

## Dealing with Monetary Policy Spillovers

Fed policy has effects outside U.S. borders, but what can monetary policymakers here and abroad do about it?

BY TIM SABLİK

**D**uring the financial crisis of 2007-2008, the Fed took extraordinary measures to cushion the fall of the U.S. economy. This included cutting the federal funds rate to near zero and purchasing assets on a massive scale to further increase the supply of money in the economy — a policy known as quantitative easing, or QE.

The intent of these policies was to alleviate domestic economic problems such as mounting unemployment. As the financial crisis turned into the Great Recession, the Fed embarked on a second and third round of QE. While these policies may have helped soften the blow of the recession on the United States, other countries complained that the Fed's actions were having disastrous effects on their economies.

In 2012, Brazilian President Dilma Rousseff referred to the expansionary policy in the United States and other advanced economies as a “monetary tsunami” that was overwhelming emerging economies. In the immediate wake of the crisis, many investors sought safety in developed markets despite low or even negative interest rates. When the initial panic subsided but interest rates remained low, however, investors began to seek higher returns in emerging markets.

Those investments reversed course in mid-2013 after then-Chair Ben Bernanke indicated that the Fed might consider slowing QE soon if economic conditions in the United States improved. His comments triggered a sharp response in emerging markets such as Brazil and India as investors who had sought higher yields in those markets suddenly pulled out. This and other market reactions to Bernanke's comments came to be known as the “taper tantrum.”

In a 2014 speech, Raghuram Rajan, then-governor of the Reserve Bank of India, called on the Fed and central banks in other advanced economies to be more mindful of the effects their policy decisions could have on other countries.

“Even if a central bank has a purely domestic mandate, the country's international responsibilities do not allow it to arbitrarily impose costs on the rest of the world,” he said.

But just how much impact does Fed policy have on the rest of the world? And what, if anything, can it or other central banks do about such monetary policy spillovers?

### The Dollar's Global Reach

The U.S. economy accounts for nearly a quarter of world-wide GDP, making it the largest economy in the world. It's unsurprising, then, that economic shocks in the United

States often have global repercussions. One recent study found that the last four global recessions all overlapped with major U.S. recessions. To be sure, spillovers go both ways. America's interconnections with the rest of the world mean that policy changes in other countries affect it as well. But most economists agree that the United States is a driving force behind the global business cycle, making spillovers from Fed policy changes particularly powerful.

One reason for this is the role of the dollar in the global economy. Nearly a third of non-U.S. trade is priced in dollars, and according to the Bank for International Settlements (BIS), non-U.S. banks have about \$15 trillion in U.S. dollar liabilities. The dollar's outsized involvement in global trade and finances means that the effects of U.S. monetary policy are more than just domestic.

“There's a lot of activity in dollars outside the United States,” says Stephen Cecchetti of Brandeis University, who previously served as director of research at the New York Fed and economic adviser at the BIS. “So when the Fed changes the safe rate of return on dollar-denominated assets by changing its monetary policy, everything adjusts.”

Along with Tommaso Mancini-Griffoli, Machiko Narita, and Ratna Sahay of the International Monetary Fund, Cecchetti found that changes in U.S. monetary policy had an even larger effect on the median non-U.S. financial firm in advanced economies than domestic monetary policy changes in those countries. Another recent paper by economists at the Federal Reserve Board



*Raghuram Rajan, then-governor of the Reserve Bank of India, speaks about the costs of monetary policy spillovers at the Brookings Institution in Washington, D.C., on April 10, 2014.*

of Governors also found that monetary tightening by the Fed was associated with banking crises in countries whose economies were linked to the United States via trade or dollar-denominated bank liabilities.

Still, despite the vocal complaints from leaders of other countries about Fed policy during the Great Recession, it's not clear that unconventional monetary policy such as QE generated more spillovers than the Fed's traditional monetary policy. A 2018 paper by researchers at the Fed Board of Governors found no evidence that QE had larger international spillover effects than conventional monetary policy.

In fact, QE may have had positive effects on other economies, at least initially. Anusha Chari, Karlye Dilts Stedman, and Christian Lundblad of the University of North Carolina at Chapel Hill used high-frequency data to examine the effects of U.S. monetary policy shocks on emerging market countries between March 1994 and June 2016. They didn't find strong evidence of the "monetary tsunami" that Brazilian President Rousseff spoke of during the QE period, but they did find that the value of equity in emerging markets increased significantly during this period.

"In a classic asset pricing framework, rising equity valuations implies that the cost of capital is falling," says Chari. "That can have a positive effect on investment and growth."

But any positive effects turned sharply negative during the taper tantrum in 2013. Indeed, this was the concern of central bankers in emerging markets during the QE period: that positive spillovers from the Fed would increase the leverage in their financial systems, setting financial firms up for a fall when Fed policy reversed. And by all accounts, that fall was hard. Chari and her co-authors found that the spillovers from the taper tantrum were nearly three times the size of those from the QE period for debt measures. Further, the effects on equity were nearly triple the effects on debt during the taper period.

### A Call for Coordination

In his 2014 speech, Rajan called on the Fed and central banks in other advanced economies to commit to greater collaboration to reduce the disruption from spillovers.

"The current non-system in international monetary policy is, in my view, a source of substantial risk," he said.

There is some evidence that synchronizing monetary policy responses to global economic shocks can be beneficial. Laura Liu of Indiana University, Christian Matthes of the Richmond Fed, and Katerina Petrova of the University of St. Andrews examined monetary policy spillovers among the United States, the United Kingdom, and the euro area across time in a 2018 paper. They found evidence that monetary policy in the United Kingdom and Europe happened to be more in sync with policy changes in the United States during the early 1980s. While not the result of explicit coordination, the movement of policy in the United Kingdom and Europe in response to unexpected changes in U.S. policy during this period was associated with more positive spillover effects.

Fortuitous alignment of monetary policy across countries is one thing, but explicit central bank policy coordination has proven to be a more complicated issue. During the period between the two world wars, New York Fed Governor (the title for Reserve Bank presidents at the time) Benjamin Strong worked with the heads of the Bank of England, the German Reichsbank, and the Banque de France to support the international gold standard. The BIS was established during this period in part to facilitate central bank cooperation, according to economic historians Michael Bordo of Rutgers University and Catherine Schenk of the University of Oxford.

The post-World War II international monetary system, developed in Bretton Woods, N.H., also involved plenty of central bank cooperation. Throughout the 1960s and into the early 1970s, the Fed and other central banks intervened in currency markets in order to maintain the fixed exchange rates that underpinned the Bretton Woods system. (See "The Fed's Foray Into Forex," *Econ Focus*, Second Quarter 2017.) But in the cases of both the interwar gold standard and Bretton Woods, policy coordination alone was ultimately not enough to keep the systems in place.

Throughout the 1970s and 1980s, the Fed periodically coordinated with central banks in other advanced economies to stabilize the value of the dollar. In the "Plaza Accord" of 1985, for example, the United States pledged to pursue expansionary monetary policy while Japan agreed to pursue contractionary policy. But as the 1980s came to an end, policymakers and economists grew more skeptical of the value of this sort of explicit coordination.

"Policymakers became increasingly convinced that the best way of maintaining economic stability was to keep 'one's own house in order,'" wrote Claudio Borio of the BIS and Gianni Toniolo of Duke University and the University of Rome Tor Vergata in a 2006 history of central bank cooperation. While central bankers today acknowledge that their policy decisions can have effects on other countries, they have little appetite for subordinating domestic monetary policy to international concerns.

In 2013, finance officials and central bankers from Canada, France, Germany, Italy, Japan, the United Kingdom, and the United States issued a statement in which they agreed to "cooperate as appropriate" but reaffirmed that "fiscal and monetary policies...will remain oriented toward meeting...domestic objectives using domestic instruments."

"The central bank's mandate in any country is a domestic one," says Cecchetti. "That's not to say that central bank officials don't care about what happens elsewhere in the world, but they focus on domestic conditions because that's their job."

Indeed, coordinating policies to minimize international spillovers could even make it more difficult for the Fed or other central banks to meet their domestic objectives. In a recent paper, Fed Vice Chair Richard Clarida argued that formal policy coordination could threaten the credibility

for containing inflation that the Fed fought so hard to build in the 1980s and 1990s by making domestic policy concerns secondary to international considerations. To the extent that this causes domestic inflation expectations to become unanchored, this could ultimately lead to worse spillover effects as the Fed grappled with reasserting control over inflation.

“The all-in cost to a regime of policy cooperation could swamp the theoretical benefits,” Clarida wrote.

### Resilience and Transparency

Short of policy coordination, then, what can countries do to defend against monetary policy spillovers?

After Bretton Woods, many economists thought flexible exchange rates would provide some defense, allowing countries to pursue their own monetary policies in the face of international capital flows. A country that is open to international capital and has a fixed exchange rate pegged to the dollar, for example, cannot deviate its monetary policy from the Fed’s. The discrepancy in interest rates between the two countries would trigger capital inflows or outflows, putting pressure on the currency to adjust. The only way for a country to be open to international capital and retain independent monetary policy is to have flexible exchange rates. (This is known as the Mundell-Fleming trilemma.)

But H el ene Rey of the London Business School found that countries with floating exchange rates face similar spillovers from Fed policy as countries with fixed exchange rates. That means central banks in countries with flexible exchange rates may still be obliged to respond to spillovers from other central banks, constraining their independence.

Additionally, monetary policy responses to another country’s spillovers may be counterproductive. In their 2019 paper, Cecchetti, Mancini-Griffoli, Narita, and Sahay note that if easing by the Fed increases leverage in the financial systems of other countries by increasing capital flows, central banks in those countries would likely respond by tightening their monetary policy. This would have the effect of raising interest rates in that country further, potentially attracting even more foreign capital and magnifying the spillover effects.

“All the natural domestic monetary policy responses to spillovers are probably going to make things worse,” says Cecchetti.

An alternative option is macroprudential policies — requirements such as capital and liquidity rules imposed on financial firms to prevent system-wide problems. Such

policies may offer a better defense against spillovers by making countries’ financial systems more resilient. A 2019 article by El od Tak ats of the BIS and Judit Temesv ary of the Fed Board of Governors suggested that there are advantages to keeping one’s financial house in order. They examined the fallout from the 2013 taper tantrum and found that countries that had implemented macroprudential regulations prior to the event were significantly less affected.

Financial regulation is also an area where cooperation among central banks is less controversial. Through groups like the Basel Committee on Banking Supervision, policymakers routinely discuss best regulatory practices and formulate minimum standards for financial firms. These global standards can help prevent weaknesses in one country’s financial system that can lead to negative spillovers for the rest of the world. This type of regulatory collaboration does not keep central bankers from independently pursuing the monetary policy best suited to their domestic economic conditions. Unsurprisingly, then, central banks in advanced economies have largely favored this type of cooperation.

Another way that the Fed might be able to help moderate the effects of its spillovers is by clearly communicating its policy moves in advance.

“During the taper tantrum, the shock that had the greatest impact was the most unexpected one,” says Chari. “When Chair Bernanke first mentioned tapering during congressional testimony in May 2013, the market really reacted.”

When the Fed actually started to raise interest rates and taper QE, it proceeded very gradually, using forward guidance in its policy statements to signal when changes would occur. “With a gradual rollout, the cumulative spillover effect might be the same, but you won’t get these big shocks,” says Chari.

The Fed seems to favor these latter two approaches to mitigating policy spillovers — cooperation in financial regulation and open communication about monetary policy moves — over the sort of explicit policy coordination proposed by Rajan. At a May 2018 conference in Zurich on the international monetary system, Fed Chair Jerome Powell expressed the Fed’s commitment to communicate policy decisions “as clearly and transparently as possible to...avoid market disruptions” and pledged to “help build resilience in the financial system and support global efforts to do the same.” While such measures may not prevent monetary policy spillovers that arise from America’s economic dominance, they could at least lessen their impact. **EF**

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#### READINGS

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