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A Monetary Policy for the Future

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A year ago at another IMF conference, "Monetary Policy in the New Normal," I argued that central banks should renormalize monetary policy, not new-normalize it to some new normal as some had suggested.[1] I want now to elaborate on that theme, outline an implied monetary policy for the future, and consider some objections that have been raised.

Let me begin with a mini-history of monetary policy in the United States during the past fifty years. When I first started doing monetary economics in the late 1960s and 1970s, monetary policy was highly discretionary and interventionist. It went from boom to bust and back again, repeatedly falling behind the curve and then overreacting. The Fed had lofty goals but no consistent strategy. If you measure macroeconomic performance as I do, by both price stability and output stability, the results were terrible. Unemployment and inflation both rose.

Then, in the early 1980s, policy changed. It became more focused, more systematic, and more rules-based, and it stayed that way through the 1990s and into the start of the twenty-first century. Using the same performance measures, the results were excellent. Inflation and unemployment both came down. We got the Great Moderation, or the NICE period (noninflationary, consistently expansionary), as Mervyn King put it.[2] Researchers like John Judd and Glenn Rudebush at the San Francisco Fed and Richard Clarida, Mark Gertler, and Jordi Gali showed that this improved performance was closely associated with a more rules-based policy, which they defined as systematic changes in the instrument of policy—the federal funds rate—in response to developments in the economy.[3]

Researchers found the same results in other countries. Stephen Cecchetti, Peter Hooper, Bruce Kasman, Kermit Schoenholtz, and Mark

Watson showed that as policy became more rulelike in Germany, the UK, and Japan, economic performance improved.[4]

Few complained about spillovers or beggar-thy-neighbor policies during the Great Moderation. The developed economies were effectively operating in what I call a nearly international cooperative equilibrium, another NICE to join Mervyn King's. This was also a prediction of monetary theory, which implied that if each country followed a good rules-based monetary policy, then the international system would operate in a NICE way.[5]

But then there was a setback. The Fed decided to hold the interest rate very low during 2003–2005, thereby deviating from the rules-based policy that worked well during the Great Moderation. You do not need policy rules to see the change: With the inflation rate around 2 percent, the federal funds rate was only 1 percent in 2003, compared with 5.5 percent in 1997, when the inflation rate was also about 2 percent. The results were not good. In my view this policy change brought on a search for yield, excesses in the housing market, and, along with a regulatory process that broke rules for safety and soundness, was a key factor in the financial crisis and the global recession.

During the ensuing panic in the fall of 2008 the Fed did a good job of providing liquidity through loans to financial firms and swaps to foreign central banks. Reserve balances at the Fed expanded sharply as a result of these temporary liquidity provisions. They would have declined after the panic were it not for the Fed's initiation of its unconventional monetary policy, the large-scale purchases of securities now called quantitative easing (QE). Regardless of what you think of the impact of QE, it was not rulelike or predictable, and my research shows that it was not effective.[6] It did not deliver the economic growth that the Fed had forecasted, and it did not lead to a good recovery. And yet another deviation from rules-based policy was the continuation of a near zero interest rate through the present, long after Great Moderation rules would have called for its end.

This deviation from rules-based monetary policy went beyond the United States, as first pointed out by researchers at the OECD, and is now obvious to any observer.[7] Central banks followed each other down through extra-low interest rates in 2003–2005 and more recently through QE. QE in the United States was followed by QE in Japan and by QE in the euro zone, with exchange rates moving as expected in each case.

Researchers at the Bank for International Settlements[8] showed the deviation went beyond OECD and called it the Global Great Deviation. Rich Clarida[9] commented that "QE begets QE!" Complaints about spillover and pleas for coordination grew. NICE ended in both senses of the word. World monetary policy now seems to have moved into a strategy-free zone.

This short history demonstrates that shifts toward and away from steady predictable monetary policy have made a great deal of difference for the performance of the economy, just as basic macroeconomic theory tells us. This history has now been corroborated by Alex Nikolsko-Rzhevskyy, David H. Papell, and Ruxandra Prodan using modern statistical methods.[10] Allan Meltzer found nearly the same thing in his more detailed monetary history of the Fed.[11]

The implication of this experience is clear: monetary policy should renormalize in the sense of transitioning to a predictable rulelike strategy for the instruments of policy. Of course, it is possible technically for the Fed to move to and stick to such a policy, but the long departures from rules-based policy show that it is difficult.

These departures suggest that some legislative backing might help. Such legislation could simply require the Fed to describe its strategy or rule for adjusting its policy instruments. It would be the Fed's job to choose the strategy and how to describe it. The Fed could change its strategy or deviate from it if circumstances called for a change, but the Fed would have to explain why.

There is precedent for such legislation. The Federal Reserve Act used to require the Fed to report ranges of the monetary and credit aggregates. The requirements were repealed in 2000. In many ways the proposed reform would simply replace them. It would provide responsible oversight without micro-managing. It would not chain the Fed to a mechanical rule. It would not threaten the Fed's independence. Indeed, it would give the Fed more independence from the executive branch of government.

Now let me consider some of the objections to such a monetary policy, whether it is backed by legislation or not.

Some argue that the historical evidence in favor of rules is simply correlation, not causation. But this ignores the crucial timing of events: in each case, the changes in policy occurred before the changes in performance, clear evidence for causality. The decisions taken by Paul Volcker came before the Great Moderation. The decisions to keep interest rates very low in 2003–2005 came before the global recession. And there are clear causal mechanisms, such as the search for yield, risk taking, and the boom and bust in the housing market, which were factors in the financial crisis.

Another point relates to the zero lower bound. Wasn't that the reason that the central banks had to deviate from rules in recent years? Well, it was certainly not a reason in 2003–2005 and it is not a reason now, because the zero lower bound is not binding. It appears that there was a short period in 2009 when zero was clearly binding. But the zero lower bound is not a new thing in economics research. Policy rule design research took that into account long ago.[12] The default was to move to a stable money growth regime, not to massive asset purchases.[13]

Some argue that a rules-based policy is not enough anymore and that we need more international coordination. I believe the current spillovers are largely the result of these policy deviations and of unconventional monetary policy. We heard complaints about the spillovers during the stop-and-go monetary policy in the 1970s. But during the 1980s and 1990s and until recently there were few such complaints. The evidence and theory are that rules-based policy brings about NICE results in both senses of the word.

Some argue that rules-based policy for the instruments is not needed if you have goals for the inflation rate or other variables. They say that all you really need for effective policymaking is a goal, such as an inflation target and an employment target. The rest of policymaking is doing whatever the policymakers think needs to be done with the policy instruments. You do not need to articulate or describe a strategy, a decision rule, or a contingency plan for the instruments. If you want to hold the interest rate well below the rules-based strategy that worked well during the Great Moderation, as the Fed did in 2003–2005, then it's OK as long as you can justify it at the moment in terms of the goal.

This approach has been called "constrained discretion" by Ben Bernanke,[14] and it may be constraining discretion in some sense, but it is not inducing or encouraging a rule as a "rules versus discretion" dichotomy might suggest. Simply having a specific numerical goal or objective is not a rule for the instruments of policy; it is not a strategy; it ends up being all tactics. I think the evidence shows that relying solely on constrained discretion has not worked for monetary policy.

Some of the recent objections to a rules-based strategy sound like a revival of earlier debates. Larry Summers draws analogies with medicine, saying he would "rather have a doctor who most of the time didn't tell me to take some stuff, and every once in a while said I needed to ingest some stuff into my body in response to the particular problem that I had. That would be a doctor who's [advice], believe me, would be less predictable."[15]

So, much as did the proponents of discretion in earlier rules versus discretion debates (such as between Walter Heller and Milton Friedman), Summers argues in favor of relying on an all-knowing expert, a doctor who does not perceive the need for, and does not use, a set of guidelines.

But much of the progress in medicine over the years has been the result of doctors using checklists. Experience shows that checklists are invaluable for preventing mistakes, making good diagnoses, and prescribing appropriate treatments.[16] Of course, doctors need to exercise judgment in implementing checklists, but if they start winging it or skipping steps, the patients usually suffer. Checklist-free medicine is as bad as rules-free monetary policy.

Many say that macroprudential policy of the countercyclical variety is an essential part of a monetary policy for the future. In my view, it is more important to get required levels of capital and liquidity sufficiently high. We do not know enough about the impacts of cyclical movements in capital buffers to engage in fine-tuning, and it puts the central bank in the middle of a very difficult political issue.

Some argue that we should have QE forever, leave the balance sheet bloated, and use interest on reserves or reverse repos to set the short-term interest rate. But the distortions caused by these massive interventions and the impossibility of such policy being rule-like indicate that QE forever should not be part of a monetary policy for the future. The goal should be to get the balance sheet back to levels where the demand and supply of reserves determine the interest rate. Of course, interest rates on reserves and reverse repos could be used during a transition. And a corridor system would work if the market interest rate was in between the upper and lower bands and not hugging one or the other.

Should forward guidance be part of a monetary policy for the future? My answer is yes, but only if it is consistent with the rules-based strategy of the central bank, and then it is simply a way to be transparent.

If forward guidance is used to make promises for the future that will not be appropriate in the future, then it is time-inconsistent and should not be part of monetary policy.

For all these reasons, monetary policy in the future should be centered on a rule or strategy for the policy instruments designed to achieve stated goals with consistent forward guidance but without cyclical macroprudential actions or QE.

Notes

This chapter is a written version of my opening remarks at a panel with Ben Bernanke and Gill Marcus titled "Monetary Policy in the Future" and chaired by José Viñals. It was part of the IMF conference, "Rethinking Macro Policy III: Progress or Confusion?"

1. The presentation was later published as "Re-Normalize, Don't New-Normalize Monetary Policy," *Macroeconomic Review* (Monetary Authority of Singapore) 13 (October 2014): 86–90.

2. Mervyn King, speech delivered at the East Midlands Development Agency/ Bank of England Dinner, Leicester, October 14, 2003.

3. John P. Judd and Glenn D. Rudebusch, "Taylor's Rule and the Fed: 1970–1997," *FRBSF Economic Review* 3 (1998): 3–16; Clarida Richard, Jordi Gali, and Mark Gertler, "Monetary Policy Rules and Macroeconomic Stability: Evidence and Some Theory," *Quarterly Journal of Economics* 115, no. 1 (2000): 147–180.

4. Stephen G. Cecchetti, Peter Hooper, Bruce C. Kasman, Kermit L. Schoenholtz, and Mark W. Watson, "Understanding the Evolving Inflation Process," paper presented at the US Monetary Policy Forum, Washington, DC, March 9, 2007.

5. See John B. Taylor "International Monetary Policy Coordination: Past, Present and Future," BIS Working Paper 437, Bank for International Settlements, December 2013, for a summary.

6. Johannes C. Stroebel and John B. Taylor "Estimated Impact of the Federal Reserve's Mortgage-Backed Securities Purchase Program," *International Journal of Central Banking* 8, no. 2 (2012): 1–42.

7. Rudiger Ahrend, "Monetary Ease: A Factor behind Financial Crises? Some Evidence from OECD Countries," *Economics: The Open-Access, Open-Assessment E-Journal* 4, no. 2010–12 (April 14, 2010): 1–30.

8. Boris Hofmann and Bilyana Bogdanova, "Taylor Rules and Monetary Policy: A Global 'Great Deviation'?," *BIS Quarterly Review*, September 2012, 37–49.

9. Richard Clarida, "Discussion of 'The Federal Reserve in a Globalized World Economy,'" at the conference, "The Federal Reserve's Role in the Global Economy: A Historical Perspective," Dallas Federal Reserve Bank, September 2014.

10. Alex Nikolsko-Rzhevskyy, David H. Papell, and Ruxandra Prodan, "Deviations from Rules-Based Policy and Their Effects," *Journal of Economic Dynamics and Control* 49 (December 2014): 4–17.

11. Allan Meltzer, "Federal Reserve Policy in the Great Recession," *Cato Journal* 32, no. 2 (2012): 255–263.

12. For example, in my 1993 book, *Macroeconomic Policy in a World Economy: From Econometric Design to Practical Operation* (http://web.stanford.edu/~johntayl/MacroPolicyWorld.htm), in the chapter "Design of Policy Systems," I state that "since negative nominal interest rates are not feasible, Equation (6.1) [for the interest rate] must be truncated below some nonnegative value, which is taken to be 1 percent in this analysis.... In other words, whenever the function in Equation (6.1) calls for a nominal interest rate below 1 percent, the nominal interest rate is set to 1 percent. This truncated form of Equation (6.1) is the policy rule that the monetary authorities are assumed to follow" (pp. 225–226). It is in that zero bound context that we looked for an optimal rule.

13. My general view has been that interest rate rules are best thought of as part of a metarule according to which the instrument switches to money growth in deflationary or hyperinflationary situations. For example, in my 1996 paper "Policy Rules as a Means to a More Effective Monetary Policy" (*Monetary and Economic Studies* [Bank of Japan] 14, no. 1), I state that the "interest rate rule needs to be supplemented by money supply rules in cases of either extended deflation or hyperinflation" (p. 27). I held this same view at the end of 2008 as the Fed's temporary liquidity facilities began to draw down. For example, in a paper I presented at the January 2009 ASSA meetings, "The Need to Return to a Monetary Framework" (subsequently published in *Business Economics* 44, no. 2 [2009]: 63–72), I said that in the region where rates would be negative, "policymakers could use Milton Friedman's famous constant growth rate rule.... Or policymakers could design another procedure for determining the quantity based on economic principles." I also referred there to Lawrence Christiano and Massimo Rostagno's "Money Growth Monitoring and the Taylor Rule" (NBER Working Paper 8539 [Cambridge, MA: National Bureau of Economic Research, 2001]), which had shown how a broader framework could work technically.

14. Ben S. Bernanke, "'Constrained Discretion' and Monetary Policy," remarks by Governor Ben S. Bernanke before the Money Marketeers of New York University, New York, February 3, 2003.

15. Transcript published in the *Journal of Policy Modeling* 36, no. 4 (2013).

16. Atul Gawande, "The Checklist: If Something So Simple Can Transform Intensive Care, What Else Can It Do?," *The New Yorker*, December 19, 2007.