

MARKET COMMENTARY AND OUTLOOK

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Worshiping False Prophets:

Why Powell's "Volcker Moment" is Misguided and Destined to Fail

To his admirers, Paul Volcker was the most successful Fed chair in history, a bold policymaker who beat back inflation, even when his actions were greatly unpopular.

Before Volcker took office as Fed chair on August 6, 1979, the Fed tried small increases in interest rates in hopes of taming prices to no avail. Just a few months after taking office Volcker called a surprise meeting in October 1979, setting the Fed on a shocking, new, dramatically tighter course of monetary policy. The Fed would allow interest rates to go higher than before. That month, the Fed's interest rate was set at 13.7 percent; by April, it had spiked a full 4 points to 17.6 percent. By 1981, it extended to a yield of 20 percent.

The approach took two attempts to achieve its desired effect. Volcker's tightening slowed economic activity enough that by January 1980 the US declined into recession. But Fed interest rates actually began falling sharply after April, which limited the effectiveness of the Fed's anti-inflation efforts. The Fed tightened again after that, sparking another recession in July 1981. Unemployment peaked at 10.8 percent in December 1982, amidst a much more painful 16-month second recession. The nation was in crisis.

The program came at a huge human cost. At 10.8 percent, unemployment in the U.S. reached the highest levels since the Great Depression. It also came at immense *global* cost. It set off a global debt crisis. In particular, many Latin American governments had borrowed from US banks, which charged far higher interest rates after Volcker's hikes. As a result, their debt ballooned. In 1982 Mexico defaulted on its debts, with many others following behind. Businesses, including building contractors and carpenters, were forced to close shop in droves. At the peak of the crisis, builders mailed Volcker's office two-by-fours by the pallet that they weren't able to use to build homes, as the mortgage market had completely dried up. Farmers protested by blockading the Federal Reserve's headquarters with tractors.

Previous Fed Chair Ben Bernanke kept one of those two-by-fours in his office as an inspirational symbol, telling *The New York Times* that Volcker "came to represent independence. He personified the idea of doing something politically unpopular but economically necessary." Bernanke is not alone in his admiration of Volcker. Jerome Powell, after being named Fed chair in 2018, was often seen with Volcker's memoir, *Keeping at It: The Quest for Sound Money and Good Government*. When asked by the media why he carried the book around, he was effusive in his praise: "I actually thought I should buy 500 copies of his book and just hand them out at the Fed. I didn't do that. But it's a book I strongly recommend, and we can all hope to live up to some part of who he is." Powell has been clear that he considers Volcker one of his professional heroes. "I knew Paul Volcker," Powell said during congressional testimony this March, "I think he was...the greatest economic public servant of the era."

Currently, it is hard to imagine a public figure who is held in higher regard than Paul Volcker. Looming over 6ft 7in, a lover of oversized cigars and fly-fishing, "Tall-Paul" occupies an almost mythical, Hemingway-esque role within social psychology. He is popular, at not only the Fed but the country writ large. At no other time has the fetishization of the man and his policies been more universal than in the politics of the current period. Innumerable op-eds have been written in the last year (2021-2022), contrasting Powell to Volcker and contemplating whether Powell could ever live up to Volcker's independence and bravery. After all, the thinking goes, in the face of tremendous pressure, Paul Volcker did something three chairmen before him, William McChesney Martin, Arthur Burns, and William Miller, failed to do: stop a seemingly perpetual wage-price spiral from 1965-1980.

As a result of Volcker's legendary vanquishing of inflation, a zeitgeist has taken hold amidst the cognoscente. The economic theory goes that the primary cause of secular inflation in the modern economy is actually "inflationary psychology." Once an inflationary mindset takes hold, for whatever short-term initial reason, consumers pull forward demand in order to beat anticipated future price increases. Firms readily pass along higher costs to consumers, including the future cost increases that they anticipate, and they become less resistant to offering higher wages. Left unchecked, this naturally plays out as a self-perpetuating, wage-price spiral. In effect, once long-term inflation expectations take hold they become a self-fulfilling prophecy. If this self-fulfilling loop can be short-circuited, then Fed Chair 1979-1987 secular inflation can be relegated to rare, short, cyclical phenomena.



Paul Volcker

The obvious implication of this contention is that, had previous Federal Reserve chairs not been derelict in their duty and had instead acted courageously, like Volcker, they could have circumvented the wage-price spiral that ultimately took hold. With foresight and gumption, 10 to 15 painful years of inflation could have theoretically been bypassed. Today's broadly accepted policy response to inflation should therefore be to "circumvent a potential wage-price spiral before it starts, at all costs." "Go big, early, and do whatever it takes."

The Wrong Playbook at the Wrong Time

What this prevailing narrative fails to contemplate is that not all moments in history are created equal. Paul Volcker did indeed do the right thing from 1979-1981. But, as always, context matters. He did the right thing at the right time. 1965 was not the same time as 1980. Policymakers would like to imagine that all inflation is created equal and that there is a cookie-cutter policy that fits all inflationary scenarios. This cookie-cutter approach ignores several critical structural factors:

- What was the initial structural driver of the inflation and had this structural inflation push run its course?
- What are the current structural realities of the domestic economy of the moment and how will the economy of the time react to reductions in monetary policy?
- What will be the economic cost of a Fed-generated slowdown in the current era?
- What are the current political realities of the current period and what policy feedback loop will the economy likely experience in response to a Fed generated slowdown?

As with most things, including policy responses, the devil is in the details. The more you look under the surface at the details of the current period, the more it becomes clear that the Volcker playbook that the Fed is currently following is the wrong playbook at the wrong time.

The Rise of Populism as a Structural Force Driving Global Inflation

After having left his job as Fed Chair in 1978, Arthur Burns gave a telling speech at the meeting of the IMF in Belgrade, on September 30, 1979. His presentation bore the revealing title "The Anguish of Central Banking." In the speech, he spoke to the long-since forgotten painful experiences of the prior 15 years of Fed Governors from 1964-1979. "My conclusion that it is illusory to expect central banks to put an end to the inflation that now afflicts the industrial democracies does not mean that central banks are incapable of stabilizing actions," he opined, "It simply means that their practical capacity for curbing an inflation that is continually driven by political forces is very limited." As a story that serves to enhance the Fed's credibility, the hero's tale of Volcker's vanguishing of inflation is all too often conveniently circulated by the Fed. Meanwhile, the stories of William Fed Chair 1970-1978



Arthur Burns

McChesney Martin, Arthur Burns, and William Miller are all too conveniently sullied or brushed

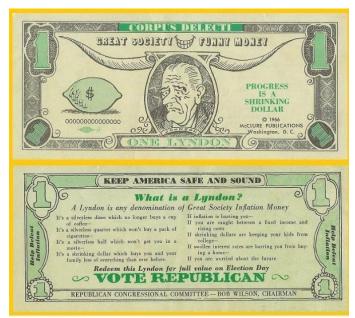
under the rug. Bordering on conspiracy theory, it makes sense that the failed attempts are essentially erased from the history books while the "successful" ones are immortalized, despite the actions taken literally being the same. Although not without good reason, as the public's faith in the Fed's ability to manage perilous situations is as important as any tool it has in its arsenal with regards to monetary policy.

Fifteen years before Volcker set the wheels in motion to heroically crush the wage-price inflationary spiral, in May 1964, President Lyndon B. Johnson laid out his agenda for a "Great Society." The Great Society was an ambitious series of policy initiatives and programs with the goals of ending poverty, reducing crime, and abolishing inequality. Until recently, the program was the largest social reform plan in history and only rivaled in fiscal spending by FDR's New Deal of the 1930s. (See figure below).

POVE	RTY		
	Tax Reduction Act cut corporate and individual taxes to stimulate growth. Economic Opportunity Act created Job Corps, VISTA, Project Head Start, and other programs to fight the "war on poverty."		Medicare Act established Medicare and Medicaid programs. Appalachian Regional Development Act targeted aid for highways, health centers, and resource development in that economically depressed area.
CITIE	s		
	Omnibus Housing Act provided money for low-income housing. Department of Housing and Urban Development was formed to administer federal housing programs.	1966	Demonstration Cities and Metropolitan Area Redevelopment Act funded slum rebuilding, mass transit, and other improvements for selected "model cities."
EDUC	ATION		
1965 1965	Elementary and Secondary Education Act directed money to schools for textbooks, library materials, and special education. Higher Education Act funded scholarships and low-interest loans for college students.		National Foundation on the Arts and the Humanities was created to financially assist painters, musicians, actors, and other artists. Corporation for Public Broadcasting was formed to fund educational TV and radio broadcasting.

While Johnson avowed to create a Great Society and eliminate poverty in America, there was another large source of fiscal spending in the federal budget other than the war on poverty. It was the war in Vietnam. The dual fiscal spending on both war fronts laid the groundwork for the initial surge of inflation. Suddenly demand was given a big shot in the arm and the aggregate demand curve shifted up. Consumer demand began to run at a feverish pitch, as government spending simultaneously accelerated. Soon demand exceeded the economy's ability to supply and everything began to cost significantly more.

President Johnson, who had come to power in an electoral landslide four years prior, began to suffer from dismal approval ratings as inflation surged and the Vietnam War dragged on. Having served Kennedy's last two years and one full term of his own, he was legally allowed to pursue a second full term. But as the tide was turning against Johnson, he shockingly opted not to pursue another term. By the end of 1968, the inflation rate climbed over 5%, it could no longer be ignored. Both the business community and consumer groups railed against the Democratic Party and demanded that something be done. Republicans printed "Great Society, Funny Money" to protest the inflationary effects of LBJ's policies (see images below) and won the presidency in a landslide. The responsibility of curing inflation was left to President Richard Nixon.



Above, "Great Society Funny Money", issued by the Republican Congressional Committee

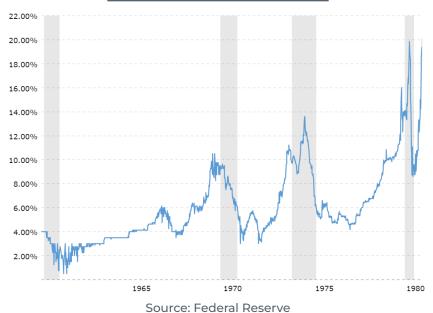
Despite being a laissez-faire Republican, due to the continued popularity of populist policies to address inequality, Nixon not only continued LBJ's war on 2 fronts but passed new laws to increase social welfare spending. Much like the leaders of today, for the less popular job of controlling inflation, LBJ and Nixon pushed the Federal Reserve front and center and mandated that they reign in prices. The Fed obliged.



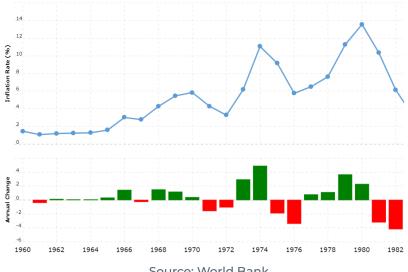
William McChesney Martin Fed Chair 1951-1970

Before the heralded "Volcker Moment" in 1979 was the less discussed "William McChesney Martin Moment" in 1967. From June 1967 to June 1969 the Federal Reserve ratcheted the fed funds rate up a gut-wrenching 7% from 3.5% to 10.5%. The recession that followed lasted for 11 months, beginning in December 1969 and ending in November 1970. Despite mounting unemployment, unlike in the case of Volcker's heralded dual recession, inflation was barely affected. (See figures below)

Federal Funds Rate: 1960-1982



U.S. Inflation Rate: 1960-1982

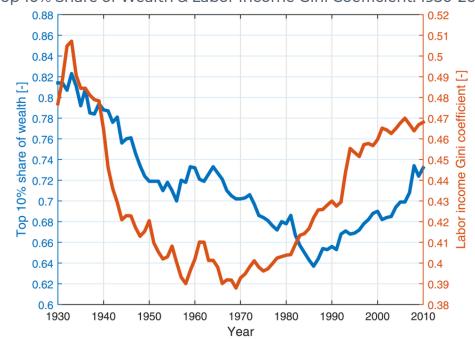


Source: World Bank

Faith was lost in the Federal Reserve, as the economy declined into stagflation. In 1971 critical economists and politicians called for the government to intervene directly and freeze prices and wages. Absent a viable alternative, Nixon ordered a freeze on all prices and wages throughout the United States for a period of ninety days. These price controls amounted to soft transfer payments from corporations to consumers and, once lifted, only served to make matters worse, fueling the fires of even worse, double-digit inflation.

The important lessons from this painful period in Federal Reserve history have been broadly whitewashed, largely ignored by the Fed and history. As Arthur Burns explained, when structural inflation is driven by underlying political forces, the Federal Reserve's capacity to curb it is *very limited*. At no time in the U.S.'s history have these lessons been more relevant or more critical to understand than now. After 40 years of monetary policy dominance & secularly declining interest rates from 1981-2021, the world likely faces its first secular inflationary period in two generations. This inflation, much like the inflation of 1965-1980, is not merely a psychological phenomenon that can be controlled by decreasing long-term inflation expectations. Its structural underpinnings run much deeper. Much like in the 1960s, it has been driven primarily by the political winds of populism.

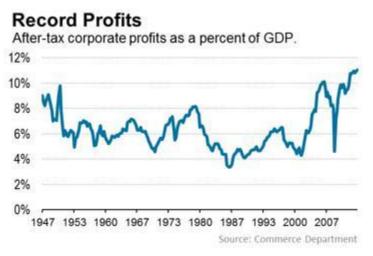
Inequality, as measured by the Gini Coefficient and the top ten percent's share of domestic wealth (See figure below), has been secularly increasing since monetary policy dominance took hold in the mid to late 1970s.



Top 10% Share of Wealth & Labor Income Gini Coefficient: 1930-2010

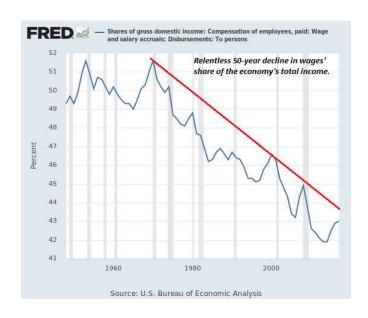
The Gini coefficient is a summary measure of income inequality. The Gini coefficient incorporates the detailed shares data into a single statistic, which summarizes the dispersion of income across the entire income distribution. The Gini coefficient ranges from 0, indicating perfect equality (where everyone receives an equal share), to 1, perfect inequality (where only one recipient or group of recipients receives all the income).

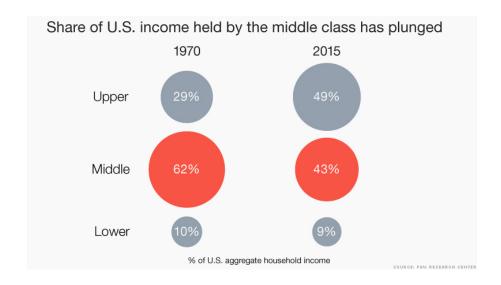
This is no coincidence. Inequality in the developed world has been overwhelmingly driven by the unconstrained monetary stimulus for the past forty years. Low interest rates represent cheap capital to the investment class. The overwhelming majority of the Fed's stimulus has ended up in the hands of the wealthy and corporations, which have used the capital to maximize profits. Maximizing corporate profits entails lowering costs of production and spurring innovation and competition to capture market share. This unconstrained free-market capitalism, fueled by cheap investment capital, has driven secular globalization and historic technological innovation. Both of these trends, and the record profits that they have generated for corporations (See figure below), have come directly at the cost of the domestic labor class.



As a result, wages' share of the economy's total income has dropped by nearly 20% in the last 50 years and the middle class has been hollowed out in the U.S. (See figures below)

Employee Compensation as % of Gross Domestic Income: 1940-2020



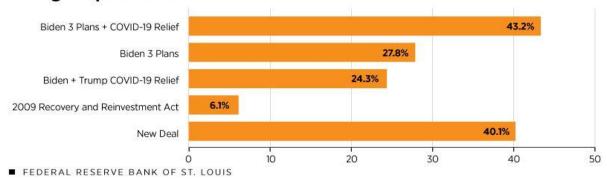


This has, unsurprisingly, led to distrust in government and decreasing societal cohesion. Starting in 2009, it began to spur increasingly populist movements in the U.S. on both sides of the political spectrum. In 2009, it spawned the Tea Party movement on the Right; in 2011, it gave birth to Occupy Wall Street on the Left. However, neither movement was able to gain sufficient traction to force structural change and monetary policy remained dominant from 2011-2020. Eventually, this forced greater distrust and anger and greater pressure for populist policies on both sides of the political spectrum. Donald Trump & Bernie Sanders are just the most recent incarnations of this movement in the U.S. Both politicians are simply populist vehicles created by the Federal Reserve & forty years of unencumbered monetary policy.

The structural transition of the political Right to the populist Left by Donald Trump in the U.S. was ultimately the catalyst that made for a revolution in wait. Once this occurred, the tidal wave of fiscal policy was all but inevitable. The COVID pandemic was simply the spark that led to its ultimate ignition.

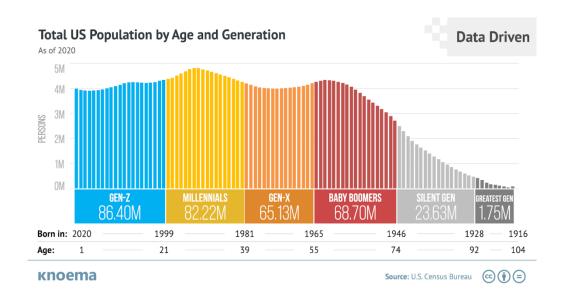
The total proposed fiscal response to the COVID pandemic, nearly \$9 Trillion and counting dwarfs the fiscal spending of LBJ's Great Society program in comparison. Its only contemporary rival, adjusted for the size of the economy, was FDR's New Deal of the 1930s, which plugged a decade-long economic hole in the U.S. during the Great Depression (See figure below).

Federal Fiscal Relief and Stimulus as a Percentage of Annual GDP during Respective Time Periods

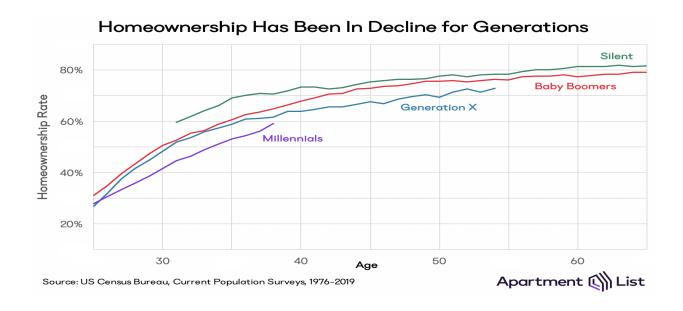


But much like in the late 1960s, after 40 years of expanding inequality, the populist response has likely just begun. As a "flat tax" that disproportionately hurts the poor, inflation serves to only reinforce populism. Despite all of the efforts towards addressing inequality of the last two years, much like with Nixon in 1970, policy makers are only facing even greater populist pressures. Much like Nixon did in 1971 their natural policy response will likely be to apply more fiscal policy, including price controls. We are already witnessing a dramatic uptick in these policies globally in the form of tuition forgiveness, gas tax holidays, and first time homeowner tax credits. As we enter the midterms and the next U.S. presidential cycle., we will likely only see similar policies, regardless of the party in power.

There is another critical factor driving demand and exacerbating the populist trend. Much like was the case with the Baby Boomer generation in the 1960s, Millennials represent a significant demographic bubble. In fact, the millennial generation is the largest in US history, even larger than the Baby Boom (see below).

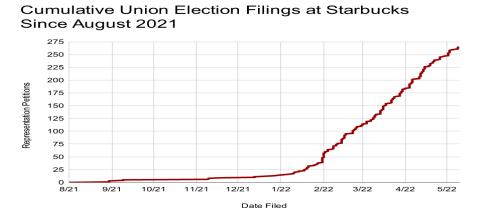


As they reach their prime working and spending years, their impact on the economy will increasingly accelerate demand for goods and drive policies that are important to this cohort. Millennials have come of age during a time of technological change and globalization driven by monetary policy dominance. As the labor class, during the last 20 years, they have not possessed the assets to benefit equally from the monetary policy dominance of their lifetime. Baby Boomers, the primary holders of wealth from 1980 to 2020, overwhelmingly benefited from asset inflation. Household and wealth formation for Millennials has dramatically lagged. In 2016, the Federal Reserve calculated that "the typical Millennial family was 34% poorer than expected" when compared to previous generations. Millennials' homeownership rate trails that of their predecessors dramatically at the same point in their lives, with approximately half of Millennials still renting (See figure below). When Baby Boomers hit a median age of 35 in 1990, they owned nearly one-third of US real estate by value. In 2019, the millennial generation, with a median age of 31, owned a paltry 4%.

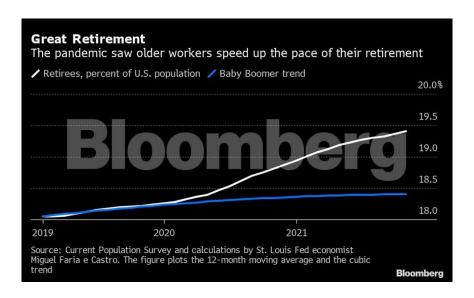


In 2021 the median price of a U.S. home alone saw a 24% increase from a year earlier, the largest annual increase ever recorded, making homeownership even more unattainable to most. Millennials are just now entering prime home-buying years, right as many are priced out of the market. Meanwhile, from 1989 to 2016, the percentage of under-35 households w/ student loan debt almost tripled, from 17 percent to 45 percent. The net effect of these realities is an inevitable surge in underlying demand, due to both simple demographics as well as pent-up underlying demand. The inevitable mean reversion in these trends will not only serve to underpin continued structural inflation but will likely continue to drive populist fiscal stimulus to this increasingly politically powerful generation, exacerbating inflation for a decade to come.

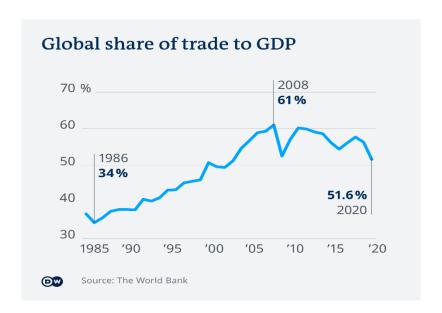
Excess demand is just half of the negative feedback loop that occurs once a populist cycle takes hold. A greater fiscal response to labor doesn't just drive greater demand pull in an economy. It also drives reductions in supply. As labor's share of wealth grows, workers tend to not be willing to work for the same pay and under the same conditions that they did prior. The National Labor Relations Board reported that for the first six months of Fiscal Year 2022 (October 1, 2021 – March 31, 2022), labor unions filed 57 percent more representation petitions than they did during the same period a year prior. This increase comes on the heels of a Gallup poll of Americans' approval of Labor Unions, which showed that the percentage of Americans who view labor unions favorably has increased from only 48 percent in 2009 to 68 percent in 2021. The last time this many Americans viewed unions favorably was in 1965. In the last year alone there has been more than a twenty-fold increase in union election filings at corporations like Starbucks (See figure below).



Meanwhile, better pay also tends to lead to an increase in retirements. This has been particularly relevant in the current cycle as Baby Boomers are increasingly dropping out of the workforce in droves, having secured their retirement. (See figure below).



To add to this maelstrom of supply-side inflationary pressures, much like in the 1960s, developed countries are experiencing an uptick in protectionism and an unwind in globalization (See figure below). This reduces a critical deflationary force that has promoted price stability for the last forty years.



Meanwhile, as forty years of economic cooperation transitions to a historically volatile period of increasing global competition, much like LBJ and Nixon experienced, we are experiencing a dramatic uptick in global conflict and military spending (See figure below).



History's replete with examples of inflationary periods generating unrest, from Weimar Germany in 1923 to postwar Hungary in 1946 to Yugoslavia in 1994 and the Arab Spring in 2010. This era of increasing conflict is not likely to be any different. And reflexively, the more war spending that occurs, historically the more inflation has typically risen both during and in the aftermath of major wars. In fact, (See figure below) when mapped against major wars, inflation historically peaks at 8% one year after war has ended.

End of War 13.0 11.0 11.0 Average Start Date Median 9.0 9.0 Start Date Median (Global and Country Specific) Median (Global Only) 7.0 5.0 5.0 3.0 3.0 1.0 1.0 1.0 -3.0 -3.0 Years -5.0 -10 10

Figure 1 Inflation has typically risen sharply both during and especially in the aftermath of major wars

Notes: CPI Inflation (% year-on-year) around wars, median and interquartile range.

Source: Goldman Sachs Global Investment Research, Bank of England (2021), Schmelzing (2020).

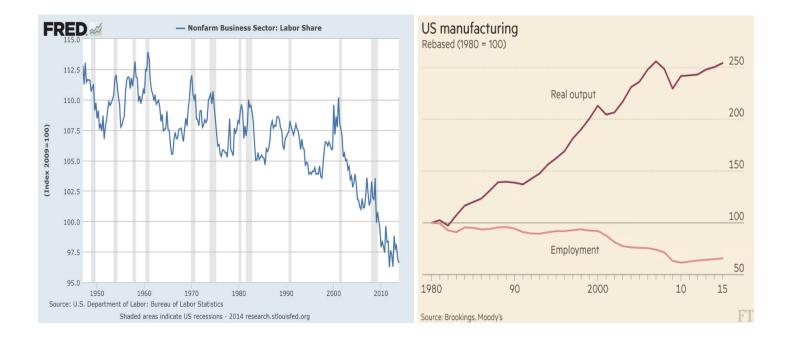
It is important to note that, despite how independent many of these factors might appear, the majority of these factors that drive structural inflation are highly correlated. Virtually all of them are connected to inequality and the populist impulse that it drives. The historic clustering of these inflationary factors is not a coincidence. Much of the same clustering of factors were present during WWI, WWII, and the 1970s. Populism is the structural driving force underpinning its secular return. Despite what the current zeitgeist might say, much like William McChesney Martin, Arthur Burns, and William Miller experienced, the Fed will likely be largely impotent to secularly decrease these structural forces in the coming decade. This will continue to be the case until the desired rebalancing the populace demands has run its course and the political winds of populism have ebbed.

The 'Blunt Tool' of Fed Policy Is Ineffective at Stopping Inflation & Will Likely Exacerbate the Problem

William McChesney Martin was not the only Federal Reserve Chairman of the 1960s and 1970s to guide interest rates higher in an attempt to reign in runaway inflation and to fail. Arthur Burns aggressively raised the Fed Funds rate 10.5 percent from 1972 to 1974 and drove a painful recession from November 1973 to March 1975. The U.S. Bureau of Labor Statistics estimated that 2.3 million jobs were lost during the excruciating recession; at the time, this was a post-war record. Despite briefly lowering inflation, price pressures came screaming back to new highs, like a beach ball underwater, as soon as the Fed attempted to normalize rates again. Just like the prior recession, the structural drivers of inflation were still present in 1974-1975. Monetary policy tools were not capable of addressing the underlying drivers of excess demand, and the Fed unnecessarily provoked the first stagflationary recession in modern history.

As Fed Chairman Powell noted in a recent press conference in May, "We don't have precision surgical tools. We have essentially interest rates, the balance sheet, and forward guidance... They are famously blunt tools, they are not capable of surgical precision." Not only are the Federal Reserve's tools blunt and unwieldy, but they are not even well-suited for addressing demand-pull inflation, as primarily supply-side instruments. Monetary policy has always been a brutish process of pumping "steroids" in and out of the free market economy to control more nuanced inflationary issues. Monetary policy's primary function is increasing or decreasing liquidity to corporations and investors. When the monetary spigot flows, it creates infinite capital for unadulterated competition and innovation, progressively obviating the need for labor while increasing supply by producing cheaper goods more efficiently. Counterintuitively, despite dramatic increases in monetary supply, the primary byproduct of monetary policy has been cheaper, more plentiful and advanced goods. As a result, 40 years of expansionary monetary policy and secularly lower rates has led to secular price deflation. In extension, its removal will likely serve to secularly reduce supply and exacerbate inflation by reducing capital to industry, presumably driving stagflation much like in 1974-1975.

Despite these facts, the theory has always been that, in the short-term, the Fed can still affect demand second-hand via "trickle down" economics. Whereby when a corporation has less money, its workers accordingly make less money via hiring and wages. As experienced throughout the 1960s and 1970s, this has been a tenuous, second-hand approach to affecting economic demand and has rarely "trickled down" sufficiently to drive desired outcomes. That said, during the 1960s and 1970s, there was at least hypothetically more efficacy to this method than there is now. Today's U.S. economy is not nearly as domestic-labor intensive as it once was (see figures below). In the words of Fed Chair Powell in his July 2019 congressional testimony, the connection between economic slack and inflation has become "weaker and weaker and weaker to the point where it's a faint heartbeat that you can hear now." In the modern domestic economy, the velocity of monetary policy is now essentially almost zero. As such, relying on such second-hand, blunt tools is now even less effective than ever in the battle against inflation.



The Potential Damage from a "Volcker Moment" Is Much Larger At This Point in the Cycle

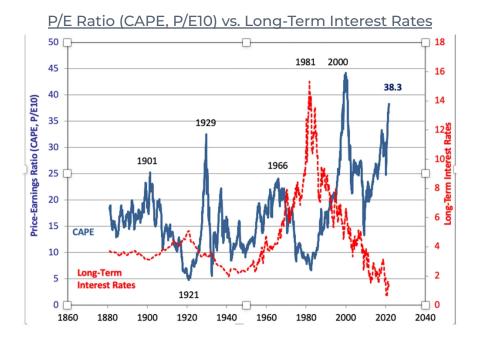
Amidst all the arguments for why inflation is likely to be structural and unavoidable and all the reasons that the Federal Reserve is likely not to have the necessary tools to control structural inflation, maybe the most important argument against Federal Reserve intervention to control inflation is the immense potential economic cost of doing so. Of the five highest unemployment peaks in U.S. history, two have come as a direct result of recessions caused by the Federal Reserve's attempt to battle inflation. Two others have come as a direct result of popping of the historic, financial bubble, where the Fed has played a primary hand in both creating the bubble and ultimately pricking it. Yet, never has the Federal Reserve had to navigate both monetary policy intervention to battle inflation as well as a financial bubble at the same time.

In May 1975, the unemployment rate reached its height for the cycle of 9 percent, as a result of the 1973–1974 stock market crash. The crash and recession were driven by Fed Chair Burns aggressively raising the Fed Funds rate 10.5 percent from 1972 to 1974 to battle inflation. The crash affected all the major stock markets in the world and was arguably the worst global stock market downturn since the Great Depression. The Dow Jones Industrial Average lost over 45% of its value. The effect was even worse for global markets, as the LSE's FT 30, lost 73% of its value during the crash. The United Kingdom didn't return to the same market level in real terms until May 1987 (just a few months before the Black Monday crash), whilst the United States didn't see the same level in real terms until August 1993, over twenty years after the 1973–74 crash.

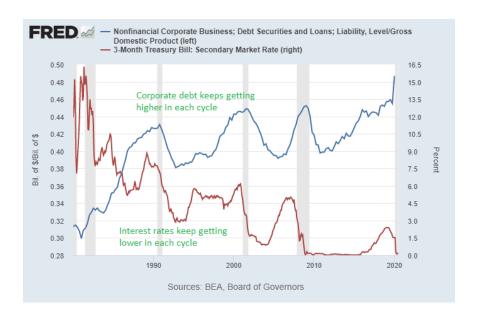
Similarly, in December 1982, Fed Chair Volcker once again caused the unemployment rate to spike to 10.8 percent by raising the Fed Funds rate by 10.5 percent to battle soaring inflation. Much like the recession just 7 years earlier, the recession was the most severe recession since the Great Depression. This time the recession that the Federal Reserve sparked unfurled a dramatic and painful savings and loan crisis. In 1980, there were approximately 4,590 savings and loan institutions (S&Ls), with total assets of \$616 billion. From 1979, they began losing money because of spiraling interest rates. Net S&L income, which had totaled \$781 million in 1980, fell to a loss of \$4.6 billion in 1981 and a loss of \$4.1 billion in 1982. The tangible net worth for the entire S&L industry fell to essentially zero. The S&L crisis would last well beyond the end of the economic downturn, weighing on the economy for almost a decade, until the passage of the Financial Institutions Reform, Recovery and Enforcement Act of 1989.

The Great Depression from 1929-1939 saw unemployment peak at 25 percent; the Great Recession in 2008-2009 caused unemployment to peak at 10 percent. Both of these well-documented, painful periods in American history were a result of the popping of significant bubbles driven by excess liquidity. In the case of the 1929 Stock Market Crash, the Fed was reluctant to raise interest rates in response to soaring share prices throughout the Roaring Twenties, leaving rampant bank lending to push prices excessively high. When the Fed did belatedly act, the bubble burst with a vengeance, causing unequivocally the longest, deepest, and most widespread depression of the 20th century. Between 1929 and 1932, worldwide gross domestic product (GDP) fell by an estimated 15%. Similarly, in 2007-2008 the Federal Reserve lowered interest rates excessively to support the U.S. economy in the aftermath of the 2000 tech bust, creating historic excess liquidity that resulted in widespread over-investment and a housing bubble. As they attempted to raise rates, the bubble burst and residential investment fell by nearly 4%. GDP and consumption enabled by bubble-generated housing wealth slowed dramatically. This created a gap in annual demand (GDP) of nearly \$1 trillion and a run on banking institutions. Both of these asset bubbles and their resulting crashes were driven by dramatic mal-investment, propelled by the artificially low cost of credit and an unsustainable increase in money supply.

As explained by John Mills in an article read before the Manchester Statistical Society on December 11, 1867, "Credit Cycles and the Origin of Commercial Panics", "Panics do not destroy capital; they merely reveal the extent to which it has been destroyed by its betrayal into hopelessly unproductive works." In 2022, the U.S. economy sits at a dangerous crossroad of momentous mal-investment once again, driven by Federal Reserve largess. U.S. equity market's cyclical adjusted price-to-earnings ratios (CAPE, P/E 10 ratio) sit precariously at levels only rivaled by the 1929 and Tech Bubble peaks, at almost twice its long-term median. (See figure below).



All of this, while the Fed's maintenance of historically low interest rates for a historically long period of time has built historic levels of corporate leverage (See figure below).



Needless to say, this makes for a highly combustible situation. Never before has the Federal Reserve been tasked with controlling inflation amidst this scale of corporate leverage and mal-investment. The costs of robust intervention, like Fed chairs Burns and Volcker pursued to control inflation, would likely be no less painful than the Great Depression or Great Recession, with highly unpredictable, potential tail risks and consequences to such actions. Meanwhile, given the reasons enumerated prior, the ability of monetary policy intervention to stem inflation any more than cyclically in the short term is suspect at best.

A Fed-Driven Slowdown Will Likely Accelerate a Populist Response and Exacerbate Structural Inflation

If the immense potential costs of intervention, the likely inability to stem structural inflation, and the highly ineffective tools available to the Fed for the task at hand were not enough reason for Powell to reconsider embarking on his own "Volcker Moment," there exists another important reason to reconsider. The Fed may not only be unable to stem secular inflation, but they may very well have the exact opposite intended effect and exacerbate it, if they choose to continue down their current path. After all, the origins of the massive fiscal stimulus that has driven the current demand-pull inflationary impulse was a crisis. Without the COVID pandemic, one could argue the fiscal impulse from the populist movement would likely have been more gradual and less extreme.

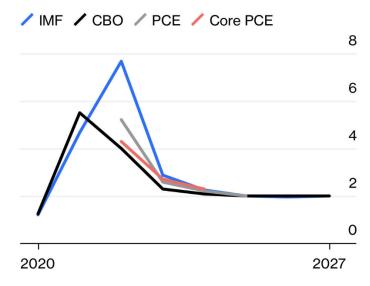
As he was working to form the United Nations post-WWII, Winston Churchill highlighted that politicians "never let a good crisis go to waste." The likely recession and crisis that the Federal Reserve is hurtling towards will invariably solicit a political response by the government. Given the current political and demographic winds, that policy response is likely to be once again populist, similar to the reaction to the COVID crisis. This is likely to be the case, regardless of the party in power. As Nixon experienced, despite being a laissez-faire Republican, the political realities of the electorate demanded that for his reelection in 1972 that he, much like Trump, move left. Due to the popularity of populist policies to address inequality, Nixon not only continued LBJ's "War on Poverty" but passed new laws to expand Social Security. Moreover, the worse the economic crisis, the more likely the party in power will be pressured to help stem the costs of inflation on the poor. Much like Nixon was eventually forced to do in 1971, stagflation would invariably lead to price controls, another fiscal response likely only to accelerate and exacerbate the inflation at hand.

The Fed May Stop Inflation Cyclically in the Short Term, But the Inflationary Impulse Is Likely Secular

Recently, many long term deflationists have been declaring victory, with a cacophony of "I told you so's" echoing from inside the Fed and across Wall Street. In the last several months pretty much every component of inflation, except energy, is pointing down. Consequently, warehouses are beginning to overflow with inventory.

Much like Fed Chairs William McChesney Martin and Arthur Burns experienced, one would reasonably expect inflation to reach a short-term peak, as the Fed accelerates its hikes. The lesson of history is that it is unlikely to come back down to below 3% next year, drop below 2.5% in 2024, and then decline to 2% thereafter. However, that's exactly what the Federal Reserve's, Congressional Budget Office's, and the International Monetary Fund's projections all anticipate (See figure below).

Best Guesses?Selected official inflation predictions



Sources: International Monetary Fund; Congressional Budget Office; Federal Reserve

Lost in the current inflation versus deflation debate is that the Fed may very well win the battle against inflation cyclically, but that the true inflationary war is likely structurally secular and just beginning. For forty years the Federal Reserve's power over financial markets has been absolute. Their credibility and the markets' faith in their ability to control the most heinous of outcomes sits at an all-time high since "Volcker's heroic act" magically turned back the forces of inflation. Forgotten is the actual history and the realities of the last time the U.S. experienced structural inflation. Forgotten are the fifteen years prior to 1980 when the Federal Reserve was powerless to control the rising tides of inflation. Paul Volcker was indeed courageous and did the right thing, at the right time, but he is no prophet. Powell's idolization of Volcker and current embracing of his own "Volcker Moment" is politically expedient, misguided, and destined to fail. The long end of the curve has yet to wake up to this reality. As inflation stabilizes at a higher plateau in the years to come, the coming loss of credibility at the Fed will likely mark a period of increased global volatility and a second leg down.



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As always, these longer-term macro views only represent a small portion of the factor inputs used in our models for predictive distributions for underlying market moves and implied volatility. Our models are focused on capturing daily moves and in the immortal words of Bruce Lee are always focused on not being dogmatic, instead being flexible,

"...formless, shapeless, like water."



<u>CONTACT US</u>: If you have any questions, concerns, or need any information please feel free to reach out to us at any time by contacting ir@KaiVolatility.com

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