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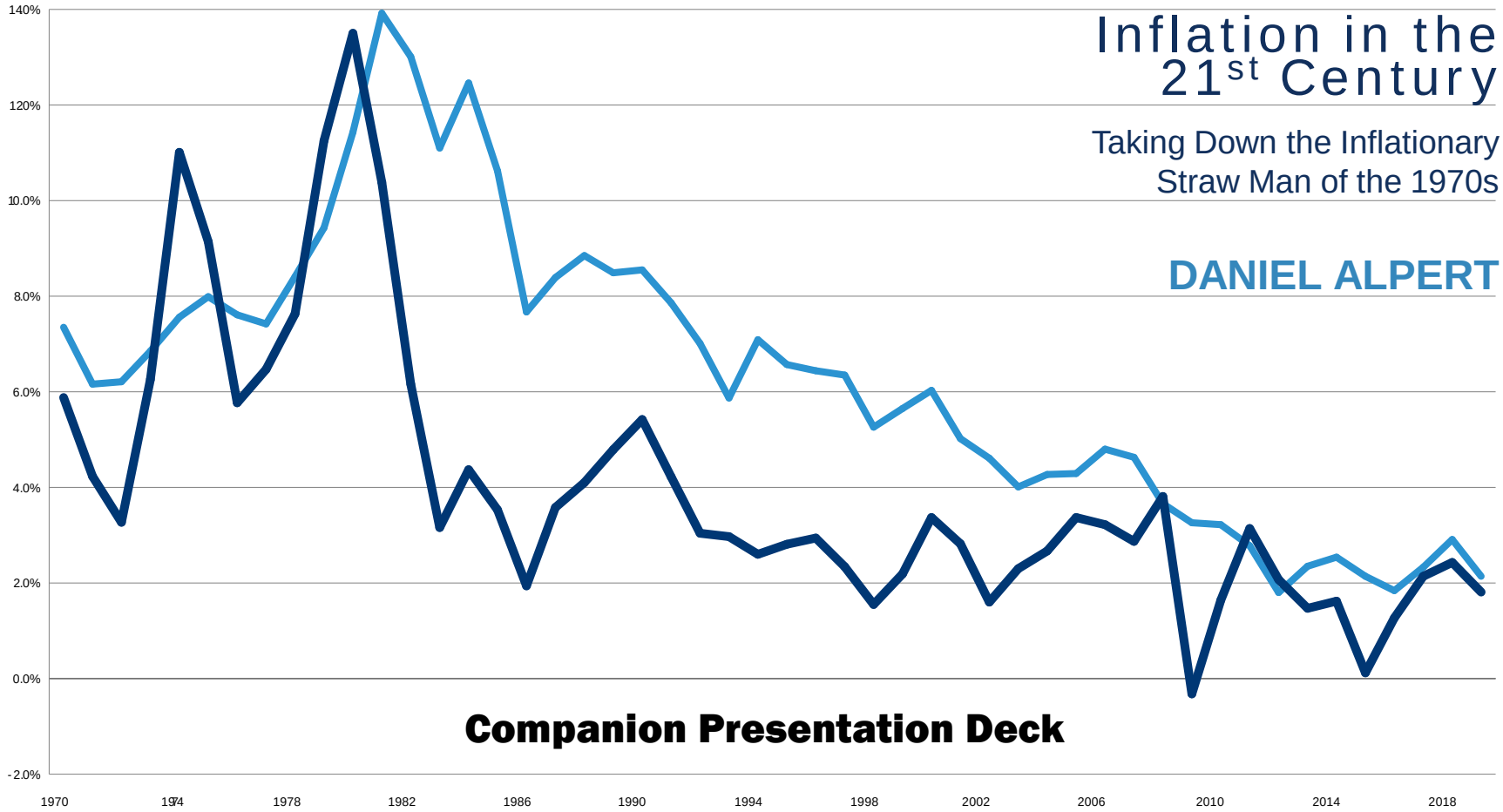
Inflation in the 21st Century

Taking Down the Inflationary Straw Man of the 1970s

DANIEL ALPERT



Companion Presentation Deck

OCTOBER 2021

From the foreword by Paul Allen McCulley:

In 1970, Milton Friedman famously declared: "Inflation is always and everywhere a monetary phenomenon in the sense that it is and can be produced only by a more rapid increase in the quantity of money than in output."

To this day, that putative verity is regularly trotted out by economists and politicians, whenever inflation accelerates, usually summarized in the cliche that inflation is "too much money chasing too few goods." Implying, of course, that our government needs to rein in the amount of money doing the chasing.

This pithy conclusion ignores two critical issues:

(1) Who owns the money that is doing (or, increasingly, not doing) the chasing; and

(2) What could the government do to increase the supply of goods (and services) that are being chased?

Both questions deserve rigorous examination, both to understand the history of inflation, as well as its prospective path.

- In February of 2021, a coterie of academic and business economists and commentators began to express views ranging from apprehension to outright alarm that the expansionary fiscal plans put forth by the Biden administration would likely result in sustained - and possibly difficult to control - levels of U.S. price and wage inflation.

- ***"Inflation in the 20th Century"*** is a deep dive into both the supply and demand side of the debate over the possibility that a period of persistent inflation might endure – concluding that there is neither an insufficiency of supply or a surfeit of demand that would result in a sustainable inflationary imbalance between the two.

- To the contrary, the paper concludes that it is more likely that, in the absence of public sector intervention, the U.S. economy will revert in 2022 to its pre-pandemic pattern of disinflation and sluggish growth.

Section I

The 21st Century U.S. Economy is Just not Wired to Produce Sustained Demand-pull Inflation in the Prices of Goods and Services

Inflation in the 21st Century

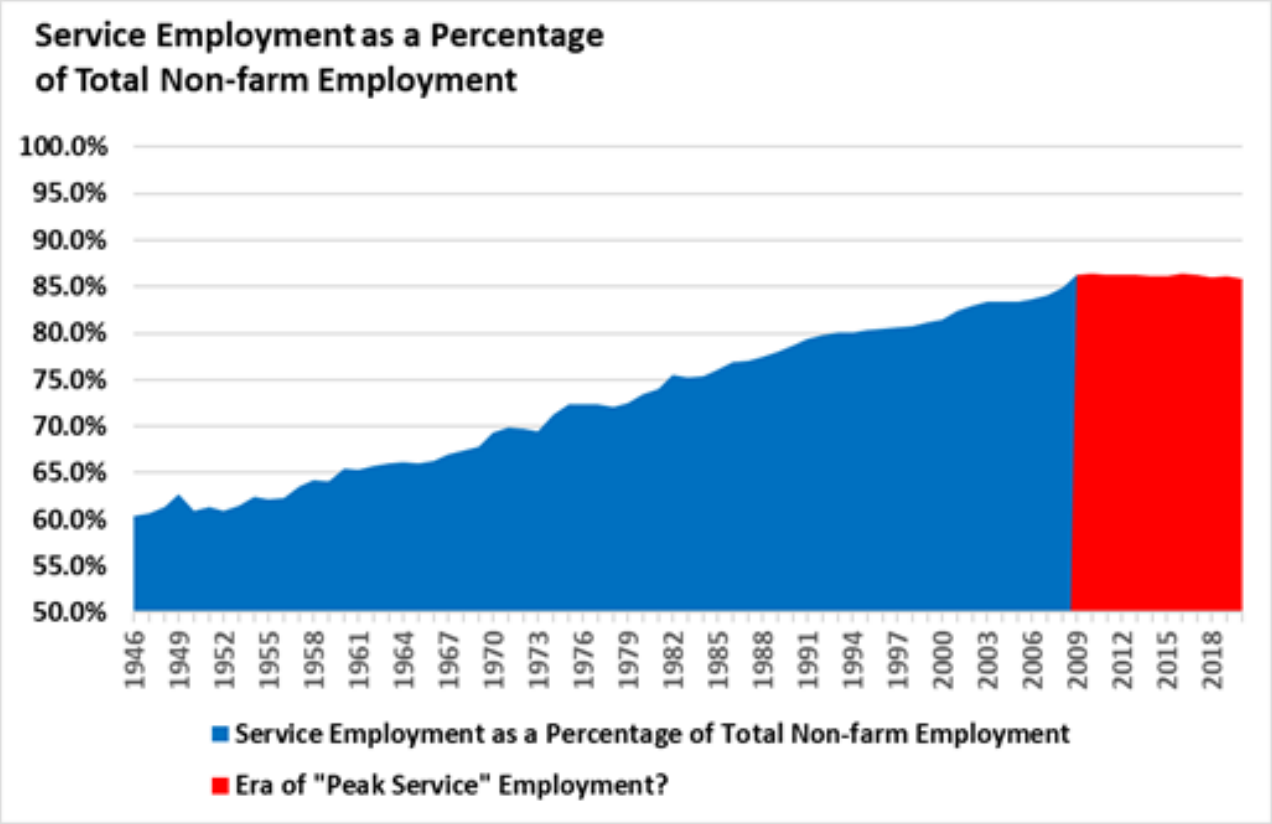
- The success of any stimulative policy depends on the transmission of same to aggregate demand. The same is true of inflation – which is always and everywhere (to refute Friedman) a phenomenon of demand running ahead of supply.
- All other correlations with inflation are ultimately dependent on transmission to demand. Whether unemployment, income growth, or cheaper and more plentiful money, there can be no inflation unless consumption increases relative to more limited supply.
- "Supply-side" economic theory postulates that easier monetary policy can produce higher levels of investment, therefore increasing supply and thus modulating inflationary pressures. Even in that instance a stable inflationary environment is dependent upon increased demand by households and firms – in the absence of which additional supply would result in deflation.

The declining labor share of growth is not only an obstacle to improved living standards for many, but it is a significant barrier to inflation:

Inflation in the 21st Century

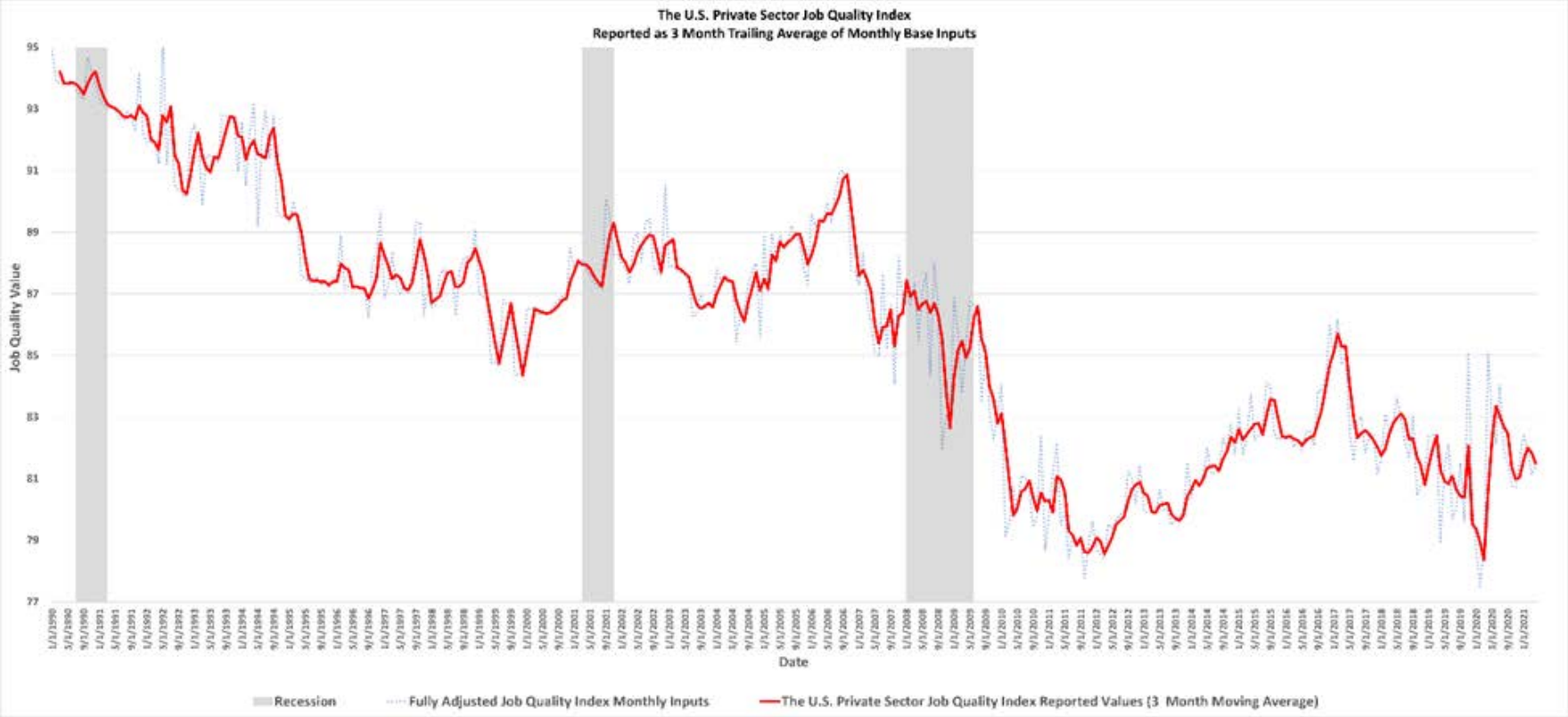
- 2017 share of income before transfers and taxes among households in the top 1 percent in the U.S. (those making an average of $2 million per year) was 17%.
- Up by 8 percentage points in just under 40 years.
- Meanwhile, the share of income among the middle three quintiles fell by 7 percentage points, and the lowest quintile's share fell by 1 percentage point.
- Piketty shows that essentially none of that eight percentage points of growth in the share of the 1%, (= $1.13 trillion in 2017, or just under half of an average 1% household's $2 million in income) flowed to either increased consumption or to primary investment in "new stuff" on the part of the wealthy.
- $1.13 trillion = ~5.75% of 2017 GDP.
- Decreased labor share/increasing polarization in the U.S. has effectively reduced the consumption, and therefore the inflationary pressures that would otherwise materialize from that portion of GDP.

The Effective Underemployment of U.S. Labor



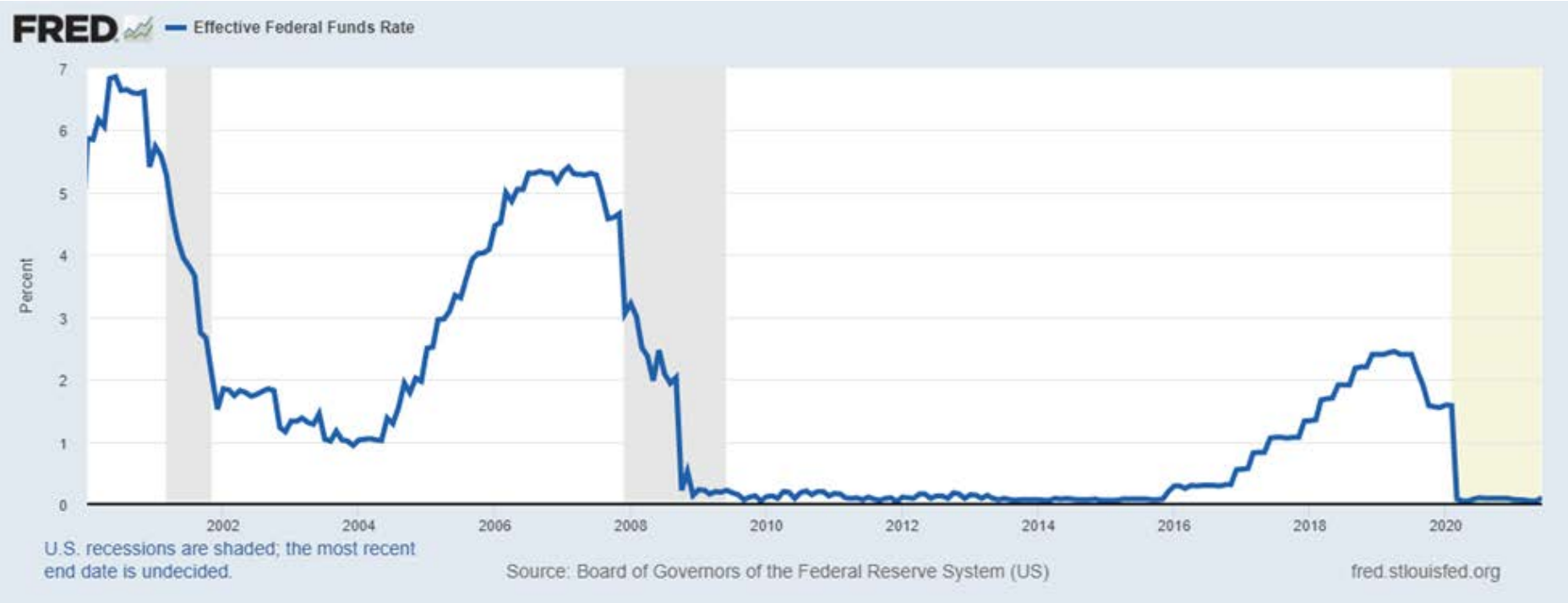
Source: Bureau of Labor Statistics

More Jobs Offering Less than Average Incomes



Source: U.S. Private Sector Job Quality Index (Bureau of Labor Statistics data)

Monetary Policy is Unable to be Stimulative



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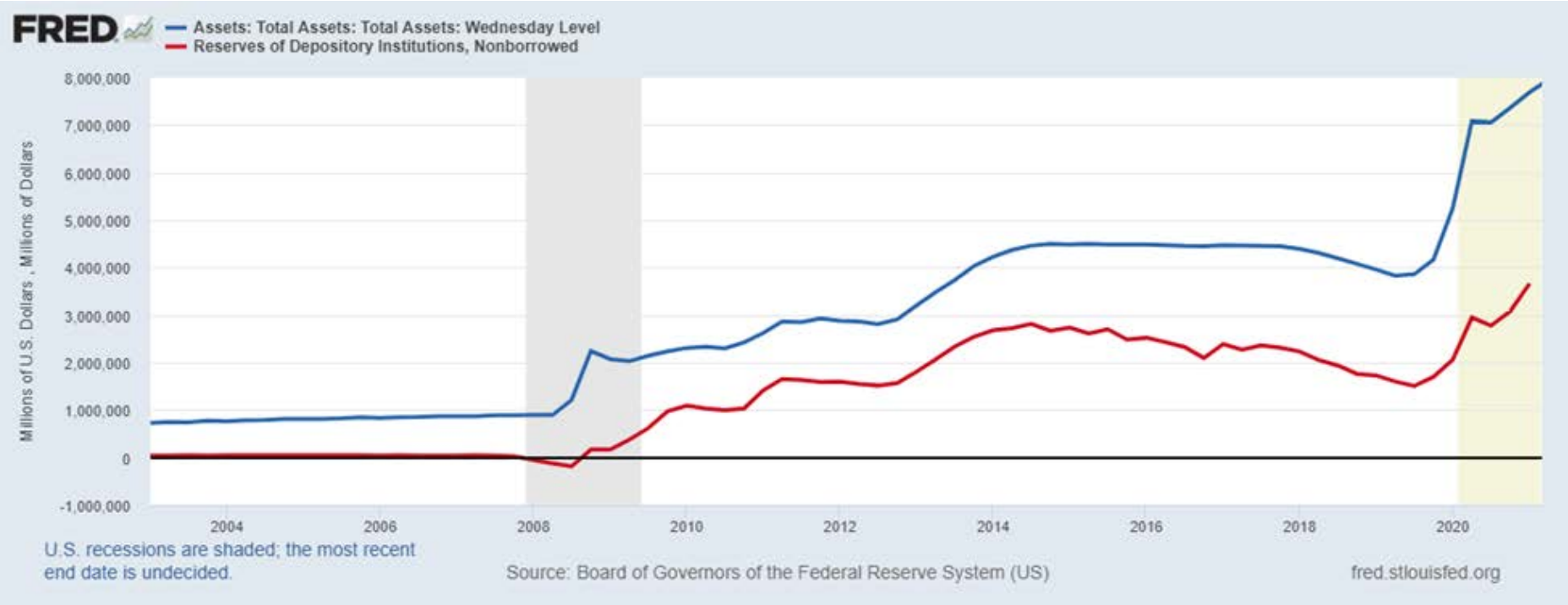
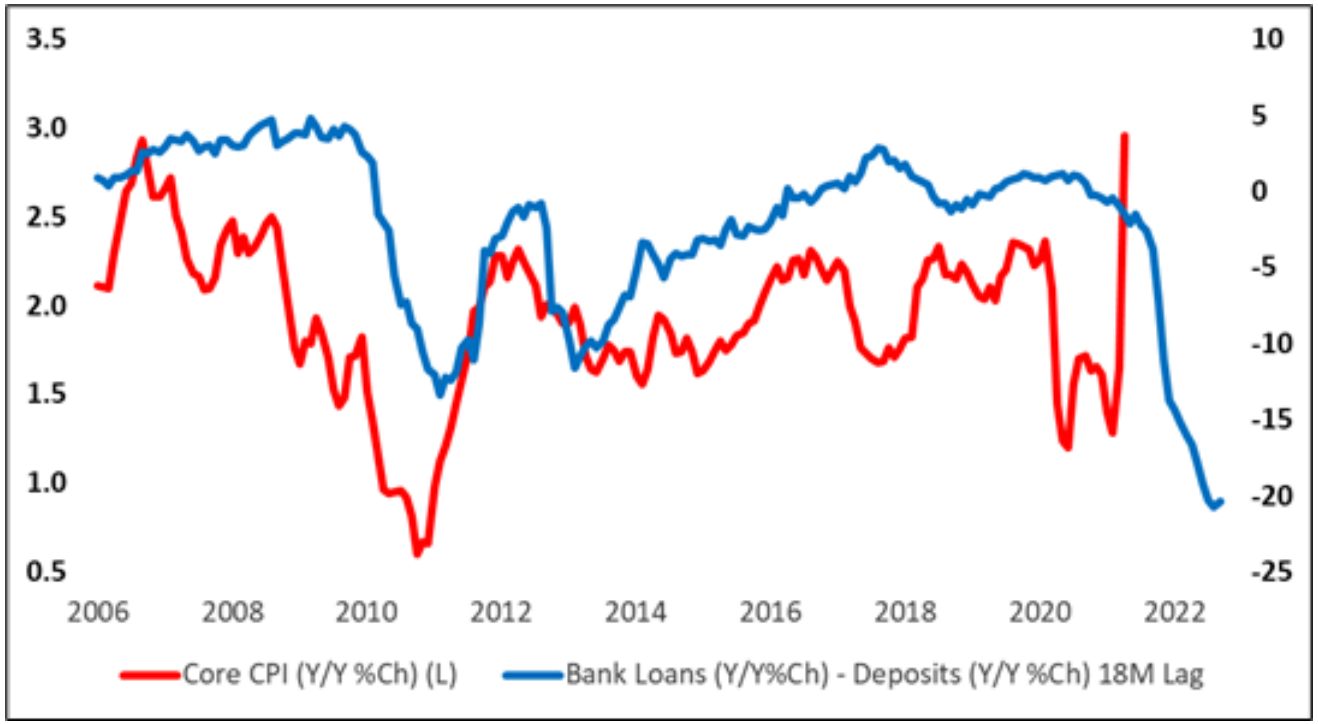


At least not until quite recently – and then not via the private sector!

The Lending Channel has Proven Unresponsive to Accommodative Policy:



Source: Bureau of Labor Statistics, Federal Reserve Board

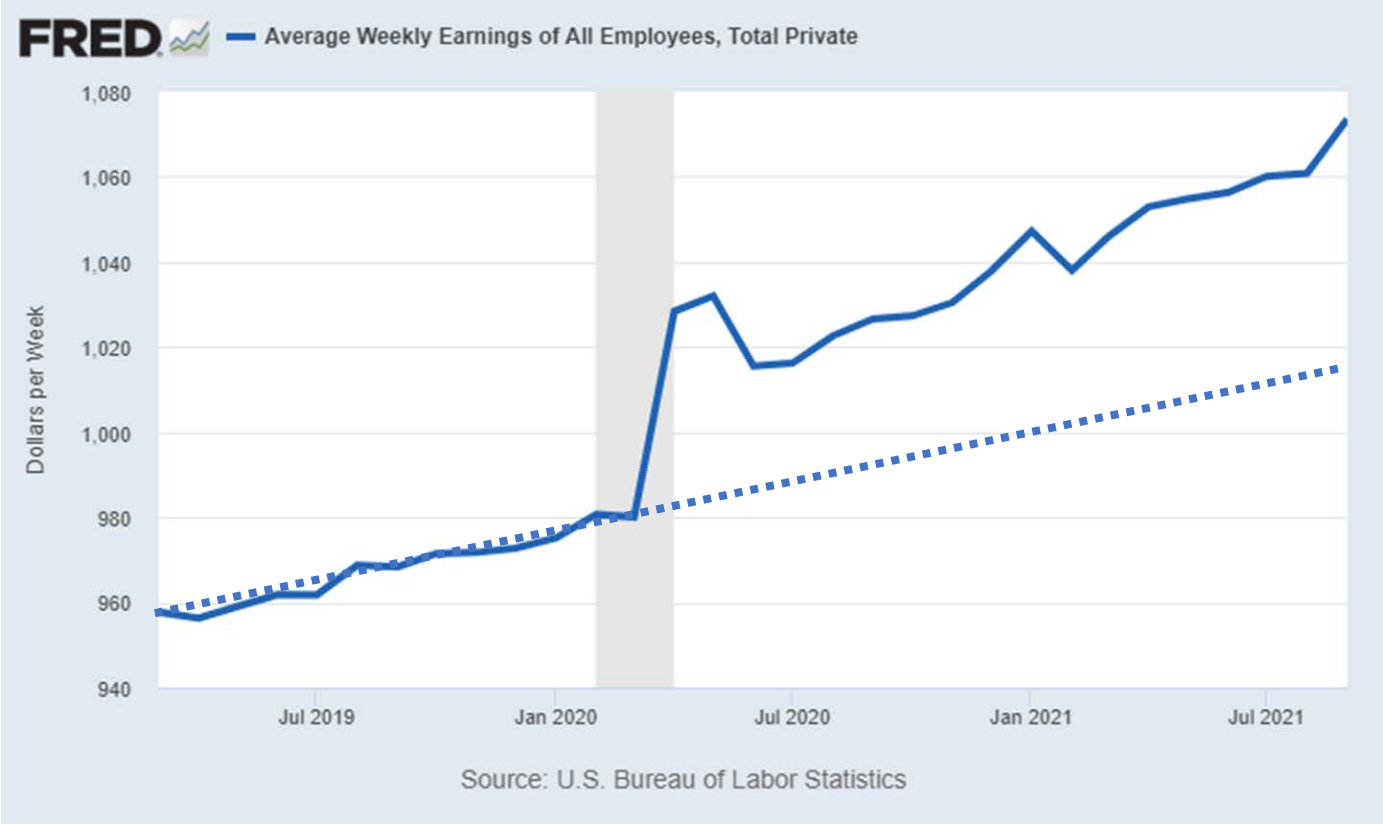
Proof of the pudding is weak net loan demand.

The Pandemic Reveals Some of the Economy's Dirty Secrets

Elimination of Low-Wage/Low-Hours Jobs results in dramatic spike in average incomes.

Skew in incomes is enormous.

Analysis of aggregate data becomes problematic.



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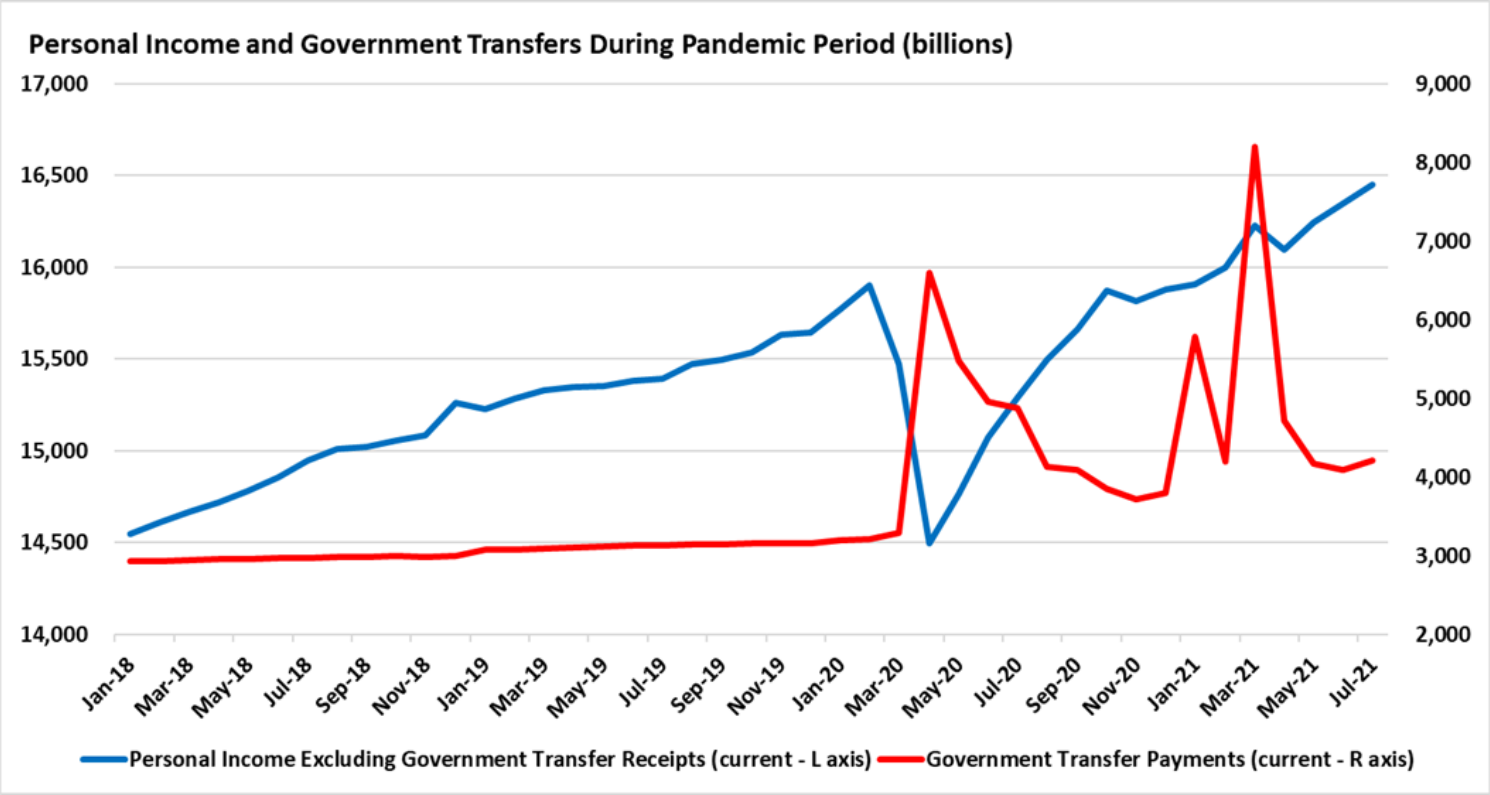


Source: Bureau of Economic Analysis

Inflation in the 21st Century

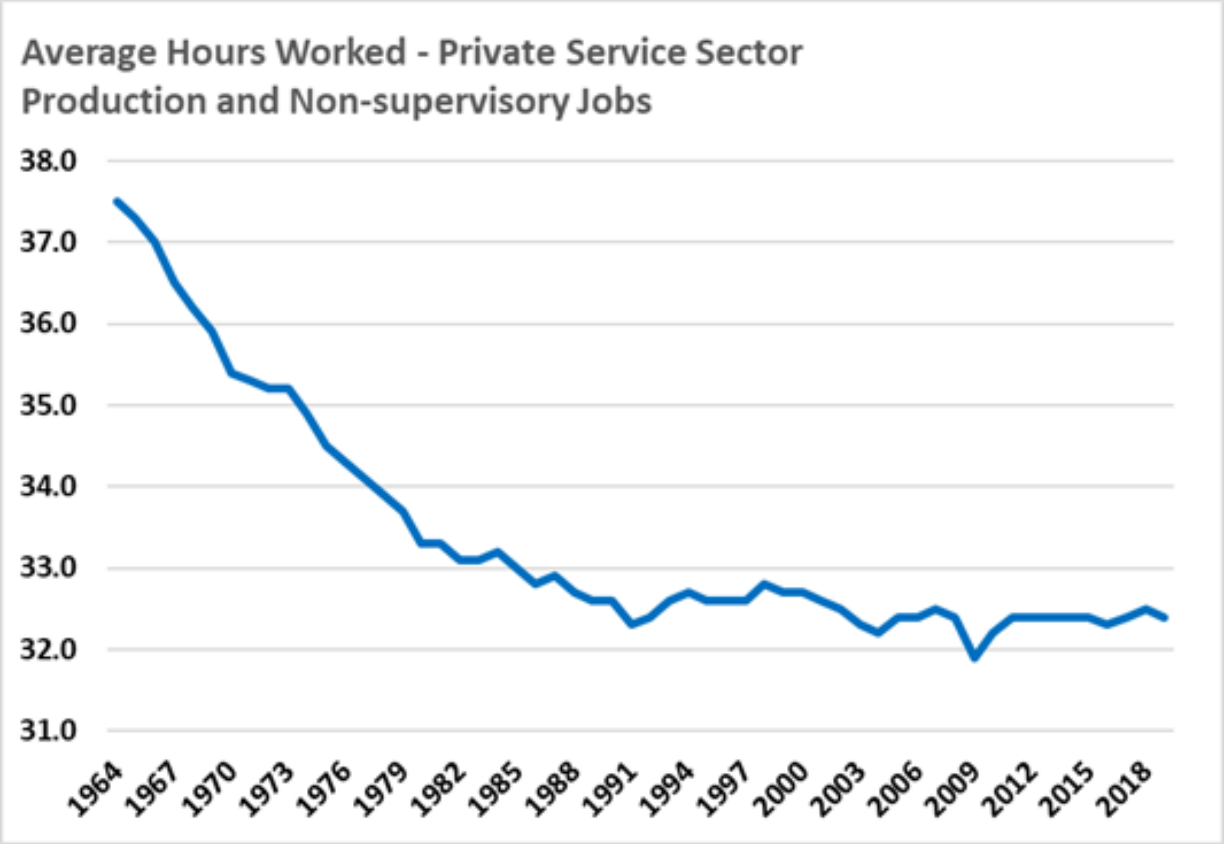
- Q1 2021: Extraordinary government transfers injected ~ $785 billion ($3.1 trillion on an annualized basis) into the economy relative to immediately pre-pandemic levels.
- 16.6% more personal income than in the three months immediately preceding lockdown., spun out of the blue for all intents and purposes, notwithstanding clear inequities in distribution of same.
- Compared to the first eight months of the last full pre-pandemic year of 2019, over $1.8 trillion of additional cash flowed to households in the first eight months of 2021 (+15%).
- And with all the supply bottlenecks attendant to the restarting of a pandemic-addled global economy all that $1.8 trillion, in what was essentially extra cash, could do is create an inflation spike that has already begun to fade.

Section II

The "Non-accelerating Inflation" Capacity of the Domestic and Global Economy to Fulfill U.S. Demand Remains Extraordinarily High

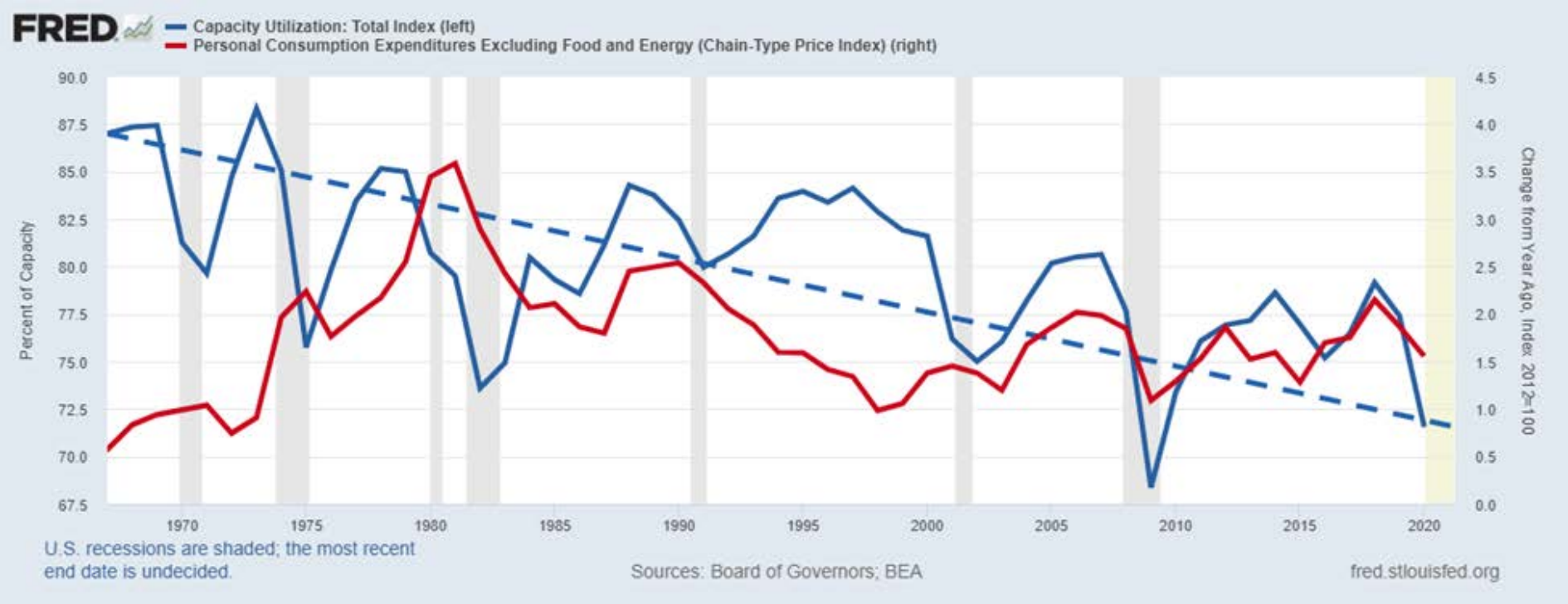
Underutilized Human Resources

Jobs in the 21st Century deepen trend towards short-hours employment.



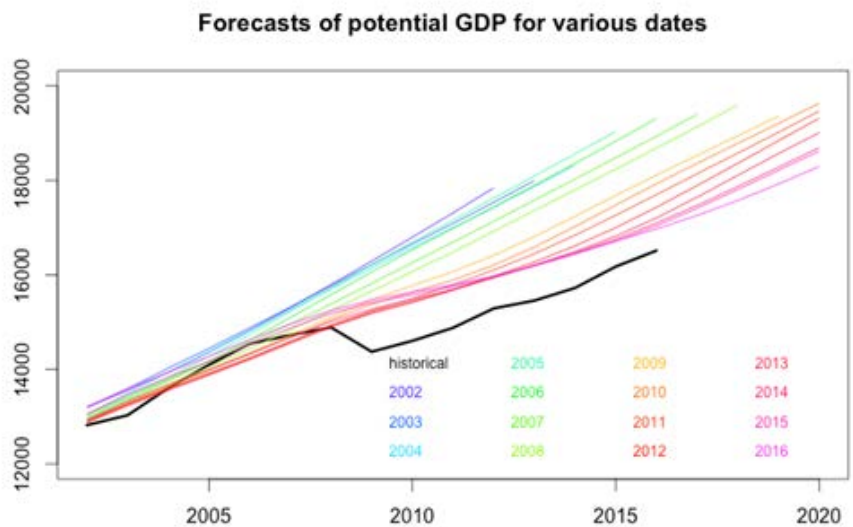
Source: Bureau of Labor Statistics

Underutilized Capital Resources



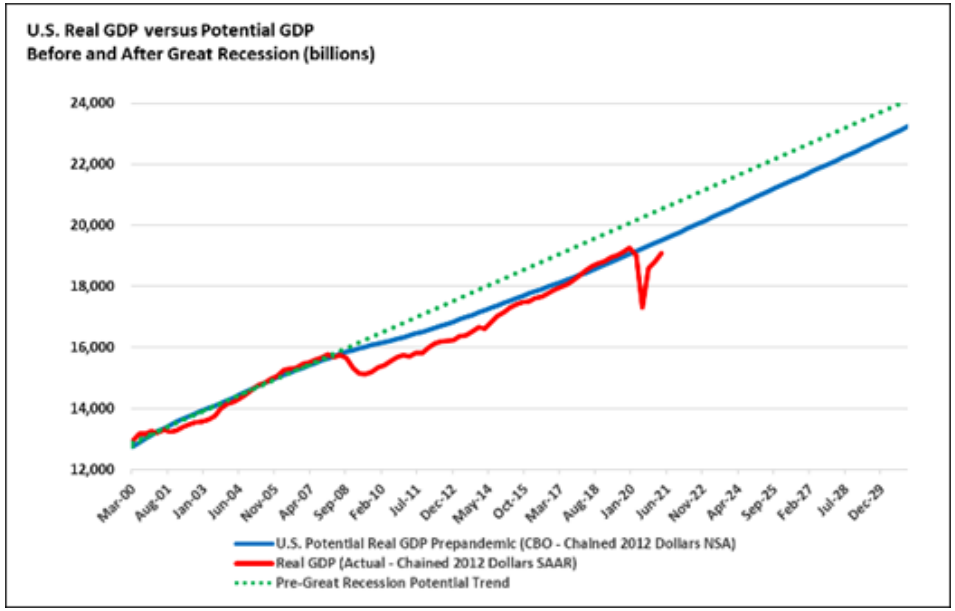
Interim fluctuations in utilization, as well as its overall decline, have correlated with movements in core inflation since the 1970s.

Modeling Potential GDP Becomes a Fool's Errand



Source: J.W. Mason – via Congressional Budget Office

Using flawed models of economic potential to compute r*, NAIRU and other theoretical equilibrium targets used in policy making can render such exercises pointless – or dangerous.

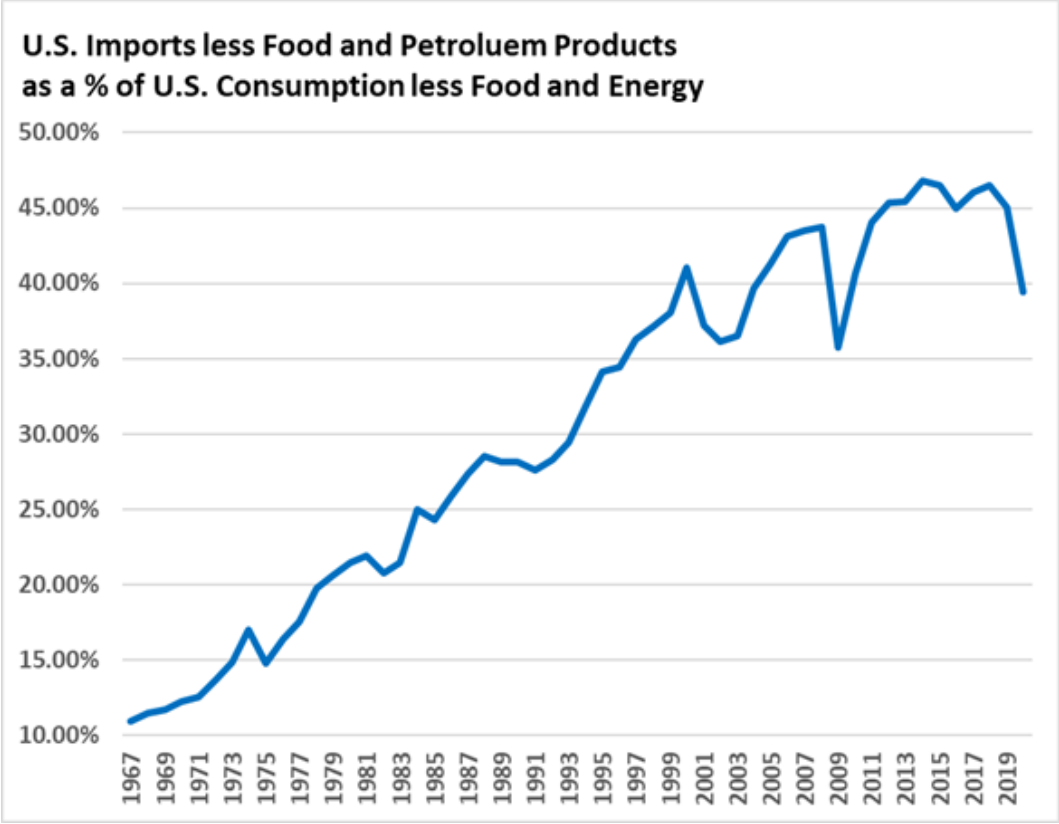


Source: Bureau of Economic Analysis and Congressional Budget Office

But What of the Intersection of Global Potential and U.S. Aggregate Demand?

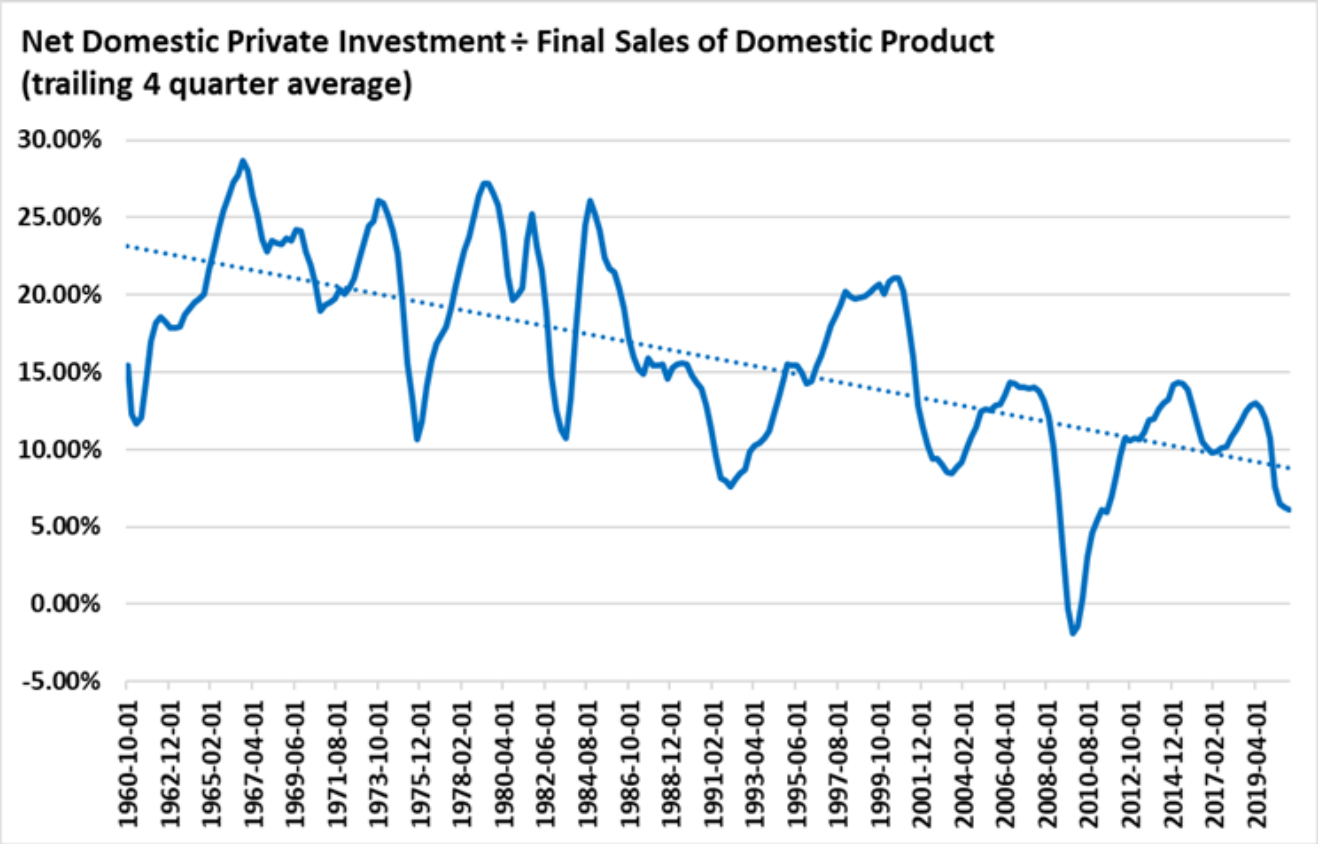
<u>The Importance of Imports</u>

Even more acute when you consider that the total consumption at right included in finished goods assembled in the U.S. using imported components. Today almost all finished goods consumed in the U.S. are (i) imported or (ii) contain imported components.



Source: Bureau of Economic Analysis

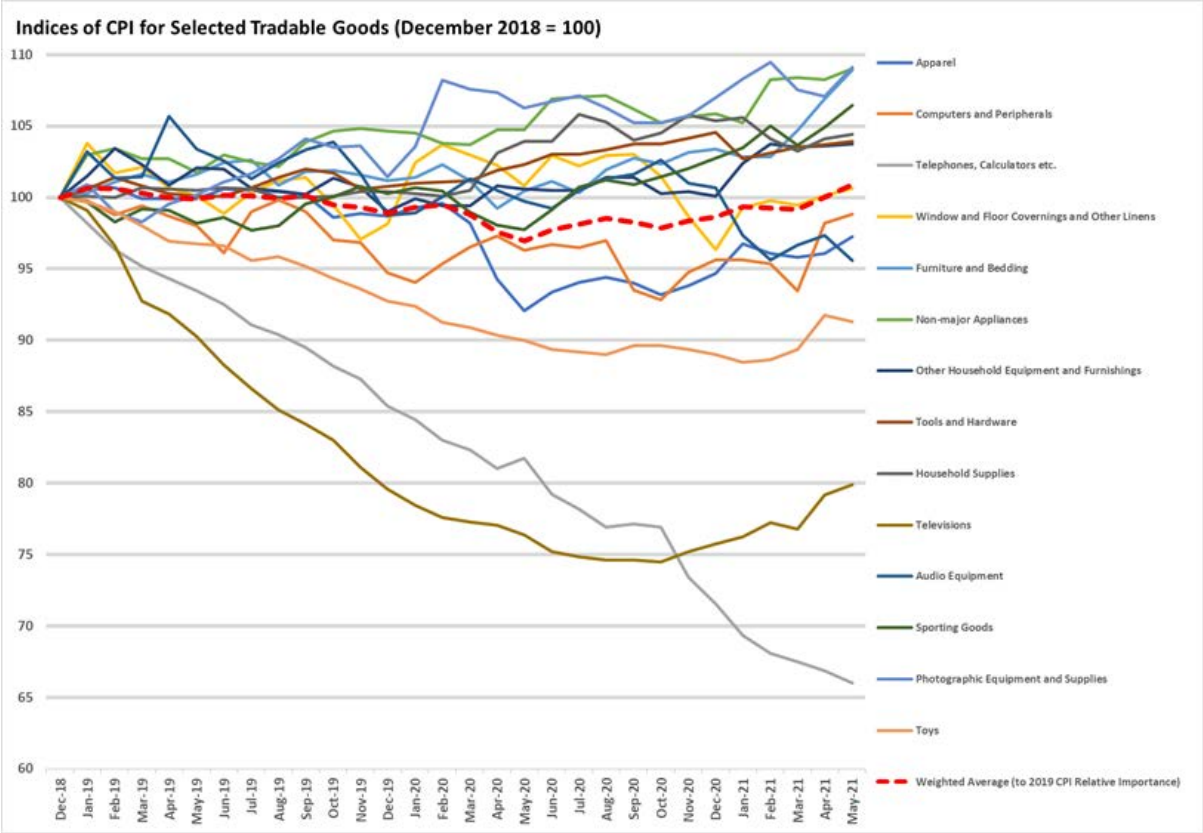
Domestic Investment Ceases to Have Relevance to Sales



Source: Bureau of Economic Analysis; Federal Reserve Board

The Pandemic Reveals Underlying Realities

By August 2021, prices of this basket of typically imported goods had increased by only 2.18% over its **December 2018** level.

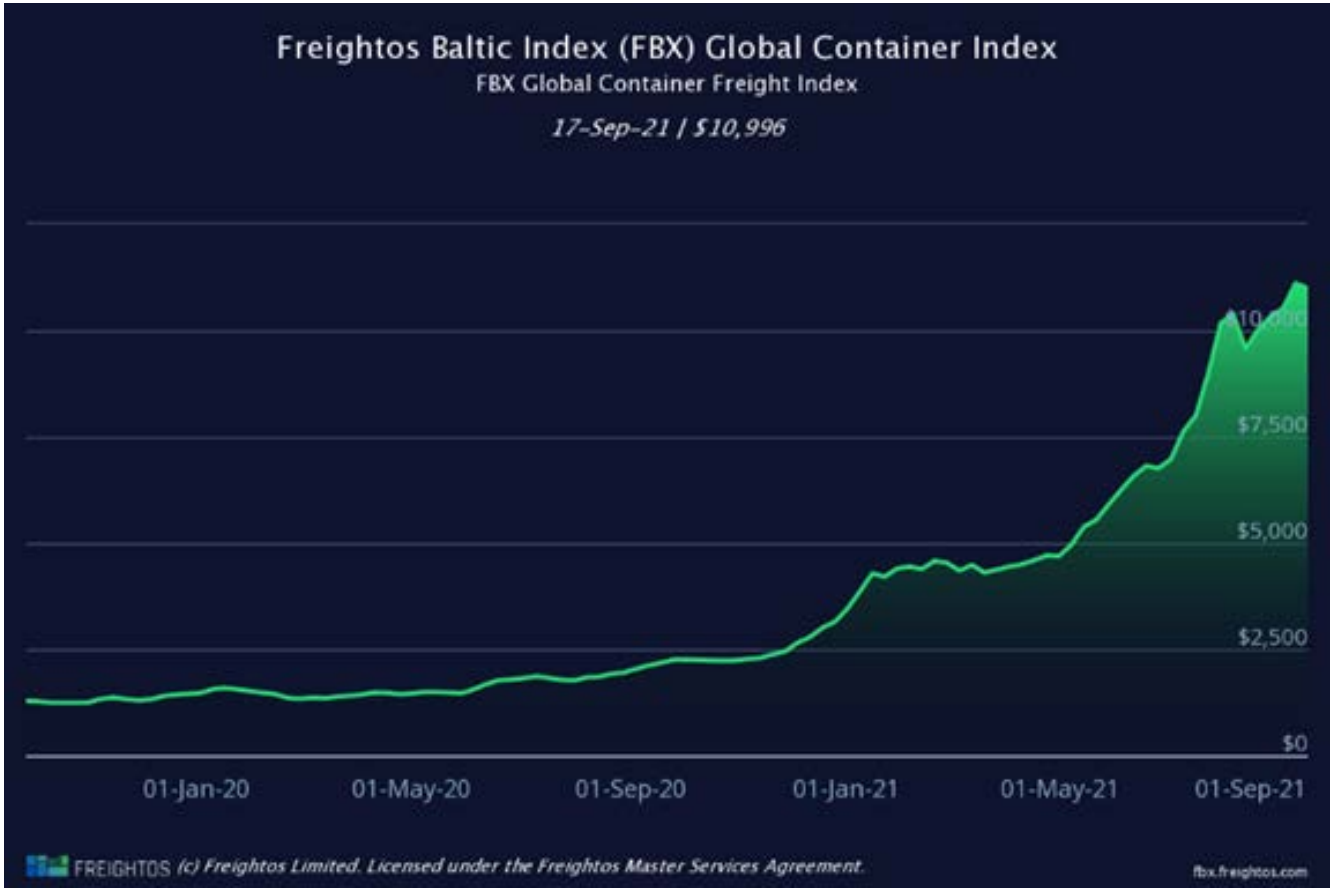


Source: Bureau of Labor Statistics

The Pandemic Reveals Underlying Realities

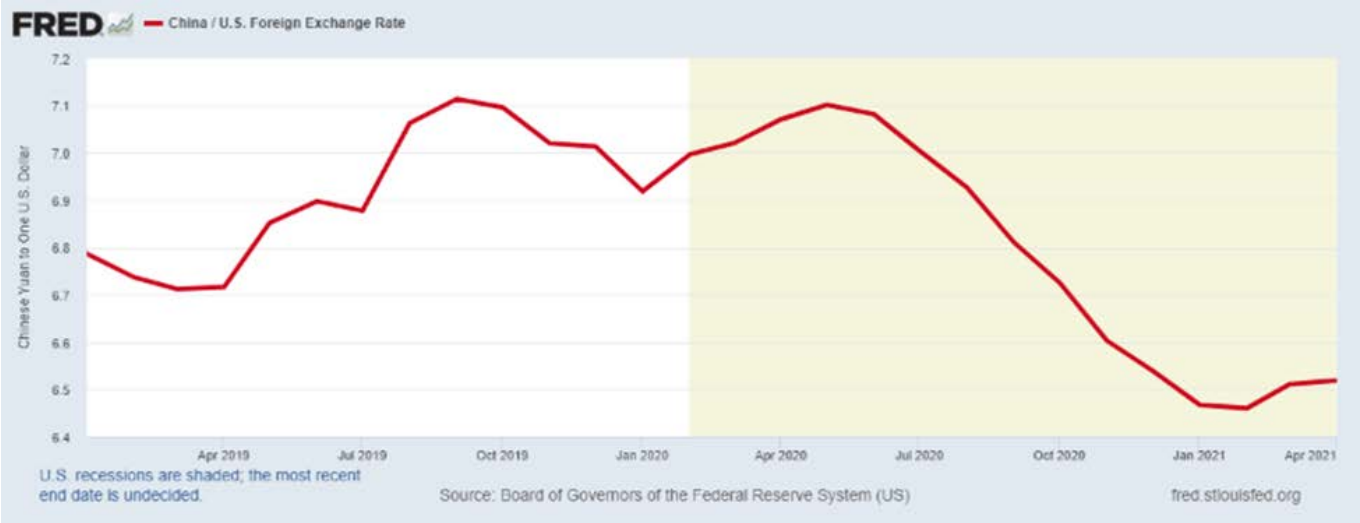
Even after pandemic-era spike, import prices up only 2.1% from a decade ago.

The Pandemic Reveals Underlying Realities



Were this spike passed through to importers, based on an average contents of approximately $250,000 in cargo value per shipping container, a $9,000 increase in container costs would, by itself, have added 3.6% to freight-on-board pricing.

The Pandemic Reveals Underlying Realities



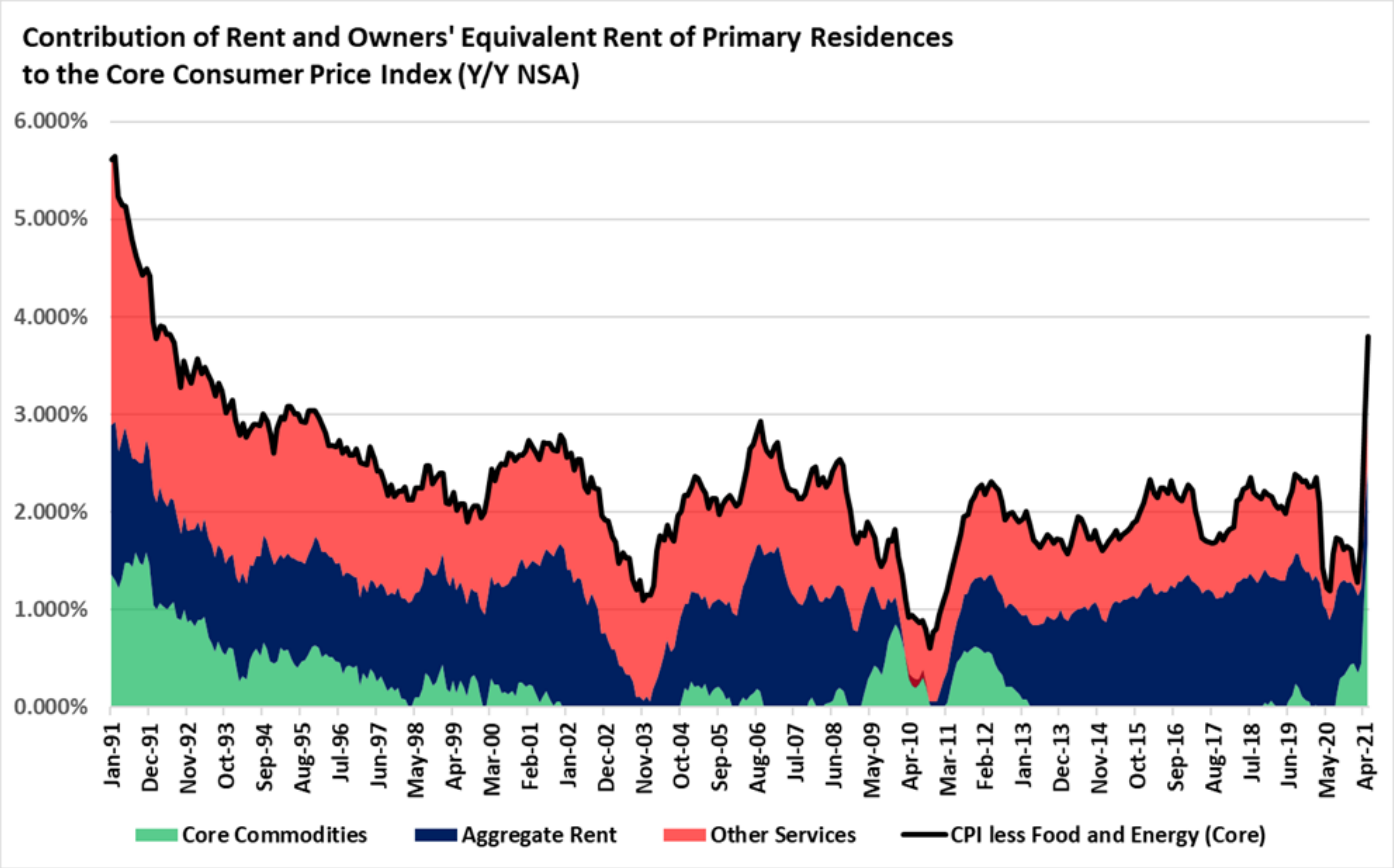
Increased shipping costs and exchange losses themselves should thus have accounted for – *ceteris paribus* – between an 8.5% and an 10.6% rise in the price of goods delivered to the U.S. That didn't happen. → ***Production abroad (esp. China) is very elastic.***

Section III

The Shifting Drivers of Core Inflation

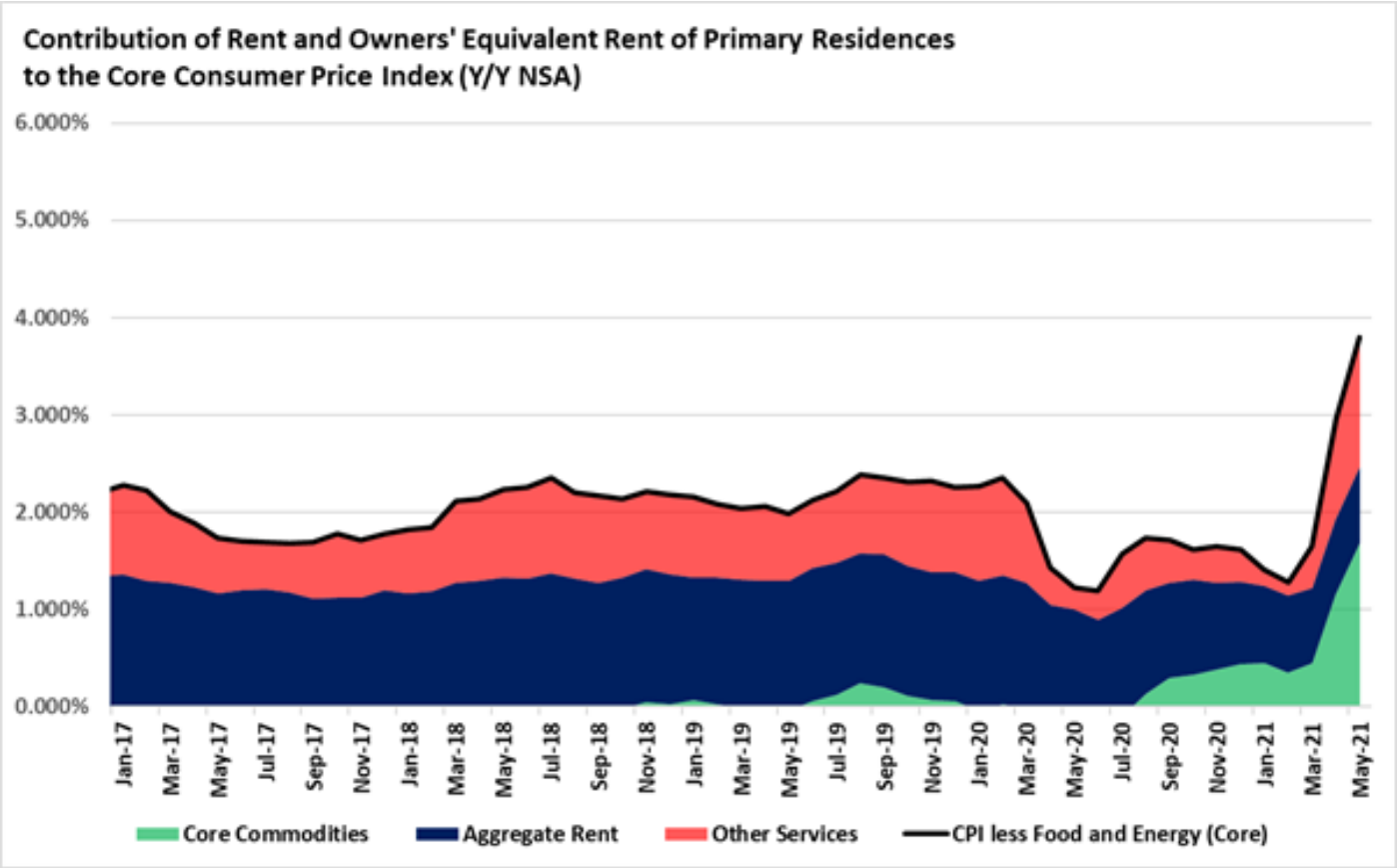
1990 to Present

21st Century Inflation has Been Largely Rent Inflation



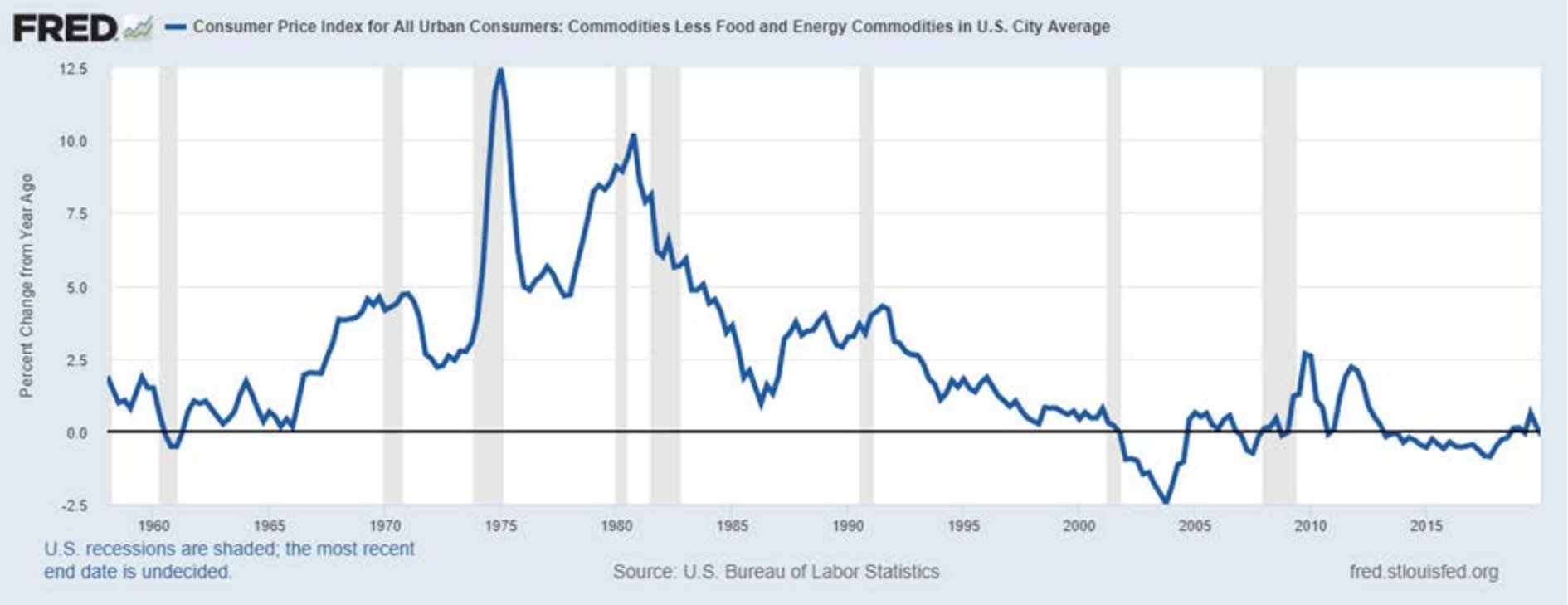
Source: Bureau of Labor Statistics

Supply Chain Bottlenecks Reintroduced Goods Inflation



Source: Bureau of Labor Statistics

But, Really, Does the Present Resemble the 1970s?



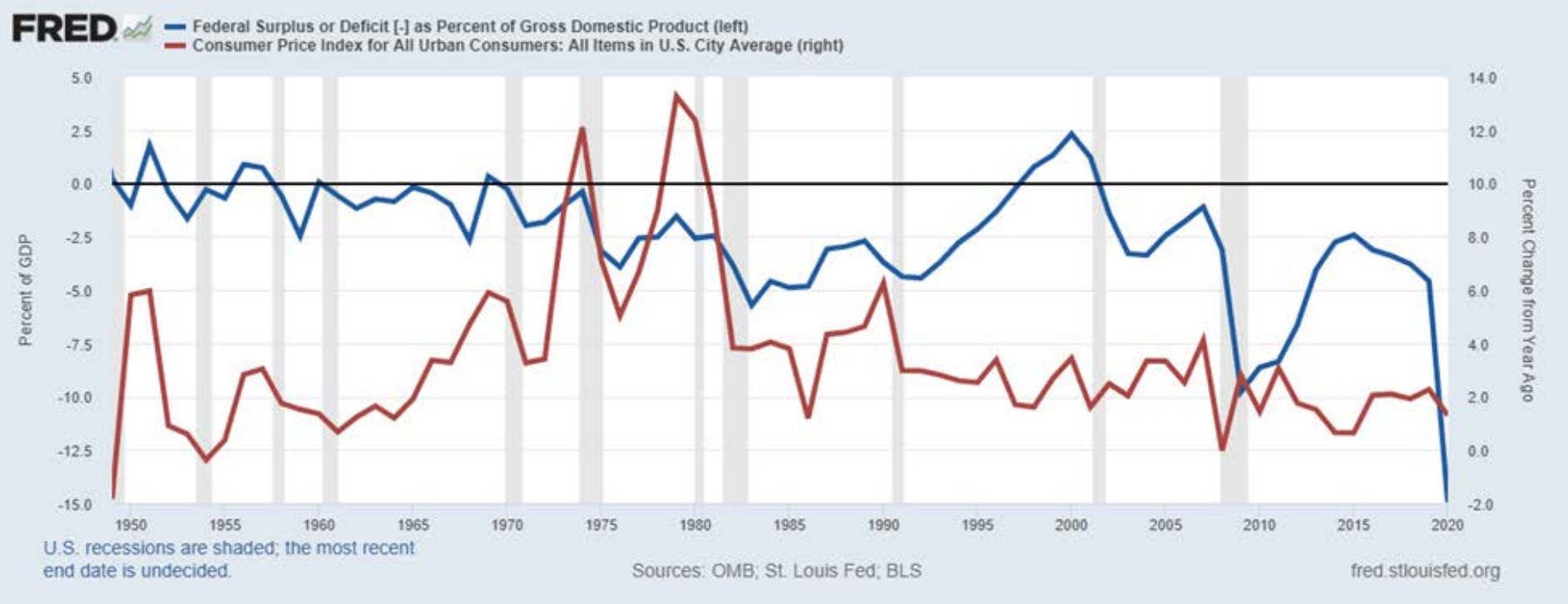
Section IV

What is the Relevance of 1970s Inflation to Present Day?

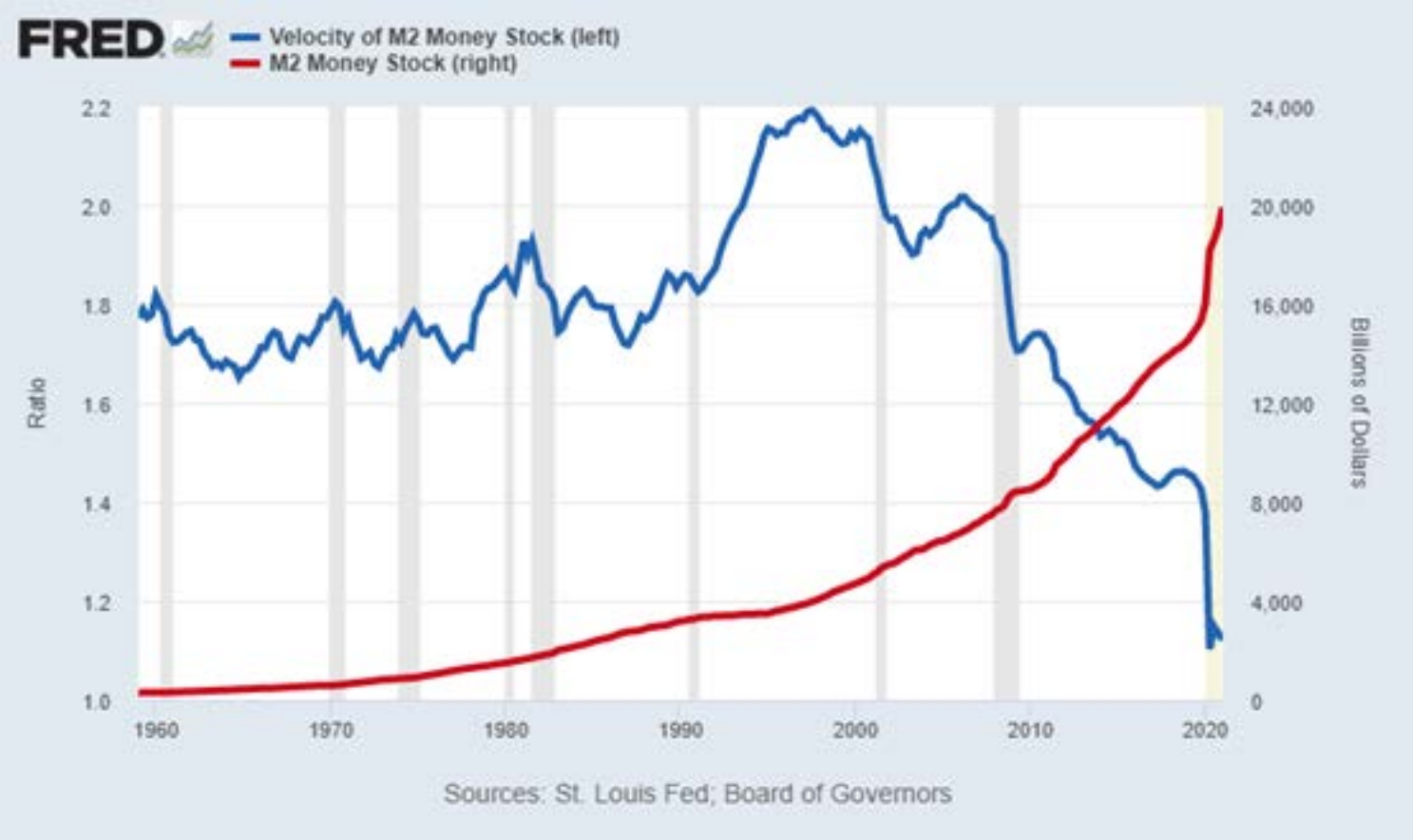
What Underpinned High Inflation in the 1970s?

- Increased levels of federal deficit spending beginning in the 1960s, coupled with accommodative monetary policy from 1969 through 1971?
- The “Nixon Shock” of 1971 - ending the dollar’s convertibility to gold and ultimately, by 1973, ending the 1944 Bretton Woods System?
- The twin oil price shocks that followed, and rippled through the economy?

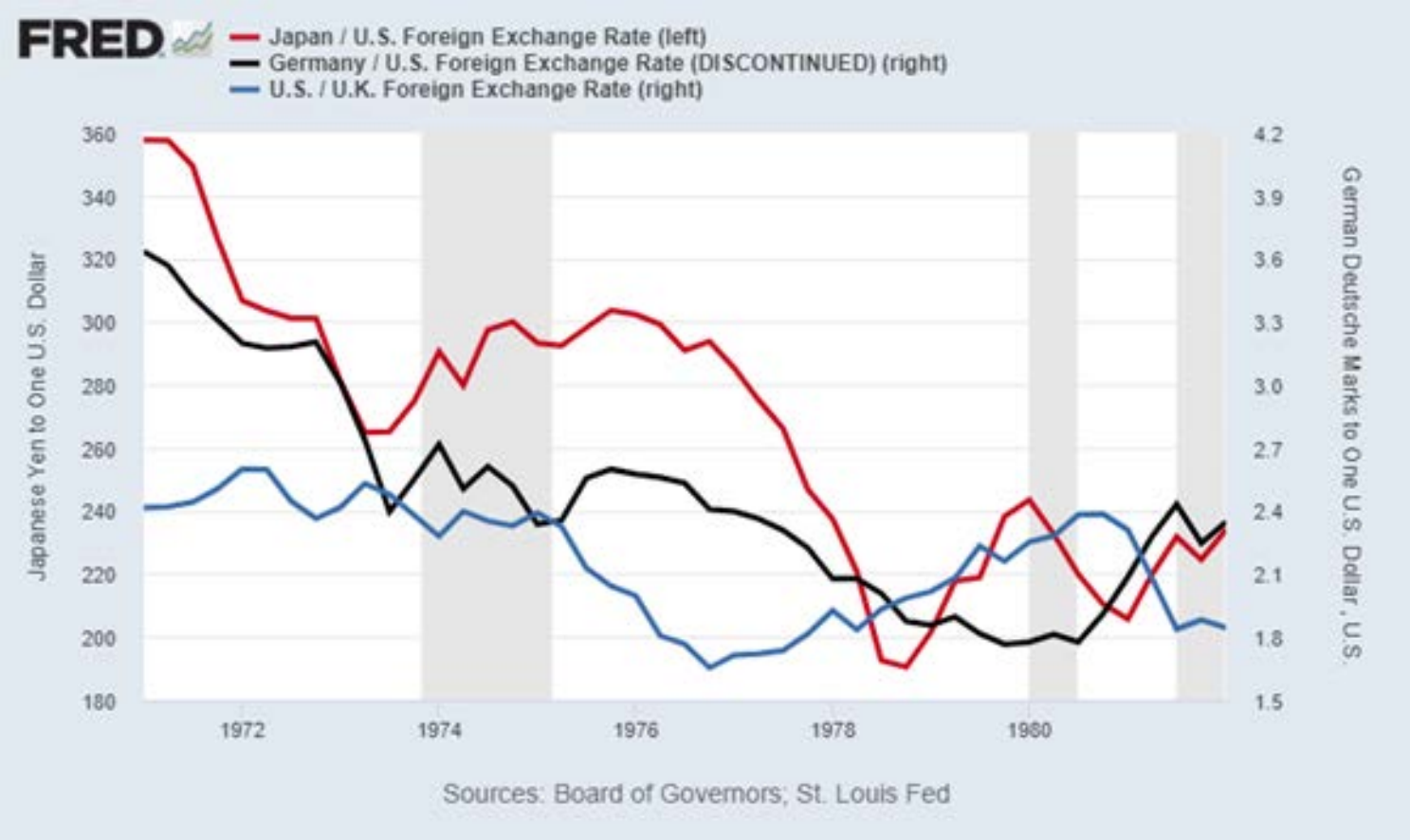
We can Discard Deficits as an Explanation:



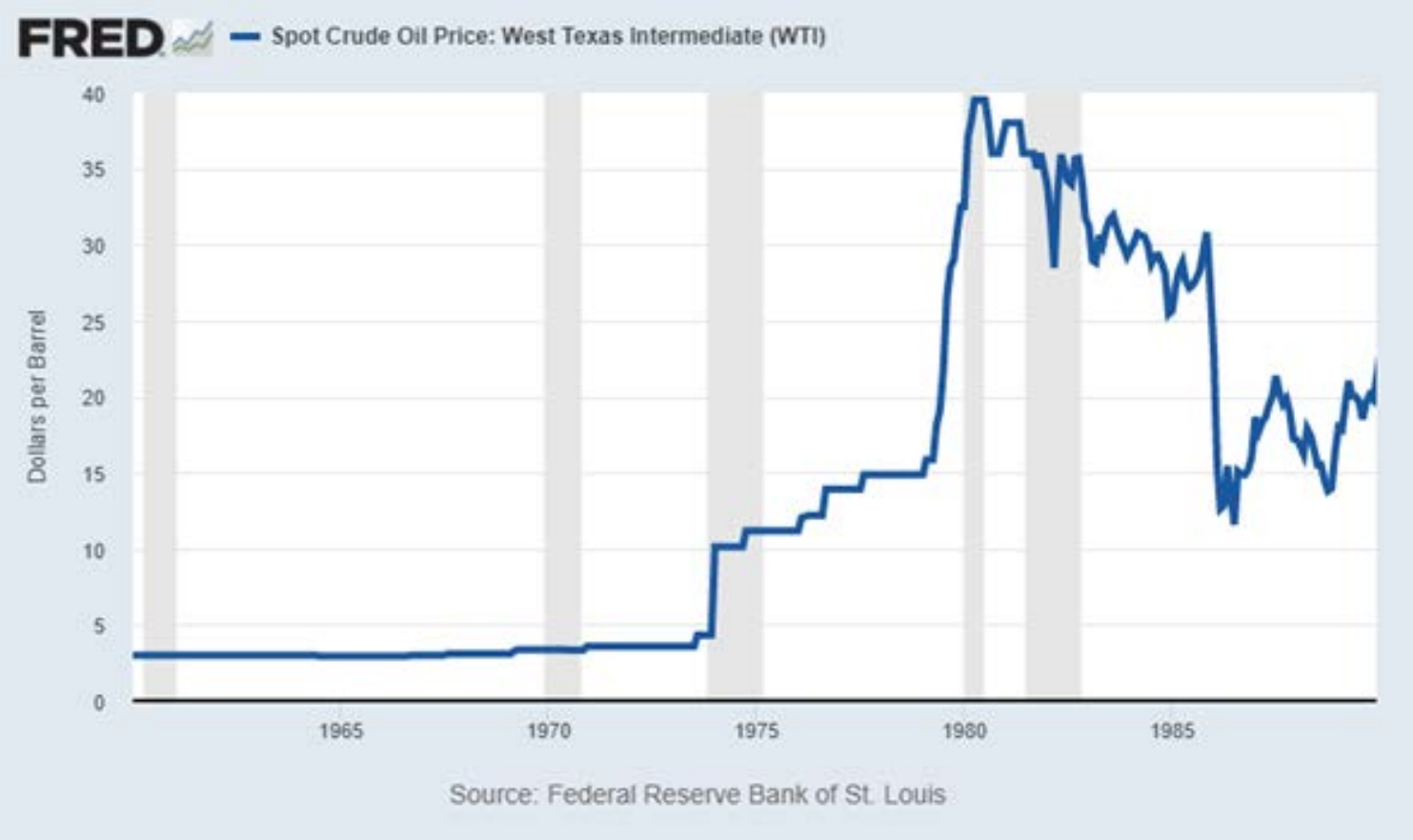
Friedman and Money Don't do Well Either (hint: "V" matters):



The Nixon Shock is a More Compelling…

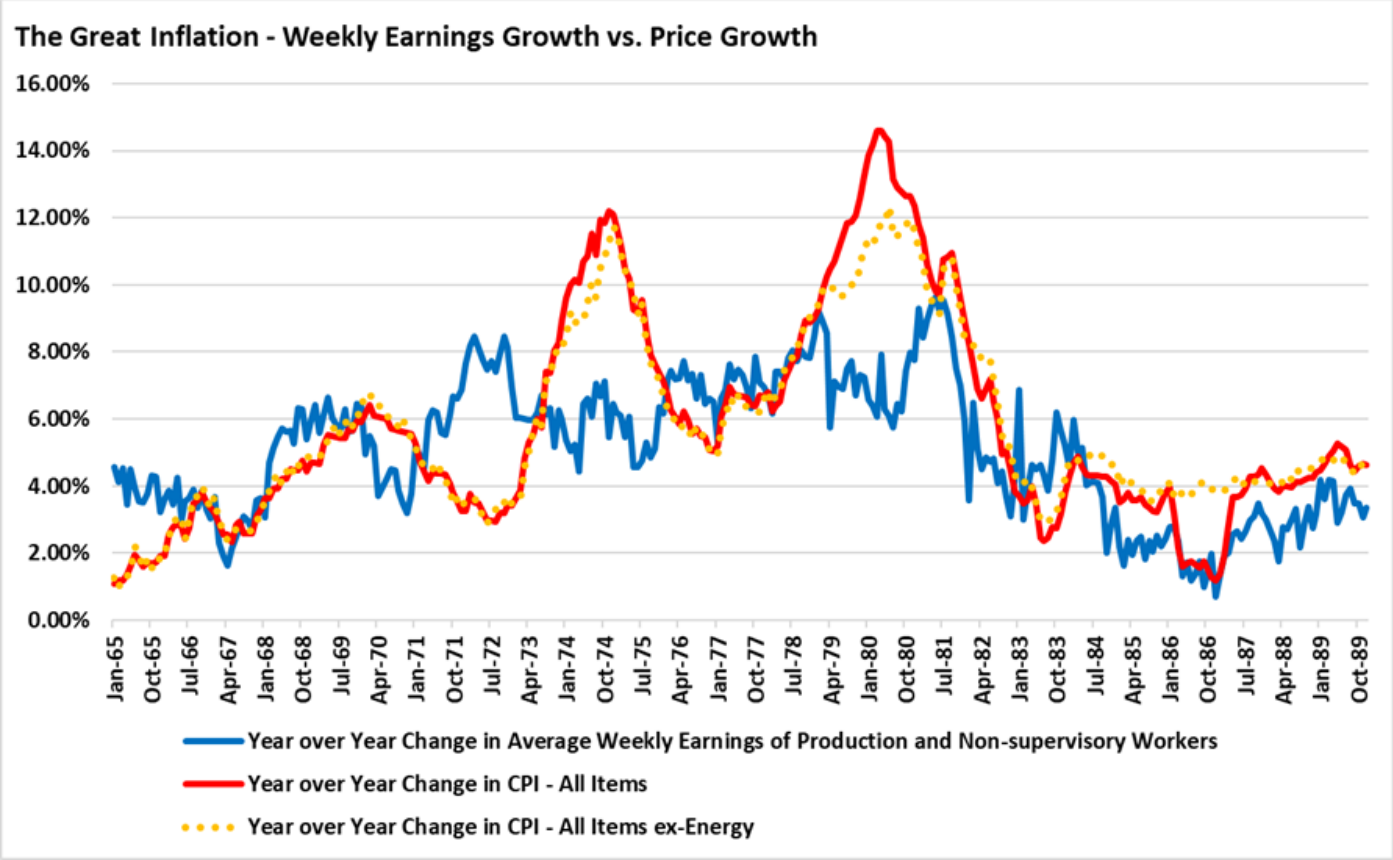


…and Certainly Played a Role in the Oil Crises:



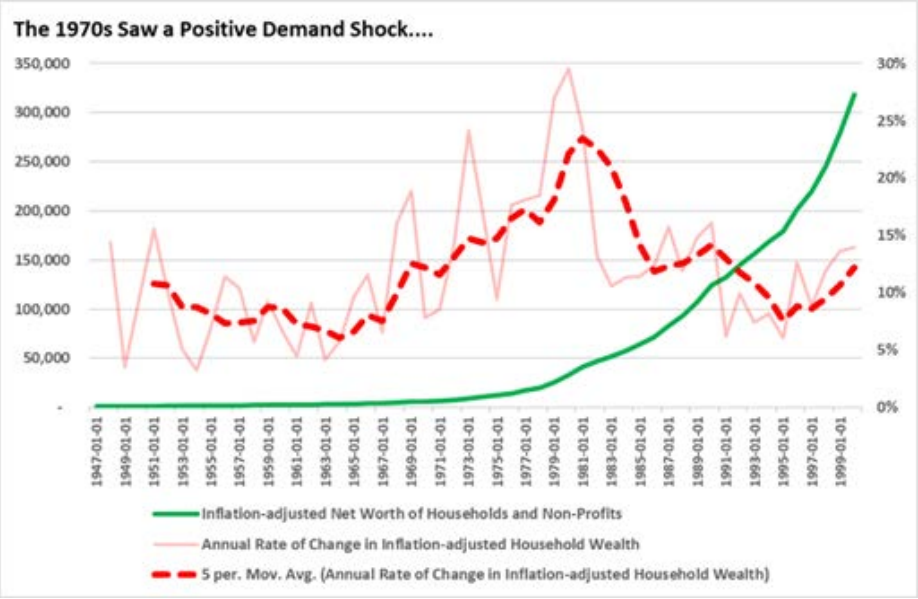
But, as Unique as These Events Were, There was More

During the decade prior to 1973, income growth well-exceeded price growth.

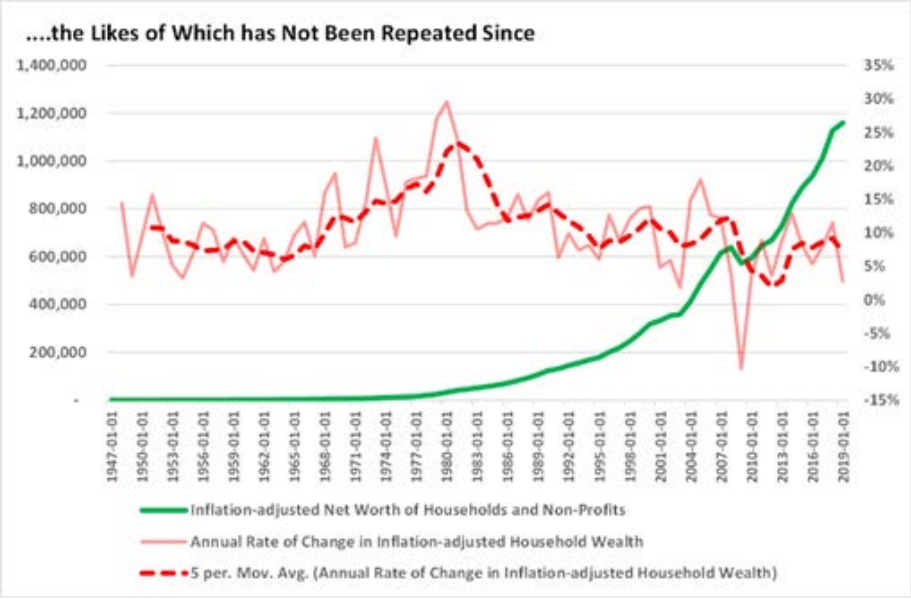


Source: Bureau of Labor Statistics

A Positive Demand Shock as Wealth Built Rapidly

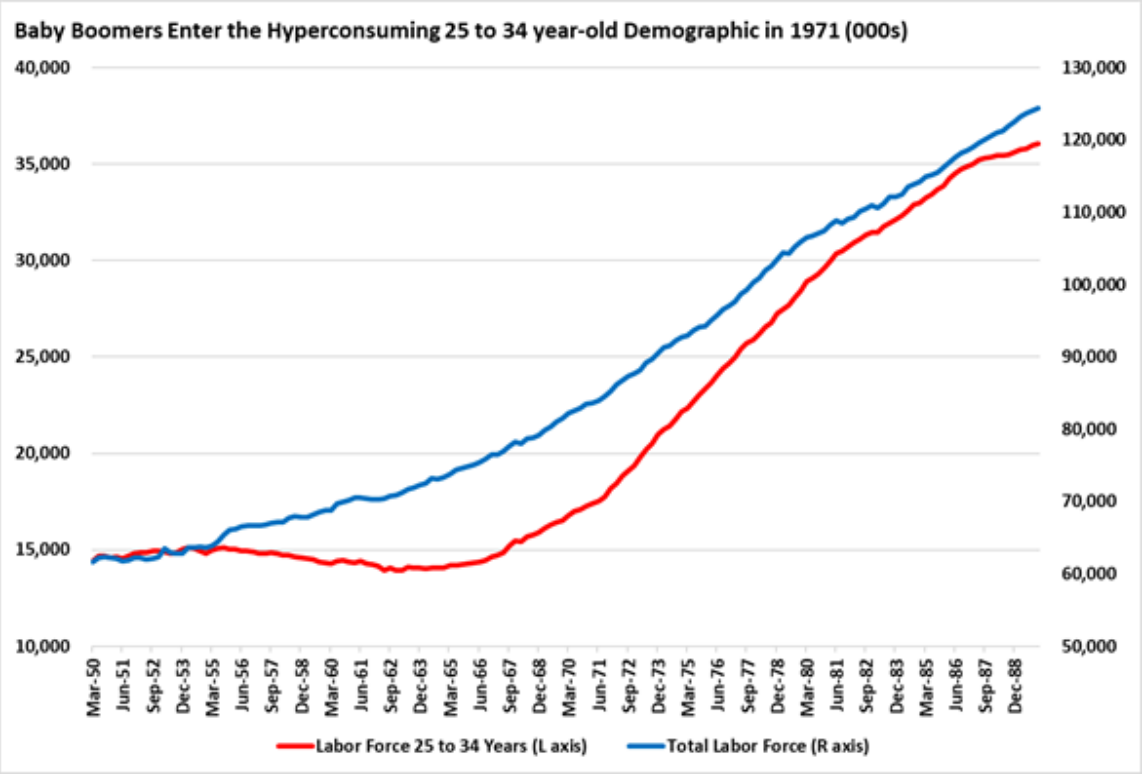


Source: Federal Reserve Board



Source: Federal Reserve Board

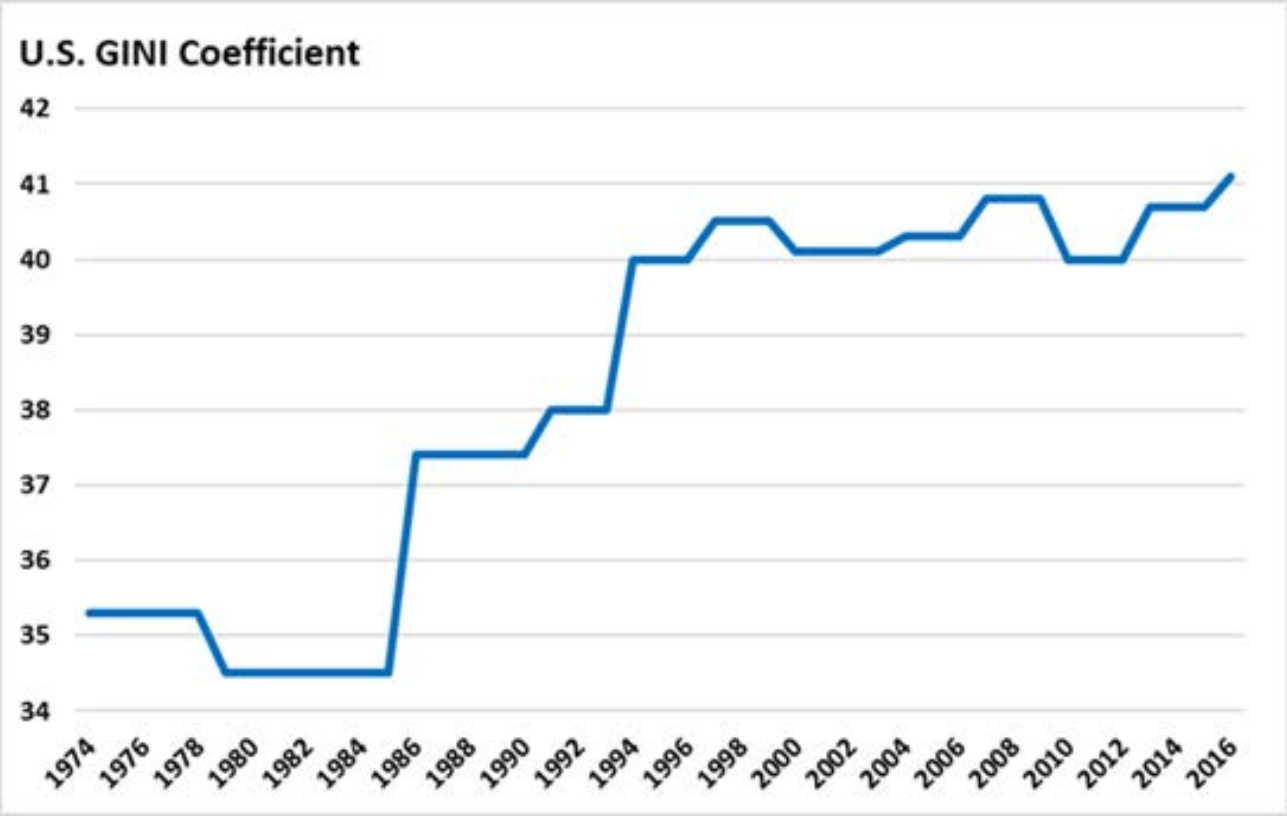
Demand Accelerated by Demographics



Source: Bureau of Labor Statistics

Baby Boomers controlled nearly 20% of the nation's wealth by the time the average member turned 30, and controlled about 53% in 2020. At 30, Gen Xers controlled just under 6% of wealth and Millennials barely 4%. Gen Z doesn't even rate a mention yet.

In a flatter economy, production finds its way to those more likely to spend:



Source: The World Bank

The 1970's are almost wholly incomparable to present day.

Those debating appropriate levels of fiscal spending in the 21st century, by raising the prospect of undesirable levels of price inflation seen in the 1970s, are raising straw men.

It is long past time to take such straw man arguments down.

The questions to be properly addressed are – what can the economy bear today and how much incremental benefit can be extracted through increased spending?

Section V

Inflation, Debt and Assets: Dilemmas and Answers

In a nutshell:

$$S = I$$

but only over such a long period of time that…

…well, you know what Keynes said.

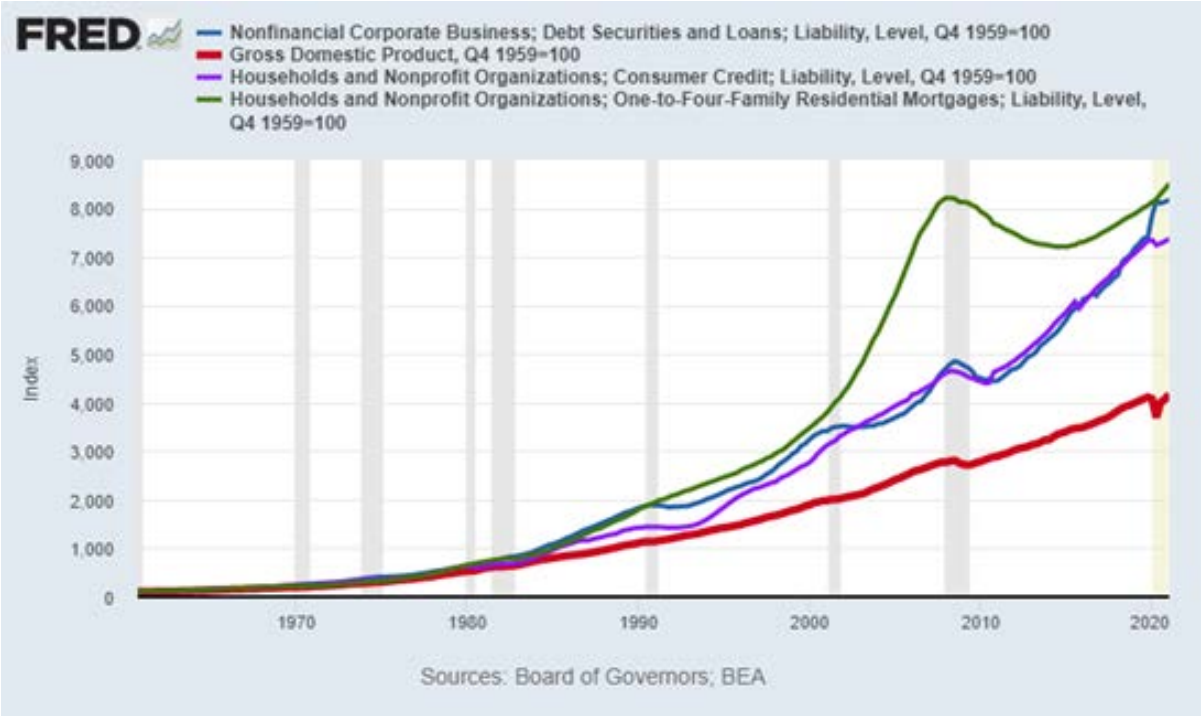
In a nutshell:

~~S = I~~

should be ignored in policy making *in proportion to the degree of polarization of wealth*…

…because of the massive distortions that emerge.

At high levels of wealth inequality, savings are either hoarded, used for speculation, or lent to others - often for consumption or speculation:

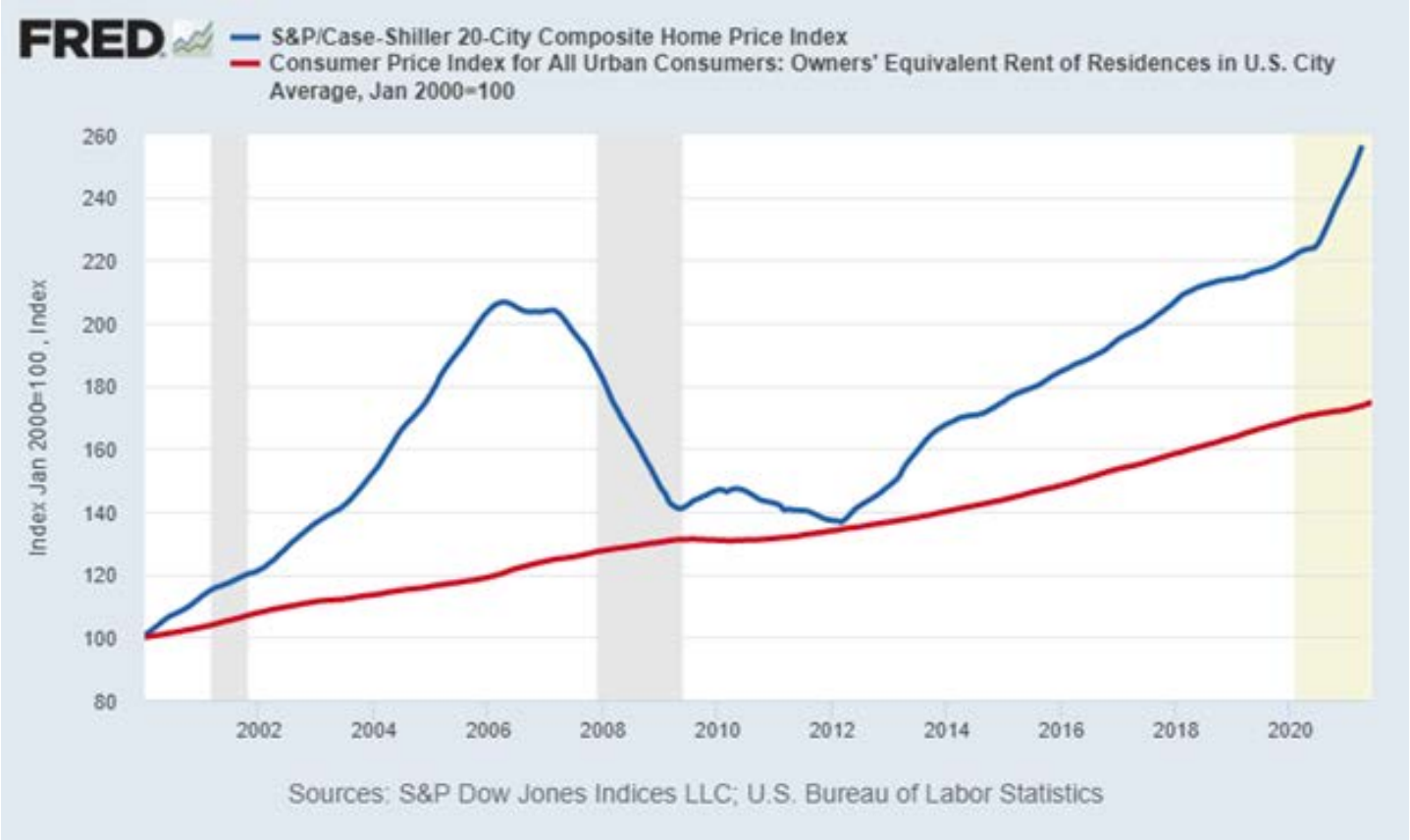


- Lending has an indisputable impact on maintaining consumption. Accommodative monetary policy (largely operating through the residential mortgage channel, but others as well) is of course helpful in this regard during a slump in preventing a deflationary spiral.
- But the opposite is clearly true of monetary policy in the presence of high concentrations of wealth (S) and high levels of income polarization, in which many are forced to depend on borrowing for maintenance of living standards.

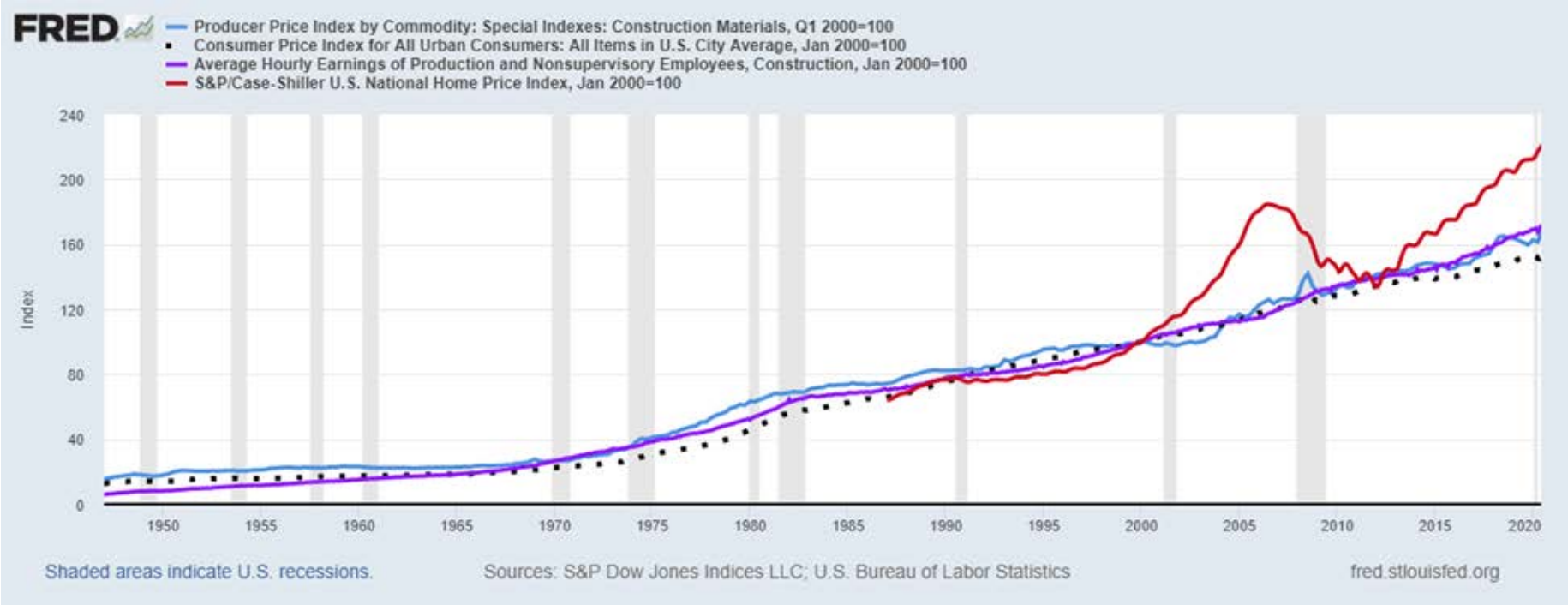
- On the flip side, in the absence of risk-reasonable primary investment alternatives, excess savings are directed to:
  - Hoarding (cash or risk-free debt alternatives such as sovereigns, municipals and AAA synthetics*);
  - Speculation in secondary markets; and
  - "Storage" in new primary assets that are largely unutilized but perceived to be of relatively low risk.
- This behavior is disinflationary to goods and services, but highly inflationary to capital assets.
- Minsky's "Two Price System"

*Synthetically derived securitized senior interests in pools of lower credit consumer or business loans.

Repeated distortions in housing:

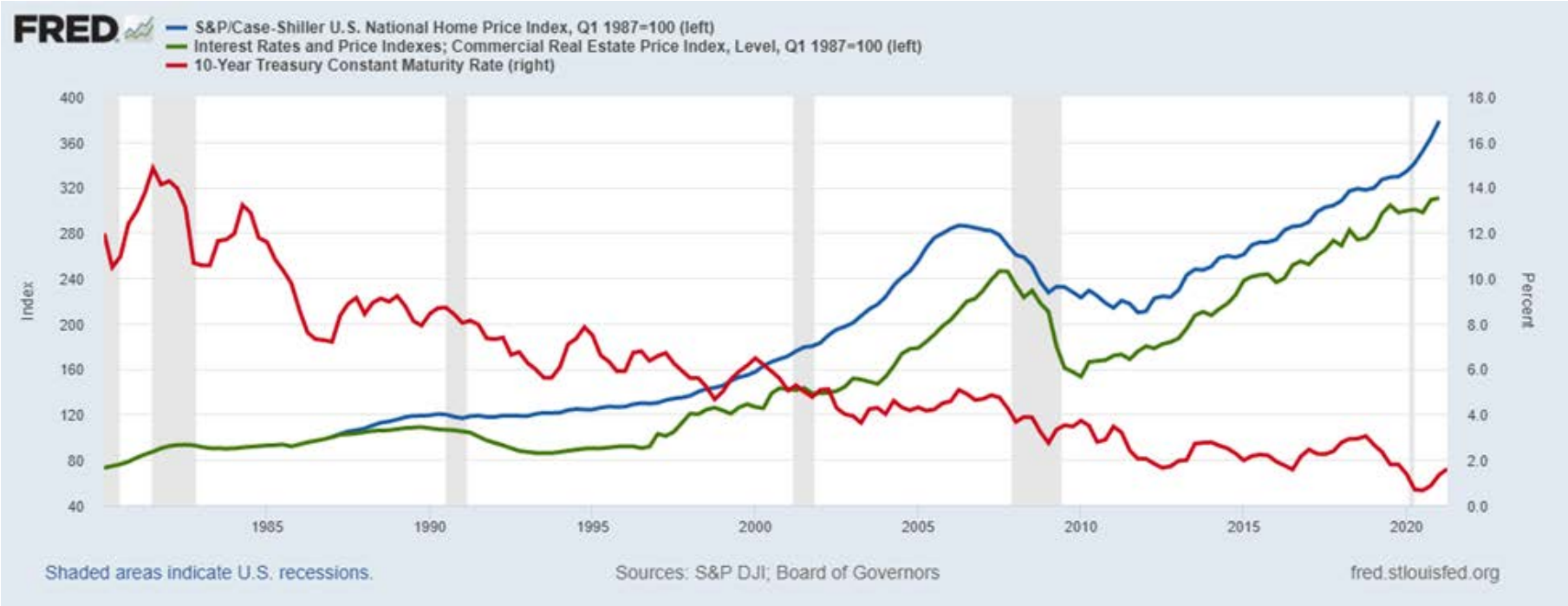


Repeated distortions in housing = land speculation:



At extremes – certainly at or near the effective lower bound of interest rates – distortions become severe.

"The Great X"



A simplistic thought experiment and proof:

- Ascribe value of $100,000 to each point on the commercial property index shown on the prior page.
- Property X has Q1 2021 Value = $31,040,000
- Assume commercial real estate trades to yield T + 4%
- Q1 2021 10 year UST yield = 1.34%
- Q1 2021 property yield (cap rate) = 5.34%
- Therefore, implied net income = $1,661,000

What would the same income have been worth in 1981?...

Inflation in the 21st Century

- Q3 1981 (historical peak) 10 year UST yield = 14.84%
- Generously assume same 4% spread, cap rate = 18.84%
- Assume same net income as in 2021, held constant only for the purpose of this exercise. Would be far lower.
- $1,661,000 ÷ 18.84% = $8,814,000 value
- Index value from graph indicates $8,700,000
- Delta of $114,000 attributable to increase in utility value?

The balance of value increase in Property X (over 99.4%) can be ascribed to the 91% decline in the cost of capital.

- Consider the instability that would ensue if the long-term trend of declining money costs were to reverse for an extended period such as to cause buyers of real estate assets (land, as discussed above) to pull up their anchored belief in future capital gains growth in excess of net rental inflation.

- Borrower belief in future capital gains, once anchored, is not only a hard thing to shake loose, but becomes progressively more disconnected from generalized inflation trends – especially as the cost of money approaches its effective-lower-bound.

- Which begs the question: What is the value of a capital asset at a zero cost of capital?

  The undiscounted sum of all future cash flows?

  Or ZERO?...

…Because if capital is truly without cost for a protracted period (i.e. either demand has fallen to zero, or supply of everything is infinite), those cash flows could of course be chimeric, and the value could just as well be zero…the ultimate distortion!

But lets not go there!

Let's just note that at prices of capital assets connect with generalized inflation when it comes to the behavior of real and economic rents. And the more extreme asset prices become relative to declining future expected growth of rents – the more reliant the investment becomes on future declines in the cost of capital (difficult at or near the ELB) and ***the more critical it is that future cash flows do not deflate***.

As a result they become rather "sticky" and markets do not clear.

- Such stickiness can be expressed as a corollary to Minsky's two price system and financial instability hypothesis with regard to long term capital assets:

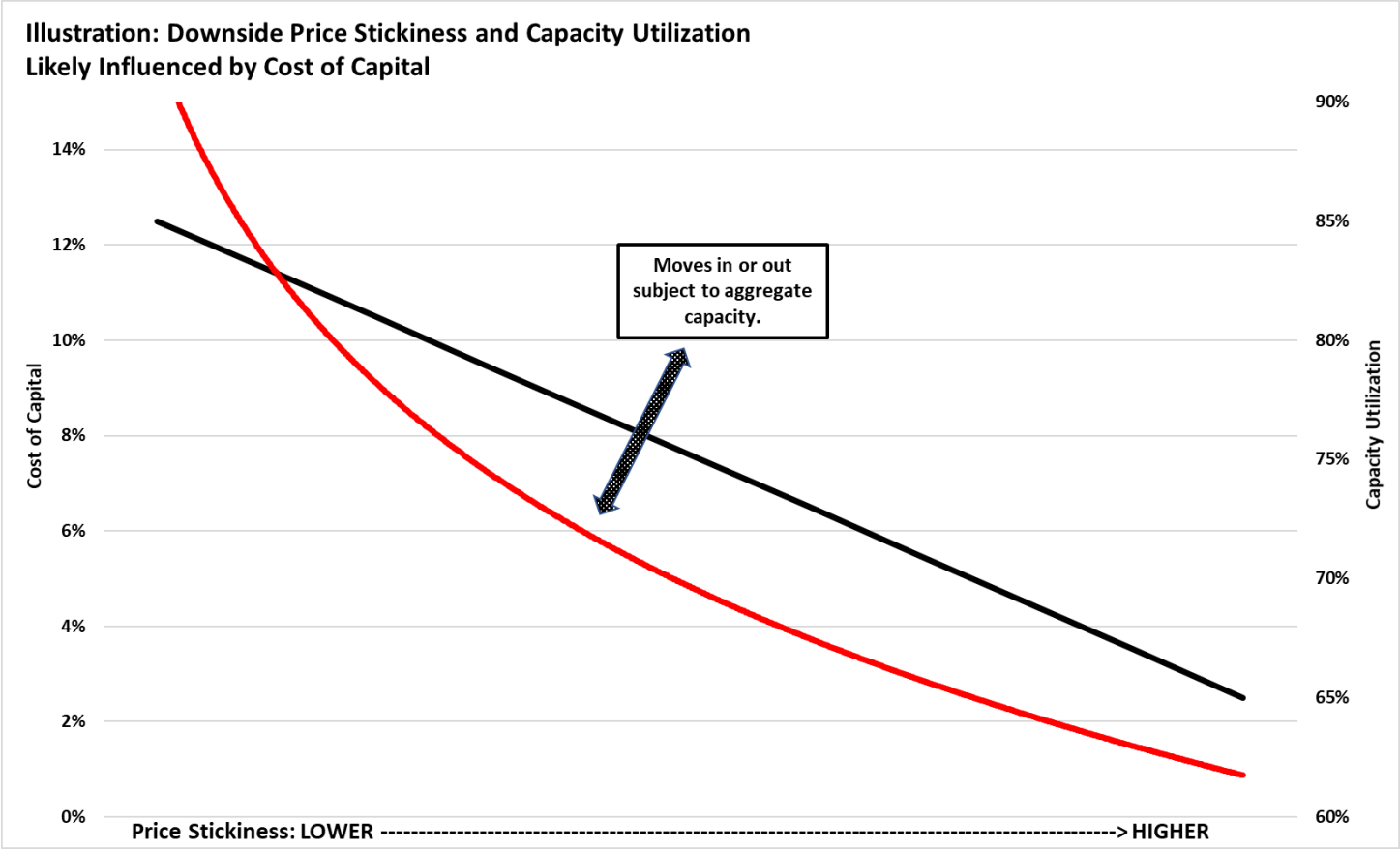
> *"As the carrying cost of assets approaches zero there is correspondingly less pressure placed upon owner/borrowers to earn any net operating income at all, and prices (rents) become therefore progressively more unresponsive to a falloff in demand."*

- In other words, as the cost of capital approaches zero, owners become more concerned with the franchise value of a property or business than with current income, as long as income is sufficient to cover basic operating costs and maintain a going concern.

- Properties operate at high vacancy, businesses at low capacity.

- Thus, ***deflation*** in rents or prices is stalled or never occurs until the financial bubble finally bursts for other reasons.

Illustration of Downward Price Stickiness: Capital Assets Rents



Inflation in the 21st Century

- In theory, in a sluggish economy characterized by disinflation, low growth and capital oversupply, ***public market*** prices of claims on long term capital assets should fall on expectations of poorer results.
- Yet the first fifth of the 21st century experienced a booming stock market, up three-fold since the turn of the century.
  - 330% the rate of inflation
  - 163% the rate of nominal GDP growth
- Real yields on corporate bonds (including "junk"), and many sovereigns, turned negative by 2020.
- The prices of non-yielding assets such as cryptocurrencies, most credit derivatives, non-perishable commodity futures contracts have also been impacted by protracted low inflation and correspondingly low carrying costs in anticipation of capital gains.

Inflation in the 21st Century

- Why does all this public market speculation emerge?
- Who would risk loss when inflation is low and risk taking is less of an imperative to preserve purchasing power of capital?
- Unclear, but many possible answers:
  - Nominal reservation return in excess of inflation that those with capital are persistent in pursuing?
  - Most money today is professionally managed and managers compete with each other for assets and must at least keep pace with other managers' returns, as Minsky noted decades ago – so remain fully invested until a crash?
  - FOMO: Fear of Missing Out driving the bullish behavior of retail (non-professional) investors?
- TINA: There Is No Alternative. A perception that may constitute the n'est plus ultra of distortive behavior.
- ***These distortions in markets, however, all have their roots in the disinflationary path the global economy (and many advanced economies, particularly, with policy-driven, long-term declines in labor share of production) has been on for 40 years.***

Conclusions

- That the unique historical and economic circumstances of the 1970s gave rise to a near cultish obsession with changes in price levels, shunting aside the importance of equitable growth, is a tragedy.
- That it occurred almost precisely at a time that exogenous supplies of global labor and productive capacity were showered upon the merchants and consumers of advanced nations (to the enormous detriment to their domestic labor forces), is nothing short of a perfect storm in the world of policy disasters.

Inflation in the 21st Century

- The failure of a nation to optimize the use of its people's labor, and to engage the capacity of government (as the collective agent of the citizenry) to "crowd in" underutilized capital and other resources, results in increasingly sub-potential and inequitable growth, as well as missed opportunities to catalyze innovation.
- The United States has been awash in underutilized labor , capital and other resources for decades now, with a private sector fairly hellbent on pursuing lowest cost procurement of tradable goods (and services, where possible) abroad.
- This is not a criticism of the private sector. Nor is it a criticism of capitalism, for the pursuit of efficiency and profit is precisely what capitalism is designed for.

- The criticism here is of the political missteps that have led to chronic underassessment of U.S. economic potential, and policy traps from which the country has seemed to be able to escape only briefly during periods of truly extraordinary crisis.
- ***The silver lining to the Great Pandemic would be found if the period provides the off-ramp for the U.S. to depart the damaging policy trap that has increasingly tightened its harmful grip over the past four decades.***
- ***This is critical, because the status quo ante has not only limited prosperity, but has threatened the political half of the delicate balance between capitalism and democratic institutions.***