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Should Financial Stability Be a Goal of Monetary Policy?

Notes from the Vault

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The Federal Open Market Committee (FOMC) currently operates under what is called the dual mandate from Congress: to promote maximum employment and stable prices.¹/₂ In the wake of the financial crisis, there has been discussion about the merits of incorporating a third goal related to financial stability. This month I posit that the inclusion of a financial stability goal is well supported on theoretical grounds but raises difficult issues in practical implementation.

The theoretical case for a financial stability goal

The goals of promoting maximum employment and price stability can be thought of as elements of a single overarching goal: promoting maximum sustainable real economic growth. Maximum sustainable real economic growth is a reasonable goal, as it is this growth that provides the resources to accomplish other societal goals.² Moreover, monetary policy works through its influence over aggregate nominal demand, which bears a more direct relationship to economic growth than it does to employment per se.

Some observers would say that the FOMC adopted an implicit policy of maximizing sustainable growth when it set a target rate of 2 percent inflation. The <u>Federal Reserve's</u> case for a 2 percent inflation rate rather than a literal interpretation of stable prices (a constant price index) is that a low level of inflation reduces the risk of price deflation, "a phenomenon associated with very weak economic conditions." Yet the Federal Reserve does not seek to reduce further the risk of deflation by setting a higher target because that "would reduce the public's ability to make accurate longer-term economic and financial decisions." One of the costs of such less accurate decisions would be lower longer-term growth.

Financial stability is also linked to both monetary policy and economic growth. <u>Tobias Adrian and Nellie Liang</u> discuss a variety of ways in which more accommodative monetary policy that fosters short-run growth may also increase the risk of financial instability. And this instability may result in lower growth in the future; Furceri and Mourougane (2012) estimate reductions in potential output after the financial crisis of from 1.5 to 2.4 percent in Organisation for Economic Co-operation and Development (OECD) countries from 1960 to 2008.

Thus, a good theoretical case can be made for shrinking the dual mandate to a single mandate: maximum sustainable real economic growth, which, in turn, implies a strong theoretical case for including financial stability considerations.³ Further, consideration of financial stability is also fully consistent with the dual mandate given that financial crises tend to lower employment and increase the risk of unintended deflation.

The practical case against a financial stability goal

The practical case against adding financial stability to the FOMC's goals is that doing so would make a difficult problem far tougher. Policymakers already struggle with questions such as whether a looser policy (generally defined as a lower target path of short-term rates) would result in significantly lower unemployment without higher inflation, or in substantially more inflation with little or no employment gains. Theoretical models of the macroeconomy often deliver conflicting answers to these questions.

Ideally, these difficult questions would be answered by the data on economic performance. Some models would be decisively rejected and those not rejected would deliver generally consistent answers. Unfortunately, the data often fail to deliver such definitive answers. Moreover, even if a model is rejected by the data, it is often the case that a slightly revised version cannot be rejected. Thus, those who enter the debate about the impact of monetary policy with strong priors about the theoretical impact of policy in a given circumstance are unlikely to have those priors changed by the data.

A further problem is determining what data are relevant—is the structure of the economy that generated the data relevant to the policy problems of today? The <u>FRB/US</u> large-scale macroeconomic model available online provides data back to 1968 while the Federal Reserve's <u>Estimated Dynamic</u> <u>Optimization-Based</u> (EDO—a dynamic stochastic general equilibrium model) is estimated using data starting in 1984. As <u>David Rowe</u> pointed out in a purely financial context, there is no safe answer to the question of how far back to start empirical analysis of economic data. Pick too long a period and you may incorporate data that are no longer relevant.

Yet as the period shortens and the amount of data decreases, the set of models that can be rejected with statistical analysis also decreases.

The challenge of developing macroeconomic models to assist the FOMC would be made even more difficult by the addition of financial stability considerations into the modeling framework. As with inflation and unemployment, we have theoretical models of financial instability. However, far less theoretical work has been done on financial stability. Moreover, the range of definitions and measures of systemic risk in <u>Dimitrios Bisias</u>, <u>Mark Flood</u>, <u>Andrew W. Lo</u>, <u>and Stavros Valavanis</u> shows that in some important respects researchers do not even agree on how to define the key terms, let alone how to measure them.

Moreover, obtaining decisive answers about the impact of monetary policy on financial instability is even more difficult. The consensus is that low interest rates are more likely to generate risks to financial stability, but even here there is some scope for disagreement. A summary of work on the effects of monetary policy on financial stability through various channels by the <u>International Monetary Fund</u> finds that whether higher rates enhance stability depends upon which channel one is analyzing. For example, lower rates may encourage risk-taking solvent intermediaries, but higher rates may encourage increased risk taking by distressed intermediaries. Thus, the state of the art is far from being able to provide policymakers what they really want, how much a given change in the path of the policy rate would affect the likelihood of a financial crisis in the short to medium term.

In principle, we might be able to answer policymakers' question better if we observed enough crises to see a clear pattern. Fortunately, the United States does not experience financial crises with nearly the frequency we observe changes in employment or inflation. Employment and inflation are measurable on a monthly basis (and gross domestic product on a quarterly basis) so it is possible to find some variability in the data that might help in identifying their relation to growth. Bouts of financial instability that have measurable impacts on real growth happen at a frequency closer to once every 10 to 20 years. At such a low frequency it is relatively easy to create many different models (stories) that are consistent with the data. The problem is that these models often deliver conflicting policy implications and, until the next crisis, we have no more data to test the models on beyond the data used to create them.

Also, the financial system appears to evolve at least as fast as the real economy. Certainly the U.S. banking system of the 1960s, 1970s, or even 1980s bears little resemblance to the current one. Thus, if anything the problem of which prior periods of instability are relevant to contemporary concerns is more severe than that for employment and inflation—especially if one's goal is to calibrate the appropriate monetary policy that provides maximum sustainable growth (and hence, the best trade-off among inflation, employment, and financial stability).

Finally, even judging whether prior monetary policy was correctly calibrated in the past will be difficult. Suppose the FOMC raised the path of its shortterm interest rate targets in an attempt to head off financial instability and that the end result was a stable financial system. Does that prove that tighter monetary policy prevented instability? Or was the financial system going to be stable regardless, so the only result of tighter policy was lower employment?

Therefore, the reluctance of monetary policymakers to add financial stability concerns is understandable. At best, economists can provide only vague insight into the trade-offs between financial stability and the FOMC's other goals. But completely dismissing financial stability as a concern is difficult given the potentially very high cost associated with such instability. Many policymakers want to simplify the task by delegating responsibility for financial stability to other tools, tools broadly grouped together under the heading of macroprudential regulation. Is macroprudential regulation the answer?

Macroprudential regulation as a substitute

Macroprudential regulation is prudential regulation intended primarily to enhance the stability of the financial system. Among the set of macroprudential tools are institutional measures such as higher capital requirements for systemically important banks and countercyclical capital buffers. Macroprudential measures can also include a variety of regulations designed to limit credit growth in specific markets (such as maximum loan-to-value ratios) and reduce credit risk in specific markets (as is intended by requirements for centralized derivatives clearing).

The targeting of specific markets and institutions has both advantages and weaknesses relative to monetary policy. The major benefit is that macroprudential regulation can be targeted at those markets and institutions thought to pose a threat to financial stability, whereas monetary policy has an impact on the overall economy.

One of the weaknesses of such targeting is that the specific markets and/or institutions that threaten financial stability must be identified and appropriate regulatory requirements established.⁴ But the set of markets and institutions posing a threat and the extent of appropriate regulation are both subject to considerable debate given the current state of the art in measuring and managing systemic risk. Although regulators could make errors in both directions, the political process is likely to bias the outcomes toward underregulation over the long run. Those markets and institutions that perceive they are being targeted for excessively strict regulation can form potent lobbying groups opposing the regulation.

A related weakness is that the functional goals of most types of financial transactions can be accomplished in a variety of market and institutional structures. If macroprudential regulation imposes high costs on one way of transacting, the transactions will shift to a less regulated market or institution. In contrast, monetary policy has the advantage that it "gets in all of the cracks," according to former Federal Reserve Governor <u>Jeremy Stein</u>.

Conclusion

The theoretical case including a financial stability mandate into monetary policy is very strong. However, the practical problems with incorporating such a mandate lead many to favor using macroprudential regulation rather than monetary policy to maintain financial stability. Yet a closer look at macroprudential regulation suggests it faces many of the same problems, and monetary policy may work in cases where macroprudential regulation might fail due to regulatory arbitrage.

Policymakers are unlikely ever to be able completely to end the risk of financial instability, but better policies can almost surely reduce the risk and social costs of such instability. Hence, at this point the safest approach is to continue developing macroprudential tools while retaining the option of using monetary policy to reduce the risk of financial instability.

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employment, stable prices and moderate long-term interest rates." Importantly, the mandate is to "promote" the goals and not to "attain" the goals. This language is appropriate as the path of the economy is determined by a variety of influences from both the private and public sectors, most of which are not under the control of the Federal Reserve. Note also that this mandate includes a third goal of moderate long-term interest rates. However, the <u>Federal Reserve</u> views attainment of this goal to be a byproduct of policies and communications designed to foster stable prices.

² Maximum sustainable growth is by no means the only possible economic issue of concern for the federal government. Among the many other possible concerns are disparities in income distribution and regional growth. However, although monetary policy affects these and other important economic variables, monetary policy is a blunt tool that is not well suited to accomplishing multiple objectives. Moreover, in many cases there is no consensus about the optimal long-run resolution of these issues, suggesting that these questions would be better answered in a political forum such as the U.S. Congress.

³ Financial crises are also adverse to the dual mandate narrowly defined, as such crises lower employment and increase the risk of unintended deflation.

⁴ I offered some thoughts on how to strengthen macroprudential surveillance and how that information could be incorporated into regulatory policy. While the suggestions would be a step forward, these proposals are nowhere near robust enough to justify excusing monetary policy from all financial stability responsibilities.

¹ The <u>congressional mandate</u> is to "maintain long run growth of the monetary and credit aggregates ... so as to promote effectively the goals of maximum

References

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