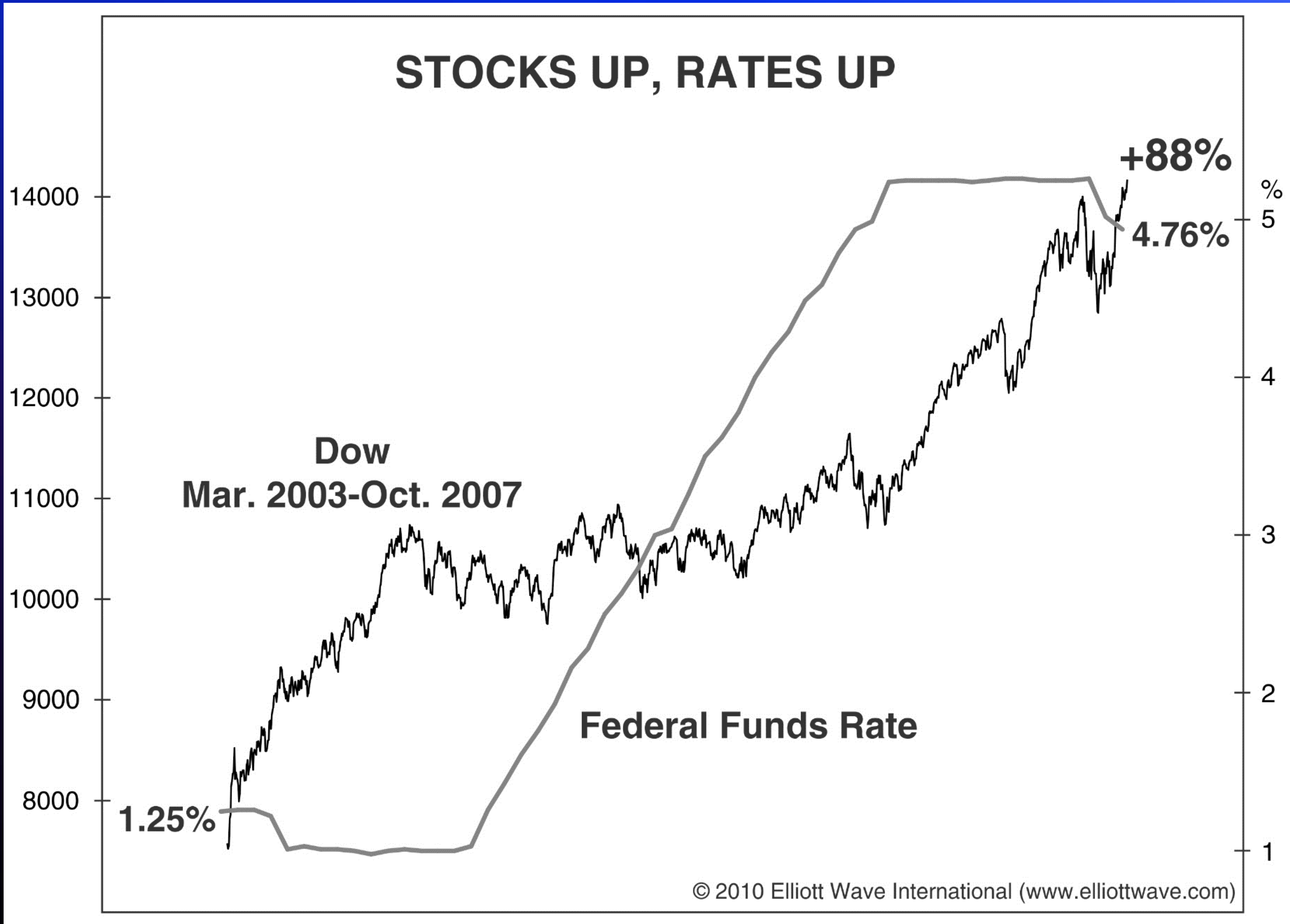
STOCKS UP, RATES UP
+88%
%
14000
13000
12000
11000
10000
9000
8000
5
4
3
2
1
4.76%
Dow
Mar. 2003-Oct. 2007
Federal Funds Rate
1.25%
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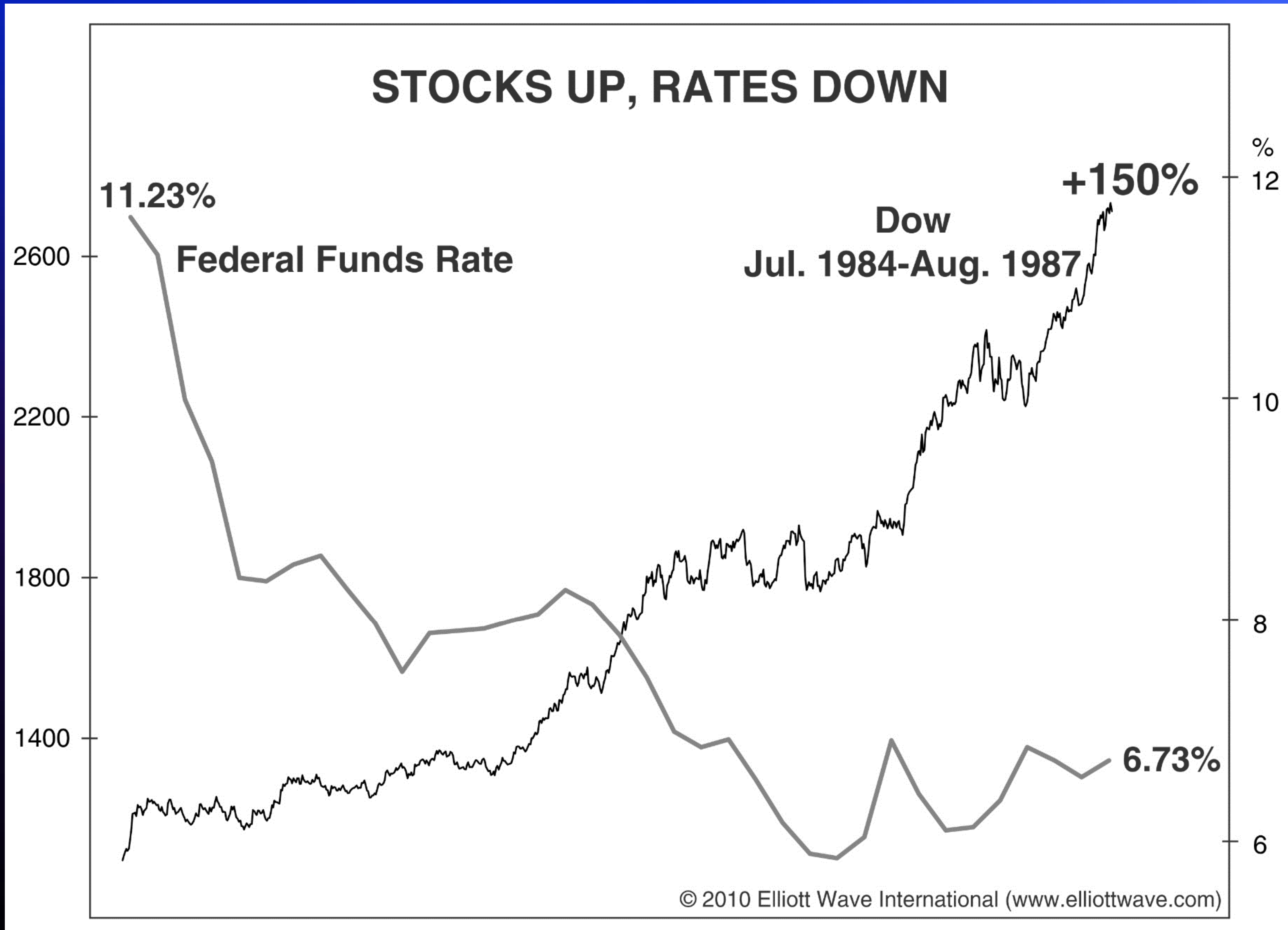
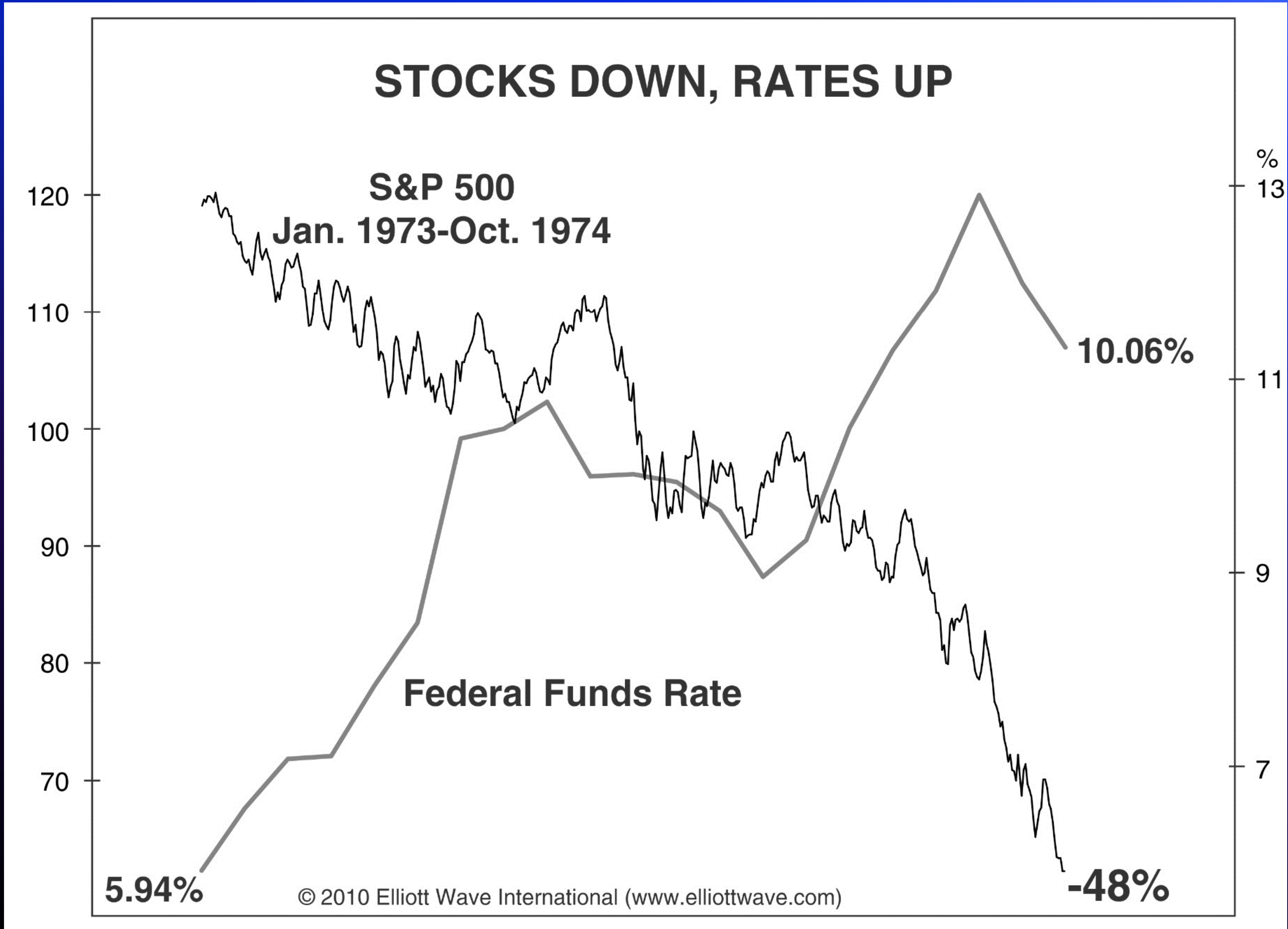
Figure 5



 www.socionomics.net **Figure 6**



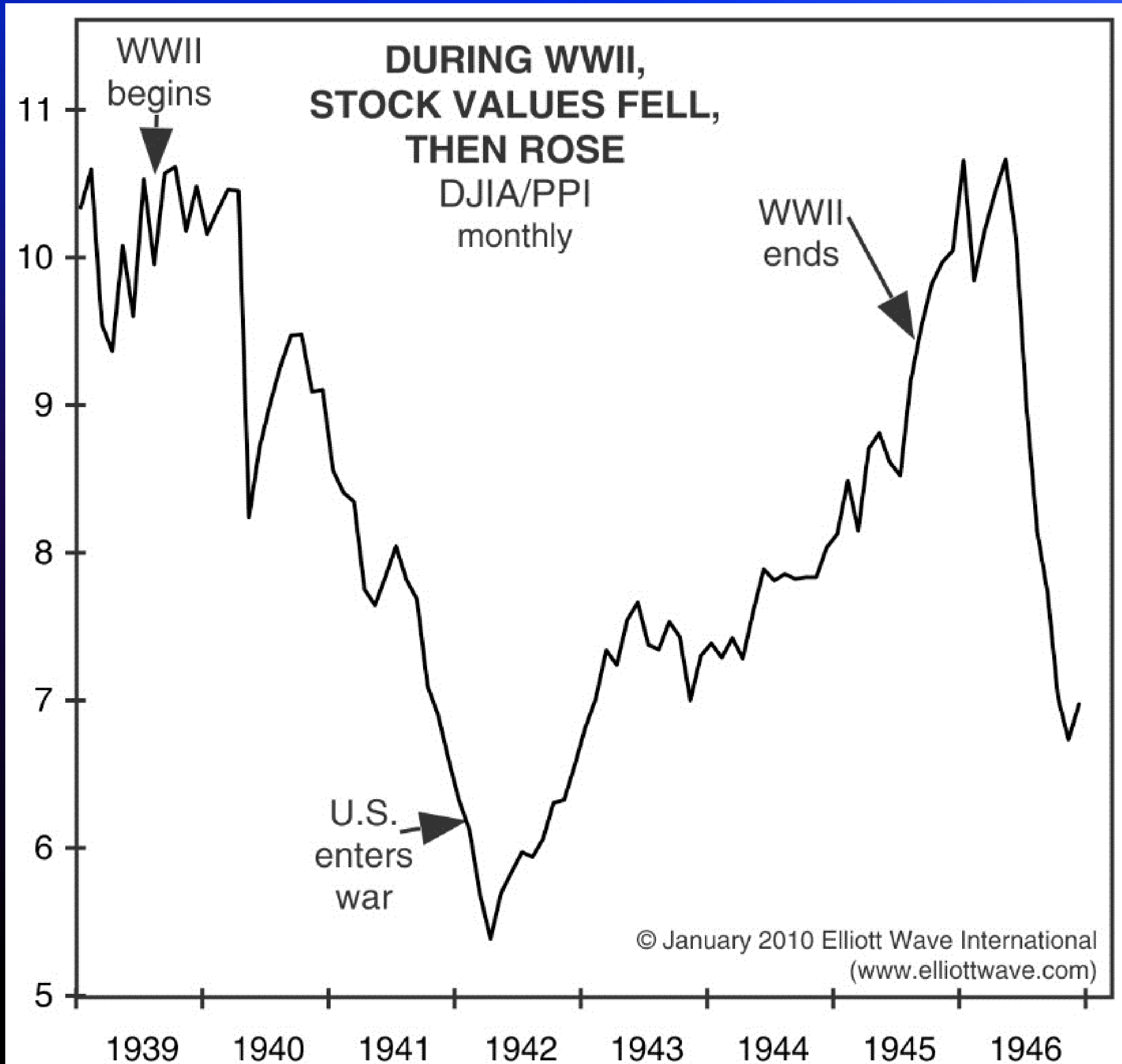
STOCKS DOWN, RATES UP
S&P 500
Jan. 1973-Oct. 1974
Federal Funds Rate
120
110
100
90
80
70
%
13
11
9
7
10.06%
5.94%
-48%
© 2010 Elliott Wave International (www.elliottwave.com)

Figure 7

Does war affect the stock market?


DURING WWI, STOCK VALUES ROSE, THEN FELL
Dow/PPI
monthly
8
7
6
5
4
3
WWI begins
U.S. enters war
WWI ends
1914
1915
1916
1917
1918
© February 2010 Elliott Wave International (www.elliottwave.com)
PPI data courtesy of Federal Reserve

Figure 9



 www.socionomics.net **Figure 10**

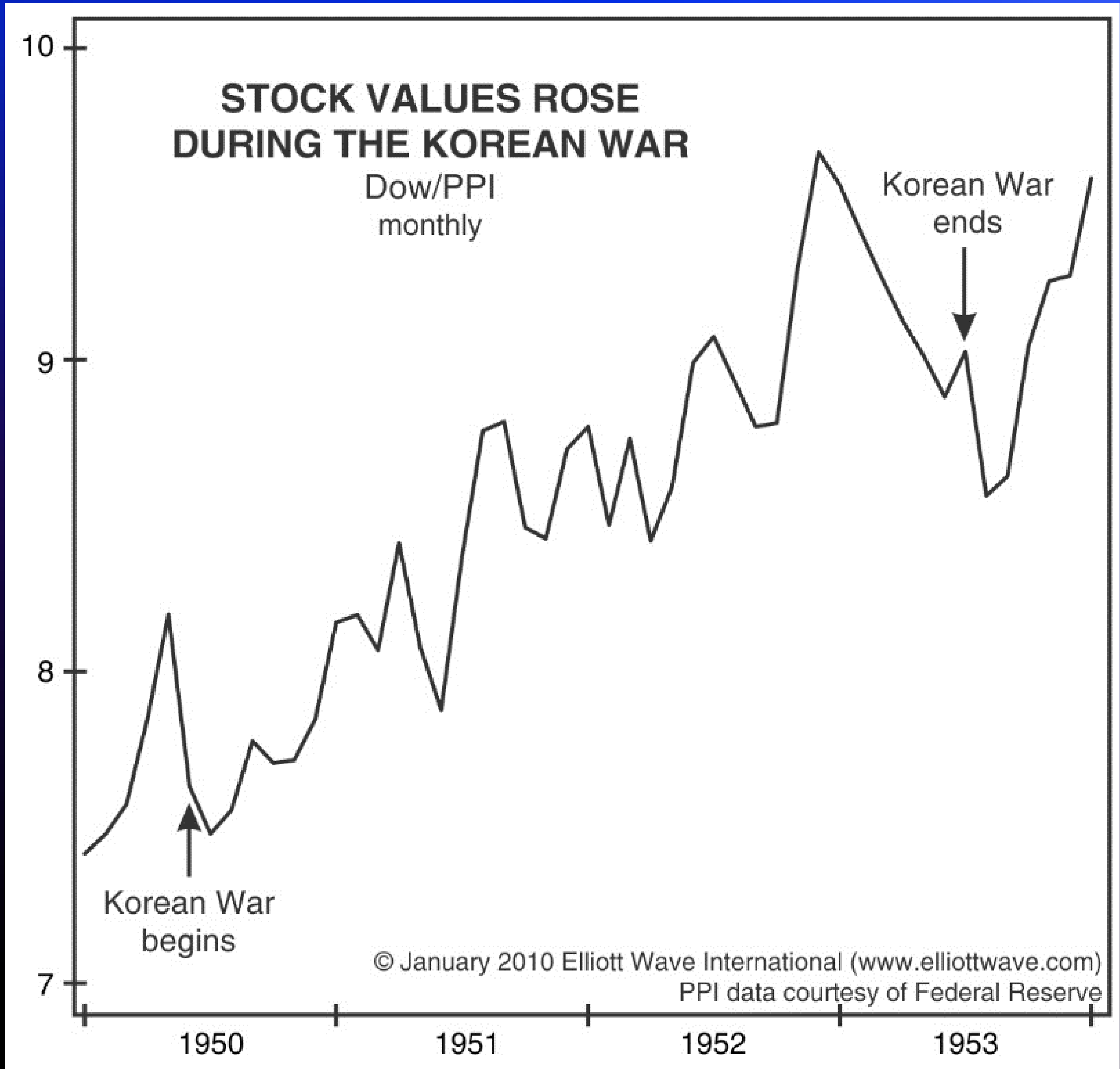

STOCK VALUES ROSE
DURING THE KOREAN WAR
Dow/PPI
monthly
Korean War
ends
Korean War
begins
10
9
8
7
1950
1951
1952
1953
© January 2010 Elliott Wave International (www.elliottwave.com)
PPI data courtesy of Federal Reserve

Figure 11

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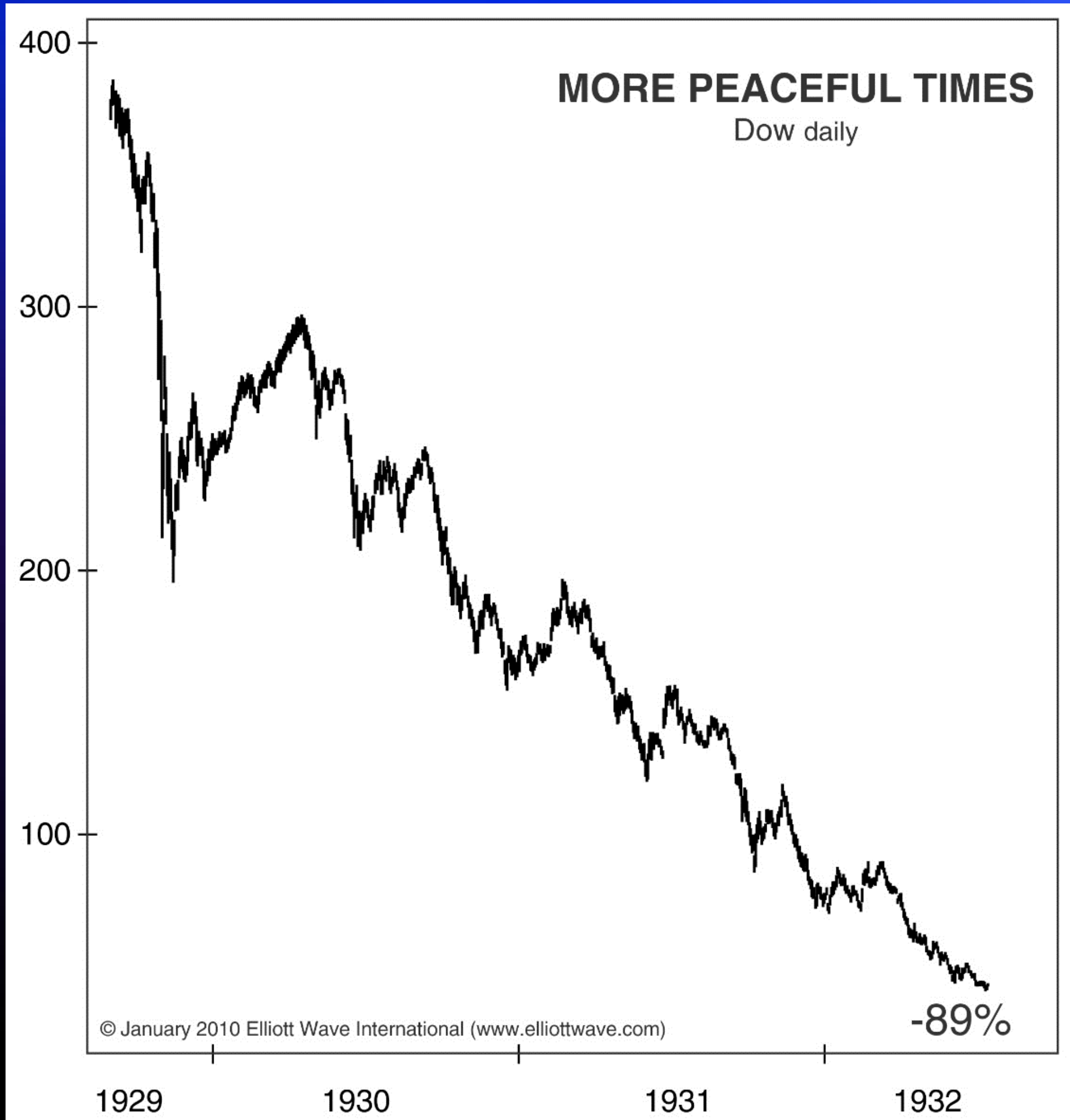
Figure 12

What about peaceful times?

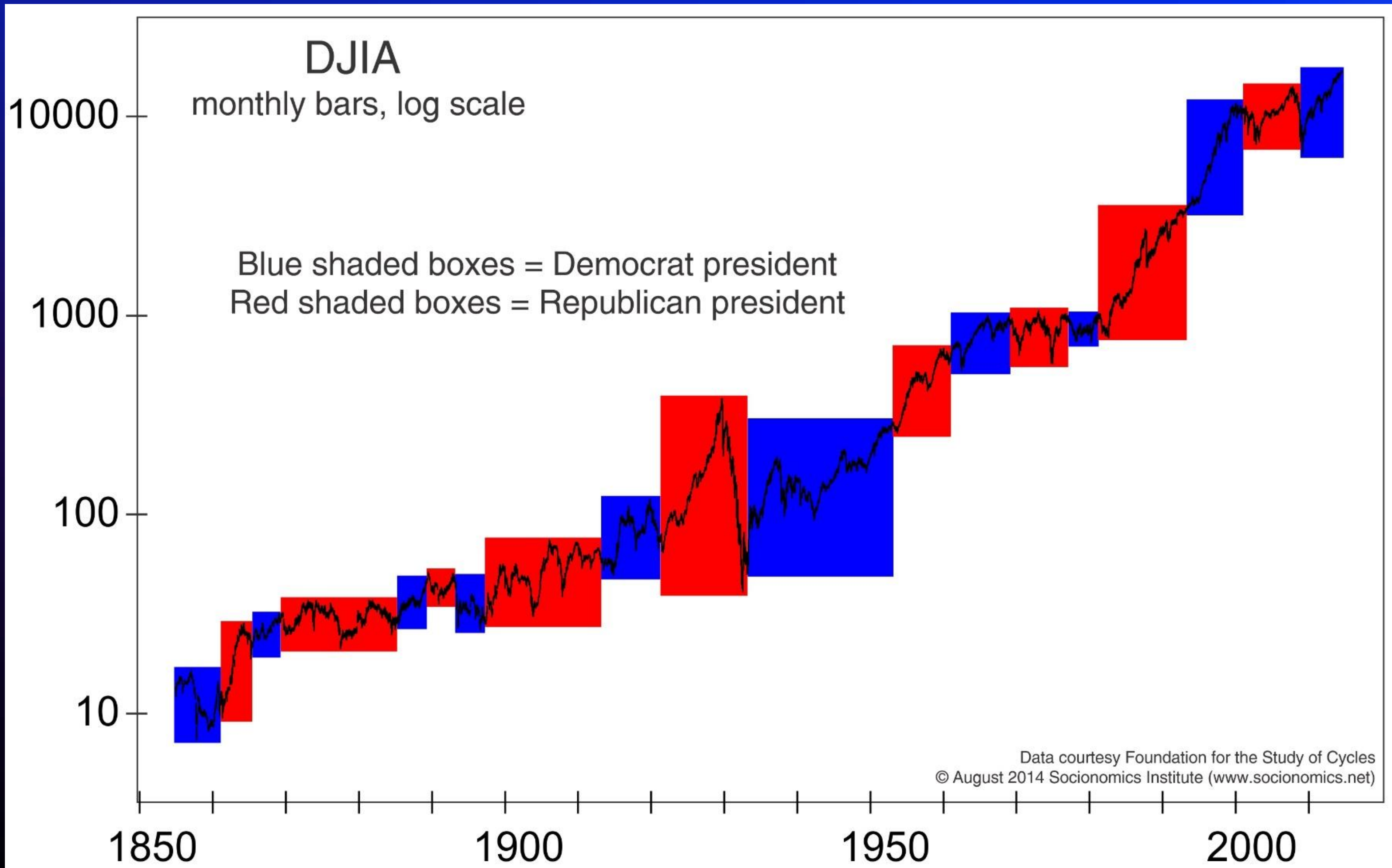

PEACEFUL TIMES
Dow daily
+500%
400
300
200
100
1921
1923
1925
1927
1929
© January 2010 Elliott Wave International (www.elliottwave.com)



 www.socionomics.net **Figure 15**

Do political parties affect the stock market?

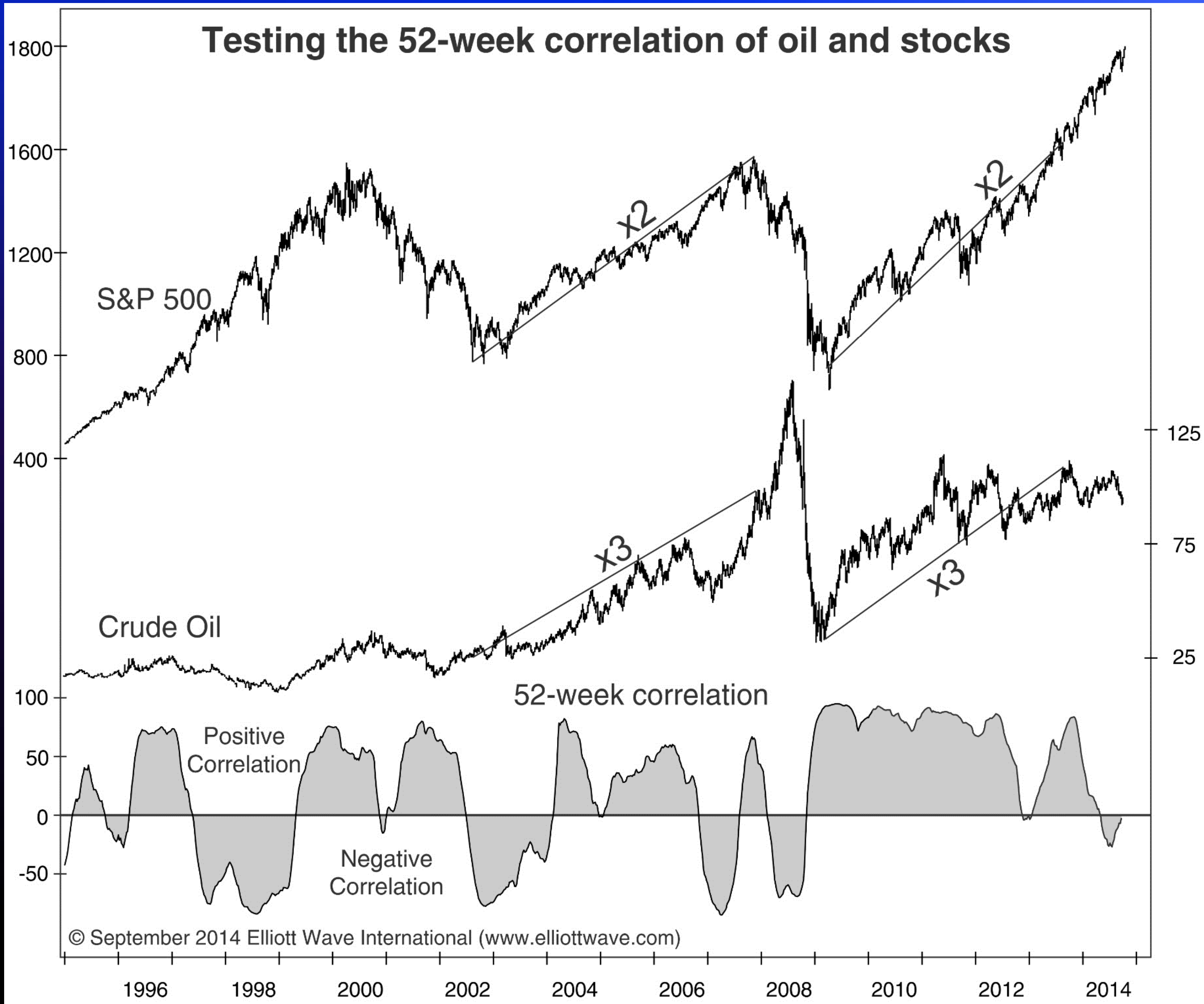
Since 1857, the stock market's average annual gain has been approximately equal under Democrat and Republican presidents



Average annual return under **Democrat** presidents: **7.2%**
Average annual return under **Republican** presidents: **5.9%**
With 1929-32 omitted, Republican average is 7.7%

Figure 17

What about "oil shocks"?



www.socionomics.net
Figure 19

Energy experts say gasoline could hit $8/gallon if Iran closes strait

USA Today

March 23, 2012

Gas prices could double if Iran acts to close the Strait of Hormuz to oil-tanker traffic near the beginning of next year, a leading energy-consulting firm says. **Brent crude oil prices could briefly hit $240 a barrel** in the first quarter of 2013, said [a] senior research director for Global Economics at HIS Global Insight. "If it did hit $240, you're looking at about a doubling of where gas prices are now," said [the] managing director of the global oil group at IHS CERA, the firm's energy-research arm. "And **the U.S. is at $4**." The firm's analysis assumes the strait would be closed at the start of 2013.

Oil prices plunging despite ISIS

September 25, 2014

CNNMoney

Oil prices have fallen sharply over the past few months—even though the terrorist organization ISIS has taken control of some refineries in Syria and Iraq.

Prices haven't shot up since the United States and its allies have started to conduct airstrikes against ISIS oil targets in Syria either.

It may seem strange that prices haven't skyrocketed.

Investors have grown fatigued by worrying about a geopolitical-induced shock that never seems to come to pass.

Oil near its low for year despite turmoil

September 24, 2014

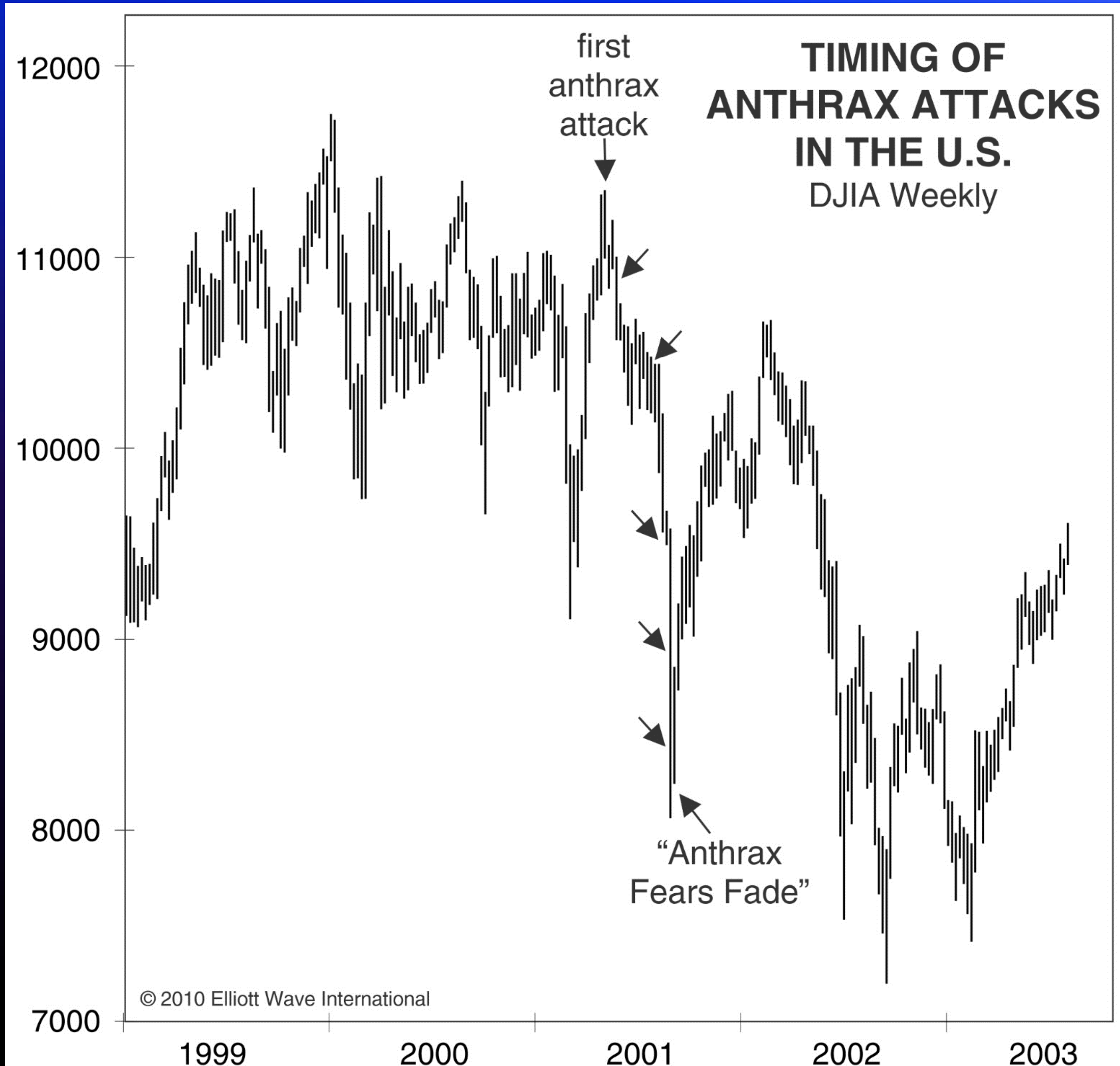
AP

The oil market has lost its jitters.

Some regions around the world are seeing the type of unrest that in the past sent oil prices soaring. Yet oil is down about $15 since mid-summer and near its low for the year, even with escalating violence in Iraq, OPEC's second largest exporter, and multiple rounds of sanctions by Western nations against Russia, the biggest exporter outside of OPEC.

Figure 21

What about terrorist attacks?



 www.socionomics.net Figure 23

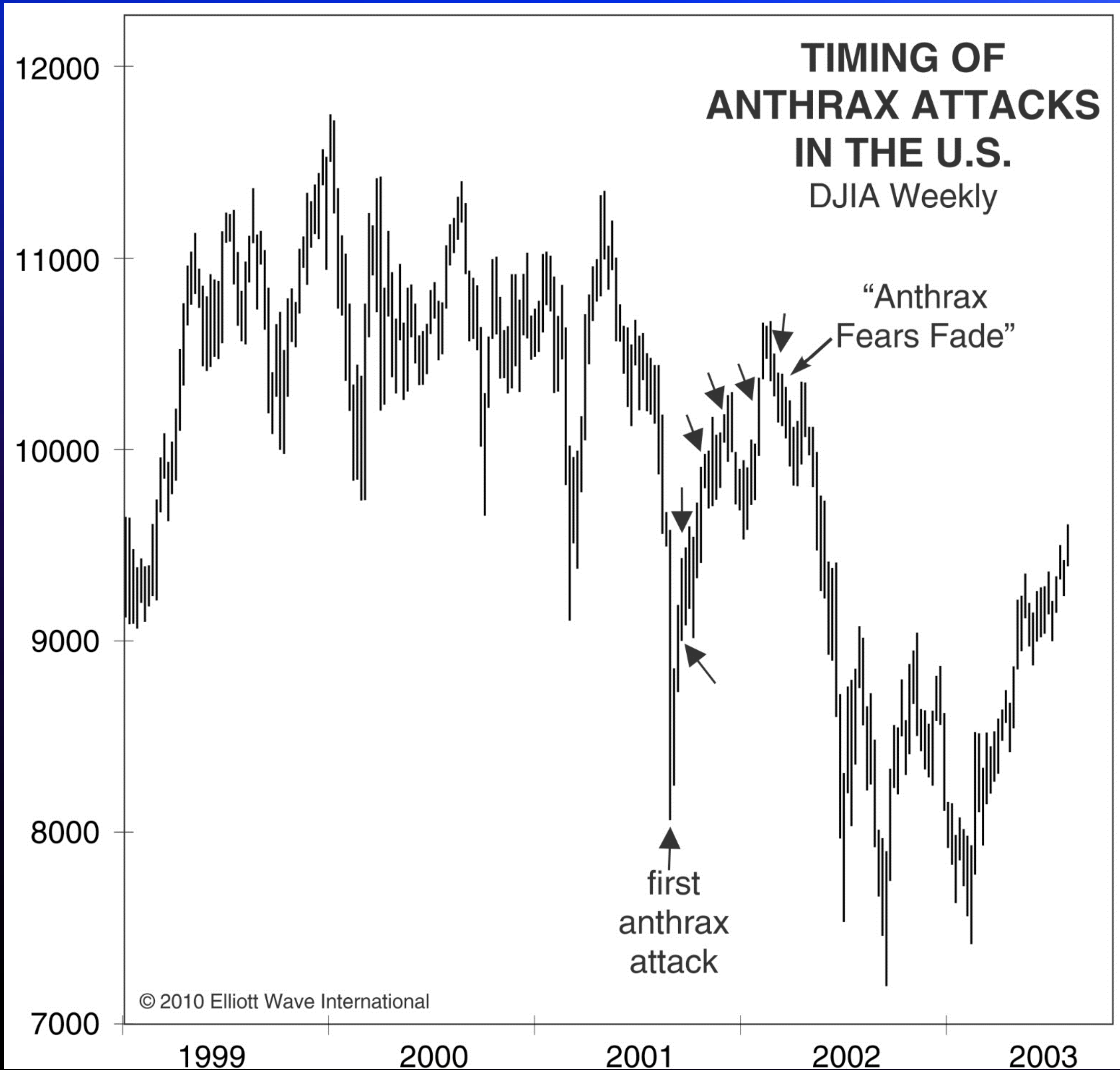


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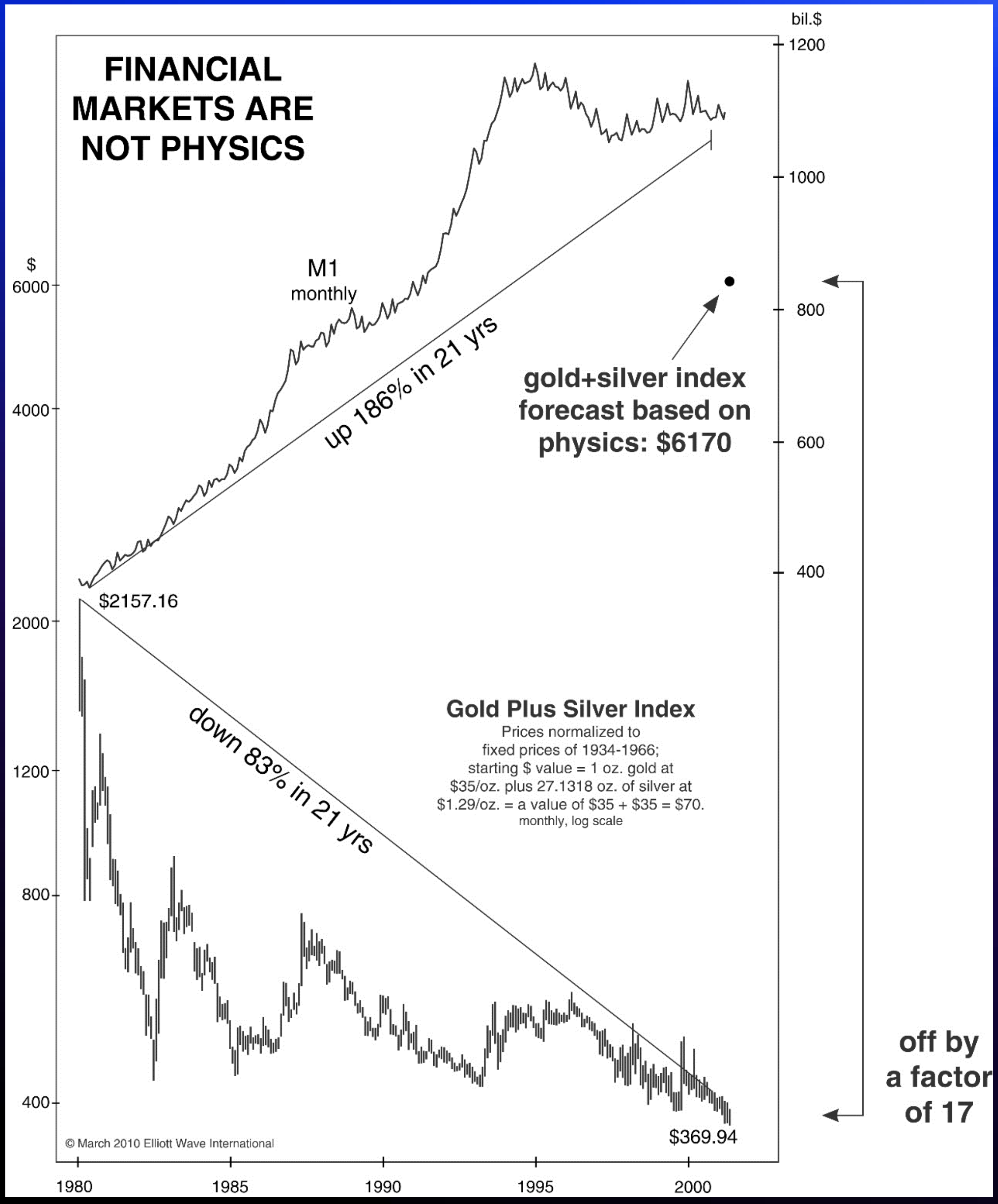
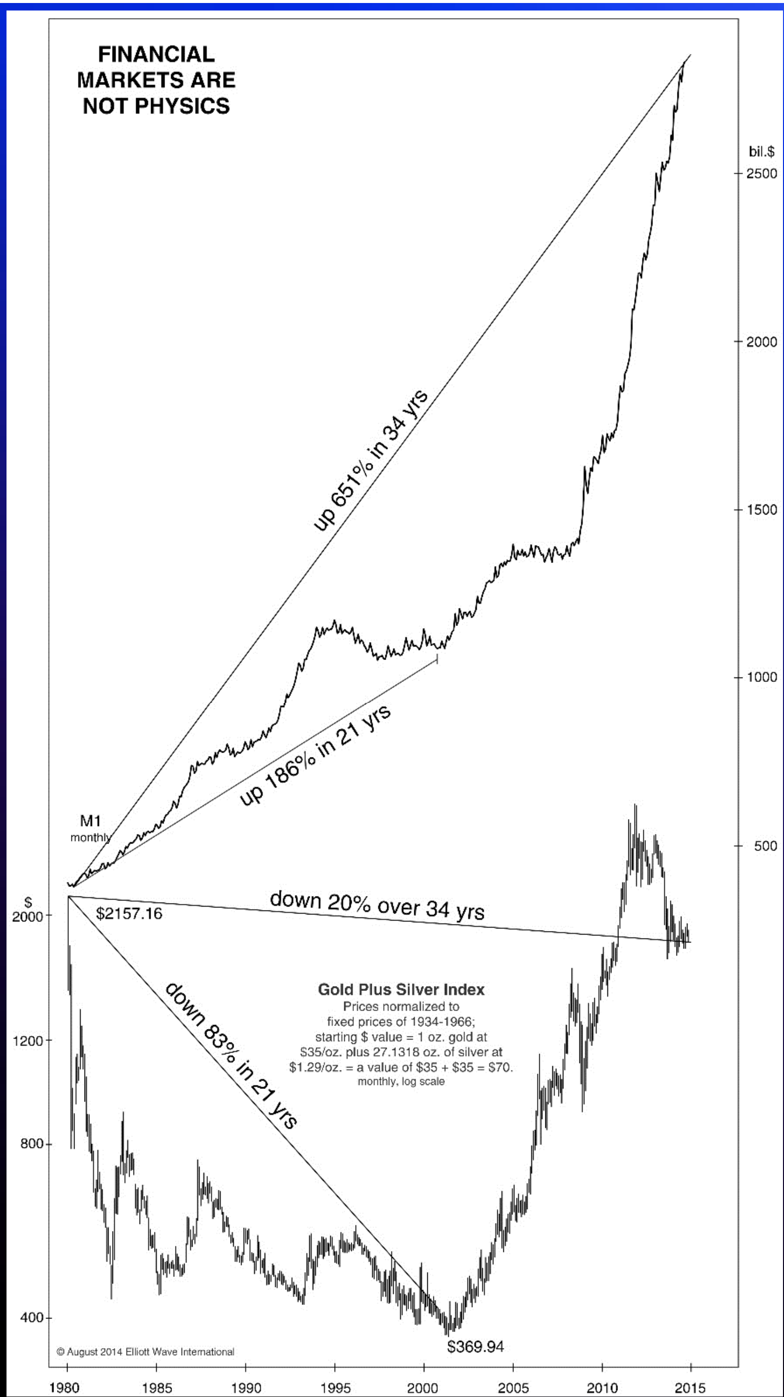
Figure 24

Does inflation make gold go up?



 www.socionomics.net **Figure 26**



 www.socionomics.net

Figure 27

Does QE make gold go up?

 www.socionomics.net **Figure 29**

Our headline published in 12/30/12:

"BIGGEST INFLATIONARY FED COMMITMENT IN HISTORY PROVIDES ANOTHER SELLING OPPORTUNITY IN METALS"

Figure 30


Gold
daily bars
2000
1500
1000
500
QE3 begins
QE4 begins
© October 2014 Elliott Wave International (www.elliottwave.com)
2001
2003
2005
2007
2009
2011
2013
2014

Figure 31

Conclusion:
Exogenous factors do not regulate financial markets.

Data from the real world are inconsistent with EMH’s causal claim.

Socionomics

Standard View

Social actions motivate social mood

Socionomics

Social mood motivates social actions

Figure 34

Social mood is an unconsciously shared motivational impulse arising from social interaction independently from events.

  Figure 35

The Standard View of Causality (based on mechanics):

Social events determine the character of social mood.

Examples

"A rising stock market makes people increasingly optimistic."
"Recession makes business people cautious."
"War makes people fearful and angry."
"Scandals make people outraged."
"The choice of leaders determines the path of the stock market."
"Upbeat entertainment makes people happy."

The Socionomic Hypothesis (based on socionomics):

Social mood determines the character of social events.

Examples

"Increasingly optimistic people make the stock market rise."
"Cautious business people create recession."
"Fearful and angry people make war."
"Outraged people seek out scandals."
"The path of the stock market determines the choice of leaders."
"Happy people choose upbeat entertainment."

Figure 36

The stock market is a meter of social mood.

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Figure 38

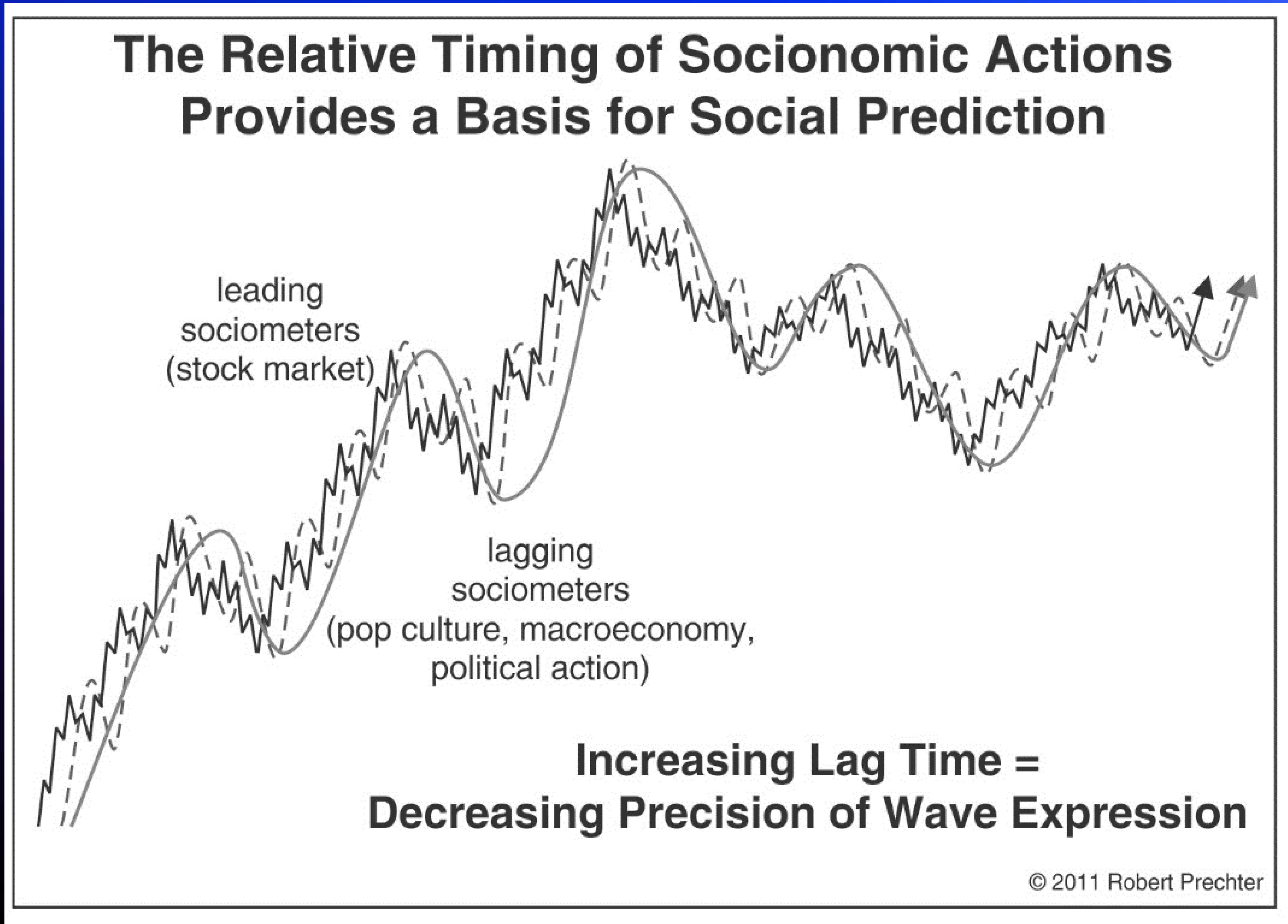

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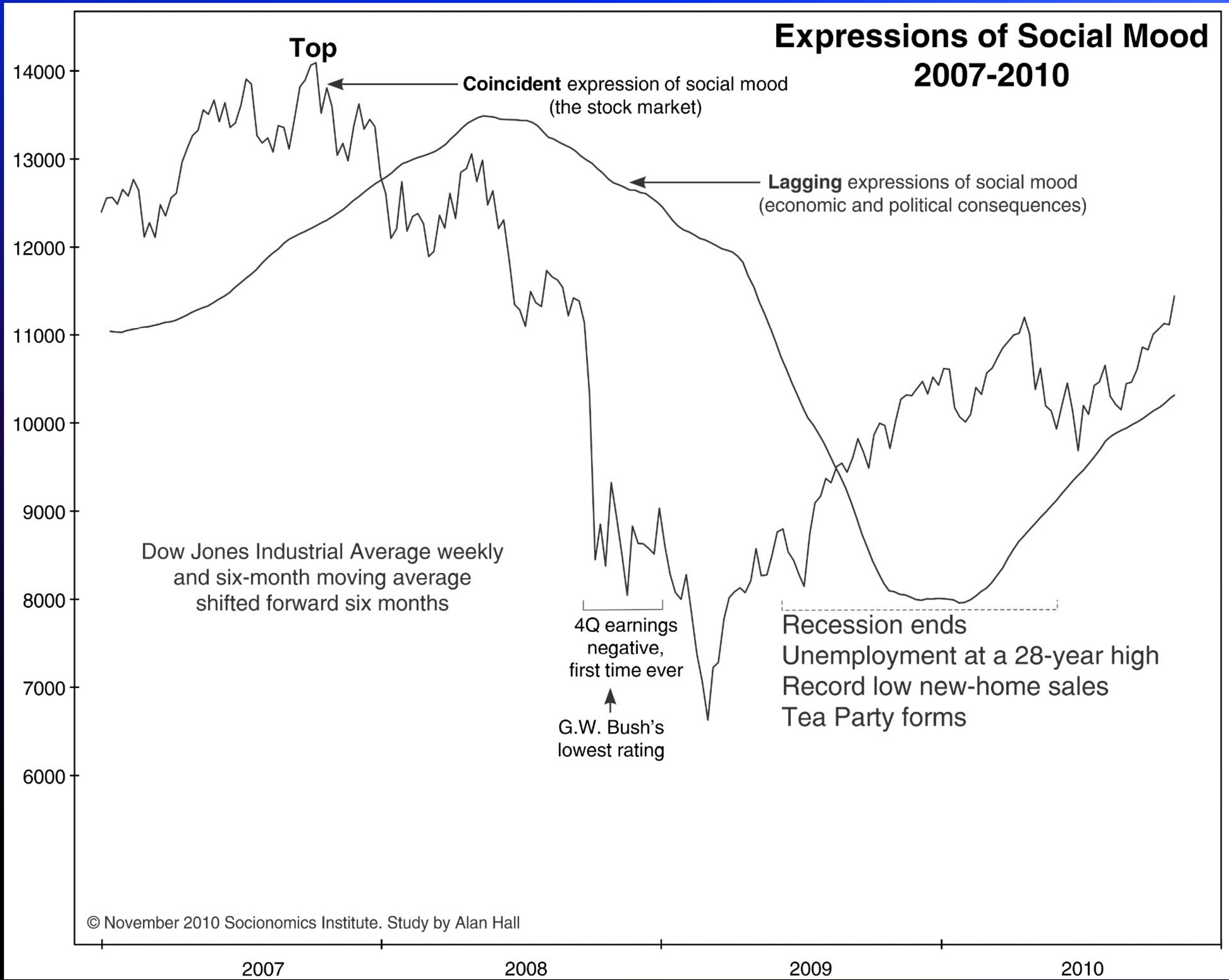
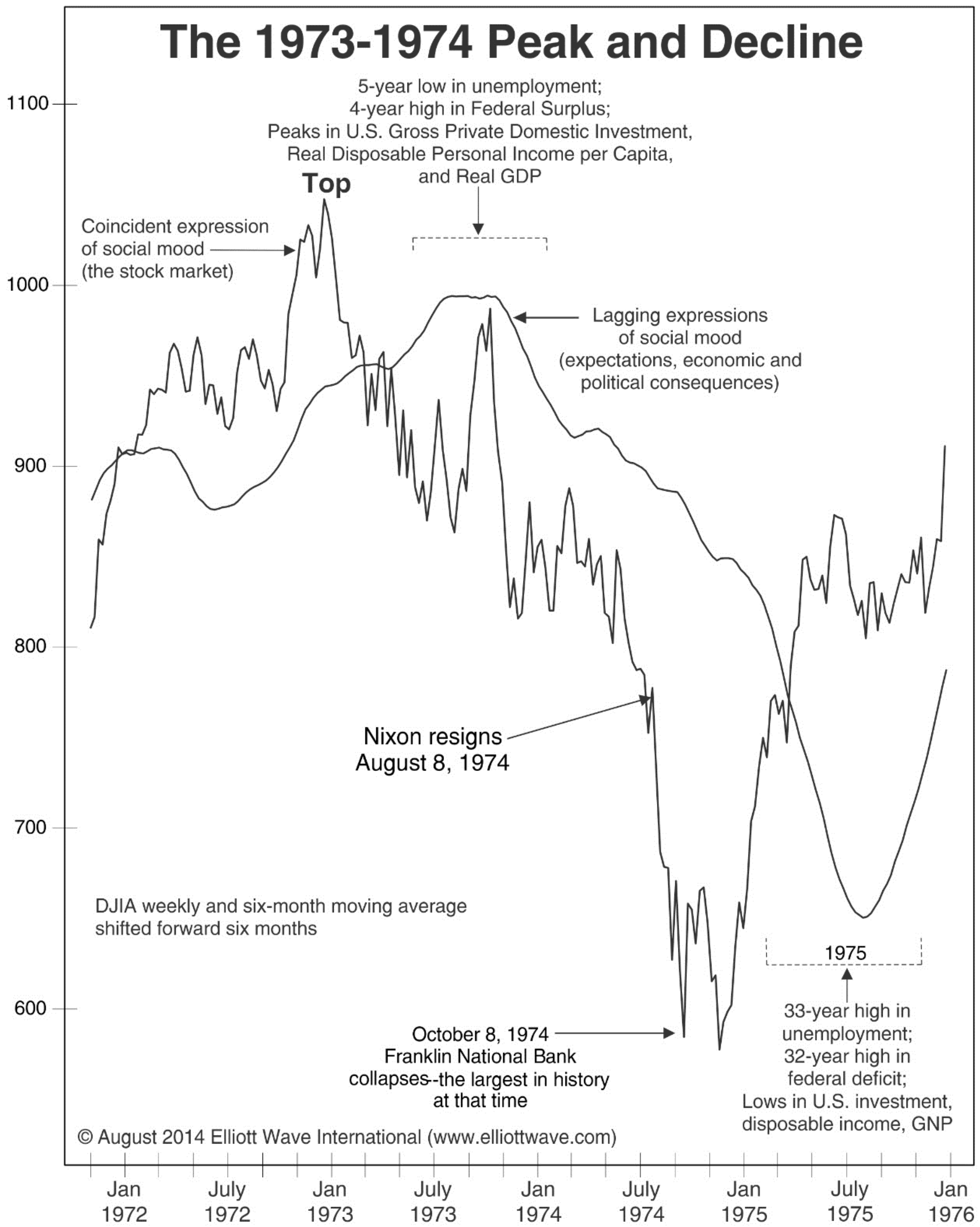
Figure 39

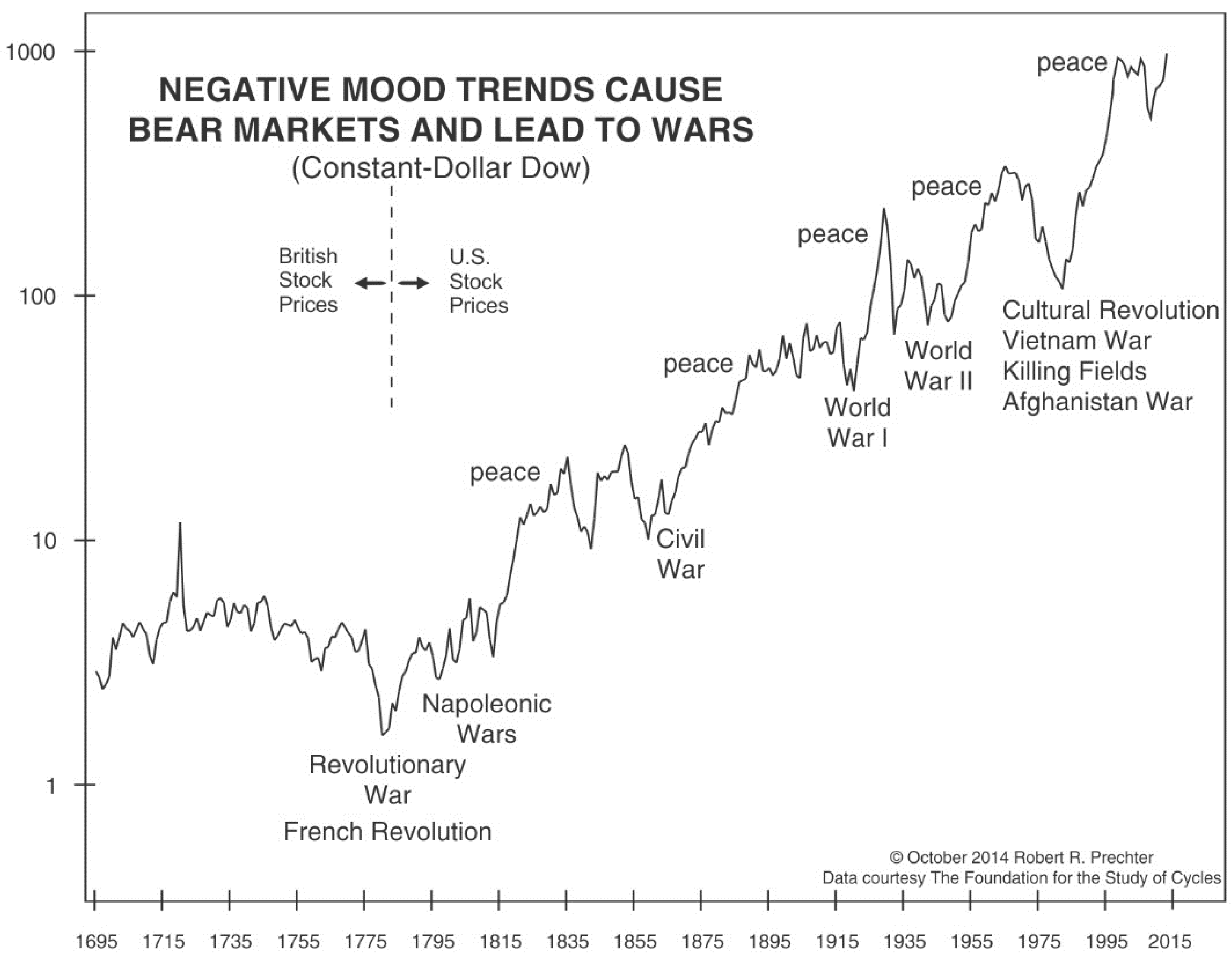


Expressions of Social Mood
2007-2010
Top
Coincident expression of social mood
(the stock market)
Lagging expressions of social mood
(economic and political consequences)
14000
13000
12000
11000
10000
9000
8000
7000
6000
Dow Jones Industrial Average weekly
and six-month moving average
shifted forward six months
4Q earnings
negative,
first time ever
G.W. Bush's
lowest rating
Recession ends
Unemployment at a 28-year high
Record low new-home sales
Tea Party forms
© November 2010 Socionomics Institute. Study by Alan Hall
2007
2008
2009
2010



The 1973-1974 Peak and Decline
5-year low in unemployment;
4-year high in Federal Surplus;
Peaks in U.S. Gross Private Domestic Investment,
Real Disposable Personal Income per Capita,
and Real GDP
Top
Coincident expression
of social mood
(the stock market)
Lagging expressions
of social mood
(expectations, economic and
political consequences)
Nixon resigns
August 8, 1974
DJIA weekly and six-month moving average
shifted forward six months
1975
33-year high in
unemployment;
32-year high in
federal deficit;
Lows in U.S. investment,
disposable income, GNP
October 8, 1974
Franklin National Bank
collapses--the largest in history
at that time
© August 2014 Elliott Wave International (www.elliottwave.com)
1100
1000
900
800
700
600
Jan 1972
July 1972
Jan 1973
July 1973
Jan 1974
July 1974
Jan 1975
July 1975
Jan 1976

Figure 41



 www.socionomics.net **Figure 42**

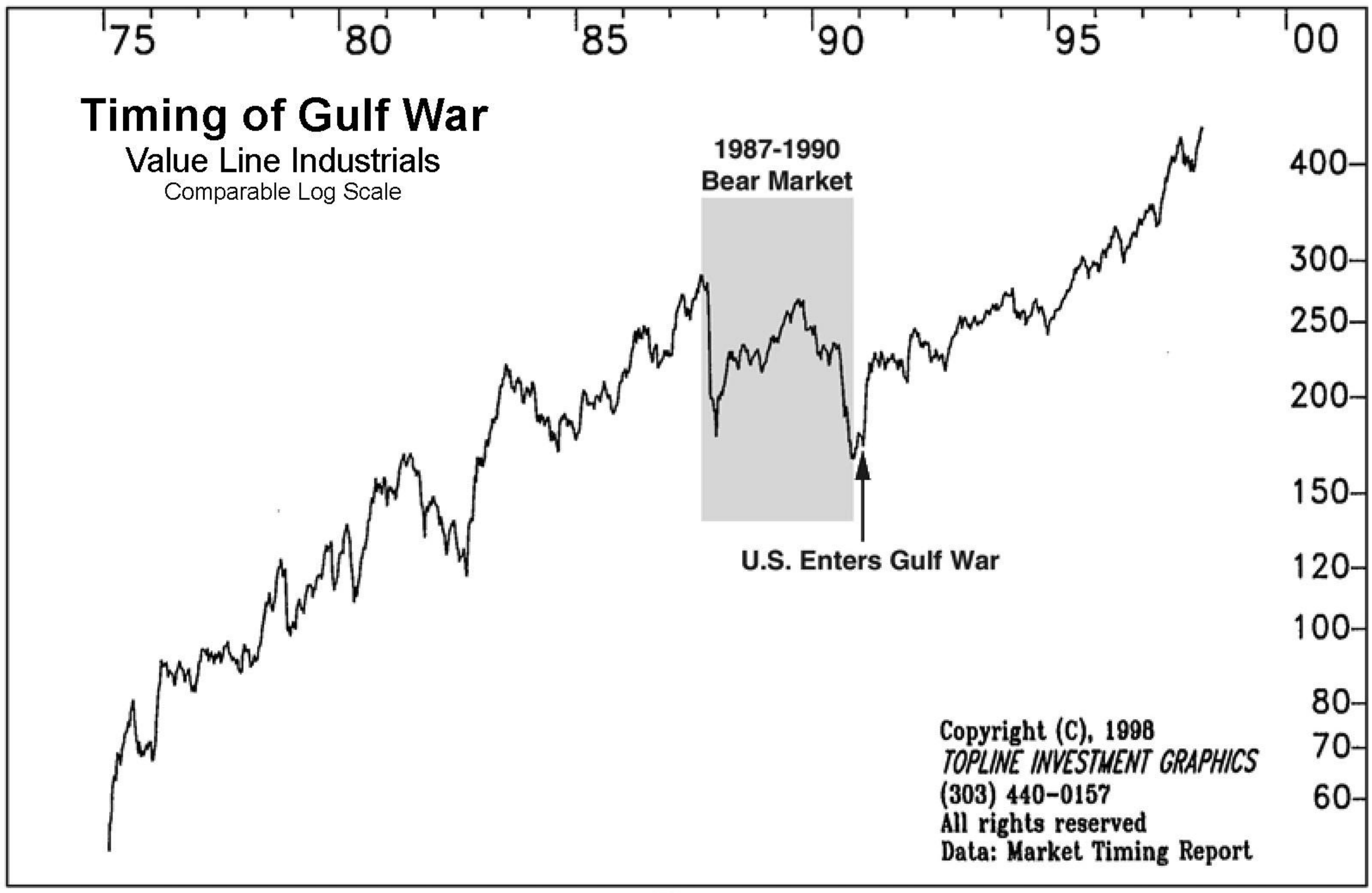


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Figure 43

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Figure 44

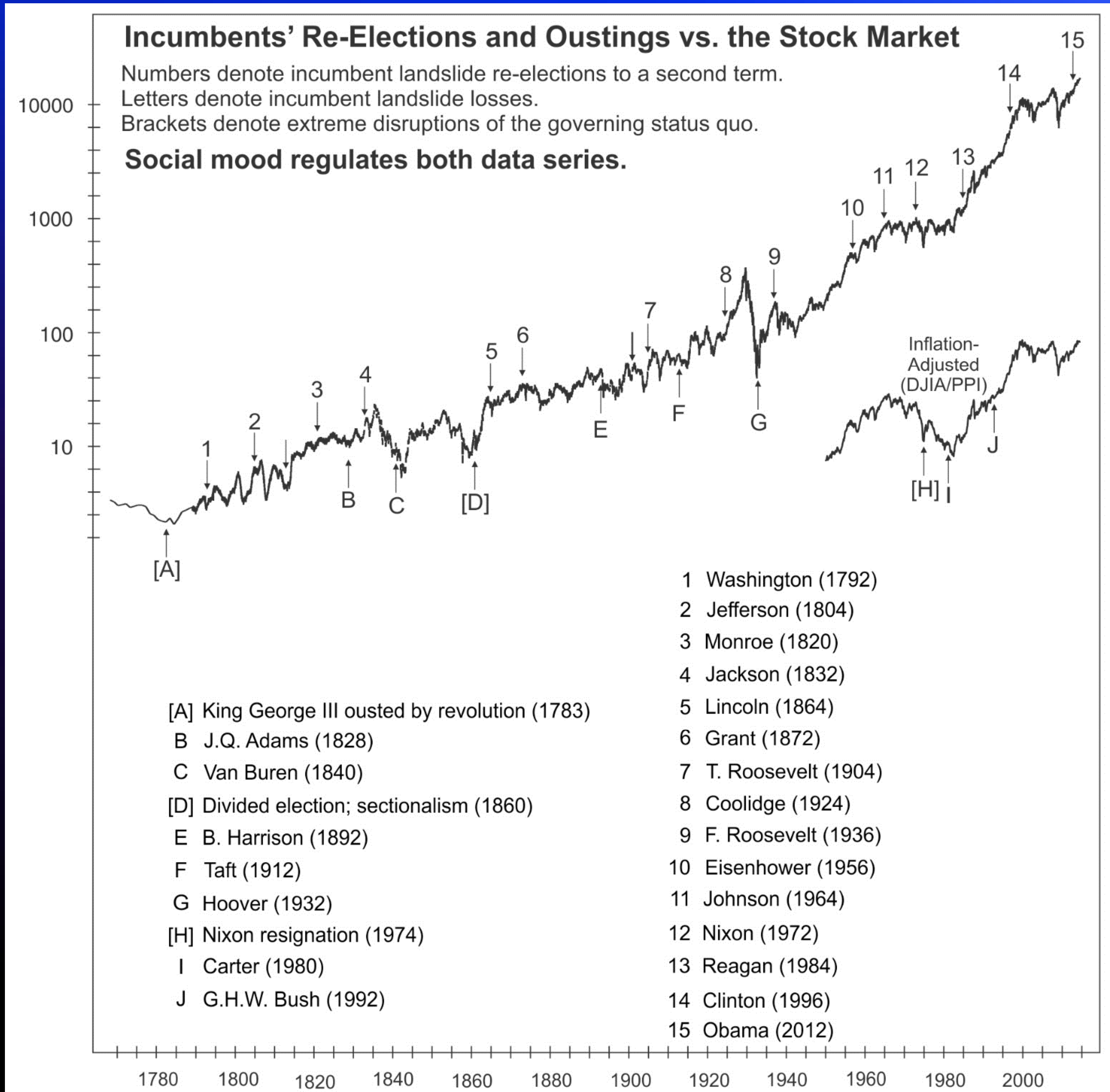

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Figure 45

“Social Mood, Stock Market Performance and U.S. Presidential Elections: A Socionomic Perspective on Voting Results”

Robert R. Prechter, Jr.
Deepak Goel
Wayne D. Parker
Matthew Lampert

SAGE Open, 2012

posted at ssrn.com

Table 2: Top-Grossing Film Released Each Calendar Year

Year	Title	$mil.
1920	*Over the Hill to the Poorhouse*	3.0
1921	***The Four Horsemen of the Apocalypse***	9.2
1922	Robin Hood*	2.0
1923	The Covered Wagon	3.8
1924	The Sea Hawk*	0.0
1925	The Big Parade	11.0
1926	Alamo of the South Seas	3.0
1927	The Jazz Singer	3.0
1928	The Singing Fool	10.0
1929	The Broadway Melody	2.8
1930	Tom Sawyer	11.0
1931	***Frankenstein***	12.0
1932	Shanghai Express*	3.7
1933	***King Kong***	10.0
1934	It Happened One Night	2.5
1935	Top Hat	1.8
1936	How to Become a Detective	6.0
1937	Snow White and the Seven Dwarfs	184.9
1938	You Can't Take it With You	4.0
1939	Gone with the Wind	198.7
1940	Pinocchio	84.3
1941	Sergeant York	16.4
1942	*Bambi*	102.8
1943	This is the Army	19.5
1944	Going My Way	16.3
1945	The Bells of St. Mary's	21.3
1946	Song of the South	65.0
1947	Forever Amber	16.0
1948	***The Snake Pit***	10.0
1949	***Samson and Delilah***	28.8
1950	Cinderella	85.0
1951	Quo Vadis?	30.0
1952	The Greatest Show on Earth	36.0
1953	Peter Pan	87.4
1954	White Christmas	30.0
1955	Lady and the Tramp	93.6
1956	The Ten Commandments	80.0
1957	The Bridge on the River Kwai	33.3
1958	South Pacific	36.8
1959	Ben-Hur	73.0
1960	Swiss Family Robinson	40.4
1961	101 Dalmatians	153.0
1962	The Longest Day	39.1
1963	Cleopatra	48.0
1964	Mary Poppins	102.3
1965	The Sound of Music	163.2
1966	The Bible	34.9
1967	The Jungle Book	141.8
1968	Funny Girl	58.5
1969	Butch Cassidy and the Sundance Kid	102.3
1970	***Love Story***	106.4
1971	*Billy Jack*	98.0
1972	***The Godfather***	135.0
1973	***The Exorcist***	204.9
1974	Blazing Saddles	119.5
1975	*Jaws*	260.0
1976	Rocky	117.2
1977	Star Wars Ep. IV: A New Hope	461.0
1978	Grease	181.8
1979	*Kramer vs. Kramer*	106.3
1980	*Star Wars Ep. V: The Empire Strikes Back*	290.3
1981	Raiders of the Lost Ark	245.0
1982	ET: The Extra-Terrestrial	435.1
1983	Star Wars Ep. VI: Return of the Jedi	309.2
1984	Ghostbusters	238.6
1985	Back to the Future	210.6
1986	Top Gun	176.8
1987	3 Men and a Baby	167.8
1988	Rain Man	172.8
1989	Batman	251.2
1990	Home Alone	285.8
1991	Beauty and the Beast	218.7
1992	Aladdin	217.4
1993	*Jurassic Park*	357.1
1994	The Lion King	422.8
1995	Toy Story	191.8
1996	Independence Day	306.2
1997	Titanic	600.8
1998	Saving Private Ryan	216.3
1999	Star Wars Ep. I: The Phantom Menace	474.4
2000	How the Grinch Stole Christmas	260.0
2001	Harry Potter and the Sorcerer's Stone	317.6
2002	Spider-Man	403.7
2003	The Lord of the Rings: The Return of the King	377.8
2004	Shrek 2	441.2
2005	Star Wars Ep. III: Revenge of the Sith	380.3
2006	Pirates of the Caribbean: Dead Man's Chest	423.3
2007	Spider-Man 3	336.5
2008	*The Dark Knight*	533.3
2009	Avatar	760.5
2010	Toy Story 3	415.0
2011	Harry Potter and the Deathly Hallows: Part II	381.0
2012	The Hunger Games	253.0

Figure 47

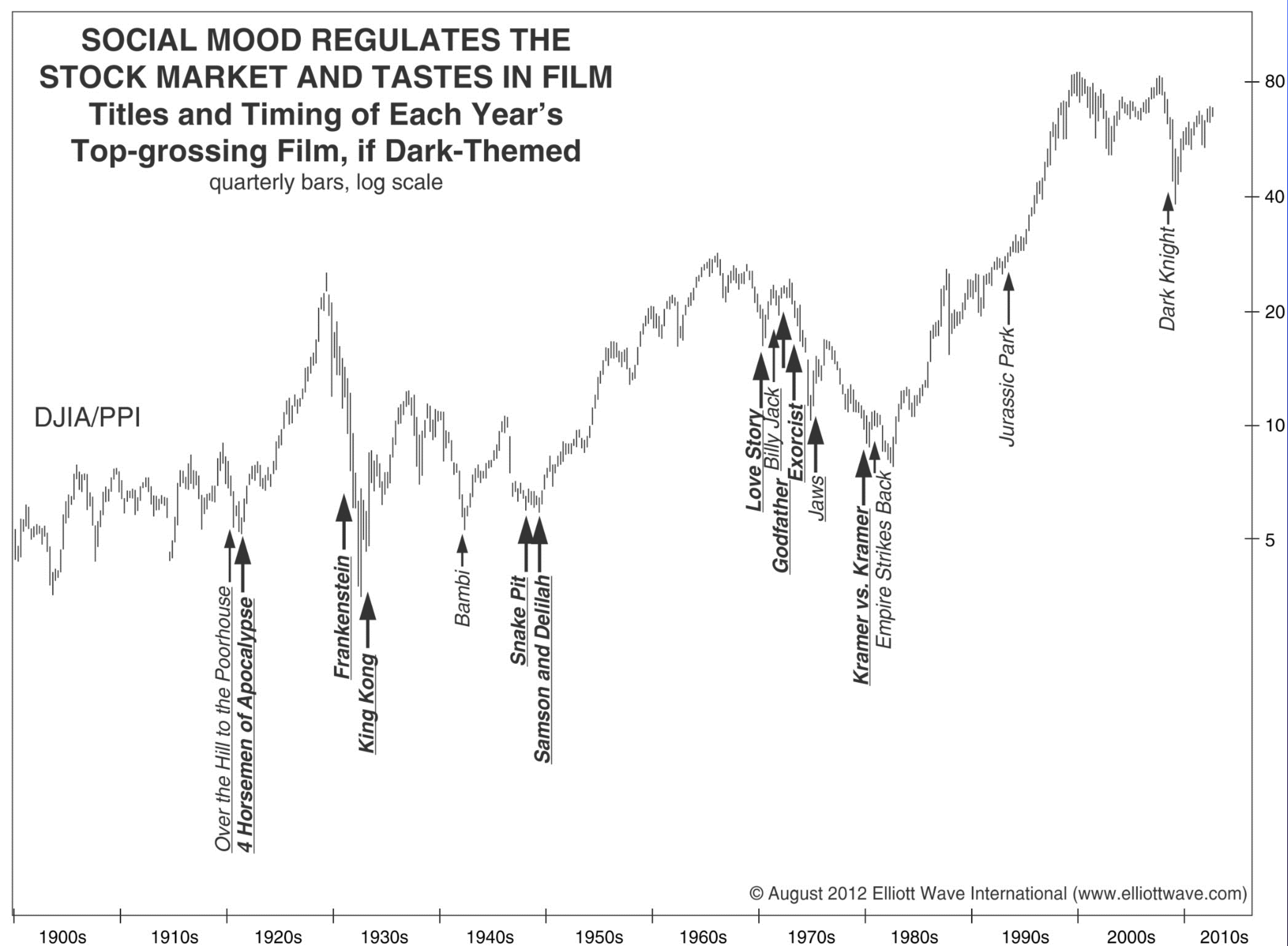

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Figure 48

In none of these cases does either variable control the other.

A hidden variable—social mood—controls both.

The character of
lagging social actions
is highly predictable.

News doesn’t predict
the stock market;
the stock market predicts
the news.

Testable, Falsifiable, Hypotheses of Socionomics

1) Preceding trends in the stock market predict election results, wars, peace and the macroeconomy better than election results, wars, peace and the macroeconomy predict ensuing trends in the stock market.

2) Social actions that take time to mobilize—such as the expansion and contraction of business and the initiation of wars—tend to lag actions that express social mood more immediately, such as buying and selling stock.

3) Claims and assumptions favoring exogenous causes of stock market trends will fail to survive testing.

4) At times when both endogenous and exogenous cause explanations of types of social action such as stock market movement, election results, wars, peace and macroeconomic trends appear plausible, the endogenous-cause explanation will almost always better fit the data.

5) Decision-making in the economic marketplace usually results in success, while decision-making in the financial marketplace usually results in failure.

6) Different parts of the brain are involved in economic vs. financial decisions.

7) Since unconscious social mood motivates social action, changes in social mood precede changes in social action.

8) The closer a social mood trend comes to termination, the more certain most forecasters become that social trends accompanying it will continue.

Figure 51

The Socionomist

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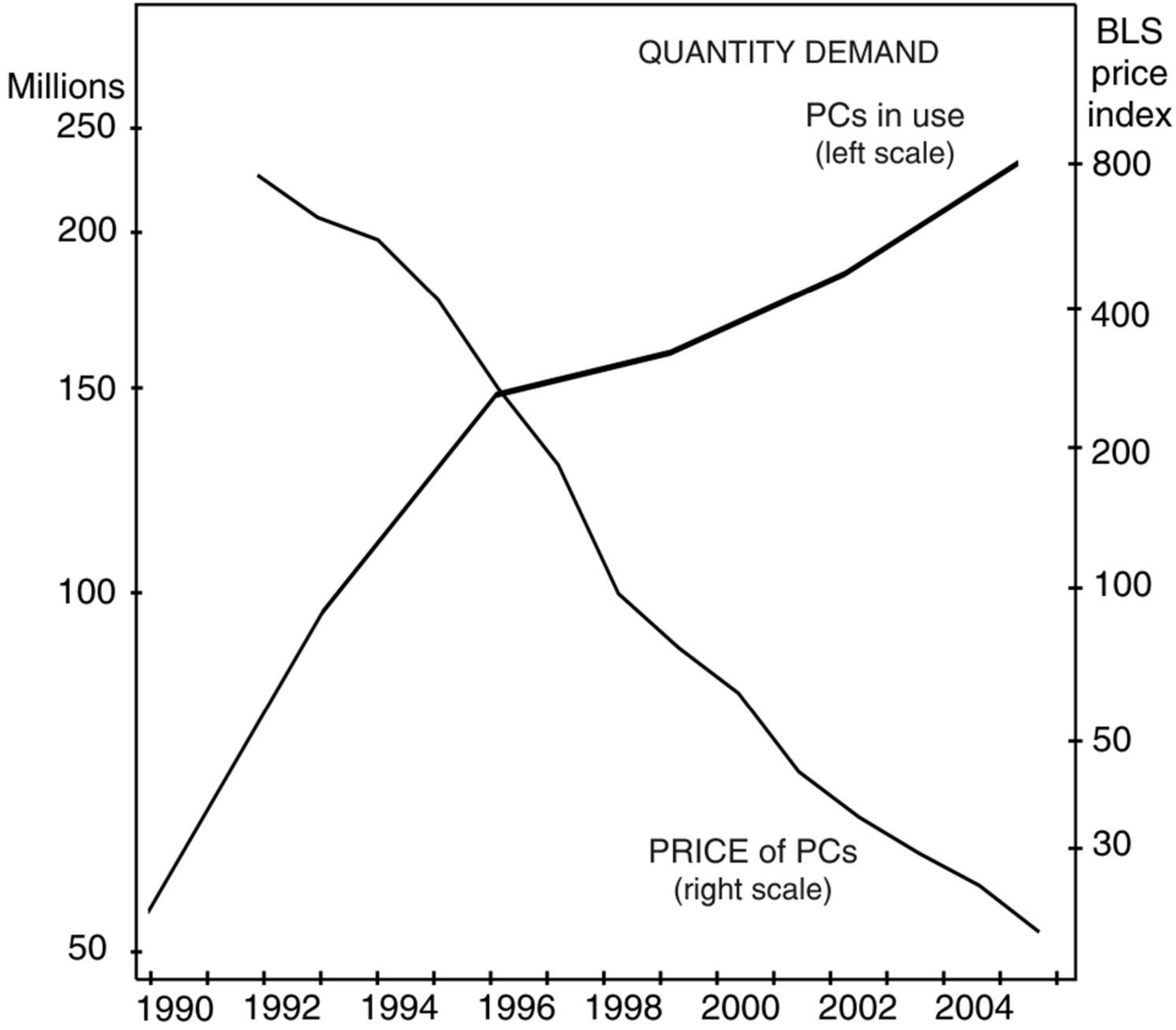
Socionomic Theory of Finance

The Price/Demand Dichotomy in Economic vs. Financial Markets

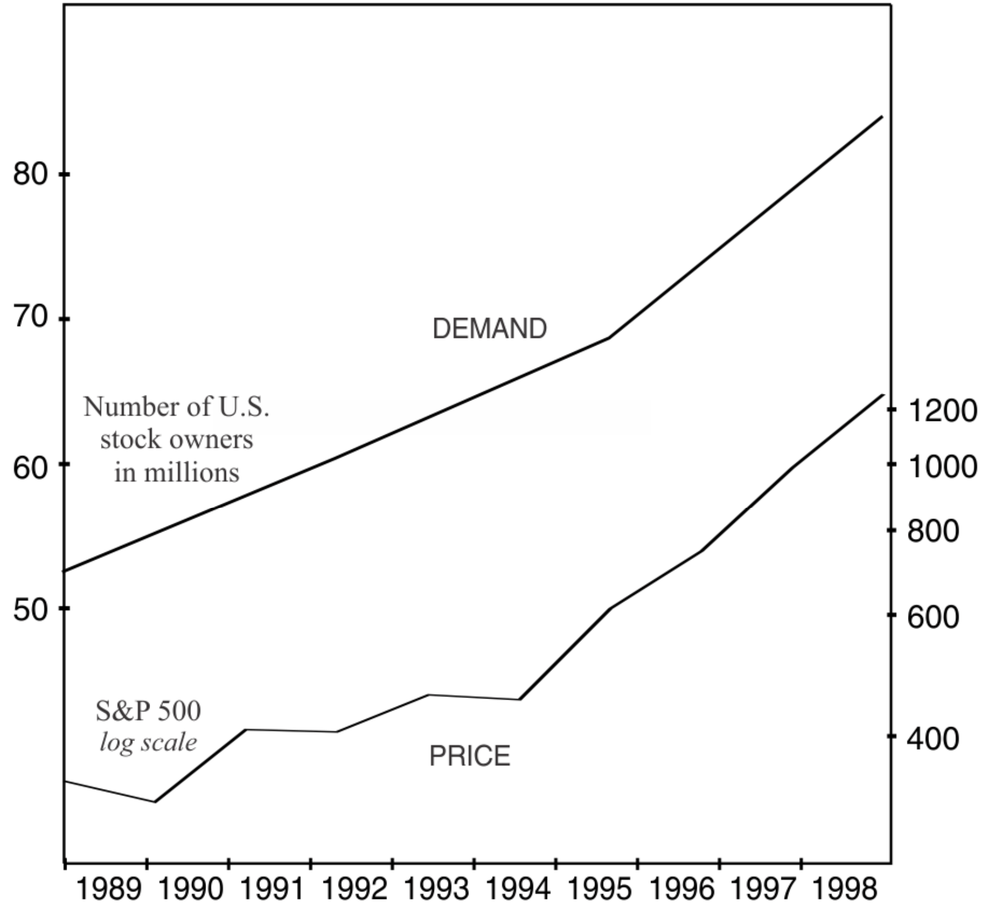
Economic Market: Prices Trend Inversely to the Number of Customers and Their Holdings



Note. Data from the Survey of Consumer Finances and the Bureau of Labor Statistics. Adapted with permission.

  Figure 55

Financial Market: Prices Trend in the Same Direction as the Number of Owners of Stock



Source: James M. Poterba.
Note. Annual survey respondents were limited to individuals who are heads of household or married to heads of household. Data from the Survey of Consumer Finances. Adapted with permission.

Figure 56

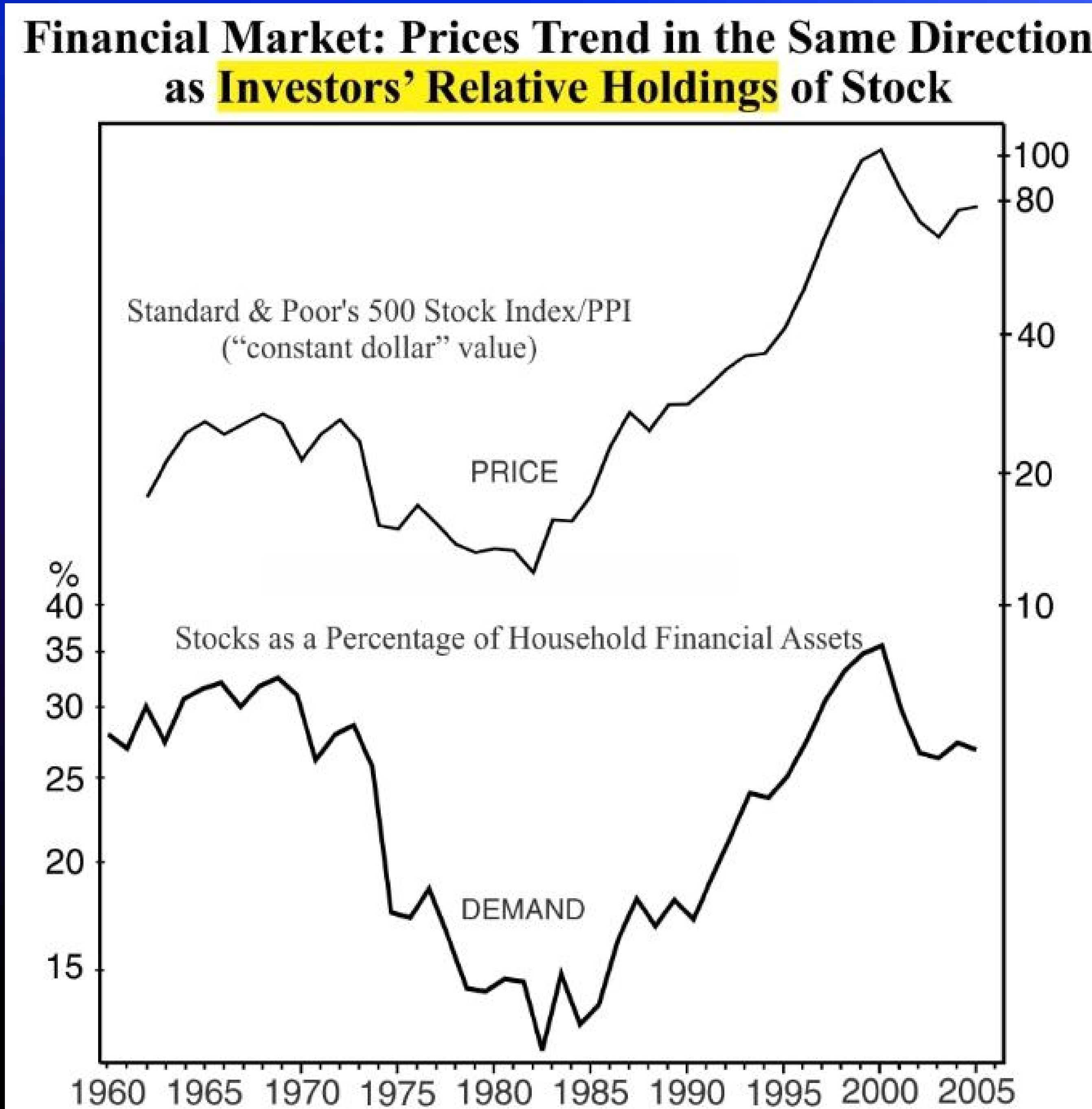

Financial Market: Prices Trend in the Same Direction as Investors' Relative Holdings of Stock
Standard & Poor's 500 Stock Index/PPI
("constant dollar" value)
PRICE
Stocks as a Percentage of Household Financial Assets
DEMAND
%
40
35
30
25
20
15
100
80
40
20
10
1960
1965
1970
1975
1980
1985
1990
1995
2000
2005

Figure 57

Financial Market: Prices Trend in the Same Direction as Volume

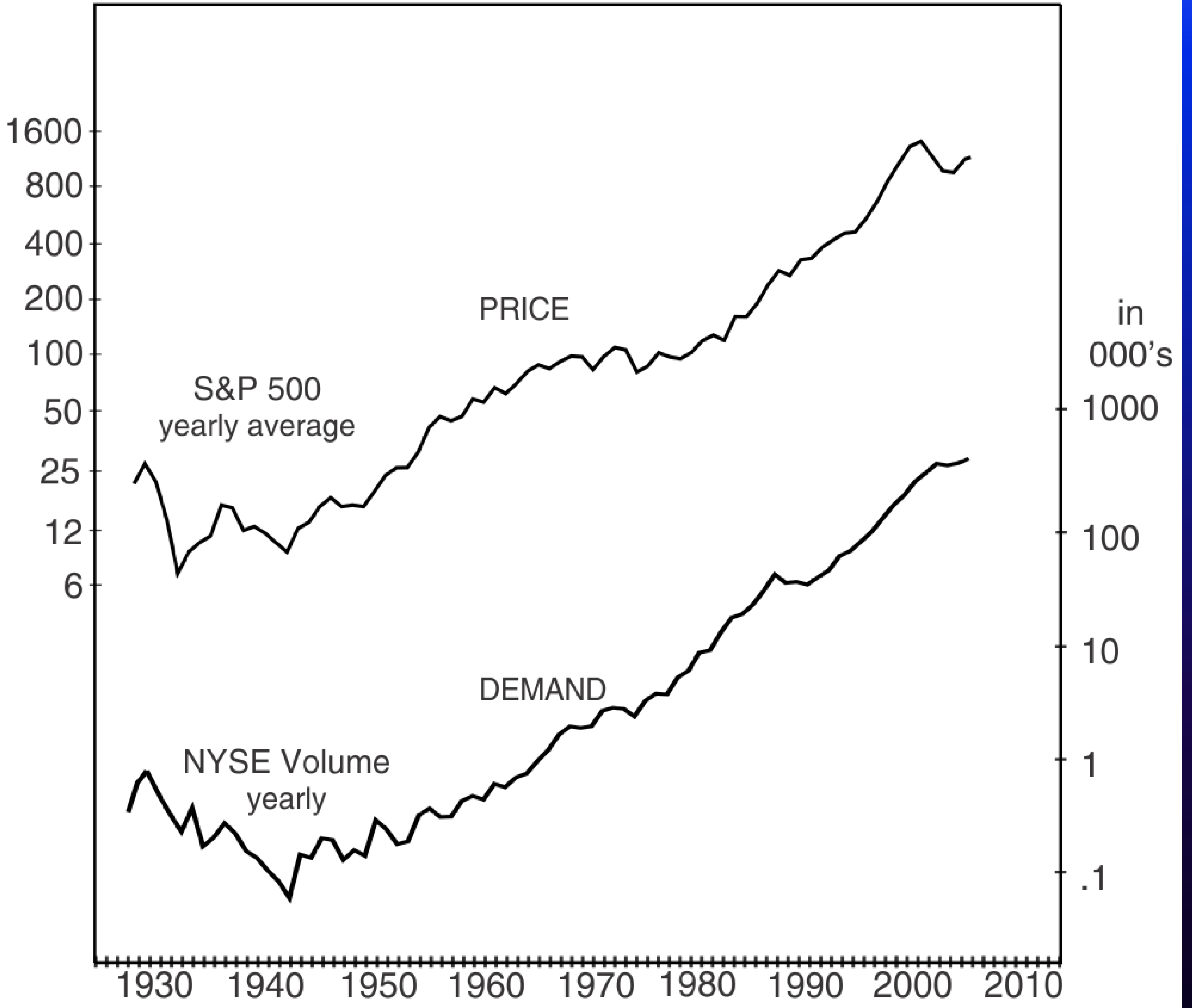
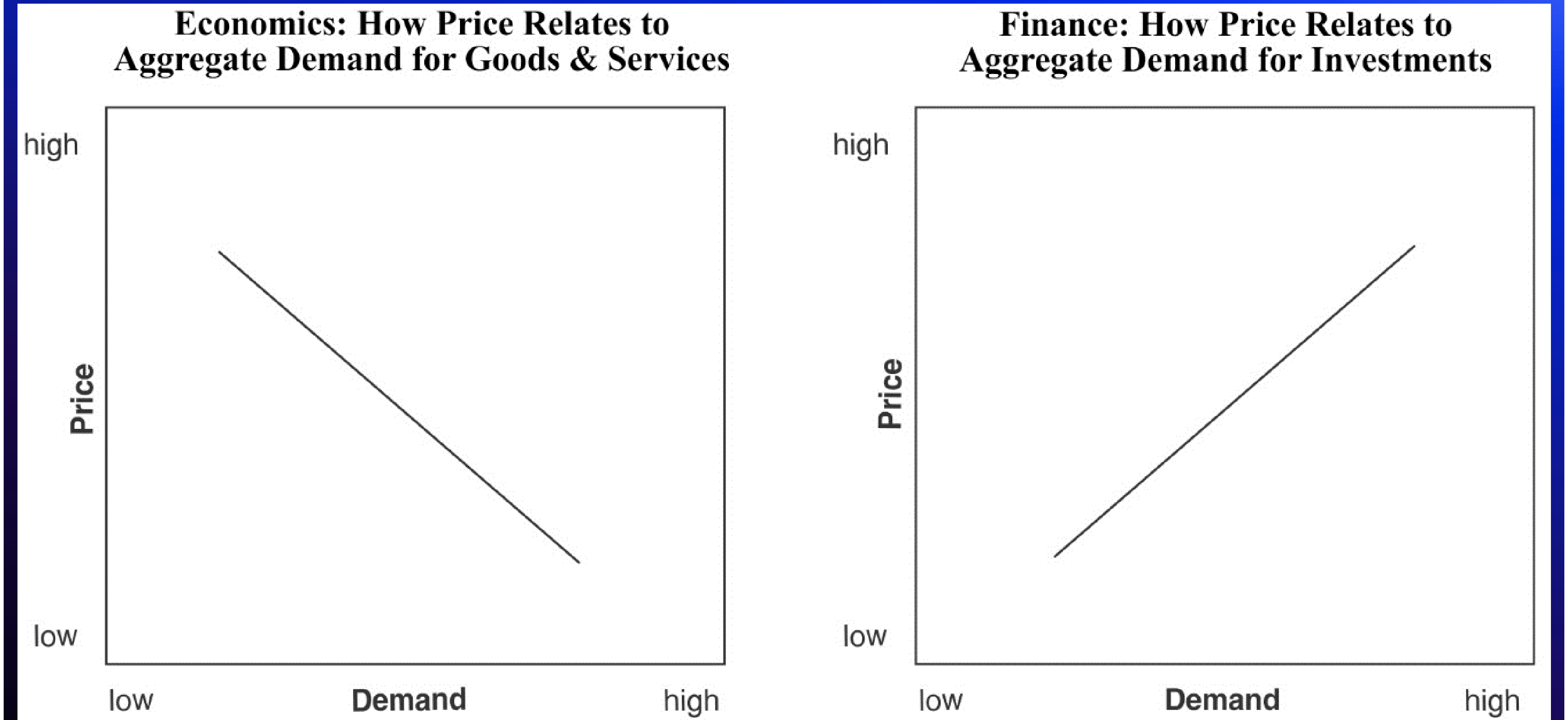


Figure 58



 www.socionomics.net Figure 59

Why is the price/demand relationship in finance the opposite of that in economics?

Economics:

Consumers are *knowledgeable* about their *own* values, producing relative *certainty*, so they can *reason*.

Finance:

Investors are *ignorant* of *others'* values, producing *uncertainty*, so they *herd*.

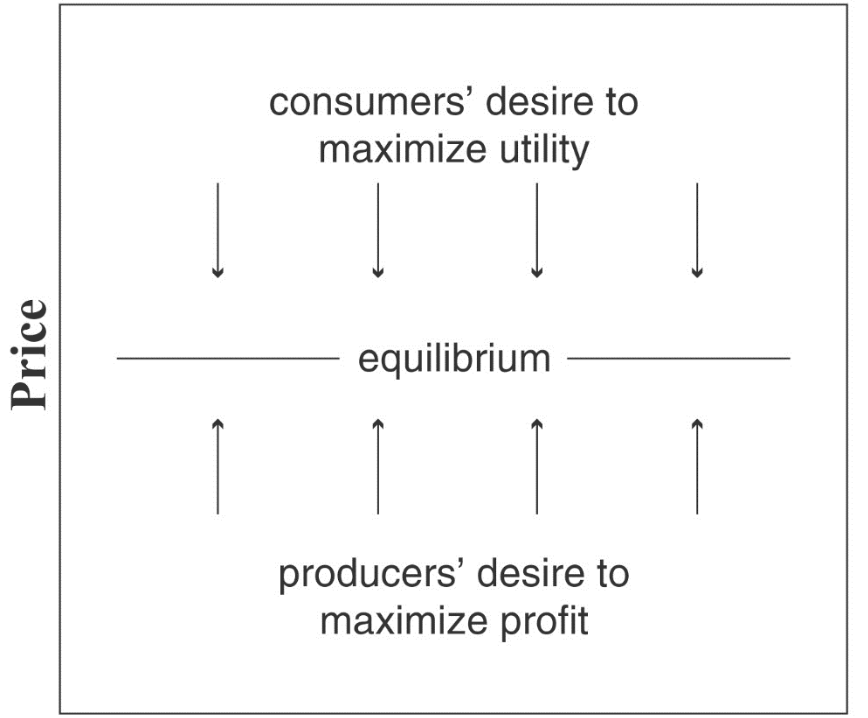
Investors herd in response to changes in social mood.

Figure 60

The Equilibrium/Dynamism Dichotomy in Economic vs. Financial Markets

EQUILIBRIUM IN ECONOMICS:

Opposition between producers and consumers, deriving from conscious utility maximization, produces a tendency towards *equilibrium* in the market for utilitarian goods and services.



In economics, *relative* pricing also seeks equilibrium and is fairly stable.

One price is a benchmark for another.

In the stock market, there are no useful benchmarks of value.

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Figure 65

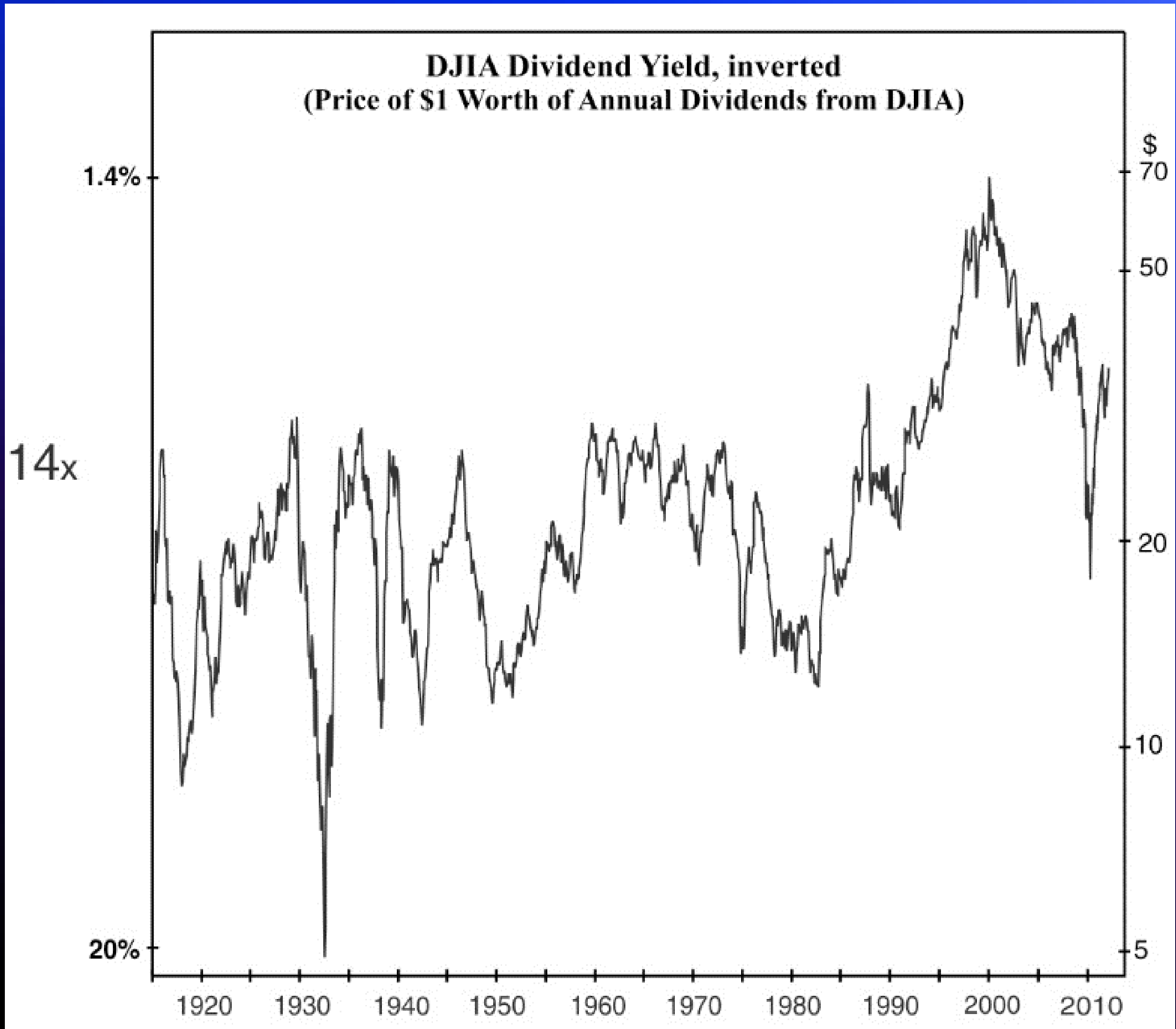

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Figure 66

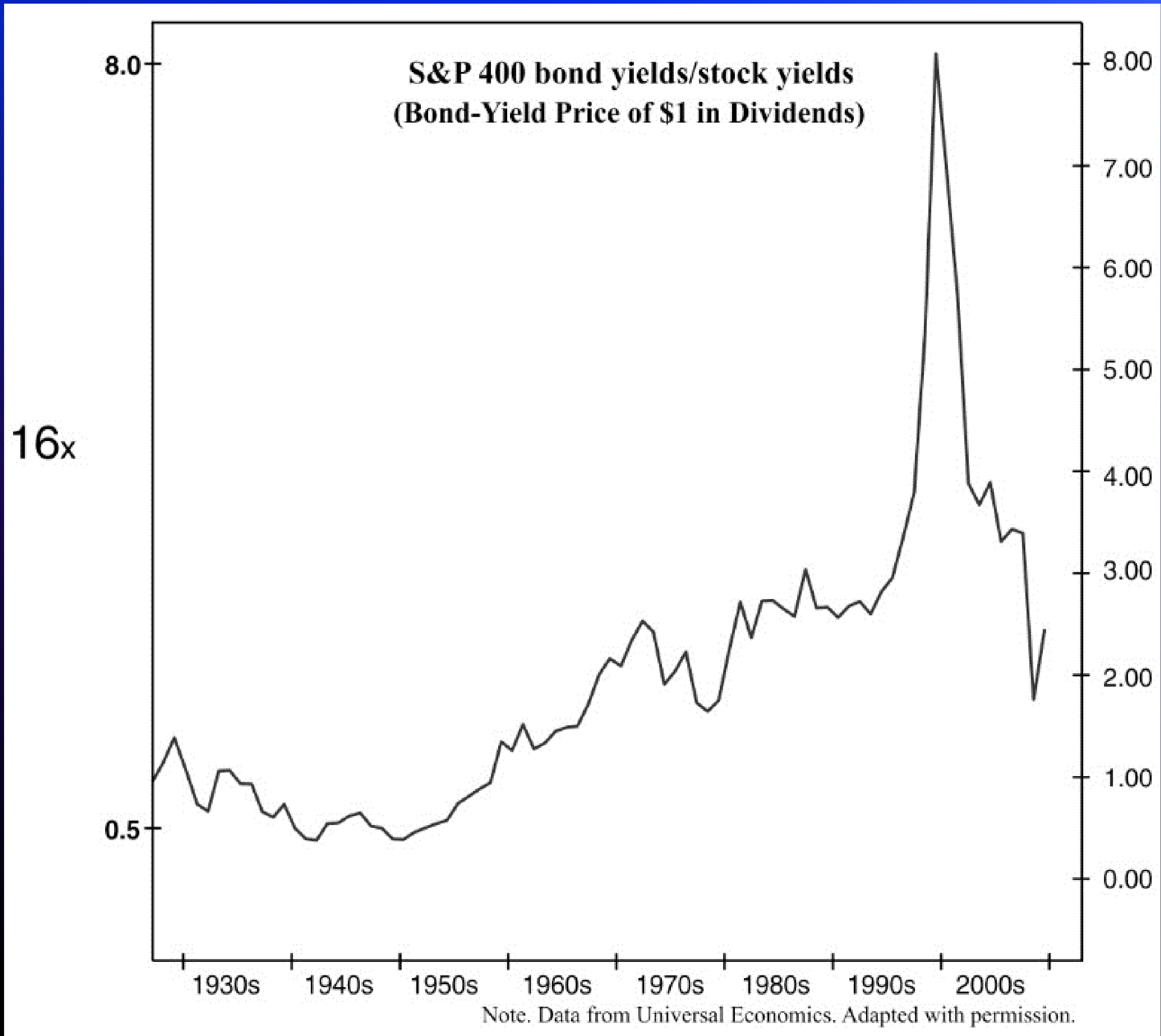

S&P 400 bond yields/stock yields
(Bond-Yield Price of $1 in Dividends)
8.0
0.5
16x
8.00
7.00
6.00
5.00
4.00
3.00
2.00
1.00
0.00
1930s
1940s
1950s
1960s
1970s
1980s
1990s
2000s
Note. Data from Universal Economics. Adapted with permission.

Figure 67

1) Financial markets have NO reliable benchmarks of price or value.

2) There are NO periods of equilibrium, only unceasing dynamism.

So, investors seem not to value stocks primarily rationally, as EMH claims.

Economics and finance are *different.*

Economics:

Price is important. It *regulates* rational buying (consumer) and selling (producer) behavior.

Finance:

Price is irrelevant. It is a *byproduct* of non-rational impulses among investors to buy and sell.

Figure 69

The Elliott Wave Model of Financial Price Fluctuation

Figure 70

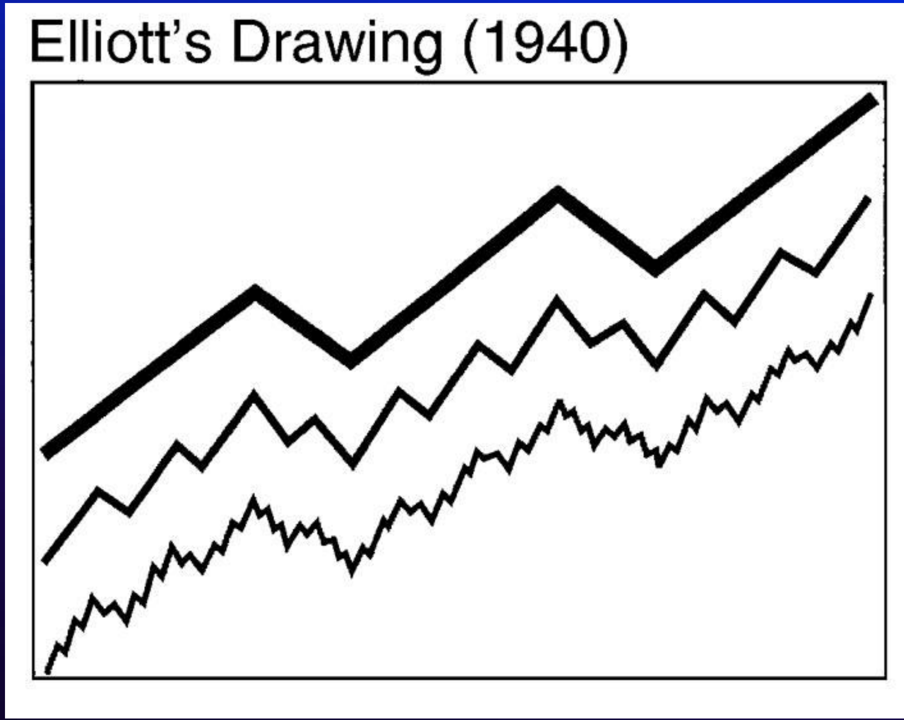


Figure 71

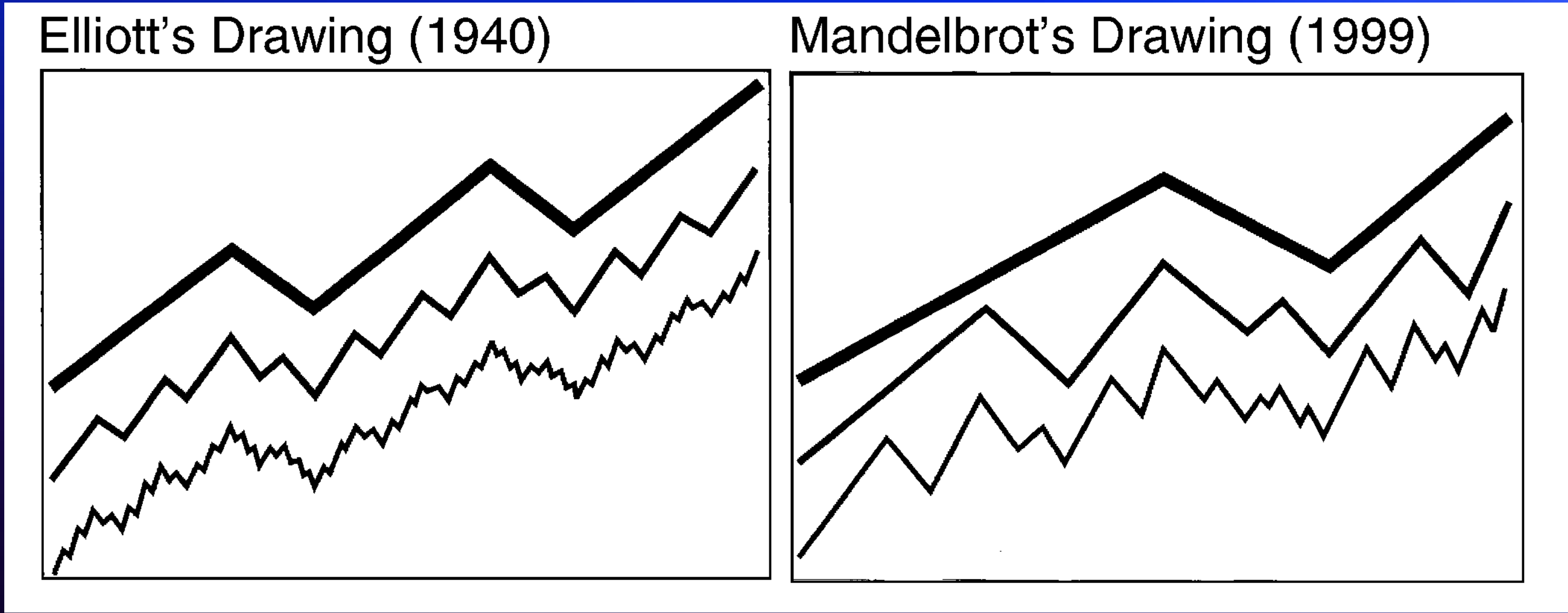
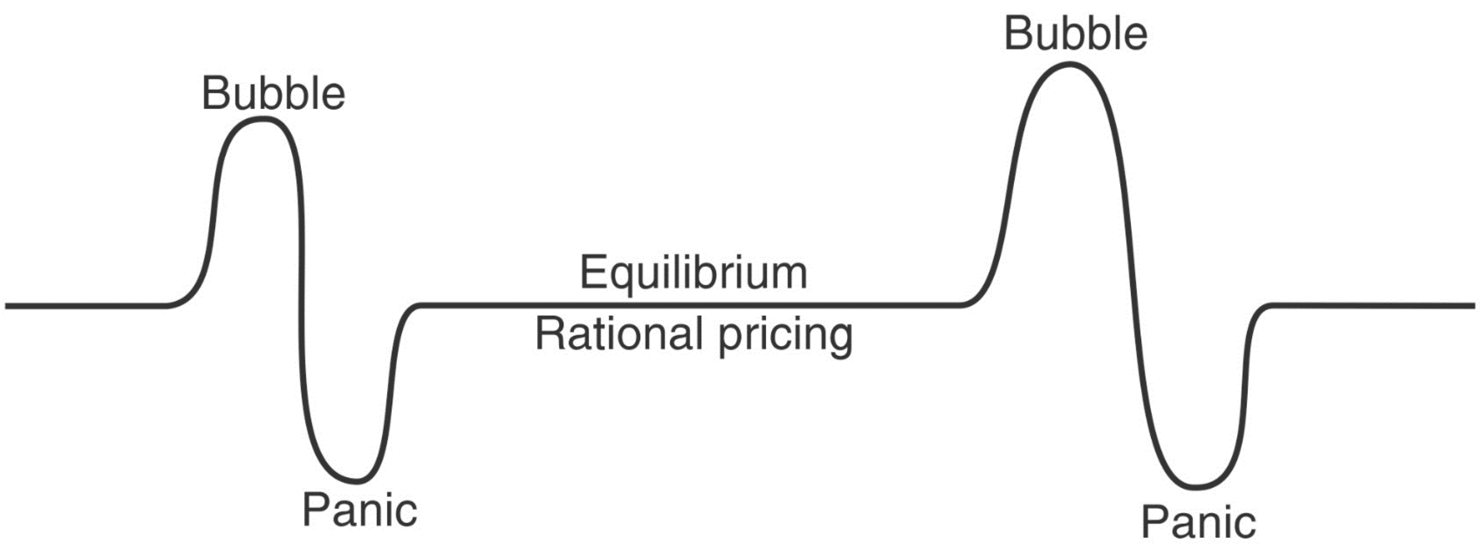
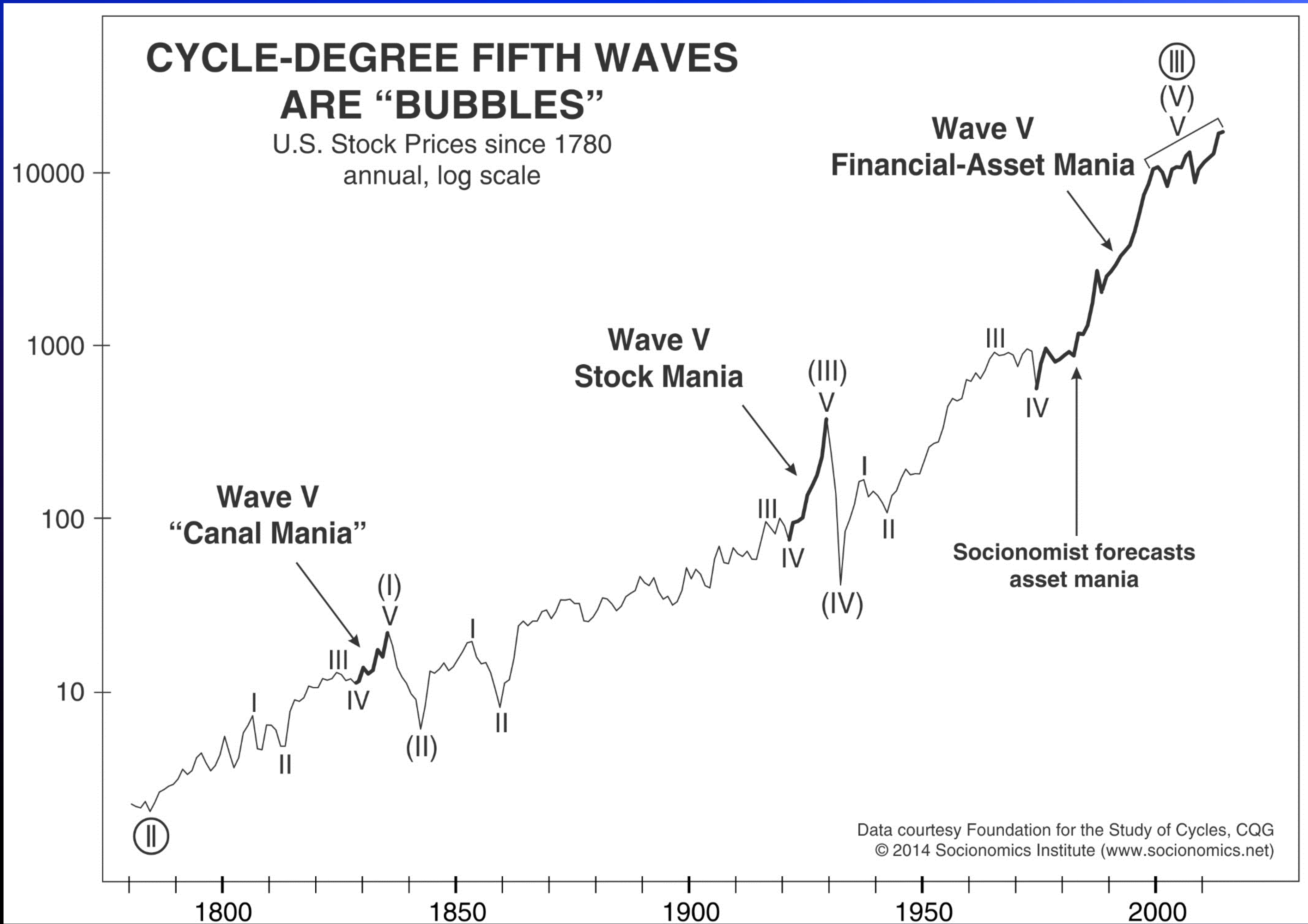


Figure 72

How the Elliott wave model relates to bubble theories.

What Financial Valuations Would Look Like under Most Bubble Theories





 www.socionomics.net **Figure 75**

Under the Elliott Wave Model:

— No exogenous shocks

— No exogenous triggers

— No exogenous catalysts

— No feedback loop

— No qualitative changes in motivation, only in result

—System provides its own "shocks".

—Price changes are not random but adhere to an organizing principle.

—Prices are probabilistically predictable.

Figure 76

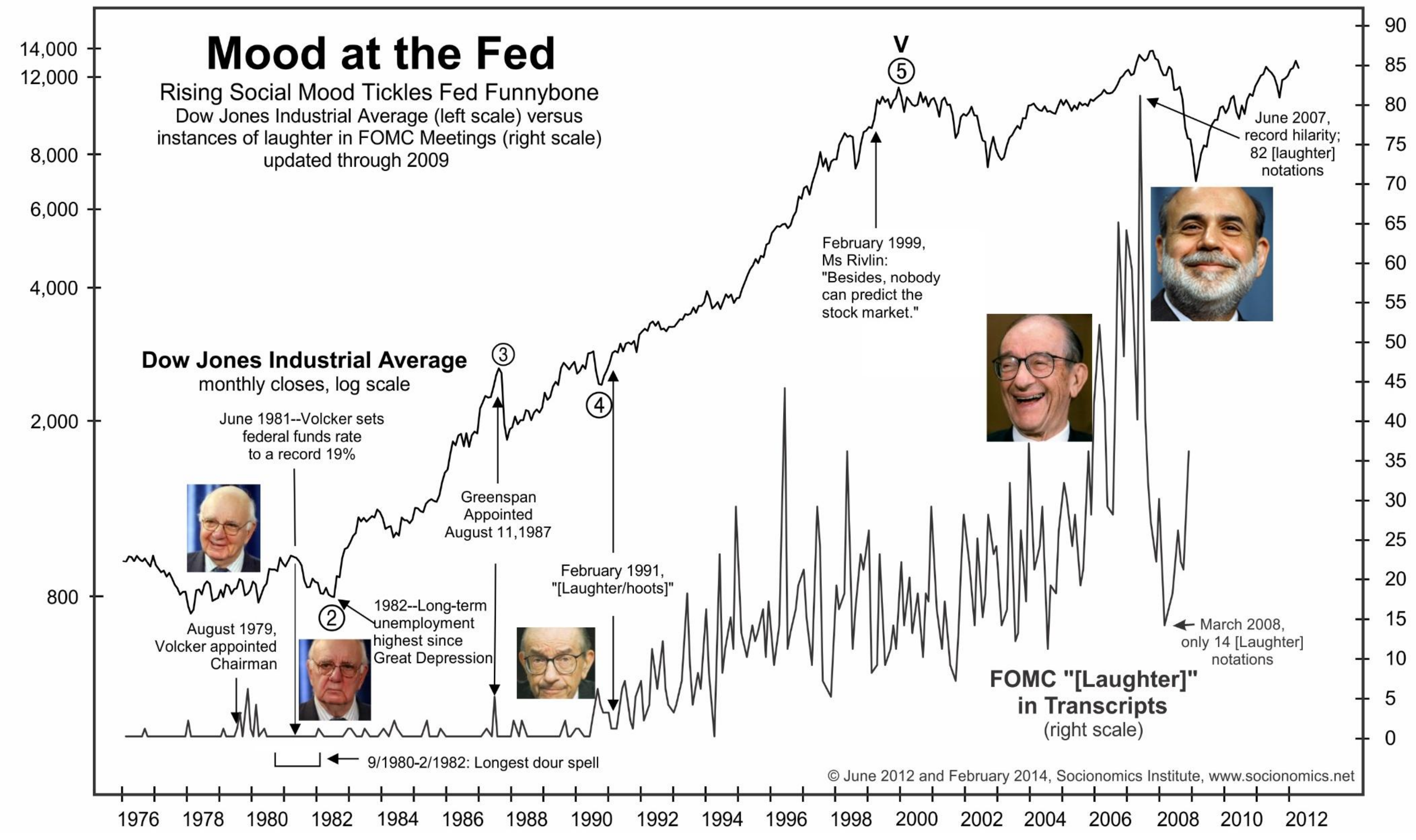
Herding

Groups of People in Finance Who Herd

Individual Investors
Options Traders
Small Futures Traders
Large Futures Traders
Newsletter Advisors
Mutual Fund Managers
Hedge Fund Managers
Economists
Government
The Fed

Figure 78

 www.socionomics.net **Figure 79**



 www.socionomics.net **Figure 80**

The only sub-group that does *not* consistently herd is the "Commercials".

Table 1: Summary of Positions of Six Theories of Herding on Eight Theoretical Dimensions								
	1. Evolutionary	2. Uncertainty	3. Homogeneous	4. Endogenous	5. Conscious	6. Rational	7. Equilibrium	8. Utility Maximi-zation
Social Psychology	No	**Yes**	**Yes**	**Yes**/No	Yes/**No**	Yes/**No**	?	Yes
Information theory	**Yes**/No	**Yes**	**Yes**/No	No	Yes	Yes	Yes	Yes
Ethological	**Yes**	**Yes**	**Yes**	**Yes**	**No**	**No**	?	Yes
Econophysics	?	**Yes**	No	**Yes**/No	Yes/**No**	Yes	Yes	Yes
Medical Model	**Yes**	**Yes**	No	**Yes**	**No**	**No**	Yes/**No**	Yes
Socionomics	**Yes**	**Yes**	**Yes**	**Yes**	**No**	**No**	**No**	**No**

The herding impulse is a blunt tool of survival, maladapted to finance.

Bubbles are *not* rational.
Crowds are *not* wise.

Figure 82

Corollaries to the Socionomic Theory of Finance

1) Investors are herding all the time, not just during bubbles and crashes.

2) Rationalization is constant.

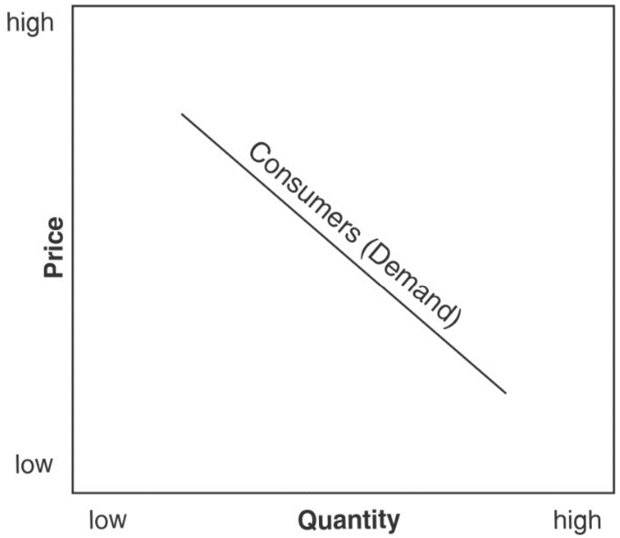
3) Agents are homogeneous.
   No investors vs. traders
   No technicians vs. fundamentalists
   No smart money vs. dumb money
   Differences in herding and rationalizing are *quantitative*, not qualitative

4) Bubbles and crashes are consistent with *non-rational risk aversion*, not rational assessments of risk.

5) There is no memory of social mood.

Economics and finance are two separate fields

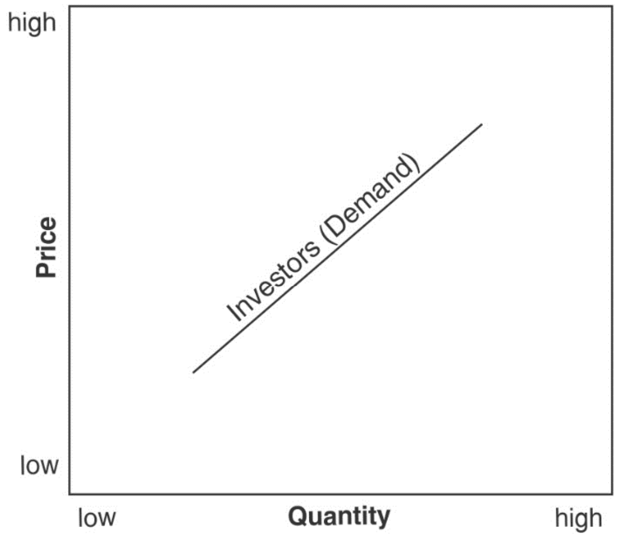
(MICRO) ECONOMICS
(Utilitarian Goods and Services)



Features at the Individual Level
Motivation (goal): Survival and Success
Participants: Producers and Consumers
Consumers' Orientation: One's Own Values
Decisions: Independent
Context: Knowledge and Certainty
Means: Thoughtful Maximizing of Utility
Mental State: Conscious
Mechanism: Reason
Ultimate Result: Survival and Success

Features at the Aggregate Level
Rational Valuation
Objective Values
Equilibrium and mean reversion
Price Regulates Demand
Constraint: The Invisible Hand
Product: Prosperity and Stability

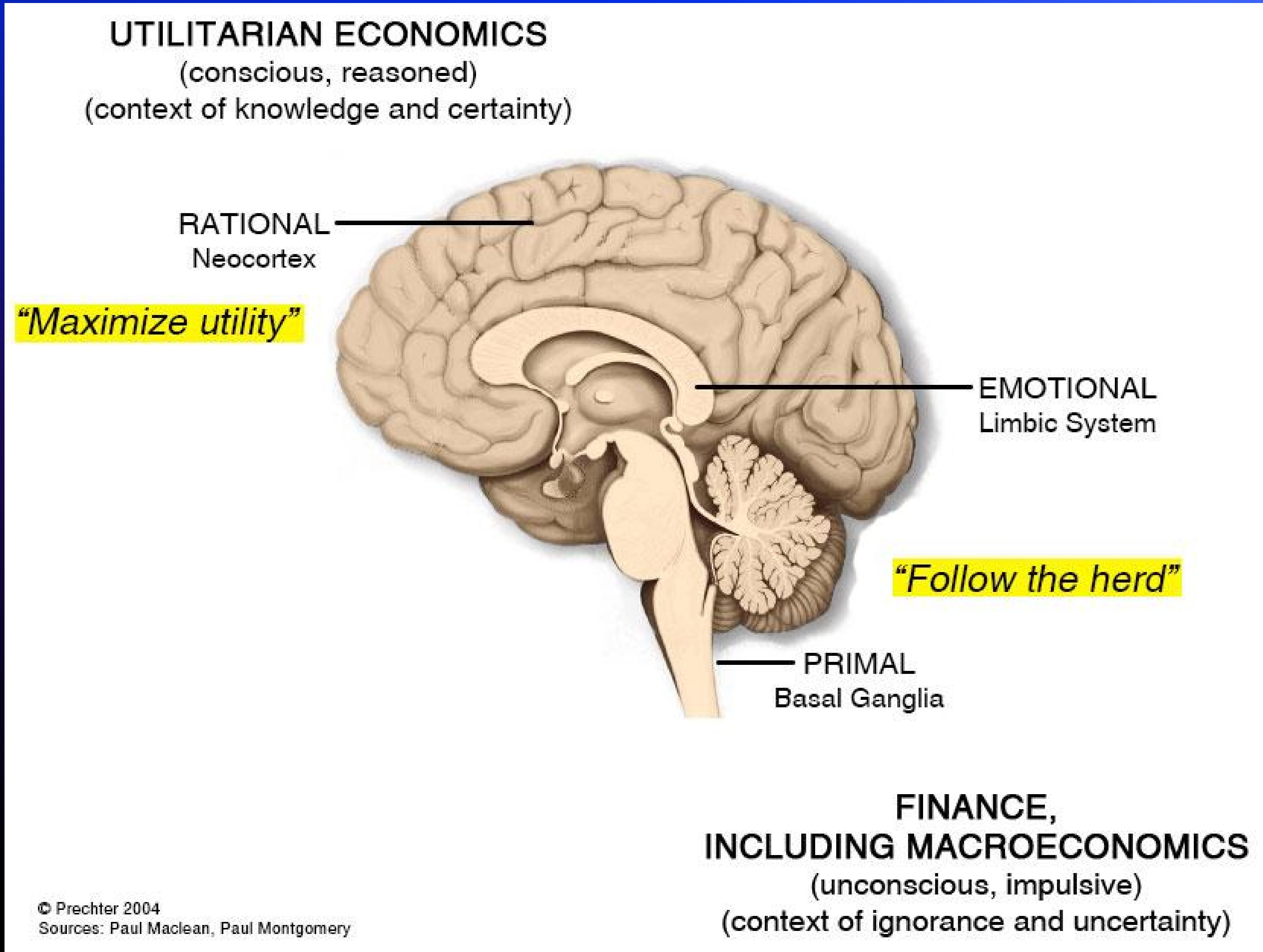
FINANCE
(Investments)



Features at the Individual Level
Motivation (goal): Survival and Success
Participants: Investors
Investors' Orientation: Others' Values
Decisions: Dependent
Context: Ignorance and Uncertainty
Means: Herding
Mental State: Unconscious
Mechanisms: Impulsion, Rationalization
Ultimate Result: Losses and Failure

Features at the Aggregate Level
Pre-Rational, Impulsive Valuation
Subjective Values
Dynamism
Demand Regulates Price
Constraint: The Wave Principle
Product: Boom and Bust at all degrees

Figure 84



 www.socionomics.net **Figure 85**

Context Can Change a Market from Economic to Financial

Housing is a *good*, a consumption item.
In a free market, prices normally follow the laws of economics.

When government provided unlimited credit,
removing the constraint on prices,
houses became perceived as *investments*.

EMH asserts that <u>economic</u> laws rule finance.

STF proposes that <u>financial</u> laws govern finance.

Contrasting Models of Finance

Efficient Market Hypothesis (EMH)	Socionomic Theory of Finance (STF)
1. Objective, conscious, rational decisions to maximize utility determine financial values.	1. Subjective, unconscious, prerational impulses to herd determine financial values.
2. Financial markets tend toward equilibrium and revert to the mean.	2. Financial markets are dynamic and do not revert to anything.
3. Investors in financial markets typically use information to reason.	3. Investors in financial markets typically use information to rationalize mood-induced imperatives.
4. Investors' decisions are based on knowledge and certainty.	4. Investors' decisions are fraught with ignorance and uncertainty.
5. Exogenous variables determine most investment decisions.	5. Endogenous social processes determine most investment decisions.
6. Financial prices derive from individual decisions about value.	6. Financial prices derive from trends in social mood.
7. Financial price changes are essentially random.	7. Financial prices adhere to an organizing principle at the aggregate level.
8. Financial prices are unpredictable; the character of news is unpredictable.	8. Financial prices are probabilistically predictable; so is the character of news.
9. Changing events presage changes in the values of associated financial instruments.	9. Changing values of financial instruments presage changes in associated events.
10. Economic principles govern finance.	10. Socionomic principles govern finance.

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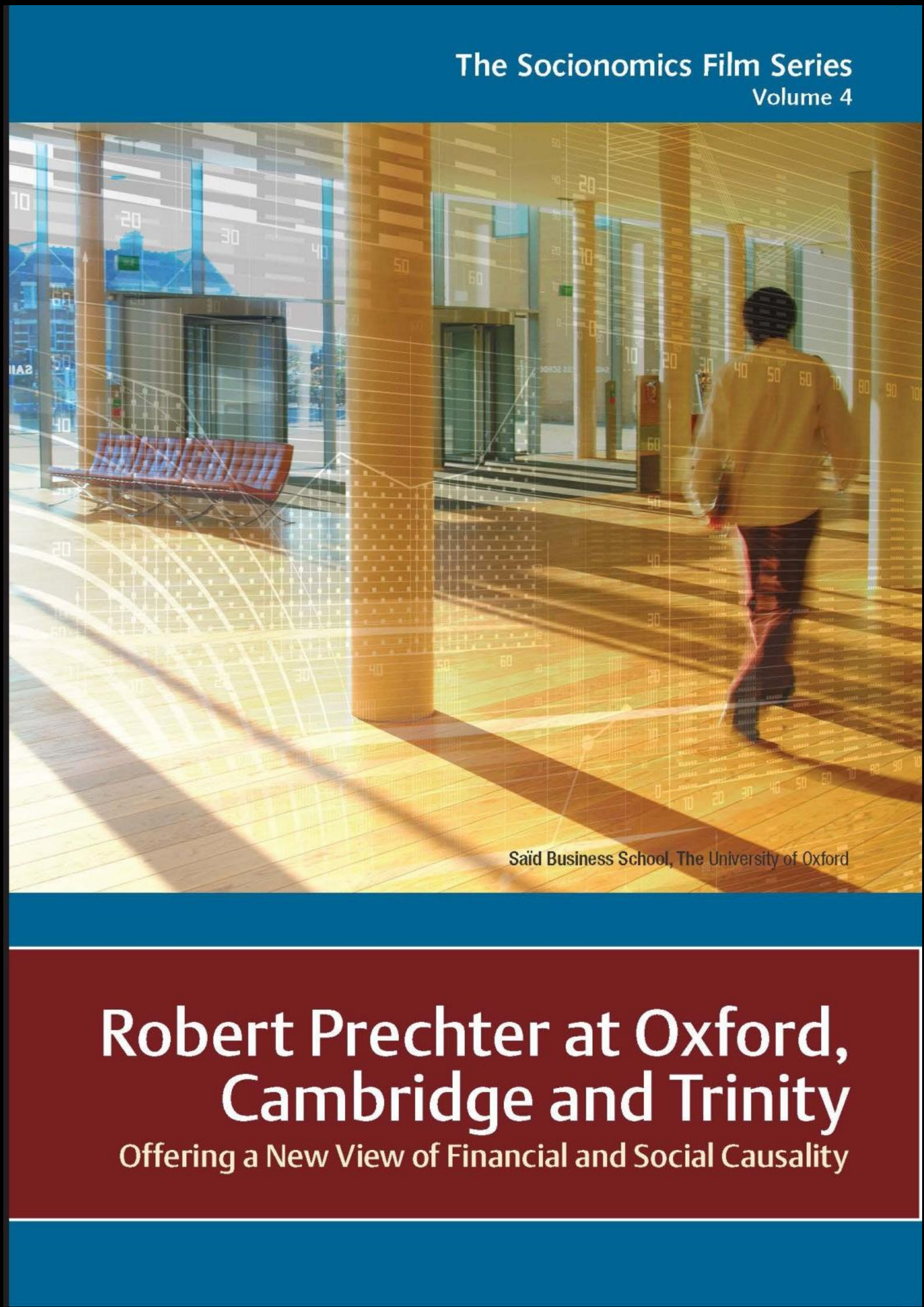
Figure 88

STF is elegant and
internally consistent.

It is also externally consistent.

Most "fundamentals" are results, not causes.

Mood change is causal. It is also patterned, providing a basis for technical analysis.



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Slides available at:

www.socionomics.net/wave/14IFTA