Ten Lessons from the Economic Crisis of 2008

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During the 1930s, the Great Depression was largely viewed as resulting from a series of financial crises, both domestic and international. Thirty years later, Friedman and Schwartz (1963) reevaluated this period, and discovered that the key problem was an excessively tight monetary policy. The high unemployment, falling incomes, and debt defaults were primarily symptoms of that policy failure, not the fundamental cause of the Great Depression.

In this article, I attempt a similar reevaluation of the Great Recession, focusing on two areas. First, how do we correctly diagnose the nature of a macroeconomic crisis? Second, what policy mistakes were made, and how can we do better next time?

The Real Problem Was Nominal

An important lesson of the Great Recession is the need to correctly diagnose the nature of macroeconomic problems in real time. Throughout history, many macroeconomic problems are seen as "real" problems when they are occurring, and are later diagnosed as nominal problems—too much or too little nominal spending, also known as "aggregate demand."

I have already mentioned the Great Depression, but the same initial misdiagnosis occurred during the Great Inflation of 1965–81,

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which at the time was attributed to real factors, including labor unions, oil shocks, poor harvests, and budget deficits, and only later attributed to monetary policy failures that allowed inflation to climb from less than 2 percent to more than 10 percent.

Whenever there is a dramatic rise or fall in nominal spending, it is almost always a failure of monetary policy. Thus in 2008–09, the rate of growth of nominal GDP fell from the roughly 5.4 percent trend rate of the previous 17 years, to −3 percent. This led to sharply higher unemployment, and dramatically worsened a financial crisis that had already begun in the previous year.

At the time, the consensus of the economics profession was that monetary policy was roughly appropriate. This mistake was driven by two examples of what I call *reasoning from a price change*. The phrase refers to the common error of drawing implications from the change in a price without first considering whether the change was driven by supply-side or demand-side factors. Thus, someone might expect high oil prices to lead to less oil consumption, without first considering whether the higher oil prices were caused by less oil supply or more oil demand. If prices were driven up by more demand for oil, then the economy would see more consumption.

Unfortunately, reasoning from a price change is especially common in the field of macroeconomics. During mid-2008, inflation rose well above the Fed's (implicit) 2 percent target.[1] At the time, the Fed interpreted the high inflation as an indication that the economy was in danger of overheating. In mid-September 2008, for example, the FOMC cited the fear of high inflation as a reason not to cut interest rates in the first policy meeting after Lehman failed. In fact, the economy was already nine months into the worst recession since the 1930s, and the actual problem was too little nominal spending, not too much. Instead of focusing on an unreliable indicator such as the inflation rate, the Fed should have looked at nominal GDP (NGDP) growth, which slowed sharply in the first half of 2008, even as inflation was rising.

Another common type of reasoning from a price change occurs when policymakers and pundits wrongly assume that the level of

[1]The Fed explicitly adopted a 2 percent inflation target in 2012, using the PCE index, but even by 2008, policymakers were implicitly aiming for roughly 2 percent inflation.

interest rates is a good indicator of the stance of monetary policy. Interest rates did gradually decline throughout 2008, and this was widely viewed as an indication that monetary policy was easing. More recent studies indicate, however, that the natural rate of interest was falling even more rapidly, which meant that policy was effectively tightening.[2]

Even before the Fed was created in 1913, interest rates often moved up and down with the business cycle. Thus the Fed is obviously not the only factor determining the level of interest rates. People get confused on this point because on a day-to-day basis the Fed often targets the overnight rate on interbank loans, the fed funds rate. What they miss is that the Fed tends to accommodate movements in the business cycle, so while a falling fed funds rate might indicate monetary easing, it also might indicate a weakening economy, with Fed rate cuts merely reflecting the economic slump. This is especially problematic if the Fed doesn't fully accommodate the fall in the natural rate of interest, as in 2008. In that case, policy was actually tightening even while the public and many policymakers assumed it was easing.[3]

Another mistake was to focus on some very real economic problems that accompanied the Great Recession, and assume that those problems had caused the recession. Two that stand out were the housing bubble and bust, and the subsequent banking crisis.

The housing boom of 2000–06 is often seen as a root cause of the recession. But why would a housing boom in 2000-06 cause GDP to plunge in 2008–09? One answer is that housing construction was far too high, at unsustainable levels. But housing construction during the boom was not at unusual levels relative to the U.S. population. Furthermore, housing construction fell by more than 50 percent between January 2006 and April 2008, and yet unemployment barely changed, edging up from 4.7 to 5.0 percent. Only when

[2]See www.frbsf.org/economic-research/publications/economic-letter/2015/october/gradual-return-to-normal-natural-rate-of-interest.

[3]While the stance of monetary policy can be defined in a variety of ways, in my view the most *useful* definition is relative to the goals of the central bank. Thus "tight money" is policy that results in the economy falling short of the Fed's inflation and employment goals, while "easy money" is a policy that leads to excessive spending and an overshoot of the policy goals.

nominal GDP plunged in the second half of 2008 did unemployment soar to much higher levels.

Others point to the excessive rise in home prices, which they believe made a crash inevitable. But Canada, the United Kingdom, Australia, and New Zealand all had similar home price run-ups during 2000–06, and in those economies housing prices did not crash, except for a brief dip during the global recession of 2008–09. Furthermore, home prices have again soared in many of the same U.S. housing markets that saw a boom in 2000–06. Does that mean another Great Recession is inevitable?[4]

The housing slump of 2006–09 should be seen as an exogenous shock that initially did little damage to the broader economy and then became much worse during the Great Recession of 2008–09, indeed as a result of the Great Recession. The conventional view that housing caused the recession was analogous to someone assuming they had a mild cold that kept getting worse, whereas they actually had a mild cold that eventually turned into pneumonia, a very different illness.

The preceding medical analogy applies equally well to the banking crisis. Initially, the banking problems were an exogenous shock related to defaults on subprime mortgages. Later, when excessively tight monetary policy caused NGDP to plunge, the banking crisis predictably got much worse. Furthermore, the nature of the crisis changed. Most of the banks that failed during the Great Recession were brought down by bad commercial loans, a side effect of the recession itself, not a cause.

Interestingly, the wave of bank failures during the 1980s was also associated with bad commercial loans, often to property developers. And that wave of bank (and S&L) failures was also associated with a sharp slowdown in NGDP growth. However, there is one important difference. The NGDP slowdown of the 1980s was a needed adjustment to bring down inflation, whereas the NGDP plunge of 2008–09 was entirely unnecessary, as the inflation spike of mid-2008 was a temporary phenomenon related to the extraordinary surge in oil prices (to a peak of $147 per barrel).

[4]See Erdmann (2019) for an excellent discussion of misconceptions about the housing bubble.

Policy Lessons from the Great Recession

In my view, the most important policy lessons of the Great Recession related to monetary policy. But first I'd like to consider a few other areas where policy was misguided. In the spring of 2008, the Bush administration implemented a policy of fiscal stimulus, in the form of tax rebates to each household. There is some evidence that households spent a portion of this windfall on consumption. Nonetheless, many experts overestimated the impact of the tax cut, by ignoring *monetary offset*.

When a central bank is targeting inflation, fiscal stimulus in the form of a tax rebate has virtually no long-run effect on nominal spending. Any increase caused by the tax cut will be offset by tighter Fed policy, aimed at keeping inflation on target. The Fed did notice that the tax cuts were boosting spending slightly in the spring of 2008, but reacted by refusing to cut interest rates between April and October, despite a weakening economy. Thus the fiscal stimulus ended up being a failure; after a slight rise in the second quarter, GDP fell sharply in the second half of 2008.

The opposite occurred in 2013. In late 2012, Congress adopted a policy of fiscal austerity. Tax cuts expired and spending was reduced, beginning in January 2013. A letter signed by 350 Keynesian economists warned that this fiscal austerity risked triggering another recession.[5] And yet, even as the budget deficit plunged from roughly $1,050 billion in calendar year 2012 to $550 billion in calendar year 2013, growth gradually picked up. By the end of 2013, 12-month real GDP growth was running well ahead of year earlier levels, despite the dramatic reduction in the budget deficit.[6]

Why did fiscal austerity fail to depress the economy? The Fed anticipated the fiscal austerity of 2013 and adopted some extraordinary monetary stimulus (QE3 and forward guidance) at the end of 2012. This monetary stimulus offset the impact of the fiscal tightening. This is not to say that tax changes cannot impact the economy, rather that to be effective, tax changes need to focus on

[5]See www.huffingtonpost.com/2012/11/14/350-economists-urge-against-austerity_n_2130019.html?ref=topbar.

[6]Four-quarter real GDP growth increased from 1.5 percent in late 2012 to 2.6 percent in late 2013.

the supply side, changing the incentive to work, save, and invest. A policy of simply shoveling out more money to the public through tax rebates and transfers will generally be offset by monetary policy, and do little to spur the economy.

Another policy lesson is the need to reduce moral hazard in the banking system. Federal policies such as FDIC (deposit insurance), "too big to fail," and the GSEs (Fannie Mae and Freddie Mac), end up subsidizing risk taking. Thus, banks have an incentive to take socially excessive risks, knowing that taxpayers are absorbing a portion of that risk. If we must have federally insured bank deposits, it makes sense for those funds to be invested in relatively safe assets, and riskier lending to be done with noninsured funds. Unfortunately, there are major political hurdles to achieving this sort of banking reform.

The single most important lesson of the Great Recession is the importance of a stable monetary regime. In my view, inflation targeting is not the most reliable guide to monetary policy. Rather than target the rate of inflation, the Fed should target the level of NGDP, perhaps along a path growing at roughly 4 percent per year (see Sumner 2017). Such a policy would lead to some year-to-year variation in the inflation rate.

However, as George Selgin (2018a) and others have pointed out, some fluctuation in inflation is actually appropriate, and helps to stabilize the overall economy. NGDP represents the funds available to pay wages, and also to repay nominal debt. When NGDP growth falls sharply, the result is almost inevitably higher unemployment and more debt defaults.

The advantages of level targeting are less well understood. Under current policy the Fed lets, "bygones be bygones." Thus, if they miss their 2 percent inflation target for a few years in a row, they do not attempt to get back on the old 2 percent trend line. Rather they start a new 2 percent inflation target, from the current position of the economy. This sort of "growth rate targeting" is especially ineffective during major shocks such as 2008–09. It makes monetary policy much less effective once interest rates fall to near zero, and cannot be reduced much further.

Paul Krugman (1998) has argued that at zero nominal interest rates, monetary policy injections will not boost the economy if they are expected to be temporary (see Beckworth 2017). One way to make monetary policy more effective at the zero bound is to adopt

level targeting. This is one reason why NGDP level targeting has gained increasing adherents on both the left and the right, in the years since the Great Recession. It is rightly seen as a way of credibly promising to do whatever it takes to get the economy back to the old trend line after a major shock.

The greatest advantage of level targeting is not that it eventually gets the economy back on the original trend line for NGDP, but rather that it tends to minimize short-term deviations from that trend line. Imagine a major real estate project that was under construction during late 2008, when the recession got much worse. Now think about the conditions on which the developer might cancel the project. Clearly, if the Fed committed to getting nominal spending back up to the original trend line as soon as possible, the developer would be less likely to cancel the project than if the central bank accepted the decline as permanent, and started aiming for a new and lower trend line. Unfortunately, in 2009 the Fed did the latter, taking the decline in 2008–09 as permanent and aiming for growth along a new and much lower trend line.

Getting the right target for monetary policy is the most important lesson of 2008–09, but it is not the only lesson for monetary policy. After all, even with the Fed's current flawed regime, which features flexible inflation targeting (2 percent inflation plus high employment), the Fed fell well short of its goals during 2008–09. This points to three additional lessons:

1. Do whatever it takes to equate the policy target and the economic forecast.
2. Be guided by market forecasts, not internal Fed forecasts.
3. Do not pay interest on bank reserves during a slump.

Lars Svensson (2003) advocated a policy of "targeting the forecast," which meant setting monetary policy at a position where the expected growth in the nominal variable being targeted (inflation or NGDP) was equal to the policy goal. Under this approach, policy would have had to become much more expansionary in late 2008.

There is one popular misconception about a policy where the central bank does "whatever it takes" to hit its policy target. Some fear that this would lead to frequent use of extraordinary initiatives such as quantitative easing and negative interest on reserves, which might have unfortunate side effects on the economy. In fact, the exact opposite is true. These extraordinary policy initiatives tend to occur

precisely because *policy has previously been too tight*, causing NGDP growth to fall to very low levels. When monetary policy is aggressive enough to keep NGDP growth along a trend line of 4 percent or more, nominal interest rates do not need to fall to zero to maintain a healthy economy. The one major developed country that avoided the Great Recession (Australia) did not do so by cutting rates to lower levels than other countries; indeed, rates never fell to zero in Australia.

A comparison of the United States and the eurozone provides an almost perfect case study of this misconception. During the early years of the Great Recession, European Central Bank (ECB) officials believed that Ben Bernanke's Fed was pursuing too much monetary stimulus, which would lead to high inflation. The high inflation never arrived. In contrast, the ECB initially adopted a tighter policy, not cutting rates as sharply and not doing QE. On two occasions in 2011, the ECB raised rates prematurely, and the eurozone plunged into a double-dip recession. This made conditions in the eurozone so dire that the ECB was eventually forced to do an extraordinary monetary stimulus, and ended up doing *even more extreme policies than the Fed*.

Today, the Fed is steadily raising rates, while the ECB combines QE with negative interest on bank reserves, a more radical policy mix than anything done by Ben Bernanke during his years as chair of the Fed. The lesson is simple. Doing whatever it takes to maintain adequate NGDP growth will allow central banks to avoid the sort of extraordinary policy steps seen recently in Europe and Japan. These radical steps are a signal that central banks have inappropriately allowed NGDP growth to fall to excessively low levels.

While Svensson recommended that central banks target their own internal forecast of inflation, the events of 2008 suggest that the market forecast is more reliable. Earlier I referred to a meeting in mid-September 2008, right after Lehman failed, where the Fed refused to cut interest rates below 2 percent despite a weakening economy. The Fed statement cited a risk of high inflation, and indeed inflation had been relatively high during the previous 12 months. But on the day of the meeting, financial market

[7]This was the TIPS spread, the difference between the yield on conventional 5-year T-notes and inflation indexed 5-year T-notes.

indicators suggested an inflation rate of only 1.23 percent over the following 5 years.[7] The Fed was driving by looking in the rear view mirror, whereas it should have been using market forecasts to look ahead down the road (see Sumner 2016).

In my view, the federal government should set up and subsidize trading in a NGDP prediction market, as the market forecast of NGDP growth is the single most important indicator of the stance of monetary policy. The Mercatus Center has worked with Hypermind to set up just such an experimental market, as a demonstration project.

Soon after the Fed mistakenly refused to cut rates in September 2008, they made an even more serious error, instituting a policy of paying interest on bank reserves in October 2008 (see Selgin 2018b; Beckworth 2018). Paying interest on bank reserves has the effect of increasing the demand for base money, which is the type of money directly created by the Fed. While an increase in the money supply is expansionary, an increase in money demand is contractionary. The Fed was essentially paying banks to sit on the money being injected into the economy in the various QE programs, which negated or "sterilized" the effect.

Defenders of interest on reserves point to the fact that the rate was cut to only 0.25 percent in mid-December 2008. However, this misses two important points: (1) the worst of the slump had already occurred by the end of 2008, and (2) even a rate of 0.25 percent is contractionary at a time when alternative investments such as T-bills were paying even lower interest rates. Paying interest on reserves was not the only Fed error, but it was an important mistake.

Summary

To summarize, there are 10 key lessons to be learned from the events of 2008:

1. Unstable NGDP represents a failure of monetary policy.
2. Never reason from a price change; focus on NGDP growth, not inflation and interest rates.
3. Don't confuse the symptoms of falling NGDP (falling asset prices and banking distress) with the *cause* of falling NGDP (overly tight money).
4. Don't try to predict asset price bubbles; markets are smarter than policymakers.

5. Demand-side fiscal stimulus is relatively ineffective; any tax cuts should focus on supply-side effects.
6. The federal government needs to reduce moral hazard in the financial system by scaling back taxpayer protections on risky loans.
7. Set a target path for the *level* of NGDP, perhaps growing at 4 percent per year.
8. Do whatever it takes to equate the forecast of NGDP growth with the policy target.
9. Rely on market forecasts of nominal variables such as inflation and NGDP, not internal Fed forecasts.
10. Do not pay interest on bank reserves during an economic slump.

Long-term interest rates have been on a downward trend since 1981. Many experts now believe that it is highly likely that the United States will again experience near zero interest rates during the next recession. Thus, it is important that we learn the correct lessons from the Great Recession. The most important lesson is that monetary policy is always capable of maintaining adequate NGDP growth, and the Fed must continually do whatever it takes to insure that expected future NGDP growth is adequate to meet the Fed's policy target.

References

Beckworth, D. (2017) "Permanent versus Temporary Monetary Base Injections: Implications for Past and Future Fed Policy." *Journal of Macroeconomics* 54 (Part A, December): 208–16.

_____ (2018) "The Great Divorce: The Fed's Move to a Floor System and the Implications for Bank Portfolios." Arlington, Va.: Mercatus Center Research Paper (November 13). Available at www.meratus.org/publications/monetary-policy/federal-reserves-move-floor-system-and-implications-bank -portfolios.

Erdmann, K. (2019) *Shut Out: How a Housing Shortage Caused the Great Recession and Crippled Our Economy*. Lanhan, Md.: Rowman and Littlefield.

Friedman, M., and Schwartz, A. J. (1963) *A Monetary History of the United States, 1867–1960*. Princeton, N.J.: Princeton University Press.

Krugman, P. (1998) "It's Baaack! Japan's Slump and the Return of the Liquidity Trap." *Brookings Papers on Economic Activity* 2: 137–87.

Selgin, G. (2018a) *Less than Zero*, 2nd ed. Washington: Cato Institute.

_____ (2018b) *Floored: How a Misguided Fed Experiment Deepened and Prolonged the Great Recession*. Washington: Cato Institute.

Sumner, S. B. (2016) "Measurement, Accountability, and Guardrails: Nudging the Fed Toward a Rules-Based Policy Regime." *Cato Journal* 36 (2): 315–35.

_____ (2017) "Monetary Policy Rules in Light of the Great Recession." *Journal of Macroeconomics* 54 (Part A, December): 90–99.

Svensson, L. E. O. (2003) "What Is Wrong with Taylor Rules? Using Judgment in Monetary Policy through Targeting Rules." *Journal of Economic Literature* 41: 426–77.