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What is wrong with our monetary policy? Warren Coats October 5, 2016

Senator Jeff Merkley of Oregon said this summer that "The Fed should be using its economic expertise to highlight the long-term devastating impacts of failing to provide the opportunity for the skills needed for the economy of the future." 1

While it is a bit of a challenge to tease out what Senator Merkley really wants the Fed to do, his statement does epitomize the propensity of politicians to assign objectives to the Fed that it doesn't have the power to achieve while neglecting those measures for which they themselves are responsible.

So what can and should the Fed do?

Until President Richard Nixon closed the gold window on August 15, 1971, and in 1973 permanently ended the United States' commitment to exchange its currency held by other central banks for gold at the fixed price of \$35 per ounce, U.S. monetary policy had been guided by and constrained by its commitments under the gold exchange standard adopted in the Bretton Woods agreements of 1945. The gathering at Bretton Woods New Hampshire in July 1944 led to the creation of the International Monetary Fund, the World Bank, and what is now the World Trade Organization. The irresponsible Guns AND Butter spending of the Johnson administration on the war in Viet Nam and the war on poverty had undermined the fiscal discipline required by the gold exchange standard. Since its abandonment, the Federal Reserve and other central banks have searched for and experimented with a variety of alternative approaches to monetary policy with floating exchange rates.

From the end of the Korean War through 1965 inflation measured by the consumer price index averaged around 2% per annum but rose the second half of the 1960s to 6% by the end of the decade.² Along with closing the gold window, Nixon launched a 90 day wage and price freeze on August 15, 1971, which turned into an almost three year period of wage and price controls.

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¹ Ylan Q. Mui, https://www.washingtonpost.com/news/wonk/wp/2016/08/26/liberals-fought-for-janet-yellen-to-lead-the-fed-now-they-hope-shes-more-more-ally-than-adversary/ The Washington Post Aug. 27, 2016

² In addition to closing the Gold window and a 90-day wage and price freeze, the Nixon Shock also included a 10% surcharge on existing tariffs on imports.



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When they were finally lifted the CPI increased a staggering 12% in 1974. Over this period the Fed implemented monetary policy via adjustments in the overnight interbank lending rate (the Fed funds rate) in light of, among other things, its objectives for the growth of monetary aggregates. However, during this period the monetary aggregates played more the role of indicators of policy than of targets.

By the 1970s the Fed and the economics profession more generally had accepted the fact that monetary policy influences economic activity and employment only temporarily, i.e. that in the long run there is no trade off between employment and inflation (a vertical long run Philips Curve). Nonetheless, during this period the Fed remained more sensitive to increases in unemployment than inflation and tended to ease monetary policy more quickly when employment was threatened than it tightened it in the face of increases in inflation. As the effects of changes in monetary policy take one to two years to show up in employment and inflation (Friedman's "long and variable lags" in the effects of monetary policy), policy decisions need to be based on forecasts of their future impact. Thus the Fed's bias toward fighting unemployment was compounded because during this period the Fed's economic forecasting models persistently underestimated NAIRU—the Non-Accelerating Inflation Rate of Unemployment, also called the natural rate of unemployment—leading the Fed to maintain "easy money" conditions for too long.

The net result of these factors was that with ever higher inflation peaks the market's expectations of future inflation began to increase. Expected inflation was increasingly built into wage agreements. During this period higher inflation was empirically associated with higher unemployment (a positively sloped Philips Curve). Growing public and Congressional concern with inflation and broader professional acceptance of the "Monetarist" views of Milton Friedman resulted in 1977 in amendments to the Federal Reserve Act to clarify the Fed's mandate as the pursuit of stable prices, maximum employment, and moderate long-term interest rates.

To further tighten congressional guidance of monetary policy and to remove its inflationary bias Congress enacted the *Full Employment and Balanced Growth Act of 1978*, commonly called the Humphrey-Hawkins act, which required, among many other provisions, that the Fed establish targets for the growth of monetary aggregates and to report them and progress in achieving them to Congress twice yearly. Given the widely accepted fact that monetary policy has no long run effect on employment, determining maximum employment consistent with stable prices (NAIRU) was an important challenge for fulfilling the Fed's congressional mandates.

In the face of the Fed's persistent over shooting of its narrow and broad money target ranges and the entrenching of higher and higher inflation expectations in wage and price increases, Federal Reserve Board Chairman Paul Volcker led the Board and the Federal Open Market Committee (FOMC) on October 6, 1979 in a dramatic change in the Fed's approach to implementing monetary policy by shifting to an intermediate, narrow money target, operationally implemented via a target for non-borrowed reserves. The new approach



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required the Fed to relax its Fed funds rate targets and it increased the band set by the FOMC for the Fed funds rate from 0.5% to 4%. The most important element of this dramatic shift was the acceptance by the Fed of its responsibility for inflation and elevating its objective of price stability to first place.

Volcker explained the Board's thinking in his first Humphrey-Hawkins testimony on February 19, 1980:

In the past, at critical junctures for economic stabilization policy, we have usually been more preoccupied with the possibility of near-term weakness in economic activity or other objectives than with the implications of our actions for future inflation. To some degree, that has been true even during the long period of expansion since 1975. As a consequence, fiscal and monetary policies alike too often have been prematurely or excessively stimulative, or insufficiently restrictive. The result has been our now chronic inflationary problem, with a growing conviction on the part of many that this process is likely to continue. . . .

The broad objective of policy must be to break that ominous pattern. That is why dealing with inflation has properly been elevated to a position of high national priority. Success will require that policy be consistently and persistently oriented to that end. Vacillation and procrastination, out of fears of recession or otherwise, would run grave risks. Amid the present uncertainties, stimulative policies could well be misdirected in the short run; more importantly, far from assuring more growth over time, by aggravating the inflationary process and psychology they would threaten more instability and unemployment.

The new approach was not easy to implement. The Fed not only had to refine its new operating procedures to better control monetary aggregates but also had to enforce new Humphrey-Hawkins requirements such as reducing monetary growth targets over time and the gradual reduction of the inflation rate to zero by 1988. Further complicating its policy implementation, on March 14, 1980 it gave in to the Carter administration's pressure to establish credit controls on banks. But as a result of the unsurprising poor results of such controls it dismantled them completely less than four months later on July 3. The biggest challenge to the new procedures, however, came from shifts in the demand for money that were to some extent precipitated by the new focus on monetary targets and the liberalization of deposit interest rates, the expanding use of credit cards, and the emergence of competing near moneys.

A detailed inside review by David Lindsey of Fed policy formulation from 1975 to 2002 states that: "The Federal Reserve discovered that pragmatic money targeting could not be done on a computer, as Milton Friedman had advocated. Communicating the ins and outs of monetary targeting in practice similarly was not easy....



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"Experience with the extreme volatility of desired holdings of transactions balances was fresh for the FOMC going into its July 9 [1980] meeting. Small wonder that the Committee's initial decision was as laid out in its Humphrey-Hawkins report to the Congress:

"While there is broad agreement in the Committee that it is appropriate to plan for some further progress in 1981 toward reduction of the targeted ranges, most members believe it would be premature at this time to set forth precise ranges for each monetary aggregate for next year, given the uncertainty of the economic outlook and institutional changes affecting the relationships among the aggregates."

On July 1, 1982, in the midst of the relatively sharp recession of 1981-2, the Fed raised its narrow money growth target and started lowering the funds rate. Then, in October, it gave up its intermediate money targeting and dropped the non-borrowed reserves operating target. The Fed's abandonment of tight targets for monetary aggregates represented a failure, to some extent at least, in Congress' intention to provide the Fed with clear policy rules.

In response to Volcker's July 1982 Humphrey-Hawkins report to an unhappy congress: "The [House] Committee was concerned that changing the monetary target from the midpoint to the upper end of an unchanged range "seriously obscures" the Fed's intentions with regard to monetary policy. 'By changing its ostensible target without changing its target range, the Federal Reserve in its July 20 report seriously obscures its intentions on monetary policy and fails to act in consistency with the reporting requirements of the Humphrey- Hawkins Act.... Under that law, the Federal Reserve is required to report ranges of growth of the monetary aggregates and not some obscure hybrid of ranges and targets-within-ranges.' The Committee was concerned that the Fed's policy 'could be viewed by market analysts as abandonment of any kind of target scheme.'

"The report continued 'if changed conditions merit a change in the targets, then a change in the ranges should be reported. If ranges are not changed, they should be hit. The current policy of 'brinksmanship' in which the Federal Reserve announces that it is aiming for the ceiling of its ranges, is unsatisfactory. The Federal Open Market Committee should, at its next meeting, correct its presentation of its targets and report either a change or no change in its announced aggregate-growth target ranges."

Despite these difficulties—the fed funds rate rose temporarily to over 22% and GDP fell by over 2% in 1982—actual and expected inflation were reversed and fell below 2½% by 1983.

Importantly, having licked inflation, the Fed continued to give primacy to its price stability mandate, though with a more flexible and traditional operational approach. The era of the

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³ David E. Lindsey, *A Modern History of FOMC Communication: 1975-2002* FOMC Secretariat, June 24, 2003 page 55.

⁴ Lindsey, *Ibid.* page 60.



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great moderation in the volatility of GDP and inflation followed but the search for suitable monetary policy operational rules continued.

The non-borrowed reserves operating target of October 1979 to October 1982 was replaced with a borrowed reserve target. It was not without difficulties. The straw that broke the camel's back was reported by Lindsey:

Eating Humble Pie along with the Thanksgiving Turkey - November 22, 1989

Just before Thanksgiving 1989, the Manager was, as in previous months, trying to implement the procedures geared mainly to an operating target for adjustment plus seasonal borrowings. He had been attempting to place primary emphasis on reserve needs in Desk operations and secondary importance on the funds rate quoted in the market at the time of Desk action. On that Wednesday before Thanksgiving, the Desk needed to add reserves for technical reasons. Even though the funds rate slipped from 1/16 percentage point to 1/8 percentage point below the Committee's funds rate expectation just before the operation, the Desk still arranged a five-day System repurchase agreement (RP). Market participants interpreted the operation as signaling a policy move, when it in fact did not. On Friday morning, the New York Times cited 'government officials' claiming (albeit erroneously) that an easing had taken place. The policy record of the December meeting that year mentioned the episode: 'Conditions in reserve markets softened temporarily around Thanksgiving when operations to meet seasonal reserve needs were misread as signaling a further easing of monetary policy.' After the incident, the Desk put top priority on signaling the Committee's intended funds rate. And that's the story of how the FOMC lost its borrowing procedures."⁵

At about the same time radical innovations in the development of monetary policy rules were launched by the Reserve Bank of New Zealand, which came to be known as explicit inflation targeting.⁶ An inflation target provides a clear and explicit rule that permits flexible operational approaches to its achievement. Given Friedman's long and variable lags in the effect of monetary policy, setting monetary operational targets (almost always the equivalent of a fed funds rate) must be based on the best model assisted forecast of its consistency with the inflation target one to two years in the future. A longer target horizon provided more scope for smoothing the output gap (employment). Full transparency of the policy and the data and reasoning underlying policy settings is required to gain the benefits of the alignment of market inflation expectations with the policy target.⁷

⁵ Lindsey, *Ibid.* page 93

⁶ Key roles in developing the forecasting models and decision making processes at the RBNZ and subsequently at the Bank of Canada and else where were played by Doug Laxton and David Rose at that time from the Bank of Canada.

⁷ Geoffrey Heenan, Marcel Peter, and Scott Roger, 2006, "Implementing Inflation Targeting: Institutional Arrangements, Target Design, and Communication," IMF Working Paper 06/278 (Washington: International Monetary Fund)



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The RBNZ's development and adoption of inflation targeting was an important development in the pursuit of rule based monetary policy with floating exchange rates that accommodated flexible implementation. It swept the world of central banking. While the Fed did not adopt explicit inflation targets until 2012, it clearly pursued an implicit inflation target long before that.

The **FOMC** made its inflation target explicit in January 2012:

"The inflation rate over the longer run is primarily determined by monetary policy, and hence the Committee has the ability to specify a longer-run goal for inflation. The Committee judges that inflation at the rate of 2 percent, as measured by the annual change in the price index for personal consumption expenditures, is most consistent over the longer run with the Federal Reserve's statutory mandate....

"The maximum level of employment is largely determined by nonmonetary factors that affect the structure and dynamics of the labor market. These factors may change over time and may not be directly measurable. Consequently, it would not be appropriate to specify a fixed goal for employment; rather, the Committee's policy decisions must be informed by assessments of the maximum level of employment, recognizing that such assessments are necessarily uncertain and subject to revision."

The Great Recession of December 2007 to June 2009 highlighted the failure of inflation targeting to take account of asset price bubbles and for "inappropriate responses to supply shocks and terms-of trade shocks". 10 What followed can only be described as a nightmare (largely because of weaknesses in the U.S. financial system). After properly and successfully performing its function of a lender of last resort and thus preventing a liquidity-induced collapse of the banking system, the Fed went on to undertake ever more desperate measures to reflate the economy. These Quantitative Easing (QE), quasi-fiscal activities have been widely discussed and have contributed little to economic recovery. 11

With the "failure" of inflation targeting, nominal GDP targeting is now gaining support. With a NGDP target when real GDP slows or falls, the inflation target is automatically increased in countercyclical fashion. The rationale for this approach reflects the view inspired by Keynesian aggregate demand management that government policy, whether fiscal or monetary, can assist the market's own adjustments to shocks of one sort or another. While measures of aggregate demand can be useful for analysis, actual government expenditure components of aggregate demand are specific to individual projects and unlikely to coincide with areas of actual excess capacity. NGDP targeting also ignores the role and benefits of stable money (a constant, preferably zero, rate of inflation) for private market calculations and adjustments to changing

⁸ As of March 2012, 28 central banks had formally adopted inflation targeting policy regimes.

⁹ Minutes of the Federal Open Market Committee, January 24–25, 2012.

¹⁰ Jeffrey Frankel. "The Death of Inflation Targeting". *Project Syndicate*, May 16, 2012

¹¹ See for example, Warren Coats, "US Monetary Policy: QE3", Cayman Financial Review January 2013.



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real circumstances. Investors must augment their assessments of real economic conditions and prospects with their guesses about monetary policy and its impact.

Each household's, or region's, or country's balance of payments with the rest of the world is regulated by individual budget constraints—what the household is able to produce (its income) and is thus capable of buying (smoothed by what it is able to borrow and/or has previously saved). Dynamic, growing economies are always adjusting to changing consumer tastes, new technologies, failed firms, changes in prices of internationally traded goods, etc. These adjustments, which may entail painful periods of retraining and/or unemployment for workers, and capital reallocation for firms are a necessary aspect of growing economies. The goal of all active stabilization policies, fiscal or monetary, is to reduce the pain of market adjustments to shocks by actively adding to deficient demand or diminishing excess demand, thus spreading the adjustment over a longer period. The passive elements of fiscal policy—automatic stabilizers such as unemployment insurance—are generally accepted as helpful along with the rest of the social safety net.

The potential, temporary contribution of monetary policy to smoothing swings in output come from speeding up adjustment by pushing interest rates even lower than would market forces alone during downswings and higher than the market alone would produce when output is overheating. This can be achieved by pushing money growth above the growth in its demand or vice versa (or equivalently by pushing interest rates below or raising them above their natural real rate). Interest rates below the full employment rate (by more than the market would produce on its own) should encourage increased borrowing and investment, increases in asset prices (including real estate) that increase consumption, and depreciation of exchange rates that increase net exports and thus a quicker closing of the output gap.

When interest rates are lowered to zero (the lower zero bound), consumption and investment cannot be stimulated further via the interest rate channel for transmitting monetary policy nor can they further depreciate the exchange rate. Consumption can potentially be stimulated via the wealth effect of increasing asset prices but at the expense of distorting resource allocation (asset bubbles). This leaves negative real interest rates (e.g. by increasing inflation) and helicopter money (increased government transfers, e.g. by the reduction of social security wage taxes, financed by printing money).

For these countercyclical policies to make a positive contribution to price and output stability, the central bank must be able to correctly forecast the interest rate or money supply required for the inflation or NGDP targets in one to two years in the future. This requires, among other things, correctly determining the natural real rate of interest and sustainable real output, both of which are unobservable. The conclusion from the above history is that monetary policy is being asked to deliver more than it is capable of delivering. Central banks are generally staffed by very capable people, but they can never know all that they need to know to keep the economy at full employment as employers and jobs keep changing. The quality of forecasting models has greatly improved in recent years, but they remain unreliable. The policy strategy



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and intentions of the Fed and other inflation targeting central banks have become admirably, if not painfully, transparent, but given the uncertainty of its next policy actions markets remain spooked by every new data release and speech by Fed officials. In addition, politicians like Senator Jeff Merkley expect the Fed to perform miracles that are beyond its capacity while Congress continues to spend and regulate destructively. In my opinion, central banks have given their price stability mandates their best shot and failed. The successful management of the money supply with floating exchange rates is simply beyond the capacity of mortals.

The alternative is to return to a hard anchor for monetary policy. This means linking the value of money to something real and managing its supply consistent with that value (exchange rate). Such regimes do not magically overcome an economy's many and continuous resource allocation and coordination challenges, but by providing a stable unit in which to value goods and services and to evaluate investment options, and sufficient liquidity with which to transact, such regimes facilitate the continuous adjustments private actors need to make for an economy to remain fully employed and to grow.

But fixed exchange rate regimes, including the gold standard in one of its forms or another, have had their problems as well. These problems generally reflected one or the other of two factors. The first was the failure of the monetary authorities to play by the rules of a hard anchor, which is to keep the supply of money at the level demanded at money's fixed value. The pressure to depart from the rules of fixed exchange rates generally came from fiscal imbalances or mistaken Keynesian notions of aggregate demand management. However, even when central banks aimed actively to match the supply of its currency to the market's demand with stable prices it proved beyond their capacity to do so.

The second source of failure came from fixing the value of money to an inappropriate anchor.

When the exchange rate of a currency is fixed to another currency or commodity whose value changes in ways that are inappropriate for the economy, domestic price adjustments can become difficult and disruptive. Fixing the exchange rate to a single commodity, as with the gold standard, transmitted changes in the relative price of gold to prices in general, which imposed considerable hardships on the public.

Consider, for example, the previous era of globalization in the late nineteenth century. World "wide demand for gold rose much more than the supply from the 1870s through the mid-1890s as nearly two dozen countries adopted or re-adopted the gold standard, and hence needed to accumulate reserves. Two of the world's largest economies, the United States and France, also made growing use of gold coins. Indeed, demand drove the commodity-exchange value of gold to the highest level it was to reach in four centuries of record-keeping—the flip-side of deflation of other commodity prices. The commodity price decline reduced profits and chilled investment demand." 12

¹² Clark Johnson, "Did Keynes Make His Case?" *Journal of Economics Library* Vol 3, Issue 2, June 2016.



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These historical weaknesses of monetary regimes with hard anchors can be overcome by choosing better anchors and by replacing central bank management of the money supply with market management via currency board rules. I have discussed these improvements extensively in earlier papers but summarize them briefly here.

The value of the IMF's SDR is determined by the market value of fixed amounts of (soon to be) five currencies. Such an anchor is by its nature more stable than is the value of any one of the currencies in the SDR's valuation basket (USD, Euro, Yen, GBP, and RMB). Broadening a commodity anchor to include a number of diverse commodities would be an improvement over the use of a single commodity such as gold. The most stable anchor relative to purchasing power would be the basket of goods in a representative consumer price index basket (CPI). Such an anchor is proposed in my *Real SDR Currency Board* paper.¹³¹⁴

The public will demand to hold an amount of money (currency plus transaction deposits at banks) in light of the value of its anchor that generally varies with income and the opportunity cost of holding money (interest rates). In addition, however, advances in payment technology and innovations in financial instruments have affected and will continue to affect the demand for money. These variations in money demand create serious challenges to central bank management of the supply of money that do not exist when issuing currency via currency board rules in response to market demand. Under currency board rules the public can always buy and hold exactly the amount of money it wants at its official anchor price.

Central banks need to return to monetary regimes with hard anchors in which money is issued in response to public demand under currency board rules. Removing any uncertainty about the value of money would facilitate market adjustments to changing environments and shocks, and would force governments to manage their fiscal policies without recourse to manipulation of monetary policy. While countercyclical monetary policy targeting inflation or NGDP might potentially reduce the amplitude of swings in employment and output, it is not obvious that it would produce faster long-term growth and, if history is any guide, it is highly unlikely that it would hit its intended target.

<u>References</u>



¹³ Warren Coats, "Real SDR Currency Board", Central Banking Journal XXII.2 (2011).

¹⁴ The very important feature of indirect redeemability (issuing and redeeming SDRs for assets of equivalent value rather than the goods in the basket) is discussed in the above article as well.



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	n Targeting in Transition Economies: The Case of the Czech ue: Czech National Bank and Washington DC: International) 2000.
	axton, and David Rose (Editors), <i>The Czech National Bank's I policy analysis system,</i> Czech National Bank (Prague), March
	ency Board", Central Banking Journal XXII.2 (2011), also available bepress.com/warren coats/25
	Policy: QE3", Cayman Financial Review January 2013. ymanfinancialreview.com/2013/01/11/US-monetary-policyQE3/
<u>"A modest prop</u> Review, May 20	oosal: Helicopter money and pension reform," Cayman Financial 016
	er, and Scott Roger, 2006, "Implementing Inflation Targeting: arget Design, and Communication," IMF Working Paper 06/278 onetary Fund)
Frankel, Jeffrey. <u>"The Death of</u>	Inflation Targeting". Project Syndicate, May 16, 2012.
Johnson, Clark. "Did Keynes M 2016.	lake His Case?" Journal of Economics Library Vol 3, Issue 2, June
David E. Lindsey, <i>A Modern Hi</i> . June 24, 2003.	story of FOMC Communication: 1975-2002 FOMC Secretariat,
A Century of M	onetary Policy at the Fed, Palgrave Macmillan, 2016.
	s Orphanides, and Robert H. Rasche, "The Reform of October appened and Why" <i>Federal Reserve Bank of St. Louis Review</i> 2005.

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