

**THE LEARNING CURVE
OF THE FEDERAL RESERVE
U. S. Monetary Policy 1965-2005**

By Wayne Jett

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October 6, 2004, marked the 25th anniversary of the Federal Reserve's move from an interest rate target to a money growth target as the tool chosen for fighting inflation. The Federal Reserve Bank of St. Louis convened a conference to consider how current U. S. monetary policy is informed by that 1979 milestone, by open market operations with money growth targets, and by 22 years of experience since the Fed abandoned money growth targets in 1982.

Three major papers were presented, plus commentaries on each, and two panels discussed their merits.¹ Were monetary issues not such a crucial weakness in U. S. public policy, and thus a significant global concern, the St. Louis discussions might slide by as an academic exercise.

But they deserve attention. Not because they are clairvoyant or comprehensive - they are neither. In fact, the St. Louis discussions were often politically correct in the academic sense. The commentators were demand-side economists evaluating demand-side policies implemented by the Federal Reserve. Some sins are overstated, some go unnoticed and some are forgiven too quickly.

"Origins of the Great Inflation"

On the other hand, many insights are available, both in what is said and in what is not. Allan H. Meltzer of Carnegie Mellon University marks the "Great Inflation" as running from 1965 to 1984,² emphasizes Fed conduct in 1965,³ and concludes that Fed chairman William McChesney Martin "... was in a position to stop..." inflation until January, 1970, but "... failed to do so."⁴

Meltzer reports that inflation "destroyed"⁵ the Bretton Woods protocol for the international monetary system, so the Fed and all other central banks were forced to stabilize their currencies with their own policies and ideas.⁶ He concludes that the Fed's economic theories, despite flaws, were sufficient to defeat inflation, but politics (particularly unwillingness to pay the trade-off of higher unemployment) prevented effective action.

Christina D. Romer of UC Berkeley sees the cause of the Great Inflation somewhat differently. Defective theory

involving the "natural rate" of unemployment required to prevent inflation came into use in the mid-1960s giving rise to moderate inflation.⁷ Both theory and inflation worsened in the early 1970s, then improved before turning worse yet into the late '70s.⁸ During this time, Fed chairman Arthur Burns saw the Fed's primary role as "managing aggregate demand" to achieve "a return to price stability."⁹ Nevertheless, after "tightening" during recession in 1974, Burns "led rapid monetary expansion in 1977."¹⁰

In Romer's view, ideas began the Great Inflation and ideas ended it. So politics were not entirely to blame, although unwillingness to pay the "natural" unemployment price for low inflation played a role. Romer refines an improved idea from this experience: "inflation can be controlled by aggregate demand policy," which she credits as the idea that "fueled the Volcker disinflation" and "broke the back of inflation worldwide."¹¹

"The Reform of 1979 - How and Why It Happened"

Other commentators at the St. Louis conference from the Federal Reserve system (Lindsey, Orphanides and Rasche) point out that the Paul Volcker-led Fed on October 6, 1979, conditionally adopted a target for aggregate money growth, not aggregate demand.¹² Volcker led the move to money growth targets from interest rate targets, not as a monetarist, but partly to shield the Fed from public criticism for sharp rises in interest rates.¹³

These commentators note that, while targeting money quantities in 1980, Volcker lamented the murkiness of any relationship between money quantities and GDP growth, and the arbitrariness of defining and measuring money.¹⁴ The Fed abandoned money aggregate targets in mid-1982, and money aggregates play no role in today's Fed operations.

Monetary Policy Debate Since 1979

Marvin Goodfriend of the Richmond Fed describes the "consensus model" of monetary theory. Depending on who is using it, the model is sometimes called the New Neoclassical Synthesis Model and other times the New Keynesian Model. The model focuses on managing aggregate demand to optimize unemployment at its "natural rate" where "output equals potential."¹⁵

Goodfriend perceives an irony that "monetarists deserve much of the credit" for defeating virulent

inflation in the early 1980s, "yet the Fed currently ignores money" quantities.¹⁶ He argues that money quantities ought to be integrated into Fed operations "to some extent."¹⁷ He further notes that U. S. monetary policy has had no anchor for the dollar since the Bretton Woods international monetary protocol "collapsed in 1973."

Goodfriend observes that neither Congress nor the Fed has acted to provide a dollar anchor, and concedes that recent developments may make an anchor unnecessary. But he contends the desirability of an anchor "is [at least] debatable" in view of changing Fed membership and U. S. fiscal policy. Nonetheless, Goodfriend sees monetary theory and policy as "revolutionized in the two decades since the Federal Reserve moved in October 1979 to stabilize inflation and bring it down."¹⁸

If the views related so far indicate a significant degree of divergence from consensus within demand-side monetary theory, stay tuned. Laurence M. Ball of The Johns Hopkins University reviews Goodfriend's survey of "current mainstream thought," asserts no revolution has occurred since 1979, and credits Milton Friedman's 1968 "precise theory of the Phillips curve" as "still the best simple theory of the unemployment-inflation trade-off."¹⁹

Ball questions the usefulness of "rational expectations theory" (nee "credibility" of central banks) for "understanding inflation in the real world" and he finds "little evidence that inflation targeting changes the behavior of output or inflation."²⁰ Moreover, Ball examines the "modern consensus model," describes it as "wildly counterfactual," and concludes its "absurd predictions make it a poor tool for policy analysis."²¹ He shows that corrections necessary to make the "modern consensus model" useful amount to abandoning it and returning to Friedman's 1968 re-statement of the Phillips curve theory.

Ball reports that "the Fed has *not* been unusually successful in reducing inflation" and has, in fact, been "near the middle of the pack" among the world's central banks. He says reducing inflation is "easy to accomplish ... if policy-makers are willing to slow the economy sufficiently."²²

Ball credits U. S. unemployment performance as excelling compared to other countries, but dissents "180 degrees" from Goodfriend's view that the reason is the Fed's unflinching inflation fight. Ball says U. S. unemployment has been relatively low because the Fed "has *not* been as single-minded about fighting inflation" as other central banks.²³

Anna J. Schwartz of the National Bureau of Economic Research, speaking on behalf of monetarists at the St. Louis conference, says the economics profession now embraces the belief that "... there is no long-run trade-off between inflation and unemployment..."²⁴

With dissension of this magnitude within its ranks, is criticism from outside the demand-side fraternity really necessary? Of course, it is. With disagreement of such fundamental gravity among even those who guide U. S. monetary policy, inquiry into the soundness of the Fed's theory and practices is urgently needed.

A revealing aspect of the St. Louis Fed symposium is what was *not* said there. No mention was made of the seminal event of the "Great Inflation:" the 1971 presidential order closing the U. S. gold window to European central banks, effectively disabling the gold standard mechanism for maintaining dollar value stability. Thus, despite relative candor in debating some issues within demand-side theory, demand-side ideology places limits beyond which no Fed insider may go.

A Classical Critique of Demand-Side Theory

The question above may not seem serious, but the answer requires understanding that demand-side economics and classical (supply-side) economics are not merely two divergent branches of a common intellectual field of inquiry. Demand-side theory is relatively recent in origin, first gaining traction through Depression-era politics of the Franklin Roosevelt presidency.

Young advisors surrounding FDR undertook development of intellectual theories to support federal relief programs. These theorists tended to examine the economy from the viewpoint of the central planner, and from the viewpoints of political constituencies, primarily consumers. The resulting economic ideas were often attributed to the English classical economist, John Maynard Keynes, although he did not participate actively in their development and is known to have dissented from them at times in occasional written comments to FDR.

Given primacy as foundation for federal government programs during five consecutive presidential terms (1932-1952), demand-side economic theory gained firm footholds both in public policy and in academia. By the mid-20th century, demand-side theory was well established in academic institutions alongside classical economics. In the ensuing 50 years, demand-side theory came to dominate the

academy so thoroughly (to the exclusion of classical economics) that no institution of higher learning presently offers an accredited degree in classical economics.

Classical economics came through Adam Smith, Alexander Hamilton and others who probed conditions that promote individual productivity and prosperity. Classical theory fashioned public policy accordingly. The gestation of classical theory was much longer than demand-side, though the "supply-side" descriptive name for classical economics is more recent.

Classical theory was dubbed "supply-side economics" in the midst of the Great Inflation of the 1970s, partly because classical economics had been wrongly faulted as blameworthy in the Crash of 1929 and the Great Depression. The case showing serious violations of classical theory as the true culprits, thus exonerating classicists, has been made elsewhere to willing minds.²⁵ The focus here will remain the merits of current U. S. monetary theory and policy.

The point of this passing reference to the genesis of demand-side theory is that it was born of a political motive to escape classical principles. From the outset, monetary and fiscal principles of classical economic theory were politically troublesome to New Deal policy-makers.

Under the twin-barreled assault of protective tariffs and sharply higher income taxes, the U. S. economy contracted as private capital sought shelter in gold rather than productive investment. During 1933, his first year in office, President Roosevelt seized all privately owned gold, paying dollars at the stated exchange rate of \$20.67/oz.

In 1934, Congress authorized by statute the president's seizure of gold and, in addition, authorized Roosevelt to devalue the dollar. FDR promptly did so, reducing the dollar's value almost 70% to \$35/oz of gold.

The dollar's devaluation would cause price inflation to permeate the economy during the next 15 years or more. But FDR's manner of handling the seizure of gold damaged the private economy even more. By seizing private gold, paying \$20.67/oz and then devaluing the dollars paid, FDR's actions amounted to confiscating without compensation a major portion of the nation's private investment capital.

This federal confiscation of private capital debilitated investment in production and employment, importantly setting back economic recovery. Then legislative "reform" of the Federal Reserve in 1935 gave FDR effective control of the Fed. Making matters far worse,

the FDR-dominated Fed further contracted the private economy by twice radically increasing required bank reserves in 1936-37. Occurring as they did, after banks had already safely rebuilt reserves, these inexplicable Fed actions assured that banks could make no new loans and would have to call in existing loans.

Another aspect of Roosevelt's influence deserves acknowledgment in the current debate of U. S. monetary policy. FDR viewed the analyses developed by his aides and called "Keynesian," not as serious economic theory, but as intellectual cover for his political programs.

The diaries of FDR's Treasury secretary,²⁶ Henry Morgenthau, record their discussions of March 5 and 7, 1939, when FDR suggested to Morgenthau greater government spending to off-set the business downturn. Morgenthau countered FDR by proposing tax cuts he assured would produce "... within a month ... a boom."

Roosevelt admonished Morgenthau for bringing him "a Mellon plan of taxation" that would signal a victory by his political foes in business, ridiculed as "very stupid" a small sign ("Does It Contribute to Recovery?") Morgenthau kept on his desk, instructed "this is a matter of politics," and shouted as Morgenthau and his undersecretary John W. Hanes departed his office "For God's sake, don't be so innocent!"

Innocent or not, academia continues to treat demand-side theory as serious intellectual endeavor, much to the detriment of scholarship and global economic progress. The Federal Reserve Board and staff follow in its thrall. Regardless of guile, no chain of abstractions can achieve price stability while the currency unit value fluctuates unpredictably.

The Bretton Woods Responsibility

Under the Bretton Woods protocol of 1944, the U. S. took upon itself the key role in the international monetary system. The U. S. was obliged to maintain the dollar's value at \$35 per gold ounce, so that every other currency could link its own value to the dollar.

The Bretton Woods protocol did not simply collapse of its own accord, nor fail because it was unworkable, nor was it innocently "destroyed by inflation." The Bretton Woods protocol was destroyed by the failure of the U. S. Federal Reserve to honor its obligation to maintain the dollar's value. The Fed knowingly created inflation by issuing

excess currency to fund federal debt at below-market interest rates.²⁷

The Fed's practice of accommodating federal debt appeared subtly in the 1950s, reappeared in the mid-60s, and grew each year as demand-side theory became more supportive. The seminal event, going entirely unremarked at the St. Louis conference of 2004, occurred August 15, 1971, when President Nixon closed the gold window to European central banks. By mid-1972, the price of gold doubled and, by Spring 1975 hit \$200 per ounce, five times the price four years earlier.

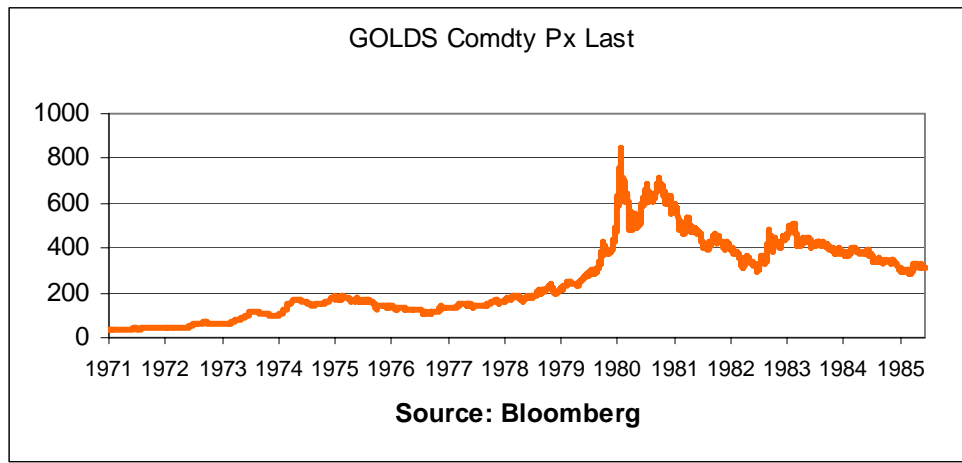


Figure 1. Gold Price 1970-1986

Why would the noted scholars of St. Louis 2004 avoid mentioning such an obviously pivotal event that unleashed soaring inflation on U. S. and world economies during the following years? The answer is patently obvious. Acknowledgment of the importance of cutting the dollar's anchor to gold would raise questions whether that was the central error, and whether it should be reversed.

Sadly, to sidestep the same subject, the esteemed outgoing chairman of the Fed, Alan Greenspan, testified to Congress on July 21, 2005, that no advantage exists in returning U. S. monetary policy to the gold standard. Why? "Because we're acting as though we were there." From an eminently educated economist who witnessed the gold price move unpredictably between \$250 and \$480 per ounce during his last ten years in office, this testimony is difficult to fathom.

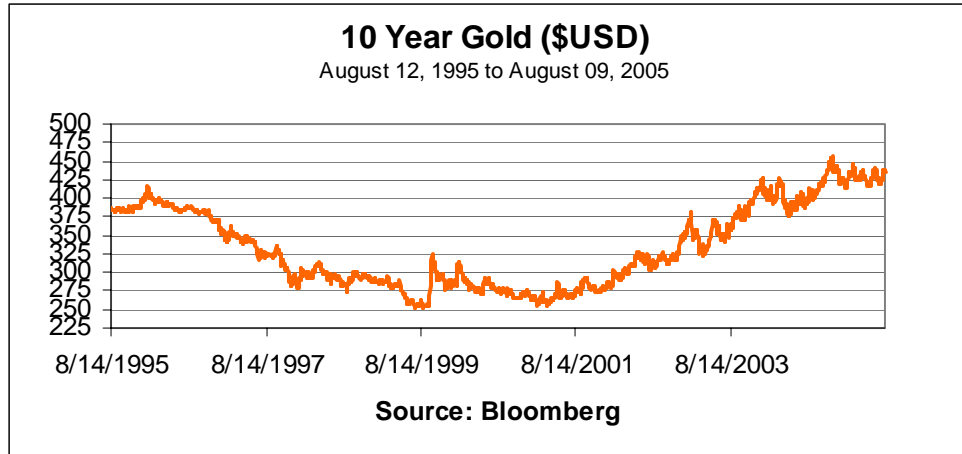


Figure 2. Gold Price 1995-2005

Admirers of Chaos

When the gold standard rule was lifted in 1971, discretionary power was conferred upon the Fed chairman that no incumbent has been willing to yield. This power includes use of currency creation to resolve crises encountered - discretion quite attractive to private banks wishing assistance on occasion. Another faction loving the *status quo* floating dollar is the foreign exchange investment community, which presently invests more funds in currencies than are invested in corporate stocks and bonds.

The Fed could choose, as chairman Greenspan says it has, to behave as if it is on the gold standard. The Fed could adopt a price target for gold and create only the number of dollars required to hit the target. The benefits of a stable dollar to the U. S. economy, to other G8 economies and to emerging economies would be very significant. Of course, a stable dollar would be much less interesting to forex speculators.

This may not be as apparent to those guiding the Fed as it should be. Demand-side theory is deeply embedded in the thought processes of Fed policy-makers. Economic theory can misguide attention, confuse thinking and produce counter-productive actions despite good intentions.

New Reality Show: 1979-1982

The October 6, 1979, Fed meeting provides a case in point. Commentators in St. Louis 25 years later unanimously credited that meeting as a turning point in the fight against inflation. No one acknowledged that inflation

skyrocketed *after* the meeting and as a result of the actions taken.

In adopting a new target for money growth, the Fed misjudged the appropriate limits on money quantities and actually added substantial new liquidity to the economy. In response, the price of gold (which had been \$240 in the Spring and below \$300 in August of 1979) spiked to \$890 per ounce in February, 1980. During 1980, the gold price fell to \$500, and then rose again to \$750 before ending the year above \$600.

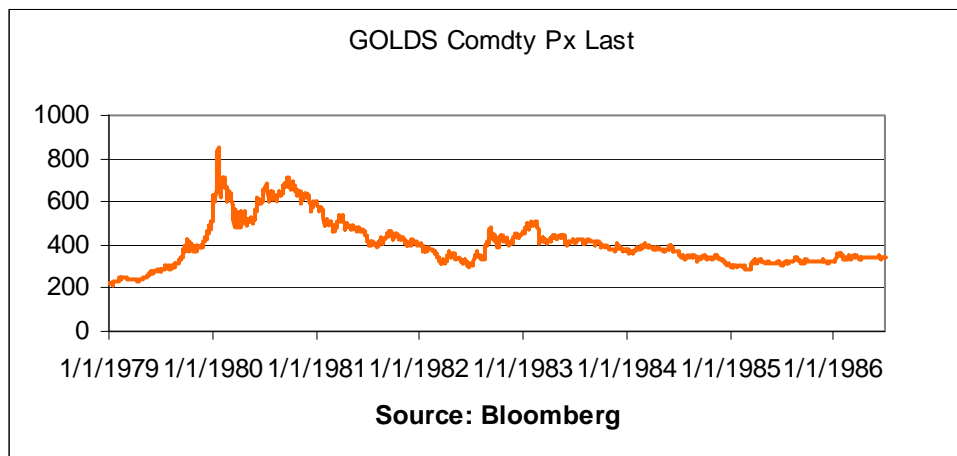


Figure 3. Gold Price 1979-1986

After the 1980 election of President Reagan raised prospects of significant cuts in marginal tax rates, demand for dollars increased and the dollar's value recovered sharply. With economic growth absorbing excess monetary liquidity, the gold price ended 1981 near \$400.

The gold price fall (dollar appreciation) continued in early 1982, slipping \$10 on St. Patrick's Day to \$310, and commodity prices adjusted to the deflated dollar as they must. Classical economists Robert A. Mundell of Columbia University and Jude Wanniski alerted Fed chairman Volcker that dollar deflation below \$300 gold would cause severe distress in financial institutions and commodity-based industries. Regardless, the Fed remained attentive to the views of monetarists who insisted addition of liquidity would re-ignite inflation and collapse the bond market.

In August, 1982, Mexico notified U. S. banks of its impending default on loans collateralized by oil, since the oil price had fallen \$5 below the "tipping point" of \$36 needed to repay the loans. The Fed had no choice but to abandon monetarist advice and monetize \$3 billion in Mexican bonds to avoid the default endangering U. S. banks.

On this news, the gold price moved higher, but interest rates did not follow. Instead, the bond market rallied strongly and equity markets surged (DJIA from 790 to 1100 and NASDAQ from 150 to 250 at year-end). Economic growth had strengthened the dollar but required a stable dollar (meaning sufficient liquidity) in order to continue at rates permitted by the cuts in marginal tax rates.

One will not find these facts and analysis examined, much less expressed as consensus, in the St. Louis proceedings. Demand-side commentators acknowledge that the Fed abandoned money quantity targets in 1982, but are far too lenient in explaining why monetarism theory failed in practice.

Selection of the appropriate measure of money, current gauging of money growth and estimate of liquidity requirements - each of these proved to be beyond the capability of Fed planners in 1979. Moreover, the crucial "velocity" factor assumed by monetarist theory to be very stable (as Friedman concluded it had been during the gold standard) turned out otherwise. In short, the monetarism experiment begun by the Fed October 6, 1979, failed miserably and was near disaster from beginning to end.

Federal Reserve Theory: Bankrupt Central Tenet

On June 6, 2003, the *Financial Times* of London reported Milton Friedman's concession that his theory of money quantities had failed. The St. Louis commentators made no such concession, and continue to honor as a central tenet of their economic model Friedman's theory describing inflation as a trade-off for employment.

Demand-side theorists claim to honor a second central premise credited to Professor Friedman asserting that "...inflation is always and everywhere a monetary phenomenon." Of the two premises attributed to Friedman, demand-siders should recognize, but apparently do not, that they must choose which to believe is valid. Both cannot be true.

Classical economists have no difficulty making the choice. A monetary phenomenon is one exhibited by the currency managed by the central bank. Inflation is a creature that lives and dies by the hand of the central banker and, thus, is always and everywhere a monetary phenomenon.

Let's be clear about why inflation is a monetary phenomenon and why inflation is not caused by employment. Inflation (or deflation) is a change in value of the monetary unit. Any such deterioration in monetary unit

value must be worked through the entire pricing system of the economy if the value of property, goods and services is to be preserved. The Fed can control the unit value of its currency; workers cannot control or affect the unit value of currency received as pay.

This being the case, then who could believe that inflation is caused when the employment level rises above a "natural" rate? Apparently the demand-siders who guide the Fed believe it.

As reflected in the St. Louis proceedings, the Fed uses the funds rate target to manage "aggregate demand." By raising the funds rate target to reduce aggregate demand, the Fed aims to slow production, thereby increasing unemployment so wage-push inflationary pressures will be subdued.

By treating the employment level as a purveyor of inflation, the Fed robs the labor market of the benefits of supply and demand signals. Oil, e.g., needs a trustworthy signal of a higher oil price to justify investment in more production. When labor is in short supply, the signal of higher wages will attract more workers. Meanwhile, workers who can provide the desired services during the shortage are entitled to gain from their market advantage. This does nothing to produce inflation. If workers are not permitted to gain in periods of labor shortage, the market will not work to supplement and replenish supply.

Untrustworthy currency undercuts the supply message given by higher wages or prices. Labor is handicapped by bad money in this manner, as are all other goods and services. But labor is dealt a doubly damaging blow by the Fed's erroneous embrace of Phillips curve theory, even as refined by Friedman. The Fed beats down any employment rate above what is perceived as "natural" by Phillips curve theorists.

Thus, the U. S. market for human services is furnished a deteriorating currency by the Fed. The Fed then acts to prevent the workers from adjusting to the changed currency value. Workers might choose to work more, or require more members of the household to work, to restore purchasing power. Regardless, the Fed acts with its funds rate target "tool" to slow economic growth and reduce employment opportunities.

The monetarist Anna Schwartz reported at St. Louis a consensus that "... there is no long-run trade-off between unemployment and inflation..." Indeed, demand-side economists do use this statement uniformly. Yet Goodfriend and Ball showcase the existing consensus supporting

Friedman's definition of the Phillips curve trade-off between unemployment and inflation.

Thus, denial of any *long-run* link between unemployment and inflation merely serves to mask the Fed's practice of targeting a higher funds rate to reduce aggregate demand, slow economic growth and raise unemployment *in the short-run* to reduce inflation. One presently out of work would remind demand-siders, as Keynes did long ago, that "in the long-run we are all dead."

Demand-side monetary theory is bankrupt, having no essentially valid core. The Phillips curve inflation-unemployment "trade-off" is theoretically absurd, and its effects are diabolical on workers at every income level. The Fed's manipulation of the funds rate target destabilizes other market variables affecting the dollar's value, so isolation of employment as inflation's controlling variable is both logically indefensible and morally repugnant.

There being no true inflation-unemployment trade-off, the entire demand-side theory chain that aims to slow the economy is misconceived. There is no point to slowing the economy, since no theoretically sound reason exists to raise unemployment.

Federal Reserve Practice: Inapt "Instrument"

Demand-side theorists dominant at the Federal Reserve choose as the Fed's only inflation-fighting "tool" an interest rate target that provides *no prospect* of stabilizing the dollar's value. The Fed actually wields the funds rate target as an instrument of *fiscal* policy to raise and lower the government-imposed cost of doing business, much as tax laws do.

The federal funds rate target instrument enables the Fed to increase unemployment, but is entirely inapt for fighting inflation. With the case made that increased unemployment contributes nothing to the inflation fight, the funds rate target instrument ought to be abandoned *posthaste*. Indeed, as wielded by the Fed, the funds rate target does more harm than good.²⁸

By slowing economic growth to produce higher unemployment, the Fed reduces demand for dollars in the productive economy without removing dollars from the system. The reduced demand for dollars produces greater excess liquidity and more inflation. The Fed could hardly conceive a more counter-productive way of conducting itself.

This explains why the Fed is notorious for "overshooting" in each rate-hiking cycle by raising rates too high until economic recession occurs. Since the rate hikes themselves produce excess liquidity and inflation, once the rate hikes begin the Fed can find no place to stop because the hikes feed the inflation data which alarm the Fed even more. The rate hawks never learn, calling for "higher, faster" rate hikes as the economy goes right over the recessionary cliff.

Unfortunately, the charts that show inflation following the fed funds rate upward can be read two ways. Demand-siders who endorse the inflation-unemployment tradeoff of the Phillips Curve and love the fed funds target "tool" read the charts erroneously. They say: "Look at the Fed's brilliance - predicting the rise in inflation before the data showed it!" The truth is the inflation follows the rate hikes upward because each rate hike produces greater excess liquidity; *i.e.*, more inflation.

Validation of Classical Theory

Classical theory for centuries has viewed gold as the most reliable and stable measure of a currency's value. Recently, a team of scholars²⁹ at Middlebury College using statistical regression analysis designed an econometric model capable of forecasting general price inflation. The model relies upon measured volatility in the gold price as the basis to forecast future increases in general prices.

The Gold Volatility Model ("GVM") has been able, when applied to past intervals, to predict movements in the Consumer Price Index ("CPI") and in the Personal Consumption Expenditures deflator ("PCE") with precision, and six months sooner than the CPI and PCE data are available. If these virtues withstand scrutiny, the GVM's value to the Federal Reserve relative to the other indices should prove substantial.

What springs from the pages of the GVM analysis, however, is the crucial importance of gold price volatility as a signal of currency deterioration. Thus, the GVM informs that the monetary instrument most needed by the Federal Reserve is one capable of damping gold price volatility. The GVM virtually shouts that a central bank can dependably eliminate inflation and deflation by damping gold price volatility.

Fortunately, such a monetary instrument is closely at hand. Indeed, it is Chairman Bernanke's professed "preferred alternative" to the funds rate target when that

tool proves ineffective: namely, buying and selling Treasury instruments in the open market. By selling bonds to remove liquidity, or the reverse, the Fed can assure stability of the gold price and, thus, of the dollar's value and general prices. Chairman Bernanke has an historic opportunity to lead promptly towards that objective.

Honest Money for the World

U. S. monetary policy since 1971 reflects unwise management of the most important central bank in the world. As use of the federal funds target produces inflation through creation of excess liquidity, the Fed impedes the validity of market price signals. The capital and labor markets of the world cannot function fairly or efficiently under such irrational handicaps imposed by central planning.

When the unit value of the dollar is changing, the Fed cannot achieve price stability by managing the output gap by managing aggregate demand by managing the funds rate target. This chain of abstractions strung together by demand-side theorists to guide Fed practices ignores reality without escaping it. When the dollar changes value, prices measured in dollars must be adjusted to maintain accurate, fair value in transactions.

The market supply/demand mechanism works best when the currency unit value does not change. To achieve currency value stability, the central bank must target the desired value and act directly to achieve it. Here, theoretical simplicity is to be admired, and will be rewarded with greater prosperity around the world.

Often Fed actions run directly contrary to congressional or executive branch fiscal policy. Demand-siders view this as a benefit of the "independent" Fed, so that expert economic planners are empowered to offset fiscal "excesses" of the elected branches of government. Reliance on democratically elected institutions, however, often provides greater wisdom and stability in policy-making than does central planning.

Though debate of monetary policy may seem esoteric to some, misery flowing from economic errors has many human faces. The dollar's service as the reserve currency of the world carries with it grave moral responsibilities. The standards of living of many societies - American, Mexican, Brazilian, Argentine, Korean, Thai, Chinese, Russian, and African - have suffered greatly from the U. S. Federal

Reserve's failure to meet its duty to provide honest currency.

The Federal Reserve's use of complex oratory does not hide the inadequacy of its policy, nor does it meet America's moral obligation to act up-rightly as a nation. The Fed's management of the dollar has fallen short of American standards. Demand-side theory ought to be cast out of the Fed's operations immediately, freeing central banks worldwide to follow sound monetary principles. What ought to replace it is a simple rule targeting the desired value of the dollar relative to gold. If the Fed will not do so, the President or the Congress should provide leadership to that end.

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END NOTES

¹ Proceedings of the St. Louis conference are published in the Federal Reserve Bank of St. Louis *Review*, Vol. 87, No. 2, Part 2, March/April 2005, and linked [here](#). Citations of the proceedings are to page numbers in that volume.

² 145.

³ 158-166.

⁴ 152.

⁵ 145.

⁶ 151.

⁷ 178.

⁸ 178-179.

⁹ 181.

¹⁰ 181.

¹¹ 184.

¹² 202. Indeed, Volcker is reported to have "rejected the premise that policy should actively seek to close output or unemployment and related gaps, judging that the informational requirements of such calculations were simply untenable." 227.

¹³ 214-215.

¹⁴ 226.

¹⁵ 250-251.

¹⁶ 256.

¹⁷ 257.

¹⁸ 258.

¹⁹ 264.

²⁰ 264-265.

²¹ 265.

²² 265.

²³ 266.

²⁴ 351.

²⁵ See Wanniski, *The Way The World Works*, chapter 7, pp. 127-159 (Regnery Publishing, Inc., Wash., D.C., 1998) for the seminal description of the intimate interplay between actions in the U.S. Senate on the Smoot-Hawley tariff bill (including floor votes during October, 1929) and the 1929 Crash in the financial markets.

²⁶ Blum, *Years of Urgency 1938-1941 - From the Morgenthau Diaries*, pp. 19-21, (Houghton Mifflin Co. Boston, 1965).

²⁷ 152-168, 178-184.

²⁸ Flaws in the funds rate target instrument are tangential to the core theoretical problem, as has been shown, but are significant. Here are the most apparent flaws:

- The funds rate is not a controlling variable in the dollar's value, so changing the funds rate produces unpredictable changes in the dollar.
- Under Fed practices, raising the funds rate target does not actually "tighten" flow or quantity of dollar liquidity; it merely raises the cost of capital.
- The Fed cannot really control the funds rate target, since market pressures force the Fed to change the target against its wishes.
- Manipulating the funds rate causes market conditions to change in ways they would not otherwise, thereby destabilizing the dollar's unit value.

²⁹ The Breen-Erten-Hajizadeh team's paper "A Case For A Gold Target?" is yet to be offered for general publication.