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The Imbalances of the Bretton Woods System 1965 to 1973: U.S. Inflation, The Elephant in the Room[*]

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This paper argues that the key deep underlying fundamental for the growing international imbalances leading to the collapse of the Bretton Woods system between 1971 and 1973 was rising U.S. inflation since 1965. It was driven in turn by expansionary fiscal and monetary policies ---the elephant in the room. What was kept in the background at the Camp David meeting on August 15 1971 when President Richard Nixon closed the U.S. gold window, as well as imposing a ten per cent surcharge on all imports and a ninety day wage price freeze—was that U.S. inflation, driven by macro policies, was the main problem facing the Bretton Woods System, and that for political and doctrinal reasons was not directly addressed. Instead President Nixon blamed the rest of the world rather than correcting mistaken U.S. policies. In addition, at the urging of Federal Reserve Chairman Arthur F. Burns, Nixon adopted wage and price controls to mask the inflation, hence punting the problem into the future.

This paper revisits the story of the collapse of the Bretton Woods system and the origins of the Great Inflation. Based on historical narratives and conversations with the Honorable George P. Shultz, a crucial player in the events of the period 1969 to 1973, I argue the case that the pursuit of sound monetary and fiscal policies could have avoided much of the turmoil in the waning years of Bretton Woods. Moreover, I point out some of the similarities between the imbalances of the 1960s and 1970s—especially fiscal and the use of tariff protection as a strategic tool, as well as some differences—relatively stable monetary policy and floating exchange rates.

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Abstract:

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1.Introduction

The Nixon shock of August 15 1971 was a critical event in the twentieth century history of the international monetary system. It was on a par with the ending of the classical gold standard at the outbreak of World War I in August 1914 and the UK's departure from the gold exchange standard in September 1931.

President Richard Nixon's speech to the nation on that Sunday ended the history of gold convertibility that underlay the Bretton Woods System and that was a major underpinning of the global monetary system for two centuries. The rest of the Bretton Woods System (the adjustable peg) collapsed with the advent of generalized (managed) floating exchange rates in March 1973.

One of the driving motivations for President Nixon's actions was the perception that growing imbalances between the U.S., with an exploding balance of payments deficit, and Germany and other countries of Western Europe and Japan, with burgeoning surpluses, was harmful to the competitive position of U.S. manufacturing and the country's overall prosperity. President Nixon's New Economic Policy had three principal prongs: closing the gold window to protect the remaining U.S. gold reserves; a ten per cent surcharge on imports of all countries to force the surplus countries to revalue their currencies; and a ninety-day wage price freeze to control U.S. inflation.

This paper argues that the key deep underlying fundamental for the growing international imbalances was rising U.S. inflation since 1965, in turn driven by expansionary monetary and fiscal policies—the elephant in the room. What was kept in the background in August 15 1971 was that U.S. inflation, driven by U.S. macro policies, was the main problem facing the Bretton Woods System, and that for political and doctrinal reasons was not directly addressed. Instead President Nixon blamed the rest of the world instead of correcting mistaken U.S. policies. In addition, at the urging of Federal Reserve Chairman Arthur F. Burns, Nixon adopted wage and price controls to mask the inflation, hence punting the problem into the future.

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Section 2 provides the background of the Bretton Woods System, established in 1944 but its operational form only ran from 1959 to 1973, after the Western European countries declared current account convertibility. The monetary and fiscal policies of the U.S. as center country of the BWS were crucial to its successful operation and survival and we document the connection between US domestic policies, and the eventual collapse of the BWS between 1968 and 1973.

Section 3 tells the story of the genesis of the Great Inflation which began in 1965 and ended in 1983. The early years of the Great Inflation are closely tied to the dynamic forces that eventually destroyed Bretton Woods.

Section 4 focuses on the international policy coordination between the US and the other major players in the Bretton Woods system (the G10, the IMF, the BIS) to try to preserve the system. In section 5 we spotlight the actions of three key actors in the US drama of the collapse of BWS whose actions were an important element in the way the political economy of the events played out; Arthur Burns, Paul Volcker and George P. Shultz. Section 6 in conclusion considers some parallels between the events of the crisis of the early 1970s and the current U.S. situation. Unlike the 1960s and 70s monetary policy and inflation is not a serious force pointing to a crisis. But there is some similarity to the 1960s and 1970s in the burgeoning fiscal deficits and a run up in the ratio of debt to GDP consequent upon the resolution of the Great Financial crisis and the recent tax cuts. This may lead to a fiscal crisis and eventually a dollar crisis which has some echoes to the events of 1968 to 1973.

2.Bretton Woods

The Bretton Woods System (BWS) came out of the Bretton Woods conference in 1944. The adjustable peg system was conceived as a compromise between the fixed exchange rate gold standard and the floating exchange rates of the 1920s (Bordo

1993, 2017). Its purpose was to optimize the global trading system and yet allow domestic demand management to preserve full employment. It required capital controls and the International Monetary Fund was established to help alleviate short term current account imbalances.

The BWS only became fully operational in December 1958 after the Western European countries declared current account convertibility. The system quickly evolved into a gold dollar standard. The U.S. as center country pegged the dollar into gold at $35 per ounce and the rest of the world pegged their currencies to the dollar. The U.S. dollar emerged as a key reserve currency for the rest of the world as a substitute for scarce gold.[1] The demand for international reserves grew with the growth of real output and trade and was satisfied by the U.S. running ever larger balance of payments deficits. As center country the U.S did not have to adjust to its balance of payments deficits by pursuing tight financial policies[2]. The dollar was held as international reserves because of its unique properties as an international unit of account, medium of exchange and store of value. The crucial requirement for the system to work was that the US maintain stable monetary and fiscal policies, ie maintain price stability.

In 1960 Robert Triffin pointed out the problem of having one country's currency, the dollar, as the reserve currency for the world (Bordo and McCauley 2018). He posited that as the rest of the world grew the demand for dollars as international reserves would eventually exceed the US monetary gold stock leading to the possibility of a

[1]The British pound was also a reserve currency in the BWS, but its role declined steadily throughout the period. See Schenk (2010)
[2] It was the n-1th currency in a system of n currencies. See Mundell (1969)

run on Fort Knox. Were the Fed to tighten world depression, like in the 1930s, would follow. The only solution according to Triffin was to create a substitute for dollars as international reserve. He preferred Keynes's (1943) bancor, Eventually the international community produced SDRs as a form of paper gold. Despres, Kindleberger and Salant(1966) and McKinnon (1969) argued counter to Triffin , that the US was the banker to the rest of the world and a dollar standard could persist as long as the U.S. followed stable macro policies.

Milton Friedman (1953) predicted that the adjustable peg would eventually break down because it depended on capital controls and because the adjustment mechanism both between countries and the rest of the world and the US wouldn't work in the face of downward nominal rigidities and the full employment mandate that came out of the Employment Act of 1945. As it unfolded Friedman's predictions came true. He favored: freely floating exchange rates , rules based monetary and fiscal policy and no controls on current account and capital account transactions. All of these were adopted in the 1970s and 1980s.

US and international officials were convinced by the Triffin story especially after the London price of gold spiked at $40 per ounce on the news that John F Kennedy would win the 1960 election and follow an inflationary set of policies. They became obsessed over growing US balance of payments deficits and declining gold reserves as European real incomes recovered from the devastation of World War II increasing the demand for dollars**.** See figure 1 which shows that by 1959 the U.S. monetary gold stock equaled total external dollar liabilities and the rest of the world's gold stock exceeded that of the U.S.

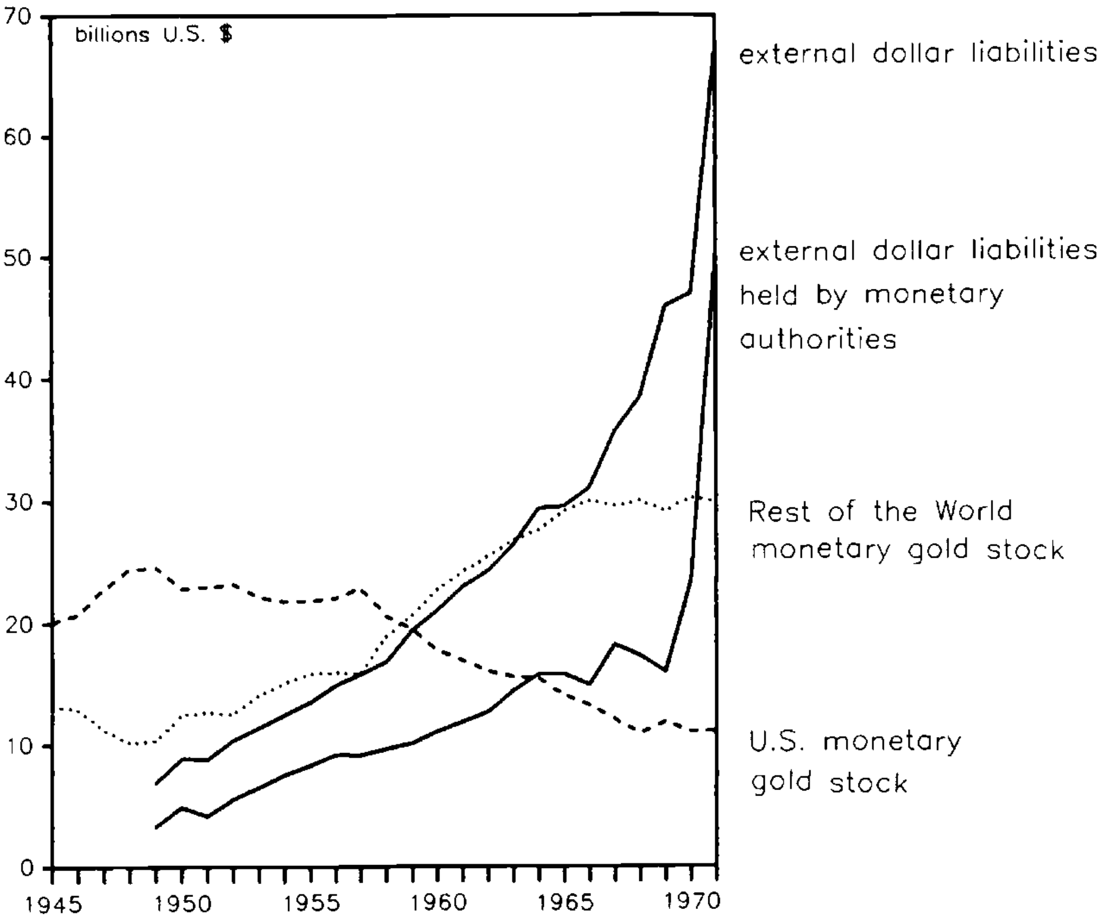

Figure 1: Monetary gold and dollar holdings, the US and the rest of the world, 1945-1971. Source: Bordo (1993).

By 1966, official dollar liabilities held by foreign monetary authorities exceeded the US monetary gold stock. dollar holdings. This led to the creation of many official facilities to staunch the gold drain (Coombs 1976, Solomon 1982, Bordo 1993). These included US capital controls (The Interest Equalization Tax 1963); Operation Twist 1962 (combining tight monetary policy with expansionary fiscal policy to both encourage capital inflows and stimulate domestic investment), the Gold Pool in 1961(in which 8 key countries pooled their gold resources to intervene in the London gold market and protect the $35 peg Bordo, Monnet, Naif 2017,) moral suasion (threatening Germany that it would remove U.S. troops if it converted its outstanding dollars into gold), the GAB(General Arrangements to Borrow 1961 which increased the IMF's line of credit to the US in the face of a speculative attack); and the swap lines(IOUs between central banks as substitutes for gold conversions (Bordo, Humpage and Schwartz 2015).

In general these stop gaps measures worked, at least until 1965. More important as we expand on below, before 1965 Federal Reserve Chairman William McChesney Martin followed a policy of low inflation and the FOMC did pay attention to the US balance of payments and gold reserves in its deliberations (Bordo and Eichengreen 2013). Europeans complained about US inflation but they were wrong –U.S. inflation adjusted for output growth was below theirs before 1965 (Meltzer 2010). The French also resented the exorbitant privilege of the dollar and its "adjustment without tears" (Bordo, Monnet and Naif 2017).

1965 to 1971: Crisis and Collapse

The key driving force for the growing imbalances beginning in 1965 was money financed fiscal policy in the U.S. to pay for the Vietnam War and Lyndon Baines Johnson's Great Society. The increases in fiscal deficits and money growth (relative to real output growth) led to the beginning of the Great Inflation**.** See figures 2 and 3.

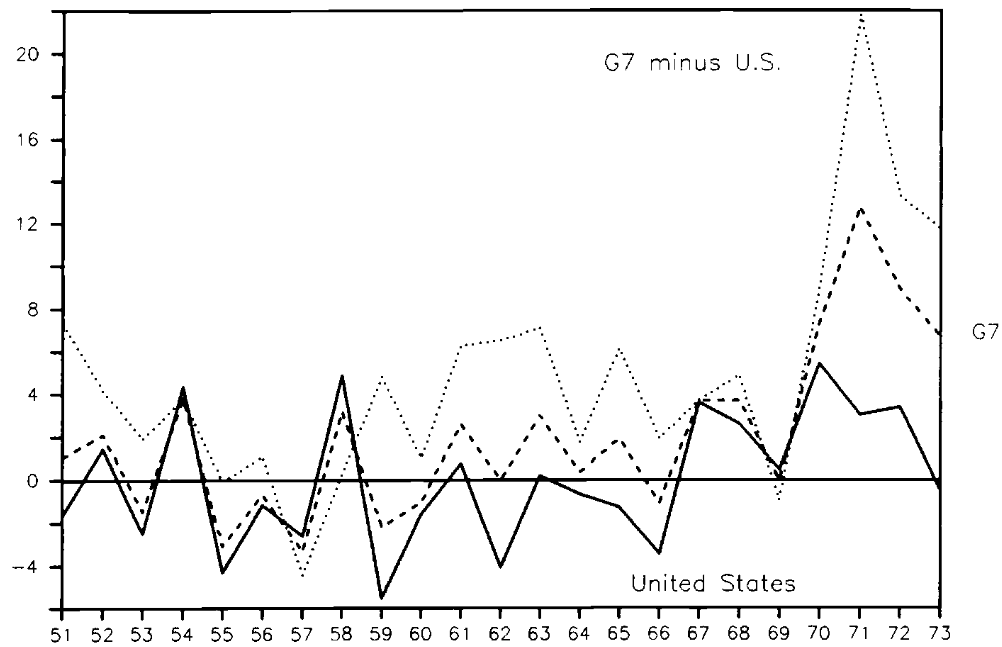

Figure 2: Money (M1) growth less real output growth in the US, the G7 countries and the G7 excluding the US, 1951-1973. Source: Bordo (1993).

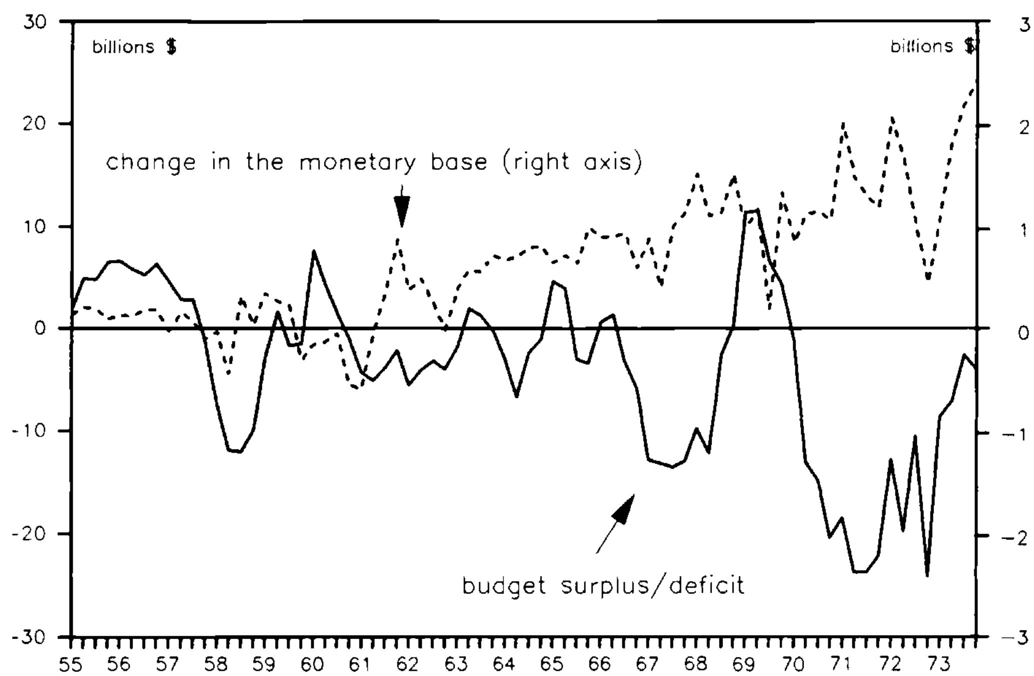

Figure 3: The US budget deficit and the changes in the monetary base, 1955-1973 (y-o-y change of quarterly data). Source: Bordo(1993).

The increase in US money growth led to larger US balance of payments deficits (figure 4) and increases in the international reserves of Germany, Japan and other surplus countries (figure 5), in turn putting pressure on them to expand their money supplies and push up prices (Bordo 1993) , This led to increased resentment against the U.S.

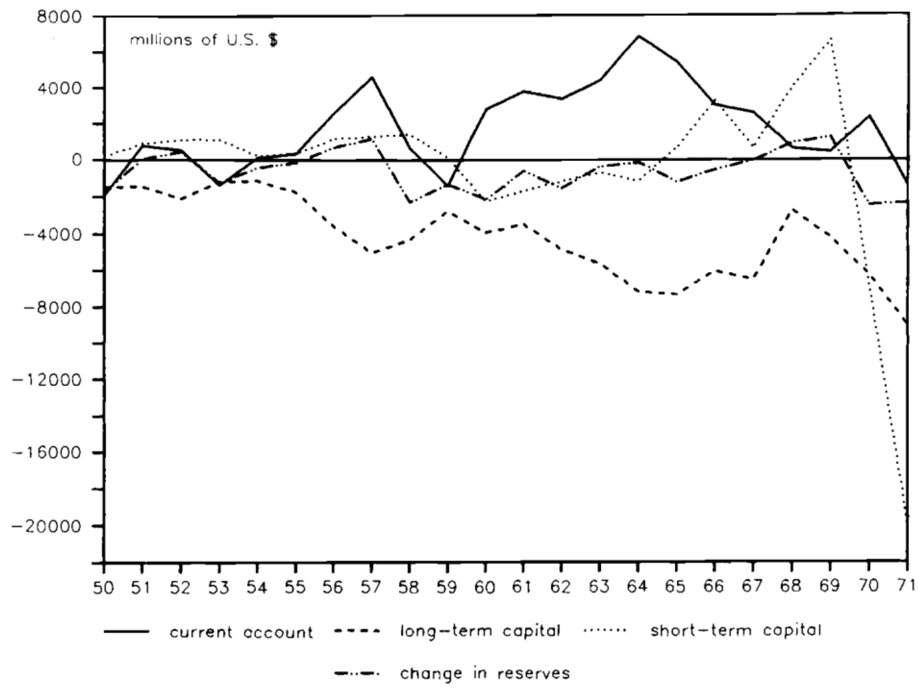

Figure 4: Balance of Payments, US, 1950-1971. Source: Bordo (1993).

In this period the dollar was increasingly under threat seen in a series of currency crises and unsuccessful policy responses. The first serious threat to the dollar was the sterling crisis of November 1967 which led to great pressure on the price of gold in the London Gold market and stressed the Gold Pool. Much of the resources used to shore up sterling, (the second reserve currency of the BWS believed by the US monetary authorities as the first line of defense for the dollar Bordo, Monnet, Naef

2017) came from the US Treasury gold window which reduced the monetary gold stock.

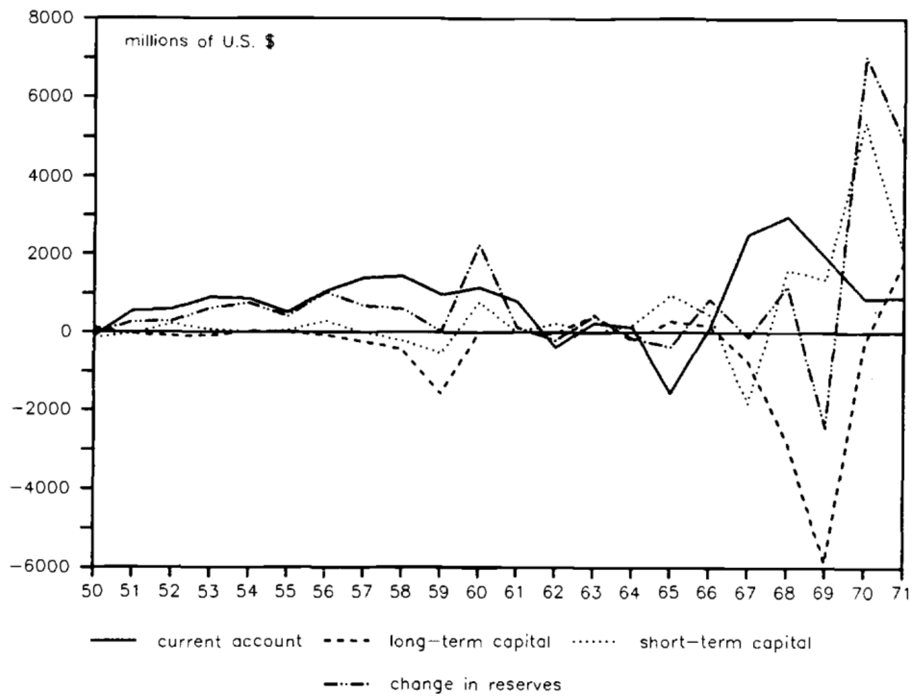

Figure 5: Balance of Payments, Germany, 1950-1971. Source: Bordo (1993).

Once sterling was devalued and the pound ceased to be a major reserve asset , speculation turned against the dollar . The Gold Pool kept raising the quotas required of the members until first France dropped out in June 1967 and then the others objected. By March 1968 the US and the other partners in the Pool agreed to close it and create a two-tier gold market—the private market in London and an official arrangement open only to monetary authorities. Meltzer (2010) declared this event as the beginning of the end of the Bretton Woods System.

Two other US actions greatly weakened the US defenses—eliminating the gold reserve ratio behind member bank reserves in 1965 and then eliminating the gold reserve ratio behind Federal Reserve notes in 1968. Both of these measures designed to release more gold resources to defend the dollar ultimately made things worse by reducing the US's credibility.

The crisis abated somewhat in 1969 following a tightening in both fiscal (the 1968 tax surcharge) and in monetary policy. These policies temporarily led to capital flows into the US and less pressure on US gold reserves. However the tight policy was quickly reversed because the Nixon administration feared that the continuation of the 1970 recession into 1971 would threaten the following year's election and it put pressure on Burns and the FOMC to loosen its monetary policy (Meltzer 2010, Stein 1994, Wells 1994). This prompted the attack on the dollar to resume leading to a capital outflow of $4 billion in May 1971 (Meltzer 2010 page 749).

The reaction to the growing balance of payments crisis by the Nixon Administration was to increasingly blame the surplus countries for running large surpluses and deliberately undervaluing their currencies to gain a competitive advantage over the US. There was deep reluctance to recognize that the key source of the problem was US inflation.[3] To do so would require following monetary contraction and hence producing a severe recession. Nixon feared such an outcome would harm his reelection chances in 1972. As we discuss below Fed Chairman Arthur Burns accommodated the President's demands.

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[3] This is not to argue that the only cause of the global imbalances of the 1960s and 70s was US inflation. The surplus countries did follow export led growth policies and were reluctant to revalue their currencies. However rising US inflation became increasingly the major problem leading to the collapse of Bretton Woods (Bordo 1993).

The crisis peaked in August 1971 when fears that the British would convert their dollar holdings into gold led President Nixon to announce his New Economic Policy on August 15. The policy had three principle components. : closing the gold window ;a 10% surcharge on imports and a 90 day wage price freeze. The object of the first two actions was to preserve US gold reserves and to pressure the surplus countries to revalue their currencies. The wage price freeze (which later turned into controls) reflected the belief by Burns and others that inflation was primarily driven by non monetary cost push forces and more fundamentally that the domestic political costs of the correct monetary policy required to really kill inflation was just too high.

3. The Beginning of the Great Inflation in the U.S.

During World War II the US financed only a small part of wartime expenditures with the inflation tax compared to World War I and much of it was suppressed by price controls (Friedman and Schwartz 1963). During the War the Federal Reserve was subservient to the Treasury and was constrained in its actions by enforcing pegs on both short term and long term government securities. After the war when the controls were lifted inflation jumped, reaching a peak in 1948. The Fed began pressing for a return to its operational independence which was finally achieved in the Federal Reserve Treasury Accord of February 1951. In the following decade under the direction of Chairman William McChesney Martin the Fed followed a policy geared to price stability. This was consistent with the conservative fiscal policies of the Eisenhower Administration (Meltzer 2010, Stein 1994). Martin also paid considerable attention to the gold constraint of the Bretton Woods system and the balance of payments and monetary gold reserves.

The succeeding Kennedy and Johnson administrations attached high priority to increasing US growth and reducing unemployment using Keynesian aggregate demand management policies. The 1964 Kennedy tax cut increased the fiscal deficit and in this period the Martin Fed began accommodating fiscal policy by its even keel operations (Meltzer 2010)[4].

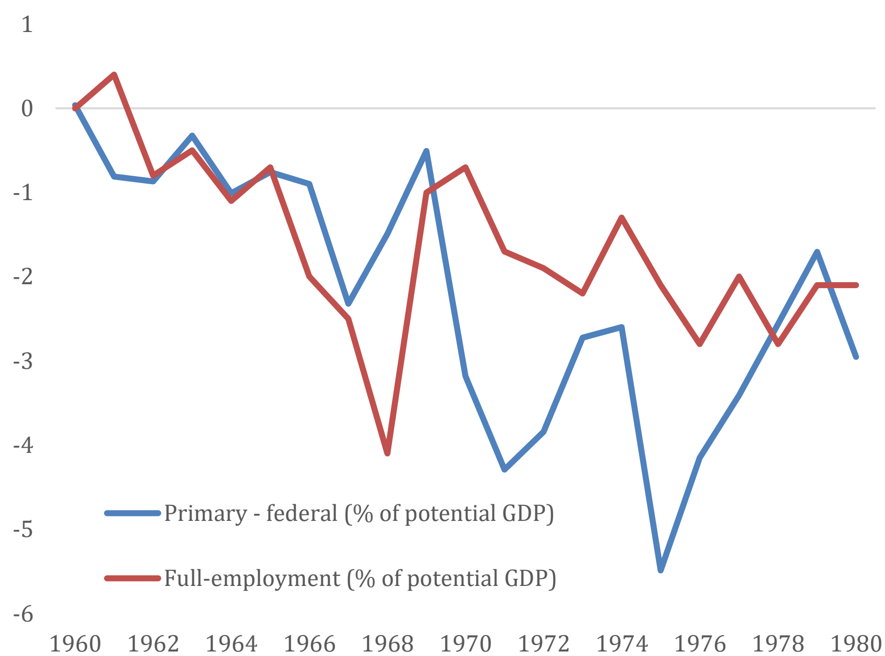

Figure 6: US budget balance. Notes: primary budget balance is defined as the difference between current expenditures and current receipts. Sources: BEA, CBO and FRED.

[4] See Humpage (2015) who attaches less weight to Fed accommodation via Even Keel operations

Martin attached considerable importance to cooperating with the administration and his concept of central bank independence was “independent within the government”. As a consequence money growth began increasing along with fiscal deficits.

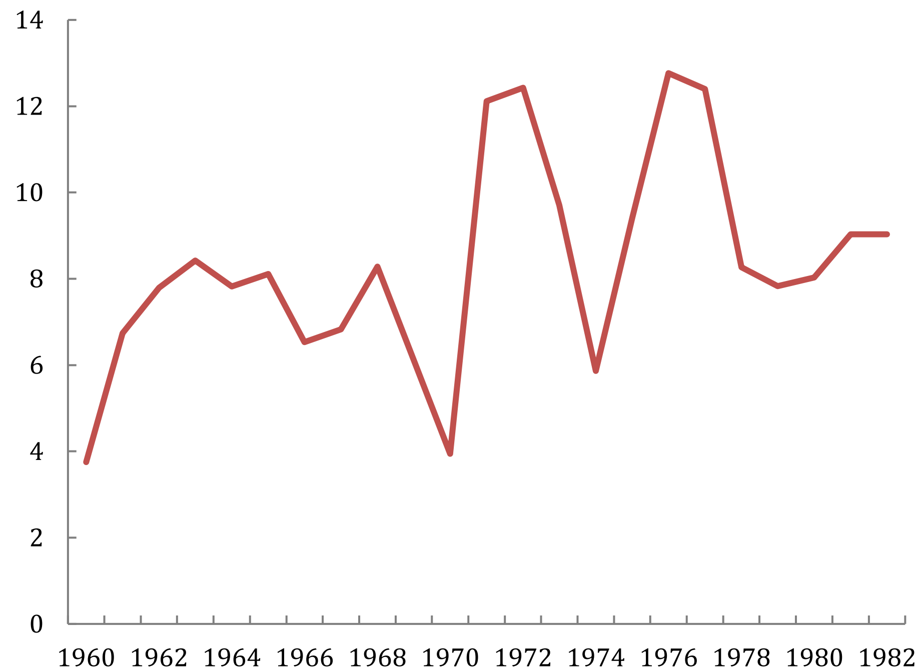

Figure 7: M2 growth (% change) in the US, 1960-1982. Source: FRED.

The underlying ideology of macroeconomic policy changed in this period from classical orthodoxy to Keynesianism. Council of Economic Advisors Chairman Walter Heller and then Arthur Okun adopted the Phillips Curve as their policy guide. Following the mandate of the Employment act of 1945 their main emphasis was on maximizing employment. Reducing unemployment below 4 % was the goal at the expense of higher inflation. The welfare costs of inflation were perceived as lower than the costs of unemployment. The Keynesians also believed that fiscal policy was a more potent tool of demand management than monetary policy and that both monetary and fiscal policies should be used to fine tune the business cycle (Stein 1994).

Inflation increased slowly after 1962 and then more rapidly in 1965 with the build up in government expenditures for the Vietnam War and LBJ's Great Society programs (figure 8). Meltzer (2010 page 485) posited that the Fed's expansionary monetary policy accommodated one half of the increase in the fiscal deficit. As inflation increased the Martin Fed began following a tighter monetary policy in late 1965. President Johnson greatly opposed this for fear that his domestic agenda would be sabotaged and he put considerable pressure on Martin to avoid tight money[5]. The Congress also favored low interest rates in this period.

[5] The urban legend is that LBJ invited Martin down to his ranch and took him for a rough drive in a jeep when he made the point that Martin should not raise the discount rate in December (which he did anyway) Bordo and Eichengreen 2013, Meltzer 2010)

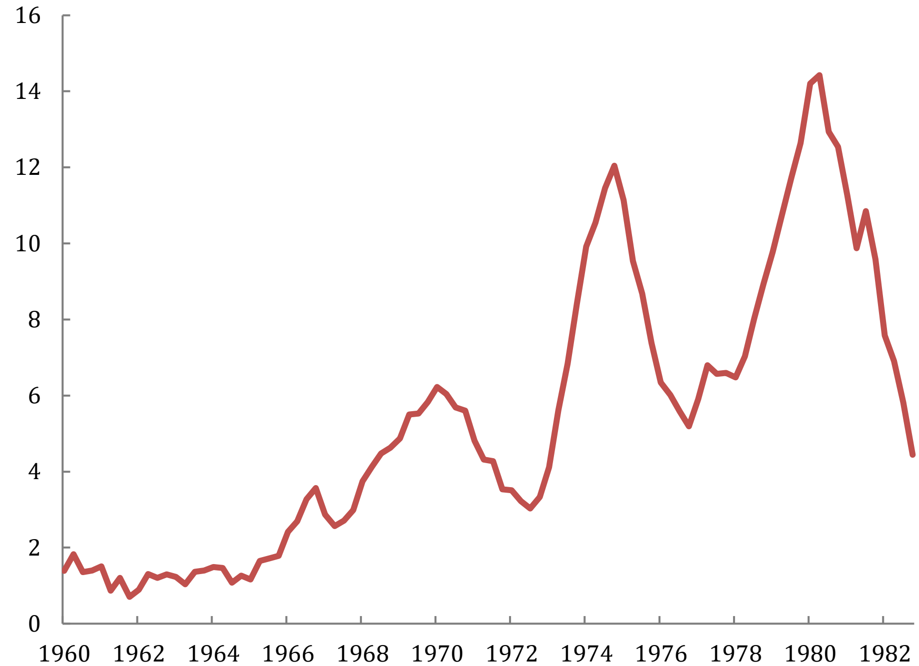

Figure 8: CPI inflation (y-o-y % change) in the US, 1960-1982. Source: FRED.

In 1966-67 Fed tightening (in part due to concerns over the balance of payments) led to the Credit Crunch of 1966 when rising rates surpassed the regulation Q ceiling on time deposits and led to a decline in mortgage finance. This led to considerable pressure from Congress and the Administration to shift to a more expansionary policy (which it did). In the years 1965 to 1969 (with a few exceptions) the FOMC reduced its attention to the rest of the world, to the US balance of payments and to the monetary gold stock in favor of its domestic objectives (Bordo and Eichengreen 2013).

Meltzer (2010 chapter 4) summarized Fed policy in the early years of the Great Inflation as increasingly attaching more weight to unemployment than inflation. This reflected both ideology –the adoption of Keynesian doctrine; and politics—increased pressure from the administration to avoid rising unemployment. As a consequence, expansionary monetary (and fiscal policy) would lead to a reduction in unemployment then followed by an increase in inflation. The Fed would then tighten to reduce inflation but once unemployment started increasing political pressure would encourage the Fed to abandon its tightening. According to Meltzer these actions convinced the public that the Fed did not attach high priority to inflation which became more and more persistent as inflationary expectations became embedded in the public conscience[6].

Richard Nixon became President in November 1968 and he campaigned on a platform to roll back the expansionary aggregate demand policies and the liberal agenda of the preceding Democratic administrations. He was influenced by the views of Milton Friedman. He posited a greater role for free markets, the pursuit of a policy of monetary gradualism to reduce inflation, and full employment balanced budgets. In October 1969 he appointed Arthur Burns as Chairman of the Fed. Burns was close to Milton Friedman (his teacher at Rutgers University in the 1930s). Burns was viewed as an advocate of sound money but not of monetary rules (Meltzer 2010, Wells 1994). He also had been a close advisor to Nixon since 1960.

Before leaving, Martin began pursuing a tight monetary policy. This was also coincident with the 1968 tax surcharge (passed in early 1969). This led to the beginning of a recession in late 1969 which did reduce inflation close to 3 % from a peak of 6%. Burns followed through with the inherited policy and the Nixon

[6] For other explanations of the Great Inflation see Bordo and Orphanides 2013.

administration did not roll back the Johnson tax surcharge. This contributed to a recession in 1970 and rising unemployment.

Burns under pressure from Nixon reversed policies and began expanding money growth in early 1971. Burns both remembered that he had correctly warned Nixon in 1960 that a recession was coming which would threatened his election chances and had acceded to Nixon's promise on the day he was installed as Chairman "You see to it: no recession" (Wells 1994 page 42).[7]

Monetary expansion rekindled inflation in 1971. Burns was increasingly reluctant to tighten monetary policy. In 1970 he began to publically state that the key determinant of inflation was now cost push pressure by big labor unions and large firms with considerable market power. During that year in varying venues he began advocating incomes policies—wage and price controls[8]. As mentioned above the big upsurge in US inflation spilled over into the balance of payments deficit, the international reserves of the surplus countries and inflationary pressure abroad., This precipitated the balance of payments crisis in the summer of 1971 and led to Nixon's Camp David speech on August 15.

A key component of the New Economic Policy was a 90 day wage price freeze. Arthur Burns was successful in overcoming the opposition of Milton Friedman and George Shultz and convincing first Secretary of the Treasury John Connally and then President Nixon that incomes policy would deal with the inflation problem. This

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[7] Nixon also said about Burns, " I respect his independence . However, I hope that independently he will conclude that my views are the ones that should be followed" (Wells 1994 page 42)

[8] See Shultz (2018) who unearthed a letter from Burns to Nixon dated June 22 1971 when he explicitly advocated wage price controls.

decision in turn reflected both Burns and the Nixon administration's unwillingness to recognize the elephant in the room and use monetary policy to reduce inflation directly. This reflected Nixon's fear of a recession weakening his re- election chances in the forthcoming 1972 Presidential election and Burns's surrendering the Federal Reserve's independence to political pressure.

4. International Policy Considerations

The Bretton Woods system was designed as a cooperative exercise and the IMF was established to coordinate international and domestic macro policies of all the members. As described in Bordo and Schenk (2017) as the BWS evolved increasing policy coordination was required to manage the ongoing currency crises facing many countries (eg France 1958,Italy 1961, Canada 1962) . Of greater importance to the BWS was the chronic sterling crisis which played out intermittently from 1947 to 1968 (Bordo, McDonald and Oliver 2009). The final episode was the crisis of the dollar from 1968 to 1973.

In addition to the IMF which was an organization of finance ministers, the G10 advanced countries plus Switzerland and the BIS an organization of central bankers emerged as the key players in the major rescues of the 1960s (Bordo and Schenk 2017).

As mentioned above, in response to the Triffin dilemma the U.S. authorities and the other international agencies set up many facilities to preserve US gold reserves.

All of these mechanisms came under great strain once the U.S. began inflating and its balance of payments deficits expanded.

Richard Nixon changed the international perspective of the US away from providing a favorable institutional and political environment for the development of the international economy embodied in the New Deal Bretton Woods institutions. He turned inward and made domestic US concerns "national renewal" his prime focus (Sargent 2015 page 102). He attributed the global imbalances threatening U.S. gold reserves and the position of the dollar on the surplus countries of Western Europe and Japan who he believed intentionally undervalued their currencies to gain a competitive advantage over the US. They also pursued an export driven growth model. This perception dominated the deliberations leading to the Camp David announcement.

Nixon, Connally and his other advisors viewed cutting the link with gold as a measure to force the others to adjust by revaluing their currencies. The temporary import surcharge was also viewed as a strategic measure to force the others to come to the bargaining table. It was believed that once the rest of the world revalued their currencies US investment and manufacturing industry would regain the position lost to foreign competition (Irwin 2013).[9]

After the Camp David announcement Nixon sent Connally and Paul Volcker, Under Secretary of the Treasury, to the capitals of the world to convince them to adjust the values of their currencies. The chief hold out was President Pompidou of France who believed that the US should devalue the dollar (raise the dollar price of gold). A meeting between Nixon and Pompidou in November 1971 led to a compromise at a

[9] Irwin(2013 page 32) also argued that the Nixon administration took a mercantilist position on trade issues for political reasons—to get domestic political support.

meeting of the major countries at the Smithsonian Institution in Washington DC December 11 1971.

At the Smithsonian the US agreed to devalue the dollar by 8.5%, the Europeans revalued their currencies by a similar amount and Japan agreed to revalue the Yen by 16.9%. In addition, the revamped par value system would have wider exchange rate bands of 2.25 % instead of the original 1% (Volcker and Gyothen 1992).

Through this period US inflation was still going strong and the pressure on imbalances continued. George P Shultz, newly appointed Secretary of the Treasury, proposed a plan at the IMF Annual meetings in September 1972(dubbed Plan X) to correct the imbalances (Shultz 1973). This plan, earlier formed with the aid of Milton Friedman and Paul Volcker, was an attempt to create a quasi- flexible exchange rate system and ultimately move to free floating. Under the Plan countries would convert their reserves into SDRs. Each member would adjust their currencies to imbalances measured by a series of indicators based on the size of their reserves relative to some normal measure, which in in turn were based on their IMF quotas (Schenk 2017). Countries with reserves below normal would have to devalue their currencies by 3-4% per year. Countries with reserves larger than normal would have to revalue their currencies by 3% per year, countries whose reserves exceeded 175% of normal would be penalized and lose access to convertibility. In a sense this was an actualization of Keynes's (1943) scarce currency clause which was blocked by the US at the Bretton Woods conference in 1944.Both the IMF and France were opposed to the plan and it never was adopted.

Throughout 1972 one country after another left the par value system and floated; Canada May 1970, Germany (May 1971) followed by Austria, Belgium, the Netherlands and Switzerland, the UK June 1972..The US devalued a second time by 10 % in February 1973. By March 1973 the par value system had disappeared replaced de facto by generalized managed floating.

5. Key Players in the Drama

Three US officials (other than Richard Nixon and John Connally) were key players in the drama of the collapse of the Bretton Woods system: Arthur Burns, Paul Volcker and George P Shultz.

Arthur Burns was the villain of the play because of his about face in 1970 on inflation. By rejecting the role of monetary forces and advocating wage price controls he had considerable responsibility for the Great Inflation of the 1970s[10]. He also was a continued advocate for pegged exchange rates and an opponent of floating. Before

[10] Milton Friedman was very pleased at Burns's appointment to the Federal Reserve Chairmanship. He expected that he would follow through with a gradualist rules based monetary strategy. When Burns changed his views and became an advocate of wage price controls and an opponent of the monetary approach to inflation Friedman was very upset and was highly critical of his former mentor for many years.

In another letter to Robert Leeson on May 11 1994, Friedman wrote
"It is interesting that you present Arthur Burns as the key opponent of inflation policies at the time (the 1960s), and that is certainly correct. However it is ironic that in the 1970s, particularly 1971, he bears considerable responsibility for the adoption of price and wage control, and accordingly for the subsequent inflation that it unleashed. This was when he was chairman of the Federal Reserve Board. He gave a speech in early 1971 essentially defending "voluntary price and wage control, something which was precisely what was precisely the opposite of what he urged long before. I say this with sadness since Arthur Burns was unquestionably the single most important professional mentor I had to whom I was extremely close as a student, as a colleague, and as a friend."

1970 he was an advocate for a gradualist approach of slowly and steadily reducing money growth to reduce inflation without engendering a recession. Once he became Chairman of the Federal Reserve and under the thumb of Richard Nixon (who was paranoid about the political consequences of rising unemployment based on his perception of why he lost the 1960 election to John F. Kennedy), he became an advocate for wage price controls (Leeson 2004). The Great Inflation and stagnation of the 1970s has largely been blamed on the policies he and the FOMC followed until 1978 (Meltzer 2010 chapter 6 and the chapters in Bordo and Orphanides 2013). Burns also was a continued advocate for pegged exchange rates and an opponent of floating (Leeson 2004)

Paul Volcker was Under Secretary of the Treasury before and after Camp David. He headed up several task forces at Treasury on the solution for the imbalances. In 1969 his report emphasized adjustment by the surplus countries. He argued that if the surplus countries could not be persuaded to revalue within two years that the U.S. should close the Gold Window until close to the very end he was an advocate for maintaining the par value system and maintaining convertibility of the dollar into gold. Following through on his views in 1969, , he argued in the spring of 1971, for an end to convertibility. He in turn persuaded John Connally, the Secretary of the Treasury and the President Nixon to do this at Camp David. Later he was a key planner of Plan X and was greatly involved in the negotiations that led by 1973 to the advent of Managed Floating. His earlier views on the importance of credibility was a theme that came back a decade later when he ended the Great Inflation. (Silber 2012,).

George P Shultz was the hero of the drama. He had three cabinet positions in the Nixon administration; Labor, OMB and Treasury. He had been a close colleague of Milton Friedman at the University of Chicago and brought many of his views to government. He was in favor of monetary orthodoxy --targeting money growth to maintain price stability and fiscal balance in the form of a full employment balanced budget. Like Friedman he believed in a policy of monetary gradualism. This policy, tried in the early Nixon years, was unsuccessful because it didn't account for shifts in velocity and because the Fed had not been not following a consistent credible rule like policy (Bordo, Erceg, Levin and Michaels 2017). As a labor economist Shultz understood the importance of large unions and big corporations in the US economy and was most successful in heading off major strikes . He also was a strong opponent of wage price guidelines in the 1960s (Aliber and Shultz.1966) and then wage price controls in the 70s. He tried unsuccessfully to counter Burns campaign for controls at Camp David but his views were later vindicated as the distortions of the controls program mounted in the next decade. His "Steady as you Go Speech" in June 1971 was a blueprint for a policy strategy for the Nixon administration which if it had been followed would likely have avoided much of the economic turmoil of the 1970s. According to Shultz in private conversation, its main goal was to head off wage price controls which he feared were coming.

"A captain has the choice of steering his ship by telltale, following the prevailing winds, or to steer by the compass. In a democracy, you must have your eye on the telltale, following the prevailing winds, or to steer by the compass." Shultz 1971 page 15.

Milton Friedman in his Newsweek column on July 26 1971 praised the speech. A year later in his May 14, 1973 Newsweek column "Steady as You Go Revisited" he argued that had the administration listened to Shultz's advice at Camp David, and not imposed the controls but still had closed the gold window that the US economy would have been much better off.

"In the price and wage area, "steady as you go" would have avoided the turmoil and disruption of the freeze, phase one and two… Most important of all, "steady as you go" would have avoided miseducating the public about the cause and cure of inflation."[11]

Shultz also was a strong advocate for floating exchange rates and viewed cutting the link with gold at Camp David as a first step in moving to a floating rate system. Later Plan X was devised as a scheme to deliver exchange rate flexibility through the back door. Subsequently as Secretary of the Treasury he pushed hard to make the US official position as in favor of floating which in the end solidified the shift to generalized floating in 1973.[12]

6. Conclusion: Some Lessons for today

[11] See Taylor 2012

[12] In private correspondence with Robert Leeson September 15 1999, available from the Hoover Institution Archives, Milton Friedman praised George Shultz for his role in ending the par value system and creating the managed float.

"You give George Shultz much credit, and he fully deserves it and more. He has a fine mind and an even more unusual character. What impressed me most about him—under both Nixon and Reagan is that in dealing with a problem, his first step is to consider long-term consequences and only then ask how various short time measures will contribute to the desirable long term outcome"

The major problem in the US and the rest of the world in the 1960s and 1970s was inflation. That is not the case today although it could be if the Fed is too slow to tighten. Rather the key problem today is fiscal. Like the 1960s and 70s the source of the problem was a run up in fiscal deficits beginning in 1965 and continuing through the 1970s. In recent years major fiscal expansion to stem the Great Recession and a significant run up in the debt to GDP ratio has not been rolled back. The recent tax cuts have increased the fiscal imbalance and are raising the debt ratio into historically high levels. As the Fed tightens to normalize monetary policy and were inflation to pick up much beyond the 2% level, debt service costs will rise which will add to the fiscal imbalances. Aggravating the problem are entitlements that cannot be cut. This means that the room for a fiscal consolidation without an increase in fiscal space could move the US in the direction of a debt crisis. (Slok 2018). This is a different imbalance than in the 60s and 70s but is still a serious one. Indeed a sovereign debt crisis would threaten the credibility of the dollar as an international currency (Eichengreen 2010).

A second source of resonance from the earlier crisis is the use of tariff protection. At Camp David the 10 % temporary import surcharge was imposed as a strategic bargaining tool to force the surplus countries to adjust. It was successful in leading to the Smithsonian agreement but in the end the only solution to the problem of the imbalances of the BWS was floating exchange rates. Today the use of tariffs as a threat to force trading partners (especially China) to change their industrial policies risks the same kind of reaction that ultimately made the Camp David strategy fail in the sense that the Smithsonian Agreement only lasted several months as the underlying deep fiscal and monetary imbalances became even worse. It also raises the specter of a trade war such as occurred in the 1930s which greatly exacerbated the Great Depression.

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