

Anti-inflationary policy when the Fed doesn't matter: A comparative history of the 1940s and 1970s.

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Abstract: In this paper I offer a comparative history of price controls and monetary policy in the 1940s and the 1970s. I argue that while both price control regimes were far from perfect, they operated more or less as intended while they were in force. However, the decontrol period is where issues with price controls arise. During the decontrol period the main monetary variable that behaves theoretically consistent across both periods is the money supply. During both periods, the Fed had little to no control over the money supply. By policy in the 1940s and de facto in the 1970s. Postwar decontrol inflation in the 1940 is sharp but short, accompanied by muted growth of M2. In the 1970s bank balance sheet growth remains robust during and after price controls. Inflation burns off at the end of the 1940s because regulatory financial repression is coherent and forceful. This repressed financial system, however, provides adequate---non-inflationary---financing for the sustained postwar boom. Inflation conflagrates into the chronic expectational inflation of the 1970s because rapid domestic and international financial innovation was met by a reactive and passive regulatory regime.

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Introduction

This paper offers a comparative study of policy during the inflationary 1940s and 1970s. This is a useful exercise for two reasons. First, experience with price controls is a distant memory in the US. As such, histories of price controls are useful. This paper differs from other recent histories (Weber, 2021; Elrod, 2021) in that the focus here is on the mechanisms of price controls during these two decades. Second, price controls are part of an overall package of policies during inflationary events. The success of price controls requires that other policy variables, most clearly the money supply, behave in a way that does not undermine price controls. This is particularly true during the decontrol process.

During both inflationary periods discussed here the Fed has little to no control over the money supply. In the 1940s this is a result of deliberate policy decisions. Control of the money supply was sacrificed to maintain the wartime 2.5% Treasury Peg through the postwar structural adjustment inflation, not ending until 1951. In the 1970s the lack of control over the money supply was less intentional, largely due to changes in the financial system the Fed was not prepared to deal with and did not manage within a coherent policy framework. During the 1940s, when New Deal financial repression is at its height the demand-pull inflation of the reconversion structural adjustment does not become chronic expectational inflation. In contrast, during the 1970s, regulators and policy makers are reactive and passive in the face of financial market and regulatory innovation in the financial system. Unchecked market forces provide the fuel that turns the spark of the Vietnam War demand pull inflation into the fire of the expectational inflation malaise of the 1970s.

During WWII price controls, along with a raft of other anti-inflation policy, were instituted as the demands of military production ramped up. These alternative policies were necessary given that the Treasury peg hamstrung the Fed's ability to control interest rates or the money supply. Eventually in 1943 full controls were implemented, though crucially, agricultural prices were exempt from controls. During the "high tide of price controls" inflation was held low despite the enormous economic

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distortions of the conflict. However, during the reconversion period from 1946-1948 decontrolling prices was chaotic and premature. The need to readjust relative food prices was a major source of inflationary pressure that manifested itself, particularly in the summer of 1946. Inflation in food was just the most dramatic example of the massive change in absolute and relative prices that the economy had to experience in the transition back to a full employment civilian economy after 15 years of depression and war. Labor disputes and shortages also added inflationary pressure during the massive structural adjustment to the postwar economy. Year over year inflation peaked at over 20% in the winter of 1947.

However, after the winter of 1947 inflation slows over the next year and a half, with year over year inflation bottoming out at -3.0% during the brief deflationary 1948-49 recession. This disinflation is remarkable given that monetary policy remained passive throughout the entire decontrol period. Some minor adjustments to Treasury Bill rates were carried out but the 2.5% peg on long term treasury bonds remained until the Treasury Fed Accord of 1951. Despite the Fed ceding control of the money supply, its growth remained muted in the postwar period. This slower growth of the money supply offers the clearest explanation for why the inflation of the reconversion process did not ignite into the kind of expectational¹ inflation that plagued the 1970s.

Price controls in the 1970s, instituted to deal with the already virulent expectational inflation that had evolved out of the demand-pull inflation of the early Vietnam War years were carried out with less enthusiasm and coherence than the price controls of the 1940s. Nixon instituted price controls for political reasons more than economic reasons. However, when in full force price controls during the

¹ I am using the idea of "expectational inflation" here in the way Jeremy Rudd (2022) finds acceptable. That is, I am using vaguely defined expectational inflation as "... simply serving as a plausible postulate that, once invoked, allows a theorist to analyze other interesting questions" (p11). Its usefulness here is to mark out a line between inflation that is demand pull and thus tied to real economic phenomenon and inflation that operates as a seemingly self-fulfilling phenomenon less easily understood as tied to the real economy.

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1970s were as effective as they were during WWII. This is despite, as with WWII controls, the failure to control the price of agricultural commodities.

These two inflationary experiments offer us two contrasting behaviors of monetary variables. In the 1940s interest rate policy was analogous to the zero lower bound in that interest rates were held at an arbitrarily low interest rate and as a matter of policy the Fed was rendered unable to be used to pursue macroeconomic policy goals. Despite this, the reconversion inflation burnt itself off once the postwar structural adjustment had been completed. During the 1970s interest policy was more active and contractionary, likely inducing the 1974-1975 recession. However, this interest rate policy was not adequate to anchor inflationary expectations. This is despite the more muted underlying disruptions to the real economy in the 1970s than in the 1940s. The behavior of the money supply during these two periods is more theoretically consistent. The failure of the reconversion inflation to become expectational is matched by the muted monetary growth of the late 1940s. In contrast, the monetary growth of the 1970s is consistent with the rampant and chronic high inflation that plagued that decade.

I take the view that a simple monetarist read of these two inflationary events is in order. That is, a comparison of the 1940s and 1970s lends evidence to the idea that inflation is strictly a function of the money supply. However, during these two periods the behavior of the money supply—here the reader is reminded that this is virtually synonymous with bank balance sheets—is not driven by Federal Reserve policy. During the 1940s, the impotence of the Fed is a matter of declared policy, during the 1970s the lack of control over the money supply is less intentional but no less real. Economists generally portray the Federal Reserve as lacking control of the money supply in the 1970s due to a mix of not understanding the causal relationship between money and inflation and an unwillingness to constrain monetary growth for political reasons (Bordo et al, 2015) a mix of a misdiagnosis of the inflationary problem and an inability to keep up with domestic and international changes in the financial system that

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were inflationary. Since the Fed “did not matter” during these two decades this begs the question of what explains the difference in the behavior of the money supply during the 40s and 70s.

There are three broad mechanisms that explain the difference in the behavior of the money supply between the two decades. First, the federal budget is very different between the decontrol periods. Authors, make much of the budgetary pressure on inflation through the combination of war spending and expanded social programs during the 1970s, while the Federal budget maintained a small surplus during the reconversion period. However, the historical evidence that the federal budget drives inflation is mixed. For instance, the budget deficits of the 1970s only became more structural and larger during the disinflationary 1980s. A more direct tie to the behavior of the money supply can be drawn from changes in international and domestic finance. The exchange rate crisis of the 1970s likely added direct inflationary pressure through the feedback loop of exchange rate devaluations and money supply increases. That this process was almost entirely left up to a market process that had developed during Bretton Woods as a series of speculative attacks against pegged currencies. International policy makers remained reactive to changes in international currency arrangements as the Bretton Woods international order crumbled. The Eurodollar phenomenon is where the international and domestic financial causes of runaway growth of bank balance sheets during the 1970s intersect most clearly. As Hyman Minsky (1984) argues, the Eurodollar, money market funds, the removal of interest caps on large denomination CDs and other financial innovations shifted bank management away from a system managed through assets, namely Treasury Bonds, to a weaker and more short-term system based on managing liquidity through liabilities. The shift towards attracting liabilities such as Eurodollars and CDs to avoid reserve requirements and interest rate regulations sped up the growth of the money supply and put banks and the banking system in a more precarious position, necessitating several major bailouts of banks during the decade.

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This passive and reactive response to financial innovation during the 1970s ultimately ended with the Volker Shock of the early 1980s. The decade of stagflation malaise and the ineffective ad hoc response to the inflationary crisis of the 1970s should be contrasted with a much smoother reconversion process when the New Deal Order was at the peak of its power. Disciplined by the memory of the Great Depression and strong regulatory financial repression, the financial system of the 1940s avoided a major financial crisis and recession for 20 years. What is more, this disciplined financial system produced adequate financing for the longest and most widely shared period of economic growth in American history.

WWII price controls²

Price controls ramped up slowly in the first half of the 1940s, with full controls being instituted in 1943. From 1943 to 1946 almost full controls were imposed and in this extended period of controls inflation was very successfully repressed. During the decontrol period from 1946-1948 realized inflation was high, but it did not become driven by self-fulfilling expectations. This post-WWII bout of inflation ended during the slightly deflationary 1948/49 recession. This relatively smooth price level transition is particularly striking given that the poorly executed decontrol process made inflation worse than it should have been. Pent up inflation in the period was most prominently in food prices. The lack of agricultural price controls meant that prices along the food supply chain had to adjust upwards rapidly once they were allowed to. Further inflationary pressure came from strike activity that was also caused by the poorly managed decontrol process. Labor complained consistently about the unfairness of wage controls during the war, arguing rightly that wage controls suppressed the growth of nominal wages below the growth of inflation. The evaporation of overtime after the war pushed nominal weekly earnings down and a rolling series of major strikes broke out in 1945/46. Despite these inflationary

² Unless otherwise cited the history of both inflationary periods comes from Rockoff (1984) and Campagna (1987).

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pressures the high inflation of reconversion ended in the 1948/49 recession, which was slightly deflationary. By 1948 market prices had done the job of bringing the economy back into its new full employment equilibrium and the inflationary period subsided. **Error! Reference source not found.**marks out the three major periods of WWII price controls. While the choice is somewhat arbitrary, I have chosen May 1940 as the start of controls³. This was the month the Price Stabilization Division, which would later become the Office of Price Administration (OPA), was founded. The decision to mark this as the beginning of controls is arbitrary because controls evolved at a leisurely pace, absent active war, and when controls start could be dated from several places. Another place to date the beginning of controls would be the signing of the Emergency Price Control Act in December of 1941. This act fully fleshed out the legal and administrative rights and boundaries of the OPA. The OPA was not thrilled with the bill. Among the many complaints was that the bill formalized a lack of rationing powers by the OPA. That was to be left to other agencies. John Kenneth Galbraith, head of the OPA, lobbied for a veto of the bill because of the lack of control over agricultural prices. He was correct to have insisted on controlling agricultural prices from a price control perspective. The problems caused by not adequately controlling agricultural prices will be a consistent theme of both price control experiments under consideration here. Early price control efforts were focused on producer input markets. The first formal controls were issued on machine tools in February of 1941. As the economy more generally started to push beyond potential, military needs, for things like meat and aluminum added to the increase in consumer demand from rising incomes. General price controls needed to be implemented. The government froze prices in March of 1942 to allow OPA time to organize enforceable and flexible general price controls. It is

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evident from **Error! Reference source not found.** that inflation begins to fall in April of 1942. It was a year before total controls were in place when FDR issues his Hold-the-Line Order. The total controls regime held inflation down effectively until the collapse of controls in summer of 1946, though even under this total control regime agricultural prices and wages were not controlled. Under total controls, costs of production were allowed to pass through to prices but profits per unit were restricted to the same dollar amounts they had been in 1936-39. As those were Depression years, business was not happy about that profits benchmark.

As shown in **Error! Reference source not found.**, inflation was kept to about 2.5% from April 1943 to June 1946 during what Rockoff calls the “high tide of price controls” (Rockoff 1984, Table 4.3).

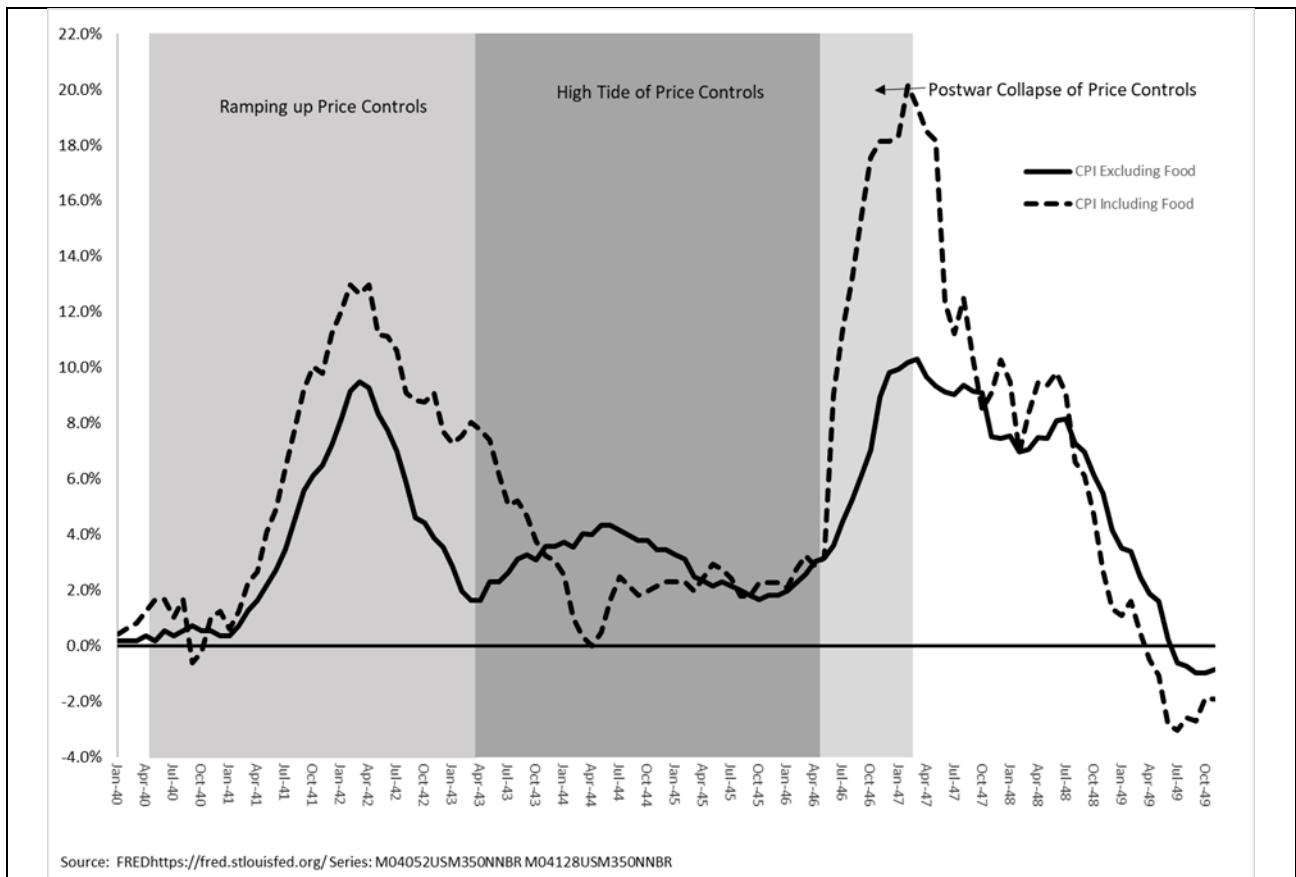


Figure 1 Year over year inflation 1940-1949

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Error! Reference source not found. also shows rapid inflation set in as soon as price controls are lifted. Here it is necessary to talk about wages and agricultural prices during the war. In both the price control regime in 1940 and the one in 1970 exemptions were carved out for agricultural products. This would be a major weakness in both regimes. Ceilings for agricultural wages were so high during WWII they were still not binding by the end of the war. Importantly, the lack of controls on agricultural prices and wages was a major redistributive device. Agricultural workers were some of the lowest paid workers in the 1940s and their earnings increased by more than any other type of worker during the war. (Bossie and Mason, 2020)

WWII Price Controls in a Policy Context

The economy after WWII needed an adjustment period after 15 years of depression and war. As well, twelve million men of prime working age were pouring back into civilian labor markets in the second half of the 40s as seven million “extra workers”, half men and half women, left the labor force. Given the capitalist system the government was managing, the most straightforward way was to allow supply to adjust to demand through the price mechanism. Successful price controls during the reconversion period would have necessitated a sophisticated administrative device to adjust industrial composition by hand. The algorithms, then as now, were not good enough to coordinate that adjustment as well as the market did. The laissez faire tolerance of the New Deal Order for the inflation of the late forties allowed the US economy to adjust into its generational postwar prosperity.

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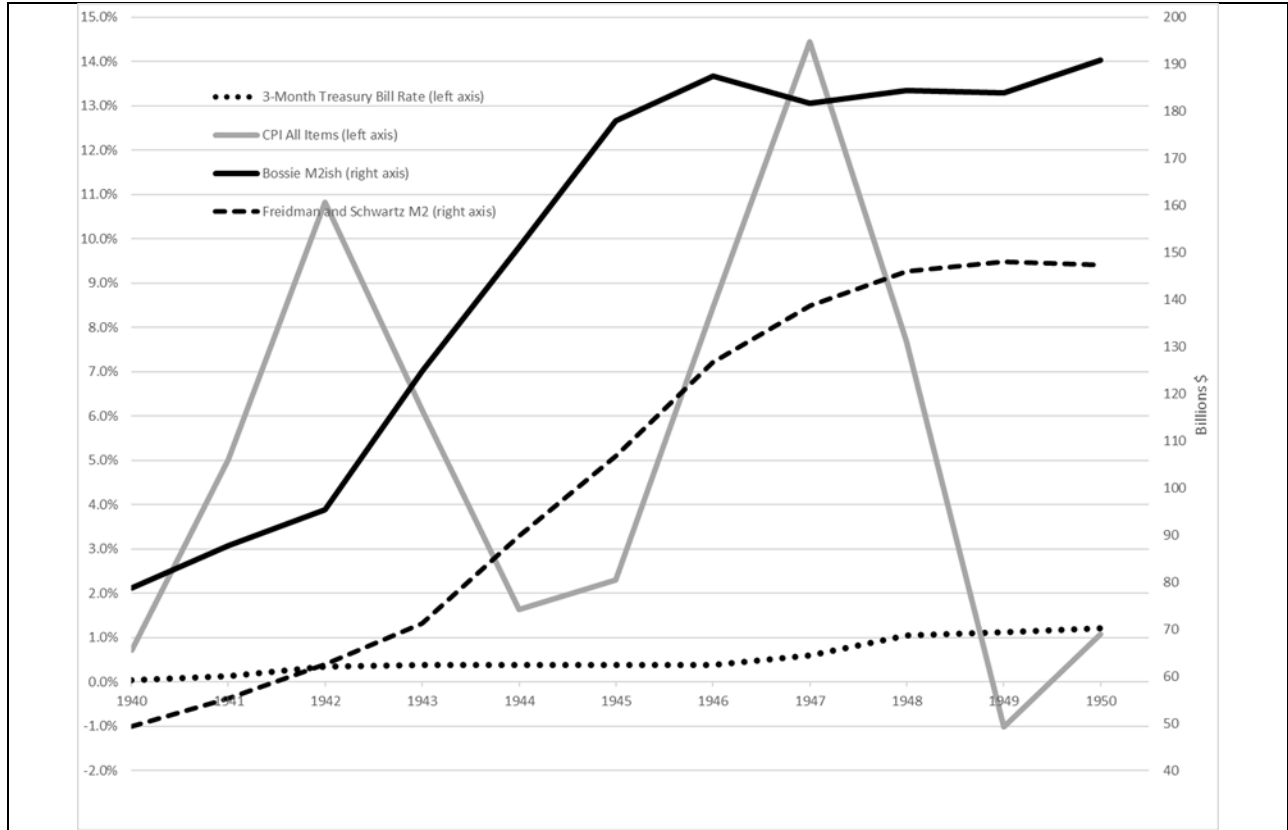


Figure 2: Monetary Variables 1940-1950

It is necessary to place price control policy in a wider policy context. First, price controls should be taken seriously as part of a coordinated response during severe inflationary periods. However, like all policy, price controls are not perfectly constructed. These imperfections give rise to pent up inflation that will express itself once price controls are lifted.

WWII saw the Federal government bring a raft of policies that complimented and enhanced price controls. Rationing, increased household income and excess corporate profits taxes, and a very active and effective industrial and infrastructure policy. All of these were mustered to help dampen the inflationary impulse of producing so far above potential to fight the war.

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Here we focus on the behavior of monetary variables: the money supply and short-term interest rates. Figure 2 shows the behavior of inflation, short term interest rates and the money supply from 1940 to 1950. What stands out most strikingly is how monetary growth ended after WWII (in 1947 by my series and 1949 by Freidma & Schwartz, 1970). This pattern of monetary growth was a market phenomenon. The swell of liquidity, almost entirely Treasury Bonds, could have sustained an increase of bank balance by 600% (Bossie, 2020). Remarkably, monetary growth did not explode after the war. The postwar burst of catchup inflation mixed with post-war demand pull inflation played itself out naturally against a backdrop of a flat money supply curve and ended during the 48/49 recession.

The post-war inflationary period, likely more inflationary than it would have been under an ideal decontrol regime nonetheless burnt itself out after about 28 months. Figure 2 shows that during the 1948-1949 recession there was a short period of deflation. This light recession occurred “naturally”. There were no price controls and interest rate policy stayed tied to the 2.5% Treasury peg until 1951. The money supply also did not grow. Markets prices in the second half of the 1940s was high but eventually settled once they had brought the economy into its post-war full employment equilibrium.

The Nixon Controls

That post-war equilibrium began to become unstable in the mid-1960s. At the center of that instability was the Vietnam War. From the start of the American occupation of South Vietnam, monetary and fiscal policy were incoherent and scrambling. The original issue was President Johnson lying about the costs of ramping up the Vietnam War in 1965 (Dunne, 1978). This added unnecessary pressure to an economy that was already at full employment. His dishonesty also made it impossible for the Fed to respond appropriately to the fiscal shock of the war. Further, the increased demand for goods and services in Southeast Asia put severe pressure on the US's balance of payments. This added pressure on the dollar peg to gold and hastened the end of the Bretton Woods global monetary regime

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(Dunne, 1978) . The collapse of Bretton Woods was a slow-motion global policy crisis that spanned from around 1968-1974. Monetary policy makers found themselves in a kind of policy limbo until the end of the US dollar gold standard was finally accepted in 1974. Nixon made things worse. Nixon was very much a believer in the political business cycle, and he pushed expansionary monetary and fiscal policy around the 72 election. After the election Nixon, who had only been interested in price controls for political and not economic reasons, began impatiently dismantling price controls.

Employed primarily for their political utility, Nixon's price controls ran through five stages from August 1971 to April 1974. Nixon only saw price controls in political terms and so gave very little thought to their long-term economic effect. Despite this there was a fair amount of success with price controls during the period when they were most forceful. It is plausible that the more stringent controls of Phase II/III could have broken the expectational inflation of the time. The problem with the later phases of price controls was that Nixon had already signaled clearly that he did not take price controls seriously. Adding to the developing national cynicism and impatience with prices controls, shortages arose during the second price freeze period at the end of controls as uncontrolled raw agricultural good price increases made it unprofitable to sell processed food at frozen prices.

Figure 3 shows the behavior of inflation through the phases of the Nixon controls. Annual inflation accelerated from less than 2% in 1965 to over 6% in 1969. The December 1969- November 1970 recession was the country's first taste of stagflation. Unemployment increased to 6% but annual inflation in 1970 was 5.3%. Fiscal mismanagement early in the war was the original demand-pull source of inflation but by the time Nixon instituted price controls in August of 1971 inflation was being driven by inflationary expectations. It is necessary to point out--because the inflationary history of this period is often mangled--these inflationary expectations had settled in two years before the first oil price shock of the decade.

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In principle, inflation driven by expectations should be the easiest type of inflation to manage with price controls. Unlike with demand pull inflation there is no underlying real economy cause of inflation to be managed. This removes the complexity entailed in managing price changes in overlapping and disparate markets all facing different demand pressures. With expectational inflation credible price controls serve a similar purpose as credible monetary policy in that they signal the Federal government (as opposed to the Fed) is not going to tolerate high inflation. If this principle holds in practice, it is obvious to see how price controls are a desirable alternative to central banks changing inflationary expectations by causing deep recessions to establish anti-inflation credibility.

It is plausible had controls held on for longer or the decontrol process been managed more competently inflationary expectations could have been brought down. However, Nixon was not interested in establishing credible price controls for economic reasons but found them useful politically. Price controls served two basic political objectives. First, Nixon wanted to be seen as pursuing bold economic policy. Price controls polled reasonably well. The successful price control regimes of the two previous wars were still within easy memory and the public and many businesses wanted price controls. The second political reason Nixon wanted price controls was that, by limiting inflation, they allowed him to harangue Arthur Burns, then the Fed president, into pursuing an easy money policy to juice the economy in the lead up to the 1972 elections (Abrams and Butkiewicz, 2012)

The Nixon price control regime began in August 1971 with a three-month blanket freeze on prices to allow the administration to create the bureaucratic structure needed to actively manage prices. Phase II saw the creation of three main agencies to manage price controls. The Cost of Living Council had coordinating and final authority on price controls. The Price Commission was given authority over prices and rent and the Pay Board, with members from labor, management and the public had authority over changes to worker compensation. Price controls dictated that increased costs could be passed through, but profit margins could not increase. Wages were limited to 5.5% annual

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increases under the assumption that productivity would increase by 3%. This would, theoretically, limit the inflationary pressure of wages to 2.5% a year. The price control agencies, however, made several exceptions to these rules that undermined the credibility of this phase. Both business and labor were unhappy with controls. Organized labor objected to controls so strongly that four of the five labor

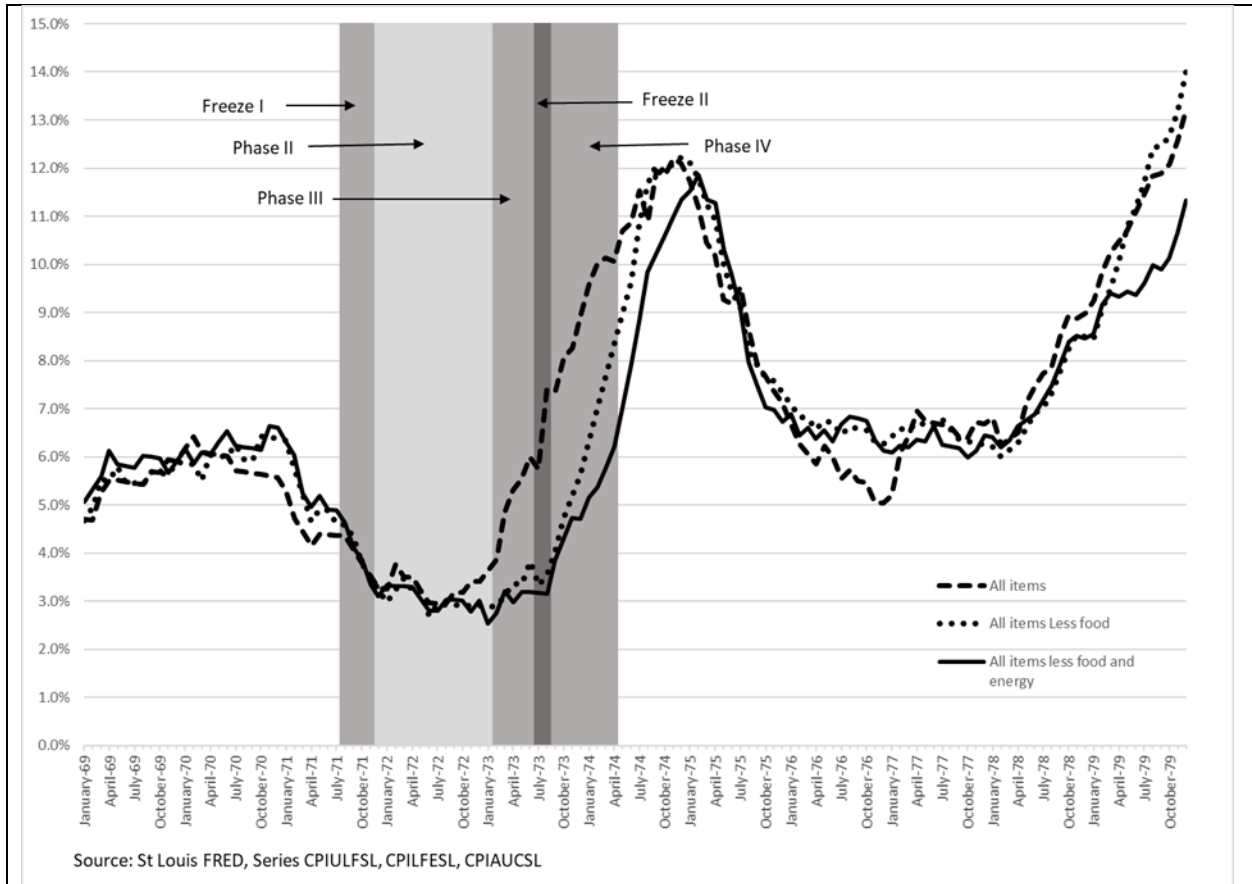


Figure 3 Monthly year over year inflation 1969-1980

representatives of the Pay Board eventually resigned. This parallels the unhappiness of labor during the WWII wage controls. The evidence from both regimes suggests that labor is inherently on its backfoot in negotiations of who bears economic costs of price controls in the US.

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Figure 3 Monthly year over year inflation 1969-1980 suggests that Phase II was relatively successful in terms of price controls. Year-over-year inflation fell during the freeze and remained low through Phase II. However, the Nixon Administration had consistently signaled that it did not like price controls and having done the political job of getting him reelected, Nixon announced Phase III shortly after the inauguration of his second term. The main change to controls was in enforcement. Controls in Phase III were moved to a self-administered system with firms responsible for interpreting rules. The justification for it was fears of economic distortions caused by price controls, though as Campagna (p 374, 1987) points out it's not clear how switching to voluntary controls was supposed to solve this problem. There were other changes to controls, most important was eliminating a rule governing profit margin limitations and liberalization of wage increases. The Pay Board and Price Commission were disbanded, and their responsibilities absorbed by the Cost of Living Council.

The consistent increase in inflation during Phase III is obvious from Figure 3. However, it does not seem to be the weakened controls themselves that are responsible for the inflation. Rather, the commodity malaise of the 1970s began to set in. A bad harvest year in 1972 put pressure on uncontrolled agricultural prices. The inflationary pressure of agriculture prices was made worse by increasing import prices after the devaluation of the dollar at the beginning of 1973. Firms were allowed to pass on cost increases and food processors did so. Looking at Figure 3 Inflation excluding food was increasing, but not very dramatically during Phase III.

The reader will notice that all items inflation increases rapidly through the rest of the price controls. In response to this increase in inflation Nixon attempted a second freeze for 60 days in the summer of 1973. This freeze had none of the advantages of the first freeze. The first freeze has been a surprise policy announcement with a population relatively willing to endure price controls. This second freeze lacked any real credibility and was imposed on a public already annoyed that controls were not working. Probably worse, only meat prices were controlled while other agricultural prices still were not

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controlled despite the freeze. Inflation in raw food inputs and a freeze of processed food output prices resulted in shortages.

The final phase of price controls began in July and August of 1973. Phase IV liberalized prices for food processors to relieve shortages. This phase was from the beginning intended to be the end of price controls. Prices were decontrolled sector by sector with less important markets decontrolled first. More important sectors negotiated exit from price controls, but the government had very little negotiating power having already signaled the intention to end controls. As Figure 3 shows, this is when core inflation (All items excluding food and energy) starts to increase rapidly. The OPEC oil embargo starting in October 1973 shows up in Figure 3 despite price controls on petroleum. This is also evident in Figure 3 as all items excluding food leads core inflation. In April of 1974 all controls, besides controls of petroleum prices were lifted. At this point, restrictive monetary policy, increasing interest rates and Nixon's post reelection shift to fiscal discipline had started a second stagflation recession in November of 1973. Year on year inflation continued to rise until early 1975. Despite a peak unemployment of 9% in May 1975, year over year inflation never went below 5% for the rest of the decade.

The Nixon Controls in a Policy Context

The most important thing to understand about the Nixon controls is that, as he was organizing and implementing price controls he was haranguing Arthur Burns, the Fed chairman, to increase the money supply and keep interest rates low. We have recordings of phone calls between Nixon and Burns discussing monetary policy. In December of 1971 (during Phase II of his controls program). Nixon is recorded having said to Burns about the money supply: "The whole point is, get it up. You know, fair enough? Kick it!" (Abrams and Butkiewicz, 2012)

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Figure 4 shows comparable monetary policy variables for the 1970s to those shown for the 1940s. From the start of controls in 1971 until the end of control in 1974 the money supply increased by 25%. From 1942-1945 the money supply increased by 103%. After price controls are lifted in 1974 the money supply increased by 68% by 1979. From 1945-1950 the money supply grew by only 7%. This suggests that committing to an end to inflationary monetary and fiscal policy is a key element in a successful decontrol period. It also suggests that after the emergency liquidity shock ends, a stable level of inflated assets can be used to manage inflationary expectations as a clearly communicated ceiling for the economy to grow into. A consistently positive growth rate of the money supply will perpetuate

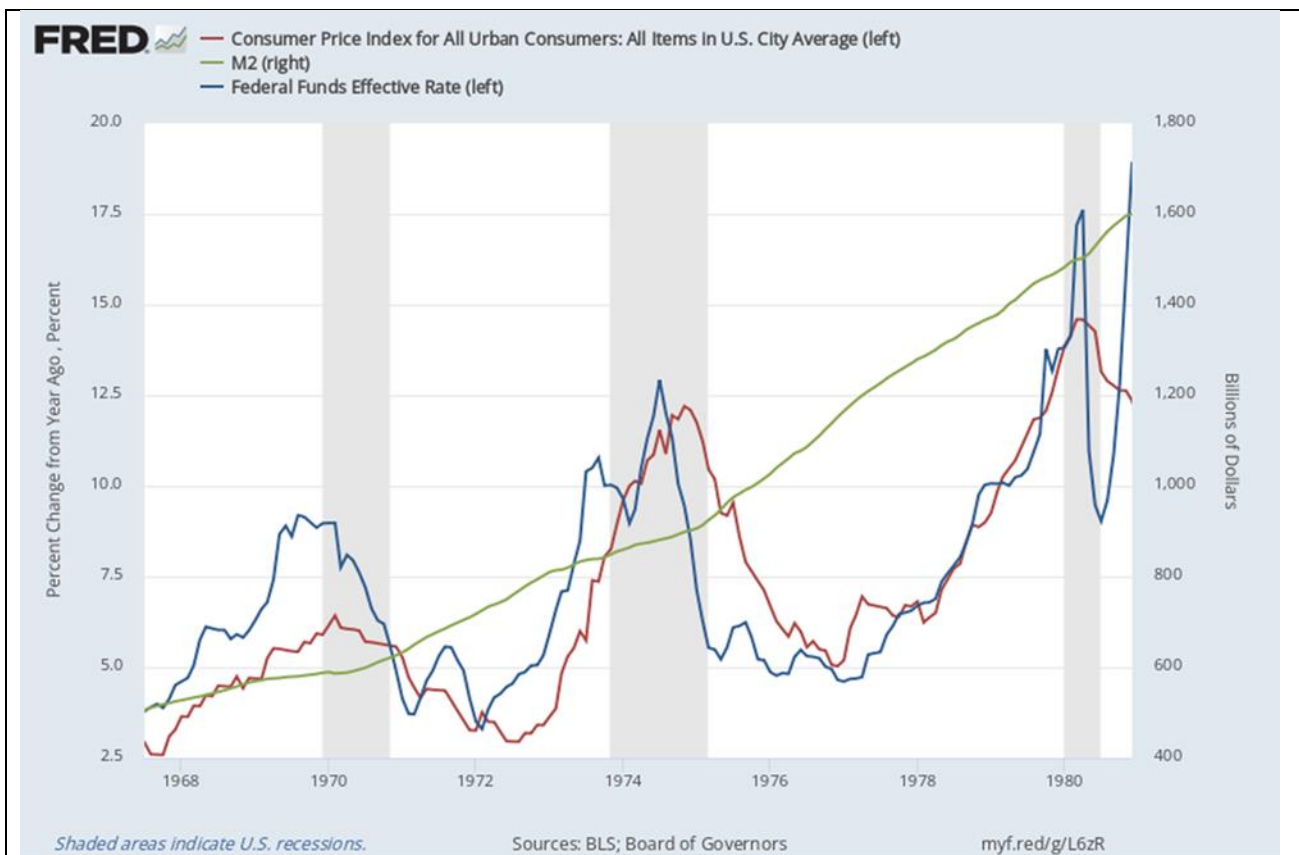


Figure 4: Monetary Policy Variables 1968-1981

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inflationary expectations, but a clear end to a monetary shock signals a finite level of the money supply and provides an anchor for inflationary expectations.

Also striking about the 1970s is the active interest rate tightening through the control period. The nominal Fed Funds rate grew and the real rate was often positive through the control period. Despite Nixon's demands, the growth of M2 also slows down before the 1975 recession. It is evident from Figure 4 that Interest rate policy is effective with a lag and the 74/75 recession was likely caused by monetary policy. This recession caused unemployment to hit 9% but inflation barely moved below 5% YOY. Again, this should be compared to the 1940s, when the 2.5% peg held throughout the entire war and postwar inflationary period. The passive and arbitrarily low interest rate policy of the 1940s seems to fare better than the active interest management of the 1970s in suppressing inflation. If nothing else this suggests that an active contractionary interest rate policy is not an obvious path to successfully curbing inflation.

The Nixon controls can also be seen as part of a coherent policy goal of getting Nixon reelected. This policy goal was political, however, and not economic. In economic terms Nixon's monetary policy worked at cross purposes to his price controls policy.

What explains the differences in the behavior of the money supply during these two inflationary periods?

Someone with a crude monetarist read of the inflation of the 1940s and 1970s would look at the role of the money supply in exacerbating or quieting post-control inflation and declare that "inflation is always and everywhere a monetary phenomenon" and argue that the Fed needs to control the money supply more effectively. However, in both the 1940s and the 1970s the Fed had little to no control over monetary aggregates. In the 1940s this was a matter of declared policy. Until the 1951 Treasury-Fed Accord, pushed for after the Korean war hoarding inflation, monetary policy remained dedicated to

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maintaining the 2.5% Treasury Peg which hamstrung the Fed in the face of a potential 600% increase in the money supply (Bossie, 2020). Despite the lack of active monetary intervention expectational inflation failed to materialize. The lack of control over the money supply in the 1970s was less intentional. Evidence of this lack of control in the money supply the explosion of the money multiplier over the decade of the 1970s and the strong cyclical response of velocity as two clear indications of the non-policy nature of the inflation of the 1970s.

The emphasis here on policy coordination warrants a discussion of the possible underlying non-Fed policy drivers of the monetary response to the inflation of decontrolling prices. These underlying drivers of monetary response involved policy decisions—or lack of policy decisions---that are as important in determining the economic ecology for inflation to either peter out or to evolve into inflationary expectations. There are three possible sources of money supply behavior posed in the literature to explain the dynamics of inflation in each decade. These are: federal budgets, international finance issues, and technological and regulatory changes.

Fiscal

Friedman and Schwartz (1967) argue that the modestly balanced budget during the WWII reconversion helped mute post WWII money growth by partially absorbing excess household savings. This surplus functioned as a negative multiplier that moderated overall spending and reduced overall inflationary pressure. Budget deficits are consistently cited as playing an important role in driving the inflation of the 1970s. Hyman Minsky (2008), for instance, spends considerable time discussing the role of budget deficits in the inflation of the 1970s. He focuses on the inflationary bias when expanded social spending buoys household consumption during economic downturns. Certainly, the executive branch lying about deficits in the full employment conditions of the late 60s had an inflationary effect (Dunne, 1978).

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This fiscal story of inflation has some corroborating historical evidence provided by the Korean War policy experiment. The Korean War was prosecuted as a “balance budget” war (Edelstien, 2000). From spring 1950 to spring 1951 the CPI increased over 9.5% as expectations of wartime price increases and shortages that led hoarding as the war ramped up. Typical the expectational pressure on prices in the ramp up to the counter offensive were made worse by the memory of WWII shortages. The hoarding inflation over this period was the final straw that led the Federal Reserve to insist on ending the Treasury Peg. However, interest rate policy was not particularly active during the Korean War. While the Fed had won on principle, there was another war to be fought and fundamentally Fed policy was there to support Federal Government finance (Bossie, 2020). The Federal government managed a budget surplus in 1951 and small deficits from 1952-1955. Despite devoting 15.7% of GDP to the military by 1953 prices rose by only 3.6% between May of 1951 and May of 1954. The Korean War policy experiment suggests that balanced budgets, price controls and, perhaps, The Treasury-Fed Accord, was a successful anti-inflationary recipe. History also offers us evidence that deficit spending is not a powerful driver of inflation. The Volker disinflation, which saw annual inflation fall from 12.4% in 1980 to 3% in 1990 was successful despite the fact that structural federal government deficits had entrenched themselves starting in 1975 and grew larger as a percent of GDP during the 1980s.

[Exchange rate international finance](#)

Barry Echengreen (1996) offers a clear exposition of the fundamental problems with the Bretton Woods system, which he argues was doomed to fail from the beginning. The structure looked far closer to the original American proposal than it did to the proposal of Britain and reflected the emphasis of the US on maximizing international trade above the managed exchange rate flexibility pushed by its junior partner. The British plan sought to remedy the central asymmetry of the classical gold standard—that only deficit countries could be forced to adjust exchange rates---through a clearing

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union that forced surplus countries to support deficit countries. The US, who would remain a surplus country after the war, however, built into the agreement an underfunded and anemic mechanism for currency adjustments. The system that emerged relied primarily on capital controls to sustain fixed currency rates. However, the international economic order was stable from an American perspective in the second half of the 1940s. During this period, demand for dollars was strong and the fixed exchange rate of the US—as well as the relatively low dependence on international trade—meant a lack of inflationary pressure from international sources.

Fixed exchange rates and the continued use of gold as a substitute for dollar assets at the core of Bretton Woods was an irrationality that would have inevitably destroyed Bretton Woods. Compounding the asymmetry of the classical gold standard, industrial countries in the post-Depression global order remained dedicated to full employment policies. As a domestic political objective full employment was sensible but removed deflation as an acceptable currency adjustment mechanism, leaving only devaluation as a tool for countries in a deficit position. Devaluation, however, was only an option during a currency crisis since preemptive devaluations seriously risked markets assuming further weakness and thus inducing a crisis.

Breaking the link of the dollar to gold was necessary and inevitable. The gold peg put a fundamentally arbitrary anchor that could not adjust to economic growth at the center of the system. In 1964 the amount of dollar liabilities held by central banks surpassed US gold holdings. The movement off the international gold standard towards a pure fiat system backed by the liabilities of a hegemonic sovereign was a necessary transition in the evolution of the international order. The malaise of the 70s was primarily a malaise of the Bretton Woods global order that could not manage the inevitable transition to fiat as the source of liquidity in a mature global economic system. As Eichengreen (2019) points out: “the transition to floating following the breakdown of Bretton Wood was a leap in the dark.

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Officials—especially those of organizations like the IMF that were heavily committed to the old system—did not jump willingly; they had to be pushed.” (p140)

One major push came from the Eurodollar market that had developed along with the kind of currency speculation that was frequent against the pound. One problem left unsolved by international policy makers was the currency adjustments to their new market rates. This unresolved issue came to a head with Nixon's 1971 refusal to convert dollars to gold. Because the international political order failed to ease currencies to their floating values the Eurodollar market solved the problem of currency adjustments. A market process borne of currency speculation was likely far more chaotic than it needed to be had the process been more disciplined. In contrast to the reckless but dynamic Eurodollar market, the global political order found itself responding to the crisis with lethargy and lack of imagination. This political grind arguably dragged the transition to a clear fiat dollar standard from the 1971 refusal to convert to the Plaza Accord in 1985, bankrupting numerous countries during the transitional period.

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Historically, the moves from hard money to a fiat currencies is marked by inflation. Usually, fiat has been resorted too during crises that were ripe for inflation such as during the supply deprivations in the 13 Colonies during the Revolutionary War the South during the Civil War and during WWI. The currency crisis caused by the Vietnam War should be seen as part of the whole “marginal” crisis the war inflicted. Military spending as a percent of GDP only increased by 0.64ppt between 1965 and 1968 (BEA, Table 1.1.5), the peak of war spending. This increase, however, was in full employment conditions and the marginal effect of this increase set off a spell of demand-pull inflation. This small effect on domestic GDP meant a large increase in the balance of payment to pay for the war in South East Asia was enough to accelerate the inevitable need to go off the gold standard (Dunne, 1978). The last vestiges of the gold standard tether would have had to die off sooner or later to facilitate the more rational and flexible domestic and international balance sheet management a financially mature global economy needed.

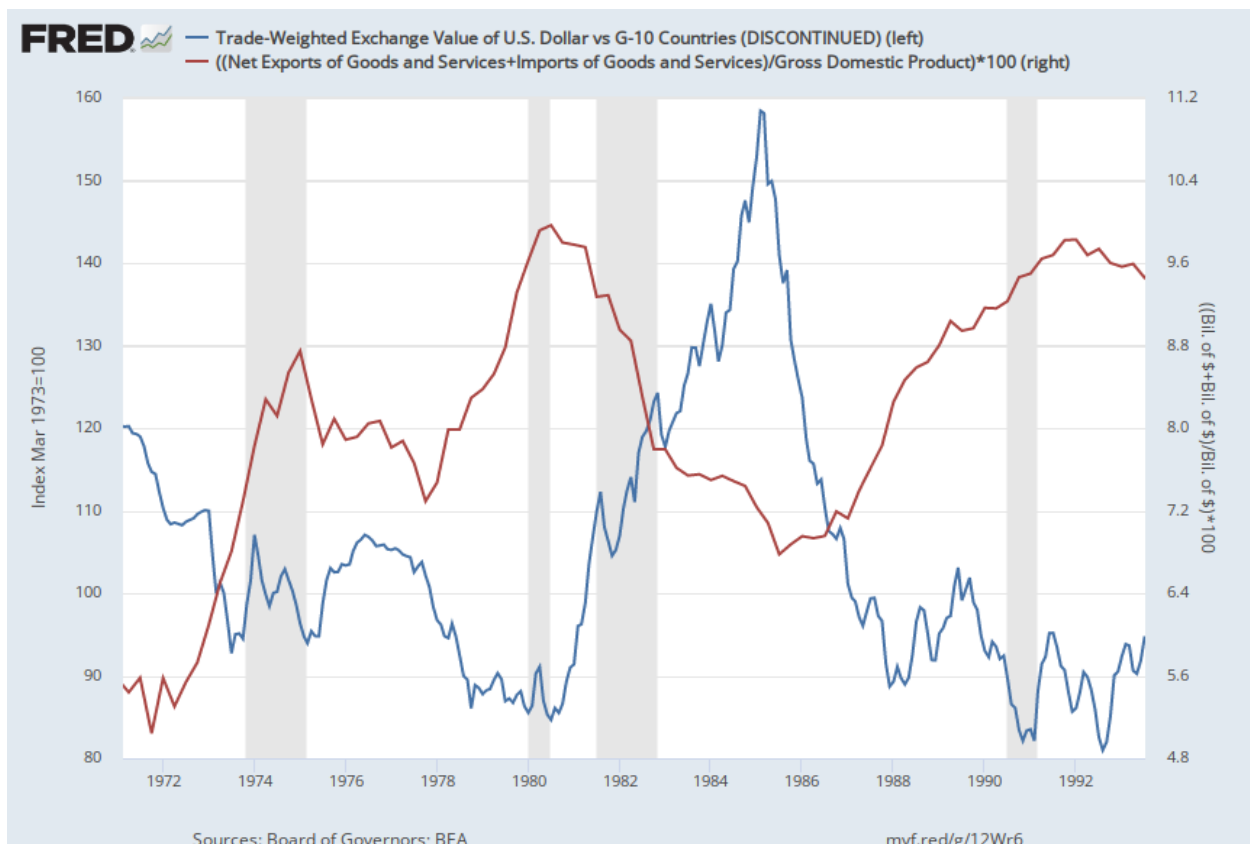


Figure 5 US Dollar trade weighted exchange rate and trade as a Percent of GDP

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Figure 5 shows the evolution of the exchange rate for the dollar as well as exports plus imports as a percent of GDP. As Figure 5 shows, the 1970s are a period in which the dollar devalues to what can be thought of as its new stabilized “long run” rate. This new lower long run value of the dollar is interrupted by the Volker shock, but after that shock resolves the exchange rate sinks back to a more volatile but similar level as that at the end of the 1970s. At the same time, during the 1970s the importance of international trade to the US economy increased significantly. Trade as a percentage of GDP increases from 5.6% in 1971 to 10% in 1981. As with exchange rates international trade responds strongly to the Volker shock, but imports and exports as a proportion of GDP continued to grow for the following decades after the Volker shock. This increase in the importance of trade would only compound the effects of the devaluation of the dollar during the 1970s on domestic prices. Here, unlike with budget deficits, we see a clear reason why the disinflation of the 1980s took hold. Since long-term exchange rates had stabilized at their new lower level, exchange rates were no longer putting pressure on domestic prices and the domestic financial system during the 1980s.

Technological and Regulatory changes in banking and finance

Domestically, coming out of WWII the New Deal order and the memory of the Depression imposed a strict discipline on financial markets. Starting in 1960s the domestic New Deal Order began conceding the initiative to financial markets in much the same way the international financial order did. Banks pushed for regulatory reforms such as ending Regulation Q for large denomination Certificate of Deposits (CDS) in 1970. Also, IBM mainframe computers began to make the processing of information much cheaper, leading to innovations in securities markets, famously by statute outside the banking system. Here there is an important overlap with changes in international finance. The Eurodollar also had a major impact on the growth of balances sheets and should be thought of as part of a larger system of innovations in finance since the end of WWII. These innovations in domestic finance were met with

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the same response from domestic regulators as international regulators: passive and at its best reactive to changes in domestic banking.

One major difficulty of talking about technical and regulatory changes in this context is that the most prominent changes take place outside of measured M2. Large denomination CDs as well as money market mutual funds are all to some degree substitutes for measured M2. To put this in perspective, while the growth of M2 was rapid during the 1970s the growth of M3, which captures more completely the financial instruments that dominate the narrative about changes to the banking industry, grew significantly faster. Between 1970 and 1980 M3 went from being 104.5% larger than M2 to 122.7% larger (Fed H.6). Thus, there is a bit of a disconnect between this discussion here and the discussion above which focused on M2. However, these financial innovations directly measured as M3 presumably indirectly amplified the growth of M2 through money multiplier type channels.

This disconnect aside, the Eurodollar represents the extreme of the dynamics of deregulation and innovation in banking pushing against the post-WWII financial order. Since Eurodollar deposits did not have interest rate caps and they were not subject to reserve requirements they eliminated two major regulatory constraints. These dollar denominated deposits not in the US, inflated by the commodity booms, filtered to both the developing world and into US banks, as large denomination CDs. Hyman Minsky (2008) offers useful theoretical framework that groups repurchase agreements, CDs and Eurodollars as variations on the same change in banking away from longer term balance sheet management towards short term liquidity management. Minsky argues that one foundation of the post WWII financial stability was that banks managed liquidity through the purchases and sales of Treasury Bonds. Central to the stability of the US banking system was the giant pool of Treasury bonds the war produced that banks used to manage liquidity. The more or less constant stock of Treasuries over the next three decades shrank relative to the size of the banking system over the postwar decades. This pushed banks to shift from managing liquidity through the liabilities side of their balance sheets. This

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shift to liabilities management brought with it other benefits for profit maximizing banks. Eurodollars, CDs and repos to varying degrees were not subject to either interest rate or reserve requirements of traditional savings and demand deposits. D'Asrita (1994) reinforces Minsky by arguing that the removal of Regulation Q helped shift the supply of deposits as well, leading those with funds to invest towards a focus on the shorter term.

Minsky also points out that Federal Reserve actions as a lender of last resort during this period undermined the ability of the Fed to control the money supply while also compounding the fragility of the banking system. Minsky emphasizes that this shift to liabilities management of liquidity leads to a greater reliance on short term lending. The indirect support through the banking system of the commercial paper market in the wake of the Penn-Central collapse and the bailout of the Real Estate Investment Trusts (Minsky 1980) only set the stage for the next bigger bailout. Also, the refusal to allow deflationary corrections directly and through relative declines in the money supply pushed the inflationary potential of bloated bank balance sheets forward.

The post-WWII financial situation offers a useful contrast to the finance situation starting in the early 1970s. In contrast to the post-Vietnam War inflation the WWII reconversion process took place at the height of New Deal financial repression. This New Deal financial repression was born of and reinforced the conservative norms governing the parts of the financial system that survived the Depression. A financial system governed by coherent conservative norms with all of the basic elements of a modern financial system: robust securities markets, depository institutions and insurance and pension funds managed to adequately finance the postwar reconstruction period. In contrast to the inflationary finance of the 1970s, Reconstruction and the sustained postwar boom--- built on top of a pile of Treasury bonds--were financed in a way that was not inflationary.

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In his history of the Office of Comptroller of the Currency (OCC) Eugene White concludes: "Although several recent Comptrollers have publicly admitted that the OCC has not done a perfect job, the OCC, the Federal Reserve, and the FDIC cannot –singly or jointly–be wholly blamed for the rapid rise of bank failures in the 1980s nor can they take full credit for the low level of bank failures before the 1970s. The bank regulators would, however, have been less harried had there been a thorough and complete banking reform instead of the piecemeal changes, which at times exacerbated the banking systems problems." (White, 1994 p68) The domestic problem was the same as the international problem. Without the will to regulate or a coherent public policy goal policy makers and regulators we constantly respond to the initiative of the market. Paul Volker is lauded for imposing discipline on the US economy and creating the disinflation of the 1980s. However, Volker's ad hoc and reactive financial discipline is a clear example of the problems with managing a financial system without systemic, cultural financial discipline. Volker met the instability of the inflationary boom times with devastating instability in the other direction.

One is tempted to contrast this with the "smooth curve" of economic activity under the imperfect but coherent New Deal regulatory financial repression. This temptation is augmented by the fact that in the 1940s much of reconversion finance also took place outside of M2. Robert Higgs (1999) emphasizes that it is largely through securities issuing and retained earnings that fueled the reconversion boom. This suggests that in both the 1940s and 1970s examples focusing on the balance sheets of banks is somewhat misleading as much finance took place outside of the money supply. However, this point about the boarder financial systems role during these two inflationary periods underscores the point that the more systemic financial repression of the 1940s was not in opposition to strong real economy growth. In fact, it ungirded the longest, strongest, and most widely shared period of economic growth in American history.

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Discussion

The experience of the 1940s and the 1970s suggests that even imperfect and unenthusiastic price controls can be successful when they are widely and forcefully implemented. The main problem that arises for price controls is during the decontrol period. Here, the behavior of the money supply is a key variable in determining the ultimate success of price controls. Strikingly, the Federal Reserve lacked any real control over the trajectory of the money supply during both inflationary periods. Other aspects of managing the financial system are highlighted as more important. The willingness and ability of the federal government to manage, regulate and repress the animal spirits of the financial system seem to be the key difference in the relative lack of expectational inflation in the 1940s. The conditions of financial repression generated by the New Deal's reaction to the 1930s set the conditions for price controls to be successful. By the 1970s the New Deal Order was anemic and in disarray, conceding the initiative to the financial system. Under such conditions, price controls could only mute inflationary expectations temporarily. As a general conclusion, policy regimes can be imperfect and somewhat arbitrary, however they must be active, vigorous, and coordinated to be successful.

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References

- Abrams, B. A., & Butkiewicz, J. L. (2012). The political business cycle: New evidence from the Nixon tapes. *Journal of Money, Credit and Banking*, 44(2–3), 385–399.
- Bordo, M. D., Humpage, O. F., & Schwartz, A. J. (2015). US Intervention and the Early Dollar Float, 1973–1981. In *Strained Relations: US Foreign-Exchange Operations and Monetary Policy in the Twentieth Century* (pp. 210–267). University of Chicago Press.
- Bossie, A. (2019). Monetary and fiscal interactions in the USA during the 1940s. *Cliometrica*, 1–43.
- Bossie, Andrew. (2020). *Employment, Aggregate Demand, and the Reconversion Recession* [Working Paper].
- Campagna, A. S. (1987). *US national economic policy, 1917-1985*. Praeger.
- Clarida, R., Gali, J., & Gertler, M. (1999). The science of monetary policy: A new Keynesian perspective. *Journal of Economic Literature*, 37(4), 1661–1707.
- D'Arista, J. W. (1994). *The Evolution of US Finance: V. 2: Restructuring Institutions and Markets*. Routledge. <https://doi.org/10.4324/9781315699813>
- Dunne, M. (1978). *Vain Hopes, Grim Realities: The Economic Consequences of the Vietnam War*. Oxford University Press.
- Edelstein, M. (2000). War and the American Economy in the Twentieth Century. In R. E. Gallman & S. L. Engerman (Eds.), *The Cambridge Economic History of the United States: Volume 3: The Twentieth Century* (Vol. 3, pp. 329–406). Cambridge University Press. <https://doi.org/10.1017/CHOL9780521553087.007>
- Eichengreen, B. J. (2019). *Globalizing capital: A history of the international monetary system* (Third edition). Princeton University Press.
- Elrod, A. Y. (2021). *Stabilization Politics in the Twentieth-Century United States: Corporatism, Democracy, and Economic Planning, 1945-1980* [UC Santa Barbara]. <https://escholarship.org/uc/item/4184v0c8>
- Friedman, M., & Schwartz, A. J. (1963). *A monetary history of the United States, 1867-1960*. Princeton University Press.
- Friedman, M., & Schwartz, A. J. (1982). Monetary trends in the United States and United Kingdom: Their relation to income price, and interest rates, 1867-1975. *NBER Books*.
- Mason, J., & Bossie, A. (2020). Public Spending as an Engine of Growth and Equality: Lessons from World War II. *Roosevelt Institute*.
- Minsky, H. P. (1980). The Federal Reserve: Between a Rock and a Hard Place. *Challenge*, 23(2), 30–36. <https://doi.org/10.1080/05775132.1980.11470607>
- Minsky, H. P., & Kaufman, H. (2008). *Stabilizing an unstable economy* (Vol. 1). McGraw-Hill New York.
- Rockoff, H. (1984). *Drastic measures: A history of wage and price controls in the United States*. Cambridge University Press.

Bossie – Anti-inflationary policy when the Fed doesn't matter.

Rudd, J. B. (2022). Why do we think that inflation expectations matter for inflation?(And should we?). *Review of Keynesian Economics*, 10(1), 25–45.

Seidman, J. I. (1953). *American labor from defense to reconversion*. Ica.

Smith, Y. (2010). *ECONned: How unenlightened self interest undermined democracy and corrupted capitalism*. Palgrave Macmillan.

Weber, I. M. (2021). *How China Escaped Shock Therapy: The Market Reform Debate*. Routledge.

White, E. N. (1992). *The Comptroller and the Transformation of American Banking, 1960-1990*. DIANE Publishing.