Michael Bordo

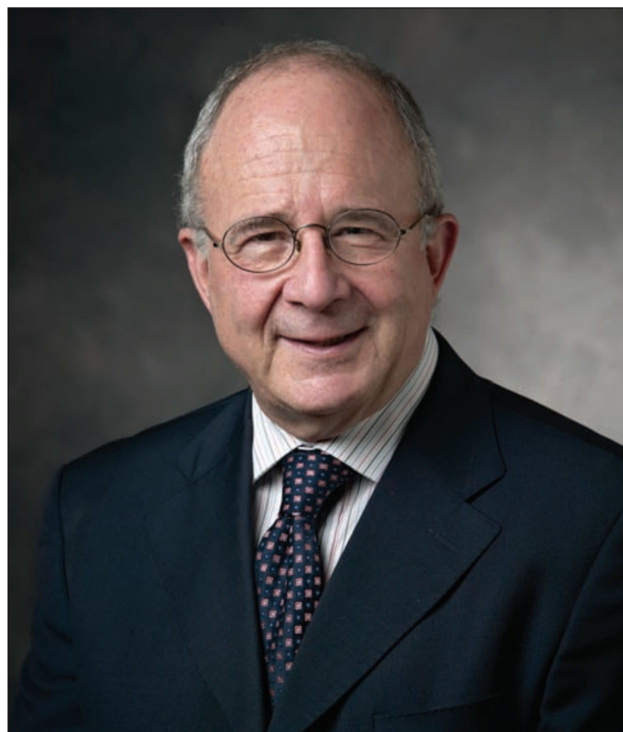
Editor's Note: *This is an abbreviated version of RF's conversation with Michael Bordo. For the full interview, go to our website: www.richmondfed.org/publications*

Many observers have compared the financial crisis of 2007-2008 and the Great Recession to the Great Depression. While one shouldn't downplay the hardships that many Americans have suffered in the last four plus years, a quick comparison of the raw data from those two episodes demonstrates how much more mild the Great Recession was, says monetary historian Michael Bordo of Rutgers University. Roughly one-quarter of Americans were out of work during the worst period of the Great Depression compared to roughly one-tenth during the Great Recession. Also, real GDP dropped at a staggering pace in the early 1930s, about 25 percent, compared to a 5 percent drop during the Great Recession.

In addition, the initial crises largely had different causes, Bordo argues, and the sluggish economic recoveries following those crises can generally be attributed to different factors. But in both cases, policy mistakes by the Federal Reserve contributed to the economy not rebounding more quickly. The Fed learned from the Great Depression by providing much-needed liquidity to the financial system after the crisis, but it engaged in a "too big to fail" policy that made things worse and that set a bad precedent for future actions. Moreover, the Fed's close collaboration with the Treasury Department and other measures it took have greatly compromised its independence. In Bordo's view, the Fed should limit the scope of its activities, focusing on price stability, and should enact a transparent set of monetary policy rules in lieu of a more discretionary approach to policymaking.

Internationally, Bordo's historical work suggests that monetary unions comprised of multiple nation-states with separate fiscal agents tend to be relatively fragile, a point that he argues is consistent with recent developments in the eurozone. Ultimately, he believes that eurozone policies will require significant revision, though a single currency may be preserved in a modified form.

Prior to joining the Rutgers faculty, Bordo taught at the University of South Carolina and Carleton University in his home country of Canada. In addition, he has held visiting positions at numerous universities in the United States and abroad, in addition to several central banks. He was a visiting scholar at the Federal Reserve Bank of Richmond in 1988. Aaron Steelman interviewed Bordo by telephone from the Hoover Institution at Stanford University, where Bordo is visiting during the 2011-2012 academic year.



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RF: I would like to start off with an admittedly very large question: What do you think were the proximate causes of the financial crisis of 2007-2008?

Bordo: I think that the deepest problem, and it goes back to the 1930s, is U.S. housing policy. The policy is generally to encourage people to own homes, and it has been supported by both political parties since the New Deal. I think it's hard to pin the blame on any one organization such as Fannie Mae or Freddie Mac or the Federal Housing Authority, but rather we should focus on the bundle of measures that have been adopted over the last 75 years. So that sets up the background in that you have an official policy to encourage people to own homes and thus to make mortgage finance as easy as possible.

There were other factors as well. Diffuse financial regulation resulted in different agencies handling different parts of the financial system with inadequate coordination to collectively understand the building up of leverage and the growing exposure of the shadow banking system. We also saw problems with corporate governance in that once the incentives were there to expand cheap mortgages, the private sector came up with ideas leading to financial innovation that produced some abuses. But in terms of ordering, I don't see corporate greed as causing the trouble. I think it goes all the way back to housing policy and govern-

ment regulators being captured or not being on the ball.

What I think fueled the credit boom that burst was expansionary monetary policy between about 2002 and 2005 on the mistaken view, in my opinion, that we faced a great risk of deflation. So the Fed kept interest rates very low. That, I think, provided the fuel for the fire. I don't think monetary policy caused the crisis, but I think it played a very important ancillary role. And I think that Fed policy has largely been misguided since the crisis hit. The Fed did the right thing in 2007 by viewing the situation as a liquidity crunch and being very expansionary. But then the Fed sat on its hands in 2008 because it was worried about commodity price inflation, and that got the recession going. Then, of course, the Fed made huge mistakes by being inconsistent in the way it treated Bear Stearns and Lehman Brothers. I think the Fed should have let Bear Stearns go. There would have been a lot of fallout from that but not as much as was caused by bailing them out and then letting Lehman Brothers go. And then, of course, the Fed bailed out AIG and the Treasury put Fannie Mae and Freddie Mac into conservatorship. There was a lot of inconsistency and that made things much worse.

An issue that I don't think was a big problem, but that many others do, was the global savings glut. I just don't see these global imbalances as causing the subprime crisis. I think it was much more of a homegrown, U.S.-created crisis that spread to the rest of the world. I am aware that there were housing busts in parts of Europe, such as Spain, Ireland, and the United Kingdom. But I think that the U.S. story with subprime and the extent of the kinds of practices that took place were unique. Europe has had many housing booms and busts, and I think that the U.S. event was caused mostly but not entirely by U.S. forces.

RF: What commonalities and what differences do you see between the policy responses and the longer-term economic consequences stemming from the Great Depression and the Great Recession?

Bordo: There are some big differences and some similarities. The Great Depression was generally caused by a series of banking panics in the United States and the Fed did not do what it should have: act as the lender of last resort to the money market. So that's why a severe recession turned into a depression. In 2007, the Fed knew about this and it avoided the mistakes that were made from 1930-1933. There was a liquidity policy in place during the recent crisis. The other thing, of course, is that the Great Depression was so much more severe. Real GDP fell by 25 percent from 1929 to 1933, whereas it fell by 5 percent from 2007 to 2009. And unemployment went from close to zero up to 25 percent compared to 5 percent up to 10 percent. So if you go through all the numbers, every single one will yield roughly the same relative difference. The people who were talking about the Great Recession being comparable to the Great Depression were way off base.

Still, there is the question of the counterfactual: Had the Fed and other central banks not implemented a liquidity policy, would the Great Recession have been as bad? My answer is that it would have been worse than it was, but it would not have been as bad as the Great Depression. We learned a lot of lessons from the Great Depression. We have these automatic stabilizers in place, we have many more fail-safes, and the economy is different. It is now much less industrialized and much more service oriented.

During the Great Recession the real problem was insolvency and the fear of counterparty insolvency. That really wasn't picked up by the Fed and other central banks until quite late. They didn't understand that in 2007 or even in early 2008. They thought it was fully a liquidity problem. And when it became clear it was an insolvency problem, they shifted gears and got into bailout mode. That produced another series of mistakes because the "too big to fail" doctrine was invoked, but it wasn't just invoked for banks, it was invoked for both financial and nonfinancial firms. This is a very key difference between the 1930s and now. In the 1930s, the United States did not follow too big to fail. But we also didn't follow Bagehot's rule either. Instead, we allowed everyone to go.

Regarding long-term economic consequences, the banking and financial systems were blamed for the Great Depression. So we got New Deal financial regulation, which greatly suppressed financial innovation and it greatly reduced risk-taking in the financial sector. The governance of the Federal Reserve also changed substantially. From 1935 to 1951, it lost its independence and became subservient to the Treasury. Further down the road, all the financial suppression that was instituted led to evasion and financial innovation and that led to new sources of systemic risk. So, in a sense, the consequences of the New Deal regulations took many decades to get worked out but they were entirely unintended.

In the wake of the Great Recession, some people have said that we should not have gotten rid of Glass-Steagall or interest rate ceilings or other New Deal regulations, and they point to how stable the banking system was between the mid-1930s and the early 1970s. What those people forget are the efficiency losses associated with such regulations and also the fact that the U.S. financial system was losing out relative to financial systems in other countries.

Also, I should say that, while the Fed has not become simply an arm of the Treasury following the Great Recession as it did following the onset of the Great Depression, I think its independence has been greatly compromised. During the

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heat of the crisis, the Fed itself did a lot of things to cripple its independence. It got involved in fiscal policy with the Treasury, it got involved in credit policy by allocating resources in a very specific manner, it got involved in debt management through quantitative easing. So the Fed moved very far away from independence from the fiscal authority. Monetary policy has become more politicized and the Fed's mission has become diluted. I think those changes could produce very large costs.

RF: What, in your opinion, can the Fed do to get back on track, so to speak?

Bordo: It needs to get back to basics; it needs to focus on price stability and stop trying to fine-tune the economy through highly discretionary policy, and that means following a very transparent policy rule. Preferably, the Fed would get congressional approval for that rule, so that the Fed can stop worrying about Congress always being on its back. Also, if there is a rule, Congress can, in a sense, require the Fed to prove that it is following it. For instance, under monetary aggregate targeting, the Fed had to report how it was doing relative to the targets that had been established. Something like that is needed to restore independence. I think that some people mistakenly believe that policy discretion helps to sustain the independence of the Fed, when it actually weakens it.

RF: Some historians have argued that the Great Depression ended due to the industrial buildup prior to and during World War II. What do you make of that claim?

Bordo: That explanation is not completely correct. The recovery from the Great Depression that started in the spring of 1933 was really rapid — GDP grew something like 36 percent from 1933 to 1936. That was fueled not by monetary policy but largely by Treasury gold policy — in particular, large gold inflows from the revaluation of gold, which acted like monetary policy. But the recovery was not complete in the sense that the real economy did not recover as quickly as it had declined. So even by 1936, the economy wasn't back to where it was when the Great Depression started. Part of that is consistent with the Cole-Ohanian story about New Deal policies cartelizing both labor and product markets, which reduced potential output. So I think if that hadn't happened and if we hadn't had the 1937-1938 severe downturn (which I think had a lot to do with the Fed doubling reserve requirements and the Treasury sterilizing gold inflows), the economy would have recovered much faster. In fact, it grew very quickly between 1938 and the start of World War II, but we still had unemployment of more than 10 percent. So the war soaked up a lot of that. But much of the growth that had been lost during the Great Depression had already been gained back by the time the United States entered the war.

RF: As you have noted, financial crises tend to result in fairly significant new regulation. Are there some general lessons that we can glean from historical examples?

Bordo: One issue is whether there is policy learning. Do you learn from the mistakes that you made leading up to the crisis? In general, in U.S. history there has been policy learning but it has worked very slowly. In a lot of other countries, there has been virtually no policy learning. They have just gone back to what they were doing before.

The U.S. financial system and regulation have evolved over 200 years and have gone through some very bad moments. For instance, by destroying the Second Bank of the United States in 1836, Andrew Jackson basically removed any serious form of control over financial instability. So there was a great deal of turmoil during the rest of the 19th century. But there was learning that took place because we developed the national banking system, which was an improvement over free banking but it still didn't solve the problem of the lender of last resort, so we invented the Fed. And the Fed was designed to be a great improvement — and it did some good things at the beginning — but in a sense it didn't quite learn from previous mistakes and the Great Depression came along, so it took 25 or 30 years for the Fed to learn to be a lender of last resort. Given that we tend to get something out of each crisis, I suspect we will get something positive out of this crisis, but I don't see it yet.

I have already mentioned many troubling regulations that came out of the Great Depression but one good thing that did emerge was deposit insurance. The FDIC removed the urge for people to panic. But deposit insurance wasn't priced properly, which led to moral hazard. Still, it really was a major innovation, even if it wasn't recognized at the time. I think most policymakers viewed Glass-Steagall and the reform of the Fed as being more important.

RF: Should central banks try to identify and then pop asset bubbles? If so, are they capable of doing so in a socially desirable way?

Bordo: I wrote some papers on that topic about 10 years ago. The first point I would make is that central banks should be wary of their role in fueling asset price booms through expansionary policy. I think what we have learned from the recent crisis is that central bank policy can have a lot to do with contributing to booms, if not necessarily creating them. So I think that's something central banks have to be worried about, and it's a point that the people at the Bank for International Settlements have made, even if they were laughed at for a long time.

In the case of big asset booms that lead to a relatively high probability of large recessions, I think that a case could be made for preemptive policy. But I don't think the Fed should use its main policy tools to defuse an asset price boom. I don't think that the Fed funds rate should be used for something like that. In fact, I am not even convinced

that the Fed should do it at all. I think that an agency like, say, the "Financial Stability Authority" — and I know that such an agency doesn't currently exist in the United States — should be doing that. In other countries, that is how it is handled. I am concerned about the Fed being pushed to downplay its single most important goal, which is price stability. I think that financial stability policy is a diversion from that.

If you do have a financial crisis, the central bank remains the lender of last resort because it can effectively print money, whereas the Financial Stability Authority could not. So you need to have the two agencies act in close coordination. If it is a true crisis, the Fed should respond very quickly, while keeping in mind its long-run goal. But I don't think that the Fed acting in a preemptive manner to defuse asset bubbles is in general a good idea.

RF: Historically, how have monetary unions within one nation-state — such as the United States — fared relative to monetary unions involving multiple nation-states?

Bordo: My work with Lars Jonung as well as continuing research tells you loud and clear that monetary unions within nation-states (that are also fiscal unions) do a lot better than international monetary unions. We looked at the experience of the Latin Monetary Union and the Scandinavian Monetary Union in the 19th century. They lasted awhile, but they lasted only as long as the gold standard was working and, in a sense, there was international harmony. But as soon as World War I hit, they completely fell apart. So the historical evidence is very clear on that one.

The question now is what will happen to the eurozone? It's a hybrid because they have both unified goods and factor markets and a single central bank with one currency. So they have some of the trappings of a nation-state but they don't have a fiscal union. My reading of history is that unless they go that way, adopt a fiscal union and move more in the direction of one large federal nation-state, they are not going to make it.

RF: What do you think ultimately will happen with the eurozone?

Bordo: In the short run, I think they are going to keep muddling through, although I think Greece is likely to default and there is a good chance it will exit from the euro area. The Greek crisis has to be separated from the other issues. Getting to the rest of it, I think in the near term the system will be saved by European Central Bank (ECB) liquidity, bank recapitalizations, austerity and some structural reforms. But ultimately there could end up being a two-speed euro. In other words, there are really two economies there. There is an advanced economy that is doing quite well and has low labor unit costs, and this includes Germany, Finland, the Netherlands, and possibly Austria, Belgium, and France. And then you have this other Europe that is not doing as well, has high labor unit costs, and is still developing. This would include Portugal, Greece, Cyprus, Malta, and maybe Italy and Spain. Unless they can work out something that would make the real economies of that second group more competitive, I think they may end up splitting into two, with something like a hard euro and a soft euro, which would permit them to potentially be reunited. So I am not terribly optimistic about the euro area as it now stands.

The two-speed euro idea was discussed before the ECB was created. You would have all the advanced countries that would be pegged to Germany. That would be the euro area proper. Then the other countries would have either a peg to, say, Italy, or they could be floating relative to the euro and be in the same situation now as Hungary and other current European Union (EU) members that want to be part of the euro area. They could be permitted into

Michael Bordo

Present Position

Professor of Economics and Director of the Center for Monetary and Financial History, Rutgers University

Previous Faculty Appointments

University of South Carolina (1981-1989) and Carleton University (1969-1981)

Other Positions and Professional Activities

National Fellow, Hoover Institution, Stanford University; Member of the Shadow Open Market Committee; visiting scholar at the Federal Reserve Banks of Cleveland and Dallas; former visiting scholar at the International Monetary Fund, Bank for International Settlements, Bank of England, Swiss National Bank, Reserve Bank of New Zealand, Federal Reserve Board of Governors, and Federal Reserve Banks of Richmond and St. Louis; former consultant to the Bank of Canada and the World Bank; and former visiting professor at the University of California at Los Angeles, Carnegie Mellon University, Princeton University, Harvard University, and the University of Cambridge, among others

Education

B.A. (1963), McGill University; M.Sc. (1965), London School of Economics; and Ph.D. (1972), University of Chicago

Selected Publications

Author of *The Gold Standard & Related Regimes: Collected Essays* (1999); co-editor of *Credibility and the International Monetary Regime: A Historical Perspective* (with Ronald MacDonald, 2012), *The Defining Moment: The Great Depression and the American Economy in the Twentieth Century* (with Claudia Goldin and Eugene White, 1997), *A Retrospective on the Bretton Woods System* (with Barry Eichengreen, 1993), and *A Retrospective on the Classical Gold Standard, 1821-1931* (with Anna Schwartz, 1984); and author or co-author of papers in such journals as the *American Economic Review*, *Journal of Political Economy*, *Journal of Monetary Economics*, *Journal of Economic History*, and *History of Political Economy*

the euro area if their economies and fiscal situations started to converge with the core countries.

What you need to make the euro project work are: a fiscal union (a euro bond, a euro fiscal authority which can make transfers, and a euro financial authority), a credible no bailout policy (even though such a policy was in the Maastricht Treaty, it has not been followed), and the true operation of free markets through the mobility of labor, capital, and goods. On the last point, they need significant structural change, especially in the labor market. The Germans have done a lot in that regard fairly recently, but most of the other countries still look pretty sclerotic.

RF: You have argued that central banking experienced a "golden age" in the late 19th and early 20th centuries. What were the most important characteristics of central banks during this period? How were they able, on balance, to maintain price stability and effectively serve as lenders of last resort?

Bordo: The key characteristic of that era is that nearly all central banks were on the gold standard and were under the constraints of having to maintain convertibility to gold. Early central banks, such as the Bank of England, also acted to provide government finance, but as time went by they didn't do much of that. Also, central banks were independent. They were private and they became independent of the fiscal authorities, because if you are on a gold standard rule, you cannot permit big deficits. You will get blown out of the water by capital flight.

What allowed central banks to act as lenders of last resort was credible adherence to the gold standard rule. If the markets believed you were going to stick to gold above all else and keep prices stable, then they would permit you to print money temporarily to deal with a crisis, because when the crisis was over they were confident you would withdraw those funds. Central banks didn't worry about managing the macroeconomy and they didn't worry about coordinating with fiscal policy. So that's what I mean when I call that period the "golden age."

RF: There is, as you know, a growing movement to change the United States from a fiat money system to the gold standard or some other commodity-based system. What do you think of such proposals? And in today's world — given the monetary arrangements of other countries, for instance — what would be required to make such a system practicable?

Bordo: Given that the rest of the world wouldn't go along with the United States in changing to the gold standard, pegging the dollar to the price of gold would lead us to be a sink for global shocks. We would have to absorb all of the shocks to the gold market from the rest of the world which would destabilize prices. And that is not to mention the old problems with the gold standard: that it depends on the growth rate of the world's monetary gold stock being equal to growth in the real economy, and if it is less, you will tend to get deflation, which was an issue in the 19th century; and Milton Friedman's argument about the resource costs of basing money on a commodity that is costly to produce. These reasons argue that we can do better with fiat money if that money is issued under a system of transparent rules.

The good thing about the gold standard is that it gave long-run price stability because there were restrictions on how much gold could be produced, and it constrained the monetary authorities from issuing paper money. They had to keep the ratio between the issue of paper money and the monetary gold stock stable. Moreover, on average, prices were more stable under the gold standard than they have been since we abandoned it. But if a modern central bank were to adopt a credible rule and abandon its discretionary policies, a fiat system can achieve the benefits of the gold standard without the costs.

RF: What are the big unanswered — or understudied — questions in monetary economics and policy, in your view?

Bordo: I think one question that is still important even though a lot has been written about it is how do you set the basic monetary rules in a political environment? For instance, many countries have something like inflation targets, but often they are not followed. How can you set up an incentive-compatible mechanism and make it work? That's a really big question. A second question is how do you follow a lender of last resort policy without bailouts? I know what Bagehot's rule says, but how do you do it? A third question is how does the central bank stay clear of fiscal entanglements? It's one thing to say central banks should not engage in fiscal policy but yet the Fed did just that. So what can you do to prevent that from happening? A fourth question is how do you prevent mission creep? How does a central bank say that it's going to handle monetary policy but it will not get involved in consumer regulation or financial stability because those things are not their business? A fifth question is how do you get away from New Keynesian Phillips curve thinking and back toward a more quantity theory approach? That might reveal my age, but I think it's important. And a sixth question is how do you take into account the rest of the world when setting monetary policy? The Fed conducts its policy mainly based on domestic conditions. It generally takes into account international events only when there are big crises. But its policies do affect us through the way they affect the rest of the world. For example, when we keep interest rates lower than other countries, there are capital flows abroad that lead to increases in the money supply in other countries and global inflation, and that comes back and hits us. This seems like something the Fed should be paying more attention to and thinking about in a very systematic way. **RF**