



REPUBLICAN STAFF COMMENTARY

UNITED STATES MONETARY HISTORY IN BRIEF

PART 3: THE FEDERAL RESERVE—A CENTRAL BANK'S GROWTH THROUGH TRIAL & ERROR

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Monetary policy and the Federal Reserve are often perceived to be shrouded in mystery or incomprehensible to all but central bankers. This three-part monetary history series attempts to remove that veil of mystery by offering an historical vantage point that sheds light upon and makes monetary policy more comprehensible.

SETTING THE STAGE

Part 1 (1791-1860) and Part 2 (1861-1914) of this 3-part series explored the monetary and economic history of the United States. The U.S. did not have a central bank from 1836 to the creation of the Federal Reserve in 1913, and in the absence of a bank, the nation suffered from frequent seasonal financial panics, recessions and depressions. The Panic of 1907, in which New York banker JP Morgan acted as a lender of last resort and the Treasury provided additional liquidity, finally spurred the Congress toward enactment of the Federal Reserve Act of 1913, which reinstated a central bank in the United States.

THE FEDERAL RESERVE OPENS ITS DOORS

With the creation of the Federal Reserve, the seasonal panics that had dominated the American economy since the 1870's ceased as the Fed effectively used the tools of monetary policy to provide greater elasticity to the U.S. money supply. Meanwhile, the Great War—World War I—raged as the Federal Reserve officially opened its doors for operations.

The now debunked **real bills doctrine**, which originated with Adam Smith, guided the Federal Reserve during World War I. The essence of the real bills doctrine held that short-term bank loans extended to businesses, based upon anticipated profitability of sales of goods produced, were not inflationary, while other loans were. So, as might be expected, the real bills doctrine tended to be pro-cyclical monetary policy: When the economy was doing well and sales of goods were expected to be strong, the central bank would loosen monetary policy—though lending restraint was in order; conversely, when the economy was doing poorly and sales were expected to lag, the central bank tightened monetary policy—though more liquidity was in order.

As the early Fed was guided by the real bills doctrine, loans were expanded to member banks during the war-related boom, and prices soared by 119% between 1913 and 1919. Learning from this experience the Fed's Board of Directors began to move away from the real bills doctrine, though the doctrine still held sway with the regional Federal Reserve Banks, other than the district of New York.

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THE U.S. AND INTERNATIONAL AFFAIRS AFTER THE GREAT WAR

World War I transformed the world, but perhaps because of the same isolationist tendencies that delayed U.S. entrance into the war, the United States failed to accept its new economic responsibilities as the world's emerging economic superpower.

Examples of the change in America's status abound. The nation's international position had gone from being a net debtor of \$2.2 billion (6.4% of GDP) with the rest of the world in 1914 to being a net creditor of \$6.4 billion (8.4% of GDP). The publicly held federal debt rose from \$1.118 billion (3.3% of GDP) in June 1914 to \$24.485 billion (34.9% of GDP) in June 1919. New York had effectively displaced London as the center of international finance, and the Federal Reserve had replaced the Bank of England as the global guardian of the gold standard.

Meanwhile, as the international economic system deteriorated, the U.S. government refused to forgive its allies their war debts, stemming from \$10.4 billion in U.S. loans during the war.¹ America's refusal to forgive these debts contributed to the allies' refusal to forgive \$16 billion of German war reparations, which were being relied upon to repay the U.S. To make these reparations payments, Germany had to run large trade surpluses. However, this could only happen if the U.S. and its allies reduced their tariffs and removed trade barriers against German imports.

Regrettably, neither the U.S. nor its allies would allow German imports to displace import-competing domestic industries and their workers. This made Germany dependent on loans from U.S. commercial banks to pay reparations. When Belgium and France invaded the Ruhr in January 1923, because Germany was behind on its reparations payments, U.S. commercial banks stopped making loans to Germany, and German workers launched a general strike with the resulting loss of tax revenue exasperating inflationary pressures leading to hyperinflation. The following year, the allies agreed to the **Dawes plan** in an attempt to stabilize the situation. This plan reduced German reparations payments to \$250 million in year one with gradual increases to \$650 million in year five. In exchange, U.S. commercial banks resumed lending to Germany.²

In 1925, Chancellor of the Exchequer Winston Churchill resumed convertibility of the British pound into gold at its pre-war parity, but this was a mistake. World War I had destroyed much of Britain's wealth and potential future workforce and output (through lives lost at the front); hence the U.K. was much poorer after the war. Assigning a value to the British pound in terms of gold greater than the amount of gold a pound could buy on the market after the war overvalued the currency, causing prices to be too low for British imports and too high for British exports, leading to a chronic current account deficit. Ultimately, Britain's return to the gold standard at pre-war parity lit the long fuse leading to the Great Depression.

THE STRONG FED: THE FEDERAL RESERVE IN THE 1920's

The Fed initially began **open market operations**³ in the 1920's to provide income to the regional Federal Reserve Banks. By the end of the decade, open market operations became the Fed's primary monetary policy tool.

Also, in the early part of the decade, the Federal Reserve raised interest rates and contracted the money supply to reverse the inflation that had occurred during the war. This action caused a brief, but deep, recession from January 1920 through July 1921. Afterward, Benjamin Strong, who was the first Governor of the Federal Reserve Bank of New York, emerged as the de facto CEO of the Federal Reserve—largely through the force of his personality.

Strong had a close friendship with the Governor of the Bank of England Montagu Norman, and to help the Bank of England maintain convertibility without devaluing the British pound, the Federal Reserve lowered interest rates in 1927 and 1928—even though an accommodative monetary policy was inappropriate for the booming U.S. economy. This action helped to inflate the U.S. stock market bubble of the late 1920's.

THE FED'S GREATEST FAILURE: THE GREAT CONTRACTION

Strong's death in 1928, at the beginning of the Great Depression, triggered a three-way power struggle within the Fed—involving the Governor of the Federal Reserve Bank of New York (George Harrison), the Federal Reserve Board in Washington, and the Governors of the other Federal Reserve Banks. The Board and the other regional Federal Reserve Banks—either because they believed that prices were too high and wanted to reduce prices back to pre-war levels, or because they resented Strong's support for Britain—pushed for a contractionary monetary policy in 1929, repeatedly blocking Harrison from taking the actions needed to counteract the contraction of the money supply. Thus, the **Great Contraction** began in August 1929 and continued until March 1933.

During the Great Contraction, the Fed failed to perform its lender-of-last-resort function of providing loans to otherwise solvent, but temporarily illiquid, commercial banks.⁴ This meant that many solvent banks that could have survived ended up failing. Also, the Fed reduced its holdings of Treasuries through open market operations; and despite massive gold inflows in 1930 and 1931—the Federal Reserve effectively went to sleep on the world's gold reserves by allowing its reserve ratio to increase to a peak of 83.4%. Had the Fed not existed, commercial banks would have had \$1.05 billion of reserves to expand deposits and loans at this critical moment.⁵

The adverse economic consequences of the Fed's contractionary monetary policy were both global and monumental. These included: massive price deflation (25%); unemployment (1 in 4 Americans); intensifying waves of bank failures; and fire sales of assets, which undermined net worth.

FRANKLIN D. ROOSEVELT: MONETARY CONFUSION

President Franklin D. Roosevelt took office on March 4, 1933, and his confused and contradictory views on monetary policy prolonged the **Great Depression** in the United States. While some urged "reflation,"⁶ which would have been the correct policy, other forces conspired against them.

On April 5, 1933, private households and firms were mandated by an Executive Order to sell gold to the Fed at a price of \$20.67 per ounce; on April 17, 1933, gold exports were forbidden; on June 5, 1933, "gold clauses" (contracts providing the creditor with the option of demanding payment in

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gold) were abrogated; on June 12, 1933, the London Conference was convened to discuss restoring the gold standard after devaluation; and on July 3, 1933, the London Conference collapsed after FDR sent conflicting instructions to U.S. delegates. In late December, FDR required the Federal Reserve to sell its gold to the Treasury at \$20.67 per ounce. Then on January 31, 1934, FDR signed the **Gold Reserve Act**, which devalued the U.S. dollar by 59% by increasing the gold price from \$20.67 to \$35.00 per ounce.

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THE ECCLES FED: THE 1937 RECESSION AND A RECORD OF FAILURE

Necessary price reflation began to occur, but FDR short-circuited it by appointing Marriner Eccles (November 15, 1934 – February 3, 1948) as Chairman of the Federal Reserve Board. Eccles was a proto-Keynesian, and he opposed devaluation and reflation; blamed the Great Depression on over-investment by firms and under-consumption by households; favored income redistribution; and thought monetary policy was ineffective, and consequently the Federal Reserve did not expand the money supply.

The Federal Reserve was reorganized into its present structure under the **Banking Act of 1935**. The Act was meant to end confusion at the Fed and to centralize decision-making powers in Washington. The Board of Governors of the Federal Reserve System replaced the Board of Directors; the Secretary of the Treasury and Comptroller of the Currency were removed from the Board; the terms of Board members were increased from 10 to 14 years; Governors of regional Federal Reserve Banks were renamed as Presidents; the Board of Governors was placed in charge of the Federal Reserve System; the Chairman of the Board of Governors was given an executive role; and the Federal Open Market Committee (FOMC) was created. The FOMC was designed to be a balanced body, composed of regional Federal Reserve Bank presidents and members of the Federal Reserve Board, though the FOMC quickly came to be dominated by the Chairman.⁷

The Federal Reserve finally began to increase the money supply in 1939 to finance war-related spending, and by 1943 prices finally exceeded their 1929 level—showing that reflation worked, when it was tried.

Meanwhile, cautious bankers who survived the Great Contraction wanted to keep large excess reserves in case of future bank runs, but Eccles thought such reserves would cause inflation. So, from August 1936 to May 1937, the Federal Reserve doubled the required level of reserves that commercial banks were required to keep at the Fed. Banks responded by contracting their loans and deposits to build new excess reserves above the now higher level of required reserves. This caused another severe recession from May 1937 to June 1938, showing Eccles's experiment to be an economic failure.

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WORLD WAR II, KOREAN CONFLICT, AND "THE ACCORD"

Through World War II, the Federal Reserve assumed a role subservient to the Treasury. To help the Treasury finance the war, the Fed targeted the long-term Treasury bond rate, keeping it at 2.5%. However, this built inflationary pressure during wartime, though price controls and rationing disguised it. Nonetheless, inflation exploded after the war when the price controls were lifted.

The **Bretton Woods system** was instituted after the war. This system created the **International Monetary Fund (IMF)** and the **World Bank** (and eventually the World Trade Organization (WTO)).⁸ The Bretton Woods system required the United States to exchange gold for U.S. dollars at a fixed price of \$35.00 per ounce, but only with foreign governments or their central banks—not U.S. households or firms. Simultaneously, Bretton Woods required other countries to maintain a pegged exchange rate with the U.S. dollar.⁹ This arrangement is sometimes referred to as the **gold exchange standard**.

Because of Eccles's opposition to monetizing the federal debt, President Harry S Truman replaced Eccles with Thomas B. McCabe (April 1948 to April 1951) as Chairman. As the Korean conflict began, inflation soared, and the Federal Open Market Committee (FOMC) challenged the Treasury's interest rate policy. This led to **the Accord** between Chairman McCabe and Secretary of the Treasury John W. Snyder, which was brokered by Assistant Secretary of the Treasury William McChesney Martin, Jr. on March 4, 1951. This Accord provided for the Federal Reserve to conduct open market operations in Treasury "bills only," allowing the market to determine long-term Treasury bond rates; and it began the Fed's operational independence.

Truman then appointed Martin to succeed McCabe as Chairman, believing Martin would allow the Treasury to recapture the Federal Reserve. Instead, Martin supported the Federal Reserve's newly won independence.

THE MARTIN FED: UNNECESSARY VOLATILITY

During the Martin era (April 2, 1951 – February 1, 1970), monetary policy decisions were largely based on Martin's "feel of the market." In practice, Martin targeted interest rates and acted in a pro-cyclical fashion, whereby the Federal Reserve would add reserves to hold down interest rates when output rose and subtract reserves to maintain interest rates when output fell. This contributed to the short business cycles in the 1950's.

The Federal Reserve's "bills only" approach was dropped during the Kennedy Administration and replaced with Operation Twist. In **Operation Twist**, the FOMC bought Treasury bonds to lower long-term interest rates and spur domestic investment, while simultaneously selling Treasury bills to increase short-term interest rates. The goal was to attract foreign portfolio investment, support the U.S. dollar, and reduce gold outflows. However, Operation Twist is now regarded as a failure. Eventually, economists Milton Friedman, Karl Brunner, and Allan Meltzer became leading critics of Martin.

THE BURNS FED: THE GREAT INFLATOR; GUNNING THE MONEY SUPPLY

Succeeding Martin as Chairman of the Fed was Arthur Burns (February 1, 1970 – March 8, 1978), who became known as the Great Inflator.

In the early 1970's, attempts were made to save the Bretton Woods system of fixed exchange rates tied to the dollar. On August 15, 1971, President Richard Nixon announced his **New Economic Plan**. This plan imposed a 90-day price freeze followed by comprehensive price controls; a 10% tariff on imports, and effectively ended the gold exchange standard, thus removing the last vestiges of a link from the U.S. dollar to gold.

The Bretton Woods system created the IMF, World Bank (and eventually the WTO). It put the U.S. on a gold exchange standard, whereby the United States was required to exchange gold for U.S. dollars, but only with foreign governments or their central banks.

In 1950, the FOMC challenged the Treasury's interest rate policy, resulting in the Accord, which began the Fed's operational independence.

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In reaction to the New Economic Plan, Treasury Secretary John Connolly negotiated the Smithsonian Agreement with other G-10 countries. This agreement provided for a devaluation of the U.S. dollar from \$35.00 per ounce of gold to \$42.22 in exchange for the resumption of the Bretton Woods system. However, this agreement quickly fell apart. By March 1973, the era of freely floating exchange rates, not tied to gold, began.

Chairman Burns succumbed to Nixon's pressure to "gun the money supply" while price controls were in place to make the economy appear better than it was when Nixon ran for reelection in 1972. Under Burns, the Fed followed a go-stop approach with unpredictable swings from loose to tight monetary policy, and stagflation resulted.

Briefly succeeding Burns as Chairman in 1978 was G. William Miller, who was appointed by President Jimmy Carter. Miller was a Keynesian who opposed higher interest rates to check inflation and blamed inflation on "real" factors such as oil shortages and labor contracts with cost-of-living wage adjustments. Miller continued Burns's misguided policies. Price inflation soared; and the foreign exchange value of the U.S. dollar collapsed. Carter appointed Miller as Treasury Secretary to remove him from the Fed.

THE VOLCKER FED: BREAKING THE BACK OF INFLATION

President Carter next appointed Paul A. Volcker (August 6, 1979 – August 11, 1987) as Chairman. Until 1982, Volcker followed a **pseudo-monetarism**, under which the Federal Reserve stopped targeting the federal funds rate and claimed that it was targeting monetary aggregates. This allowed high nominal and real interest rates to arrest price inflation; but it was mainly a ruse, designed to shield the Federal Reserve from the blame for the resulting recessions. (Under true monetarism, a central bank would focus on the growth rate of money aggregates to achieve price stability. Monetarism assumes that the velocity of money is stable.)

Volcker overreacted to President Reagan's tax cuts as being inflationary—an error that contributed to the severity of the August 1981 to November 1982 recession. Afterward, Volcker adopted a variety rules-based approaches at different times, and the FOMC abandoned targeting monetary aggregates.

In 1985, Volcker concurred with the **Plaza Accord**, which committed the United States to a depreciation of the foreign exchange value of the U.S. dollar. Then, just two years later in 1987, Volcker concurred with the **Louvre Accord**, which committed the United States to stop the depreciation of the foreign exchange value of the U.S. dollar. The monetary flip-flop from accelerating money supply growth in 1985 to decelerating money supply growth in 1987 to meet U.S. commitments in these accords contributed to the "Black Monday" stock market crash on October 19, 1987.

THE EARLY GREENSPAN FED: RULES-BASED POLICY WORKS

President Reagan appointed Alan Greenspan (August 11, 1987 – January 31, 2006) to follow Volcker as Federal Reserve Chairman. Greenspan had established strong credibility early in his tenure on "Black Monday" as he issued a statement that affirmed the Fed's "readiness to serve as a source of liquidity to support the economic and financial system," and he exerted

behind-the-scenes pressure on commercial banks to provide credit to independent investment banks. These actions prevented a wider financial crisis, and Greenspan's credibility grew even stronger as he helped to nip inflation during the July 1990 to March 1991 recession.

Greenspan also received high marks for increasing the Fed's transparency. In 1994, he began announcing federal funds rate targets publicly after FOMC meetings; and in 1998, he began releasing even more details. During the great boom of the 1990's, Greenspan tightened monetary policy, increasing U.S. interest rates and the foreign exchange value of dollar.

The era under Volcker and Greenspan is generally referred to as the **Great Moderation** (1983-2000), during which the Fed pursued price stability through rules-based monetary policy, much along the lines of the Taylor rule, devised by Stanford economist John Taylor. Generally, the Taylor rule holds that the Fed should increase the federal funds rate as inflationary forces increase and lower it as they decrease. This approach resulted in two long economic booms, low inflation, and lower unemployment rates.

CONCLUSION

Covering more recent events at the Fed and U.S. monetary policy prescriptions for the future is beyond the reach of this history series. Those subjects will be covered in future JEC Republican papers.

In sum, the monetary history experience in America has been:

- Economic freedom and prosperity with an independent central bank, managed by competent individuals (e.g. the First Bank, the Second Bank from 1822-1828, and the Federal Reserve during the Great Moderation);
- Challenges absent a central bank (e.g. 1811-1816, 1836-1915); and
- Recessions, depressions and stagflation when the central bank endures interference from politicians (e.g. the Second Bank from 1816-1822 and 1828-1836, the Eccles Fed, and the Burns Fed.)

The American experience is that economic freedom and prosperity are best served by monetary policy that is rules-based and non-interventionist.

The era under Volcker and Greenspan is generally referred to as the Great Moderation (1982-2000), during which the Fed pursued price stability through rules-based monetary policy. The results of this approach were two long economic booms, low inflation, and lower unemployment rates.

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¹ The \$10.4 billion in U.S. World War I loans included \$4.8 billion to the U.K. and \$3.4 billion to France.

² Felzenberg, Alvin Stephen, *The Leaders We Deserved (And a Few We Didn't)*, Basic Books, New York, 2008, p.207.

³ As noted in Part 1 of this series, open market operations include buying and selling of gold, silver, and government debt securities.

⁴ During the Great Contraction, the Fed actually reduced its loans to banks from \$1.29 billion in 1928 to \$0.12 billion in 1933.

⁵ Timberlake, Richard H., *Monetary Policy in the United States: An Intellectual and Institutional History*, The University of Chicago Press, Chicago, 1993, p.266.

⁶ Notably George Warren, Irving Fisher, and John R. Commons urged reflation.

⁷ Currently, the FOMC is composed of 12 members: seven members from the Board of Governors; the President of the Federal Reserve Bank of New York; and four of the remaining 11 regional Federal Reserve Bank presidents. (The seven other regional bank presidents currently do not vote.)

⁸ The World Trade Organization was finally created in 1995.

⁹ The U.S. dollar was fixed at \$35.00 per ounce of gold, but only foreign central banks could demand gold for U.S. dollars. This was not a gold standard, but a gold exchange standard.

For reference and further reading, see, Timberlake, Richard H., *Monetary Policy in the United States: An Intellectual and Institutional History*, The University of Chicago Press, Chicago, 1993.