## Stanley Fischer: Monetary policy - by rule, by committee, or by both?

Speech by Mr Stanley Fischer, Vice Chair of the Board of Governors of the Federal Reserve System, at the 2017 US Monetary Policy Forum, sponsored by the Initiative on Global Markets at the University of Chicago Booth School of Business, New York City, 3 March 2017.

\* \*

In recent years, reforms in the monetary policy decisionmaking process in central banks have been in the direction of an increasing number of monetary policy committees and fewer single decisionmakers – the lone governor model. We are only a few months away from the 20th anniversary of the introduction of the Bank of England's Monetary Policy Committee, just a few years after the 300th birthday of the venerable Old Lady of Threadneedle Street. The Bank of Israel moved from a single policymaker to a monetary policy committee in 2010, while I was governor there; more recently, central banks in India and New Zealand have handed over monetary policy to committees.

The Federal Reserve is not part of this recent shift, however. The Federal Open Market Committee (FOMC) has been responsible for monetary policy decisions in the United States since it was established by the Banking Act of 1935, two decades after the founding of the Fed itself. $\frac{2}{}$ 

The movement toward committees reflects the advantages of committees in aggregating a wide range of information, perspectives, and models. Despite the prevalence and importance of committees in modern central banking, the role of committees in the formulation of policy has not attracted nearly as much academic attention as has the research on monetary policy rules. 3

The literature on monetary policy rules stretches back to at least Adam Smith and includes important contributions from David Ricardo, Knut Wicksell, and Milton Friedman. More recently, John Taylor has moved the research agenda forward with his eponymous rule, and a large number of academic papers have been written examining the effectiveness and robustness of policy rules. In contrast, as noted, study of the role of committees in making monetary policy has been fairly light, notwithstanding the insightful work of Alan Blinder and others.

Committees and rules may appear to be in opposition as approaches to policymaking. One might even argue that if a central bank ever converged on a single monetary rule, there would be no need for a monetary policy committee. In practice, the Fed operates through a committee structure and considers the recommendations of a variety of monetary rules as we make monetary policy decisions. Our decision is typically whether to raise or reduce the federal funds rate or to leave it unchanged. Committees can aggregate large amounts of diverse information—not just data, but also anecdotes and impressions that would be hard to quantify numerically. Good committees also offer a variety of perspectives and underlying economic models for interpreting the economy. In contrast, a policy rule, strictly defined, is numerical and constrained to a single perspective on the economy.

Committees and rules each have their advantages. Committees embody a wider range of information and have a capacity for innovation. Rules can simplify central bank communications, a particularly important feature in forward-looking models of the economy. In contrast, the diversity of views that makes a committee work can sometimes pose a communications challenge, as the frequent complaints about the cacophony of messages coming out of the FOMC illustrate. <sup>6</sup>

In the remainder of my discussion, I would like to elaborate on some of the features of committees that have contributed to their prevalence in monetary policymaking. I will then

discuss monetary policy rules and some of the difficulties in developing robust rules for policy.

## Why Do Almost All Central Banks Make Their Monetary Policy Decisions in a Committee?

Let us turn to central bank decisionmaking. One of the striking facts about the Fed is that it is the third central bank of the United States. Whereas the long-lived central banks of Europe – the Riksbank and the Bank of England – have survived for more than three centuries, the Fed has only recently become a centenarian.

Roger Lowenstein's book *America's Bank* convinces the reader that it was no easy matter to establish this third central bank. It also establishes for those coming to the issue for the first time that the major issues related to the Fed's structure were political. That is, underlying the disagreements about the establishment of the Federal Reserve was the concern that the central bank not upset the balance of economic power within the U.S. economy. Indeed, it was not until 1935 that the present structure of the FOMC was established, in which the 7 members of the Federal Reserve Board in Washington, D.C., who are nominated by the President and confirmed by the Senate, vote along with 5 of the 12 Reserve Bank presidents at any given meeting. I

So, why policy committees? What makes them so special? There are several reasons to prefer decisionmaking by committee: For one thing, each committee member brings to the table his or her own perspective or view of the world, as well as valuable information that others on the committee haven't heard. Moreover, committees are less likely to take extreme positions – discussion, deliberation, and voting tends to drive policy outcomes toward compromise. Committees also tend to be less volatile or activist, imparting an inertia to policymaking that could be desirable – or perhaps undesirable when activism is required. Finally, academic studies have shown that a combination of forecasts is more accurate, over time, than a single forecast. Putting it all together, committees are, on average, likely to make better monetary policy decisions than individuals – an assertion that has received support from academic experiments in which undergraduate students played a part.

Notwithstanding the shift toward monetary policy committees, each central bank and its institutional structure reflects the politics and culture of the country that it serves (or "countries" in the case of the European Central Bank). The Federal Reserve is no exception, as Lowenstein's book demonstrates. In the years before 1913, the United States suffered through a series of financial crises culminating in the Panic of 1907. That panic convinced many important stakeholders – William Jennings Bryan, the leader of the Populist movement; Paul Warburg, a prominent financier; Nelson Aldrich, a powerful Republican senator; and Carter Glass, the Democratic chair of the House Committee on Banking and Currency – that America needed a central bank. Our unique structure with the Board of Governors in Washington and the 12 Reserve Banks scattered around the country reflected a years-long struggle to balance a variety of competing interests: farmers in the heartlands and financiers on Wall Street; populists and federalists; and creditors and debtors. Our central bank and its policy committee importantly reflect the deal the Fed's founders struck to resolve those competing interests and create an institution representing America's economic and geographic diversity.

I should add that I find the regional balance created by the membership of the FOMC to be a valuable feature of its structure. In the first round of policymaker discussion at a typical FOMC meeting, most of the presidents of the Reserve Banks start their presentations with a description of economic developments in their Federal Reserve District. From these presentations, one understands what a massive and diverse economy the United States is and why the politicians who established the Fed were right to require its decisions to be made by a committee.

## **Robust Rules for Monetary Policy**

I turn now to economic models and monetary policy rules. I recently gave a lecture at the

University of Warwick entitled "I'd Rather Have Bob Solow Than an Econometric Model, But . . . ," with the punch line quote from Paul Samuelson saved for the end: "I'd rather have Bob Solow than an econometric model, but I would rather have Bob Solow with an econometric model than without one."

12 To summarize, the speech discussed the important role that models and policy rules play in FOMC discussions and decisionmaking.

Shortly after the speech, I received an e-mail from an old and esteemed colleague, Professor Athanasios Orphanides, with the subject line "I'd rather have Bob Solow with a model and a rule (following a careful evaluation process)." What does a careful evaluation process entail? I will paraphrase my correspondent at length. 13

Professor Orphanides's recommendation is that the FOMC adopt a reference rule, based on a rigorous evaluation and paying particular emphasis to (1) robustness to model uncertainty, (2) robustness to natural rate uncertainty, (3) robustness to expectations formation, (4) robustness to the size of shocks and the effective lower bound, and (5) whatever else the Fed staff has identified as a gap in our knowledge that may matter in evaluation. He suggested that, ultimately, the FOMC could arrive at a simple rule that would serve as a good benchmark to guide policy.

My colleague certainly lays out an impressive work program for the Board's cadre of Ph.D. economists. However, I tend to agree with John Taylor and my Fed colleague John Williams when they write that "the search for better and more robust policy rules is never done."

My take is that rules are extremely useful reference tools, but they are likely to work best as inputs into a committee decision. Why? Let me reiterate some points I made in Warwick. First, the economy is very complex, and models that attempt to approximate that complexity can sometimes let us down. A particular difficulty is that expectations of the future play a critical role in determining how the economy reacts to a policy change. Moreover, the economy changes over time-Ithis means that policymakers need to be able to adapt their models promptly and accurately in real time. And, finally, no one model or policy rule can capture the varied experiences and views brought to policymaking by a committee. All of these factors and more recommend against accepting the prescriptions of any one model, policy rule, or policymaker.

## References

Blinder, Alan S. (1998). Central Banking in Theory and Practice. Cambridge, Mass.: MIT Press.

——— (2004). *The Quiet Revolution: Central Banking Goes Modern*. New Haven, Conn.: Yale University Press.

Blinder, Alan S., and John Morgan (2005). "Are Two Heads Better Than One? Monetary Policy by Committee," *Journal of Money, Credit, and Banking*, vol. 37 (October), pp. 789–811.

Bordo, Michael D. (2016). "Some Historical Reflections on the Governance of the Federal Reserve," in John H. Cochrane and John B. Taylor, eds., *Central Bank Governance and Oversight Reform*. Stanford, Calif.: Hoover Institution Press.

Chappell, Henry W. Jr, Rob Roy McGregor, and Todd Vermilyea (2005). *Committee Decisions on Monetary Policy: Evidence from Historical Records of the Federal Open Market Committee*. Cambridge, Mass.: MIT Press.

Faust, Jon (2016). "Oh, What a Tangled Web We Weave: Monetary Policy Transparency in Divisive Times," paper prepared for "Understanding Fedspeak," an event cosponsored by the Hutchins Center on Fiscal and Monetary Policy at the Brookings Institution and the Center for Financial Economics at Johns Hopkins University, held at the Brookings Institution, Washington, November 30, available at <a href="https://www.brookings.edu/research/oh-what-a-tangled-web-we-weave-monetary-policy-transparency-in-divisive-times">www.brookings.edu/research/oh-what-a-tangled-web-we-weave-monetary-policy-transparency-in-divisive-times</a>.

Fischer, Stanley (2017). "I'd Rather Have Bob Solow Than an Econometric Model, But . . . ," speech delivered at the Warwick Economics Summit, Coventry, United Kingdom, February 11.

Gerlach-Kristen, Petra (2004). "Is the MPC's Voting Record Informative about Future UK Monetary Policy?" *Scandinavian Journal of Economics*, vol. 106 (June), pp. 299–313.

Hendry, David F., and Michael P. Clements (2004). "Pooling of Forecasts," *Econometrics Journal*, vol. 7 (1), pp. 1-31.

Lombardelli, Clare, James Proudman, and James Talbot (2005). "Committees versus Individuals: An Experimental Analysis of Monetary Policy Decision Making," *International Journal of Central Banking*, vol. 1 (May), pp. 181–205.

Lowenstein, Roger (2015). America's Bank: The Epic Struggle to Create the Federal Reserve. New York: Penguin Press.

Meade, Ellen E., and David Stasavage (2008). "Publicity of Debate and the Incentive to Dissent: Evidence from the US Federal Reserve," *Economic Journal*, vol. 118 (April), pp. 695|717.

Orphanides, Athanasios, and John C. Williams (2002). "Robust Monetary Policy Rules with Unknown Natural Rates," *Brookings Papers on Economic Activity*, no. 2, pp. 63–118.

Powell, Jerome H. (2016). "A View from the Fed," speech delivered at "Understanding Fedspeak," an event cosponsored by the Hutchins Center on Fiscal and Monetary Policy at the Brookings Institution and the Center for Financial Economics at Johns Hopkins University, held at the Brookings Institution, Washington, November 30.

Ruge-Murcia, Francisco, and Alessandro Riboni (2010). "Monetary Policy by Committee: Consensus, Chairman Dominance, or Simple Majority?" *Quarterly Journal of Economics*, vol. 125 (February), pp. 363–416.

———— (forthcoming). "Collective versus Individual Decision-Making: A Case Study of the Bank of Israel Law," *European Economic Review.* 

Taylor, John B. (1979). "Estimation and Control of a Macroeconomic Model with Rational Expectations," *Econometrica*, vol. 47 (September), pp. 1267–86.

———— (1993). "Discretion versus Policy Rules in Practice," *Carnegie-Rochester Conference Series on Public Policy*, vol. 39 (December), pp. 195–214.

———— (1999). *Monetary Policy Rules*. Chicago: University of Chicago Press.

Taylor, John B., and John C. Williams (2011). "Simple and Robust Rules for Monetary Policy," in Benjamin M. Friedman and Michael Woodford, eds., *Handbook of Monetary Economics*, vol. 3B. Amsterdam: North-Holland, pp. 829–59.

Walsh, Carl E. (2009). "<u>Using Monetary Policy to Stabilize Economic Activity (PDF)</u>," speech delivered at a symposium sponsored by the Federal Reserve Bank of Kansas City, held in Jackson Hole, Wyo., August 20–22, pp. 245–96.

Warsh, Kevin M. (2016). "Institutional Design: Deliberations, Decisions, and Committee Dynamics," in John H. Cochrane and John B. Taylor, eds., *Central Bank Governance and Oversight Reform.* Stanford, Calif.: Hoover Institution Press.

Wheelock, David C. (2000). "National Monetary Policy by Regional Design: The Evolving Role of the Federal Reserve Banks in Federal Reserve System Policy," in Jürgen von Hagen and Christopher J. Waller, eds., Regional Aspects of Monetary Policy in Europe. Boston: Kluwer

Academic, pp. 241-74.

Williams, John C. (2003). "Simple Rules for Monetary Policy (PDF)," Federal Reserve Bank of San Francisco, *Economic Review*, pp. 1-12.

- 1 I am grateful to Joseph Gruber and Ellen Meade of the Federal Reserve Board for their assistance. The views expressed are mine and not necessarily those of the Federal Reserve Board or the Federal Open Market Committee.
- <sup>2</sup> Although the Federal Reserve was created in 1913, the institutional structure and governance that we have today date from 1935. See Bordo (2016) and Wheelock (2000).
- It is true, though, that popular books on prominent central banks typically relate more frequently to the outstanding governors or presidents of the central banks than they do to the organizational structure of those banks.
- See Taylor (1979), Taylor (1993), Taylor (1999). Afew other notable papers from the vast literature on monetary policy rules include Orphanides and Williams (2002), Walsh (2009), and Williams (2003).
- See Blinder (1998) and Blinder (2004). Other important contributions to the literature on monetary policy committees include Blinder and Morgan (2005); Chappell, McGregor, and Vermilyea (2005); Gerlach-Kristin (2004); Meade and Stasavage (2008); Ruge-Murcia and Riboni (2010); and Warsh (2016).
- <sup>6</sup> For a discussion of the cacophony issue, see Faust (2016) and Powell (2016).
- The president of the Federal Reserve Bank of New York is a permanent member of the FOMC. Four votes rotate annually among the remaining 11 Reserve Bank presidents.
- In an experimental study in which undergraduates played a monetary policy game by themselves and in groups of five, Lombardelli, Proudman, and Talbot (2005) found group decisions to be more inertial than individual decisions but closer to that of a policy rule, although Blinder and Morgan (2005) found that groups were no different from individuals in terms of policy activism. Arecent study by Ruge-Murcia and Riboni (forthcoming) of Bank of Israel policy before and after its change from a single governor to a committee found that committee decisions were more inertial than individual ones.
- 9 See, for example, Hendry and Clements (2004).
- 10 In addition, in more recent times, the Federal Reserve System has placed greater emphasis on other aspects of diversity.
- <sup>11</sup> While only a subset of Reserve Bank presidents vote at any given FOMC meeting, all of them offer their views in our discussions of the economy and of monetary policy.
- 12 See Fischer (2017).
- The direct quotation from Professor Orphanides is as follows: "My recommendation had been that the FOMC should adopt a reference rule, based on rigorous evaluation, using the technology the Fed staff has developed over the past couple of decades and paying particular emphasis on various aspects of robustness: (1) robustness to model uncertainty, (FRB/US (various vintages), EDO, SIGMA(again various vintages) and others), (2) robustness to natural rate uncertainty, u\*, r\*, Q\*, fx\* and so on, (3) robustness to expectations formation (mode consistent, learning, partial learning by businesses/households, etc.), (4) robustness to the size of shocks and the ZLB [zero lower bound] (given that certainty equivalence does not hold), (5) whatever else the staff research has identified as a gap in our knowledge that may matter in evaluation. The evaluation should allow for forecast-based rules as well as outcome-based rules and could be updated on an annual basis to incorporate new information. But ultimately, the FOMC could arrive at a simple rule that would be, in the Committee's judgment, a good benchmark to guide policy."
- 14 See Taylor and Williams (2011), p. 855.