



The Dueling Mandate

Gregory Hess
Claremont McKenna College

Shadow Open Market Committee
March 25, 2011

Executive Summary

Throughout its history, the Federal Reserve's monetary policymaking has been adversely affected by its twin and equal directives – to obtain maximum employment and stable prices.¹ Notwithstanding the desire by Congress and the voters to obtain both objectives, the Federal Reserve only has the ability to foster long run price stability. Indeed, like all other central banks, the Federal Reserve has only limited ability to influence short run employment, and even less ability to affect long run employment. I propose that the Federal Reserve consider declaring victory and simply announce what it believes -- that price stability is its first priority, as price stability is the necessary precursor for sustaining long term maximum employment. This interpretation of the dual mandate can be accomplished, I believe, without legislation. The Federal Reserve, alternatively, could request that the Federal Reserve Act be re-written to reflect this operational understanding of the dual mandate. This approach, which is perhaps a better way to improve the public's understanding of monetary policy, is riskier given the Federal Reserve's relationship and losing record with Congress.

What Do Voters and Congress Want from Monetary Policy?

In Hess [2011], I argued that we can interpret what voters and Congress want from monetary policy by looking at the macroeconomic influences on Congress' Federal Reserve legislation.² Congressional interest in the Fed is driven by Congress members' desires to gain reelection from voters, and because voters have delegated to Congress the responsibility for setting the institutional context for the Federal Reserve's operations. To measure "Congressional Interest" in the Fed, I examined the empirical relationship between BILLS – that is, the number of bills or resolutions introduced on the floor of the House of Representatives in a given year that contain the words "Federal Reserve" or "Federal Open Market Committee – and a range of macroeconomic indicators. These macroeconomic indicators included inflation, unemployment, bank failures, interest rates, levels of public debt, etc.

As shown in Hess [2011], using data from 1973-2009, the best macroeconomic predictors of BILLS are the inflation and unemployment rates. Indeed, the MISERY index, the simple sum of inflation plus unemployment, had the best empirical fit with BILLS.³ Figure 1 demonstrates this key finding, and shows a significant and strong positive relationship between the MISERY index and BILLS. That is, an increase in either inflation or unemployment by 1 percentage point leads to 3.36 more bills or resolutions introduced on the House floor. *Since voters like low*

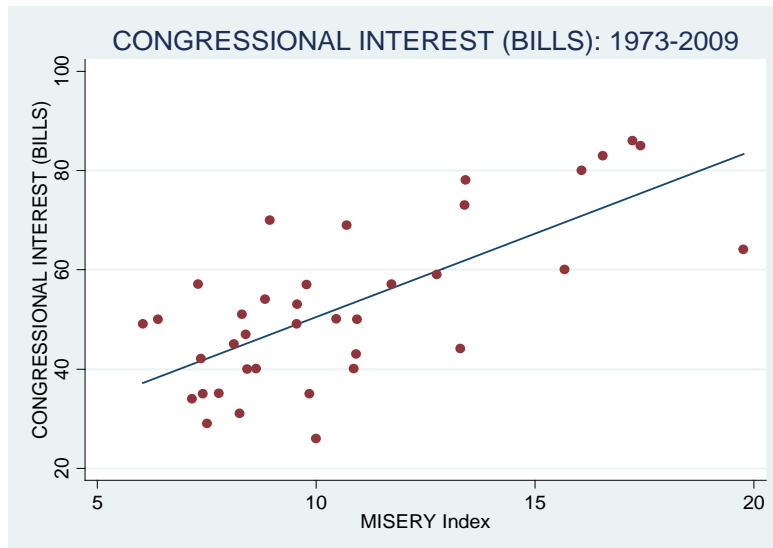
¹ Technically, the Federal Reserve Act states three mandates, not two, namely, that "The Board of Governors of the Federal Reserve System and the Federal Open Market Committee shall maintain long run growth of the monetary and credit aggregates commensurate with the economy's long run potential to increase production, so as to promote effectively the goals of maximum employment, stable prices, and moderate long-term interest rates." [12 USC 225a. As added by act of November 16, 1977 (91 Stat. 1387) and amended by acts of October 27, 1978 (92 Stat. 1897); Aug. 23, 1988 (102 Stat. 1375); and Dec. 27, 2000 (114 Stat. 3028).]

² Gregory D. Hess, "Comment on: 'Politics and the Fed,' by Allan H. Meltzer." Journal of Monetary Economics, Volume 58, Issue 1, January 2011, Pages 49-53. Carnegie-Rochester Conference Series on Public Policy: The Future of Central Banking, April 16-17, 2010.

³ I have removed the empirical effect of the two year Congressional cycle from the data on Bills – see Hess [2011]. The data start in 1973 as that is when the online THOMAS database for U.S. legislation begins -- see <http://thomas.loc.gov/>.

unemployment and low inflation, it would seem as though the Fed's dual mandate from Congress is simply a pass-through of voters' mandate to Congress.

Figure 1: Cross Plot of Congressional Interest in the Federal Reserve and the Federal Open Market Committee and the Misery Index



Data are annual. Inflation is measured using CPI and unemployment is measured by the civilian unemployment rate. The misery index is the simple sum of unemployment and inflation. Congressional Interest is calculated as the number of bills and resolutions introduced on the floor of Congress in a given year.

Has the Federal Reserve Act Made a Difference and Why?

While it is clear that voters and Congress want the Federal Reserve to deliver on low inflation and low unemployment, how has the Fed performed in achieving these aims and has the Federal Reserve Act made a difference? Table 1 presents summary statistics for the inflation rate, unemployment rate and misery index for the period since the Fed - Treasury Accord of 1951 and since the adoption of the Federal Reserve Act in 1978. Column (a) presents the averages and standard deviations, over the former time period, 1952-1977, while column (b) presents these same sample statistics for the latter time period, 1978 – 2011.⁴ The data in column (a) thus represent the statistics for the post Fed- Treasury Accord period before the Federal Reserve Act, while the data in column (b) capture the time period after the adoption of the Federal Reserve Act. The rightmost column, labeled (b)-(a), reports the difference in the means between the two sub-samples.

⁴ The findings are not all that different if we only consider the post Federal Reserve Act period to be from 1984 onwards, the period that begins with the Great Moderation. The mean for unemployment, inflation and misery during this later period are, respectively, 5.98, 2.61 and 8.60. None of these variables is significantly different from the pre- Federal Reserve Act period.

Table 1: Inflation Rate, Unemployment Rate and Misery Index Pre- and Post- Adoption of the Federal Reserve Act

Data Series	Statistic	1952	1978	Difference (b) - (a)
		-1977 (a)	-2010 (b)	
Unempl. Rate	Average	5.32	6.31	0.99***
	std. dev.	[1.29]	[1.56]	
Inflation Rate	Average	3.02	3.55	0.52
	std. dev.	[2.59]	[2.52]	
Misery Index	Average	8.35	9.87	1.52*
	std. dev.	[3.29]	[3.08]	

Data are annual. ***, ** and * indicate statistical significance at or below the .01, .05 and .1 levels. Standard deviations of the data are listed in square brackets, “[]”.

Quite surprisingly, as shown in Table 1, unemployment, inflation and the misery index are all higher post Federal Reserve Act than before. Importantly, post-adoption, the unemployment rate is one percentage point significantly higher and the Misery Index is one and one-half points significantly higher. Of course, the circumstances that the Federal Reserve faced before and after the adoption of the Federal Reserve Act are not identical – nevertheless, the data suggest that U.S. economic performance has not improved in response to the adoption of the Federal Reserve Act. Indeed, it has actually worsened.

Why then has the dual mandate not worked to improve macroeconomic performance? Clearly, if macroeconomic tradeoffs were certain, reliable and precisely understood in real time, aggregate demand fine tuning by the Fed would work, and macroeconomic performance would improve. Evidence, however, suggests otherwise. For example, throughout the 1980’s and 1990’s, Federal Reserve policymakers relied on using a NAIRU type model to help identify the “non-accelerating inflation rate of unemployment.” The relationship hinged on a negative relationship between the acceleration of inflation – that is, the future change in the inflation rate between period t+1 and period t – and the current level of unemployment at time t. Everything else equal, a rate of unemployment above a critical NAIRU level should generate slack in the economy and thereby decelerate the rate of inflation.⁵

⁵ Douglas Staiger, James H. Stock and Mark W. Watson, “The NAIRU, Unemployment and Monetary Policy,” *Journal of Economic Perspectives*, vol 11(1), Winter 1997, pages 33-49.

Figure 2

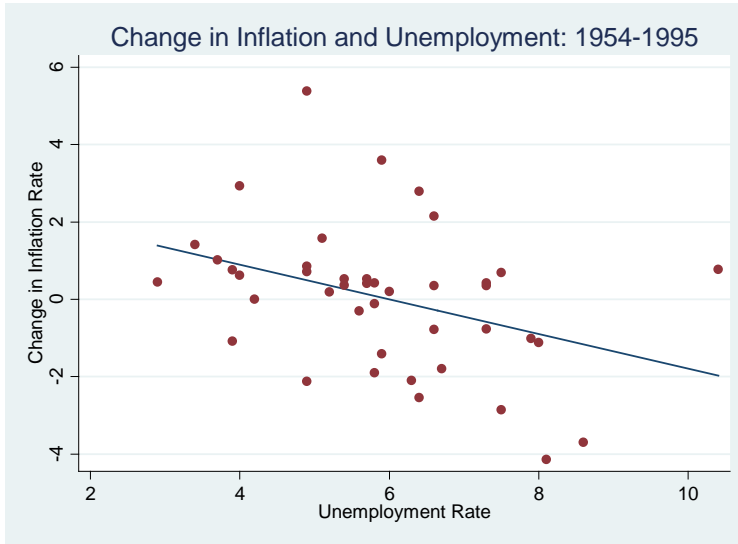
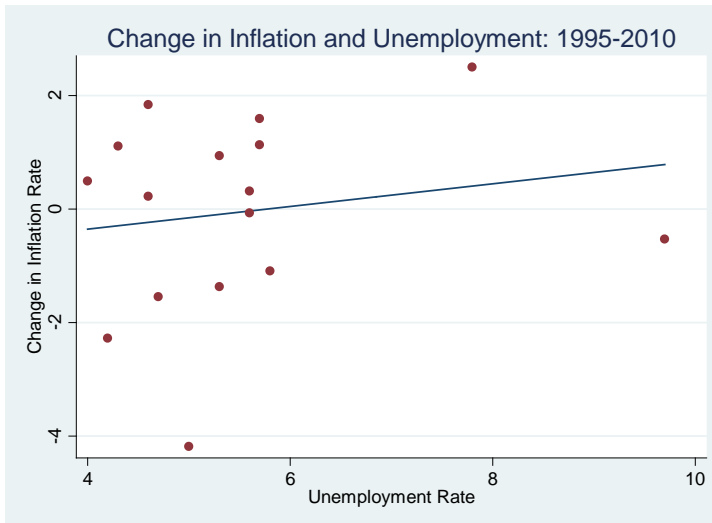


Figure 2 demonstrates the relationship between the future annual change in inflation on the vertical axis and the annual rate of unemployment on the horizontal axis. The correlation coefficient, indicated by the solid line, is -0.374 , and is statistically significant at the .001 level. Notwithstanding the substantial dispersion of data around the line, the statistical relationship between higher unemployment and decelerating inflation, demonstrated by the correlation line, encouraged the Federal Reserve to conduct monetary policy and aggregate demand policy to fine tune inflation and unemployment.

Unfortunately, starting around 1995, the empirical relationship between the acceleration in inflation and the level of unemployment began to become very unreliable. Figure 3 repeats the earlier cross-plot of data for the period since 1995. The formerly significantly negative relationship is now positive and insignificant.

Figure 3



Clearly, an abruptly shifting relationship between the change in inflation and the level of unemployment makes simultaneously balancing inflation and unemployment very difficult for the Federal Reserve. *Monetary policy based on these deteriorating empirical relationships makes simultaneously accomplishing the dual mandate exceptionally challenging, and potentially ill-advised.* In particular, the central bank controls the long run price level, but many other factors affect unemployment. These other supply factors include regulation, productivity and technological change, taxation and other fiscal policies. All in all, since the Federal Reserve has influence over the long run price level but not the long run (or even the short run) level of unemployment, a symmetric and simultaneous mandate for the Fed can only lead to confusion, poor policy or both.

Furthermore, while shifting relationships between inflation and unemployment challenge the Federal Reserve's ability to achieve simultaneously its dual mandate, another issue remains: namely, real time data often portrays an inaccurate picture of the economy's actual macroeconomic status. Of course, conducting monetary policy in the face of substantial data revisions requires a central bank to be conservative and circumspect. Indeed, as stated in Orphanides [2003]:⁶

As early as the 1920s, measures of real economic activity relative to "normal" or "potential" supply appear to have influenced policy analysis and deliberations. Confidence in such measures as guides for activist monetary policy proved counterproductive at times, resulting in excessive activism, such as during the Great Inflation and at the brink of the Great Depression.

Of course, correctly understanding conditions of slack in output and the labor market, while potentially useful for policy, is difficult to accomplish in real time. As such, monetary policy needs to be less activist in presuming to stabilize output and employment conditions, and relatively more focused on what it can accomplish – long run price stability.

Recommendation

In light of the evidence that voters and Congress want the Federal Reserve to keep both inflation and unemployment low, coupled with the fact that the Federal Reserve cannot reliably and simultaneously tradeoff risks to inflation and unemployment, what can the Federal Reserve do? While controversial, I recommend that the Federal Reserve simply declare victory, and announce and institutionalize its operational understanding of the dual mandate -- that price stability comes first, and that a low inflation environment is the necessary precursor for sustaining long term maximum employment. Moreover, it is a timely moment for the Fed to make this declaration, as inflation has been recently been consistently low, although worries remain as to whether inflation will accelerate in the coming months.

This new official interpretation by the Federal Reserve of the dual mandate, I believe, can be accomplished without legislation. Such an announcement may not sit well with all members of

⁶ Athanasios Orphanides, "Historical Monetary Policy Analysis and the Taylor Rule", *Journal of Monetary Economics*, 50(5), 983-1022, July 2003.

Congress, but it is unlikely that the current composition of Congress will take action against the Federal Reserve for simply announcing what it believes is the best operational approach for delivering the dual mandate. Alternatively, the Federal Reserve can request that the Federal Reserve Act be re-written to reflect its operational understanding of the dual mandate. The legislative approach, which is perhaps a better way to improve the public's understanding of monetary policy, is risky given the Federal Reserve's relationship and losing record with Congress. Indeed, as pointed to in Hess [2011], the Federal Reserve was particularly ineffective from 2002 through 2008 at encouraging Congress to make changes to the institutional structure of the GSE's Fannie Mae and Freddie Mac.

Again, however it does so, the Fed needs to explicitly state that in a fiat money economy, price stability comes first, and that this is the best way of ultimately fulfilling the dual mandate.