

**Capitalism,
Government,
Money,
and the
Future of
the World**

*Finding
and Keeping
the Right Balance
in
Market-Capitalist
Democracies*

Five key arguments about capitalism and government, being made in this course

Capitalism has radically transformed human life for the **better**, over the last 300 years

(despite the far left's bad attitude)

The ongoing changes driven by capitalism can be very **painful** and **detrimental** to those who get hurt, but are nonetheless absolutely **necessary**

(a fact the left is often in denial about)

Capitalism is inherently **unstable**, and prone to recurrent, inevitable **crisis** and **collapse**

(a fact the right is mostly in denial about)

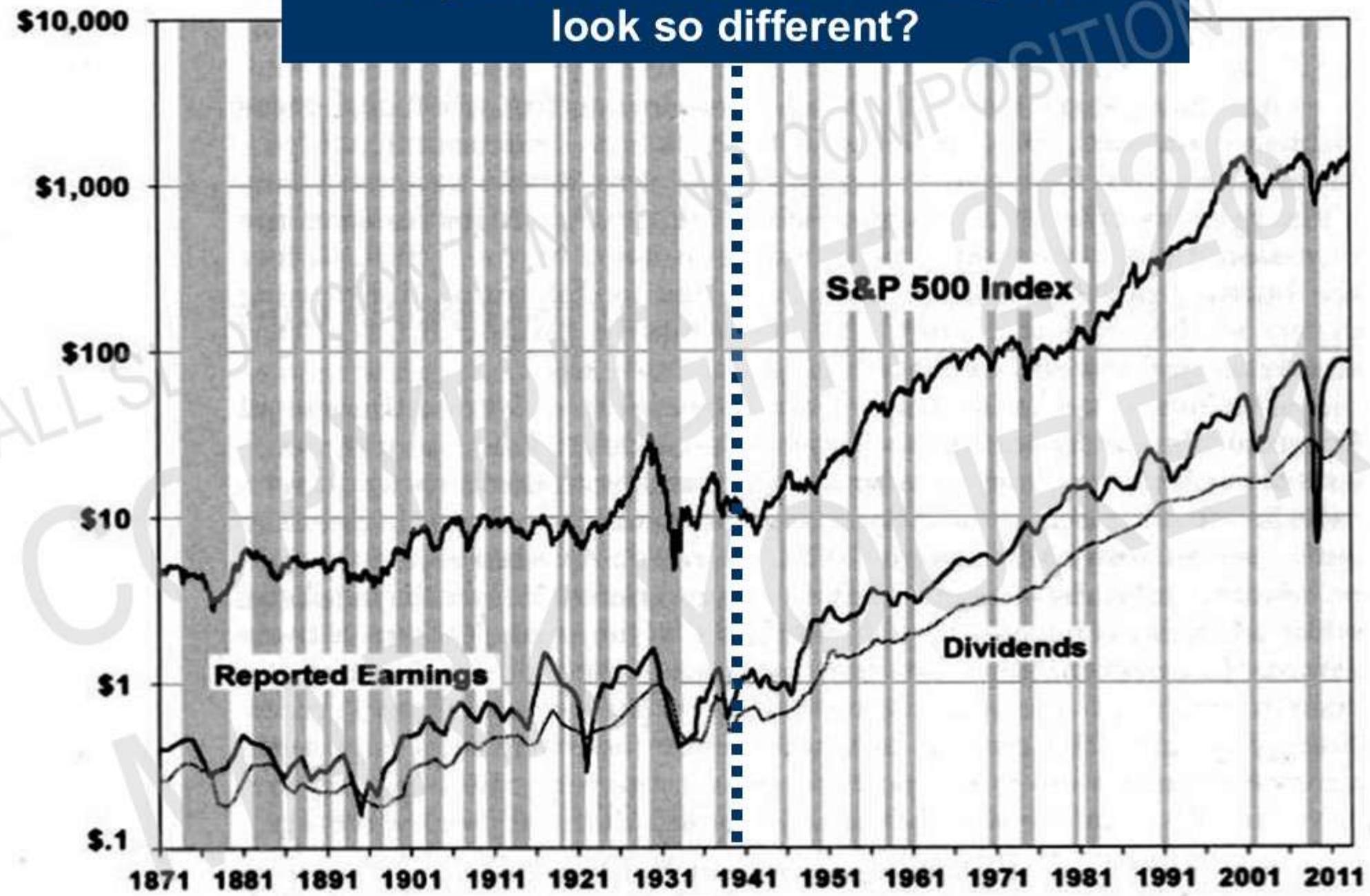
You do have to be careful about the rules you make, but capitalism requires **many** different kinds of **regulation** – ***laissez-faire*** doesn't work at all

(despite the right's bad attitude)

Capitalism is far more **productive**, and far more **stable**, because we've learned to stabilize and **improve** it, through **government**

(a fact the right is in deep denial about)

Why do the two sides of this graph look so different?



Banks – lending institutions – facilitate a large part of the investment and growth within every market-capitalist economy

Banks are an **essential foundation of capitalism**

Banks are **inherently, inescapably unstable businesses,**
inherently unstable institutions

For this reason, as well as for several other reasons,
capitalist economies, by their very nature,
at their foundation, are unstable

By its nature, capitalism is subject to
recurrent, inevitable crisis –
sudden, unpredictable spasms of collapse,
contraction, and economic destruction

Capitalism is **bipolar** –
always alternating inevitably
between boom and bust

Why do the two sides of this graph look so different?

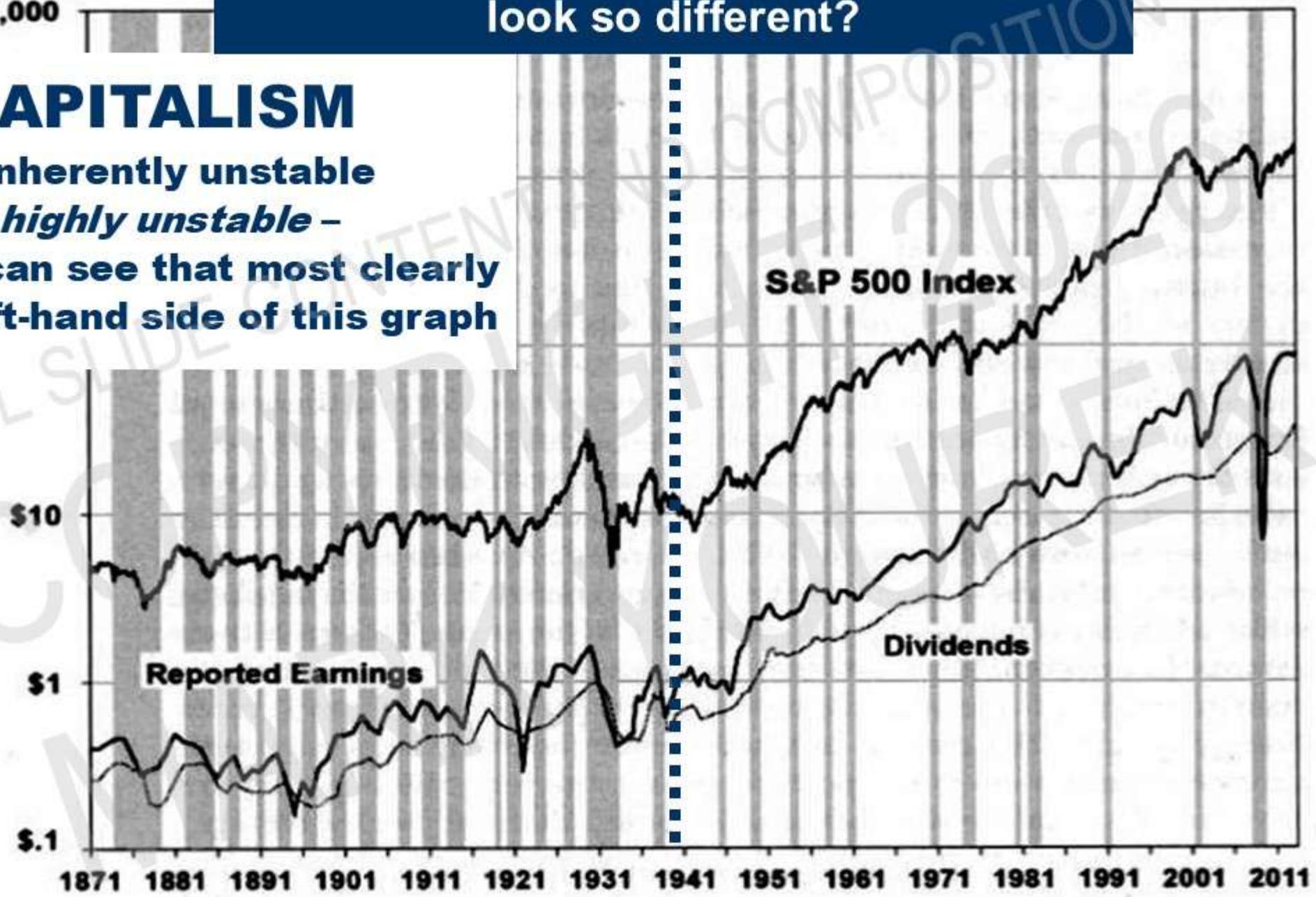
\$10,000

CAPITALISM

Is inherently unstable

- highly unstable -

and you can see that most clearly on the left-hand side of this graph



ALL SLIDE CONTENT IS A COMPOSITION

Stock Prices, Earnings

\$10,000

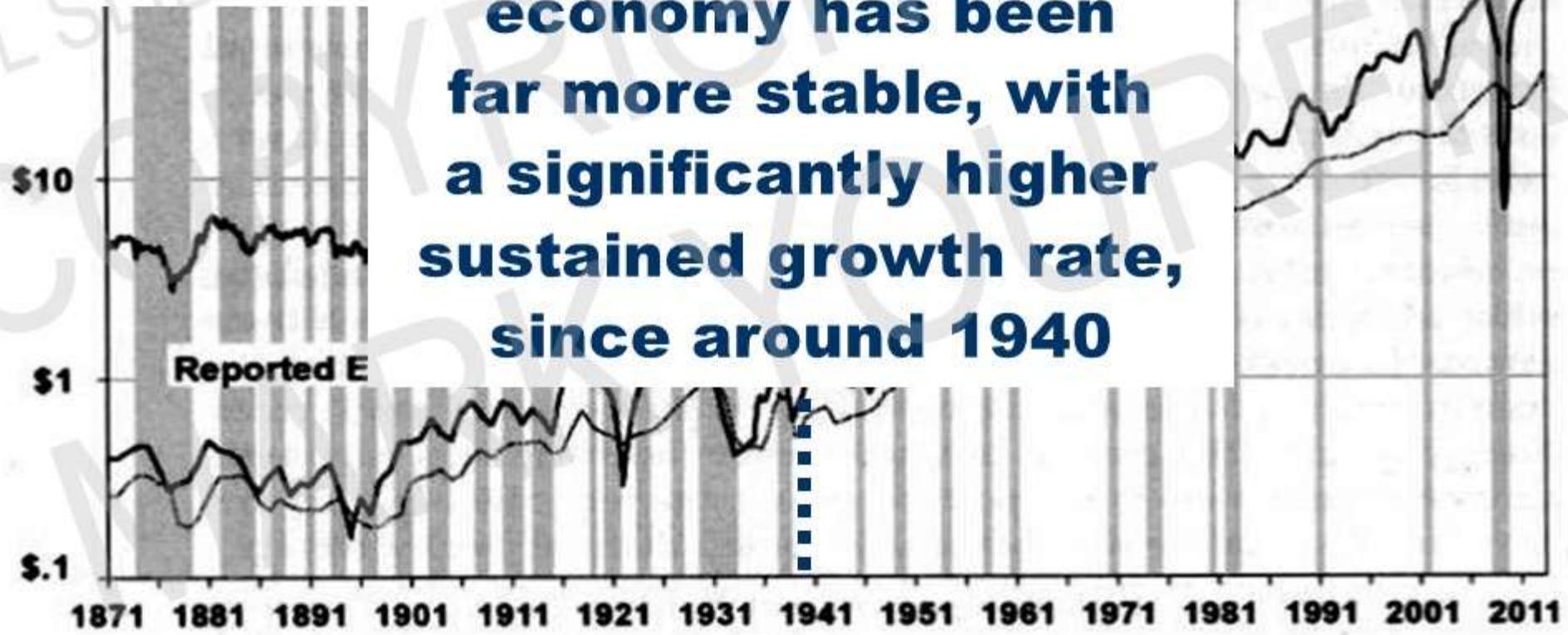
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CAPITALISM

Is inherently unstable
- *highly unstable*
and you can see that more on the left-hand side of the graph

GOVERNMENT

is the overriding reason why the American economy has been far more stable, with a significantly higher sustained growth rate, since around 1940



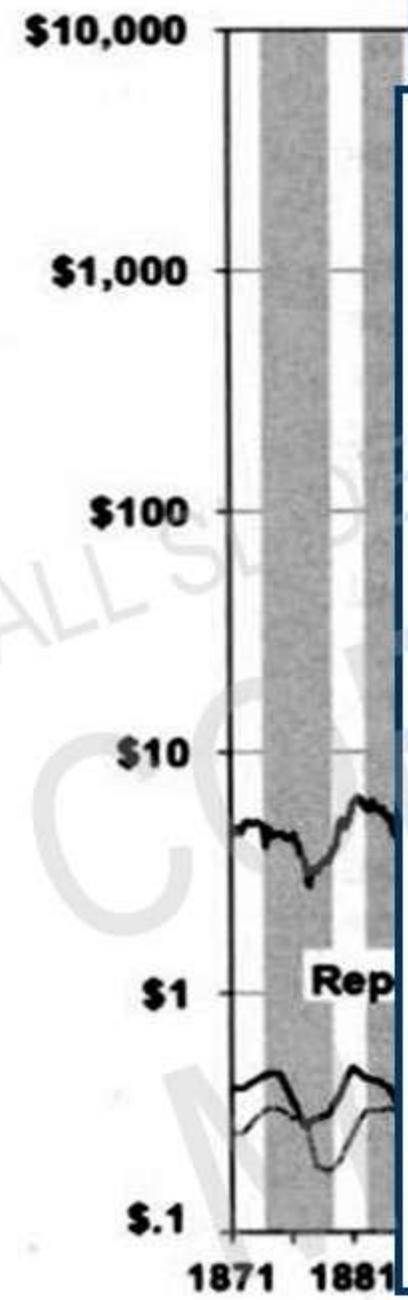
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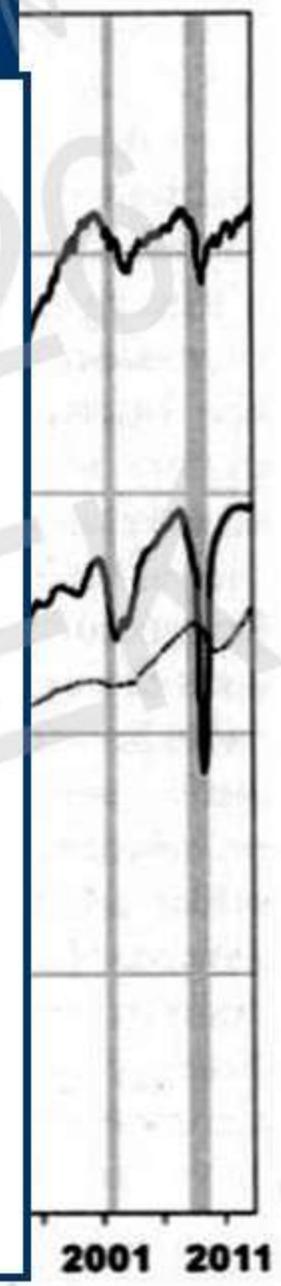
1871 1881 1891 1901 1911 1921 1931 1941 1951 1961 1971 1981 1991 2001 2011



Why do the two sides of this graph look so different?

There are three specific ways that government has been making the US economy much more stable, and with a higher sustained growth rate, since about 1940

1. _____
Stabilization of the banking sector through government-backed deposit insurance, and the
2. _____
Federal Reserve acting as lender of last resort
3. _____



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Banks are an **essential foundation of capitalism**

So, what *are* these ‘several other reasons’
why capitalism is inherently **unstable**?

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capitalist economies, by their very nature,
at their foundation, are unstable

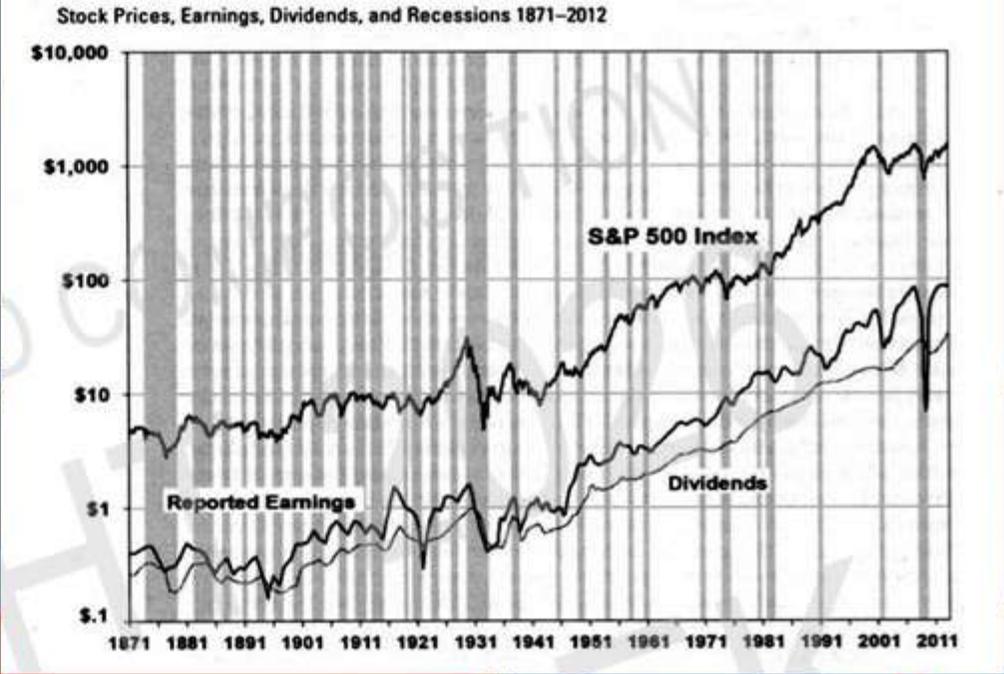
Why are market-capitalist economies inherently unstable?

- Capitalism requires *banks, credit and lending* to enable investment and growth
 - Banks are inherently unstable, and a direct source of economic instability
 - Credit, debt and leverage also create risk and potential instability for every borrower, whether individual or corporate

Capitalism's Accumulating Instability



Capitalism's Accum



FREQUENT BANK
AND COLLAPSE

Increasing
instability

**BANKING
and
LEVERAGE**

rise of banking and lending
alongside early capitalism

**CONTINUING RISK OF AGGREGATE
LEVERAGE IN THE ECONOMY**

1600

1700

1800

1900

2000

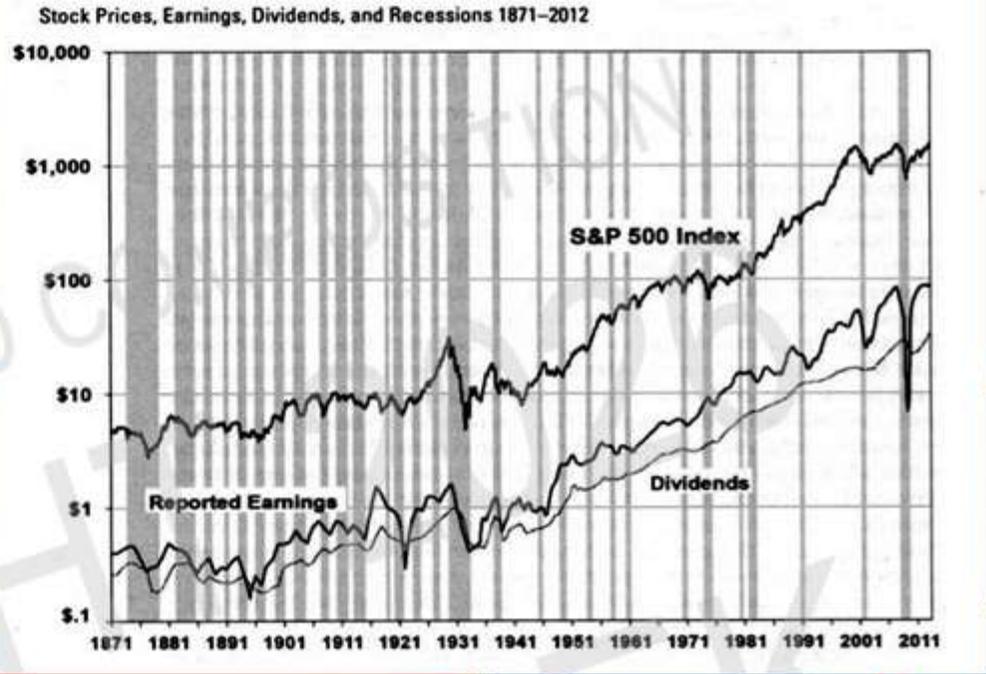
2100

ATION:

RISK

?

Capitalism's Accumulation



FREQUENT PANIC AND COLLAPSE

Increasing instability

BANKING and LEVERAGE

rise of banking alongside economic growth

1600

1871

The total amount of debt and borrowing that is present in an economy – i.e., *aggregate leverage* – increases the fragility of the economy, with less and less of a trigger needed to set off a panic and collapse

CONTINUING RISK OF AGGREGATE LEVERAGE IN THE ECONOMY

2000

2100

QUESTION:

RISK

?

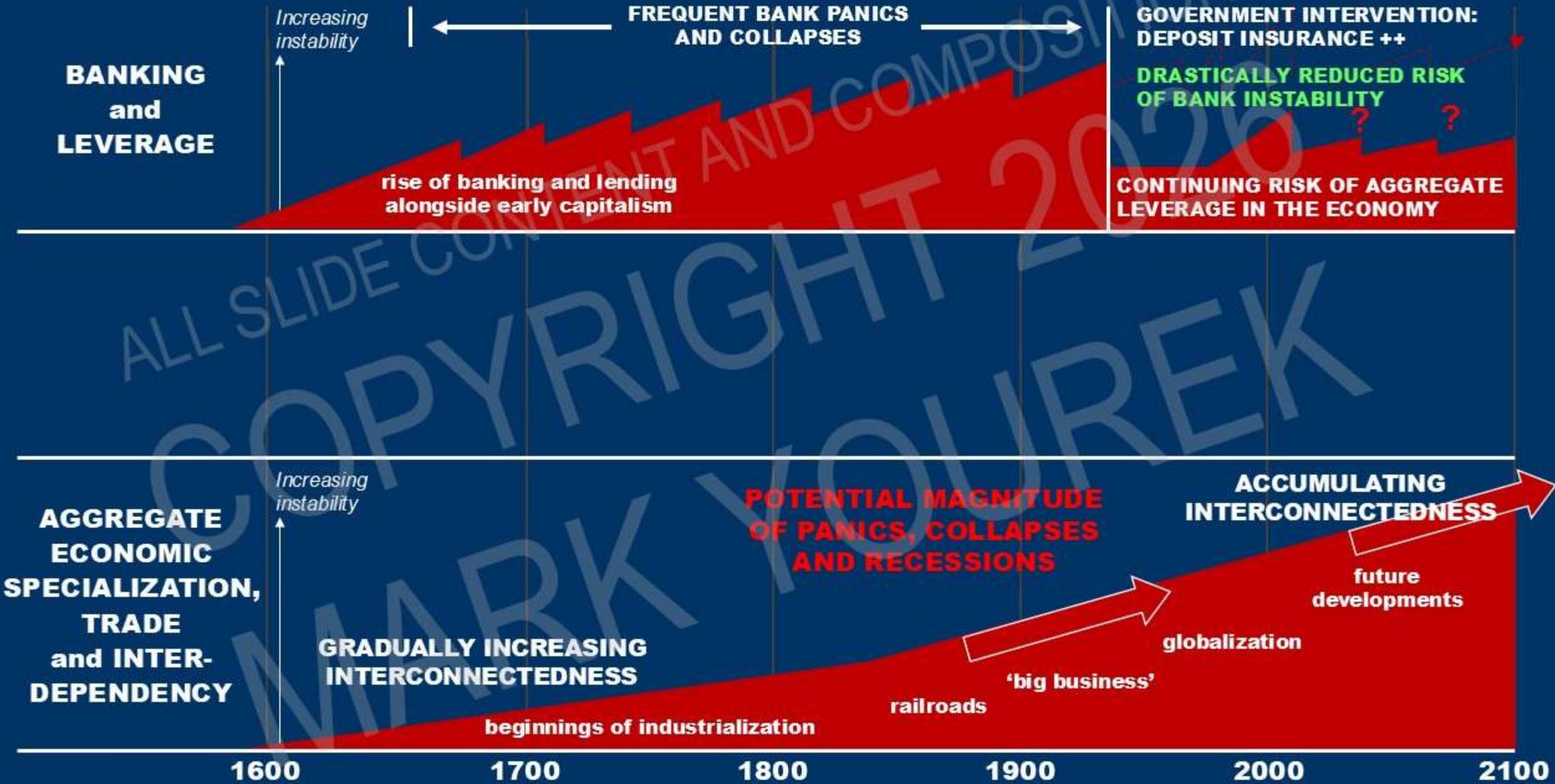
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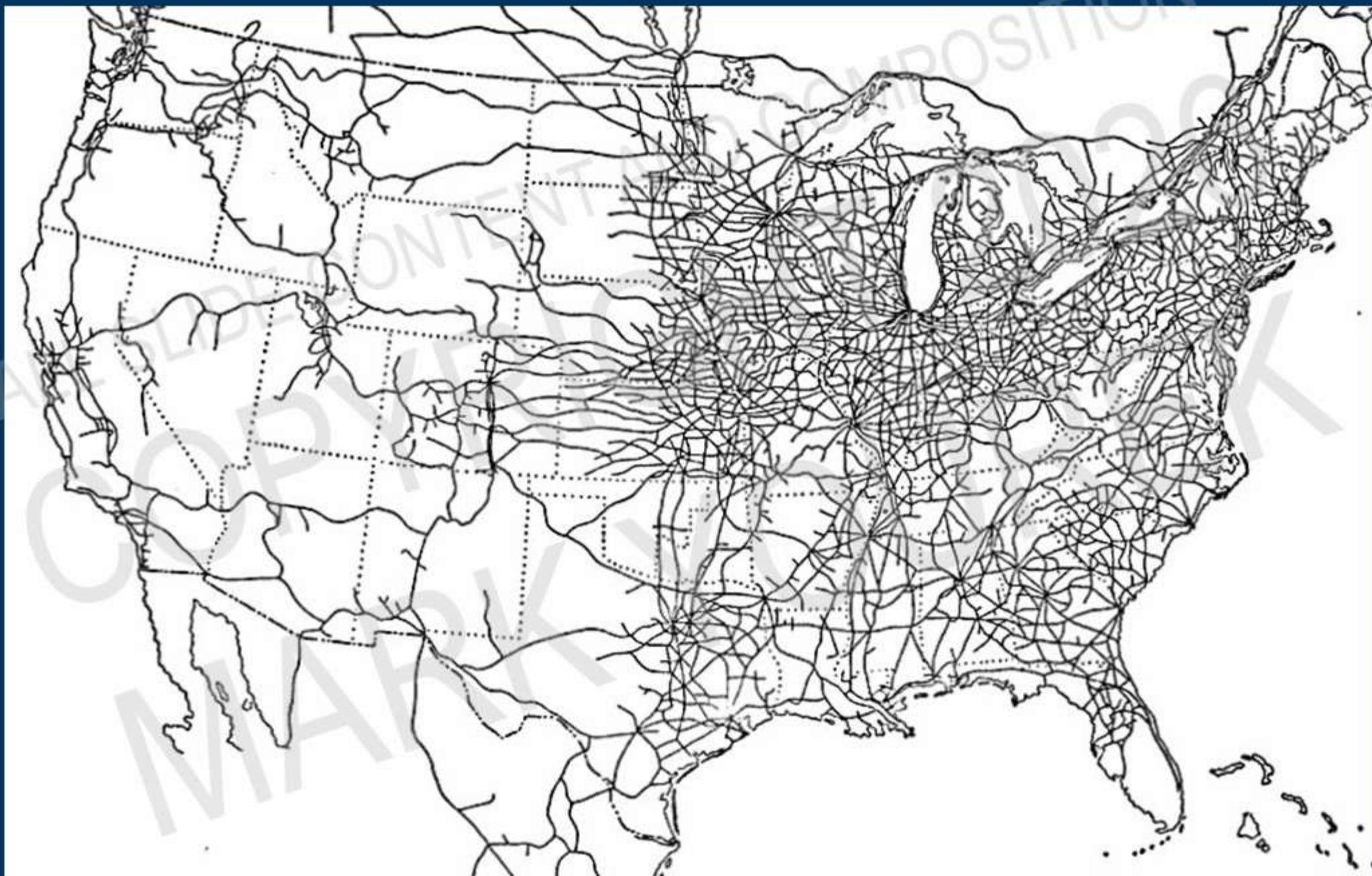
Why are market-capitalist economies inherently unstable?

- *Specialization* among individuals, companies and nations, to promote efficiency in wealth creation, is fundamental to the workings of capitalism
Capitalism is therefore inherently about constantly-increasing *technology, trade, specialization and interdependency*
 - Complex and ever-growing webs of trade and interdependency are inevitable features of capitalism, but are themselves the links by which shocks and instability are transmitted through the economy

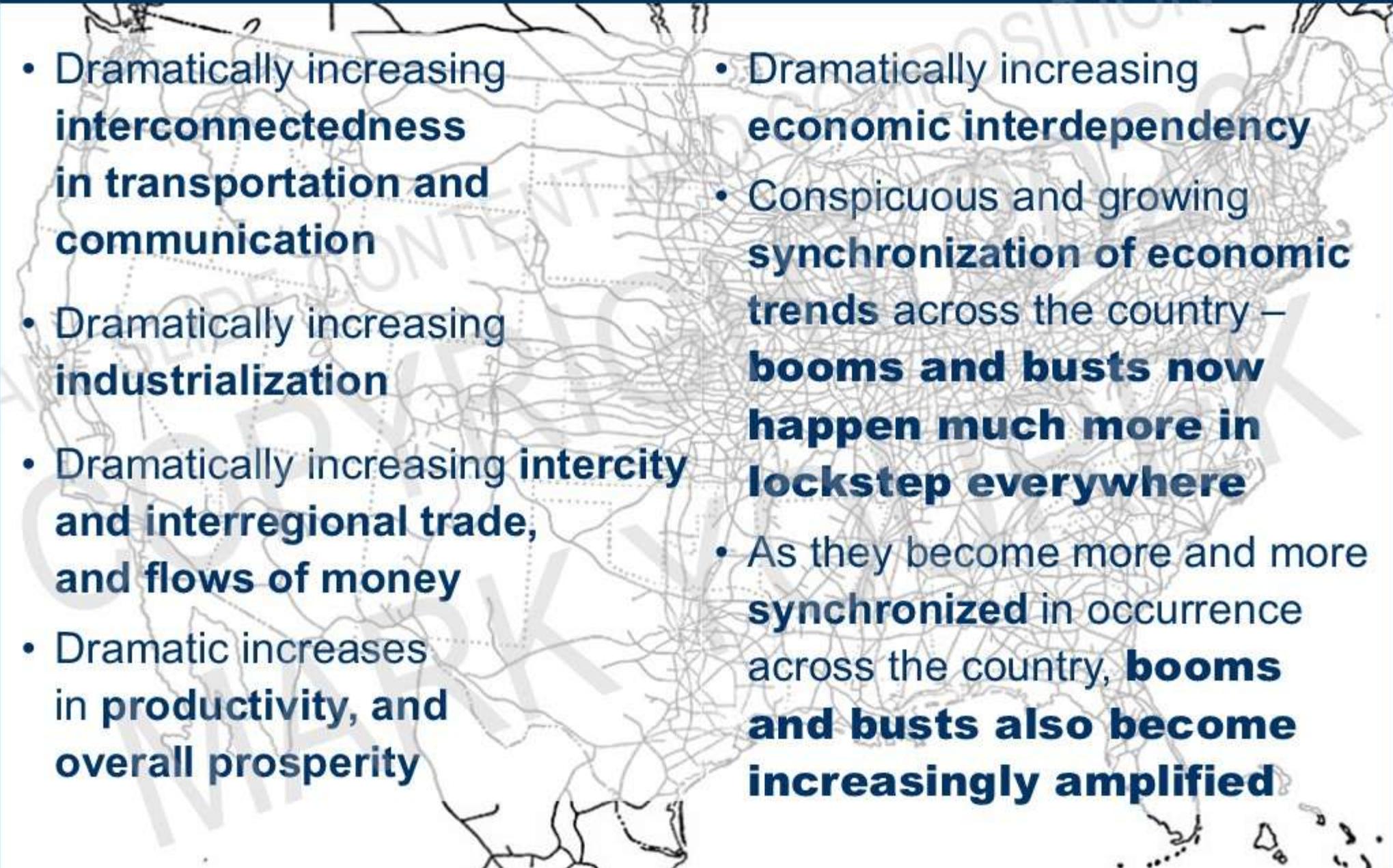
Capitalism's Accumulating Instability



The growing interconnectedness of the US economy during the 19th Century



The growing interconnectedness of the US economy during the 19th Century

- 
- Dramatically increasing **interconnectedness in transportation and communication**
 - Dramatically increasing **industrialization**
 - Dramatically increasing **intercity and interregional trade, and flows of money**
 - Dramatic increases in **productivity, and overall prosperity**
 - Dramatically increasing **economic interdependency**
 - Conspicuous and growing **synchronization of economic trends** across the country – **booms and busts now happen much more in lockstep everywhere**
 - As they become more and more **synchronized** in occurrence across the country, **booms and busts also become increasingly amplified**



As capitalism develops and the economy becomes more and more interconnected and people and companies become more and more *specialized* and interdependent all kinds of *growth* and *development* and *progress* and *increasing affluence* become possible



**As capitalism develops and the economy
becomes more and more interconnected
and people and companies become
more and more *specialized* and interdependent**

But also ...



As capitalism develops and the economy becomes more and more interconnected and people and companies become more and more *specialized* and interdependent capitalism inevitably produces *panics and collapses* of more and more *widespread impact and severity*

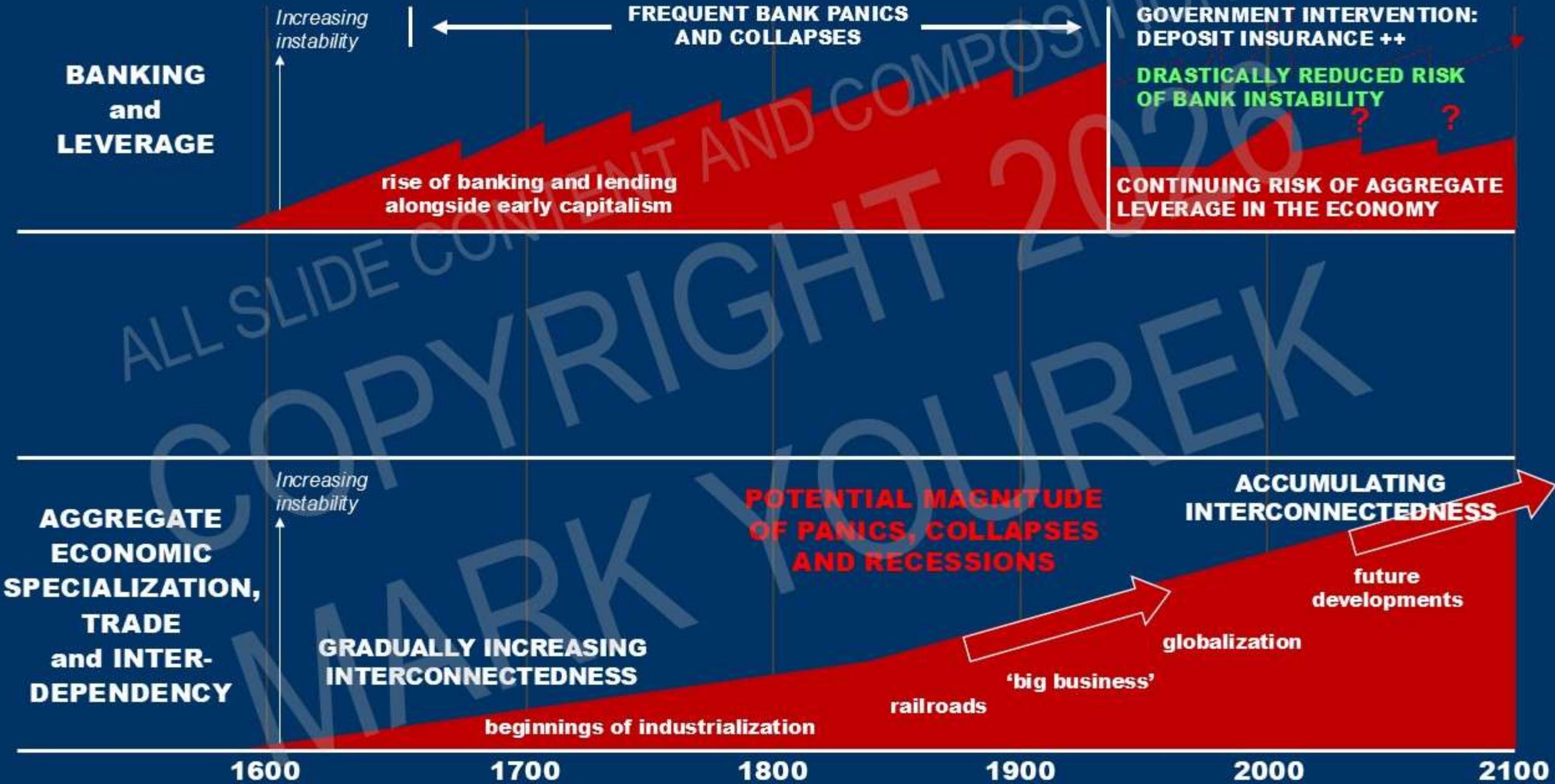


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Capitalism's Accumulating Instability



Why are market-capitalist economies inherently unstable?

- Capitalism inherently requires that *people constantly try to figure out what other people will do* – i.e., to be continuously engaged in expectations exercises
 - **Expectations exercises** are absolutely pervasive, and drive almost all investment, but also contribute enormously to **instability**
 - **Expectations exercises** range from the **individual**, to the **highest aggregate levels**: the overall mood of an economy alternates between being predominantly confident/optimistic and being predominantly worried/pessimistic
 - **Asset price bubbles** are one of the most conspicuous and destructive manifestations of expectations exercises

Why are market-capitalist economies inherently unstable?

- Capitalism requires banks, credit and lending to enable investment and growth
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These essential elements:

Banks, Credit and Lending

**Specialization, Trade
and Interdependency**

Expectations Exercises

mean that capitalist economies
everywhere, at all times,
always naturally alternate
between **boom and bust**

Capitalist economies are
not ever oriented toward
sustained, stable growth

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Expectations exercises are absolutely everywhere, throughout market-capitalist activity



When will demand be sufficient to justify building a new distribution center?



Am I confident enough in my job to go ahead and buy a new car?



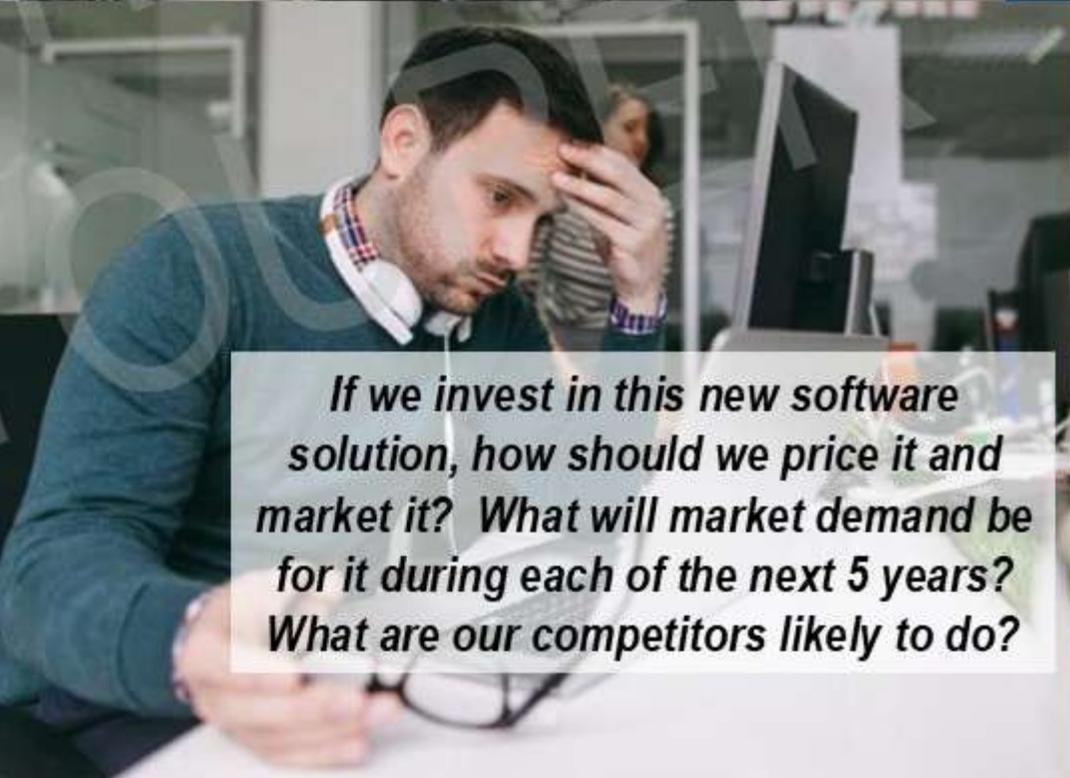
Should I sell my shares in XYZ Corp?



Should I do it now or wait til later this year?



How much should we be offering new hires as a starting salary?



If we invest in this new software solution, how should we price it and market it? What will market demand be for it during each of the next 5 years? What are our competitors likely to do?

Expectations exercises are absolutely everywhere, throughout market-capitalist activity

When will demand be sufficient to justify building a new distribution center?



How much should we be offering new hires as a starting salary?



Consumer confidence posts record plunge

American pessimistic about economy right now, but hopeful for recovery soon



Zillow's housing market projection will fall 60%, prices will dip 2-3%

BY TAYLOR SOPER on May 4, 2020 at 7:13 pm

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Dow rallies more than 300 points on hopes of economy reopening

PUBLISHED MON, MAY 4 2020 6:05 PM EDT | UPDATED 42 MIN AGO

Fred Imbert @FOIMBERT | Yun Li @YUNLI630



If we invest in this new software solution, how should we price it and market it? What will market demand be for it during each of the next 5 years? What are our competitors likely to do?

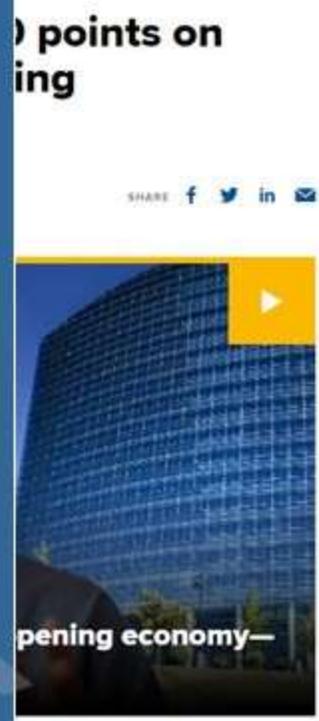
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Expectations exercises cause every economic participant to speculate extensively about the behavior of other participants – both their current and their future behavior

Expectation exercises also create **feedback loops around asset prices** – a massive driver of instability in the markets and the economy

asset
accounting: something of value that is owned
economics: something of value that is acquired both for use and also in the expectation of selling it later, potentially at a profit



Ex
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Expectation exercises also create **feedback loops around asset prices** – a massive driver of instability in the markets and the economy

- Asset price changes are **pro-cyclical**: price rises tend to **encourage people to spend more and save less** [the wealth effect on consumption], which drives immediate incremental business revenues and profits, **fueling further price rises**; while price drops do the opposite
- Asset price changes are **pro-cyclical in another way**: price rises tend to **cause businesses to increase investment**, which drives immediate incremental revenues and profits for other businesses, **fueling further price rises**; while price drops do the opposite
- Asset price changes are **pro-cyclical for one other overwhelmingly important reason**: price rises tend to **encourage banks to increase credit and lending, and borrowers to increase debt, thereby increasing overall leverage in the economy, which tends to fuel further price rises...**; while price drops do the opposite: they **increase loan defaults and bankruptcies, cause banks to reduce new lending, and cause borrowers to reduce their inclination to add debt – all of which fuels further price drops**

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Expectation exercises also create **feedback loops around asset prices** – a massive driver of instability in the markets and the economy

- Asset price changes are **pro-cyclical**: price rises tend to encourage people to spend immediately while price falls cause people to save
- Asset price rises cause **businesses** to expand and profits to rise while price falls cause businesses to contract and profits to fall
- Asset price falls cause **businesses** to contract and profits to fall while price rises cause businesses to expand and profits to rise

Capitalist economies everywhere, at all times, always naturally alternate between **boom and bust**

Capitalist economies are **not ever** oriented toward sustained, stable growth

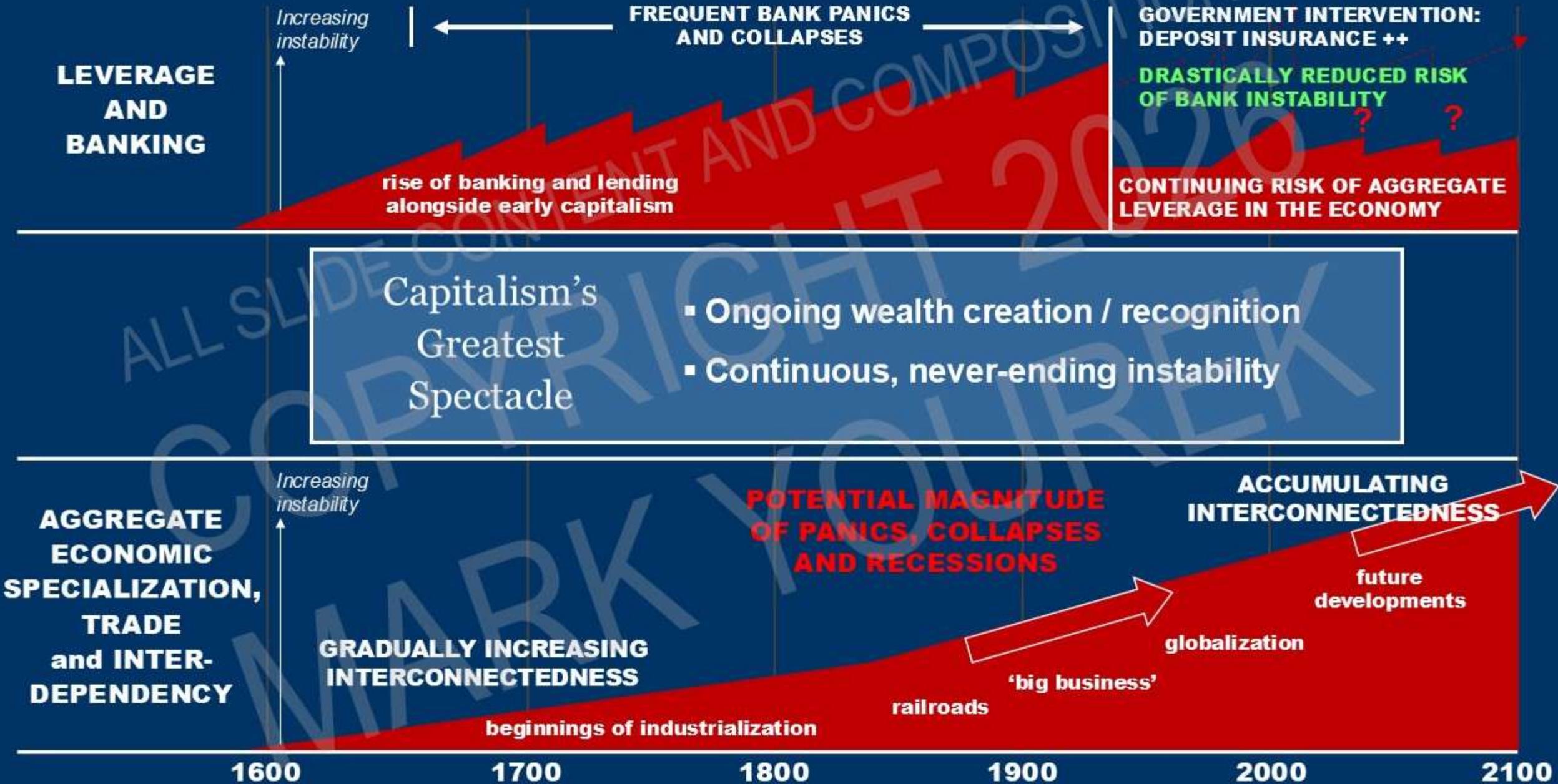
price rises; cause revenues important finding, in the bankruptcies, their

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Capitalism's Accumulating Instability



Time to talk
about capitalism's
premier showcase
of instability

Efficient market theory:

Market prices reflect all known, relevant information

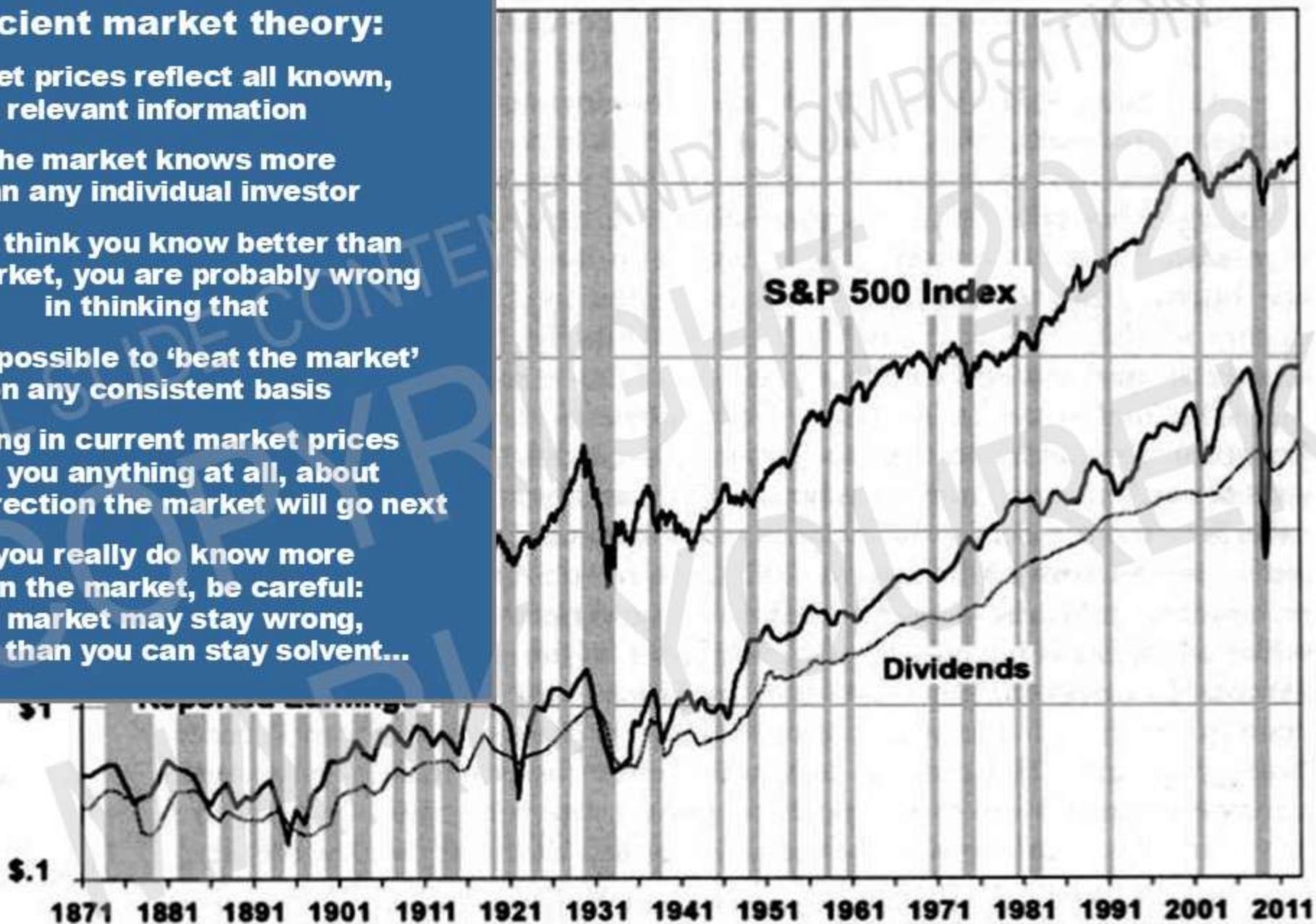
The market knows more than any individual investor

If you think you know better than the market, you are probably wrong in thinking that

It is impossible to 'beat the market' on any consistent basis

Nothing in current market prices tells you anything at all, about which direction the market will go next

If you really do know more than the market, be careful: the market may stay wrong, longer than you can stay solvent...



Capitalism's wonderful world of investing:

the infinite hall of mirrors created by **expectations exercises**

*Investor X studies the company
he's thinking of buying stock in*

Its business model

**Its strategy, and its products and services
The nature of its customers and their wants**

Its competitors

Its management

Prospects for changes to all these elements in the future

*He develops his best guess at the value of the stock,
based on all these 'fundamentals'*

*Then he checks the current market price, and notes
the difference between it and his own estimate of value*

*Then he asks himself, 'How much might others know,
better than I do? Or do I know better?'*

*Then he thinks about the direction the market price
has been trending, and guesses at what people
might be willing to pay for it in the future*

*He elects to either invest or not invest,
at the current market price*

*The price shifts continuously, in reaction to millions
of individual investors making these same judgments –
and to them watching each other make these judgments*

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Robert Shiller's thought experiment:

A share of stock can be viewed as a very simple cash flow model: If you buy just to hold, *today's stock price should equal the present value of all expected future dividends* – period

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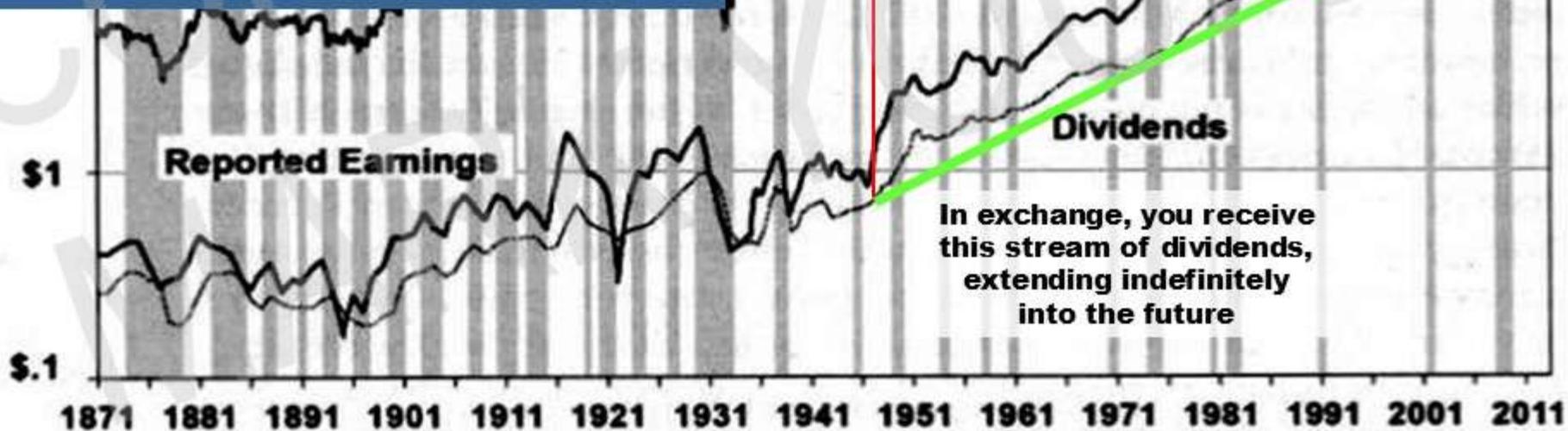
Stock Prices, Earnings, Dividends, and Recessions 1871–2012

\$10,000

Robert Shiller's thought experiment:

Theoretically, the price of a share of stock today should equal the present value of the perpetually-increasing stream of dividends you expect to receive, in exchange for the money you hand over today, to purchase the stock

There is a simple formula used in finance, to calculate the value of a **growing perpetuity** like this



Capitalism's wonderful world of investing:

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A share of stock can be viewed as a very simple cash flow model: If you buy just to *hold*, *today's stock price should equal the present value of all expected future dividends – period*

1. How much did a share in the stock market pay in dividends over the past year?

example: **VTSMX \$1.33**

Vanguard
Total Stock Market Index



2. What did a comparable share pay 30 years ago?

(using constant dollars)

3. Assume dividends will keep growing at the same rate in the future, on average. Calculate what a share should be worth

(Using the formula for growing perpetuities, and using a discount rate of 7.6%, the average real rate of return of the stock market over the past 150 years)

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One share of VTSMX
should be worth
\$38.00
today



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If everyone in the investing community agreed to approach stock-market investing in this simple, straightforward way:

If everyone agreed that future investment returns could be counted on to turn out, on average, exactly like the past...

If everyone agreed on the base period we would all use (say, 30 years) ...

And if everyone agreed to refrain from reacting to any other news, and to refrain from all *expectations exercises*...

Then the stock market would be very stable, with the S&P 500 adjusting only very slightly each day in reaction to individual companies, as they each announce their latest quarterly dividend

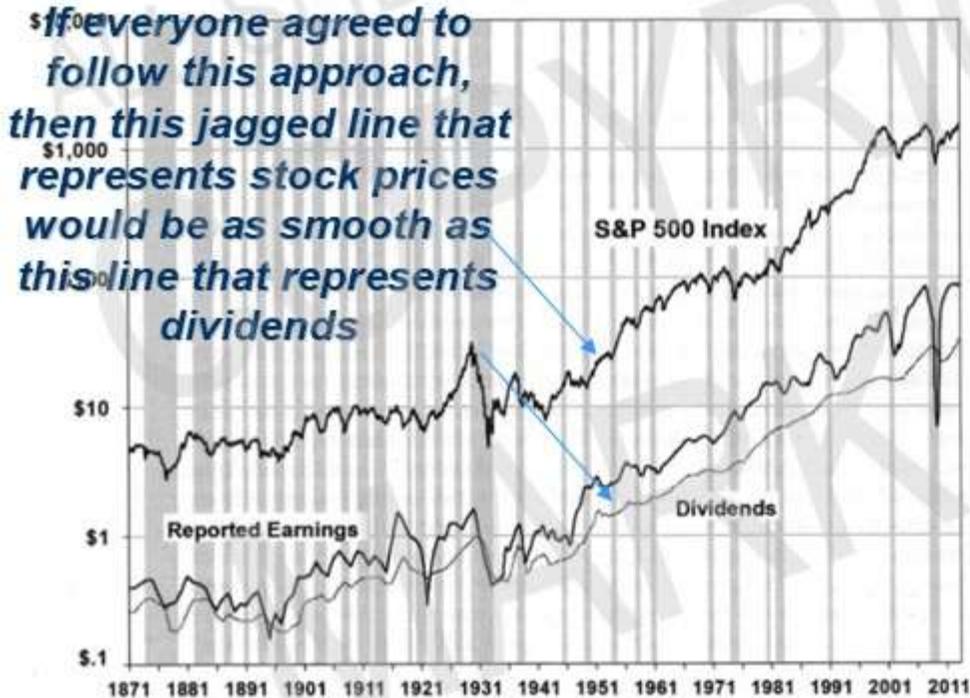
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FIGURE 15-1

Stock Prices, Earnings, Dividends, and Recessions 1871–2012



(Using the formula for growing perpetuities, and using a discount rate of 10.7%, the average real rate of return of the stock market over the past 150 years)

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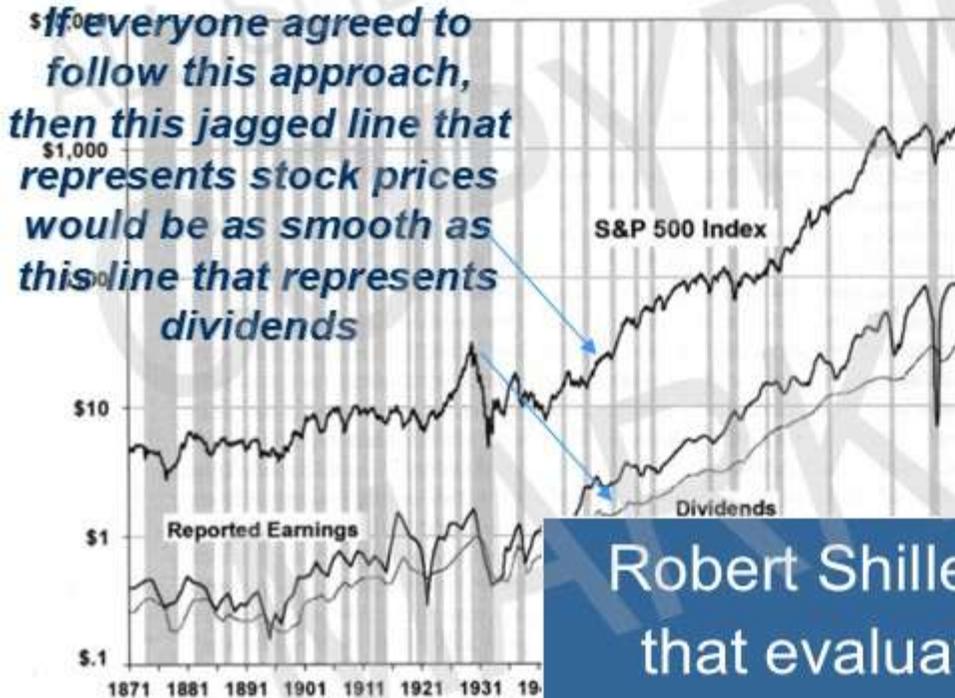
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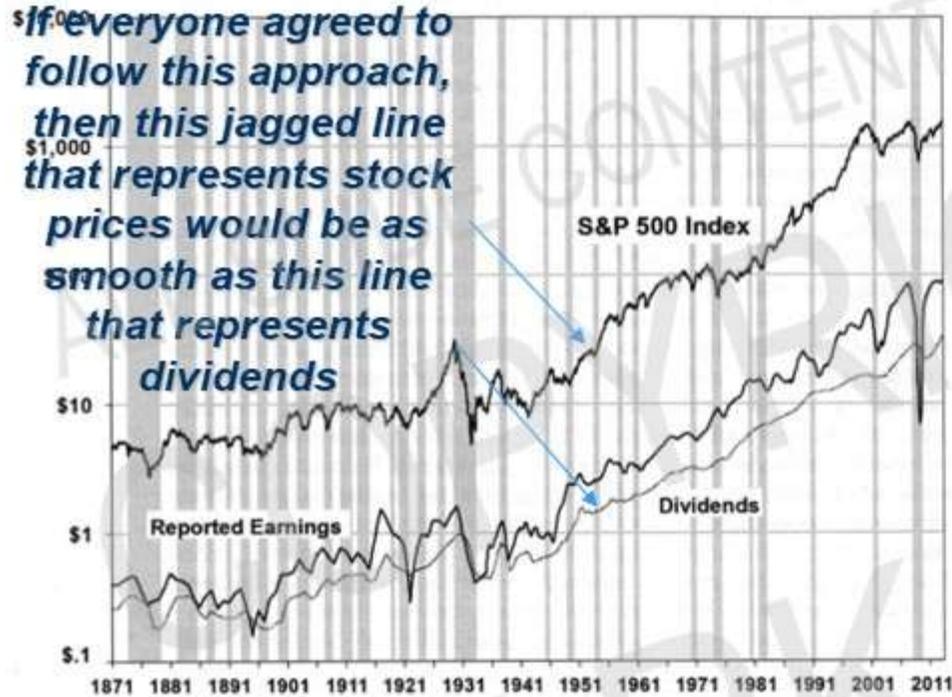
Robert Shiller did a famous study, that evaluated the stock market using exactly this approach...

... rising very slightly each day
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Capitalism's wonderful world of investing: the infinite hall of mirrors created by *expectations exercises*

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Robert Shiller's 'Dividend Projector' Stock Valuator

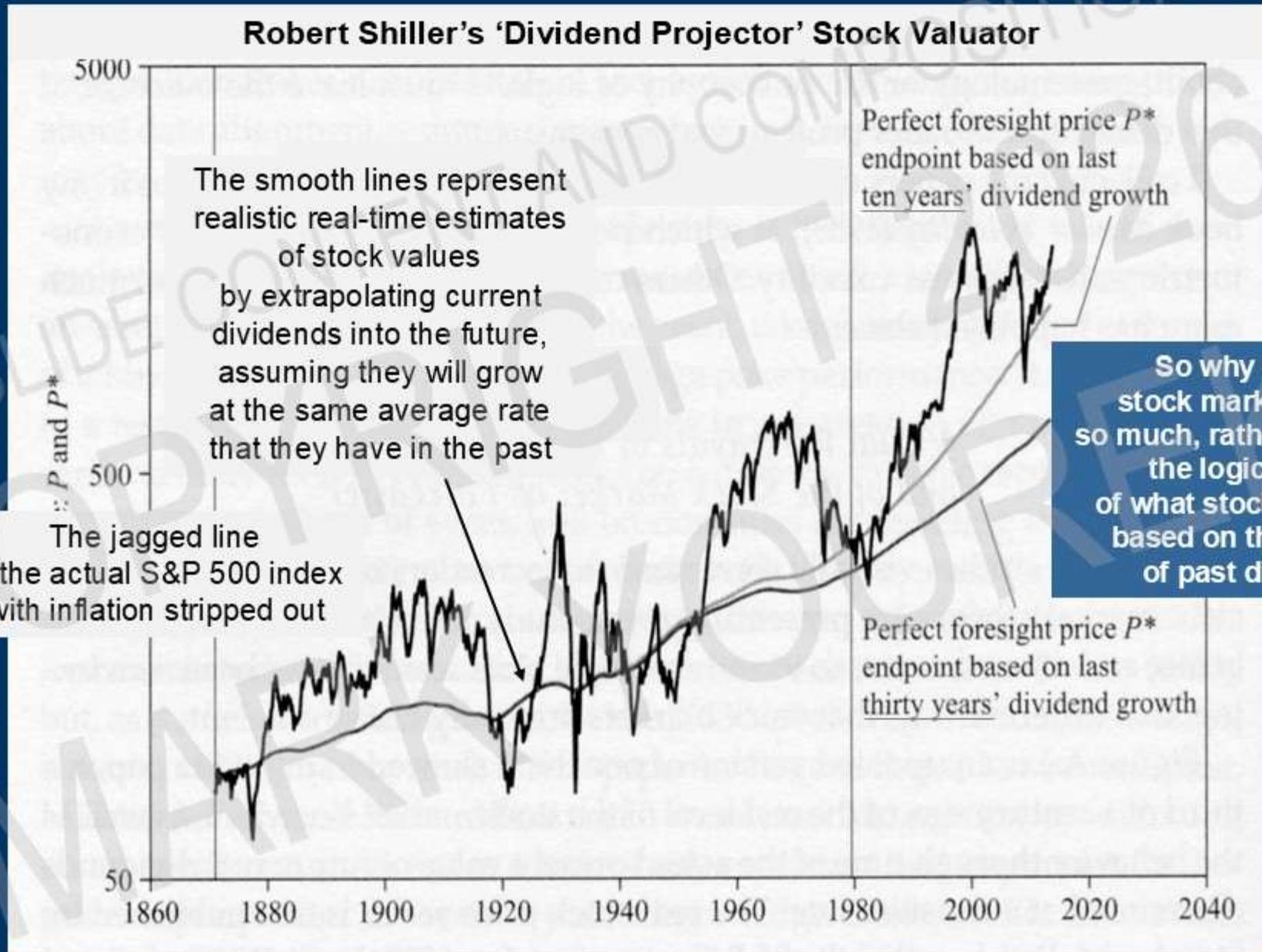


Figure 15-1
Real S&P Composite Stock Price with Constant Discount Rate Accruing to the I

The smooth lines represent realistic real-time estimates of stock values by extrapolating current dividends into the future, assuming they will grow at the same average rate that they have in the past

*If, at a given moment, you look at the value of a stock and project perpetually into the future that the dividend growth rate will continue to be exactly the average of the actual dividend growth rate as experienced over the last 30 years [or 10 years], the result is the stock value shown as line P^**

Capitalism's wonderful world of investing: the infinite hall of mirrors created by *expectations exercises*

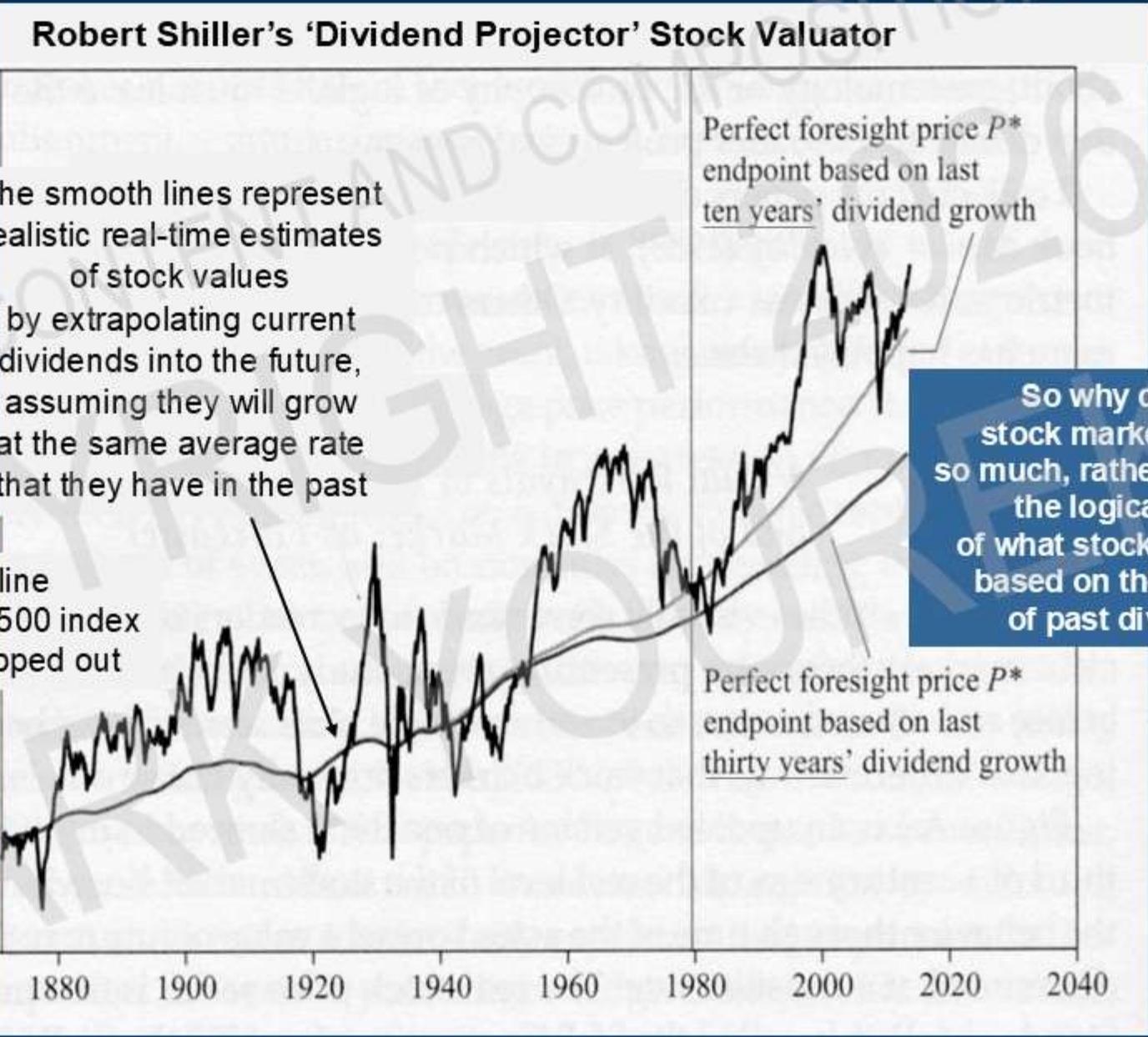


**Actual stock prices are shown in constant dollars, discounted by the CPI. The P^* line is projected using a discount rate of 7.6%, the historical average annual real stock market return since 1871*

Capitalism's wonderful world of investing: the infinite hall of mirrors created by **expectations exercises**

Real-world stock markets fluctuate widely, because investors are constantly engaged in **expectations exercises**, speculating on what other people might be willing to pay for a stock, in the future...

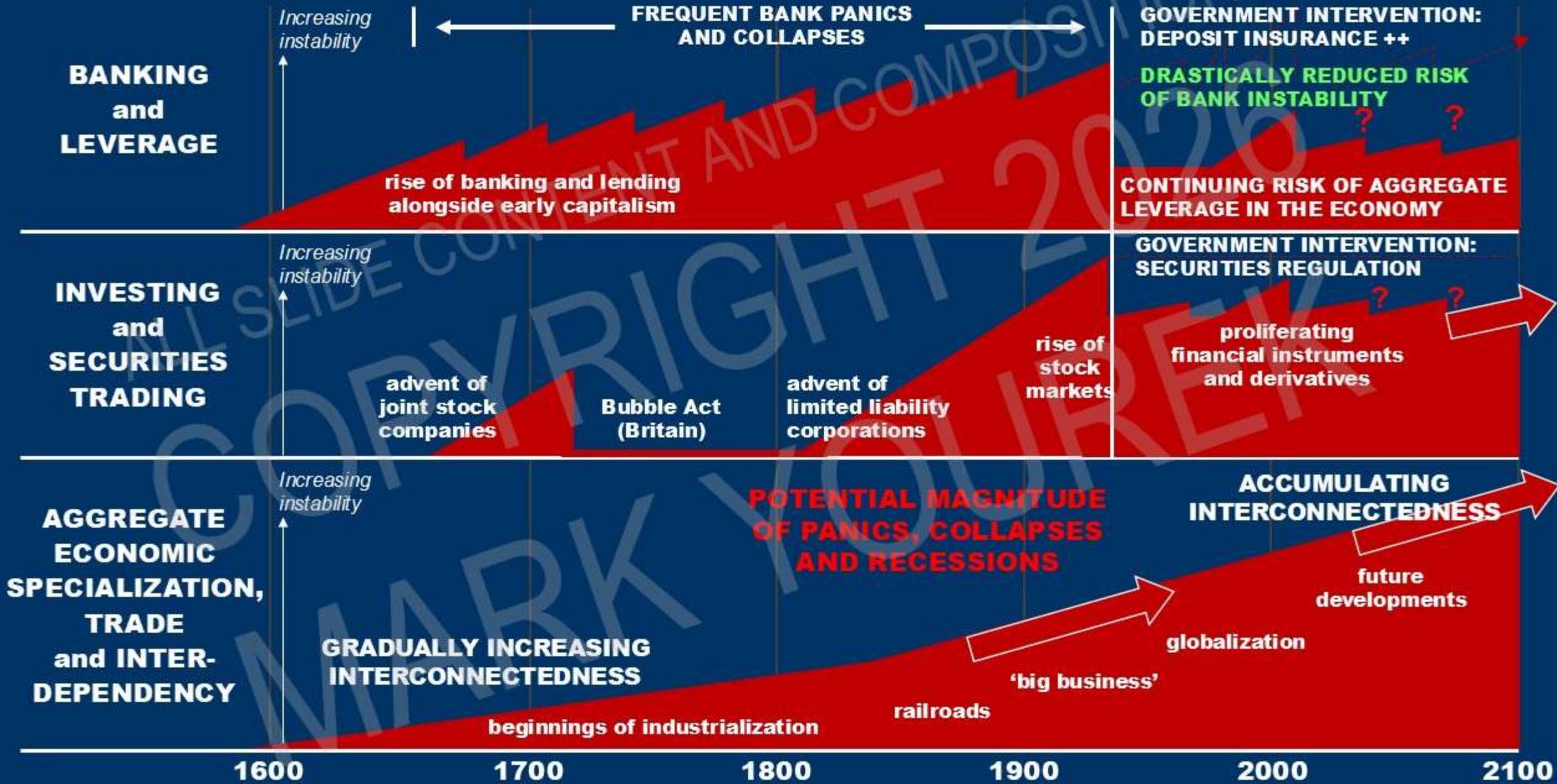
And – investors never just assume that the future will be like the past. They are always thinking about how the future might be different, including the possibility of 'black swan' events...



So why does the actual stock market bounce around so much, rather than just following the logical extrapolation of what stocks should be worth, based on the established rate of past dividend growth?

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Capitalism's Accumulating Instability



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*The price shifts continuously, in reaction to millions
of individual investors making these same judgments –
and to them watching each other make these judgments*

Capitalism's wonderful world of investing:

the infinite hall of mirrors created by **expectations exercises**

*Investor X studies the company
he's thinking of buying stock in*



A huge amount of stock-market buying and selling happens, not because people are doing any kind of reasoned analysis like this, but instead because people are watching prices move, spotting what they think are **trends**, and then guessing at whether the stock is going to keep heading in the same direction, or not

Its business model

Its strategy, and its products and services
The nature of its customers and their wants

Its competitors

Its management

Prospects for changes to all these elements in the future

*He develops his best guess at the value of the stock,
based on all these 'fundamentals'*

*Then he checks the current market price, and notes the
difference between it and his own estimate of value*

*Then he asks himself, 'How much might others know,
better than I do? Or do I know better?'*

*Then he thinks about the direction the market price
has been trending, and guesses at what people
might be willing to pay for it in the future*

*He elects to either invest or not invest,
at the current market price*

*The price shifts continuously, in reaction to millions
of individual investors making these same judgments –
and to them watching each other make these judgments*

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Expectations exercises cause every economic participant to speculate extensively about the behavior of other participants – both their current and their future behavior

Expectation exercises also create feedback loops around asset prices – a massive driver of instability in the markets and the economy:

- Asset price changes are **pro-cyclical**: price rises tend to **encourage people to spend more and save less** [the wealth effect on consumption], which drives immediate incremental business revenues and profits, **fueling further price rises**; while price drops do the opposite
- Asset price changes are **pro-cyclical in another way**: price rises tend to **cause businesses to increase investment**, which drives immediate incremental revenues and profits for other businesses, **fueling further price rises**; while price drops do the opposite
- Asset price changes are **pro-cyclical for one other overwhelmingly important reason**: price rises tend to **encourage banks to increase credit and lending, and borrowers to increase debt, thereby increasing overall leverage in the economy, which tends to fuel further price rises...**; while price drops do the opposite: they **increase loan defaults and bankruptcies, cause banks to reduce new lending, and cause borrowers to reduce their inclination to add debt – all of which fuels further price drops**

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Expectations exercises cause every economic participant to speculate extensively about the behavior of other participants – both their current and their future behavior

Expectation exercises also create **feedback loops around asset prices** – a massive driver of instability in the markets and the economy:

- Asset price changes are **pro-cyclical**: **price rises** tend to encourage people to speculate, while price drops tend to discourage speculation
- Asset price rises encourage business investment and production, while price drops discourage them
- Asset price drops increase loan defaults and bankruptcies, cause banks to reduce new lending, and cause borrowers to reduce their inclination to add debt – all of which fuels further price drops

The most fundamental feedback loop around asset prices:

Generally, when people see the price of an asset going up, they expect it to keep going up

Generally, when people see the price of an asset going down, they expect it to keep going down

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Capitalist economies everywhere, at all times, are always bipolar:
they are always alternating back and forth, between **boom and bust**

Capitalist economies are not ever oriented toward sustained, stable growth

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Compare with: the economies of medieval Europe



MANIA

Compare with: the economies of medieval Europe



Very low, static levels of technology

Every person is born into a lifelong station that comes with predefined economic privileges and obligations

Wealth is produced and distributed based on those privileges and obligations, not by market forces

70-90% of population is employed in agriculture

Other economic activities include construction, hunting and fishing, basic manufacturing, simple personal services

Specialization, trade and interdependency exist mainly just within individual fiefdoms; minimal travel between

Markets play a peripheral role in the economy; **assets are generally not bought or sold**

Minimal to nonexistent **banking, credit and lending**

Minimal to nonexistent **expectations exercises** with regard to economic activity

Compare with: the economies of medieval Europe

Virtually zero *endogenously-driven* fluctuations in the 'economy' –
no booms, no busts

Variations in economic output from year to year are driven by *exogenous factors*:
weather, blights and plagues, war

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The transition to capitalism required three fundamental changes:

- The end of feudalism / manorialism, replaced by free markets (including labor markets), banking, and joint stock companies
- Establishment of 'supportive,' less-extractive nation-state-scale government, which unified larger regions and facilitated specialization and trade within (and between) these much larger spaces
- The advent of science: experimental, evidence-based approaches to investigating reality, released from traditional reliance on faith and on deference to authority

in Europe:

1500s-1800s

1500s-1800s

1600s-1800s

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Beginning in the 1700s, people start to notice 'markets' and 'the economy' as a distinct thing – a thing that can organize productive activities in remarkably efficient ways, and that also seems to have peculiar and unpredictable **mood swings**...

simple personal services

with regard to economic activity

Very

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Capitalism's wonderful world of investing: the infinite hall of mirrors created by *expectations exercises*

The effects of expectations exercises are absolutely pervasive, and they contribute enormously to the instability of capitalism

- Stock markets and other asset markets are inherently always about **fundamental valuation** and also always about **expectations exercises**, simultaneously
 - *But, asset prices can never be dissected conclusively, so as to confidently ascertain the weighting of fundamentals vs expectations exercises*
- Expectations exercises as they manifest in the functioning of asset markets involve elements of **reflexivity** – people's perceptions being influenced by the example of other people's perceptions, as suggested by current market prices
 - *Reflexivity tends to foster feedback loops that drive asset pricing instability, which itself can be a major driver of the instability of capitalism*
- **Asset price bubbles** are the most dangerous and extreme phenomena produced by expectations exercises



Capitalism's wonderful world of investing: the infinite hall of mirrors created by *expectations exercises*

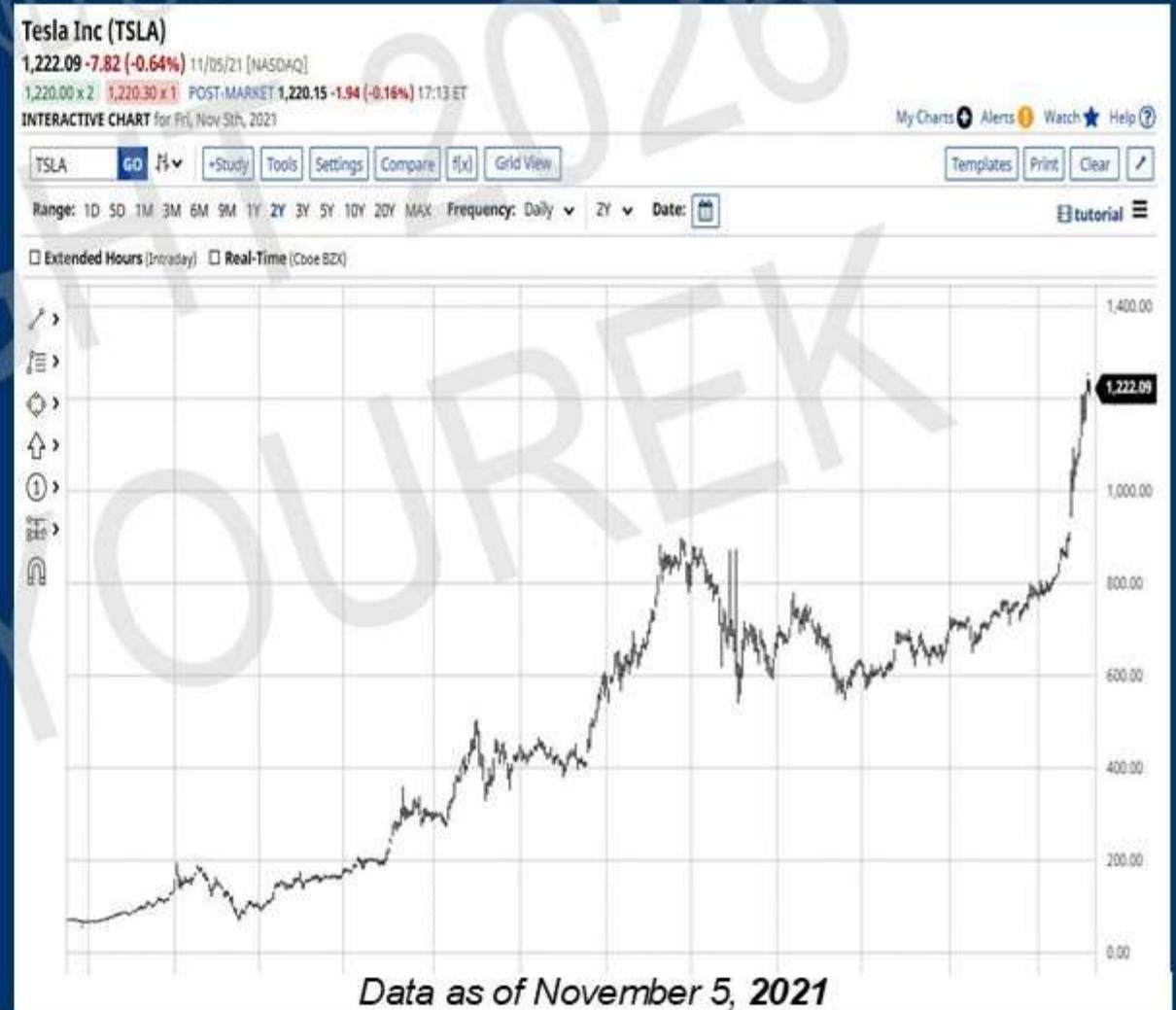
asset price bubble

An asset price bubble is an unsustainable rise in an asset's market price, well in excess of its fundamental value, driven by speculation and the belief that prices will keep rising, eventually leading to a sharp, often devastating crash, when confidence collapses

vs *expectations exercises*

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Rank	Name	Market Cap	Price	Today	Price (30 days)	Country
1	 Tesla TSLA	500,000 units sold in 2020 \$1.227 T	\$1,222	-0.64%		us USA
2	 Toyota TM	9,500,000 units sold in 2020 \$250.63 B	\$179.28	-1.21%		JP Japan
3	 Volkswagen VOW3.DE	\$149.05 B	\$222.97	2.71%		DE Germany
4	 BYD 002594.SZ	\$140.32 B	\$49.05	-3.38%		CN China
5	 Daimler DAL.DE	\$108.31 B	\$101.25	0.68%		DE Germany
6	 General Motors GM	\$84.96 B	\$58.52	-0.20%		us USA
7	 Ford F	\$75.72 B	\$19.29	-0.67%		us USA
8	 Great Wall Motors 601633.SS	\$73.84 B	\$9.82	-0.27%		CN China
9	 NIO NIO	\$69.29 B	\$42.29	-1.92%		CN China
10	 BMW BMW.DE	\$69.08 B	\$106.18	2.07%		DE Germany
11	 Lucid Motors LCID	\$66.88 B	\$41.80	12.61%		us USA
12	 Ferrari RACE	\$64.75 B	\$262.52	2.02%		IT Italy
13	 Stellantis STLA	\$64.37 B	\$20.43	0.29%		NL Netherlands

Data as of November 5, 2021

Capitalism's wonderful world of investing: the infinite hall of mirrors created by *expectations exercises*

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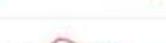
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2	 Toyota TM	\$297.07 B	\$226.86	- 0.09%		Japan
3	 BYD BYD	\$121.77 B	\$13.08	- 1.54%		China
4	 Xiaomi MI	\$117.64 B	\$4.54	- 2.16%		China
5	 Hyundai HMC	\$90.04 B	\$345.93	- 5.30%		S. Korea
6	 General Motors GM	\$78.36 B	\$84.00	- 2.62%		USA
7	 BMW BMW	\$63.31 B	\$103.87	- 0.34%		Germany
8	 Volkswagen VOW	\$62.09 B	\$121.97	- 0.87%		Germany
9	 Mercedes-Benz MBG	\$60.75 B	\$68.67	- 0.86%		Germany
10	 Ferrari RACE	\$59.01 B	\$333.17	- 1.56%		Italy
11	 Ford F	\$55.30 B	\$13.88	- 0.86%		USA
12	 Maruti Suzuki India MARUTI	\$50.06 B	\$159.23	- 0.67%		India
13	 Mahindra & Mahindra M&M	\$44.93 B	\$37.43	- 1.40%		India

But, in the three years since that 'bubble' deflated, Tesla has soared back up to even greater heights !

Data as of January 30, 2026

Capitalism's wonderful world of investing: the infinite hall of mirrors created by *expectations exercises*

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vs *expectations exercises*

- Expectations in the form of reflection by the economy as suggested by the economy
- Asset price bubbles are inevitable, in capitalist market economies?

Question:

Are asset price bubbles rational?

Are asset price bubbles inevitable, in capitalist market economies?

But, in the three years since that 'bubble' deflated, Tesla has soared back up to even greater heights !

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Data as of January 30, 2026

Asset price bubbles as rational and inevitable phenomena in capitalist economies
Richard Posner, 2009

It is not irrational, though often thought to be, to allow oneself to be influenced by what other people are doing.

You may doubt that the price of some tradable asset will continue to rise, but the fact that it is rising means that other people disagree with you. They may know something you don't. Often they do.

Asset price bubbles as rational and inevitable phenomena in capitalist economies
Richard Posner, 2009

It is risky but not irrational to follow the herd.
(It can also be risky to abandon the safety
of the herd – ask any wildebeest.)

That is why buying a stock or other asset
because others are buying it and thus
forcing up its price, is not irrational.

Asset price bubbles as rational and inevitable phenomena in capitalist economies
Richard Posner, 2009

An asset price bubble sounds like something irrational. But of course one cannot *know* that one is in a bubble, until after it has burst.

And actually, bubbles often tend to be *rational responses to uncertainty about the possible effects of a major innovation.*

Asset price bubbles as rational and inevitable phenomena in capitalist economies
Richard Posner, 2009

In the 1920s, with the rapid growth in productivity in manufacturing, and the development of new methods of credit and borrowing, there was reason to believe that the nation had entered a long era of rapid, sustained economic growth.

Suppose investors were properly sober – they thought the nation *might* be at such a threshold, not [certain] that it *was*.

Asset price bubbles as rational and inevitable phenomena in capitalist economies
Richard Posner, 2009

Such uncertainty still increases the expected value of a company's stock, particularly a new company, because the sky is the limit (think Google), while your potential loss is cut off at zero. So go for it – reach for the stars.

The same thing was true in the 1990s, with the Internet revolution, widely heralded as the beginning of a new era – and again, there was a stock bubble.

Asset price bubbles as rational and inevitable phenomena in capitalist economies
Richard Posner, 2009

And again in the 2000s, there seemed to be a new era in finance, as a result of the widespread securitization of mortgage debt, and a global capital surplus that was expected to keep interest rates low indefinitely – the Federal Reserve having been thought to have discovered how to keep interest rates low without spawning inflation.

The housing bubble, and the credit bubble, were responses to the promise of these innovations.

Asset price bubbles as rational and inevitable phenomena in capitalist economies
Richard Posner, 2009

In each era, a bubble began as a sensible bet on a bright though uncertain future; it continued to expand, even as fears began to be voiced that it might indeed be a bubble.

And it burst when the markets realized that the expectations for a new era had once again been overestimated, or perhaps perceived prematurely.

At no stage need irrationality be posited, to explain what happened.

2020

A FINANCIAL TIMES BEST BOOK OF THE YEAR

William Quinn
John D. Turner

BOOM AND BUST

A Global History of
Financial Bubbles



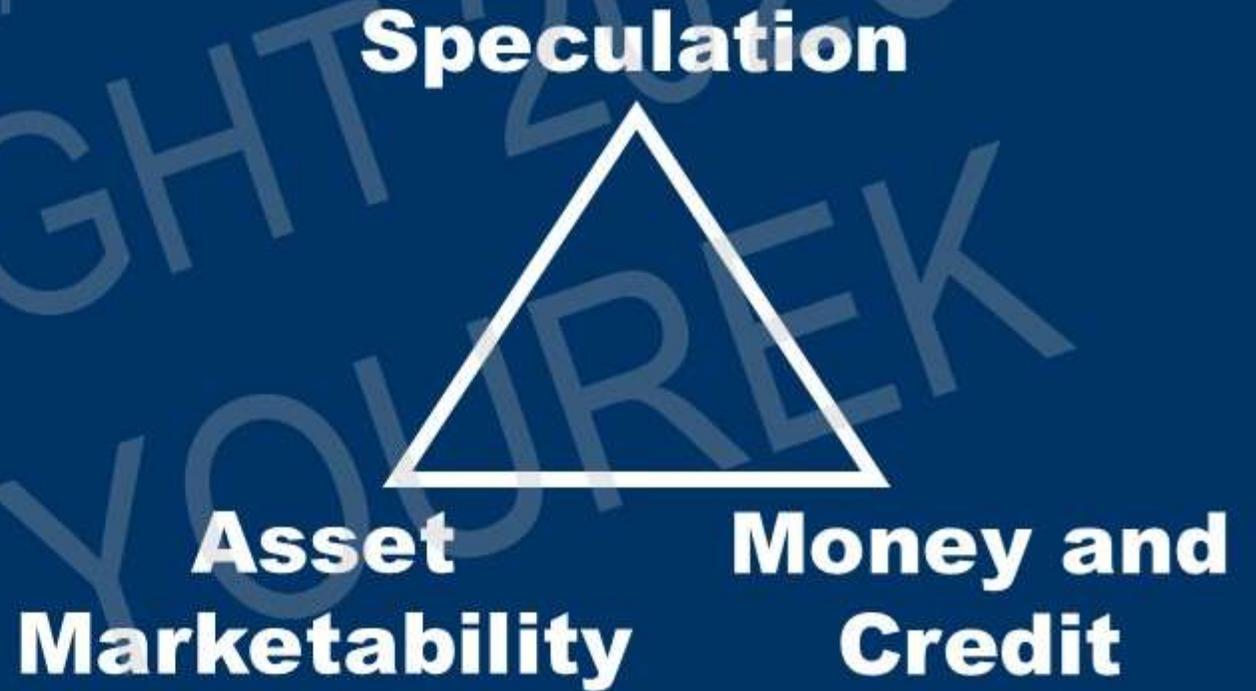
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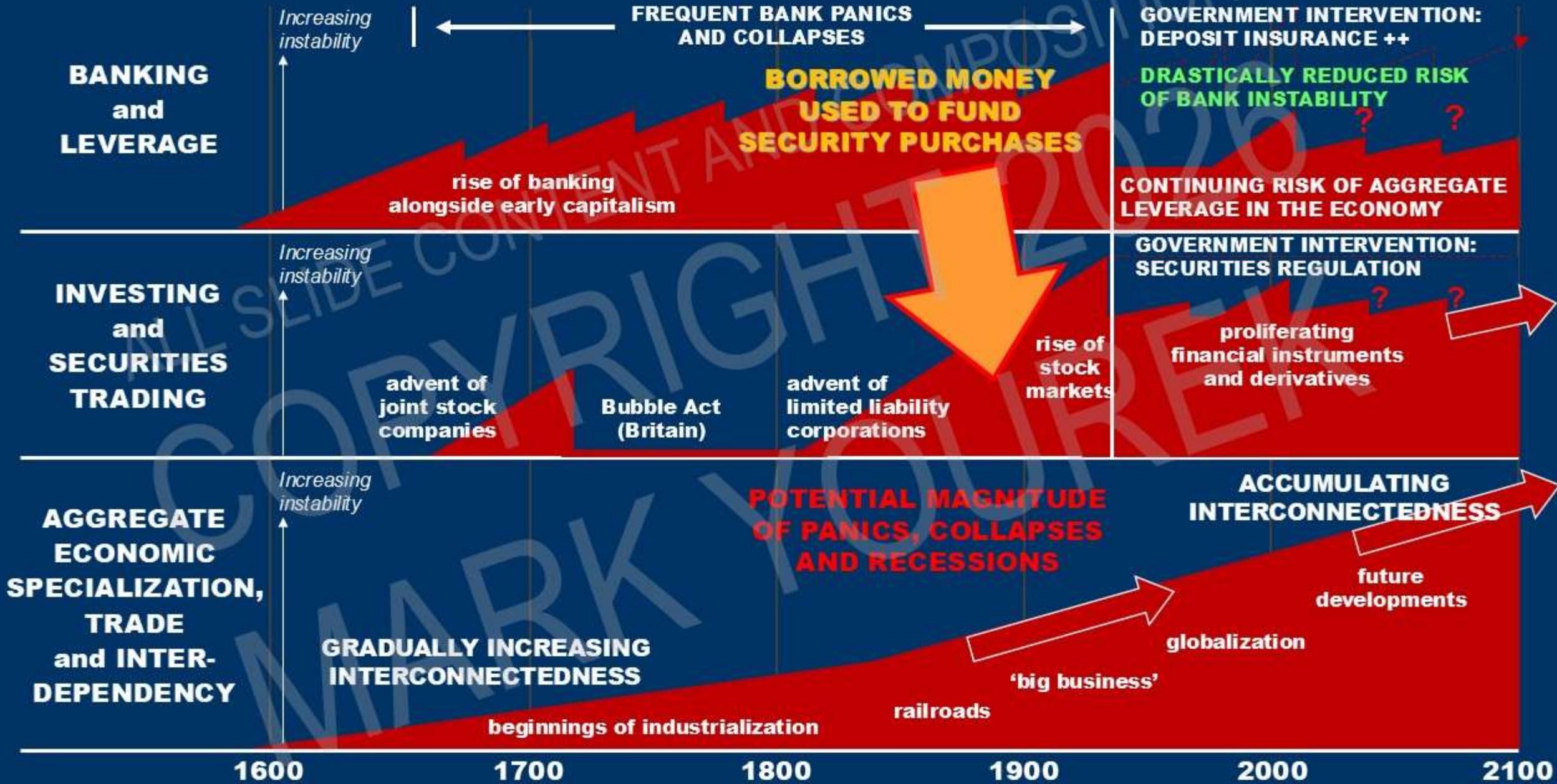
The Bubble Triangle:
'necessary conditions'



Asset price bubbles are enormously destructive, and inevitable phenomena in market-capitalist economies

- Asset price bubbles are often accompanied by, and intensified by, the use of **credit and leverage**, which fuels the ongoing expansion of the price bubble
- During the period when an asset price bubble is in progress, **capitalism tends to reward people for behaving irresponsibly**, and during price bubbles that are fed by a simultaneous boom in credit and lending, **capitalism rewards certain types of irresponsible behavior very richly**
- **Credit-fueled asset price bubbles** are, by far, the most **dangerous and destructive economic phenomena produced by capitalism** – and capitalism produces them **inevitably**

Capitalism's Accumulating Instability



Capitalism's Accumulating Instability

The total amount of debt and borrowing that is present in an economy – i.e., *aggregate leverage* – increases the fragility of the economy, with less and less of a trigger needed to set off a panic and collapse

Once a panic and the resulting collapse are triggered, the aggregate amount of **debt and borrowing** magnifies / multiplies the scale of economic destruction

FREQUENT BANK PANICS AND COLLAPSES

BORROWED MONEY USED TO FUND SECURITY PURCHASES

GOVERNMENT INTERVENTION: DEPOSIT INSURANCE ++

DRASTICALLY REDUCED RISK OF BANK INSTABILITY

CONTINUING RISK OF AGGREGATE LEVERAGE IN THE ECONOMY

GOVERNMENT INTERVENTION: SECURITIES REGULATION

proliferating financial instruments and derivatives

rise of stock markets

advent of limited liability corporations

Bubble Act (Britain)

POTENTIAL MAGNITUDE OF PANICS, COLLAPSES AND RECESSIONS

ACCUMULATING INTERCONNECTEDNESS

future developments

globalization

'big business'

railroads

beginnings of industrialization

AGGREGATE ECONOMIC SPECIALIZATION, TRADE and INTER-DEPENDENCY

GRADUALLY INCREASING INTERCONNECTEDNESS

1600

1700

1800

1900

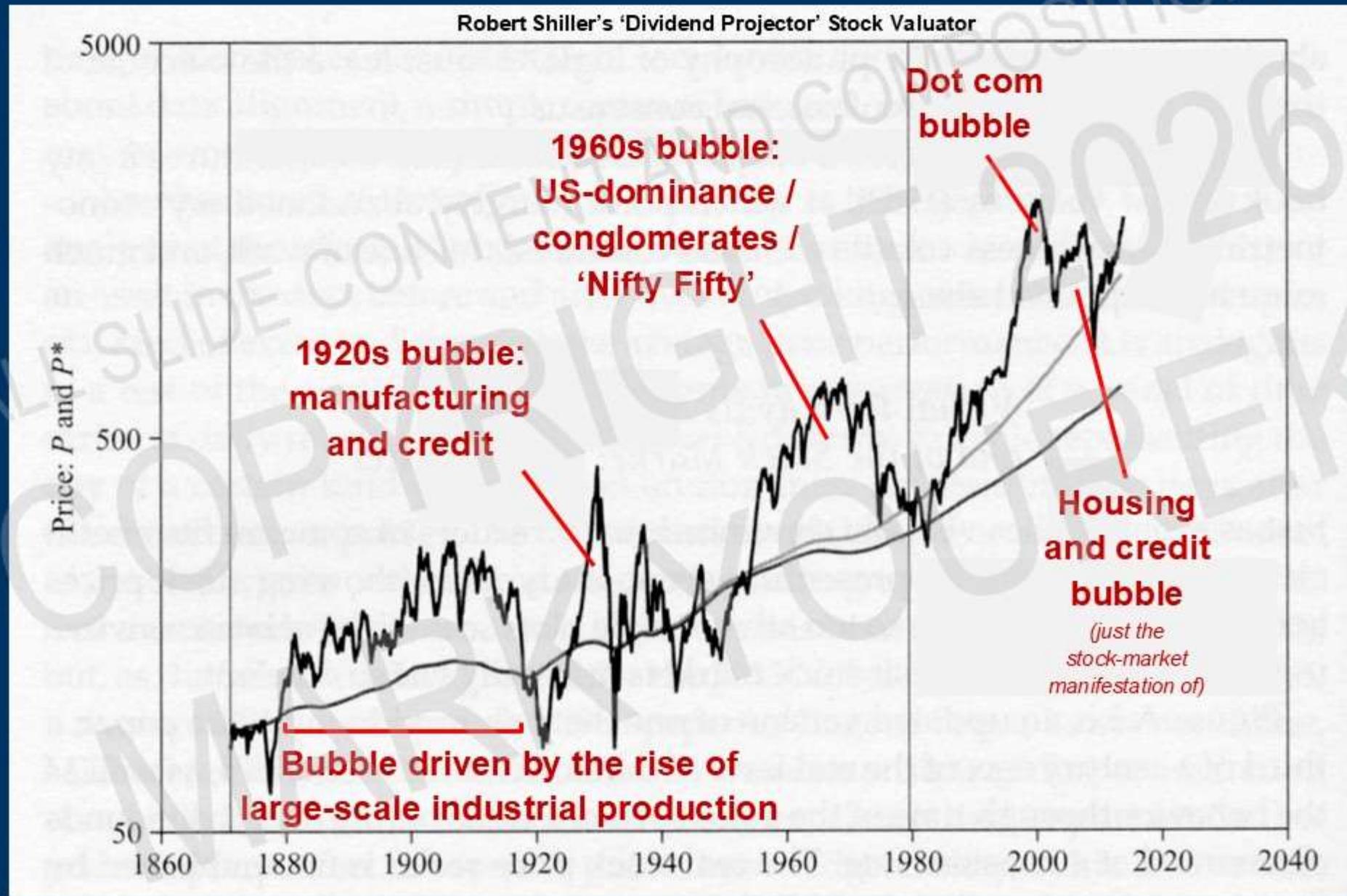
2000

2100

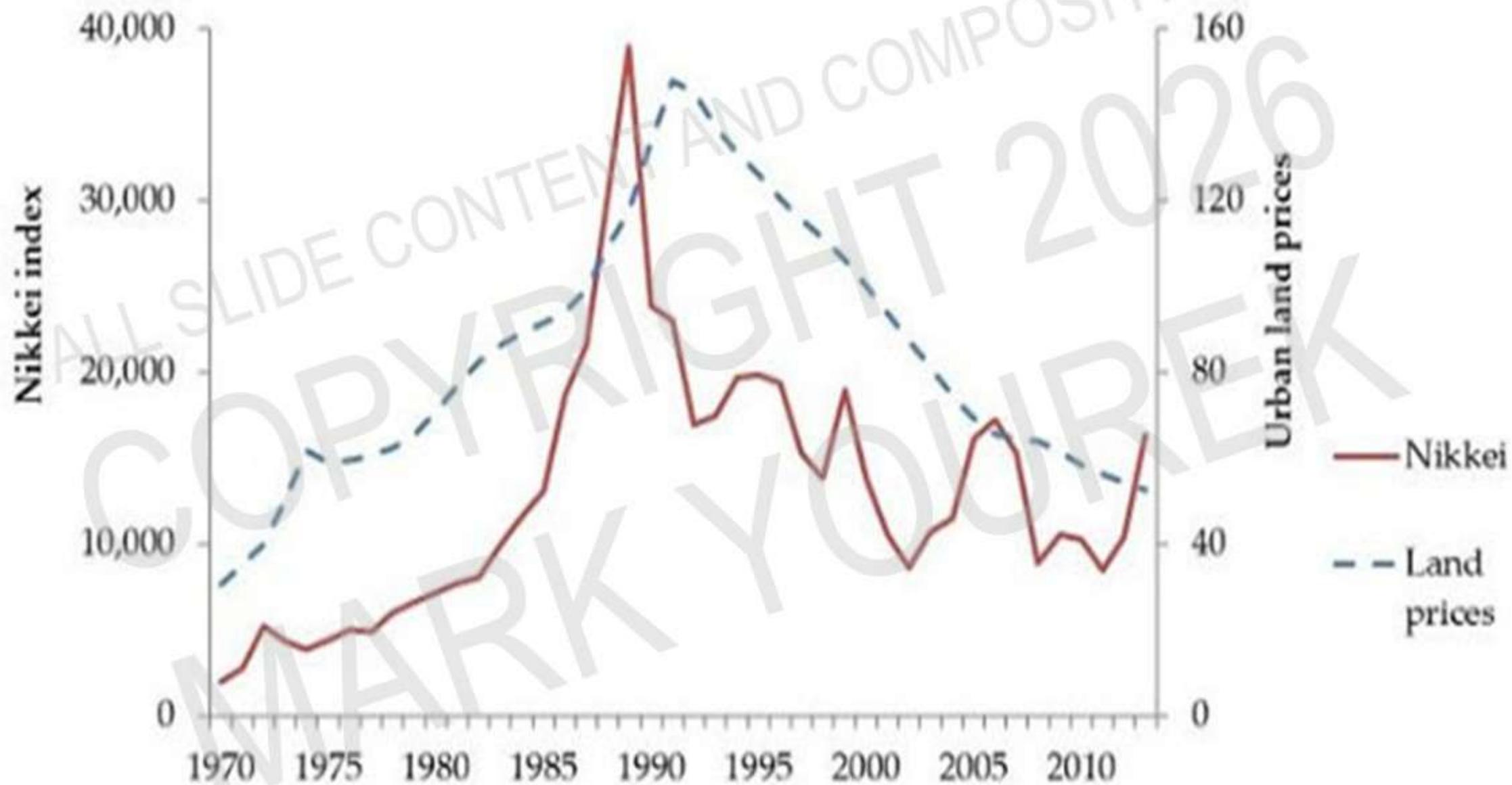
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- The use of **law and government** is essential, to regulate and **limit the use of credit and leverage in an economy**, and to therefore either **prevent** or (thinking more realistically) **limit and mitigate the destruction caused by asset price bubbles**. Effective government regulation of the **banking and financial sector** is therefore **absolutely vital**

Dangerous asset price bubbles happen more often than you might think...



Japan's stock market and real estate bubble of the 1980s





MUST YOU CHEW GUM
WHEN THE BOARD IS DISCUSSING
THE HOUSING BOOM...



**Capitalism,
Government,
Money,
and the
Future of
the World**

*Finding
and Keeping
the Right Balance
in
Market-Capitalist
Democracies*