Monetary Policy Making When Views Are Disparate

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I was asked to give some remarks on the themes of this conference and how they relate to monetary policy. The conference reveals a very wide range of views about monetary policy: about the proper size and pace of reduction of the Fed's balance sheet, about the effects or distortions caused by quantitative easing, about the equilibrium real interest rate, about whether low (or negative) interest rates have a positive or negative effect on the economy, about the fiscal theory of the price level, about international spillover of monetary policy actions, and of course about rules versus discretion.

In fact, the purpose of this whole conference series has been to explore a wide range of views about monetary policy. The series started during the Federal Reserve Centennial when Mike Bordo, John Cochrane, Lee Ohanian and I observed that conferences being held at that time did not to portray the full range of views about monetary policy. So we decided to have a conference, which turned out to be popular, and which is now in its fourth year. (See previous conference volumes by Bordo, Dupor and Taylor (2014), Cochrane and Taylor (2016), and Bordo and Taylor (2017)). I am particularly pleased to see so many current and former monetary policy makers here, along with people from the media, financial markets and academia.

Of course the range of views heard here is not exhaustive; just last week there were sessions in Washington during the IMF-World Bank meetings on the gold standard and on "capital flow management." And there are new views arising all the time, including recent efforts to bring behavioral economics to macroeconomics, expanding on previous behavioral roots of macro.

So in these remarks I would like to discuss monetary policy making in practice when views about monetary policy are so disparate. I will review some history and then make suggestions. To be sure, I have been quite outspoken on many of the topics about which there are disparate views: I prefer rules over discretion and a balance sheet where the supply and demand for reserves determines the interest rate; I see advantages of the "greater-than-one" principle in both old Keynesian and new Keynesian models; I have doubts about the effectiveness of quantitative easing and excessively low interest rate; I have concerns about the international monetary system with unconventional monetary policy and argue for reform in which policy is strategic, capital is mobile, and the exchange rate is flexible. Making the case for these views using data and theory and debating them is the best way to move forward and make progress.

But, despite these efforts, views are disparate, and we need to think about policy making in such an environment.

Disparate Views Circa 1979

Now is not the first time there has been a disparity of views about monetary policy. Consider the situation in 1979 when Paul Volcker orchestrated the most fundamental change in monetary policy in recent memory. Views were all over the map. Milton Friedman had been writing for a decade that the long-run Philips Curve did not exist, and he faced much criticism for doing so. By the late 1970s the debate had shifted from whether the long-run Phillips Curve trade-off between unemployment and inflation existed to whether the unemployment costs of *reducing* inflation were too high. Jim Tobin used an old Keynesian model to show the costs of disinflation were so enormous that we should not even try it. By then new models were replacing the old Keynesian models: There were the "new classical" models with rational expectations and perfectly flexible prices, and the "new Keynesian" models with rational expectations and sticky prices. I remember the February 1977 issue of the *Journal of Political Economy* where two papers, one by Stan Fischer and the other by Ned Phelps and me, appeared with these new Keynesian assumptions.

Despite all this disagreement—which could also be found inside the Fed—Paul Volcker proceeded with the disinflation. He went with the view that reducing inflation and unemployment required a new approach to monetary policy. On October 6, 1979 he got members of the FOMC with vastly disparate views to go along with this new approach. Just one month before, in September 1979, the Federal Reserve Board had split in approving a ½-percentagepoint discount rate hike: The vote was three to four, with the three dissenting votes being Governors Partee, Rice, and Teeters with approvals from Coldwell, Schultz, and Wallich joining Volcker (see Transcript (1979) and Lindsey, Orphanides, and Rasche (2005)).

A Package Approach: October 6, 1979

After that credibility-losing split vote, Volcker put together a *package* that received the support of every member of the Board and every Reserve Bank president. History shows that his method for getting approval was similar to how George Shultz put together a strategy for instituting flexible exchange rates and got it approved when Volcker was Under Secretary of the Treasury and Shultz was Secretary of the Treasury. (Taylor (2012)).

The October 1979 package contained three key items (see Taylor (2005)): First, a fullpercentage-point increase in the discount rate, which appealed to those believing the situation called for a traditional dose of monetary medicine. Second, an increase in reserves on managed liabilities, which appealed to those who wanted to take action to restrain the surge in bank lending. Third, new reserve-based operating procedures in which the interest rate would rise or fall depending on economic conditions. These new operating procedures allowed the Fed to say, with some legitimacy, that it was the market, and not the Fed, that was setting the level of the federal funds rate. The new procedure appealed to those who believed in timely and sizable interest rate responses to inflation. Importantly, it offered two-way flexibility for prompt downward movements in the federal funds rate, which appealed to those who feared a slowing economy. Though the new policy led to a temporary period of economic weakness, which required a great degree of fortitude by Paul Volcker and his colleagues, the policy paid off and led to lower inflation and unemployment and to the Great Moderation.

The international community also came along. The United States was not the only country which needed a change in monetary policy. The policy shift by the Fed was followed by the United Kingdom, which adopted a monetary targeting framework. For a while others held to the view that monetary policy was ineffective in controlling inflation and that wage and price controls were needed. Over time, however, this new systemic approach to monetary policy spread around much of the world.

Robustness to Disparate Economic Views

As in the 1970s, there is now a wide range of views about monetary policy and these views are based largely on differences in economic models. Clearly central banks have different models and different central banks have different models. One can criticize models, but there is a good message in Stanley Fischer's (2017a) reminder that Paul Samuelson said he would rather have Bob Solow than a model, but he would rather have Bob Solow with a model than without a model. So economic models are important in practice, as is the interface between models and policy. Here I think it is important to have a way of evaluating the policy impacts of the different models.

The most basic question is whether the different views found in models are important for policy. Do different models really lead to different policies? Today we have new methods to answer these questions that people did not have in the 1970s. In particular, I refer to the model comparison project—now incorporating over 80 different models—taken up by Volker Wieland and his colleagues (funded in part by a grant to the Hoover Institution). Such comparisons can be very useful to policy makers. In some surprising ways the differences in models do not matter much for policy (Taylor and Wieland (2012)): the impulse response functions are the same across a wide range of models covering three generations of Dynamic Stochastic General Equilibrium (DSGE) models, including some that incorporate financial accelerator effects.

But optimal policy rules tend to exploit special properties of models, which means that the policy makers need to look at policy robustness across different models so that the policy does not incorrectly pay too much attention to the exotic features any one model. Here it is essential for policy strategies or rules to be robust across different models, perhaps putting more weight on some models and less on others. I have found that an insistence on robustness to different models makes policy conclusions less disparate than views about the economy based on individual models. Again it is much easier to evaluate robustness than it was in the 1970s

Recent model comparison work by Binder et. al. (2017) finds that newer models with financial frictions give policy implications that are all over the map. This suggests that attempts to manipulate macro-prudential policy instruments in the sense of leaning against the wind of

credit growth is not ready for prime time. These are examples. Another example is John Cochrane's (2017) recent study which considers the role of fiscal policy in price level determination in new Keynesian and old Keynesian models. The important point is that the Fed and other central banks could and should consider many different models and assess whether the policies are robust.

Disparate Views About R-Star

The disparity of views about r-star, or the equilibrium real rate of interest, have suddenly become enormous. A good way to examine the policy implications of this disparity is to place the various estimates of r-star into policy rules, an approach which would not have been possible in the 1970s before the large amount of research on policy rules. Recent speeches by Janet Yellen and Stanley Fischer provide examples

In a recent talk here at Stanford, Janet Yellen (2017) compared current policy with the original Taylor rule, with a Taylor rule which is more reactive to the state of the economy, and with a Taylor rule with inertia. She then feeds lower r-star estimates into these rules, showing they indicate lower settings of the federal funds rate. Stanley Fischer (2017a, 2017b) gave two recent talks which take a similar approach, referring to decisions made in 2011, and at this conference he also considers how rules-based approaches can be designed and evaluated with committee decision-making.

However, using the same methodology Michaelis and Wieland (2017) show that if one uses the lower r-star estimates "together with consistent estimates of potential activity, funds rate prescriptions from reference rules move back up." They add that "The decline in R-Star estimates does not justify the current policy stance. Rather, consistent application suggests that policy should be tightened." By considering the range of views about r-star in this more formal way, one finds the range of policy implications narrows.

I think it would help further in dealing with disparate views if the process were more public, perhaps along the lines of proposed legislation, where the Federal Open Market Committee would report its own strategy and compare it with well-known rules. Again quoting Michaelis and Wieland (2017) "comparisons of Fed policy to simple reference rules show how such legislation would serve to bolster the Federal Reserve's independence...Clearly, by referring to such legislation and appropriate reference rules, the Fed would be able to better stand up to such pressure and more effectively communicate its reasons to the public."

A Package Approach Today

Given that a package approach led to monetary reform 38 years ago when views were so disparate, it is natural to ask whether such a package approach would work today. Consider the issue of normalization. While there is an apparent desire to normalize policy today, some express concern that the implied higher interest rate or appreciated exchange rate would slow the economy, much as there were such concerns in 1979. Much about the financial world has

changed since then, but there are several possibilities to consider in developing a multi-part package.

First, recall that the 1979 decision to target reserves reassured people with views like Teeters, Rice and Partee that the policy interest rate could easily fall if need be. The emphasis now could be on a return to rules-based policy in which interest rates could fall easily should the economy falter.

Second, recall that the 1979 decision to change reserve requirements was aimed at lending and credit creation. The emphasis today could be on a plan to off-ramp regulations for financial institutions that hold sufficient capital, appealing to those who worry that normalizing interest rates or compliance requirements reduce credit growth. That is similar to a proposal now in the Financial CHOICE Act, which was just voted out of the House Financial Services Committee as H.R. 10 of the 115th Congress. It could also be implemented in part under current regulatory procedures developed at the Federal Reserve Board without a change in legislation.

Third, a rarely discussed and implicit part of the actions taken in 1979 was the move by other central banks to change their approach to policy. This tended to mitigate concerns about dollar appreciation. The emphasis today could be that other central banks (the European Central Bank or the Bank of Japan) could begin to taper, which would appeal to those with exchange rate concerns. This of course is a most delicate issue, and is best left to central banks operating in own country's interest.

Conclusion

In these remarks I have tried to suggest ways in which monetary policy makers can deal in practice with disparate views about monetary economics, such as are being presented and discussed at this conference. Though objective empirical research, discussion and debate can help narrow views and create progress, views today appear to be as disparate as they were at the time of the big change in monetary policy in 1979.

However, the methods of dealing with this disparity have improved. Model comparison and robustness studies are much easier to carry out. Systematic policy evaluation of alternative monetary strategies has become routine. Policy makers at the Fed can and should make better use of these advances. And though more difficult, looking for policy packages that can draw in policy makers with different views is still likely to be useful, especially if we study and learn from past experiences.

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