

**The risk and opportunities of inflation: comparative
analysis between the 2022 and 1970s oil supply
shocks in the USA**

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EXECUTIVE SUMMARY

The Covid-19 pandemic has provoked a dramatic change in the macroeconomic environment: in less than 2 years most of the developed countries passed from a deep recession to a sustained growth with the side effect of high inflation.

This research paper analyzes the inflation phenomenon through the comparison between 2022 and the Great Inflation period of 1965-1982 in the USA. Analyzing the phenomenon using a retrospective view is crucial to understanding if the precedent period has given us important lessons on inflation dynamics.

Main Findings

Inflation expectations and its “anchoring”

Inflation expectations are the key variable to control when we are talking about inflation growth dynamics. In the last three decades, inflation expectations have been incredibly stable, always fluctuating around the 2% inflation rate target. As suggested by Reis, Central banks have deliberately ignored these metrics in the models used to forecast inflation and they have concentrated on the potential risk of deflationary pressures. This has led the Central banks, such as the Fed, to welcome a temporary rise in expectations, as the great fear was a potential “deflationary trap”. However, relying on “well-anchored expectations” did not seem a good idea: from the start of 2021, medium-run inflation expectations started to “disanchor” rising from 1.34% in April 2020 to 2.60% in April 2022. This empirical evidence underlines the over-reliance of central banks on the stability of this metric. If this upward trend was confirmed we could have experienced higher levels of inflation on longer horizons too. The author of this paper however has not found any evidence for Reis’s hypothesis. Indeed, 5-year inflation

expectations have decreased to lower levels that are much closer to the 2% inflation target. This result is fundamental to highlighting the transitory nature of the present inflation.



Fig. 11: 5 Year 5 Year Forward Inflation Expectation (US), source: Macrotrends.com

The supply shock

As almost 50 years ago the global economy experienced an important shock on energy prices, and in particular on oil whose price has almost doubled in less than a year. The great question around which many scholars have focused is the potential incidence of oil price spikes on the real economy. If it is true that most of the academic literature agrees on the crucial effect of the oil price spike of 1973 and 1979 on the subsequent inflation, this cannot be concluded for the recent shock. Indeed, empirical evidence shows a reduced impact, on the long horizons, of an oil price shock on the macroeconomic variables, such as inflation, since the second half of the 1980s. One of the most important reasons behind this is a greater level of credibility acquired by central banks in the last 30 years that has allowed inflation expectations to be strongly

anchored. Thanks to this, an energy price shock is predicted to affect the price level only temporarily, with negligible consequences on longer horizons.

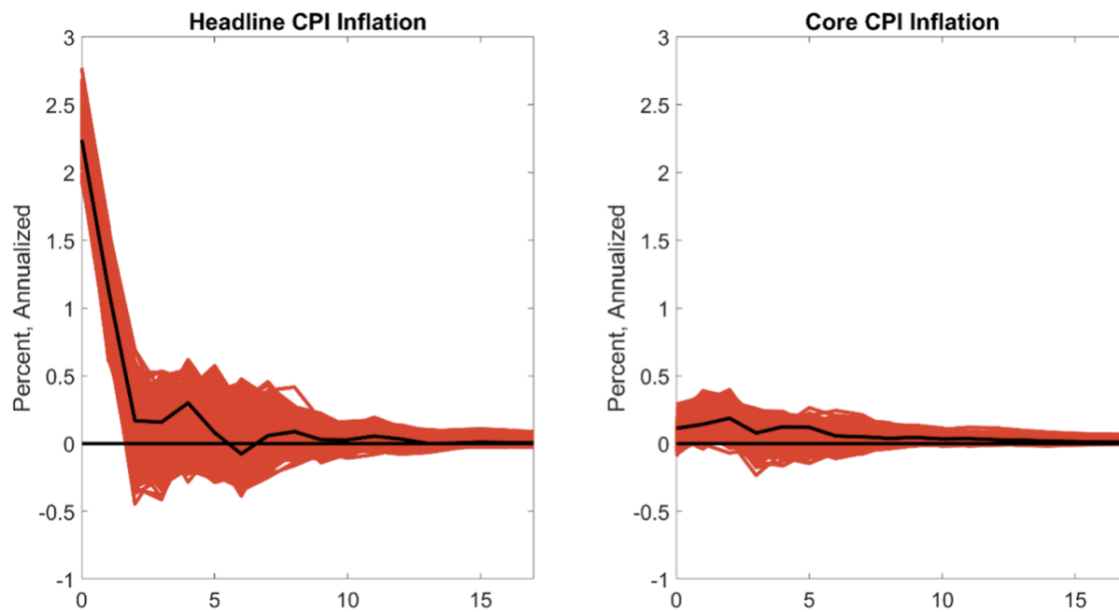


Fig. 14: the effect of an unexpected rise in gasoline prices on CPI inflation, source: Kilian and Zhou (2022)

History is not repeating itself

The post-pandemic economic environment, characterized by an energy price shock and high levels of inflation has pushed many individuals to draw easy parallelism between today and the Great Inflation period. The reality however is much more complex.

There are major differences between today and 50 years ago. The most evident one is represented by the magnitude of the commodity price jump. For example, oil prices quadrupled in 1973-74, while today oil prices (in real terms) are still $\frac{2}{3}$ of the ones experienced in the early 1980s.

Another major difference is represented by the paradigm of monetary policy. In the 1970s Fed's monetary policy had a multitude of objectives besides the one price stability. In particular, it is important to highlight that in the early 70s central banks, freed from the Bretton Woods framework, saw a clear opportunity for monetary policy to support economic activity.

Moreover, inflationary pressures were attributed to external pressures, with the clear consequence of underestimation of the effects of a prolonged excess of aggregate demand in the economic system. This passive monetary policy has been one of the driving causes of the multi-decade inflation that characterized the American economy in the late 60s, 70s, and early 80s.

In contrast with the precedent period, central banks nowadays, have a clear mandate of price stability, expressed with a stable inflation target. Thanks to this, advanced economies' central banks have acquired a higher level of credibility among the economic actors.

Even if the present macroeconomic setting is very different from the one of 50 years ago, the Great Inflation period can still provide useful lessons for the current time.

The main one is represented by the material risk of high and prolonged inflation that could represent a major threat to the well-anchored inflation expectations, constituting a major turning point after 3 decades of low and stable inflation. This event does not have a high probability to occur at the moment: the inflation that we are experiencing seems to have a transitory nature. The recent inflation spike has however reminded, once again, all market participants of the crucial role of inflation in our economic system.

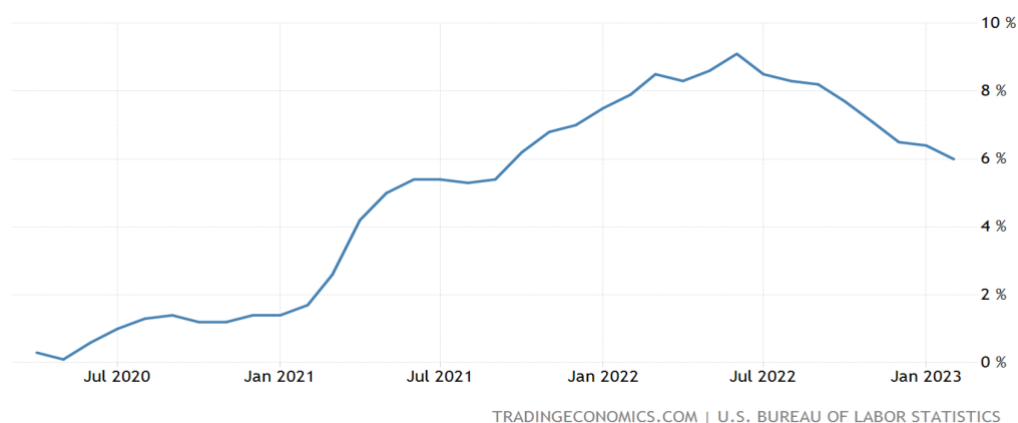


Fig. 17: US inflation rates, 2020-2023. Image retrieved by TradingEconomics, data from the US Bureau of Labor Statistics

Chapter I

1. The mechanics of inflation

1.1 Introduction:

In the last two years, we assisted in a dramatic change in the macroeconomic setting of the world economy. 2020 and 2021 have been characterized by generalized shutdowns imposed by the governments in order to reduce the spread of the virus. The COVID-19 pandemic represented an unprecedented shock due to its scale and speed of transmission. The pandemic has disrupted the global supply chain, and forced businesses to close, causing widespread job loss. All this led to dramatic effects on the world GDP which experienced a drop of 3.1%¹ in 2020: one of the largest falls ever registered since World War II.

Central banks' response to the pandemic has been extraordinary in speed, size, and scope. In the United States, in only 8 days, the Federal Reserve announced as many emergency programs as it announced in all of 2008, the peak year of the Great Recession. The most important of these emergency programs consisted of the monthly purchase of \$80 billion in treasuries and \$40 billion of residential mortgage-back securities that continued for over 1 year and a half.

The strong and fast reaction of the central banks has certainly mitigated the adverse effects of the pandemic by providing substantial liquidity and alleviating the sharp tightening of financial conditions given by the pandemic. Without any doubt, their role was crucial for the rapid return of economic activity to pre-pandemic levels. Indeed, data show the return of the American economy to pre-pandemic levels already in the second quarter of 2021.

However, this positive side-effect slowed the response of the Fed, and of all the other central banks, to the inflation problem. From the last quarter of 2021, we subsequently assisted in the rapid growth of inflation which has been rising at levels that have not been seen for decades. Inflation has therefore shown once again its crucial role in the economy: from consumer spending to business investment, government programs, tax policies, and ultimately interest rates.

Analyzing these phenomena using a retrospective view is, therefore, crucial to understand how to cope with a generalized reduction in the net worth of all economic agents in the economy.

¹ <https://data.worldbank.org/indicator/NY.GDP.MKTP.KD.ZG>

For this reason, this paper will proceed with a detailed analysis of the precedent inflationary spike period in the USA to predict the potential outcome and consequences of the actual macroeconomic setting.

1.2 Understanding Inflation and Its Impact on Purchasing Power

The term “inflation” indicates a general increase in the price of goods and services in an economy. As the general price level rises, the single unit of currency has a reduced “buying power”: it can buy fewer goods and services. Therefore, a higher level of inflation corresponds to a reduction in the purchasing power of money.

It's important to remember that some degree of inflation is typical and even desirable in an economy because it shows that the latter is expanding and doing well. However, overly high inflation rates can negatively impact the nation's economy as a whole and its residents' standard of living.

1.2.1 Instruments to measure inflation: the CPI

Inflation can be measured in several ways: the most well-known indicator is the Consumer Price Index (CPI), which measures the change in prices of a specified basket of goods and services consumed by households. In the US, the CPI is calculated by the “Bureau of Labor Statistics” (BLS) which calculates the inflationary pressure by gathering data of thousands of consumers.

The “conventional” basket tracked by BLS is composed of many commonly purchased goods and services such as gasoline and drugs, but also elements such as food or college tuition fees. Some of these components, such as food and energy, are subject to significant price changes over time. For example, in 2022, the Economic Research Service (USDA) calculated an increase of 10.9% on the annual base of the food price.² For this reason it also published the **core CPI** which intentionally leaves outside volatile components of CPI.

The calculation of this indicator is straightforward: the BLS takes the weighted average cost of the predetermined basket of goods in a given month and divides it by the value of the same basket calculated the previous month.

² <https://www.ers.usda.gov/data-products/food-price-outlook/summary-findings/>

1.3 The bottom line of inflation

In a complex economy, like the one where we live, inflation can represent the “worst enemy” for some economic agents, while it can represent an “imprescindible help” to some others: it all depends on the point of view.

Retirees and households, usually living on a fixed income, dislike inflation as it dilutes the purchasing power of money. If these agents do not find a way to increase the nominal value of their income, they will eventually experience a decrease in the quality of living as a result of rising inflation. Moreover, there will be rebalancing of the households and retirees' budget: “Essentials will take precedence over non-essentials as everyone tries to stretch the purchase side of their budget,” as Angelo De Candia, professor of business at Touro University, says.³ Empirical data confirm this fact: a recent study by the University of Pennsylvania found that lower-income households spent 7% more on essentials in 2021 compared to 2019⁴. This will lead to a reduced amount of savings. A reduced amount of savings will also reduce the ability to cope with “financial emergencies”, leading to the tendency to rely more heavily on credit cards and loans.

On the other side, debtors are in favor of inflation as it diminishes the real value of their debt. This is true for all those agents that have a fixed interest rate. Those that have a flexible interest rate are still negatively impacted by rising inflation as it usually triggers a rise in interest rates. Moreover, inflation can be beneficial for producers that can sell their products at a higher price, allowing them to receive higher profits. These will stimulate investors and entrepreneurs to increase their investment spending, leading in conclusion to higher levels of employment in the economy.

1.4 The mechanics behind inflation

The effects and causes of inflation are a contested topic among economists. Nowadays, the vast majority of economists accept the Quantitative Theory of Money (QTM), as an accurate model to predict inflation in the long run. This theory argues that inflation in the long run is strictly related to the growth rate of money.

³ <https://www.forbes.com/advisor/personal-finance/why-is-inflation-bad/>

⁴ <https://budgetmodel.wharton.upenn.edu/issues/category/Other+Public+Policy>

In the short and medium run, however, economists do not identify a unique cause, but rather many factors that can influence it. Some examples can be represented by examples such as demand pressure in an economy, the relative elasticity of wages, prices, and interest rates.

The key debate concerns if these short-term effects can be truly relevant. Monetarists believe that prices and wage adjustments are quick enough to make irrelevant other factors on a “general trend line”. Oppositely, Keynesians think that price and wages do not adjust at the same rate, producing relevant effects in the long term.

1.4.1 Keynesian view

Keynesian strongly believes that changes in the money supply do not affect prices in the short run; inflation is rather caused by demand pressures. Robert J. Gordon, in his “triangle model,” identifies three main sources of inflation: cost-push inflation, demand-pull inflation, and built-in inflation.

- Cost-push inflation is caused by a sudden drop in aggregate supply due to wars, natural disasters, or an increase in the input price. This will cause a sudden and unexpected rise in price and may prompt workers to demand a wage increase in order to preserve their purchasing power. The wage rise can fuel inflation, potentially leading to a wage-price spiral.
- Demand-pull inflation is caused by an upward shift of the demand curve due to a sudden increase in private or government spending. Demand inflation can encourage growth since the excess demand will eventually stimulate investments and therefore expansion.
- Built-in inflation is induced by “adaptive expectations”: workers striving to maintain their purchasing power constantly ask for higher wages. The higher cost is then passed to the consumers in the form of higher prices, leading to a feedback loop. Built inflation is also known as “hangover inflation” as it reflects events of the past.

1.4.2 Monetarist view

Monetarists believe the increase or decrease in prices is crucially determined by the speed by which the money supply is increased or shrunk. The monetary view, therefore, considers government spending, government taxation, and in general, fiscal policy an ineffective way to control inflation.

Monetarists argue that empirical data of monetary history show that inflation has always been a monetary phenomenon: periods of sustained money supply growth have always been followed by periods of high inflation. This idea is based on the equation of exchange of the QTM.

$$MV = PQ$$

where Q is the quantity of money; V is the velocity of money; P is the general price level; M is the real value of expenditures.

Monetarists assume as constant V and Q: the velocity of money is unaffected by monetary policy and the real value of output is determined by the productive capacity of the economy. *An increase in the quantity of money will have a direct and proportional effect on the price level.* Empirical data seems to agree with the monetarist view.

We can therefore conclude that, as Milton Friedman would say, “inflation is always and everywhere a monetary phenomenon”.⁵

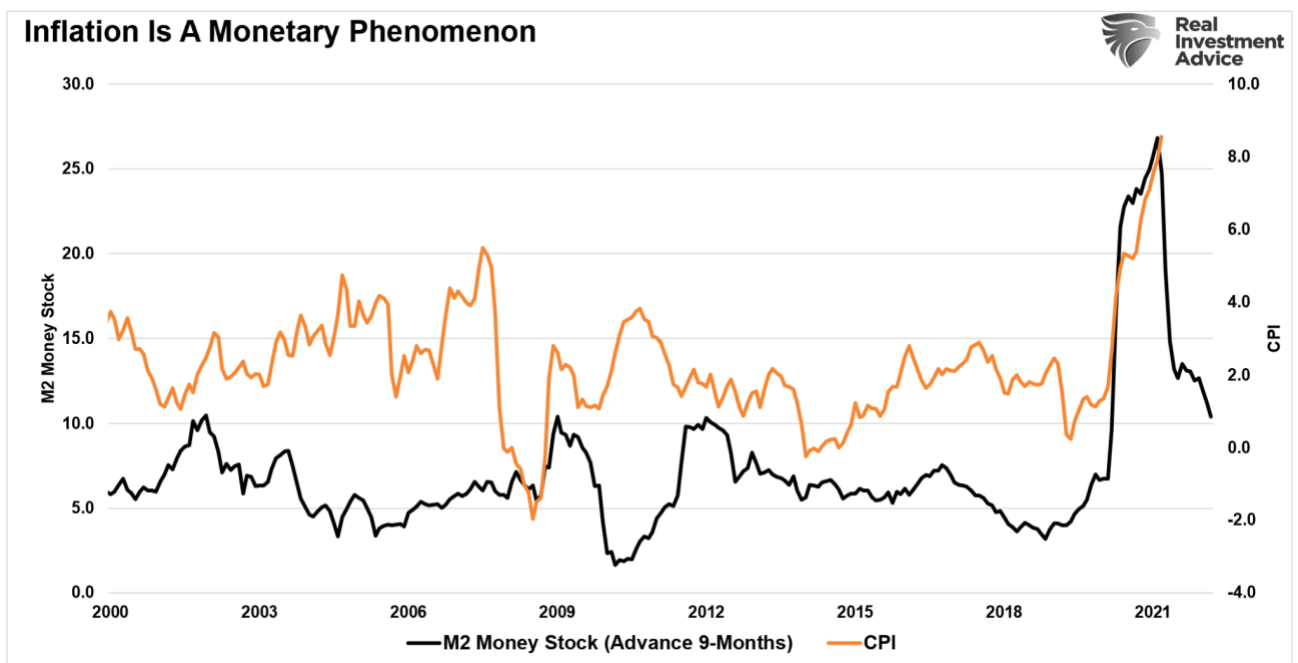


Fig. 1: correlation between the M2 stock and the CPI. Image retrieved by RIA Advice, data of FRED (St. Louis Fed)

⁵ <https://www.econlib.org/persistent-inflation-is-always-and-everywhere-a-monetary-phenomenon/#:~:text=Milton%20Friedman%20famously%20claimed%20that,can%20impact%20the%20price%20level.>

Chapter II

2. The 1970s oil supply shock

2.1 Understanding the 1970s Energy Crisis and its Impacts

What is known today as the “1970s energy crisis” is represented by two major oil supply shortages in 1973 and 1979 when, respectively, the Yom Kippur War and the Iranian Revolution triggered the interruption in Middle East countries' oil exports to the Western countries.

Before the shock, the world assisted to a peak in oil production in the late 1960s, with the highest oil production per capita ever registered. This event was followed by a long reduction in oil production that propped the first major shift toward energy-saving technologies.

The basis of the energetic crisis can be found in the heavy reliance of Western countries on primary resources, such as oil, produced in Middle East countries. The subsequent surge in oil prices, caused by the drastic reduction in its supply, led to stagnant economic growth and price inflation. Today, this economic setting is identified by economists with the term “Stagflation”.

This period was not uniformly negative for all the economies: petroleum-rich countries such as in the Middle East largely benefitted from the rise in oil prices and the parallel reduction in supply in other areas of the world. Other nations of the world benefitted as well, such as Norway or Venezuela, but also the US states of Texas and Alaska which experienced an economic boom while the rest of the country was struggling.

The two major oil supply shocks have some similar features, as well as many different ones: it's, therefore, necessary to focus on both of them before drawing conclusions.

2.2 The 1973 Energy Crisis

The oil shock of 1973-74, also known as the 1973 energy crisis, was a period characterized by skyrocketing energy prices and a generalized fuel shortage. The causes of this major shortage can be found in the embargo imposed on the USA, and some of its allies, by the members of the Organization of Arab Petroleum Exporting Countries (OAPEC), in response to the US support to Israel state during the Yom Kippur War. In the first stance, the nations targeted alongside the US were Canada, the Netherlands, and the UK. It was subsequently extended to other countries such as Portugal, Rhodesia, and South Africa.

This major shrink in the oil supply led in less than 12 months to a rise in the oil price of 300%: from \$3/barrel to over \$12/barrel globally.

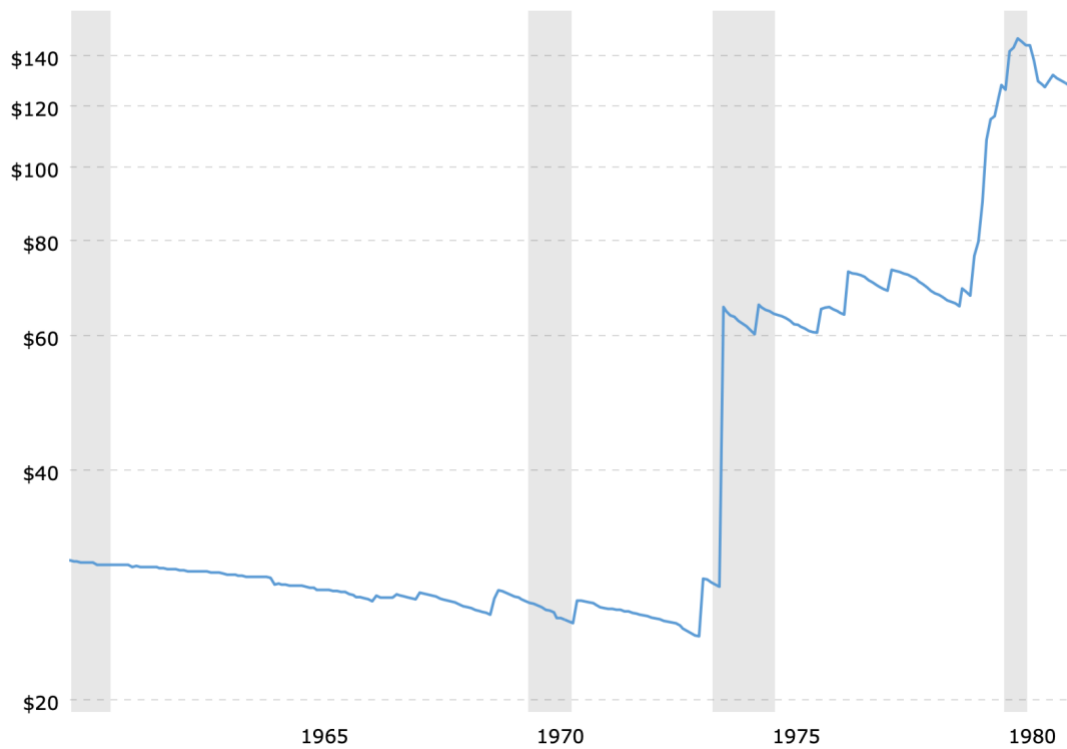


Fig. 2: average OPEC crude oil prices 1960-1980, source: Macrotrends.com. The price of oil shown is adjusted for inflation using the headline CPI and is shown on a logarithmic scale.

Shortages not only provoked a rapid increase in oil prices but also a rationing of gasoline, with long queues of cars waiting to fill up their tanks. The extraordinary circumstances caused a subsequent “psychological panic” among the consumers who saw their purchasing power rapidly decreasing. Indeed, inflation at the end of 1973 was running at 8.7%, far above the average inflation of 3.3% experienced by the United States between 1946 and 1972.

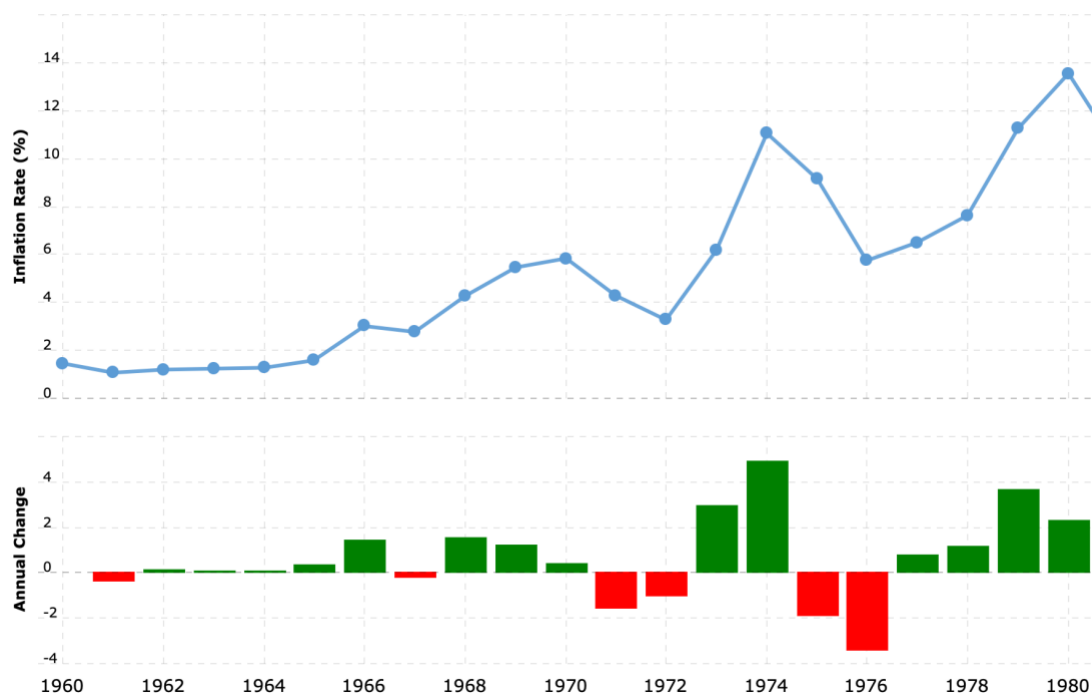


Fig.3: US inflation rate 1946-1979. Image retrieved by TradingEconomics, data from the World Bank

2.2.1 The main drivers of Inflation

As well explained by the former chairman of the FED, Arthur Burns “the manipulation of the oil prices and supplies came at the most inopportune time for the United States”. In fact, at that time the price of raw materials for industries was already rising at a rate of more than 10% on an annual basis. Moreover, industrial plants were already operating at almost full capacity and industrial materials were largely lacking at that time. In addition to all this, the US oil industry was showing a “lack of excess of production capacity”: this meant that the country’s oil industry was unable to respond to a sudden price rise caused by a sharp reduction in supply. When OAPEC cut production, the United States found themselves without any instruments to fight the speculation in the act.

In this particular scenario, the dollar played an important role. In the early 70s, the American currency was experiencing a significant devaluation: as the price of oil was quoted in dollars, its falling value caused a fall in revenues for the cartel that was pushing for pricing this commodity in terms of gold. The price of gold, indeed, was rapidly rising after the ending of the Bretton Woods agreement in 1971 that had pegged gold to a price of \$35 per ounce. It can be therefore concluded that the dollar devaluation represented an additional stimulus for OAPEC to increase prices by using its market power to reduce supply.



Fig.4: the price of gold:1960-1980, source: Macrotrends.com

2.2.2 The Origins of the inflation

Ultimately the embargo was lifted in March 1974, however, oil prices did not drop as expected, persisting for a long time, and leading to vigorous inflation.

Today, economists recognize that the first great inflation spike was the result of a series of events that started almost 10 years before. The buildup of the “Great Inflation” can be found in 1966 when Congress greatly expanded its budget to fight poverty and finance the Vietnam War. The US president in charge, Johnson, needed an excess of funds to finance the war and other social security programs, without raising new “direct” taxes to the American citizens. He imposed (as Milton Friedman would say) an “inflation tax”, injecting into the economy a great quantity of liquidity.

In this scenario, the government was keeping spending, with businesses operating close to capacity and labor approaching full employment. In a few words, the demand exceeded the economy’s ability to supply with a consequent increase in the general level of prices.

The first inflationary effects arrived in 1969 when the inflation rate climbed to over 5%: the business community and the consumer group demanded immediate actions from the new White House resident, Richard Nixon. The new president was however considered “unacceptable” to increase taxes and cut the budget. For this reason, he tried to solve the problem by intervening in the money supply, ultimately just fueling inflation.

The results of Nixon were absolutely dramatic: the economy slowed down, while the inflation was still rising. For this reason, Nixon imposed a 90-day “price freeze”, but the results were null, as inflation kept climbing after the end of the freeze.

The reason for the failure of Nixon’s “price freeze” stems from three facts:

- The wage and price ceiling were a temporary measure that did not address the underlying and much deeper causes of inflation. As the subsequent events have shown us that these measures had a null effect on the American economy which continued to experience a prolonged price rise for years.
- The presidential measure not only did not fight the price rise, but it also caused shortages in the supply chain as businesses were unable to raise prices as a consequence of an increased cost of production. All these incentivized the creation of black markets and hoardings.
- The price cap created an environment of uncertainty and instability as firms were unable to conduct effective planning for the near future in the absence of market signals. This led to a decline in investment and productivity that contributed to the inflation problem.

Nixon’s measure was only one of the many incorrect, short-term, and blind actions of the policymakers that only exacerbated the inflation problem. From the above analysis, we can therefore conclude that the Arab Israeli war of Yom Kippur represented only the last act of an extremely long chain of events, the spark that ignited the fire.

2.3 The 1979 Energy Crisis

The second energy crisis is represented by the 1979 oil price shock as the result of widespread panic among consumers of gasoline shortages and higher prices for oil and refined products. The origins of this second crisis can be found in the Iranian Revolution of 1978-79 which led to the fall of the country's monarch, Shah Mohammad Reza Pahlavi. The political turmoil in Iran, one of the major oil exporting countries in that period, led to a decrease in the global supply of crude oil. The shortages condition subsequently triggered a noteworthy increase in

oil prices that in less than one year doubled, reaching a price of \$39.50 a barrel (correspondent today to \$161.98⁶).

It's interesting to notice that in 1979 global oil production decreased by less than 7%, however, short-term supply disruptions caused panic among consumers who rushed to buy as much gas as possible, generating long lines at the gas stations.

Supply disruptions were particularly acute in some states of the USA, such as California and New York where consumers could purchase gasoline only on certain days, based on their car's license plate numbers. In other "cold" states such as New England, the spike of heating oil represented a real concern for warming houses.

In parallel to what was said about the 1973 oil supply shock, it would be simplistic and erroneous to attribute the unique factor to the oil price spike. Nowadays, economists agree to identify the country's fiscal policy as one of the main contributors to this condition, leading the USA to experience a much more acute crisis than the rest of the world.

Indeed, in the early months of 1979, the government restricted the supply of gasoline from refineries to main distributors in order to build sufficient inventories. In addition to this, the Department of Energy (DoE) ordered the sale of crude oil from larger refineries to small ones which were having problems with their procurement. These two key decisions from the regulator definitely contributed to higher prices at the pumps for the final consumers.

Despite the negative consequences of the crisis, it is possible to identify some benefits that stemmed from the second oil supply shock. The 1979 oil crisis led to the rapid growth of the "compact vehicles" segment in the USA. These vehicles, with lighter and smaller engines, were substantially more fuel efficient. Moreover, utility companies sought alternatives to crude oil generators, boosting R&D spending for other fuel sources.

After this second oil supply shock, oil prices decreased steadily for more than 20 years, with few exceptions, such as the Gulf War of 1990-91.

2.4 The Role of the Federal Reserve

Nowadays, it is largely recognized that the role of FED, during this high inflation period, was largely insufficient and incorrect: its actions further complicate the existing macroeconomic environment. As stated by the former chairman Burns the Federal Reserve was convinced that

⁶ <https://www.usinflationcalculator.com>

the inflation was the result of a “plethora of forces” represented by elements such as the large financing of the Vietnam war (1965-1975), the economic boom of 1972-73, the rise in food price of 1974-74 given by the crop failures, and the sharp decrease in productivity of the oil industry.

Policymakers agreed at the time that the country was experiencing cost-push inflation, and therefore outside the spectrum of action of monetary policy. As stated by one of the economists in the Federal Open Market Committee in May 1971: “*The question is whether the monetary policy could or should do anything to combat a persisting residual rate of inflation [...] The answer, I think, is negative. It seems to me that we should regard continuing cost increases as a structural problem not amenable to macro-economic measures*”.⁷

2.4.1 The Stagflation of the US Economy and the Fed’s Trade-off

In this kind of scenario, characterized by low (or even negative) growth and high inflation, the Fed had to face an important trade-off: fight inflation, further dampen the growth, or support growth by fueling inflation.

At that time extremely high oil prices were producing two unintended effects: an additional inflationary pressure and a further downward pressure on the economic growth. Fed's central banker had to decide whether to raise the interest rates in order to fight inflation, dampening the growth or lowering the federal rate, fueling growth, but at the same time, inflation. The ultimate decisions, as explained by Ben Bernake, 2022 Nobel Prize winner, “*Ultimately depends on how policymakers balance the risks inherent in pursuing employment and price stability objectives*”.⁸

⁷ <https://www.federalreserve.gov/monetarypolicy/files/fomcmod19710511.pdf>

⁸ <https://www.federalreservehistory.org/essays/oil-shock-of-1973-74>

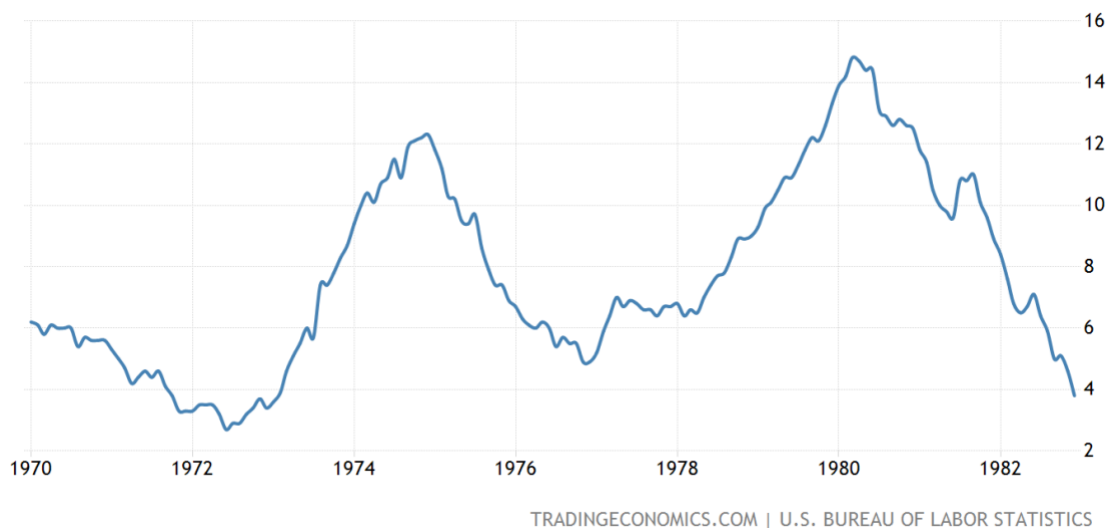
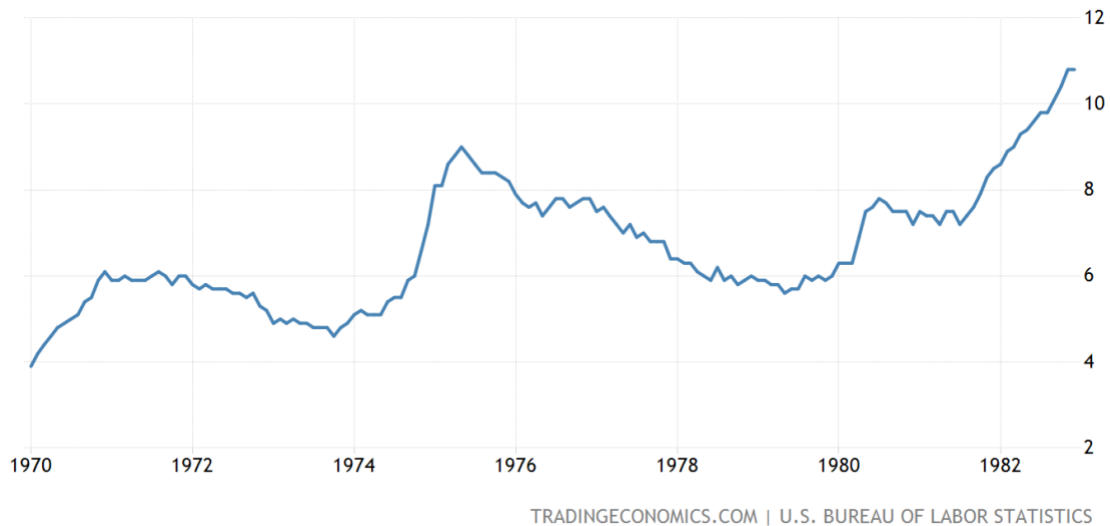


Fig. 5-6: the “trade-off” between unemployment (figure above) and inflation (figure below)
Image retrieved by TradingEconomics, data of the Us Bureau of Labor Statistics

Undoubtedly Fed’s monetary policy played an important role in this multi-decade inflation. Indeed, due to the nature of the shock, Fed officials doubted it would be able to control inflation, blaming energy prices and labor unions. This led to prioritizing low unemployment, rather than low inflation.

In order to understand the view about the nature of the 70s inflation of the American central bankers, it is highly illustrative to analyze the reaction of the Fed to the 1973 recession. The recession led to a significant easing cycle, with the Federal Open Market Committee (FOMC) cutting federal rates 7 times in less than 2 years. Even if it does represent a standard response in the case of a stable inflation scenario, it is a totally incorrect measure in the case of extremely high inflation levels as the one of the early 1970s.

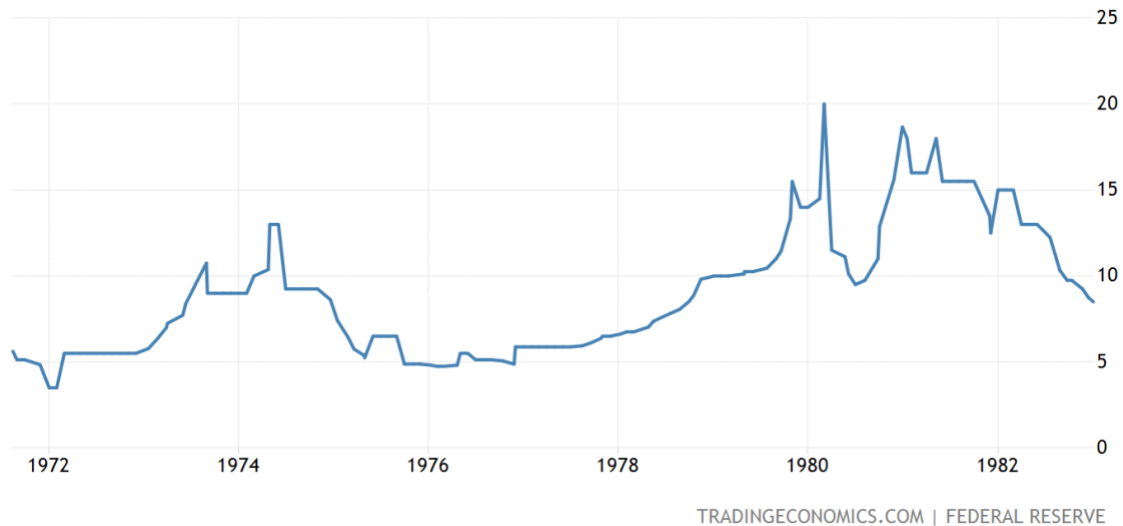


Fig 6: the Federal Rate between 1972 and 1983. Image retrieved by TradingEconomics, data of the FRED (Fed of St. Louis)

It's however unfair to blame only Mr. Burns for the insufficient response of the Fed in the early 70s. The chairman inherited a condition in which the US economy was overstimulated by the Johnson massive deficit spending program to finance the Vietnam War and his "Great Society Program". Moreover, the Central Bank was a victim of the wrong policy decisions of President Nixon who imposed a series of wage and price controls to unsuccessfully address inflation. Burn's experience ultimately reminded all economists that price stability is the bedrock of a solid and healthy economy.

The turning point was represented by the appointment of Paul Volker in 1979. From the first moment, the new chairman made it clear it would have restrained the growth of the money supply to fight unsustainable inflation rates. In his mandate, he pushed the federal rate to a peak of over 20%. Despite the protests, Volker's perseverance paid: even if inflation touched a peak of 11.6% in 1980, it started to rapidly drop, reaching normal levels already in 1983. The price to pay, however, was repressed by double-digit unemployment and a long-lasting recession between July 1981 and October 1982.

Chapter III

3. The actual inflationary setting in the US

3.1 Inflation on the Rise: A Shift in Central Bank Priorities

Inflation in most Western countries has manifested an impressive upward trend since the middle of 2021. At the end of that year, it was normal for market operators to dismiss the rise, justifying it as a normal catch-up of the price level after the long deflationary months of the pandemic period. The price correction, however, became persistent and gained further momentum in the first quarter of 2022, going well beyond any reasonable “catch-up” previously supposed. Central Banks, however, seemed to be a little worried about this unprecedented spike. For a long time indeed, central bankers had to be worried about the opposite thing: inflation stuck at low levels. A short period of one or two years of “inflation above the 2% target” seemed to be welcomed. Undoubtedly, we have been used to living in a world of low-interest rates and, most importantly, low inflation. In this new macroeconomic environment, policymakers are facing a delicate balance between the need to support post-pandemic economic recovery and containing inflationary pressures.



Fig.8: inflation rates 2000-2022. Image retrieved by TradingEconomics, data from the Us Bureau of Labor Statistics

3.1.1 The Recent Abnormal Levels of Inflation in the US

The last two years however have been undoubtedly characterized by abnormal levels of inflation that reached in the US 7% in 2021 and 6.5%⁹ in 2022. Those levels are well outside the Central Bank inflation target of 2%. In fact, most economists nowadays agree that a low but discrete level of inflation has several benefits, such as providing a “safety margin” against deflation and assuring that monetary policy remains effective in responding to excessively low levels of inflation.

The 2% inflation spectrum has characterized the American economy for the last 15 years; however, the recent inflationary spikes have triggered a debate about whether the country was experiencing a condition similar to the one of the 1970s, also known as the “Great Inflation” period. The debate is well-founded: just like in the 70s, the general price level has risen subsequently to an increase in the money supply by the Fed. Jerome Powel, the current chairman at the Federal Reserve, has repeated numerous times that the inflation that the country

⁹ <https://www.statista.com/statistics/273418/unadjusted-monthly-inflation-rate-in-the-us/>

is experiencing is “transitory” and not comparable to the precedent period. The topic however cannot be dismissed that easily: inflation is a phenomenon that has numerous and extensively structured causes at its base. The goal of this chapter will be to provide an extensive explanation of this phenomenon.

3.2 The causes behind inflation

The actual monetary policy institutional arrangement allowed low and stable inflation for more than two decades. However, as the data show, the American Central Bank failed to prevent a burst of inflation between 2020-2021. The causes of this failure are yet to be researched and understood deeply. An interesting hypothesis about the deep motives around this recent event has been formulated by Ricardo Reis of the London School of Economics. In particular, he identified four main potential causes that fueled the recent inflation:

1. The misdiagnosis of the nature of the shocks;
2. The neglect of expectation data based on the strong belief that inflation expectations were well anchored;
3. An overreliance on the credibility earned in the past;
4. A revision of the strategy of Central Banks that made it tolerant of higher inflation.

3.2.1 Shocks and Misdiagnosis

By accurate analysis of data, it is possible to notice persistent price stability in the vast majority of developed countries between 1995-2020. This phenomenon is very particular and has no precedents in recent economic history. It is remarkable to notice that none of the monetary experiments conducted throughout recent economic history worked as well as the last one in delivering low and stable inflation (Miles et al, 2017). If we take into attention for example the inflation in the US in the last 200 years this is remarkably evident.

Yearly Inflation or Deflation Rate (CPI-U) 1915 to 2012, in Percent

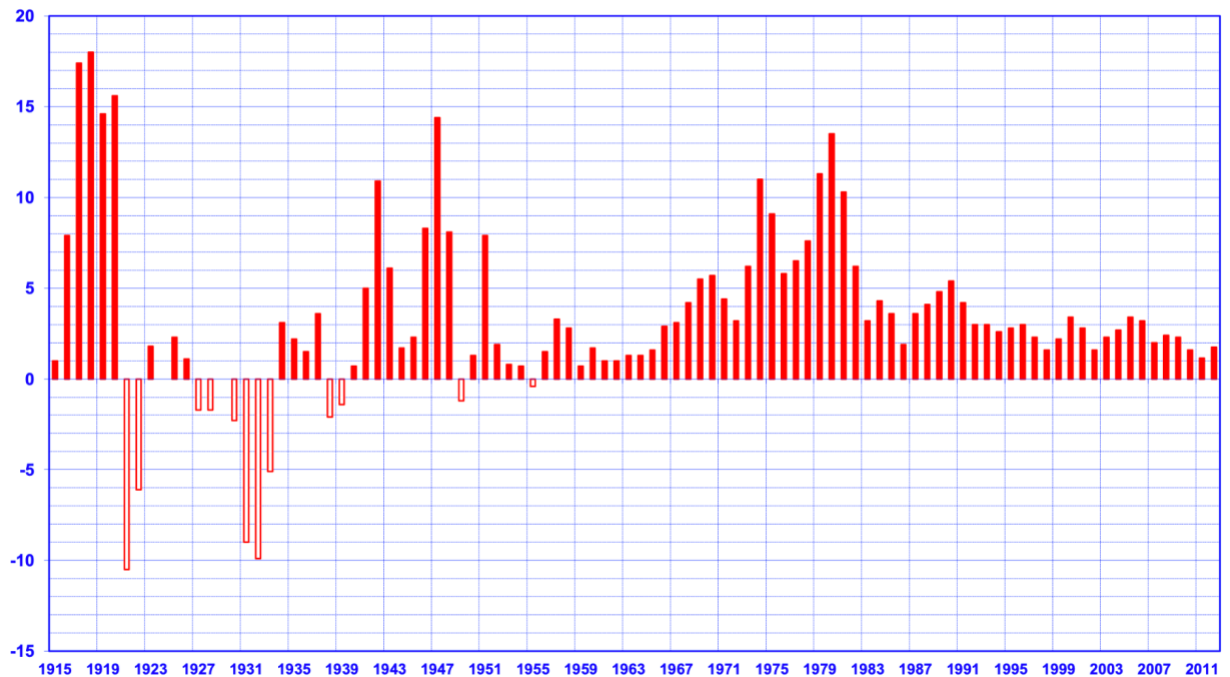


Fig.9: US inflation in the last 200 years, source: US Bureau of Labor Statistics

This successful monetary regime stemmed from three basic pillars:

1. The independence granted in recent decades from any kind of political influence;
2. A narrow mandate joined with clear actions and a routinely measured performance;
3. The use of interest rates as an official and main tool of monetary policy, set in a transparent and predictable way.

With the pandemic period (2020-2021) however, the job of the Central Banks became much harder: large and unusual shocks hit the economy. A great aura of uncertainty stemmed from the nature and persistence of the agents affecting the inflation rate. The first pandemic wave was characterized by a remarkable degree of monetary stimulus, largely justified by a legitimate fear of a prolonged depression of the economy. Perhaps, adversely influenced by the long-lasting consequences of the Great Financial Crisis, central bankers expected a long-lasting effect of the Covid Crisis. Instead, the economy rebounded quickly with the real GDP raising

in the US by 14.9% between 2020 Q2 and the end of 2021. At the same time, the recovery also pushed upward inflation.

More in general, as suggested by Reis, inflation can be driven by three different elements:

1. The rising inflation expectations by households and firms;
2. The deviation of real activity from the potential level of output;
3. A markup shock that introduces a gap between potential and efficient levels of output

The fast recovery of the economy, experienced in the post-pandemic period, is an example of the second force. In this case, the upward force of inflation can be “reduced” in its magnitude by a tighter monetary policy. However, Fed’s monetary policy was kept loose for the majority of 2021, further raising the level of aggregate demand above the potential level of output. In addition to this, the presence of crucial bottlenecks in the global supply chain in important industries, such as the one microchip, and the spike of energy prices subsequently to Ukraine have characterized the main elements of the “perfect storm” that we experienced in the last two years.

Three times in a row, in an incredibly short period, different shocks pushed inflation up and three times the Fed concluded that monetary policy should have been kept loose.

3.2.2 Expectations

Inflation expectations are a key factor in the control of inflation. Over the last decade, those expectations were very incredibly sticky, also returning a result around the 2% level. The anchoring of household expectations was achieved thanks to the success of the past 20 years of the majority of Western countries' central banks. For this reason, central banks have deliberately ignored the expectations in their econometrics model used to forecast inflation (Coibion et al., 2018). This choice seemed to be correct also in the “deflationary” pandemic months in which expectations stayed remarkably stable. Indeed, before the start of the

inflationary spike, the great fear of central bankers was that expectations were anchored at too low levels: in the Jackson Hole speech of 2020, Powell talked about the problem of an “adverse cycle of ever-lower inflation and inflation expectations”.¹⁰

Relying on anchored inflation expectations and concentrating on the potential downside risk of the monetary policy has inevitable consequences: temporary rises in expectations are welcomed as the great fear is the “deflation trap” and if inflation is evaluated to be transitory. In particular, the more expectations are anchored, the less a sharp rise of inflation is expected to move them.

Something however already changed in the mid of 2021 when analysts started to warn that expectations didn’t seem to be well anchored anymore. It’s still unclear what produced this movement: potentially the loose monetary policy or the various shocks that hit the economy. Moreover, the change in relative price of some important goods for consumers (like gas or cars), made the inflation effects even more visible to consumers with a consequent overreaction.



Fig. 10: USA consumer inflation expectations (1 year ahead).Image retrieved by TradingEconomics, data of the Federal Reserve of New York

¹⁰ <https://www.federalreserve.gov/newsevents/speech/powell20200827a.htm>

3.2.3 Credibility

Even if it's true that inflation expectations in the short term have moved, the real problem would be represented if the public would be alarmed by the persistence of the shock, inevitably moving long-term inflation expectations.

The credibility of the inflation targeting of a central bank is usually defined by the expected long-run inflation that, in an optimal condition, should be equal to the central bank's inflation target. It's clear that central bankers must convince the economic agents that inflation in the long run will be at target. This is crucial to maintain the credibility of a vital institution as the central bank in a complex economic system.

The credibility earned in the last 20 years allows central banks a certain degree of "capital inattention" (Reis, 2022), as people do not pay much attention to what the central bank is doing, trusting that it will deliver low and stable inflation in the medium term. If these it's positive from a monetary policy standpoint, there is an important consequence on the negative relationship between inflation and real activity: as the public is inattentive it will tend to update prices and wages less often. This increases the nominal rigidity of the economy making the monetary policy even more powerful.

In 2021 when the American economy was hit by a series of shocks, the Fed heavily relied on its credibility, allowing inflation to rise above target to offset the shock on the real activity. Their idea was that as long they had credibility, inflation would have risen just moderately.

It's hard to understand what economic agents expect inflation to be on long horizons. Economists however have developed a valid measure: the 5 years forward expected inflation rate. This indicator keeps track of the performance of products such as inflation swaps or nominal inflation-indexed bonds over a 5 and 10-year horizon. In this way, it is possible to calculate the expected inflation over the long term. Looking at this indicator for the US in 2020,

2021, and 2022 we can notice that it increased from 1.34% to over 2.60% in 2022, an evident signal that expectations are moving upward even on longer horizons.



Fig. 11: 5 years forward expected inflation rate (US), Source: Macrotrends.com

It seems clear that the over-reliance on the credibility of the monetary policy outcomes made possible a “capital inattention” that has allowed the central bank in the past to focus on real activity or other parts of its mandate during a period of uncertainty. The overreliance on its credibility could have produced an upward spiral of inflation.

The hypothesis proposed by Reis could not be supported by the evidence found by the author of this research paper. Indeed, the expectations for inflation over the next five years have decreased and are now much closer to the targeted inflation rate of 2%. This finding underscores the transitory nature of the current inflation.

3.2.4 Tolerance of Inflation and R-star

The fourth main potential cause of inflation can be represented by a strong influence of a falling r-star and a consequent revision of the monetary policy.

The r-star refers to a level of real interest rate in which savings are equal to investments and output is at a potential. A level below r-star + 2% captures an expansionary monetary policy and a level above captures a contractionary one. Before the pandemic both the Fed and BCE seemed to be determined to fight low inflation, increasing the tolerance of inflation above target and to be in favor of stimulus through aggregate demand. When inflation started its ascension in 2021 this pre-pandemic “attitude” contributed to the intention of not fighting inflation even if it could have been appropriate to do so.

3.3 The intervention of the FED

The American economy has quickly recovered from the disruptive effects of the pandemic, but the “bounce back” has stressed supply chains, causing a strong increase in prices. The recent inflationary spike, however, presents some unique features: it was extremely quick and sharp, jumping from 1.4% in January 2020 to 9.1% in January 2021¹¹. The FED, in its quest to reduce inflation, quickly responded in March 2022 by raising federal rates from 0.25% to over 4.5% in December 2022. By raising the official rates, the Central Bank increases the cost of borrowing, reducing inflation and slowing the economy. Besides this effective instrument, the Fed started a quantitative tightening program in June 2022 to reduce the size of its balance sheet which has reached a value of over \$9 trillion. With this measure, bonds that reach maturity are not replaced with new ones, reducing the overall amount of reserves in the banking system.

11

<https://www.statista.com/topics/774/inflation/#:~:text=Inflation%20in%20the%20United%20States,of%209.1%20percent%20in%202022.>

Fed officials declare that the target is to return to a value of the Central bank balance sheet of around 20% of GDP, rather than the enormous 35% of the pandemic period. The overall reduction can be estimated at around \$3-4 trillion and will require several years. With the recent statement of January 2023, the Fed officials have confirmed that they will continue the balance sheet reduction at a pace of \$60 billion in treasury securities and \$35 billion in agency mortgage-backed securities.

It is worth noticing that Fed’s decisions to raise interest rates and implement a quantitative tightening program have not been carried forward without criticism. Some scholars do underline how these measures always carry with them negative effects, contributing to the slowing down of the economy and worsening the access conditions to credit. Fed officials, however, empathize with the clear necessity to maintain price stability as the potential failure of this objective may have long-term negative effects on the economy. As always, Central Banks’ actions in the aftermath of a major crisis need to balance competing priorities and risks.

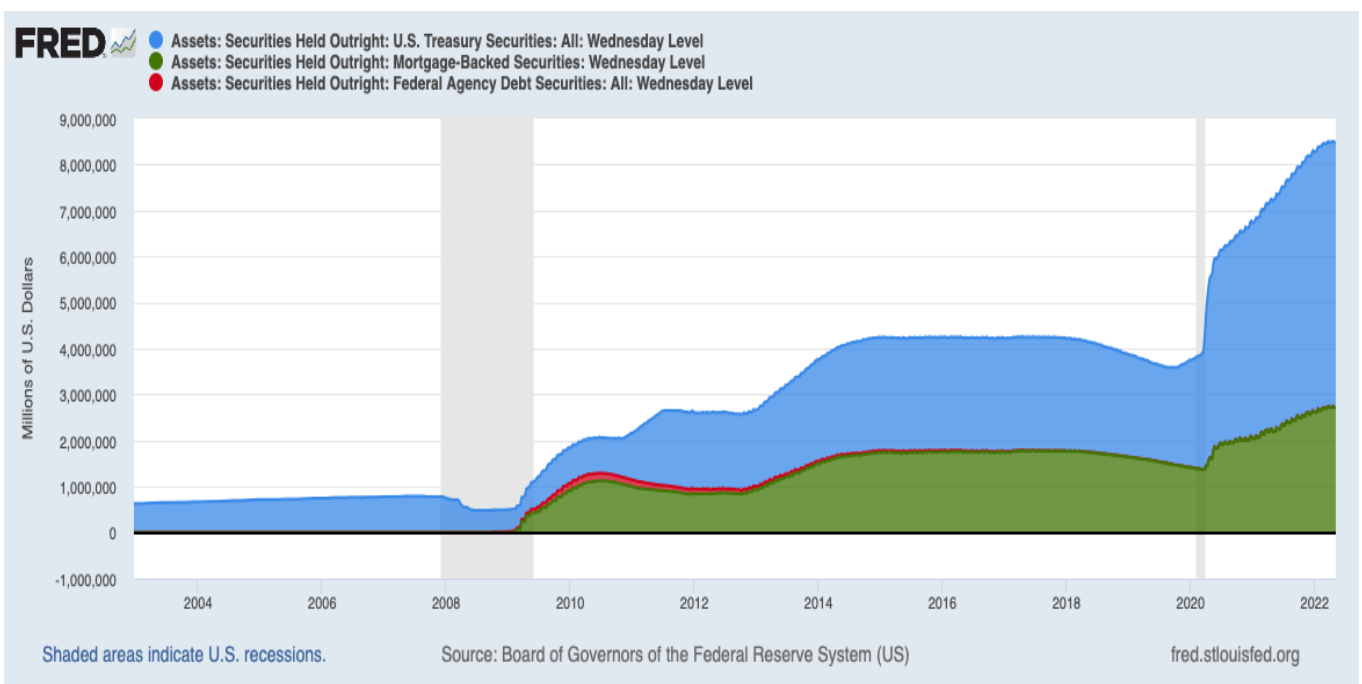


Fig. 11: the size of the Fed balance sheet divided by asset class. Image retrieved by FRED (St. Louis Fed), data of the Board of Governors of the Federal Reserve System (US)

3.4 The key challenges ahead

Inflation did not represent a problem in most of the Western countries for decades. On the other side of the ocean, on the European continent, inflation was close to zero for almost a decade with a high risk of even experiencing deflation. Inflation was therefore “forgotten” for a long time, with scholars hypothesizing about the potential causes of its disappearance in some regions of the world.

The “Great moderation” of the last 20 years has left the space for roaring inflation that has put at risk the post-pandemic economic growth. The temporal length of this phenomenon is still uncertain, and it will depend on the actions of the monetary and fiscal institutions. Even if it’s clear that energetic shocks have a mechanical impact on inflation, the subsequent evolution of inflation will crucially depend on the expectations of the economic agents.

As recently stated by Powell, wage growth may represent a serious threat to the Fed’s goal to bring back inflation to 2%. The strong demand for labor fueled wage growth that reached 5.2% in 2022, well ahead of the US average of 2-3%. This might make the Fed's job much harder. Indeed, as the average cost of living rises, the purchasing power of unadjusted wages is reduced. The obvious response of workers will be to ask for a higher salary that will eventually boost demand, neutralizing the efforts of the Central Bank to reduce the overall consumer spending and therefore reduce the pace of inflation.

Above all, as reminded by former chairman Bernake, managing expectations is the key to controlling the inflation rate. Once the public anticipates a future price increase, it will increase consumption today, worsening even further the inflationary condition. Higher inflation expectations will also lead firms to raise prices, increase the reliance on credit and reduce employment. The key to managing expectations is to be persistent and not follow a “go-stop” monetary policy, one of the key mistakes made by the Fed in the late 70s. At the moment, the

Fed is still trying to convince the public that the inflation experienced in the last 18 months was transitory and non-persistent. In particular, long-term inflation expectations are an element of focal attention for markets.

It's evident that multiple scenarios are possible for the near future just as happened for the 1973-79 oil supply shock, where different countries, experiencing the same shock, have reacted differently.

The role of central banks in this period of uncertainty is to coordinate the expectations of the public, striving to achieve a low level of inflation. If inflation expectations would start to deviate substantially, it would become even more expensive and difficult to bring them back to the original level. It's therefore fundamental that monetary policy works around the key objective to keep expectations well anchored: it's a matter of credibility of these central institutions that was gained over a long period.

At the moment Powell's words assuring the well-anchoring of the expectations are founded: the 10 years breakeven inflation rate, a widely used metric for inflation expectations among market operators, is hovering around 2.3%.



Fig.12: 10 years breakeven inflation rate, source FRED (St. Louis Fed)

3.5 The outcome of the Fed’s actions

The fast-phase increase in interest seems to be giving its results: the housing market has slowed, the mortgage rates rose, and some specific industries (especially in the tech sector) are starting to experience the consequences of a non-zero interest rate environment. Other parts of the market, such as consumer spending and the labor market seem to be much more resilient to the changes imposed by the Central Bank. In particular, the overall labor market seems strong, unemployment is touching the 50-year low, and salaries are steadily growing. Indeed, as reported by the Labor Department last December, 223.000 jobs were added to the US economy, even exceeding the analyst expectation set around 200.000 units.¹²

In addition to this positive news, inflation growth starts to slow down, and supply chains are healing, transferring the lower cost of production to consumers. As many economists highlight, the point was never if the inflation was going to decrease, but how quickly it would have occurred. Even if Fed officials are still a long way from restoring the 2% target, they seem to have taken the right moves to invert the cycle. It can therefore be concluded that policymakers

¹² <https://edition.cnn.com/2023/01/06/economy/december-jobs-report-final/index.html>

were able to deliver to the US economy a “soft landing”, cooling off inflation without initiating a recession.

3.5.1 A mixed economic outlook

2023 will be a crucial year for the American economy: Fed is projecting to continue to raise its rates and will not invert this trend all year long. Moreover, the unemployment rate is expected to rise to 5% while GDP growth will slow down to just 0.5%. While inflation will continue its descending pattern it will be well ahead of the target as it is expected touching 3.5% on annual bases. The stock market, after a terrible 2022, has started the year strongly, even if it is projected that many of the S&P 500 companies will continue to experience a decrease in earnings.

Chapter IV

4. Comparison between the two historical periods

4.1 Comparing America's Inflation

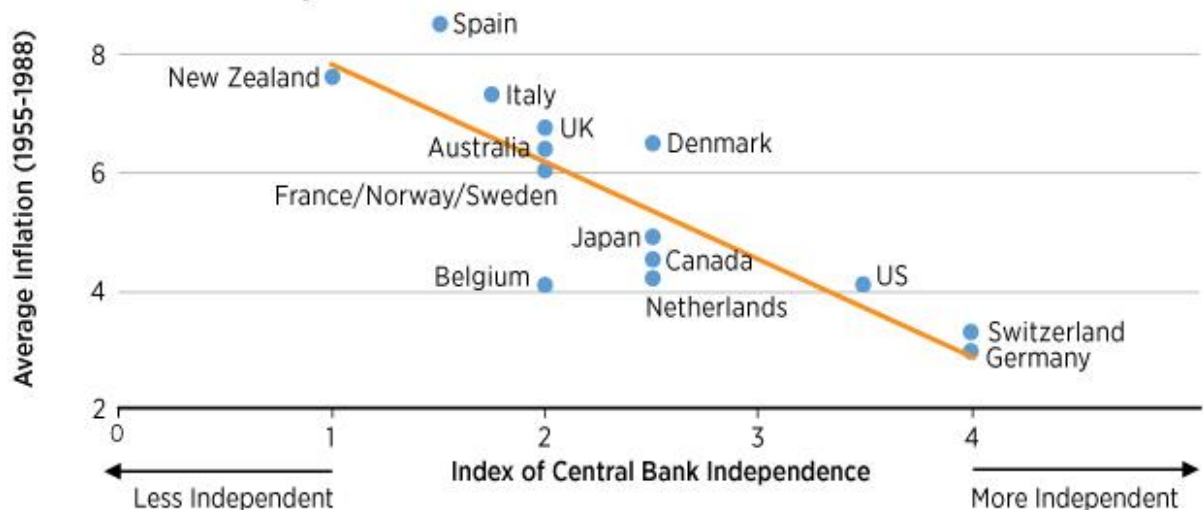
America's inflation has risen at dangerous levels in the last 24 months, being even close to breaking the double-digit level. This recent spike has evoked memories of the Great Inflation of the 1970s. An unhappy period for the American economy that has seen its consumer price index rise, on average, by more than 7 percent per year with a peak of over 13 percent reached in 1980. This "black" decade has also seen four recessions with the Dow Jones Industrial Average losing two-thirds of its value.

Before coming to easy conclusions, however, it is necessary to analyze objectively the elements of similarities and differences between these two levels.

4.2 Central bank independence from political pressures

There are two main pillars of any modern macroeconomic policy: monetary policy and fiscal policy. Historically, the first one must contend with a political bias toward inflation. Due to distortions such as market imperfections or taxes, politicians have an incentive to deviate from their commitment, raising inflation and lowering unemployment. This biased tendency is referred to as "time-inconsistency" and it does represent the main reason why central banks must be independent of any kind of interference that can distort the conduct of monetary policy. As detected by Bade and Parkin (1988), there is an evident negative relationship between the inflation rate and central bank independence.

Central Bank Independence and Inflation



SOURCE: Alesina and Summers (1993).

NOTE: The orange line is the regression line, which suggests that countries with more independent central banks are associated with low average inflation.

■ FEDERAL RESERVE BANK OF ST. LOUIS

Fig. 14: The correlation between central banks' independence (CBI) and the average inflation rate. Source: Alesina and Summers (1993)

The Fed needs to take policy decisions based solely on economic data in the long-term interest of the economy, rather than the short-term needs of politicians. It is quite surprising to come to know that the American central bank is a quasi-governmental agency with its board selected by the President and ratified by Congress. Its structure and appointment remained quite controversial and remain an element of discussion among policymakers.

Still, monetary policy decisions are meant to be separated from the one of the governments as the Fed's policies do not have to be ratified by the President. In addition to this, the American central bank does not receive funds from the congress and its board members serve a 14-year term that does not coincide with presidential terms. However, the central bank is still subject to the oversight of Congress to ensure the achievement of the economic objectives.

During the 70s however, there was clear interconnection between the Chairman and the President. During his mandate President Nixon repeatedly put pressure on Arthur Burns, Fed chairman from 1970 to 1978, to ease monetary policy in the hope it would have helped to win

the elections. Nixon was clear to Martin's successor that he would have not tolerated an economic slowdown before his reelection. Even after Nixon's resignation in 1974, Congress continued to pressure the Fed's chairman against any kind of anti-inflationary policy. Burns accepted this kind of influence from politicians also because it was of the idea that the significant inflation, averaging around 7% annually, could not be controlled directly by the central bank as it did not have any influence on the actions of trade unions and big corporations. Burns rather proposed to set wage and price controls that obviously failed its objective.

In contrast, current Powell's actions aimed to fight against inflation are well supported by the political establishment that recognizes inflation above the target as a clear threat to post-pandemic economic growth. This time the Fed has taken several measures to curb inflation, such as raising interest rates and stopping securities purchases. The American Central Bank does now understand its delicate role that requires a precise balance between controlling inflation and supporting economic growth.

4.3 The Role of Expectations

Inflation is closely tied to people's expectations of what inflation will be in the future. If the expectations change persistently, the inflation "anchor" is adrift and, if the change significantly from the central's bank target, the anchor is lost. As suggested by Reis (2021) data suggest that inflation expectations, starting from 1967, were starting to drift away from the target. This could have been noticed much before policymakers spotted it, limiting the consequent damages.

More in general the decade 1965-75 was full of shocks and changes in regime that contributed to rising inflation. Scholars widely discussed the underlying causes of inflation, but they never reached a unique consensus on it. What is clear to all the scholars is that the shift in inflation expectations played a crucial role in this context. Unfortunately, data on inflation expectations

were widely missing. Indeed, there was not a unique consensus on their measurement: sometimes they were only indirectly inferred by changes in macroeconomic variables using particular economic theories, while at other times expectations data were replaced by the psychology of the market.

From the early 1980s, the situation started to change: economists started to widely use rational expectations. In this way, inflation expectations were tied to observed fundamentals, dramatically reducing the obstacles of measurement and observation. Despite this, the great problem still lies in assessing whether these expectations are well anchored in the present. Macroeconomic variables can be only used with a long-time lag, only inferring what expectations were in the past. Moreover, forward-looking expectations are not strictly rational, leaving a wide range of possibilities where they could drift. Still, nowadays we have many different ways to measure inflation expectations. Indeed, we can extract this information from consumer surveys or, more frequently, from the financial markets, analyzing the market for inflation-indexed bonds.

Moreover, as discussed by Minskin (2007), inflation expectations have become much better anchored over the past 30 years with direct consequences of reduced sensitivity of inflation to activity indicators. This means that the long-run effects on inflation due to a supply shock (such as a significant change in the price of oil), seem to be lower than in the past. In simple words, economists have revealed a flattening of the Phillips curve. This crucially implies that shocks are much less likely to generate economic instability than they would have been during the decade 1965-75.

This positive outcome is partially attributable to correct monetary policies that have brought at low and stable levels inflation. In this way, as the expectations have become more anchored on the long horizon, inflation has become less sensitive to the level of activity.

4.4 The energy crisis

Since the 60s, oil has represented the most important energy source for the industrialized world. Nowadays oil supplies a substantial amount of the world's total energy needs, around 30% of the total¹³. The great question around which many scholars have conducted their research is the possible incidence of a spike in the oil price on the real economy. Most of the literature that has focused on the US example agrees that the exogenously induced oil shocks of 1973 and 1979 had a crucial effect on the macroeconomic variables and therefore inflation. This empirical evidence however seems to not be valid for the decades following the one in question: the impact of an oil price shock on macroeconomic variables decreases and almost vanishes since the second half of the 1980s.

There are many reasons for this crucial evidence, and they are all direct consequences of the “Great Moderation” period that has substantially reduced macroeconomic volatility for over 30 years. The explanations for this dramatic change can be found in crucial factors such as:

- the stabilization of the output gap;
- A decrease in real wages rigidities;
- A clear commitment of developed countries' central banks to stable inflation increased the degree of credibility of the public of monetary institutions.

A higher level of credibility of central banks has created over the decades better-anchored inflation expectations. A primary consequence of anchored expectations is represented by the fact that a supply shock, such as an increase in energy prices, will affect the level of prices only in the short term, having little effect on core inflation. Because of this, a lower sensitivity of long-run inflation to supply shocks reduces the probability of supply shocks generating great economic instability just as has happened in the 1970s.

¹³ <https://www.iea.org/reports/world-energy-balances-overview/world>

This hypothesis seems to be confirmed also for the 2021-2022 period when the pandemic recovery was associated with a rapid increase in demand for oil, much beyond what suppliers could provide after a year of constant downsizing of the industry because of the widespread lockdowns. This particular scenario has led many policymakers to conclude that the major cause of the “unexpected” inflation was represented by a rise in oil prices. Data however do not show any significant correlation between the two events: the rise of energy prices did not drive consumer inflation during these two years. In particular, as highlighted by Kilian and Zhou (2022) the direct effect of energy price shocks on inflation tends to be small as its share in the consumer basket is relatively limited, representing 4% in the US. This percentage represents a much smaller share concerning the one occupied by other elements such as food or shelter.

One of the major counterarguments to this statement is represented by the potential indirect effect that a supply shock may have on all the other goods. For example, if the cost of gasoline experiences a sharp increase, these events will produce a clear increase in food prices as the transportation cost has increased. However, the academic literature has largely shown that this statement is invalid. For example, Kilian and Zhou (2022), have shown by the use of an autoregressive model, how an unexpected increase in gasoline has a significant effect on consumer inflation for less than 2 months before becoming neglectable.

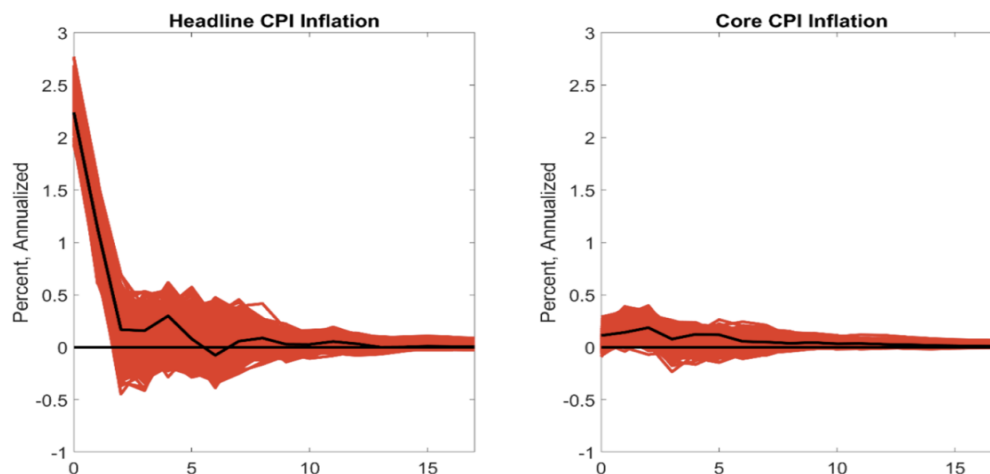


Fig. 14: the effect of an unexpected rise in gasoline prices on CPI inflation, source:
Kilian and Zhou (2022)

We can therefore conclude that an increase in energy prices just created a “blip” in the inflation level, not affecting the expected inflation levels for longer horizons.

4.5 The Globalization of the supply chain and its consequences

International trade has transformed in the last two decades the nature of supply chains that became more and more global. If it is true that international trade increases the overall welfare of the participant countries, it has also given a global dimension to domestic inflation. Nowadays, the global supply chain has a significant role in inflation dynamics, straightening the channels through which wage and price pressure can spread beyond domestic borders.

A typical example of this statement is represented by the focus event of this paper: labor shortages and supply chain disruptions have been associated with high levels of inflation in 2021 and 2022. However, if goods inflation had a crucial role in influencing core inflation in the past decades (such as the 1970s), its role has been reducing since the early 1990s, becoming

predominantly transitory. This means that the high inflation on goods is expected to be relevant only in the short term and not to be significant in the longer horizons. In particular, a model developed by Eo et al (2022) shows that after the 1990s, even if good inflation continued to have great volatility, this trend became pretty much suggested a transition of good inflation to a transitory nature.



Fig. 15: the goods inflation and its “transitory” nature, source: Uzeda, Wong, Eo (2022)

Through the examination of the variance of the aggregate trend of inflation, it’s very interesting to notice a reduced role of the goods inflation at the aggregate level in the last 30 years, suggesting its limited role on the longer horizons.

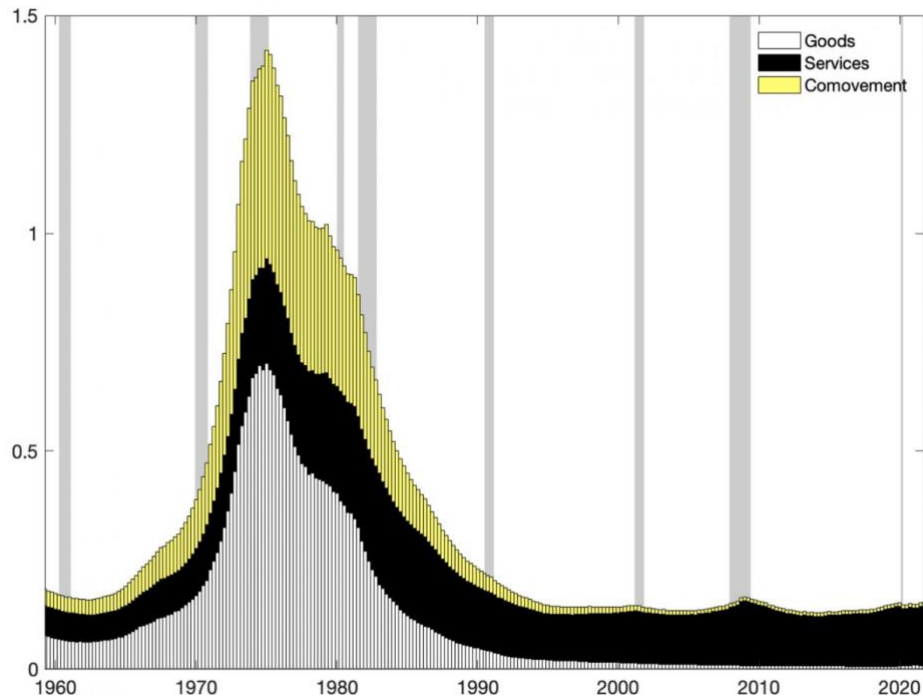


Fig. 16: the aggregate trend inflation. The gray areas represent the NBER recession dates, source: Uzeda, Wong, Eo (2022)

Therefore, we can conclude that since much of the current high inflation has origins in the goods sector, the recent inflationary spikes should be regarded as transitory. Even if the current level of inflation evokes an “easy” comparison with the 1970s, the empirical data show us that the two periods are characterized by a completely different macroeconomic setting.

Fifty years ago, trend inflation was setting itself on much higher levels with respect to the actual ones, suggesting once again that inflation expectations will remain well anchored on the long horizon.

4.6 Is history repeating itself?

The post-pandemic price surge, followed in few months by Russia's invasion of Ukraine has provided a new macroeconomic environment where inflation took back a predominant role just

as it happened during the Great Inflation period. In that period, the Fed, just like most of the advanced economies central banks, had to undertake a forceful policy to bring inflation back to the target. The effects were dramatic for the American economy which experienced a severe recession and double digits level of unemployment in the first years of the 80s.

Just as a few decades ago, a major supply shock, represented by the Russian-Ukrainian conflict, has driven upward energy prices. Moreover, similarly to the 70s monetary policy was highly accommodative to run up these shocks, with the consequent “steeper-than-anticipated” monetary policy tightening to bring down inflation that could cause a recession period for the economy.

4.6.1 Magnitude of the shock

There are however major differences with the situation experienced decades ago. The most evident one is represented by the magnitude of the commodity price jump: the precedent period saw a significant and dramatic increase in prices. Indeed, between 1973-1974 oil prices quadrupled, and between 1979-80 doubled. Today, even if we experienced a significant increase, oil prices in real terms are still $\frac{2}{3}$ of the ones experienced in 1980 and 2008.

4.6.2 Paradigm of the monetary policy

Many scholars identify a clear paradigm shift of monetary policy frameworks that were precedingly focusing on multiple objectives such as output and employment besides the core one of price stability. Back then, central banks of the advanced economies, freed of the Bretton Woods framework, saw a clear opportunity to support economic activity with an expansionist monetary policy. Inflationary pressures were often attributed to external factors, underestimating the effect of a prolonged excess of aggregate demand in the economic system. As it was analyzed in this paper, this passive monetary policy has given rise to a dramatic multi-decade inflation rise that has brought with it all its dramatic effects.

In contrast with the 70s, central banks have one clear mandate: price stability, expressed with a clear inflation target. Over the last 30 years, advanced economies' central banks have established a credible track record of achieving their inflation target that resulted in better-anchored inflation expectations.

4.6.3 Lessons from the Great Inflation

Even if today's condition is very different from the one of 50 years ago, the Great Inflation period can still provide lessons for the current period. The most important one is represented by the material risk of high and prolonged inflation that could “disanchor” inflation expectations, marking a turning point after three decades of low and stable inflation. This event could subsequently force central banks to respond even more forcefully than what they are doing today.

It doesn't seem to be the case in recent days, however: central banks, setting price level control as their highest priority, responded earlier to rising inflation. Inflation in the short term seems to remain elevated, but it is expected to experience a substantial decrease in the medium term that will allow it to come back to the target.

Anyways, this event has always reminded all the economic actors how inflation has played and plays a crucial role in the economy.

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