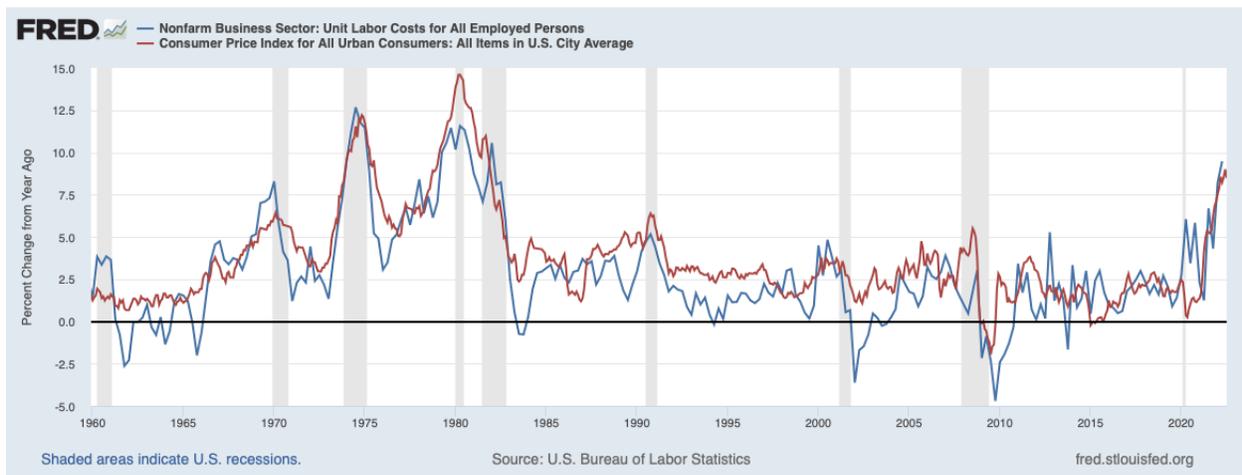


Taming U.S. inflation will likely take years

There is a belief shared by U.S. monetary policy makers and many financial market participants that a meaningful economic slowdown in the next 12-to-18 months will “fix” the inflation problem in the United States. The word “transitory” may have been stricken from the Federal Reserve’s lexicon they use to describe inflation in America, but that description still seems to be alive and well in their economic forecasts. The FOMC’s latest projections assume a rapid decline of their preferred measure of core inflation to 2.3 percent in 2024. And this decline from the current 4.8 percent pace is expected to happen with only a modest increase in the unemployment rate, to 4.1 percent. Similarly optimistic inflation forecasts are visible in financial market pricing. Fed fund futures are now pricing cuts in short-interest rates already during 2023 – an even more optimistic view than that of the FOMC. And a current yield of just 3.13 on a 5-year Treasury note embeds an equally sanguine view of how easy it will be to get to the other side of our current inflation problem.

Maybe current market pricing is accurate, and a short, relatively gentle economic slowdown is all we need to escape our high inflation environment. But the upward surge in unit labor costs (see chart below) suggests such a rosy outcome is unlikely. The causes of today’s rapidly rising labor costs are not just wage increases, it is a lack of productivity growth, and that is not a new feature of the U.S. economy caused by either Covid or war-related supply chain disruptions. America has been struggling very sluggish with for a long time – it has averaged just 0.9 percent per year from 2009 thru mid-2022. For some context, labor productivity increased by 2.9 percent per year in the 1950s



And 1960s, and 2.7 percent in the first decade of the 2000s. A sub 1.0 percent pace of productivity growth is a pathetic economic performance.

Core inflation is running hot in America now because U.S. businesses have been unable able to meet the increased demand of households for goods and services even as many supply-chain bottlenecks have eased. And an inability to accelerate productivity growth appears to be a central reason why.

A look back at high inflation periods in the 20th century reveals that a policy-induced constraint on household spending that causes a recession doesn't actually "cure" inflation. A slowdown can dampen the pace of price increases for a while, but not eliminate them. What recessions do is buy some time for structural changes to occur that *will act* to keep inflation down. In stark terms, these changes can take two basic forms: (1) significantly weaken the power of labor so that wage growth stays anemic for many years and living standards stall or decline, or (2) accelerate productivity growth so that real wages and the economy can grow without creating undesirably high inflation.

For many of us, the optimum solution to our inflation problem is the second option -- crafting a business environment in the U.S. where we again see sustained, strong productivity growth. But creating this kind of growth has, in the past, taken years of strong growth in capital investment, either by the private sector alone or in partnership with the Federal government. Growth in investment can increase industrial and service-sector efficiency by giving workers new tools and new methods to work with. In the 20th century, periods of high productivity growth were typically associated with strong real wage growth. Rising real wages encourage businesses to make continuous efforts aimed at increasing labor productivity. And if real wage growth is matched with policies that encourage a more even distribution of income, then the economy can grow at a good clip while price inflation remains tame.

Twentieth century lessons for fixing 21st century inflation

There were three decades in the 20th century when inflation ran hot – the 1910s, the 1940s, and the 1970s (see chart below). Each of these time periods offer insights into the causes of sustained, high inflation as well as methods for bringing price increases under control. These periods also offer examples of very different economic policy choices – those primarily focused on wage suppression, and those focused on accelerating



productivity growth so that there could be widespread improvements in living standards while inflation remained tame. We'll start our brief tour of American economic history with a look at the 1910s.

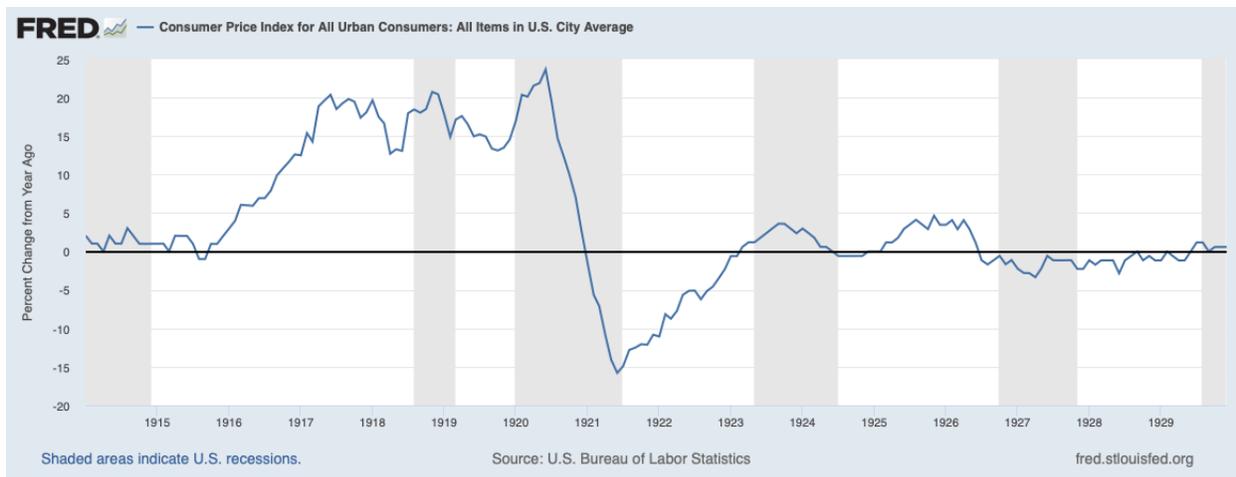
The 1910s – a European war and a global pandemic

The catalysts for surging inflation in the 1910s have some strong similarities with those we have experienced the 2020s -- there was a high-intensity war in Europe and a global pandemic. Together these events fractured existing patterns of global trade, causing disruptions to well established supply chains and human migration patterns. The result was a constrained supply of many goods and services that collided with dramatic increases in demand that were driven, in part, by a huge increase in the U.S. federal budget deficit to fund U.S. involvement in the European war. During the first half of the 1910s, U.S. government spending hovered around \$700 million per year, roughly in line with tax receipts. But spending then ramped up dramatically, to \$12.7 billion in 1918 and \$18.5 billion in 1919. Tax receipts rose as well, but the deficit in 1919 was \$13.4 billion, funding roughly 70 percent of total spending.

The war and the associated rapid fiscal expansion are mirrored in labor market data for those years. In 1915, the unemployment rate was 9.7 percent, by 1918 it was down to 1.4 percent as strong government spending heated the economy while about 2 million Americans – about 5 percent of the civilian labor force – served in the military. The result was a 3.5-year period of relentlessly high price inflation – the CPI inflation rate moved in a range of 12.5-to-23.5 percent from the beginning of 1917 to the middle of 1920 (see chart above).

The 1920s – a brutal economic contraction, and then strong non-inflationary growth

An abrupt 65 percent contraction of Federal government spending, from \$18.5 billion in 1919 to \$6.4 billion in 1920, coupled with a 300 basis point increases in short-term interest rates by the Federal Reserve, from 4



percent at the end of 1919 to 7 percent in June 1920, triggered a brutal 18-month long recession as industrial production in America fell by one-third. With most soldiers now back in the civilian labor force, the unemployment rate soared to 11.9 percent in 1921. By the middle of that year, changes in the CPI had turned deeply negative – prices were *down* roughly 16 percent from the year-earlier level in the summer of 2021.

A historically severe recession that ended with a double-digit unemployment rate turned rapid inflation into a powerful short-term deflation. But critically, the inflation rate stayed down in the U.S. in the decade that followed, a period that came to be known as the “roaring twenties”. The reasons the economy experienced a decade of strong growth and modest inflation offer one potential roadmap for today’s policy makers.

The 1920s marked the beginning of what would prove to be a 50-year long period of extraordinary productivity growth in America. Traditional economic theory links economic output and productivity growth to the quantity and quality of both labor and capital. But as Robert J. Gordon explains in his groundbreaking book **The Rise and Fall of American Growth (a)**, those basics only get us so far. Despite highly refined measures of labor inputs that attempt to account for education and training, and similar efforts to measure the quality of capital expenditures, there remains a lot that is “unexplained” when we look at overall productivity growth trends in America. Sometimes labor productivity increases much faster than one would expect based on the amount of labor and capital being put to work, and at other times there is less of a productivity benefit. Economists call this “unexplained” part of the productivity puzzle “total factor productivity”. We can think of it as a measure of the innovations and technological changes that add to labor productivity beyond the dollars spent on new equipment and the education and training of workers.

Some of the innovations that caused the acceleration of productivity growth are obvious, others less so. One clear example was the increasingly widespread adoption of the Ford Model T, the “world’s first affordable

automobile”. Ford’s assembly line production techniques used to build their cars were also implemented across the American industrial sector as electric power became ubiquitous in the U.S. These represented truly transformative changes, from horses to cars and tractors, from small groups of people crafting products to assembly lines turning out hundreds of finished products a day.

The average number of hours worked each week edged down in the 1920s as growth in average, inflation-adjusted earnings accelerated to 2.3 percent from an average of 1.0 percent in the 1910s. *(b)* An increasingly tight labor market with strong real wage growth gave U.S. businesses strong incentives to improve efficiency and increase labor productivity. And that is exactly what they did. Gordon estimates that total factor productivity rose by more than 1.25 percent per year in the 1920s, more than double the average rate of growth of this metric in the first two decades of the 19th century.

Importantly the increases in income generated by stronger productivity growth were shared quite evenly across the income spectrum in America. The share of pre-tax income going to the top 10 percent of American families was 46 percent in 1919 and it was 47 percent in 1929. The income share going to American families that made up the lower half of the income distribution was unchanged between the beginning and the end of the decade at 14 percent. *(c)* The stable distribution of income growth allowed the increases in productivity to result in a 3.5 percent average annual GDP growth over the decade, despite it starting off in a deep recession during the first two years.

The 1940s – a full-scale global war

The initial inflation surge in the early 1940s had catalysts like those the U.S. experienced in the second half of the 1910s – domestic productive resources (both labor and capital) were shifted to war related activities as Federal government spending accelerated sharply. Powerful growth in domestic demand fueled by rapidly expanding Federal budget deficits again collided with tightly constrained supplies of domestic goods and services. Federal government spending that had averaged roughly 10 percent of GDP in the second half of the 1930s increases to 24 percent of GDP in 1942 and 43 percent of GDP in 1943. About 60 percent of 1942 spending was deficit financed and that climbed to 70 percent in 1943, right in line with the 1919 experience.

The U.S. government, now headed by President Franklin Roosevelt, took an active approach to taming price inflation. At the start of 1942, with the passage of the Emergency Price Control Act, the Roosevelt administration rolled out across-the-board price controls in America. For most items like meat and fuel, households received ration coupons that ensured a fair distribution of the products at controlled prices. *(f)*

Providers of goods and services could make a profit, but the proscribed profit margins were the same as before price controls were implemented. Maximum prices were posted on shopping lists by the government, and if those out shopping experienced prices above those posted on the list, the vendors could be reported to local boards and the violator, or “profiteer” as they were labelled, would be fined. The result was a real “team effort” to control inflation – everyone in America was involved. These collective actions tamed price inflation for the remainder of the war, and those households with the greatest financial need benefited the most – households in the lower half of the income distribution saw their share of total pre-tax income rise sharply, from 14 percent in 1940 to an average of 18 percent in 1944-45.

Postwar uncertainties

The removal of price controls and a planned sharp reduction in war-related spending at the end of the war created new uncertainties for economic policy makers. Would inflation take off again? Would there be a deep recession like that at the end of the first world war?



Inflation did spike up, to 20 percent in 1946, but then gradually worked its way down to -2 percent in 1949. And despite the intense reduction in the Federal budget deficit, from 21 percent of GDP in 1945 to a modest surplus in 1947, unemployment “only” increased to 5.5 percent at its peak in 1949.

One reason the post-war economic slowdown was relatively gentle as compared to that experienced in 1920-21 was that a combination of strong income growth, savings incentives to buy “war bonds”, and physical rationing significantly increased household savings during the war. Consumer spending averaged just 75 percent of disposable personal income from 1941 through 1945. Accumulated household savings were turned in to consumer spending in the immediate post-war years. (g)

More importantly, rapid growth in labor productivity stemming from innovations and improved efficiency that Robert Gordon identified as being critical to the strong economic growth that began in the 1920s appeared to be even more powerful in the late 1940s and 1950s. Gordon identifies three likely reasons for this: (1) lessons learned in the high-pressure economy of World War II, (2) rising real wages, and (3) massive government investment in the economy. We'll look briefly at each of these.

Measures of output, hours worked, and labor productivity soared during 1942-45 as the entire US economy was converted into a high-pressure, "maximum production" machine that functioned 24/7 with very finite resources. A vivid example of the "learning by doing" that occurred during the war was the drastic reduction in time it took for the two Kaiser shipyards on the west coast of the U.S. to produce Liberty freighter ships. At the start of ship production in 1942, it took eight months to build the first ships. By the next year, completion time had been reduced to a few weeks, and in a contest between the two shipyards, complete ships were put together in just four days from prefabricated parts. The extraordinary efficiency gains were achieved, in part, by letters from more than 250 employees suggesting ways to make production more timesaving. The technological change, the "can do" optimism, and the team spirit that was built up during the war years exemplified in this example carried over to the post-war economy.

Another factor Gordon points to is strong growth in real wages of production workers. This trend took hold in the 1930s due to New Deal legislation that increased the power of labor relative to capital in America. Real wage growth encourages the substitution of capital for labor and that is what happened – the ratio of new investment in equipment relative to the overall value of equipment rose from 13.6 percent in 1928 to 14.4 percent in 1936 to 17.1 percent in 1941.

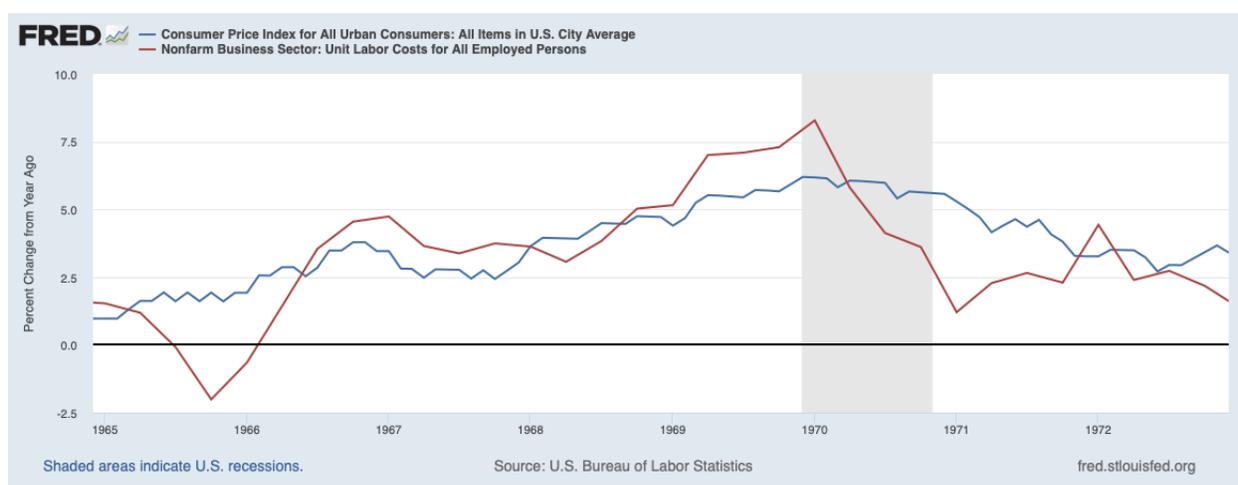
A third factor Gordon cites is the large amount of capital inputs financed by the U.S. government, both during the 1930s with the New Deal and during the war. The number of machine tools in the US, for example, doubled from 1940 to 1945 and almost all of them were paid for by the government. The US economy entered the second half of the 20th century well-stocked with the latest vintage capital equipment, much of it government funded, and an empowered and enthusiastic labor force.

Labor productivity grew at a rapid 2.9 percent per year during the 1950s as total factor productivity grew by an astounding 1.9 percent per year. And as in the 1920s, the income gains associated with the increases in productivity were spread quite evenly across American families. The top 10 percent of American families saw their share of pre-tax income decline modestly, from 38 percent in 1949 to 36 percent in 1959, while the lower half of families in the income distribution saw their income shares edge higher, from 17 percent in 1949

to 18 percent in 1959. The result was a stellar economic performance in the decade as real GDP grew by an average of 4.3 percent per year and CPI inflation averaged 2.2 percent.

The 1970s – a dollar collapse and a commodity price surge

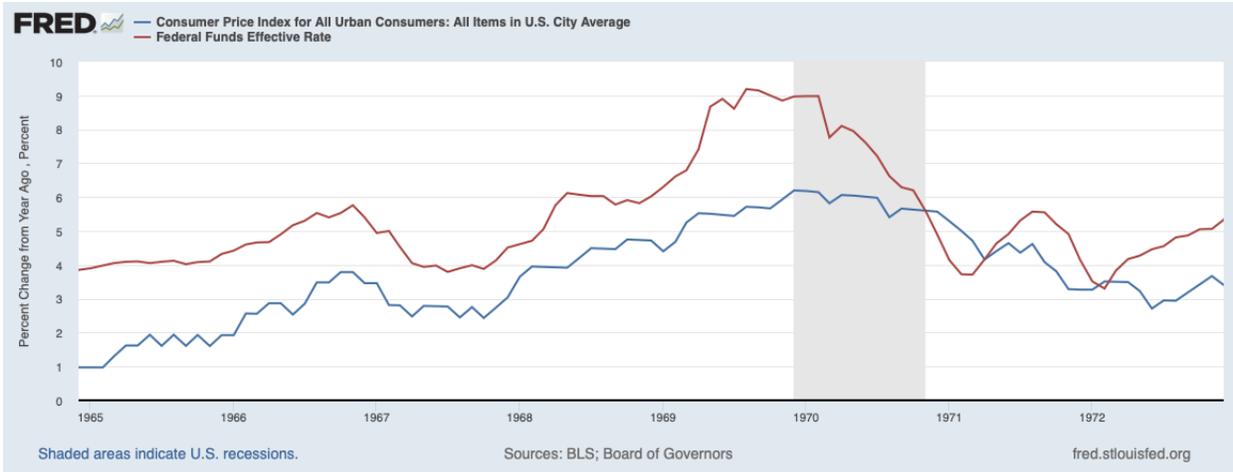
Productivity growth slowed at the end of the 1960s as social and political turmoil gripped America. Viet Nam war protests intensified and prominent political leaders – Martin Luther King Jr. and Robert F. Kennedy – were assassinated. Slower productivity growth translated into accelerating unit labor costs and consumer price inflation broke up through the 6 percent level at the end of 1969. (See chart below)



The Federal Reserve responded to accelerating inflation by engineering a recession. They raised the Fed funds rate to 9 percent, or 3 percentage points above the inflation rate in 1969, sharply slowing growth in household borrowing. The pace of price increases eased as the unemployment rate increased from 3.4 percent to 6.1 percent. And labor costs fell. But inflation stayed stubbornly high in 1971 (about 4.5 percent).

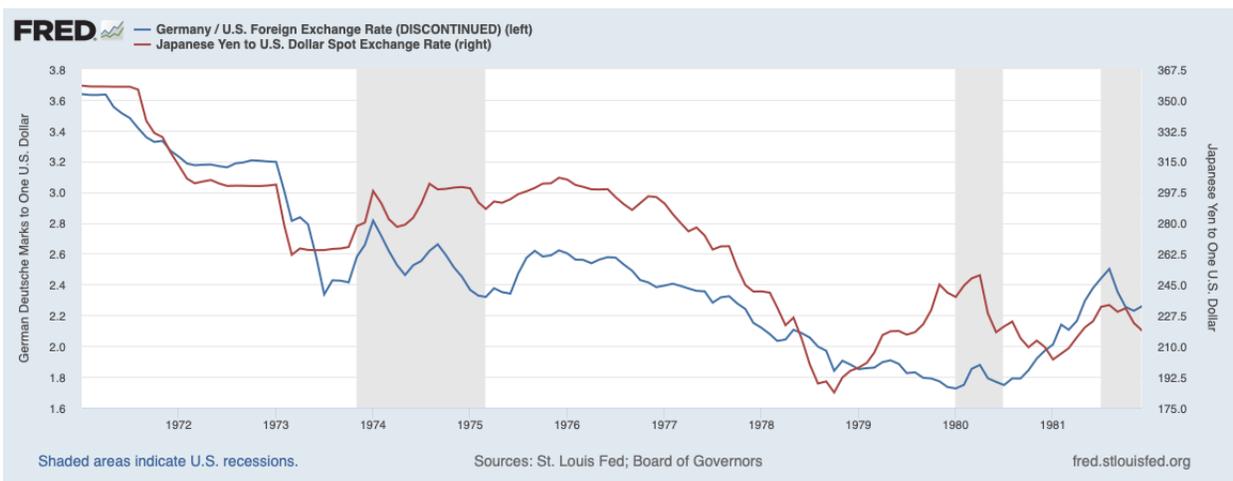
President Nixon (1971 to 1975) did not want the Federal Reserve to increase interest rates sharply again with an election on the near horizon in 1972. Instead, in August 1971 the Nixon administration introduced a new economic plan that was hoped to increase the competitiveness of the U.S. economy relative to other large economies around the world and to push inflation down without experiencing another recession.

The centerpieces of the plan were a 90-day freeze on wages and prices, and the unilateral ending the 25-year-old agreement that allowed the convertibility of dollars into gold at the rate of \$35 per ounce. When



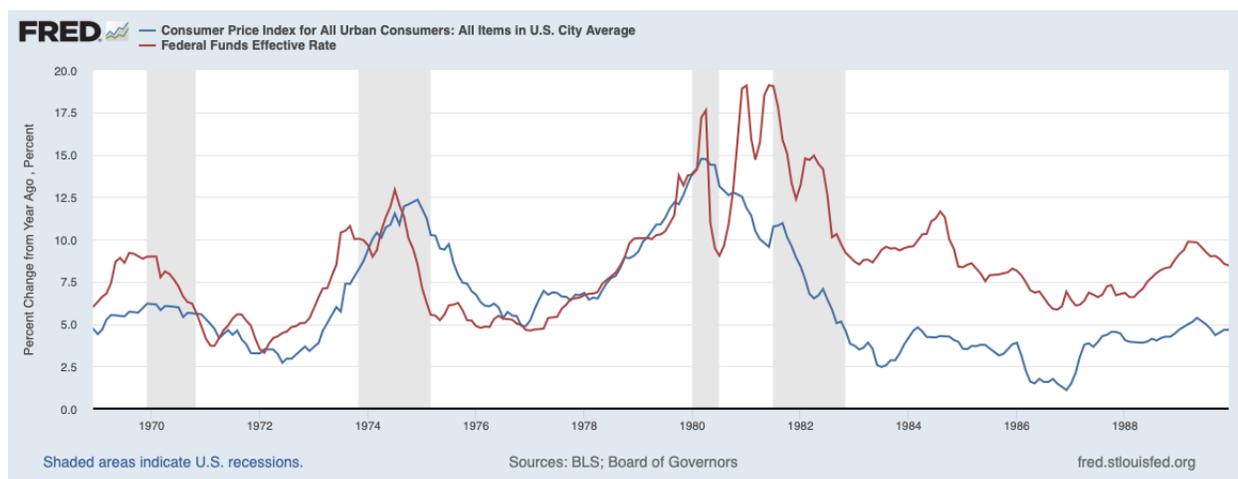
describing the plan, Nixon’s Treasury Secretary John Connolly famously told a group of shocked finance ministers from around the world that “the dollar is our currency, but it is your problem”. Americans seemed to love the new plan -- inflation continued to trend down, and Nixon was re-elected in 1972 in a landslide victory. But the inflation reprieve in America proved to be short-lived.

The value of the dollar began a decade-long decline relative to the two other most important currencies in the world at that time – the Japanese yen and the German mark. Over the next two years, the yen and the mark would both appreciate by roughly 30 percent. The dollar’s decline sharply reduced the purchasing power



of global commodity producers that priced their products in dollars, but purchased finished goods priced in yen and European currencies. They reacted by raising the prices of commodities sharply, most notably oil prices. Inflation reaccelerated as Americans experienced staggering increases in gasoline prices due to the tripling of crude oil prices – from \$3.50 per barrel in 1973 of oil to \$10.10 a barrel in 1974. The Federal

Reserve again responded to accelerating inflation by raising interest rates in line with the pace of price increases. The FOMC raised the Fed funds target rate from 5 percent in November 1972 to 13 percent in mid-1974. The result was another recession, this one deeper and longer than the one America lived through four years earlier. Inflation topped out at 12.3 percent in December 1974 and the unemployment rate peaked at 9 percent in May 1975.



The dollar took a further leg down in the late 1970s, bringing the cumulative decline in its exchange value to roughly 50 percent post-1971. This drop was associated with another surge in oil prices and overall inflation. Oil prices climbed from \$15 per barrel in early 1979 to \$40 per barrel by the Spring of 1980. The Federal Reserve, now under the new leadership of Paul Volcker, again raised interest rates in line with accelerating price inflation. But unlike 1970 or 1974, the Federal Reserve did not “pivot” and cut rates as inflation pressures eased in 1981, they pushed short rates even higher, to almost 20 percent (see chart above). The result was a recession that rivaled that of 1920-21 in duration and intensity. The 1981-82 recession lasted 16 months and the unemployment rate peaked at 10.8 percent in November 1982.

Environmental repairs

A big decline in the dollar’s exchange value and surging commodity prices were not the only causes of high inflation in the 1970s. Growth in labor productivity slowed sharply in the 1970s, meaning that any increase in hourly wages resulted in higher unit labor costs than was the case in the 1950s and 1960s. One likely reason for the slowdown in efficiency gains were an array of new regulations placed on American businesses at the beginning of the decade.

The strong economic growth of the 1940s, 50s and 60s came with high social costs, or severe “negative externalities” in economists speak. These externalities were water and air pollution, and by the end of the 1960s they were reaching extreme levels in many parts of the country. In 1969, published images of the Cuyahoga River -- that runs through Cleveland Ohio -- catching on fire captured the nation’s attention and catalyzed the political elite into action. Congress established the Environmental Protection Agency in January 1970 and passed the Clean Air Act later that year. This is a comprehensive federal law that regulates air emissions from stationary and mobile sources. The Clean Water Act was passed in 1972. This act established the basic structure for regulating discharges of pollutants into the waters of the United States and regulating quality standards for surface waters. The goals of protecting public health and public welfare.

Thousands of structures and production processes needed to be modified over time to meet the new environmental standards, as did the U.S. fleet of cars and trucks. These actions would require significant capital investments over a period of several years just to maintain the status quo in terms of economic output. For any given increase in capital expenditure, there would likely be less in the way of realized efficiency gains as measure by total factor productivity. As illustrated in Table 1 below, growth of capital inputs accelerated during the 1970s, but the average increase in total factor productivity slowed by almost half from the pace achieved during the 1950s and 1960s. Slower productivity growth amplified the impact of increasing hourly compensation on unit labor costs and overall upward pressure on prices in the 1970s.

Table 1 Productivity and inflation

Average annual % changes

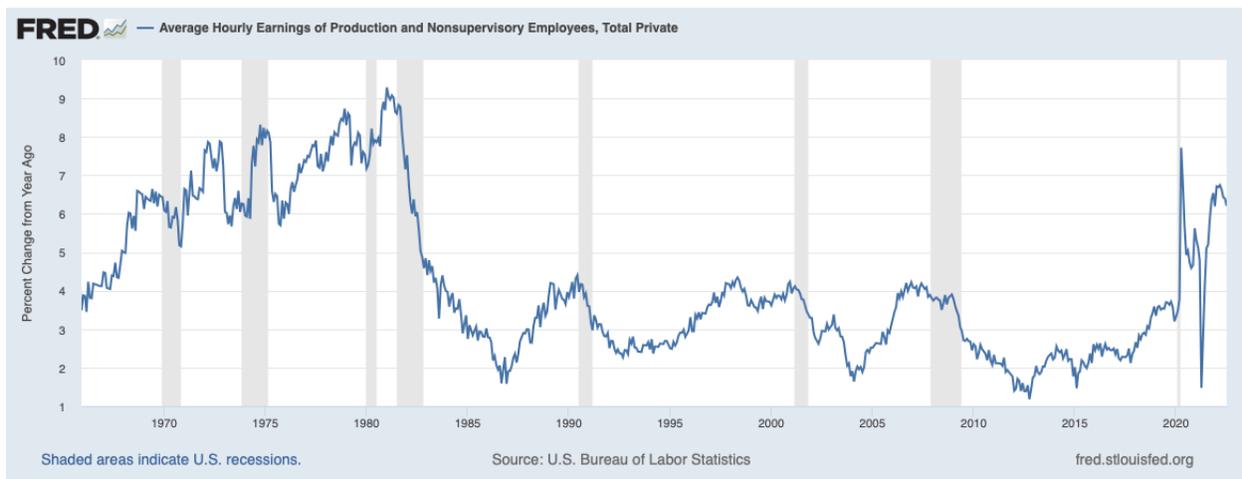
	1950s	1960s	1970s	1980s	1990s	2000s	2010s	2020s*
Labor productivity	2.9%	2.9%	1.9%	1.5%	2.1%	2.7%	1.2%	0.6%
Total factor productivity	1.9%	1.9%	1.1%	0.3%	0.8%	0.9%	0.6%	0.5%
Capital input	3.5%	4.3%	4.6%	4.7%	4.5%	3.4%	2.5%	2.4%
Hourly compensation	5.4%	5.1%	8.3%	5.7%	4.0%	3.8%	2.6%	7.0%
- non-supervisory	n.a.	n.a.	7.3%	4.3%	3.2%	3.2%	2.4%	5.8%
Unit labor costs	2.5%	2.1%	6.3%	4.2%	1.8%	1.1%	1.4%	6.4%
Consumer price inflation	2.2%	2.5%	7.5%	5.1%	2.9%	2.6%	1.7%	5.5%
Labor productivity + inflation	5.1%	5.4%	9.4%	6.6%	5.0%	5.3%	2.9%	6.1%

* 2020s data through Q2.2022, TFP and capital input through 2021

Source: BLS, Office of Productivity and Technology

The Reagan “revolution”

Wage growth slowed sharply in the 1980s. The 1981-82 recession created a tremendous amount of cyclical “slack” in the labor market – the unemployment rate remained above 7 percent four years after the end of the recession and the large imbalance between the supply and demand for labor exerted downward pressure on wages, especially those of non-supervisory production workers even as inflation stayed stubbornly high for most of the decade. But it wasn’t just “cyclical slack” that was pushing down on wages in America.



Ronald Reagan moved into the White House at the start of 1981, and he had a very different view of labor, of economic justice, and of the role of government in the economy than did the group of American presidents that served the country in the middle of the 20th century. The Reagan administration set the new tone quickly when about 13,000 air traffic controllers went on strike in August 1981 after negotiations with the federal government over better pay and working conditions proved fruitless. Reagan demanded the striking workers return to work and fired the 11,539 workers that did not. He also declared a lifetime ban of re-hiring the workers by the FAA. And in October the Federal Labor Relations Authority decertified the Professional Air-Traffic Controllers Organization.

These actions immediately stopped the increase in union density among public sector workers. Perhaps not too surprising given President Reagan’s often repeated mantra that “government is the problem”. They also accelerated the decline in the percentage of private sector workers that were union members from roughly 33 percent in the 1950s, to 25 percent in the mid-1970s, to 6 percent today as the Administration’s view that unions were bad provided cover for anti-union activities by private businesses. This anti-union ideology matters because unionized workers receive significantly higher wages than equivalent non-union workers, with estimates of private-sector union wage premiums ranging between 15 percent and 25 percent. (1)

The effort to reduce “worker power” by attacking unions and other means marked a critical change in the structure of the American economy and the narratives that were used to advocate for the public policies and laws that govern how our markets function and that shape the distribution of income in America.

In a **Brookings Paper on Economic Activity** published in early 2020 titled *The Declining Worker Power Hypothesis: An Explanation for the Recent Evolution of the American Economy* the authors Anna Stansbury and Lawrence H. Summers concluded, in part that:

“...the American economy has become more ruthless, as declining unionization, increasingly demanding and empowered shareholders, decreasing real minimum wages, reduced worker protections, and the increases in outsourcing domestically and abroad have disempowered workers—with profound consequences for the labor market and the broader economy”.

Annual growth in average hourly earnings of production workers moved in a range from 1-to-4 percent for between the early 1980s and the early 2020, tending to move toward the upper end of the range as economic expansions progressed and falling back to the low end in the wake of recessions. (See chart above) These subdued wage increases were sustained even as growth in labor productivity recovered from its terrible performance in the 1980s. (See Table 1) Median inflation-adjusted earnings growth has fluctuated around zero for 40 years in America. This means that little or no income benefit from the increases in labor productivity that Americans have produced have accrued to workers during the past four decades.



In the decades immediately after the second world war, the U.S. economy was locked into a “steady state” where a significant amount of the income gains generated by labor productivity growth accrued to workers, there was consistently positive real wage growth, improving living standards for most members of society,

and strong economic growth, with subdued inflation. That could all happen because there was rapid innovation and efficiency gains in a wide array of businesses and segments of the economy.

The policy regime Americans have been living in since the end of the 1970s is very different from that “steady state”. It has delivered subdued inflation. It took a while, but by the 1990s, inflation was subdued. But there has not been real wage growth, there has not been rapid innovation and nor widespread efficiency gains in the economy, as illustrated by the consistently weak (less than 1 percent) average annual increases in total factor productivity (see Table 1) and there has not been strong economic growth. Little or no real wage growth fits well with the very modest gains in total factor productivity.

One big reason for the lack of economic growth is the increasing skew of the income distribution in America. Looking over the 70 years, the U.S. has tended to get stronger economic growth when the top 10 percent of American families’ share of total income is stable or declining. But their income share has risen from about a third in 1979 to 46% in 2019. (See Table 2). These families tend to save a high percentage of their income, not spend it. The result is a “leakage” that acts to reduce spending in the economy.

Table 2: Distribution of income

Percent of pre-tax household income

	1949	1959	1969	1979	1989	1999	2009	2019
Top 10 percent of families	38%	36%	34%	34%	39%	42%	42%	46%
Middle 40 percent of families	45%	46%	45%	46%	44%	43%	44%	40%
Lower 50 percent of families	17%	18%	21%	20%	17%	15%	14%	14%

Source: World Inequality Database

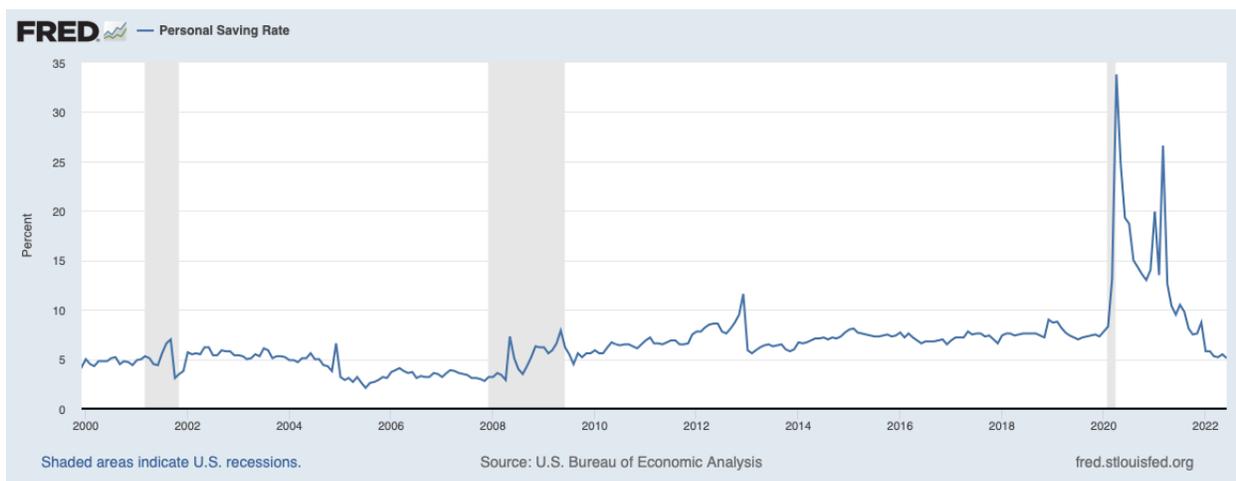
The lack of real wage growth has led to stagnant purchasing power of most American families, while cutting tax rates on high incomes, very favorable tax treatment of capital gains and capital income, and allowing corporations to inflate their share prices through share buybacks have all played a role in pushing up incomes near the top of the distribution, as has a narrative that normalized -- or made socially acceptable -- annual CEO compensation that is often 300-to-400 times the compensation of the median worker.

Now what?

A global pandemic and an intense war between the largest and seventh largest countries in Europe have massively disrupted supply chains and global trade flows in way not unlike those that occurred in the 1910s. Supplies of many finished are slowly returning to “normal”, but many commodities are moving in new

directions around the world, and some not at all. And some – like oil – seem to have structural supply issues since few private investors are eager to make large new investments in fossil fuels that may end up worthless in the not-too-distant future. Many service segments of the U.S. economy have seen their capacity constrained by shortages of labor at prevailing wage rates. And since so few households can afford to buy a house or an apartment at current prices, urban rental markets are reported to be very tight.

Federal government spending surged in fiscal 2020, to 31 percent of GDP in 2019 and all the increase was debt financed. Federal spending stayed at about 31 percent of GDP in 2021 and is declining this year to about 23 percent of GDP. This has been a year of significant fiscal tightening. Some of that has been offset by a gig drop in housing saving, a mini echo of what happened in the U.S. after World War II. But those adjustments look to have run their course now. Any further fiscal tightening looks unlikely and household savings have “normalized” (see chart)



The surge in government funded demand collided with an economy that had severe and widespread supply constraints -- one of the results has been a breakout in consumer price inflation, and another has been what looks like an emboldened labor force with unions being formed at high-profile corporations Amazon and Starbucks. Wages of production workers have accelerated, to a 5.8 percent average annual growth rate so far in the 2020s. This is modestly above measured 5.5 percent average inflation rate so far in this decade.

To subdue inflation, the Federal Reserve has begun raising interest rates to slow borrowing and spending to increase slack in the labor market and weaken labor, just like they have done many times in the past. No one knows how high interest rates will need to go, or how deep the economic slowdown will be to ease current inflation pressures. But then what? After a cyclical slowdown, will inflation prove to be stubborn like it was

in the 1980s, or will it quickly be subdued because of strong innovations and efficiency gains as the economy grows again?

The early signs are not encouraging for those of us that would like to see America grow its way out of an inflation problem, as it did in the 1920s or 1950s. Capital inputs continue to grow at an anemic pace as compared with earlier decades, as does total factor productivity. (See Table 1) Large segments of the corporate sector seem to be using the same playbook they were following before 2020. Major oil companies are using their current profit bonanza to buyback tens of billions of dollars of their own stock. **(m)** Their current shareholders -- including the firms' managers -- seem to like this behavior, but might it not be better for society if they were installing EV chargers at their gas stations or funding the construction of wind farms or solar farms? Might this be an appropriate time for heightened government regulation of the oil industry to drive investment in socially desirable directions?

And it isn't just oil companies that are spending billions on share buybacks rather than productive investment. Apple Inc. -- a company that takes pride in its ability to innovate -- recently issued \$5.5 billion in bonds to fund stock buybacks and increase dividend payments. The company spent \$85.5 billion to repurchase shares in 2021 and over \$467 billion on share buybacks since 2012, **(n)** the year after Tim Cook became CEO of the firm. Are spending these vast sums of money to support the stock price really the best use of funds in a society in desperate need of faster growth of innovation and efficiency? Prior to 1982, the SEC prohibited large scale share buybacks by U.S. corporations. U.S. firms had to innovate and grow to see their share prices climb higher. But now many don't -- they can use high percentages of retained earnings to purchase shares see their stock prices rise.

In a **Roosevelt Institute Working Paper** published in May 2021 titled ***Regulating Stock Buybacks: The \$6.3 Trillion Question*** the authors Lenore Palladino and William Lazonick **(o)** share their insights on what drives innovation within large, public corporations and how "value extraction" through share buybacks is hampering that process:

"... because innovation is cumulative, collective, and uncertain, it requires managers to be strategic, employees to be integrated into organizational learning processes, and management to have access to financial resources that can sustain the innovation process over an uncertain timeline. The structure of corporate governance in large US companies today and the focus on value extraction at the expense of value creation are harmful to innovation, and stock buybacks play a leading role in diverting executives from a strategic focus on innovation, undermining organizational learning processes, and reducing financial resources available for the uncertain innovative process of generating higher-quality, lower-cost products."

Palladino and Lazonick calculate that publicly listed companies in the U.S. spent a staggering \$6.3 trillion dollars on share repurchases during the 2010s, a decade when growth in capital inputs to their production processes declined to a post-war low of 2.5 percent. Perhaps it is not a coincidence that the pace of growth of total factor productivity has weakened in recent decades now that companies can inflate their stock price through financial engineering rather than relying on product and process innovation.

One thing is clear – the dual task of addressing our climate emergency while increasing supplies of food, housing and energy will take massive investments over several years. Only 13 percent of global power was generated by renewable energy in 2021. Almost 60 percent came from coal (36 percent) or gas (23 percent). The efforts needed to reduce carbon emissions would seem to dwarf those that were necessary to address air and water pollution 50 years ago.

The newly passed Inflation Recovery Act is a constructive step. But many more are needed. Hence the increasing chorus of voices that are now arguing for a wide array of price controls, like those implemented in the early 1940s, to keep a lid on prices for a finite amount of time while policy makers attempt to implement policies that will fix our inflation problem. **(k)**

Like “winning” the second world war, we will need a true team effort to adequately address our climate emergency and our inflation problem. The FOMC turning its interest rate dial higher – maybe a lot higher -- is not what America needs.

Douglas Cliggott
Provincetown MA
22 August 2022

Sources:

- a) Gordon, Robert J. (2016) *The Rise and Fall of American Growth* Princeton: Princeton University Press
- b) https://fraser.stlouisfed.org/files/docs/publications/histstatus/hstat1970_cen_1975_v1.pdf?utm_source=direct_download
- c) <https://eh.net/encyclopedia/the-u-s-economy-in-the-1920s/>
- d) https://www.nber.org/system/files/working_papers/w24587/w24587.pdf
- e) <https://wid.world/country/usa/>
- f) <https://www.washingtonpost.com/made-by-history/2022/08/09/way-fight-inflation-without-rising-interest-rates-recession/>
- g) <https://www.colorado.edu/economics/sites/default/files/attached-files/brunet.pdf>
- h) <https://www.brookings.edu/wp-content/uploads/2020/12/StansburySummers-Final-web.pdf>
- i) <https://mail.google.com/mail/u/0/#search/galloway/FMfcgzGqPplrZvKSdNlZvKPtgVnxrJNvX>
- j) <https://insights.som.yale.edu/insights/how-the-nixon-shock-remade-the-world-economy>
- k) <https://www.smithsonianmag.com/history/cuyahoga-river-caught-fire-least-dozen-times-no-one-cared-until-1969-180972444/>
- l) <https://www.brookings.edu/wp-content/uploads/2020/12/StansburySummers-Final-web.pdf>
- m) <https://www.nytimes.com/2022/07/29/business/oil-company-buybacks.html>
- n) <https://www.cnbc.com/2022/01/03/apples-3-trillion-market-cap-shows-value-of-share-buybacks-dividend.html>
- o) https://rooseveltinstitute.org/wp-content/uploads/2021/04/RI_Stock-Buybacks_Working-Paper_202105.pdf

The U.S. has registered so much prosperity, but without commensurate progress — wages decoupled from productivity five decades ago as we prioritize shareholders over the middle class. We've lost sight of the endgame, to help others love and care for the people important to them. Scott Galloway