

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

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

The maturation of monetary functions in the United States

ESTABLISHMENT OF GOVERNMENT-ISSUED CURRENCY 1860s	ESTABLISHMENT OF INSTITUTION TO MONITOR ECONOMY AND COUNTER INSTABILITY 1913	PREVENTION OF BANK PANICS: DEPOSIT INSURANCE and FED AS LENDER OF LAST RESORT 1934	FULL CENTRAL BANK OPERATIONS BEGIN 1934-35			
Civil War need to raise huge amounts of money to prosecute war	Panic of 1907 need to be able to react strongly to stabilize during bank panics	Great Depression need to end bank runs and enforce banking stability	Great Depression need to end severe deflation			
Elimination of private bank notes Currency issued on gold standard	Federal Reserve established as a new entity distinct from Treasury, with technocratic governance. But a significant part of the political establishment disagrees with the need for such an institution, and with the idea that govt should ever intervene in the economy	Deposit insurance established after banking industry is devastated by runs and panics. The Fed begins to act more assertively as lender of last resort to banks, with much closer bank supervision and regulation	Convertibility to gold is ended, effectively ending the gold standard. The US dollar is devalued from \$20.67 to \$35, to stop deflation. Everyone required to sell their monetary gold to the government, to prevent hoarding, and to get money to start circulating more freely			

\$10,000

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

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

1.

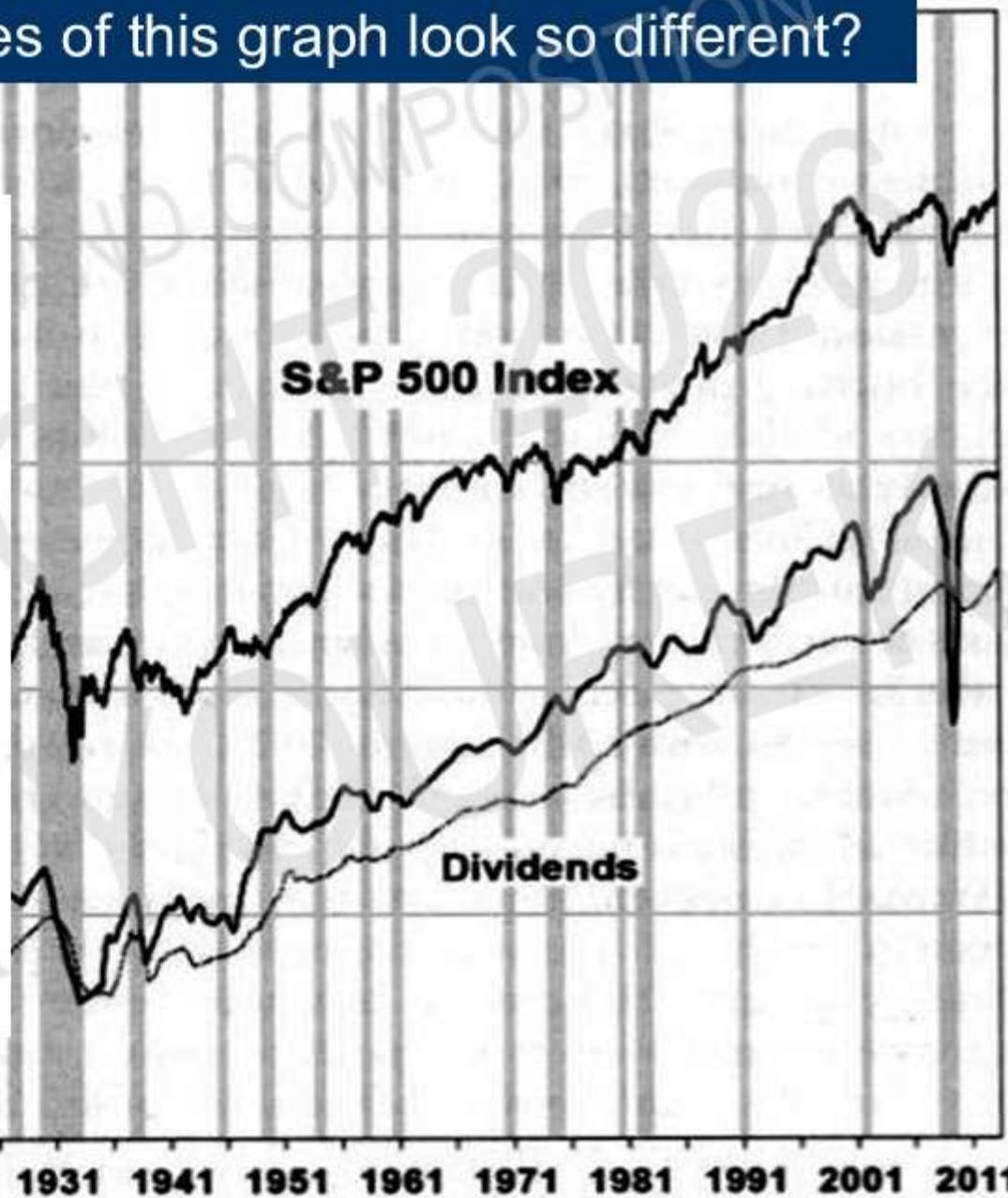
Monetary policy stabilizing prices and avoiding deflation, and direct crisis intervention and mitigation as executed by the Federal Reserve

2.

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

3.

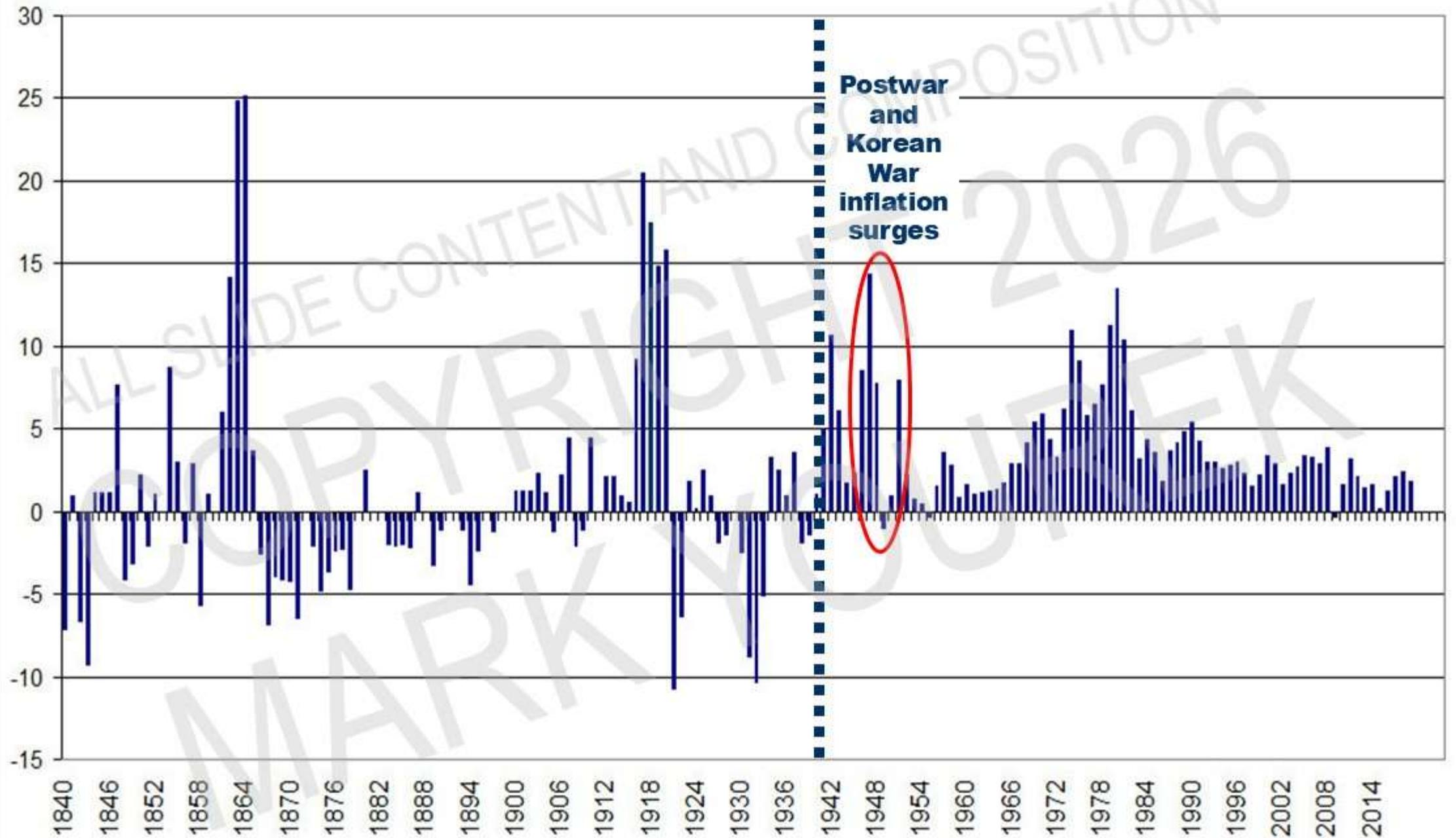
The increased size of the Federal government as a share of the economy, which provides a more significant element of overall stability



\$.1

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

US Annual Inflation Rate 1840-2019



The maturation of monetary functions in the United States

ESTABLISHMENT OF GOVERNMENT-ISSUED CURRENCY 1860s	ESTABLISHMENT OF INSTITUTION TO MONITOR ECONOMY AND COUNTER INSTABILITY 1913	PREVENTION OF BANK PANICS: DEPOSIT INSURANCE and FED AS LENDER OF LAST RESORT 1934	FULL CENTRAL BANK OPERATIONS BEGIN 1934-35	FED ASSERTS INDEPENDENCE TO SET INTEREST RATES 1951		
Civil War need to raise huge amounts of money to prosecute war	Panic of 1907 need to be able to react strongly to stabilize during bank panics	Great Depression need to end bank runs and enforce banking stability	Great Depression need to end severe deflation	Korean War inflation need to end subordination to Treasury		
Elimination of private bank notes Currency issued on gold standard	Federal Reserve established as a new entity distinct from Treasury, with technocratic governance. But a significant part of the political establishment disagrees with the need for such an institution, and with the idea that govt should ever intervene in the economy	Deposit insurance established after banking industry is devastated by runs and panics. The Fed begins to act more assertively as lender of last resort to banks, with much closer bank supervision and regulation	Convertibility to gold is ended, effectively ending the gold standard. The US dollar is devalued from \$20.67 to \$35, to stop deflation. Everyone required to sell their monetary gold to the government, to prevent hoarding, and to get money to start circulating more freely	Until 1951, interest rates were held artificially low to help limit servicing costs on the massive WW2 national debt. But the outbreak of heavy inflation causes the need for the Fed to start managing interest rates so as to stabilize the currency value		

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MARK YOUNG

What does a central bank
actually do?

Total amount of
**goods and services
offered for sale**
at a given time

SUPPLY

*If supply goes down:
> prices go up*

*If supply goes up:
> prices go down*

*Balance
between these
determines
price levels*

Total
**desire to buy those
goods and services**
at a given time

DEMAND

*If demand goes up:
> prices go up*

*If demand goes down:
> prices go down*

Total amount of
goods and services offered for sale
at a given time

SUPPLY

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DEMAND

*If demand goes up:
> prices go up*

*If demand goes down:
> prices go down*

**'Prices' ...
as denominated
how??**

*> in terms of units
of whatever you are
using as 'money'*

Total amount of **goods and services offered for sale** at a given time

SUPPLY

Equilibrium among these THREE things determines price levels

Total **desire to buy those goods and services** at a given time

DEMAND

CHANGE ANY OF ONE OF THESE THREE THINGS, AND PRICE LEVELS WILL MOVE...

Total amount of **'money' in circulation** at a given time

MONEY SUPPLY

- **Currency in circulation** (or, units of a specified commodity)
- **Bank deposits ++** (money created by banks, through lending)

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SUPPLY

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~~CHANGE ANY OF ONE OF THESE THREE THINGS, AND PRICE LEVELS WILL MOVE...~~

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MONEY SUPPLY

ALL THREE OF THESE THINGS ARE ALWAYS IN MOTION, SHIFTING

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DEMAND

Total amount of **'money' in circulation** at a given time

MONEY SUPPLY

CHANGE ANY OF THESE THREE THINGS AT JUST A DIFFERENT PACE THAN THE OTHER TWO, AND PRICES WILL MOVE

ALL THREE OF THESE THINGS ARE ALWAYS IN MOTION, SHIFTING

- **Currency in circulation** (or, units of a specified commodity)
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What role does a central bank play, in all this?

Total amount of **goods and services offered for sale** at a given time

SUPPLY

Equilibrium
among these **THREE** things determines price levels

Total **desire to buy those goods and services** at a given time

DEMAND

Total amount of **'money' in circulation** at a given time

MONEY SUPPLY

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- **Currency in circulation** (or, units of a specified commodity)
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Inflation is BAD

- Erodes the value of everyone's savings
- Messes with the value of debts, transferring value from lenders to borrowers: fixed-interest-rate debts become easier to pay, because future payments will be made in dollars that are worth less
- Makes it harder to plan for the future, and to make long-term contracts
- Tends to feed on itself and worsen, if it gets going, as people start to expect more inflation, and act on that

Deflation is MUCH WORSE

- Virtually shuts down whole sectors of the economy, forcing a severe recession or even a depression
- Messes with the value of debts, transferring value from borrowers to lenders: fixed-interest-rate debts become more painful to pay, because future payments must be made in dollars that are worth more
- Makes it harder to plan for the future, and to make long-term contracts
- Causes layoffs, due to the problem of 'sticky wages'
- Tends to feed on itself and worsen, if it gets going, as people start to expect more deflation, and act on that

Hyperinflation is a CATASTROPHE

- Wipes out the value of everyone's savings
- Makes it nearly impossible for the economy to function: at some point, people ditch the hyperinflated currency and switch to some other form of money

Inflation is BAD

- Erodes the value of everyone's savings
- Messes with the value of debts, transferring value from lenders to borrowers. Fixed-interest-rate debts become easier to pay, because future payments will be made in dollars worth less.
- Makes it harder to plan and to make long-term investments
- Tends to feed on itself: once people start to expect inflation, they will demand higher wages and prices will rise further.

If inflation, deflation, and hyperinflation are all BAD, then what condition would qualify as GOOD?

Deflation is MUCH WORSE

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- Messes with the value of debts, transferring value from borrowers to lenders. Fixed-interest-rate debts become easier to pay, because future payments will be worth more than when the debt was made. In the future, the value of the debt will be less than the value of the payments.
- Makes it harder to plan and to make long-term investments
- Tends to feed on itself: once people start to expect deflation, they will demand lower wages and prices will fall further.
- Problem of 'sticky wages' makes it worse, if it gets going, as people will not want to accept lower wages, leading to deflation, and act on that

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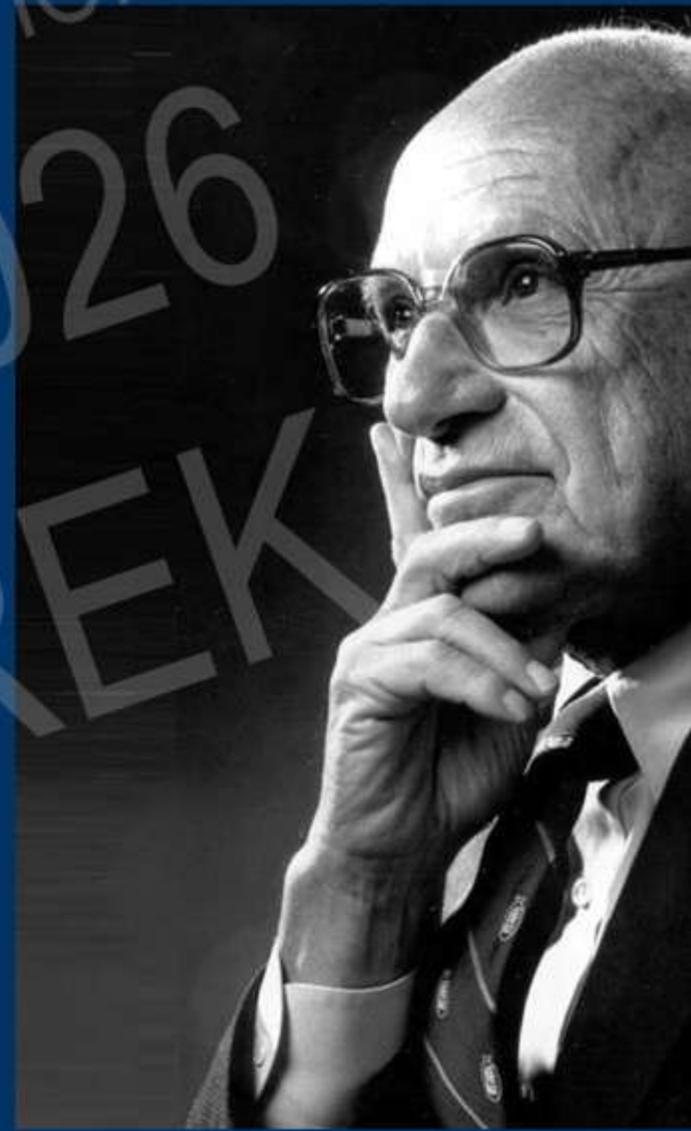
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Milton Friedman

'The Role of Monetary Policy'

1967

The first and most important lesson that history teaches about what monetary policy can do – and it is a lesson of the most profound importance – is that monetary policy can prevent *money itself* from being a major source of economic disturbance.

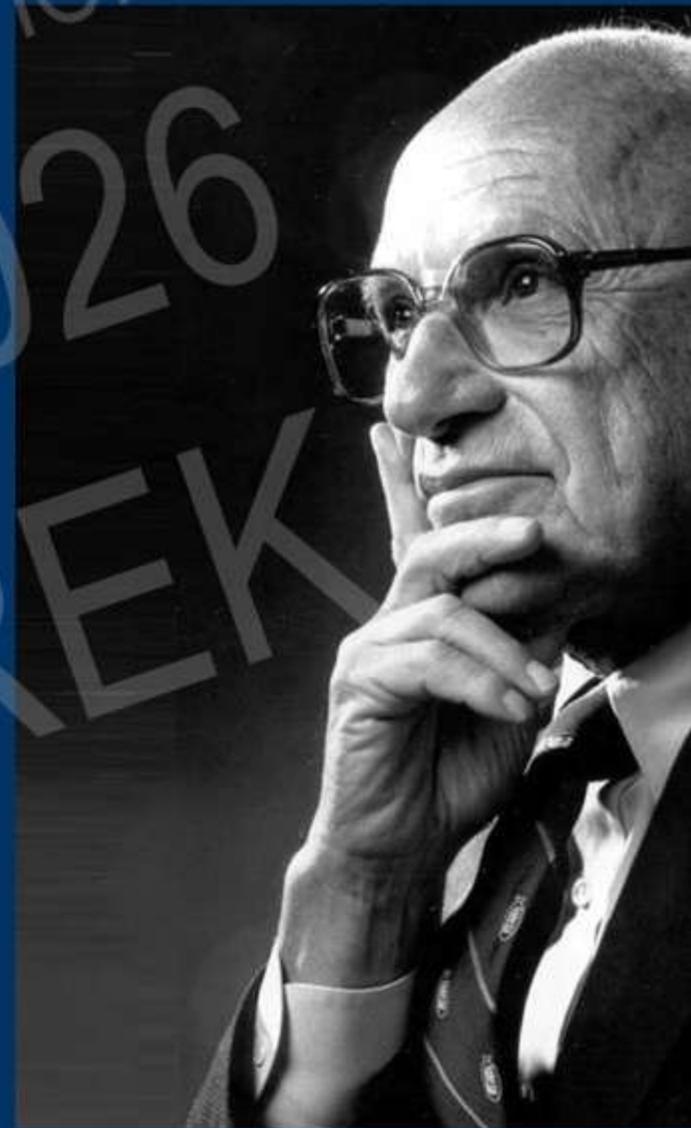


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'The Role of Monetary Policy'

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There is therefore a positive and important task for the monetary authority – to suggest improvements in the monetary machine that will reduce the chances that it will get out of order, and to use its own powers so as to keep the machine in good working order.

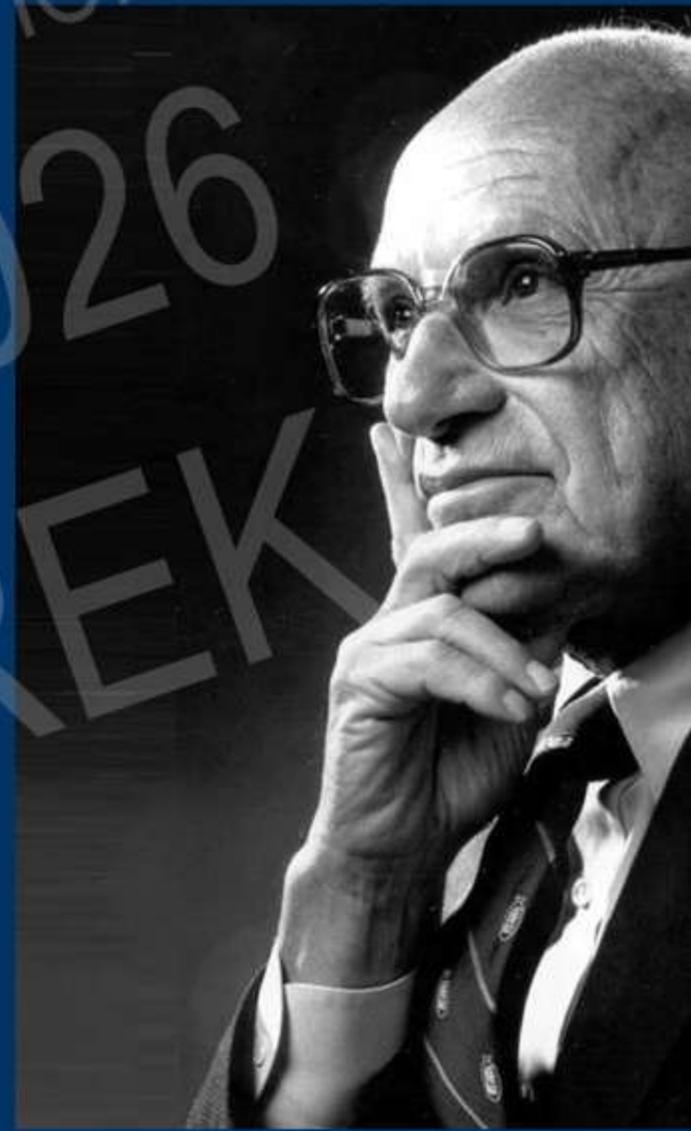


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A second thing monetary policy can do is to provide a stable background for the economy.



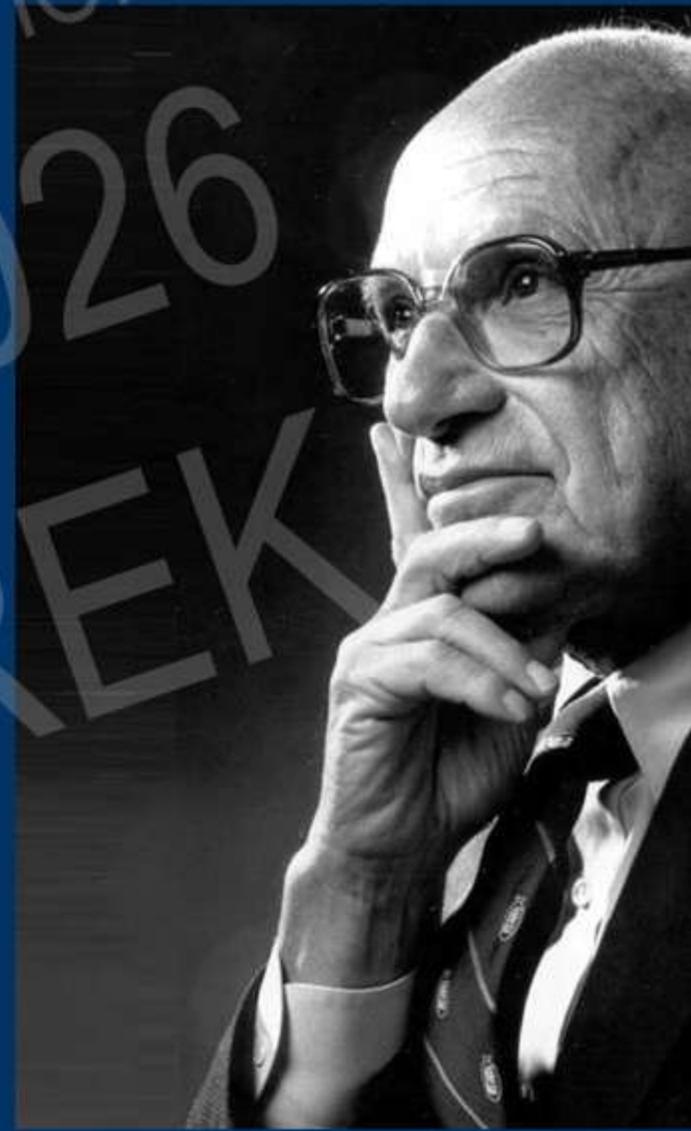
Milton Friedman

'The Role of Monetary Policy'

1967

Our economic system will work best when producers and consumers, employers and employees, can proceed with full confidence that **the average level of prices will behave in a known way in the future** – preferably, that it will be *highly stable*.

Address to the American Economic Association, December 1967



What role does a central bank play, in all this?

Total amount of **goods and services offered for sale** at a given time

SUPPLY

Equilibrium among these three things determines price levels

Total **desire to buy those goods and services** at a given time

DEMAND

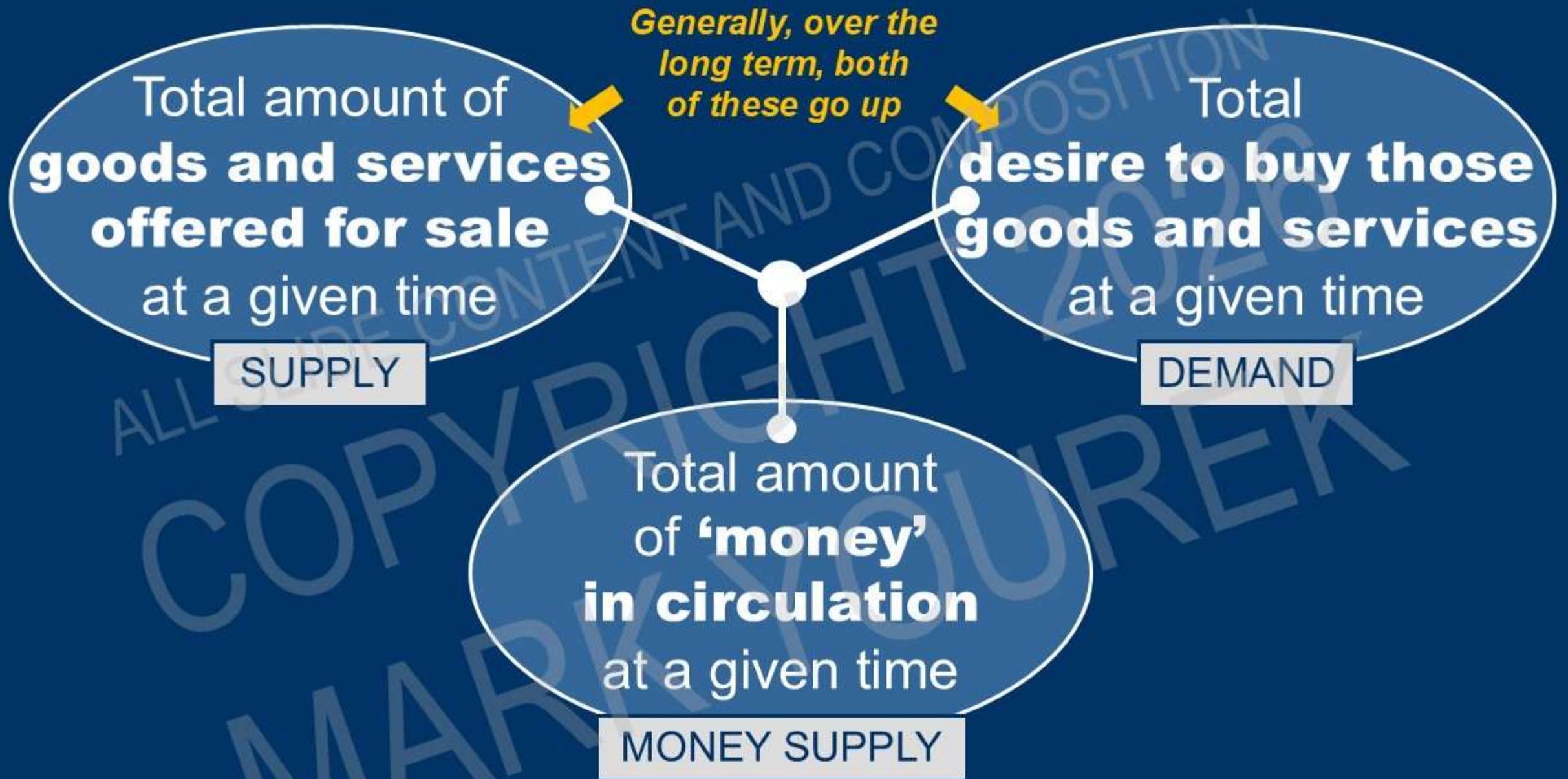
Total amount of **'money' in circulation** at a given time

MONEY SUPPLY

ALL THREE OF THESE ARE ALWAYS CHANGING, DAY BY DAY

Central banks continuously monitor *supply, demand, and the size of the money supply*, and manage the size of the money supply, with the aim of maintaining a stable currency value – i.e., **stable prices**

- **Currency in circulation** (or, units of a specified commodity)
- **Bank deposits ++** (money created by banks, through lending)



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SUPPLY

Generally, over the
long term, both
of these go up

Generally, therefore, most
of the time, central banks
are managing the creation of
money, to keep it at a pace so as
to grow the money supply at very
close to the same rate at which
the economy itself is growing

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Central banks do this primarily by setting short-term interest rates (i.e., the cost of borrowing money), thereby affecting the pace of lending, and influencing the quantity of money created by banks, as well as the total amount of leverage present in the economy

Total amount of **'money' in circulation** at a given time

MONEY SUPPLY

Central banks also do this through feeding new money directly into the economy via 'open market activities', mainly (but not exclusively) via the purchase of government debt

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The actions the Fed takes – both in setting interest rates, and in feeding money into the economy directly, itself – also affect the overall levels of demand and supply present in the economy... All this is therefore a tricky process, with feedback loops, and lags between when an action is taken, and when its full impact may be felt

Bottom line: the Federal Reserve – and every other central bank – is really in the business of managing expectations around the effects of its actions on all these moving parts – rather than just managing the money supply, as a single dimension...

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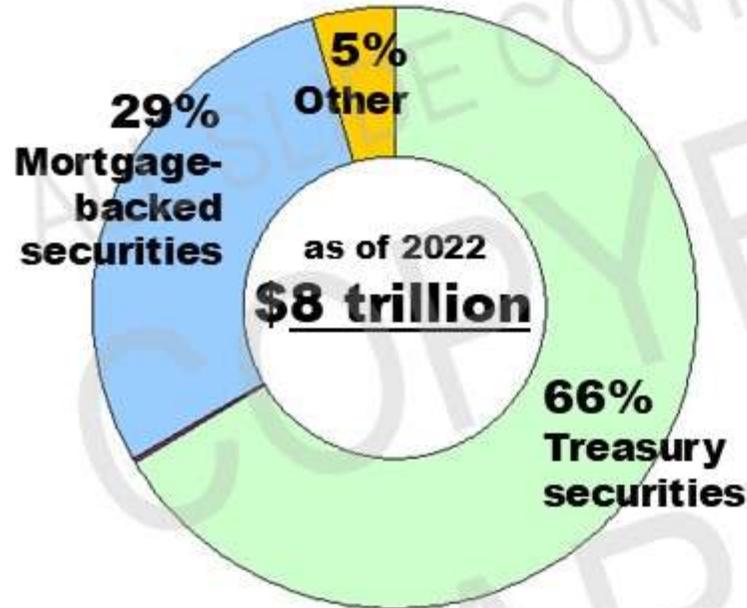
How does the Federal Reserve directly feed money into the economy?

FED BUYS ASSETS ON THE OPEN MARKETS



Mostly, government debt securities, but also other things

The Fed creates the money it spends from scratch; so this money is new to the economy, and adds to the money supply



ASSETS

The assets the Fed buys, accumulate on the Fed's balance sheet

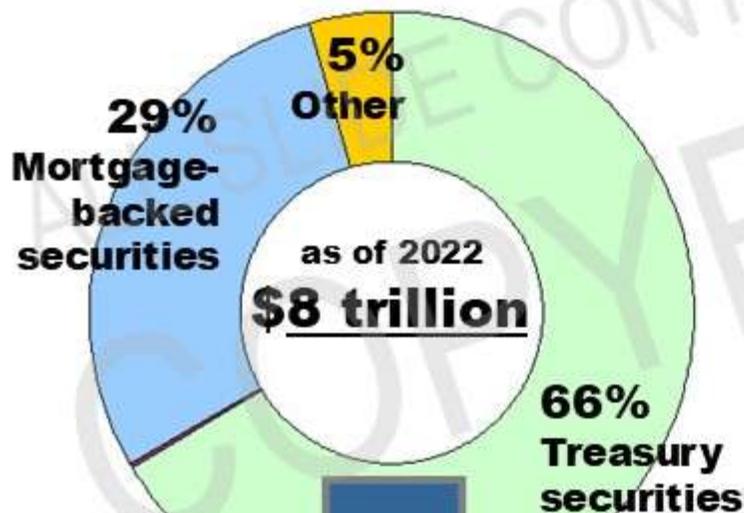
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Interest income generated by this portfolio is returned to the US Treasury, net of the Fed's operating expenses, including interest paid to banks on reserves deposited with the Fed

Most of the time, the Fed is immensely profitable, returning typically \$80 – 100 billion in profits to the US Treasury each year

How does the Federal Reserve directly feed money into the economy?

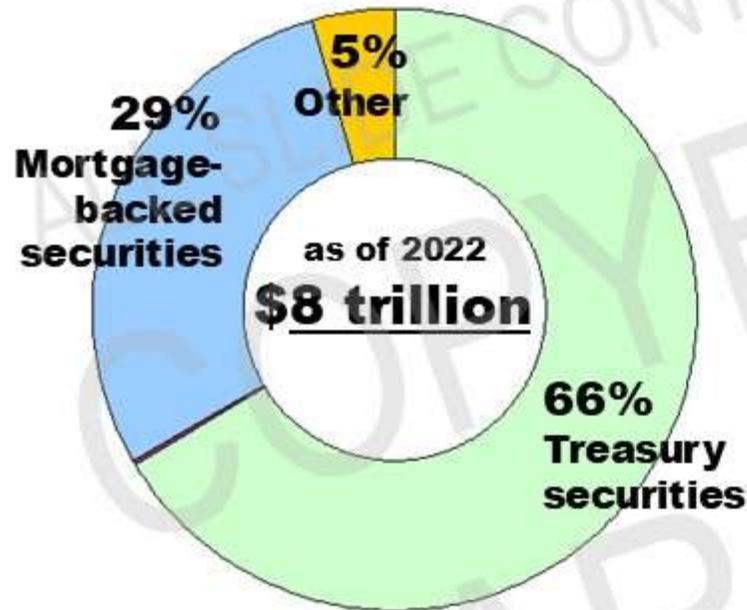
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The assets the Fed buys, accumulate on the Fed's balance sheet



ASSETS

Notice that at no time does the Fed ever 'give money away' –
No one benefits corruptly, from the process of money creation

So – do central banks try to aim for **absolutely stable** currency value – zero inflation, zero deflation?

Inflation is BAD

- Erodes the value of everyone's savings
- Messes with the value of debts, transferring value from lenders to borrowers: fixed-interest-rate debts become easier to pay, because future payments will be made in dollars that are worth less
- Makes it harder to plan for the future, and to make long-term contracts
- Tends to feed on itself and worsen, if it gets going, as people start to expect more inflation, and act on that

Deflation is MUCH WORSE

- Virtually shuts down whole sectors of the economy, forcing a severe recession or even a depression
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Hyperinflation is a CATASTROPHE

- Wipes out the value of everyone's savings
- Makes it nearly impossible for the economy to function: at some point, people ditch the hyperinflated currency and switch to some other form of money

Generally, central banks try to aim for continuous *low, but not zero*, inflation: 1% to 2% per year is considered ideal

- Managing the money supply to keep it in perfect sync with economic growth is a challenging and inexact task, with feedback loops and time lags; there's a limit to how precisely you can expect to manage outcomes
- Because even a little bit of deflation can be so destructive (due to how it causes a slowdown in economic activity that starts in real estate and durable goods, and because of sticky wages), it is prudent to err just a bit on the side of *inflation*
- Interest rates, which are the powerful central-bank tool for controlling *inflation*, are almost *useless against deflation* – which is another good reason to give yourself a margin for error, to avoid the risk of ever slipping even slightly into deflation
- Inflation under 2% is low enough that people generally don't bother to worry about it in planning their economic activities: they treat it as if it was essentially zero
- To the extent that a little bit of inflation has any economic effect at all, it is probably slightly stimulative: “*go ahead and buy it... prices only tend to go up over time*”

Total amount of
goods and services offered for sale
at a given time

SUPPLY

Generally, over the long term, both of these go up

Generally, therefore, most of the time, central banks are managing the creation of money, to keep it at a pace so as to grow the money supply at very close to the same rate at which

Total
require to buy those goods and services
at a given time

DEMAND

Over the last century, as the understanding of economics has grown enormously, what we recognize as the goals and responsibilities of a central bank have gradually evolved, until they are now understood to be

- keep prices stable
- keep the overall economy stable, with special focus on banking and the financial sector
- when the economy goes into crisis, react so as to limit damage and restore stability

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DEMAND

**Every central bank is continuously on the alert,
ready to react to capitalism's bipolar mood swings:**

- > **When the economy begins to overheat, with rising inflation and / or high lending, leverage, and risk, or a dangerous asset price bubble, the central bank starts raising interest rates, and may also sell assets on its balance sheet, to reduce the money supply**
- > **When the economy starts to fall into recession, the central bank lowers interest rates and may also feed additional money into the economy, to replace money lost through reduced bank lending, and to mitigate and minimize the bust as much as possible – all while keeping a close eye on prices, to be careful not to trigger a bout of inflation**

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SUPPLY

*Generally, over the
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Generally, therefore, most of the time, central banks are managing the creation of money, to keep it at a pace to grow the money supply close to the same rate at

During a recession, demand in the private-sector economy drops rapidly, while the money supply may decline, as well

Government may jump in with stimulus spending, to make up for some of the drop in private-sector demand

The central bank has to monitor all these changes closely, reducing interest rates and feeding money into the economy so as to encourage an economic recovery – while maintaining price stability

Every central bank is continuously ready to react to capitalism's biases

- **When the economy begins to overheat, with increased bank lending, leverage, and risk, or a dangerous asset price bubble, the central bank starts raising interest rates, and may also **sell assets on its balance sheet**, to reduce the money supply**
- **When the economy starts to fall into recession, the central bank lowers interest rates and may also feed additional money into the economy, to replace money lost through reduced bank lending, and to mitigate and minimize the bust as much as possible – all while keeping a close eye on prices, to be careful not to trigger a bout of inflation**

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in private sector demand

**Beyond all this, an unusually severe crisis
sometimes presents new challenges
to the central bank, which may drive it
to improvise or 'innovate' –
to react in ways that go
beyond what it has had to do,
to deal with previous crises...**

**Every
ready to**

- **When the economy is overheating, with excessive bank lending, leverage, and risk, or a dangerous asset price bubble, the central bank starts raising interest rates, and may also sell assets on its balance sheet, to reduce the money supply**
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The fact that private-sector actors have a good bit of awareness of the actions a central bank might take in a crisis, and therefore may shape their own behavior in anticipation of those actions, means that there are always tricky feedback loops in play between expectations and actions, on the part of both the central bank, and private-sector actors...

It's a bit of an endless cat-and-mouse game, with the central bank trying to maintain stability, and counter instability, while not creating perverse incentives that might reward private-sector actors for causing yet more future instability...

Generally, over the long term, both of these go up

Generally, therefore, most of the time, central banks are managing the creation of money, to keep it at a pace so as to grow the money supply at the same rate as...

Central bank is continuously adjusting to capitalism's bi

...begins to overheat, with **and risk, or a dangerous asset price bubble, the central bank lowers interest rates, and may also sell assets on its balance sheet to reduce the money supply**

...starts to fall into recession, the central bank **lowers interest rates, and may also feed additional money into the economy, through reduced bank lending, and to mitigate the recession as much as possible – all while keeping a close eye on inflation, and being careful not to trigger a bout of inflation**

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Generally, therefore, most of the time, central banks are managing the economy, to keep it growing, and to keep the money supply growing, to keep the economy growing, and to keep the price level stable.

Bank is

begins to

starts to fall into recession, the central bank lowers also feed additional money into the economy, through reduced bank lending, and to mitigate as much as possible – all while keeping a close careful not to trigger a bout of inflation

And each new severe crisis can require new, unprecedented actions by the central bank, which then change the way it operates, going forward – and those operational shifts then change expectations and behavior in the private sector.

And on, and on... sets on its balance

During a recession, demand in the private-sector economy drops rapidly, while the money supply may decline, as well

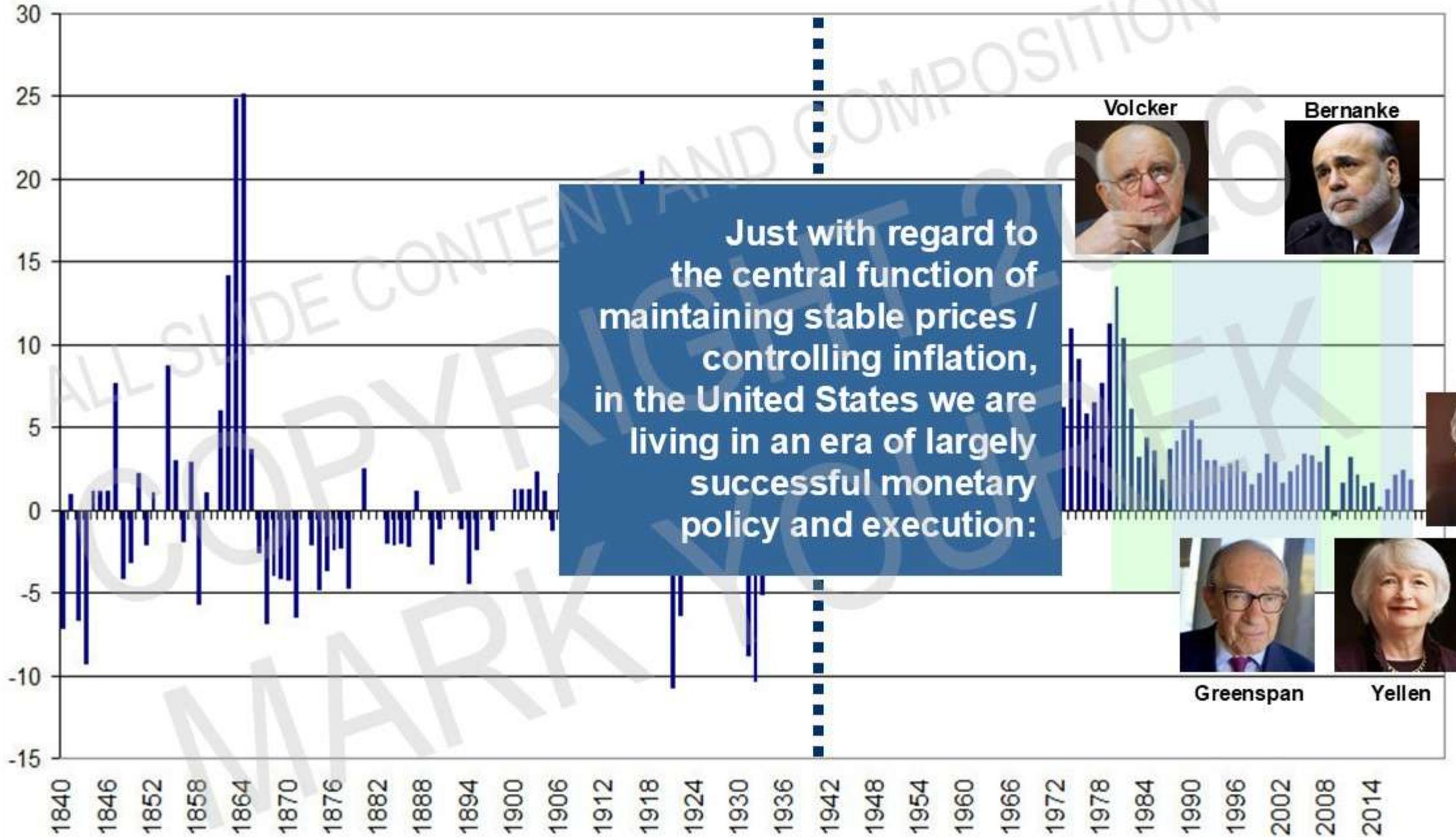
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some of the drop in demand

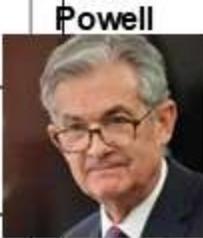
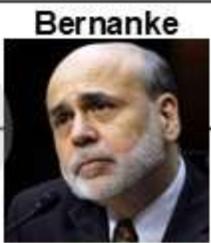
the central bank has to monitor closely, reducing and feeding money into the economy so as to bring about economic recovery and price stability

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US Annual Inflation Rate 1840-2019



Just with regard to the central function of maintaining stable prices / controlling inflation, in the United States we are living in an era of largely successful monetary policy and execution:



The Gold Standard?

- Constitutes an alternative to having a central bank manage the stability of currency value, and react to economic crises
- If you are convinced that government central bankers will never be competent to manage the value of the currency to be stable; or, that the actions they take in a crisis will inevitably result in perverse consequences that will make the next crisis even worse, or, you worry that central bankers will inevitably be corrupt; or, if you just *hate* the idea of it being necessary for **government** to perform such a central and vital economic function –
then the notion of going back to **using gold as money** may instinctively appeal to you

The Gold Standard?

- Unfortunately, since by definition, under the gold standard no one is managing the money supply so as to keep it in close, deliberate pace with the growth of the economy, using gold as money drives **price fluctuations both up and down** – and most critically, there will inevitably be episodes of grave economic destruction caused by **uncontrolled deflation**
- Since the mining of new gold has never kept pace with world economic growth, gold imposes a long-term price trajectory that is *inexorably deflationary* – which is **murderous to economic growth**

How many countries in the world are on the gold standard today?

How many countries
use a central bank,
to manage a fiat currency?

Total amount of
goods and services
offered for sale
at a given time

SUPPLY

Generally, over the
long term, both
of these groups

Generally, therefore, most
of the time, central banks
are managing the creation of
money, to keep it at a pace so as
to grow the money supply at very
close to the same rate at which
the economy itself is growing

Total
amount required to buy those
goods and services
at a given time

DEMAND

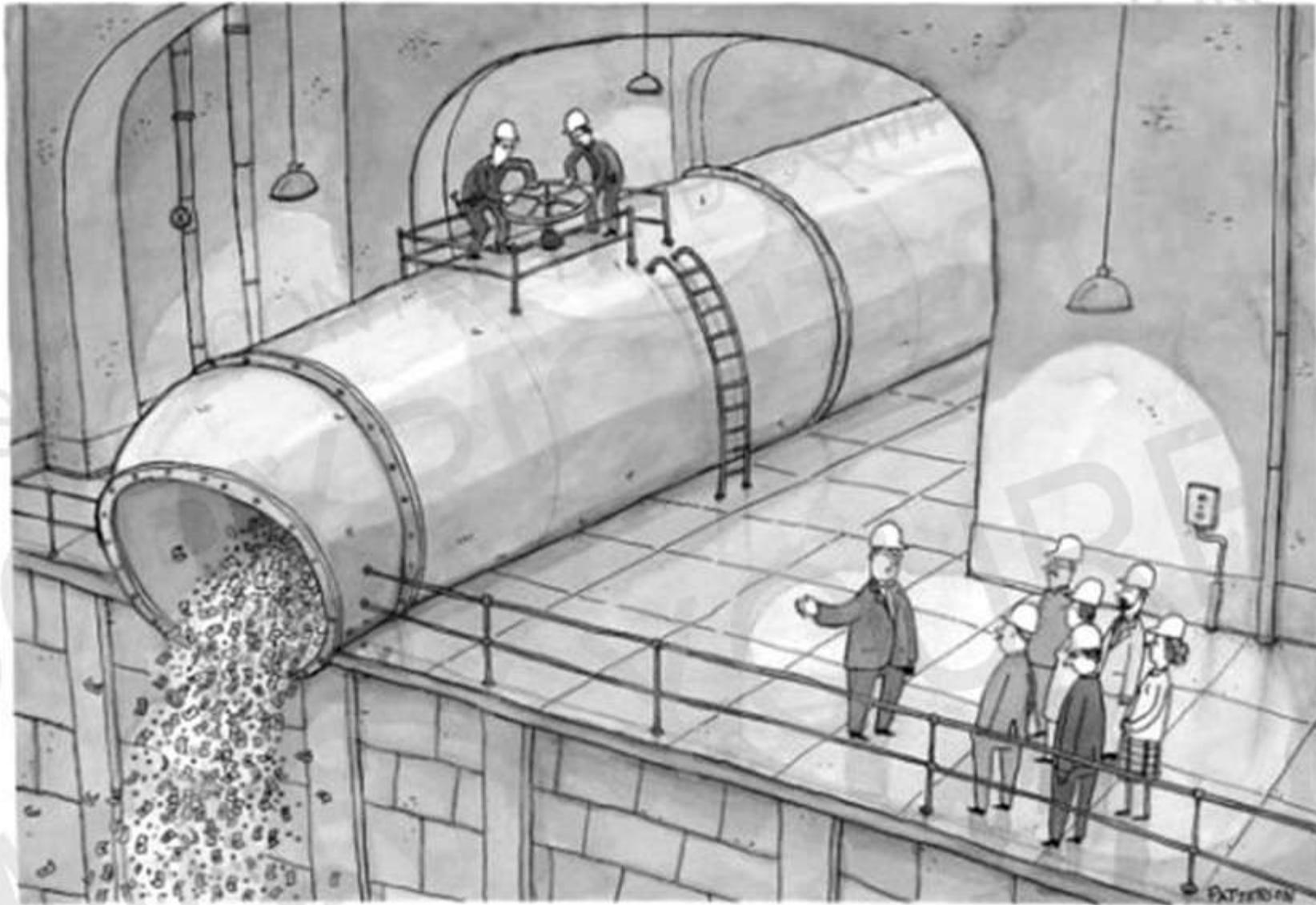
Total amount
of '**money**'
in circulation
at a given time

MONEY SUPPLY

- **Currency in circulation** (or, units of a specified commodity)
- **Bank deposits ++** (money created by banks, through lending)

On your next trip to Washington,
consider taking the tour
of the Federal Reserve...





"And this is where we adjust the interest rate."

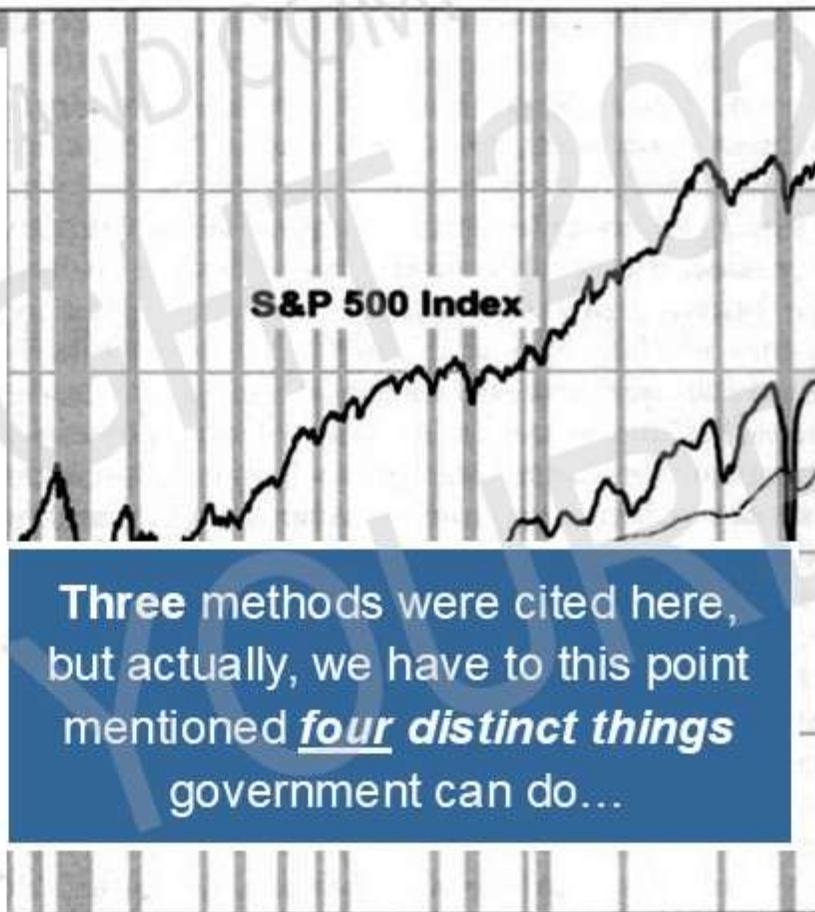
Why do the two sides of this graph look so different?

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

\$10,000

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

1. *Monetary policy stabilizing prices and avoiding deflation, and direct crisis intervention and mitigation as executed by the Federal Reserve*
2. *Stabilization of the banking sector through government-backed deposit insurance, and the Federal Reserve acting as lender of last resort*
3. *The increased size of the Federal government as a share of the economy, which provides a more significant element of overall stability*



Three methods were cited here, but actually, we have to this point mentioned four distinct things government can do...

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

Government stabilizes the banking sector through direct involvement (deposit insurance ++), and reduces instability in securities markets through financial regulation

CONTINUOUS,
ONGOING
since 1934

- Banking contributes massively to the instability of every market-capitalist economy, with bank panics historically being a prime trigger of recessions, and of vast, recurrent wealth destruction. This problem has been largely solved, since the 1930s, by government-backed deposit insurance, and the role of the Fed as lender of last resort to the banking industry, accompanied by bank regulation / supervision
- Banking since the Great Depression therefore should not be viewed simply as a *private-sector* industry: it is in fact a unique public/private hybrid, with the private sector providing the capital and expertise to do lending, and the public sector providing the critical backstop of *stability*, to prevent bank runs and banking panics
- Since the 1930s, government has also been used to reduce fraud and malpractice in the securities markets, starting with establishment of the SEC. Such efforts are in perpetual, recurrent evolution, as financial instruments, markets, and institutions evolve and change

PREVENTING
BANK PANICS
and
SECURITIES
FRAUD AND
MALPRACTICE

Delivers net
economic
value

Four ways the Federal government stabilizes the economy, and prevents or mitigates economic downturns

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The Federal government provides an element of stability in the economy through its inherent scale

CONTINUOUS,
ONGOING
since the 1940s

- Increased from 4% of GDP in 1930, to 14% after WW2; then to 17-18% during the following decades, and is now around 20-21%
- Because the Federal government does not generally react to economic downturns by laying off hundreds of thousands of soldiers or other employees, and because some government programs automatically tend to spend *more* during a recession even while tax revenues go down and the government collects less tax as a share of GDP, government automatically acts as a stabilizing economic force
- To whatever extent the federal government constitutes an incrementally larger vs smaller share of the overall economy, there is presumably some cost to productivity growth and therefore GDP growth... Since government is for the most part not subject to competitive market discipline, as most of the private sector is, it's unrealistic to expect it to be nearly as innovative or nearly as efficient as the private sector

'BALLAST IN
THE KEEL'

Carries a net
economic cost

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Government manages the money supply and interest rates, and executes direct interventions in times of crisis

- The Federal Reserve manages the supply of the national fiat currency, monitoring various measures to understand aggregate money supply, as created through banking and lending activities, etc.
- The Fed also controls interest rates through open-market activities, adjusting these upwards and downwards to maintain stable price levels (with 1-2% inflation per year considered ideal), while keeping an eye on the overall economy, to try to maintain a stable and sustainable growth rate, without tipping into either overheating or recession
- This is the realm of monetary policy, which is conducted by an ostensibly independent central bank... but which is itself of course ultimately accountable to political bodies
- Since the 1950s, the American Federal Reserve has established itself as perhaps the world's premiere example of a highly sophisticated, strongly independent, and technocratically competent central bank

**CONTINUOUS,
ONGOING**
with improving
policies and
effectiveness
since the mid-
20th century

*KEEPING
PRICES
STABLE,
WHILE
PRIMING A
FALTERING
ECONOMY and
COOLING AN
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Carries a net
economic cost

**Government can act as
an *active counterweight*, to pull
back against economic downturns**

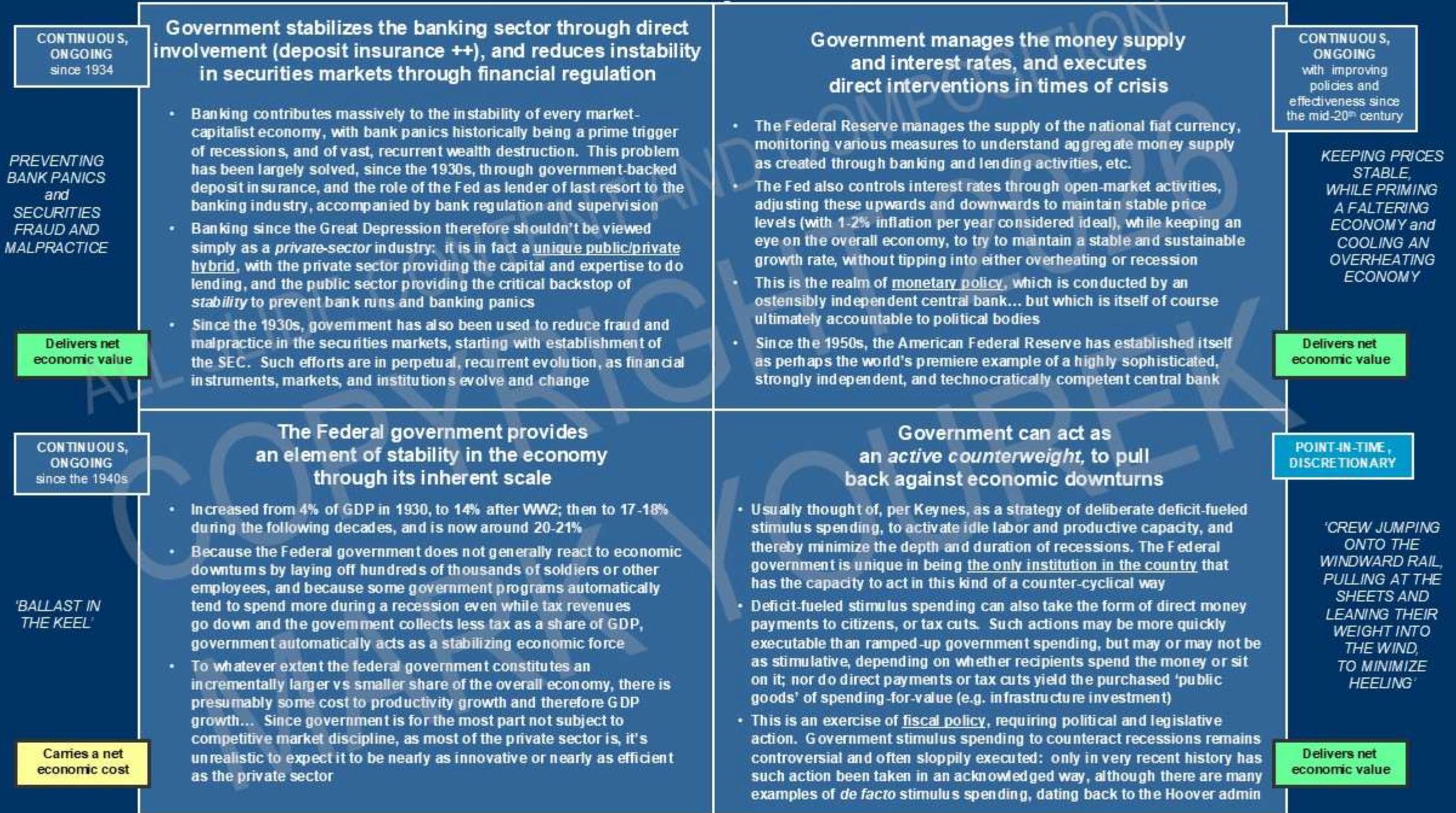
- Usually thought of, per Keynes, as a strategy of deliberate deficit-fueled stimulus spending, to activate idle labor and productive capacity, and thereby minimize the depth and duration of recessions. The Federal government is unique in being the only institution in the country that has the capacity to act in this kind of counter-cyclical way
- Deficit-fueled stimulus spending can also take the form of direct money payments to citizens, or tax cuts. Such actions may be more quickly executable than ramped-up government spending, but may or may not be as stimulative, depending on whether recipients spend the money or sit on it; nor do direct payments or tax cuts yield the 'public goods' of spending-for-value (e.g. infrastructure investment)
- This is an exercise of fiscal policy, requiring political / legislative action. Government stimulus spending to counteract recessions remains controversial and often sloppily executed: only in very recent history has such action been taken in an acknowledged way, although there are many examples of *de facto* stimulus spending, dating back to the Hoover admin

POINT-IN-TIME,
DISCRETIONARY

'CREW
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Delivers net
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Four ways the Federal government stabilizes the economy, and prevents or mitigates economic downturns



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CONTINUOUS, ONGOING with improving policies and effectiveness since the mid-20th century

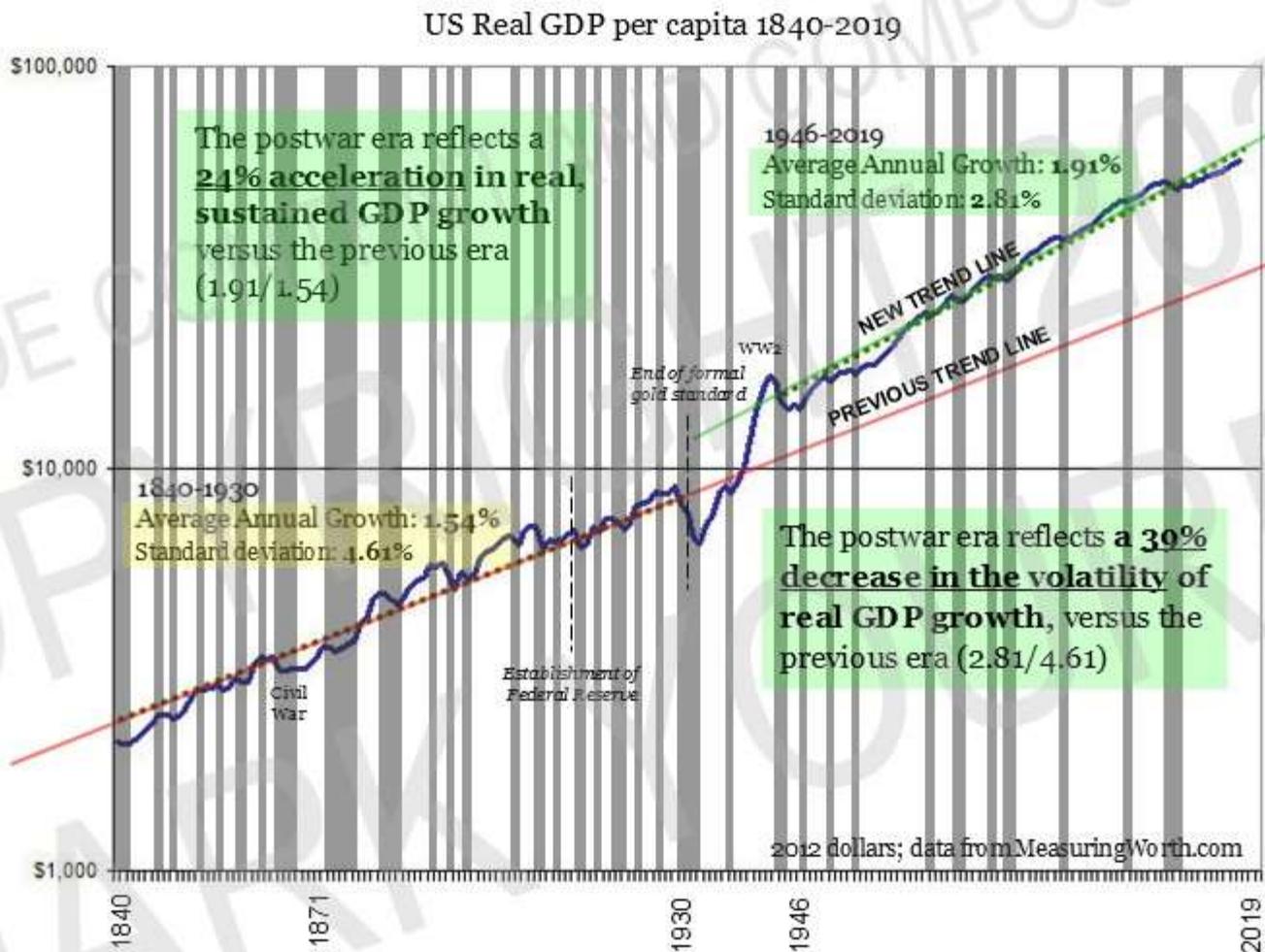
PREVENTING BANK PANICS and SECURITIES FRAUD AND MALPRACTICE

- Banking is by its nature prone to bank runs and therefore contributes to capitalist economic trigger of recessions
- This problem has been addressed by the establishment of the Federal Reserve Bank, the FDIC, and the FDIA
- Banking since 1934 is understood simply as a private industry providing the crucial bank services as crucial bank

Delivers net economic value

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Carries a net economic cost

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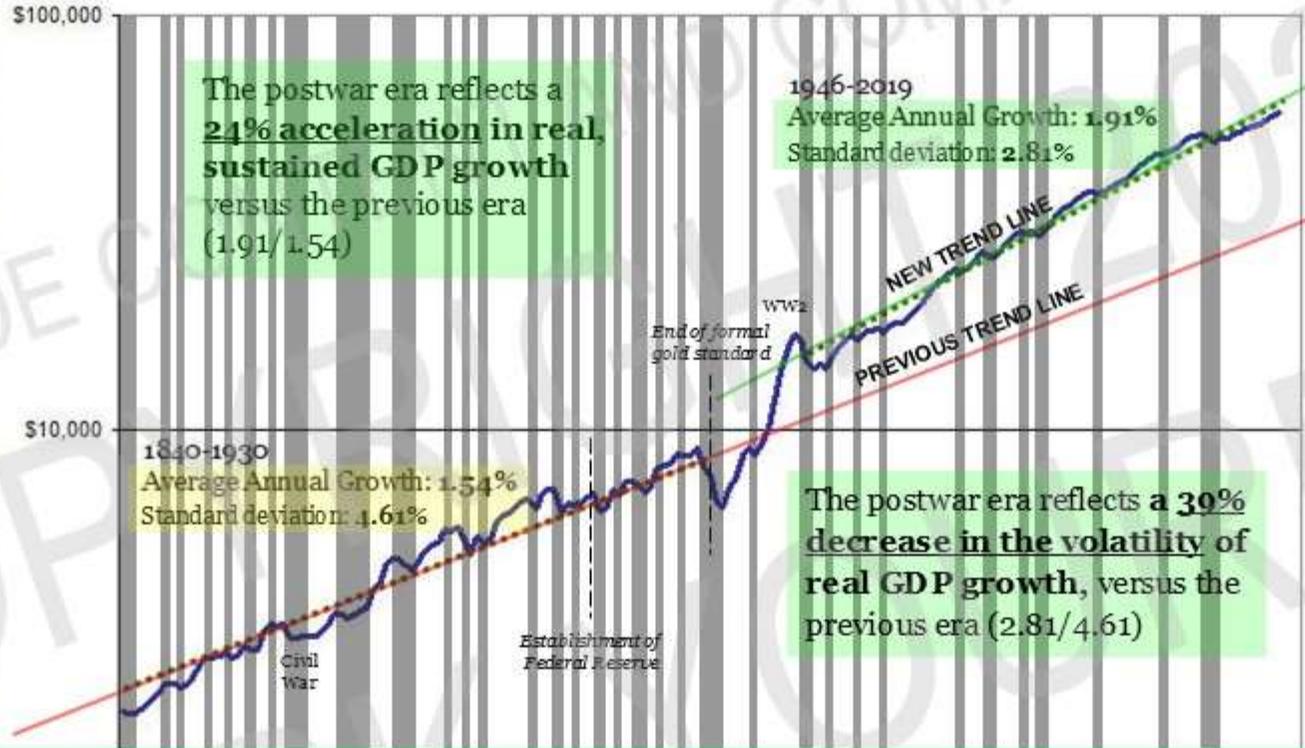
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- Banking since WWII has been understood simply as a private industry providing the crucial banking services to the economy

Delivers net economic value

CONTINUOUS, ONGOING since the 1940s

- Increased from 1940s to 1970s during the folk era
- Because the Fed has been able to provide the crucial banking services to the economy

US Real GDP per capita 1840-2019



The postwar era reflects a **24% acceleration in real, sustained GDP growth** versus the previous era (1.91/1.54)

1946-2019 Average Annual Growth: 1.91% Standard deviation: 2.81%

1840-1930 Average Annual Growth: 1.54% Standard deviation: 4.61%

The postwar era reflects a **30% decrease in the volatility of real GDP growth**, versus the previous era (2.81/4.61)

... fiat currency, ... levels of supply

... market activities, ... stable price ... while keeping an ... and sustainable recession ... ed by an ... elf of course

... tablished itself ... ophisticated, ... central bank

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'BALLAST IN THE KEEL'

Since World War II, we seem to be in something of a sweet spot, where the net impact of government's various interventions in the economy has been clearly positive, unambiguously positive:

The economic good that the Federal government is doing, appears to significantly outweigh the inefficiencies that are inherent in carrying this larger government

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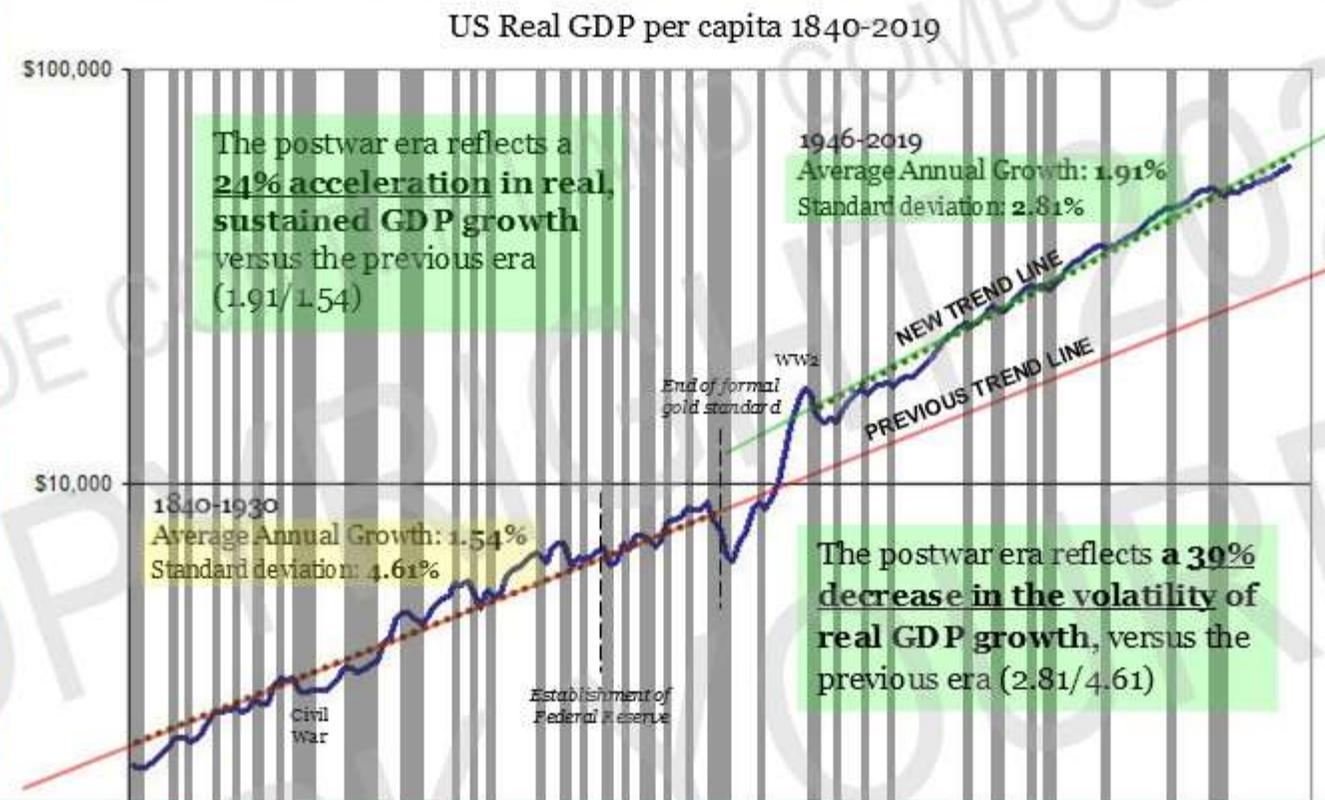
Delivers net economic value

CONTINUOUS, ONGOING since the 1940s

- Increased from 1946 to 2019 during the following period
- Because the Fed has reduced downturns by 100%

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In fact, a much wider conclusion is strongly suggested by all this

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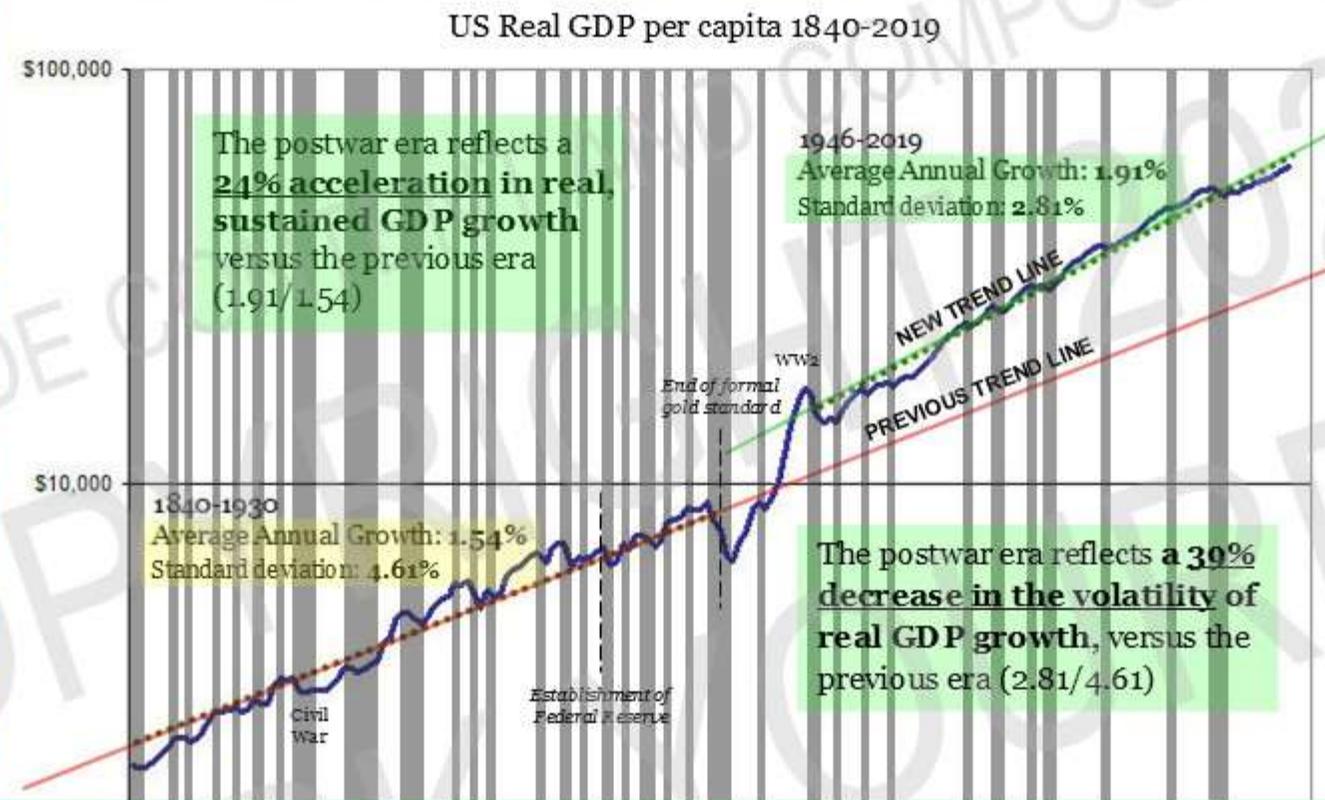
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The permanent improvement in the performance of the economy during the postwar era suggests that the net economic contributions of the Federal government significantly outweigh not just the costs of incremental government, these economic contributions also significantly outweigh the net costs of all incremental government regulation imposed since World War II – including all new federal, state and local regulations

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

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