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

Finding and Keeping the Right Balance in Market-Capitalist Democracies

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THE WALL STREET JOURNAL.

MONDAY, SEPTEMBER 15, 2008 · VOL. CCLII NO. 64

LEHMAN BROTHERS ▼94.4%

Merrill Lynch ▼68.2%

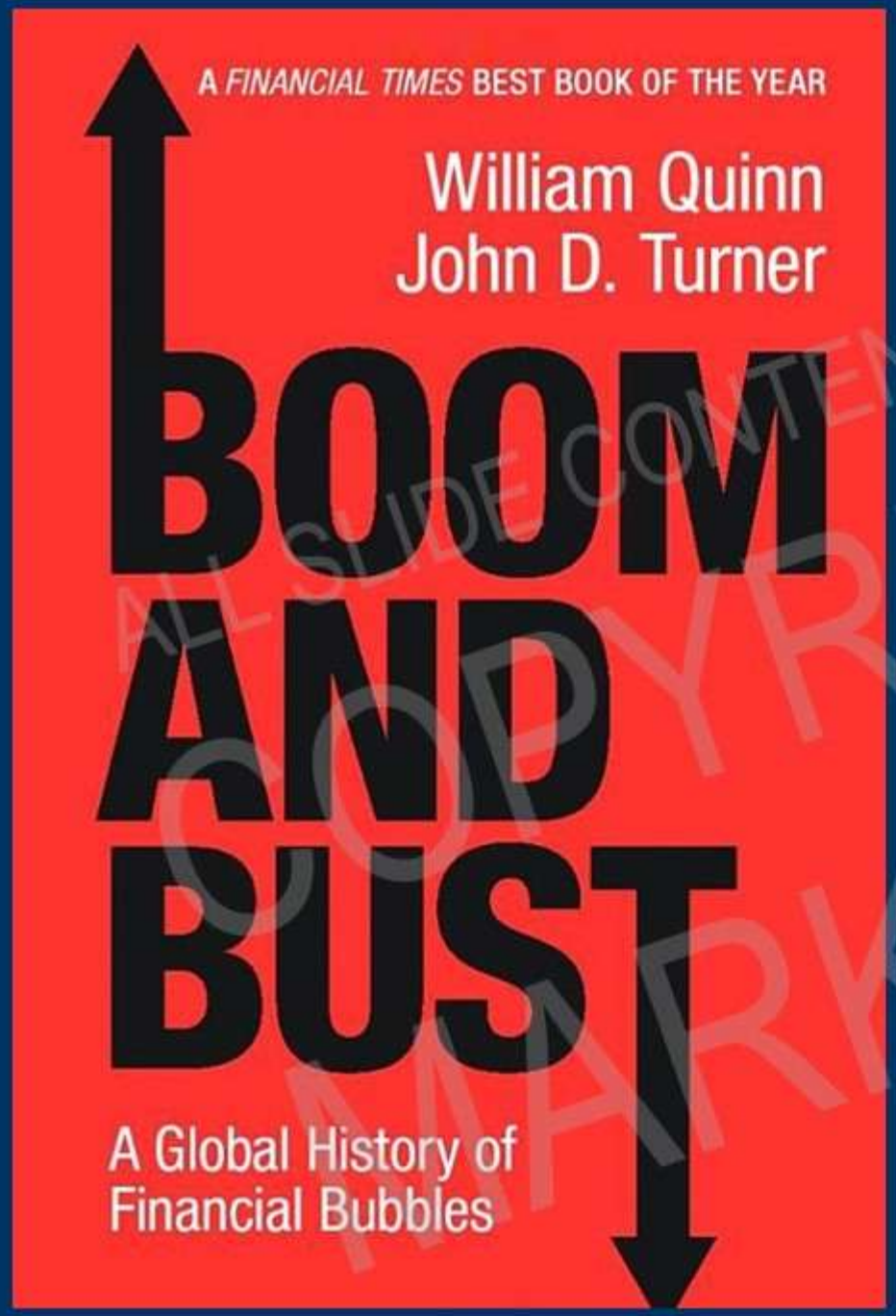
AIG ▼79.2%

Crisis on Wall Street as Lehman Totters, Merrill Is Sold, AIG Seeks to Raise Cash

Fed Will Expand Its Lending Arsenal in a Bid to Calm Markets; Moves Cap a Momentous Weekend for American Finance

A Brief Look at the Economic History of the United States

The Panic of 2008: Why Did It Happen?



The Bubble Triangle:
'necessary conditions'

Why did Lehman Brothers borrow 30X their own capital to buy and hold mortgage securities, including securities containing large quantities of subprime loans?

Why did Merrill Lynch borrow 31X their own capital to buy and hold mortgage securities, including securities containing large quantities of subprime loans?

Why did Bear Stearns borrow 32X their own capital to buy and hold mortgage securities, including securities containing large quantities of subprime loans?

Why did huge numbers of private investors and institutions buy and hold huge quantities of mortgage securities issued during this era, including securities containing large quantities of subprime loans?

Why did AIG (and several other companies) sell credit default swaps covering hundreds of billions of dollars worth of mortgage securities, including securities containing enormous quantities of subprime loans?

Why did the ratings agencies – Standard & Poors and Moody's – rate countless CDOs as having large AAA tranches, when these CDOs were built out of mortgage-security tranches that were themselves all low-rated or unrated, and included securities containing large quantities of subprime loans?

Why did tens of millions of people in the United States
– and nearly a hundred million people around the world –
willingly borrow large sums of money,
to pay conspicuously inflated prices for houses
during the years 2004, 2005, 2006, and 2007 –
quite a few of them taking out mortgages they knew
they didn't have the income to pay back?

EVERYONE was looking to use tons of borrowed money,
in an effort to move themselves several rungs up the ladder of economic success

It's 2004

Kaplan & Yourek LLP

- **Mini-investment partnership**
- **We go in as equal partners, each putting in $2,000,000 in capital**
- **We can borrow $120,000,000 on a rolling daily basis, in the 'repo' market, at 3% interest, so at a cost of $10,000 a day**
- **We can buy these things called mortgage-backed securities, that pay 5% interest. If we buy $124,000,000 of them, that will be $17,222 a day in income**
- **Our profit will therefore be: $17,222 - $10,000 - $413 = $6809 a day**

$1,225,620 apiece per year

What are the risks? What could go wrong?

Some of our lenders in the repo market might reduce our line of credit with them someday, for whatever reason	**We would have to find new lenders, or sell some of our securities and reduce the size of our business**
Some of the mortgages in our securities might default	**The securities are backed by the real estate, as collateral**
House prices might decline, causing defaults and making it hard to sell the houses for enough to cover losses; the market value of our mortgage securities would therefore decline	**There's a company called AIG that will sell you insurance against your mortgage securities going down in value, and this insurance is a good deal: 0.12% per year**

There are three aspects in which this story is not entirely realistic

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In real life, you couldn't start a business like this, and then immediately start borrowing in the repo markets – you had to be an established company, like a major corporation, with a good credit rating of long standing

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Instead, we would have been feeding much of the profits back in, continuously ***increasing our stake***, and continuously ***expanding our leverage***

In real life, a business like ours would not have been paying out all these profits to its owners

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Starting in the summer of 2004, the Fed gradually began raising interest rates

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Each **0.25%** increase would have reduced our annual profits by around **$150,000** apiece

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Backdrop of steadily ***rising housing values*** *feeds confidence*

'Global savings glut'

Backdrop of apparent ***macroeconomic stability*** *feeds confidence*

Innovations in mortgage origination → **Innovations in mortgage securitization**

Let's sum up the details of why the Financial Crisis of 2008 happened...

People wi *iple of*
to buy hous *cation as*
speculation, *ng safety*

Assumption that mortgage securities are very safe

Complexity of overall ecosystem discourages attempts at deep understanding, in real time

Profits so wonderful, no one wants to question the overall dynamic, or its sustainability

Use of vast leverage, to make <u>HUGE</u> amounts of money

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- Financial innovation in the streamlining and automation of mortgage underwriting processes, building on advances in credit reporting and credit scoring

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- Financial innovation building on both the securitization of mortgages, and the streamlining of mortgage underwriting processes: the migration of a large share of mortgage originations from banks to <u>independent mortgage brokers</u>, who also then inadvertently became incentivized to undermine underwriting standards by helping applicants falsify qualifications like employment and income

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- Mortgage brokers and originators who encouraged house buyers to take out mortgages in excess of what they could afford, by reassuring them that when the initial teaser rates expired, they could always just refinance at a new teaser rate, enabled by the rising value of their property

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- House buyers who became willing to buy properties for speculative purposes, taking on mortgage debt far beyond their ability to pay back out of their own income, because they expected that the houses they bought could be flipped rapidly at a quick profit, or rented for a time, with the rent covering the mortgage payments, until such time as they could flip the house at a profit

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- Gradual relaxation of mortgage underwriting standards (now crowding out fraud by mortgage brokers and applicants), out of a confidence that ever-rising house prices would protect the holders of mortgage debt from loss, in the event of default by borrowers

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- Financial innovation (ultimately proven mistaken / fraudulent) by banks (both investment and commercial) and others operating as mortgage securitizers, by which lower, riskier tranches of RMBSs could be repackaged into CDOs and thereby converted into new tranches that would then be rated as much lower risk. Innovative new risk algorithms like Value at Risk (VaR) also reassure players of their safety

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- Credit rating agencies that were willing, in exchange for fees, to ratify that risky low-rated RMBS tranches could be combined into new CDOs, with many of the new tranches in these CDOs now meriting a AAA or AA rating

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- **Mortgage securitizers who actively gamed the credit rating agency risk models, to load highly-risky mortgage pools into securities in ways that they knew would fool the risk models into rating them highly**

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- Hugely-increasing complexity and opacity also eventually <u>blinding many of the mortgage securitizers themselves</u> to the increasing riskiness of their own MBSs and CDOs, to the point where they increasingly held these as investments on their own account, rather than selling them all off, to others

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- Increasing complexity and opacity also blinding lenders in the repo markets, to the riskiness of funds they were loaning out against mortgage securities held as collateral

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- Growth of businesses operating as <u>shadow banks</u> – institutions borrowing short term, lending long term – which borrowed on repo markets and invested in mortgage securities at <u>leverage levels far beyond those allowed regulated depository institutions</u>. Ability of these shadow banks to grow to enormous size through access to borrowed funds, thereby making enormous profits, while also creating <u>systemic risks in the event of their own collapse</u>. Failure of government to promptly and proactively extend bank supervision to, and impose capital requirements on, these shadow banks

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- House buyers who became willing to buy houses for speculative purposes, taking on mortgage debt far beyond their ability to pay back out of their own income, because they perceived that the houses they bought could be flipped rapidly at a quick profit, or rented for a time, with the rent covering the mortgage payments, until such time as
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Causes of the Panic of 2008

- Financial innovation in the securitization of mortgages, which allowed access to much greater pools of capital to finance housing purchases
- Legalization of adjustable-rate mortgages, mortgages with interest-only payments for an initial period, and balloon-payment mortgages
- Low interest rates and low inflation, maintained over an extended period through successful monetary policies, leading to a gradual long-term increase in confidence, eventually shading into over-confidence, on the part of investors and borrowers
- Financial innovation in the streamlining and automation of mortgage underwriting processes, building on advances in credit reporting and credit scoring
- Financial innovation building on both the securitization of mortgages, and the streamlining of mortgage underwriting processes: the migration of a large share of mortgage originations from banks to independent mortgage brokers, who also then inadvertently became incentivized to undermine underwriting standards by helping applicants falsify qualifications like employment and income
- Steadily rising house prices in many places around the world, fed by low interest rates, the availability of lots of capital to finance purchases, and the gradual long-term accretion of confidence of investors, credit suppliers, and borrowers – with the steady rise in house prices further added to everyone's confidence, in a feedback loop
- Mortgage brokers and originators who encouraged house buyers to take out mortgages in excess of what they could afford, by reassuring them that when initial teaser rates expired, they could always just refinance at a new teaser rate, enabled by the rising value of their property
- House buyers who became willing to take on amounts of mortgage debt that they knew they would have difficulty paying back, because they perceived that risk to be offset by the expected capital gains of owning a rapidly-appreciating house
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- Gradual relaxation of mortgage underwriting standards (now crowding out fraud by mortgage brokers and applicants), out of a confidence that ever-rising house prices would protect the holders of mortgage debt from loss in the event of default by borrowers
- Financial innovation (ultimately proven mistaken / fraudulent) by banks (both investment and commercial) and others operating as mortgage securitizers, by which lower, riskier tranches of RMBSs could be repackaged into CDOs and thereby converted into new tranches that would then be rated as much lower risk. Innovative new risk algorithms like Value at Risk (VaR) also reassure players of their safety
- Credit rating agencies that were willing, in exchange for fees, to ratify that risky low-rated RMBS tranches could be combined into new CDOs, with many of the new tranches in these CDOs now meriting a AAA or AA rating
- Mortgage securitizers who actively gamed the credit rating agency risk models, to load highly risky mortgage pools into securities in ways that they knew would fool the risk models into rating them highly
- Hugely increasing complexity and opacity, caused by the combination of all these financial innovations, which discouraged investors in mortgage securities from trying to figure them out or understand them deeply themselves, and encouraged them to just rely on the ratings as certified by the credit rating agencies
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- Increasing complexity and opacity also blinding lenders in the repo markets, to the riskiness of funds they were loaning out against mortgage securities held as collateral
- Growth of businesses operating as shadow banks – institutions borrowing short term, lending long term – which borrowed on repo markets and invested in mortgage securities at leverage levels far beyond those allowed regulated depository institutions. Ability of these shadow banks to grow to enormous size through access to borrowed funds, thereby making enormous profits, while also creating systemic risks in the event of their own collapse. Failure of government to promptly and proactively extend bank supervision to, and impose capital requirements on, these shadow banks
- Willingness of other companies (AIG) to insure MBSs and CDOs against default, via credit default swaps, because of an assumption that these represented diverse collections of uncorrelated risks that would therefore not be prone to simultaneous collapse, and require payment all at once. Ability of AAA-rated companies (AIG), under the terms of these contracts, to not post funds as collateral against the possibility of payment in the event of default

So, who were the **villains**, in the Panic of 2008?

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On the rise of the 'shadow banking' sector, and its role in the panic of 2008
Martin Wolf

The shadow banking industry constituted a new, parallel financial system that performed the functions of conventional banking, and was also vulnerable to all the risks of conventional banking, while lacking a lender of last resort, or a regulator.

And it introduced a wide range of complex new financial innovations, which collectively increased the fragility of the financial system in a massive way.

Among other things, the shadow industry created new forms of non-deposit near-money, notably money market funds and repos (repurchase agreements). It allowed companies increasingly to issue commercial paper, instead of relying on conventional bank loans.

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It also created intense and non-transparent networks of financial relationships among institutions, both vertically and horizontally, in place of the vertically integrated silos characteristic of more traditional banking. And it introduced far more competition into the financial sector.

This novel set of arrangements was of negligible size in 1980, but became bigger than the traditional banking system by the early 2000s, with total assets reaching close to $13 trillion in 2007. And it facilitated an enormous increase in credit and debt, in the US and globally.

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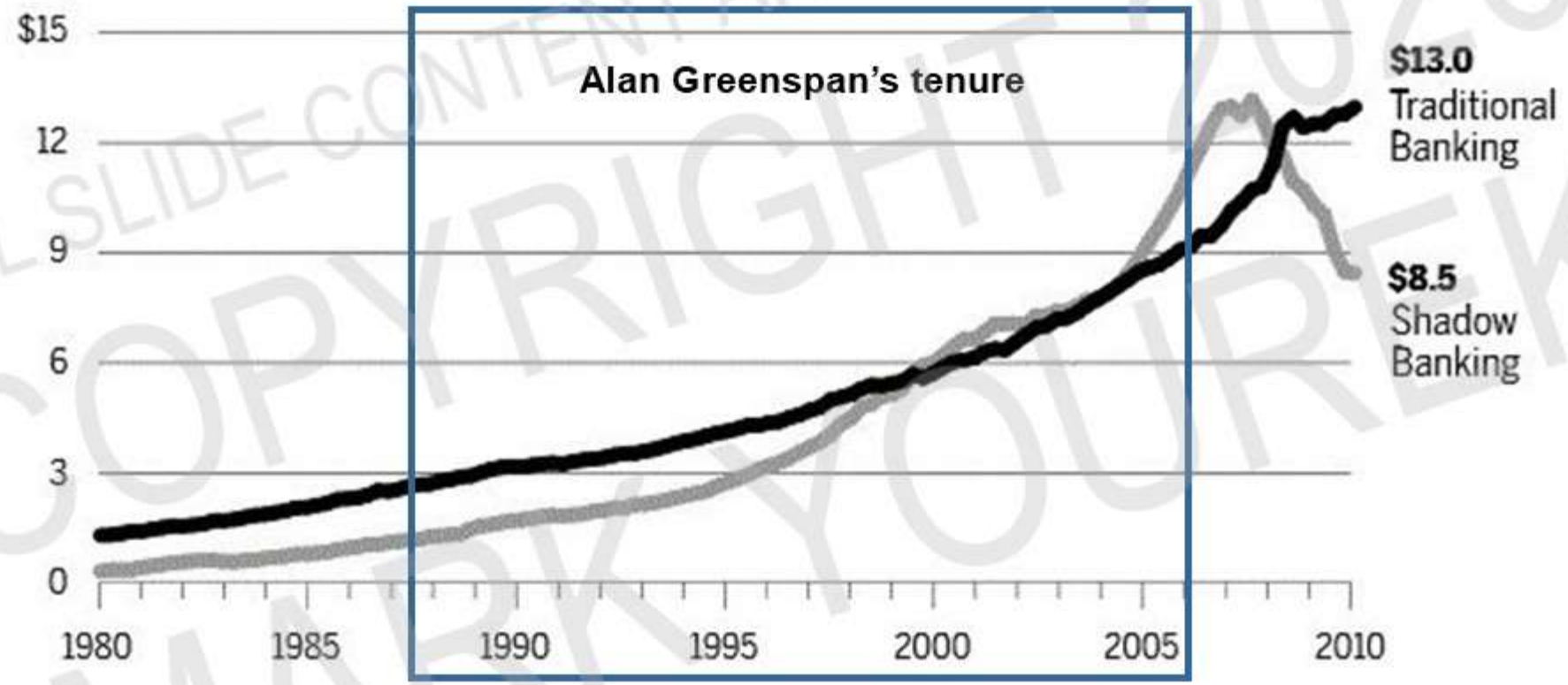
Traditional and Shadow Banking Systems

The funding available through the shadow banking system grew sharply in the 2000s, exceeding the traditional banking system in the years before the crisis.

IN TRILLIONS OF DOLLARS



NOTE: Shadow banking funding includes commercial paper and other short-term borrowing (bankers acceptances), repo, net securities loaned, liabilities of asset-backed securities issuers, and money market mutual fund assets.

SOURCE: Federal Reserve Flow of Funds Report

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The total amount of debt and borrowing that is present – i.e., *aggregate leverage* – **makes the economy more fragile... 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**

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Traditional and Shadow Banking Systems

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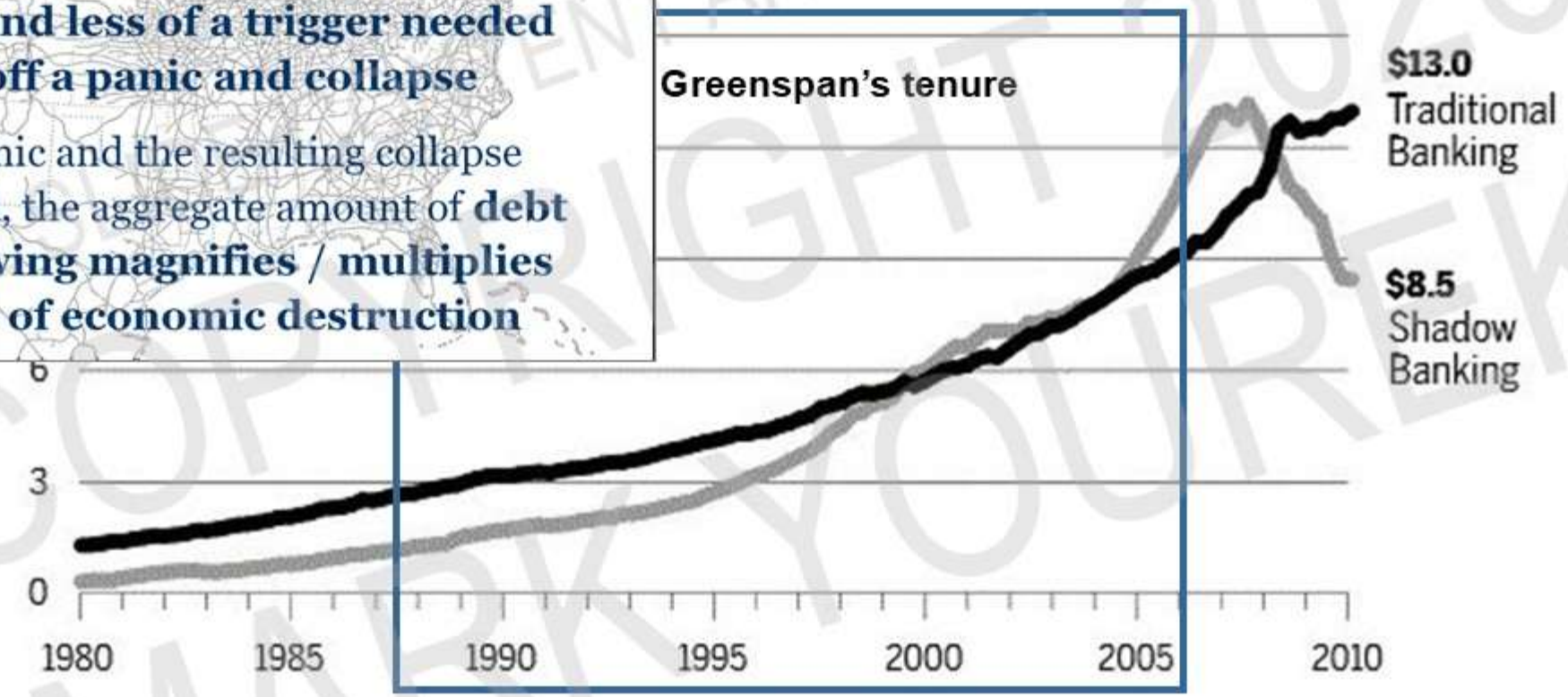

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It's 2004

Kaplan & Yourek LLP

- **Mini-investment partnership**
- **We go in as equal partners, each putting in $2,000**
- **We can borrow $120,000,000 on a rolling daily bas at 3% interest, so at a cost of $10,000 a day**
- **We can buy these things called mortgage-backed s interest. If we buy $124,000,000 of them, that will**
- **Our profit will therefore be: $17,222 - $10,000 -$4**

$1,225,620 apiece per

This was an unstable 'shadow' bank

We weren't subject to bank regulation, which would have limited the amount of money we were allowed to borrow, in our pursuit of maximum profit

We also were not insured by the government, nor protected by the Federal Reserve as lender of last resort, so we were vulnerable to bank runs and banking panics

What are the risks? What could go

Some of our lenders in the repo market might reduce our line of credit with them someday, for whatever reason

We would have of our securiti

Some of the mortgages in our securities might default

The securities are backed by the real estate, as collateral

House prices might decline, causing defaults and making it hard to sell the houses for enough to cover losses; the market value of our mortgage securities would therefore decline

There's a company called AIG that will sell you insurance against your mortgage securities going down in value, and this insurance is a good deal: 0.12% per year

The case for applying capital requirements to 'shadow banks'
Martin Wolf

In non-financial businesses, trying to raise equity returns by increasing the ratio of debt to equity – that is, by increasing leverage – is a zero-sum, speculative strategy. Indeed, one of the fundamental theorems in finance, the Modigliani-Miller theorem, holds that the way a business is financed does not influence how valuable it is, apart from any tax benefits from leverage.

And since bankruptcy is normally destructive, and high leverage makes bankruptcy more likely, well-established businesses generally try to avoid it: if BP (British Petroleum) had been as leveraged as banks typically are, the Gulf of Mexico oil spill disaster in 2010 would have immediately bankrupted it.

The case for applying capital requirements to 'shadow banks'
Martin Wolf

But banks are different: the people who benefit from their being ***less*** debt and leverage aren't the owners of the bank, ***they are the taxpayers who shoulder the risk of insuring the bank deposits***. And if banks were better capitalized, the economy would also benefit from the reduced likelihood of financial crises and panics.

The business model of banking causes a bank's profits to be the greatest when the amount of money they borrow from others is greatest – which is to say: it is always in the interest of a bank's owners, to maximize the bank's leverage
(despite the fact that greater leverage also has the effect of making a bank's financial condition more fragile, and more prone to lapse into insolvency)

More context:

Felix Martin, in 'Money: The Unauthorized Biography' (2013)

Every business has some promises to pay outstanding, to its suppliers, and owns some promises to pay, from its customers.

But for most businesses, these financial assets and liabilities – the firm's accounts receivable and payable, as they are called in bookkeepers' jargon – are dwarfed by the value of the business' real assets: its plant, its premises, its inventory, and so on.

In a bank, it is the other way around.

A bank's real assets are always ***negligible.*** [But] the balance sheets of modern banks are **vast:** in 2007 the balance sheet of a single British bank, the Royal Bank of Scotland, was larger than the GDP of the entire UK.

No manufacturing business could ever accumulate assets of this magnitude. **The reason that a bank can do so, is that almost all its assets are nothing but promises to pay, and almost all its liabilities likewise.**

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No manufacturing business could ever accumulate assets of this magnitude.
The reason that a bank can do so, is that almost all its assets are nothing but promises to pay, and almost all its liabilities likewise.

Because banks have almost no tangible assets to lose – their only sizeable investment being their shareholders' capital – it's always most profitable for them to maximize leverage, relative to that capital

The case for applying capital requirements to 'shadow banks'
Martin Wolf

But banks are different: the people who benefit from their being *less* debt and leverage aren't the owners of the bank, ***they are the taxpayers who shoulder the risk of insuring the bank deposits***. And if banks were better capitalized, the economy would also benefit from the reduced likelihood of financial crises and panics.

Given this fact about banks, what is the optimal amount of equity for bank owners to put in, from their own point of view?

The answer is: ***as little as they can get away with.***

Or to put it another way, to bankers, ***higher and higher leverage is the key to higher and higher profits.***

The case for applying capital requirements to 'shadow banks'
Martin Wolf

Just before the financial crisis of 2008, the median leverage ratio (debt to equity) in the UK shadow banking sector – that is, the value in the ***middle*** of the distribution, not at the extremes – was **50:1**. This means that the value of their assets needed to fall by only 2 percent, for the business to be insolvent.

The business model of contemporary banking is this:

Employ as much debt as possible; put as little of your own money at risk as you can; invest in high-risk, high-return assets; link bonuses to the achievement of profits in the short term; ensure that as little as possible of these rewards can be clawed back in the event of catastrophe; and become rich.

The case for applying capital requirements to ‘shadow banks’
Martin Wolf

This is a wonderful business model for bankers. For the rest of the world, it was a disaster in 2008, and it likely will be again someday.

The case for applying ca
Martin Wolf

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Wolf is arguing for the imposition of capital requirements on 'shadow banks' – and he refers to everyone who uses this business model as 'bankers' – regardless of whether they define themselves as such, or not.

But notice as well: he is also observing that all bankers – both traditional bankers and shadow bankers – pursue a fundamentally different strategy than executives in any other industry, that derives from the unique business model of banking:

In banking, more leverage is always better, because more leverage *multiplies* your profitability.

In banking, leverage magnifies profitability so much, it is well worth running the greatly-increased likelihood of eventual bankruptcy, that also derives from very high leverage.

That is not true for any other industry.

It is the reason why bankers always argue for lower capital requirements, regardless of what level the requirement may currently be set at.

If this business had been a regulated entity, subject to 10% minimum capital requirements (i.e., limited to a 9:1 leverage ratio):

It's 2004

lan & Yourek LLP

- **We go in as equal partners, each putting in $2,000,000 in capital**
- **We can borrow $120,000,000 on a rolling daily basis, in the 'repo' market, at 3% interest, so at a cost of $10,000 a day**
- **We can buy these things called mortgage-backed securities, that pay 5% interest. If we buy $124,000,000 of them, that will be $17,222 a day in income**
- **Our profit will therefore be: $17,222 - $10,000 -$413 = $6809 a day**

$1,225,620 apiece per year

What are the risks? What could go wrong?

Some of our lenders in the repo market might reduce our line of credit with them someday, for whatever reason	**We would have to find new lenders, or sell some of our securities and reduce the size of our business**
Some of the mortgages in our securities might default	**The securities are backed by the real estate, as collateral**
House prices might decline, causing defaults and making it hard to sell the houses for enough to cover losses; the market value of our mortgage securities would therefore decline	**There's a company called AIG that will sell you insurance against your mortgage securities going down in value, and this insurance is a good deal: 0.12% per year**

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- **We go in as equal partners, each putting in $2,000,000 in capital**
- **We can borrow $36,000,000 on a rolling daily basis, in the 'repo' market, at 3% interest, so at a cost of $3000 a day**
- **We can buy these things called mortgage-backed securities, that pay 5% interest. If we buy $40,000,000 of them, that will be $5556 a day in income**
- **Our profit will therefore be: $5556 - $3000 - $133 = $2423 a day**

$436,140 apiece per year

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Unfortunately, many very large companies with business models like this – making them dangerous 'shadow banks' – were not subject to government regulation like banks, during this era

Even today, the identification and regulation of such entities remains problematic

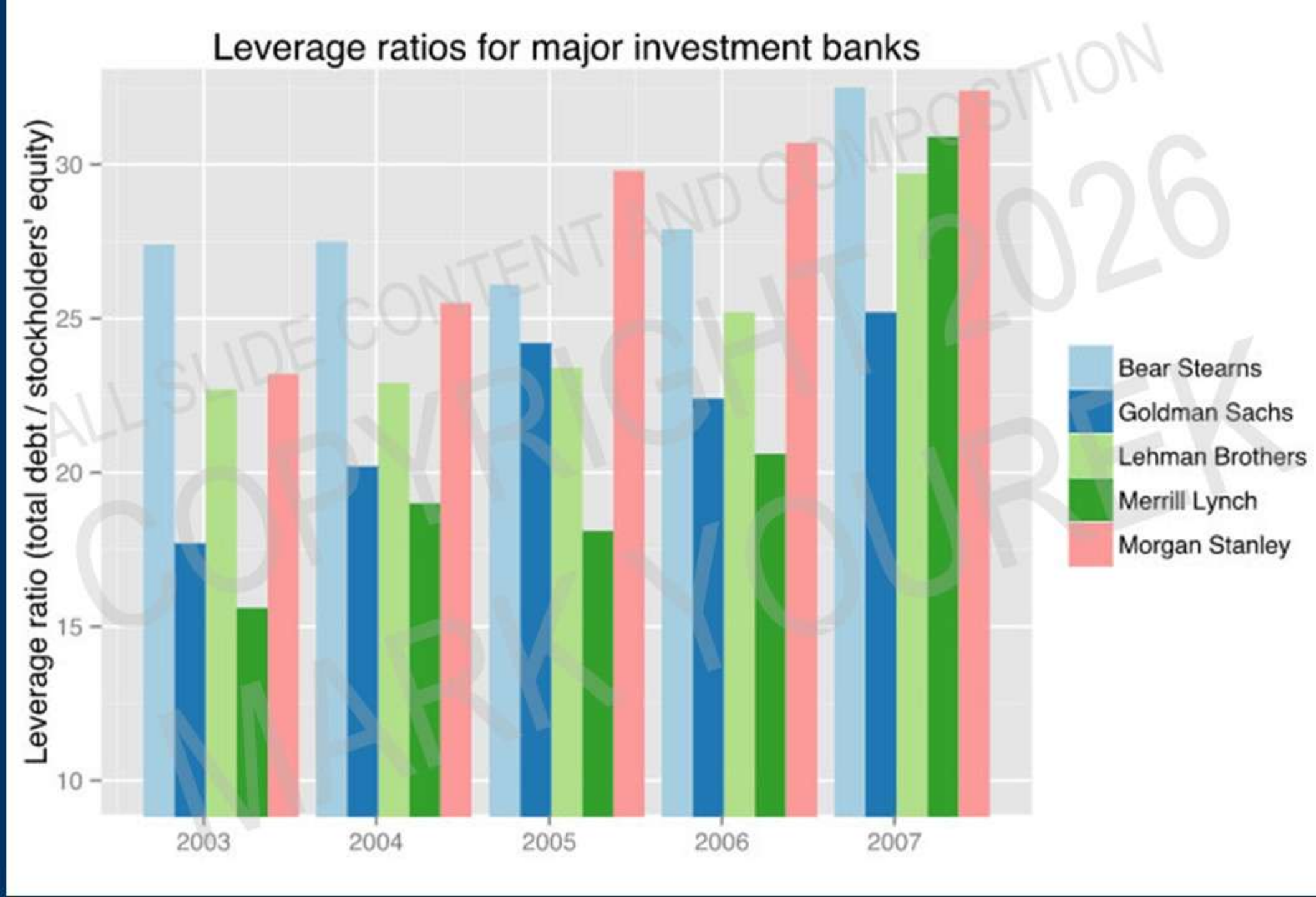
"One problem is, financial regulation always lags financial innovation."

Barney Frank
Chairman, House Financial Services Committee, 2007-2011

If you are unwilling to proactively extend regulation to innovations produced by capitalism, particularly within the financial sector, to prevent new sources of instability from arising ...

"One problem is, financial regulation always lags financial innovation."

then, whether you realize it or not, whether you admit it to yourself or not, you are choosing to allow capitalism to gradually, inexorably re-configure itself so as to inevitably produce yet another crisis, which will someday explode in another gigantic disaster



"The Postwar Era can be viewed as a relative long-term success in the use of government to steady the economy as a whole, and the banking sector as a special focus…
… punctuated by occasions of lapse and misjudgment…
while capitalism's resilient instability is always looking for new ways to manifest"

2000s

- **In 2007-08, house prices fall,** revealing a huge bubble**,** and portending an avalanche of mortgage defaults. The **shadow banking sector,** heavily invested in mortgage-backed securities, suffers **massive bank runs.** Dozens of the largest American financial institutions are suddenly at the point of default, prompting vast **emergency government bailouts.** The economy collapses, with additional sectors near failure, including the **US auto industry**
- The ensuing recession is by far the worst since the Great Depression. Economists are in consensus that, **but for the massive government intervention that took place**, it would have been much worse, perhaps **rivaling or** ***exceeding*** **the depression of the 1930s**
- In reviewing the collapse, **Alan Greenspan says he has 'found a flaw' in the market theory he held while he was Fed chair,** and is in a state of **'shocked disbelief'** at the apparent failure of market self-regulation

Waxman: You said in your statement, "The whole intellectual edifice of modern risk management collapsed. Those of us who have looked to the self-interest of lending institutions to protect shareholders' equity, myself especially, are in a state of shocked disbelief."

That sounds to me like you're saying that those who trusted the market to regulate itself, yourself included, made a serious mistake.

Greenspan: I think that's true of some products, but not all. Excluding credit default swaps, derivatives markets are working well.

Waxman: Where do you think you made a mistake, then?

Greenspan: **I made a mistake in presuming that the self-interest of organizations, specifically banks and others, were such that they were best capable of protecting their own shareholders and the equity in the firms.**

And it 's been my experience, having worked both as a regulator for 18 years, and similar [capacities] in the private sector, especially ten years at a major international bank, that the loan officers of those institutions knew far more about the risks involved in the people to whom they lent money, than I saw even our best regulators at the Fed, capable of doing.

Greenspan: So the problem here is, something which looked to be a very solid edifice, and indeed a critical pillar to market competition and free markets, did break down, and that shocked me. I still do not fully understand why it happened, and obviously to the extent that I figure out where it happened and why, I will change my views.

Waxman: Where do you think you made a mistake, then?

Greenspan: **I made a mistake in presuming that the self-interest of organizations, specifically banks and others, were such that they were best capable of protecting their own shareholders and the equity in the firms.**

Greenspan in fact did not make any mistake, in presuming that people working in the financial sector would always follow their self-interest, and that they would be better capable of defining and pursuing their own self-interest, than anyone else.

All through this episode, people working in the financial sector most certainly *did* pursue their self-interest in completely <u>rational and clear-headed ways</u>.

Capitalism, by its very nature, at its foundation,
is **bipolar –**
subject to recurrent, inevitable crisis

This is <u>not</u> to say that *capitalists*
are irrational, or unstable

Businesspeople are some of the smartest, most grounded,
clearheaded, *thoroughly rational* people around –
they have to answer to the marketplace

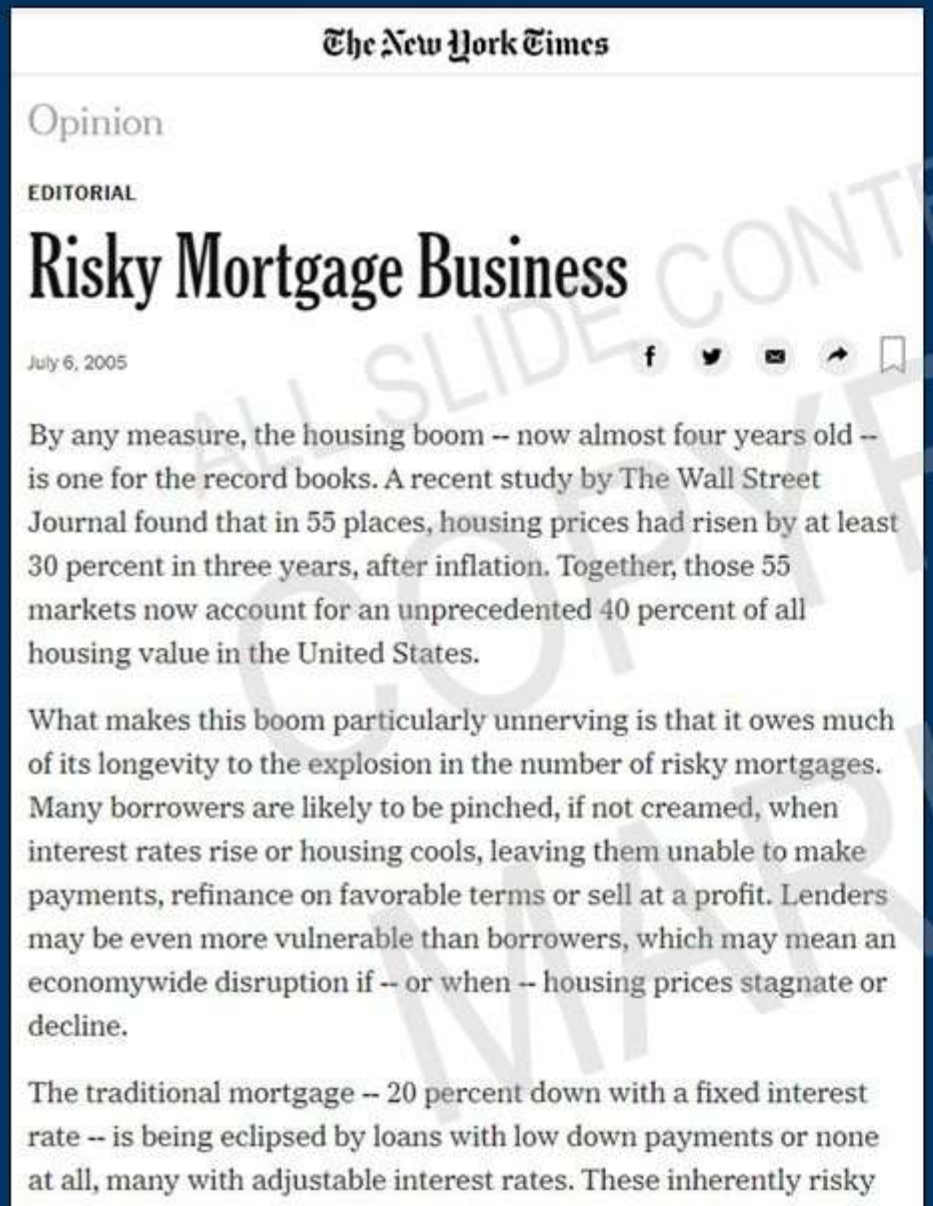
It's a safe assumption that <u>none</u> of them
behaves irrationally on any regular basis

And yet… the Panic of 2008…

Subprime lending, NINJA loans, securitization of mortgages, CDOs, credit default swaps, house prices 60% beyond their historical pattern, major commercial and investment banks nonetheless betting heavily on mortgage securities, with enormous amounts of borrowing and leverage…

Is this a rare instance in capitalism, where true irrationality made an appearance?

On the causes of the crisis of 2008
Richard Posner



The New York Times

Opinion

EDITORIAL

Risky Mortgage Business

July 6, 2005

By any measure, the housing boom -- now almost four years old -- is one for the record books. A recent study by The Wall Street Journal found that in 55 places, housing prices had risen by at least 30 percent in three years, after inflation. Together, those 55 markets now account for an unprecedented 40 percent of all housing value in the United States.

What makes this boom particularly unnerving is that it owes much of its longevity to the explosion in the number of risky mortgages. Many borrowers are likely to be pinched, if not creamed, when interest rates rise or housing cools, leaving them unable to make payments, refinance on favorable terms or sell at a profit. Lenders may be even more vulnerable than borrowers, which may mean an economywide disruption if -- or when -- housing prices stagnate or decline.

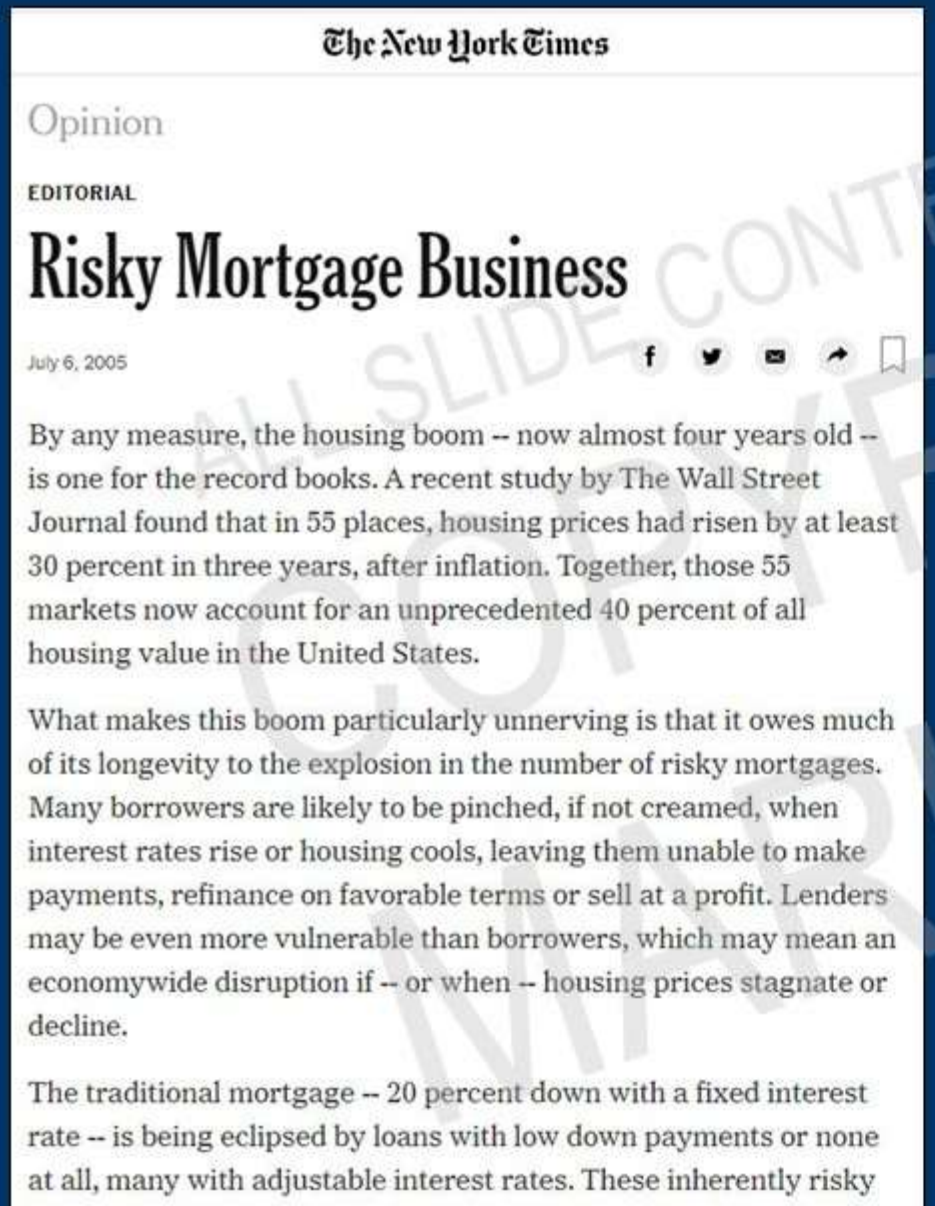
The traditional mortgage -- 20 percent down with a fixed interest rate -- is being eclipsed by loans with low down payments or none at all, many with adjustable interest rates. These inherently risky

I am skeptical that readily avoidable mistakes, failures of rationality, or the intellectual deficiencies of financial managers were major factors in the economic collapse.

Had the mistakes that brought down the banking industry been ***readily*** avoidable, they would have been avoided.

There were plenty of warnings of a housing bubble, beginning in 2003; warnings about excessive leverage in financial firms, and even rather precise predictions of the debacle that in fact ensued.

On the causes of the crisis of 2008
Richard Posner



The New York Times

Opinion

EDITORIAL

Risky Mortgage Business

July 6, 2005

By any measure, the housing boom -- now almost four years old -- is one for the record books. A recent study by The Wall Street Journal found that in 55 places, housing prices had risen by at least 30 percent in three years, after inflation. Together, those 55 markets now account for an unprecedented 40 percent of all housing value in the United States.

What makes this boom particularly unnerving is that it owes much of its longevity to the explosion in the number of risky mortgages. Many borrowers are likely to be pinched, if not creamed, when interest rates rise or housing cools, leaving them unable to make payments, refinance on favorable terms or sell at a profit. Lenders may be even more vulnerable than borrowers, which may mean an economywide disruption if -- or when -- housing prices stagnate or decline.

The traditional mortgage -- 20 percent down with a fixed interest rate -- is being eclipsed by loans with low down payments or none at all, many with adjustable interest rates. These inherently risky

The banks, and the shadow banks, must have known at least as much as economists and financial journalists did, about their industry.

They had to know that there was a lot of risk in their capital structures, that the future doesn't always repeat the past, and therefore that models of default risk based on historical experience in the housing and credit markets might be unreliable.

They had to know that credit-rating agencies have a conflict of interest because they're paid by the firms they rate.

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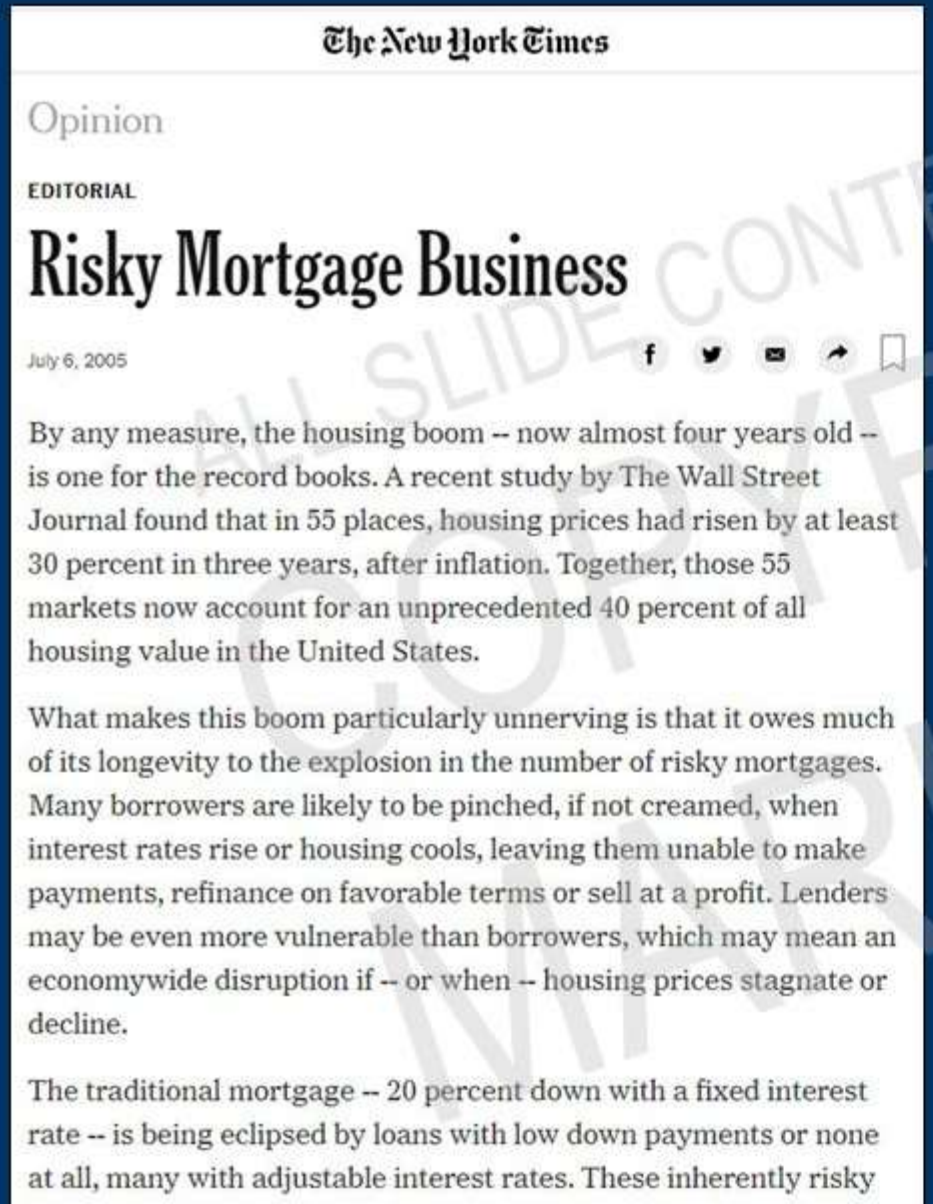

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And they had to know that commercial banking is ***inherently unstable*** because, to be profitable, it usually requires borrowing short-term and lending long-term.

So, what were bankers to do?

Even if you recognize a bubble as such, it's quite difficult to climb down off of one.

Suppose a bank's management tells its investors:

> ***"We're afraid we're riding a housing bubble by being heavily invested in mortgage securities, and because we're afraid that the bubble may burst soon, we are going to reduce our leverage, or place more of our capital in less risky assets, and this means that your short-run return will be less. But we think that in the long run you'll be better off, although we can't be certain of that, and we don't know how long you will have to wait."***

As long as other banks are continuing to ride the bubble, this will be a hard sell. Your investors, observing that the investors in your competitors are continuing to make higher profits, are apt to think you're simply offering an excuse for failure.

As Citigroup CEO Charles Prince said in July 2007, referring to the firm's leveraged lending practices:

"When the music stops, in terms of liquidity, things will be complicated.

But as long as the music is playing, you've got to get up and dance. We're still dancing."

He didn't know it,
but at the time he said that,
the music had already stopped.

A choice that is made under profound uncertainty – as in dealing with the possibility of an asset-price bubble that could put you out of business – is not an exercise like adding a column of numbers.

It is like firing a shot in the dark.

So we should consider the character traits (not flaws) that make some people willing to function under such conditions.

They will be people who have a below-average aversion to uncertainty, and since we are speaking of businessmen, an above-average love of making money.

Such people were bound to be attracted to banking in the era governed by Alan Greenspan's monetary policies, that offered prospects of great wealth to smart people willing to take large risks.

Such people are not irrational, but their clustering in banking at the moment when the wraps were taken off risky lending, magnified the inherent instability of that industry.

And not only does competition ***force*** businessmen to be profit maximizers, which implies that they will accept a small risk of bankruptcy; we ***want*** them to be profit maximizers – it is what drives economic progress. Businesses must assume a positive though small risk of bankruptcy.

But banking is special: a cascade of ***bank*** bankruptcies can, almost uniquely, bring down the entire economy.

Even so, ***no individual bank has any incentive to take measures to avoid such a collective catastrophe.***

The essential point is the difference between a 1% chance that a ***given bank*** will go broke, and a 1% chance of an ***economic catastrophe*** because the leading financial firms share a ***correlated 1% chance of all going broke at once***.

This tolerance for risk is rational for each bank, but *completely irrational for society.*

A Failure of Capitalism: The Panic of '08 and the Descent into Depression, 2009

One more take, on this key point:
Richard Posner, again

It is rational for a businessman to operate his business in a way so as to create a risk of bankruptcy – in fact, it's impossible to run a business any other way and survive, at least in a competitive market.

Likewise, consumers make rational decisions that nevertheless create a risk of personal bankruptcy for themselves.

But neither consumers nor business leaders have any reason to consider the possibility that if enough of them go broke all at once (because their risks are positively correlated), the economy as a whole may experience enormous losses.

Such economy-wide losses are ***external*** to the firms and the individuals who create them, and thus are ***ignored by them all.***

The Crisis of Capitalist Democracy, 2010

Why did Lehman Brothers borrow 30X their own capital to buy and hold mortgage securities,
including securities containing large quantities of subprime loans?

Why did Merrill Lynch borrow 31X their own capital to buy and hold mortgage securities,
including securities containing large quantities of subprime loans?

Why did Bear Stearns borrow 32X their own capital to buy and hold mortgage securities,
including securities containing large quantities of subprime loans?

Why did huge numbers of private investors and institutions
buy and hold huge quantities of mortgage securities issued during this era,
including securities containing large quantities of subprime loans?

Why did AIG (and several other companies) sell credit default swaps
covering hundreds of billions of dollars worth of mortgage securities,
including securities containing enormous quantities of subprime loans?

Why did the ratings agencies – Standard & Poors and Moody's – rate countless CDOs
as having large AAA tranches, when these CDOs were themselves built out of
mortgage-security tranches that were themselves all low-rated or unrated,
and included securities containing large quantities of subprime loans?

Why did tens of millions of people in the United States – and nearly a hundred
million people around the world – willingly borrow large sums of money,
to willingly pay conspicuously inflated prices for houses,
during the years 2004, 2005, 2006, and 2007 –
quite a few of them taking out mortgages they knew they didn't have the income to pay back?

Why was Alan Greenspan left in a state of 'shocked disbelief' at the failure of the markets,
and pondering a serious 'flaw' in his previous view of the nature of capitalist markets?

Price bubbles occur when vast numbers of people make serious misjudgments about the value of an asset or asset class – and when they engage in misjudged expectations exercises about the future value of those assets

Many people, in a very wide variety of roles and capacities, had to act in seriously irresponsible ways, to lay the groundwork for this disaster

For several years, the capitalist free markets *rewarded* people for acting irresponsibly in these ways

During price bubbles, *free markets often reward people for irresponsible behavior*, – at least, for awhile

The capitalist free markets were rewarding people for being irresponsible – and for that reason, people were behaving *irresponsibly*, but *they weren't behaving irrationally*

The fact that financial institutions were allowed to use extreme amounts of debt and leverage so as to multiply their profits is what turned this into a catastrophe that threatened to collapse the *entire economy*

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Next week:


THE WALL STREET JOURNAL.

MONDAY, SEPTEMBER 15, 2008 · VOL. CCLII NO. 64 $2.00

LEHMAN BROTHERS 94.4%

Merrill Lynch 68.2%

AIG 79.2%

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A Brief Look at the Economic History of the United States

The Panic of 2008: Responses and Outcomes

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

Finding and Keeping the Right Balance in Market-Capitalist Democracies