

# Monetary Policy, Fiscal Policy, and the Efficiency of Our Financial System: Lessons from the Financial Crisis

Benjamin M. Friedman  
William Joseph Maier Professor of Political Economy  
Harvard University

I am enormously grateful to Rich Clarida and Jeff Fuhrer for their kind and thoughtful initiative, first in conceiving the idea for this conference and then in organizing it so successfully; to Eric Rosengren and the Federal Reserve Bank of Boston for the marvelous hospitality we have all enjoyed these past two days; to the many fine economists who devoted their valuable time to writing papers and preparing discussions; to everyone who offered such generous comments at last night's splendid dinner; and to so many of my former students, and my colleagues and other friends, simply for being here. Barbara and I have fond memories, accumulated over more than four decades and still warmly treasured, revolving around every person in this room. It has been an extraordinary experience to be with so many of you, all in the same place and at the same time. Some of you have come here from the local area, and some from very far away; I thank you all. These past two days have been an experience I shall never ever forget.

In June 1772, in the midst of the worst banking and economic crisis Scotland had suffered in two generations, David Hume wrote from Edinburgh to his closest friend, Adam Smith, who was then in London. After recounting the industrial bankruptcies, the bank closures, the widespread unemployment, and the other fallout from the banking crisis, Hume asked, "Do these Events any-wise affect your Theory"? Indeed they did. At the time, Smith was working on what became *The Wealth of Nations*. Published just four years later, Smith's great book is replete with lessons he took away from

the 1772 banking crisis—including a call for far tighter restrictions on banking than anything we would imagine implementing today.

Our organizers have arranged the program for this conference in terms of three subjects: monetary policy, fiscal policy, and financial system design. In my remarks I will try to draw lessons for each of the three from the severe financial crisis and subsequent economic downturn through which our own economy, along with much of the rest of the industrialized world, has recently passed.

## 1. Monetary Policy

One highly useful lesson from the crisis is that although we conventionally use the label “monetary policy” to refer to the macroeconomic policy that central banks carry out, the way this policy works revolves around credit, not money. The movements in financial quantities that were so striking during the crisis involved non-money assets and liabilities, and much of what central banks did, both here and abroad, was intended to restore the functioning of markets for the issuance and trading of non-monetary instruments. In retrospect, the economics profession’s focus on money—meaning various subsets of instruments on the liability side of the banking system’s balance sheet in contrast to bank assets, and correspondingly the deposit assets on the public’s balance sheet in contrast to the liabilities that the public issues—turns out to have been a half-century-long diversion that did not serve our profession well.

The implied way forward is clear enough in substance, though not in execution. It is easy enough to say that we should incorporate within our models an important role for inside liabilities and the markets in which they are issued and traded, and many economists are now doing just that. But in order to do so we must also abandon one of the conventional shortcuts that we so often use in macroeconomic analysis: namely, the representative agent construct. If all agents were identical, there would of course be no reason for any one of them to borrow from, or lend to, another. Hence turning our focus toward credit, at the substantive level, also bears immediate methodological implications. The resulting analysis needs to be more subtle and, regrettably, more complicated than if what mattered were simply money. But the crisis has usefully reminded us

that what mostly matters for macroeconomic outcomes is instead credit—something we really should have known all along.

A second lesson from the crisis revolves around an issue that is explicit in a few of the papers given at this conference but also, I think, implicit in many of the others: market participants simply do not have the knowledge and understanding required to fulfill the specifications of the conventional full-rationality assumption under which they know, or are nevertheless able to act as if they know, not only the joint distribution of all stochastic influences affecting the financial markets and the non-financial economy but also the structural relationships between those stochastic influences and the outcomes to which they give rise.

Here too, making such a statement is easy enough, but it leads to a variety of difficult methodological implications. Most obviously, we badly need some replacement for the full-rationality assumption as a way of disciplining macroeconomic analysis. Simply jettisoning the full-rationality assumption, without putting anything in its place, would only produce chaos. But it is becoming increasingly clear that the discipline provided by the full-rationality assumption is in reality a straightjacket. As we read the efforts of many fine economists to analyze the recent crisis, or to explore new developments like central banks' deployment of what we now call "unconventional monetary policy," it is clear that these efforts are inevitably handcuffed if—as an accumulating body of evidence shows to have been the case—an important element in what happened was that not only small investors and other individual market participants but even highly paid professionals working at very large financial institutions did not understand the risks that they were facing and to which they were exposing their own and their institutions' balance sheets. Given the apparent centrality of this misunderstanding in what happened both before and during the crisis, any analysis that proceeds on the basis that everyone understands the joint distribution of the stochastic influences and the ensuing relationships is bound to come up short.

Here as well, I have no specific replacement for the full-rationality assumption to offer as a superior form of discipline on macroeconomic analysis. I am confident that in time one will come along, however, and I am confident too that when it does, thoughtful economists will welcome it in the same way that the rational expectations assumption was initially welcomed forty years ago. There is,

therefore, a fundamental assignment to be undertaken, and I look to the younger members of the audience present today with optimism in that regard. The benefits to macroeconomics will be great.

In the meanwhile, our responsible officials have to go ahead and make monetary policy. To paraphrase a recent secretary of defense, one goes to the crisis with the monetary economics one has. I give today's central bankers, especially ours in the United States, extremely high marks for their execution of this responsibility in the face of the challenges presented by the recent crisis. I have always taken pride in my peripheral, albeit by now quite longtime, association with the Federal Reserve System. I do so all the more in light of the way our central bank has conducted itself in these extraordinary and very trying times.

## **2. Fiscal Policy**

I have no specific lessons to draw about fiscal policy, but rather a pair of observations that, in conjunction, I find highly troublesome. The first observation is that there is today no political constituency in the United States for paying more in tax. On some thought, this in itself is quite an extraordinary phenomenon. Not so long ago one would have been greeted by disbelief to suggest that even if the country were to be attacked at home, and go to war in consequence, citizens of the republic would refuse as a matter of principle to pay any more in tax to finance that effort. But this nonetheless is the current state of thinking.

The second observation is that there is also no political constituency for reduced government spending. There is a difference between being opposed to specific government programs that one simply does not happen to like and wanting to reduce government spending in a sense that bears on the macroeconomics of fiscal policy. Our political debate on this issue today is increasingly a shouting match between people who seem to find no line item of spending that they would be willing to delete and those who are determined to shrink the role of government to its most essential functions such as subsidizing NASCAR racing. (This is not a joke; I refer to a recent vote in the U.S. House of Representatives.) This impasse is leading the country nowhere good. I believe that much of the pessimism on this front displayed at this conference is, alas, well founded.

### 3. Financial System Design

The third subject that our organizers have posed for us is the design of financial systems, and here I draw two further lessons. The first is that market self-regulation imposed by creditors, to which many people such as Alan Greenspan had looked to police the conduct of both individuals and institutions, is not sufficient for the complex financial world in which we live today. There is no lack of explanations for this failure. One is market participants' failure to understand the pertinent risks, to which I have already referred in the context of monetary policy. A second is the entire familiar range of principal-agent problems—most obviously, in the recent experience, officers of banks not acting in the interests of their shareowners and thus exposing these institutions to risks that the shareowners would not have assumed on their own. A third is a whole array of government policies ranging from lender-of-last-resort actions, to housing subsidies, to even such basic institutions as limited liability. A fourth is what Justice Brandeis, in a phrase he made famous a century ago by using it as a book title, called "Other People's Money": the overwhelming majority of the professionals working at banks that had to be rescued by the government during the crisis did very well for themselves financially and have little reason, as a personal matter, to regret their actions; it is only their institutions' shareholders, and the taxpayers and other citizens who participate in the economy, who regret what they did. For any of these reasons, and probably for all four of them, market self-regulation imposed by lenders is not effective.

But a parallel lesson is that if the voters elect to positions of public office individuals who do not believe in regulation, and if those office holders appoint people of like mind to head the major agencies of the government's regulatory apparatus, then there also will not be effective regulation by government no matter what the pertinent rules and statutes say. Regulation has to be applied, not just authorized. What we saw in the United States in the recent crisis was a failure not just to have regulation in place—although in fact the regulations in place were inadequate—but also to enforce what was actually there.

Where, then, should we go from here? For this purpose it is useful to distinguish between what Bob Solow famously called "little

think” and “big think.” At the little-think level, part of what we learned from the latest crisis is that we urgently need enhanced capital requirements on financial institutions of all kinds. Depending upon the outcome of numerous rule-making efforts now under way, these may or may not be forthcoming. (One of the most significant flaws of last year’s Dodd-Frank legislation was that rather than actually enacting many of the essential new regulations for which it called, it left them to rule-making exercises to be carried out by various regulatory agencies—and therefore subject to the usual lobbying by the institutions to which they are intended to apply.)

Even if stricter capital requirements do emerge, however, two buttressing elements will be necessary to make them effective. One is accounting reform. As the failure of Lehman and the failure-except-for-bailout of Citibank showed, in many cases what matters is not just what percentage an institution’s capital represents in relation to its assets but which of its assets count for this purpose. When assets for which an institution is responsible are held off of its balance sheet, it typically holds no capital against them regardless of the required percentages. Second, while the Dodd-Frank Act usefully extended the government’s resolution *authority* to non-bank institutions like bank holding companies, insurance companies, and independent broker-dealers, we also need to have in place spelled-out resolution *procedures*. It is important for the operators of financial institutions to know not just that they face specific capital requirements but what will happen if they violate them. At the little-think level, therefore, while there are numerous potentially useful steps to take, I would start with enhanced capital requirements buttressed by accounting reform and clearly specified resolution procedures.

At the big-think level, I believe the time has now arrived for the economics profession to examine how well our financial system is doing its job and at what cost. I mentioned earlier that we need some replacement for the full-rationality assumption as a disciplining methodology for macroeconomic research, but that devising that replacement will be difficult. I think there is a further reason, in addition to the difficulty, behind economists’ reluctance to pursue this path: fear that dropping the full-rationality assumption may turn out to be subversive of the role of markets, and in particular the financial markets, in our economy.

The essential role of the financial system, in an economy like ours, is to allocate scarce investment capital. (This includes determining how much the economy in aggregate invests.) The financial system, of course, performs other functions too: operating the payments mechanism and providing liquidity, providing various forms of insurance for both households and firms, providing households with retirement saving opportunities, and others besides. But all of those are activities for which we have well-established public-utility models. The one function that is essential to the private sector of a free-enterprise economy is the allocation of scarce investment capital.

Viewed in this respect, the financial system is like a tool, or a mechanism: It does a job, and it does it either well or badly. And it also costs something. I believe that in the wake of the recent crisis we need to examine the efficiency of our financial system's allocation of our investment capital, together with how much it costs to do that. Even if this mechanism achieved the maximum conceivable efficiency in allocating the economy's capital—a proposition that the recent crisis has sharply called into question—that in itself would not be sufficient to know that it is worth what it costs. If incremental efficiency in allocating capital, compared to some alternative, costs more to achieve than what the increment in efficiency delivers in terms of return on the capital, then it makes no economic sense. It is like buying a car that delivers better gas mileage but at an additional cost that exceeds the value of the fuel savings over the life of the car.

In recent years a great deal of attention has focused on the very high share of total profits in the U.S. economy that have accrued to the financial sector. From a fundamental perspective, this means that a very high percentage of the total return to our economy's invested capital is being used to pay for the mechanism that allocates the capital. Moreover, the cost of operating the financial system is not just the return on the capital deployed, represented by financial firms' profits, but also all of the salaries and the wages paid, the rents on the buildings used and the rental equivalent on the buildings that financial firms own, the utility bills, the travel expenses, the advertising budgets, and the myriad other expenses that any modern-day firm must incur in order to operate. The largest component of this total, the salaries and wages (importantly including bonuses), have already attracted sufficient notoriety. To the extent

that they represent fair market value for the talent employed, they indicate that our economy is devoting a significant fraction of its most talented human capital to the task of allocating its investment capital. The same point applies to the buildings. In most American cities, this is the purpose to which much of the prime real estate is devoted. What is at issue here is the use of our economy's scarce resources. Operating our capital allocation mechanism in its current form is very resource intensive.

The other side of this comparison is the efficiency with which our financial system does its job. One thing the crisis showed us is that the efficiency with which we are allocating our scarce investment capital is not all we would like it to be. As the crisis unfolded, the ensuing public discussion was full of talk about the losses that banks and other investors suffered on their portfolios of mortgage-backed securities. The more important point, from this perspective, is that behind these financial losses were real economic mistakes—misallocations of resources. True, the prices of mortgage-backed securities fell. But the fact that the securities were priced too high to begin with means that the interest rates on the underlying mortgages were too low, with the result that Americans built and bought millions of houses for which there is now no market. Nor was the most recent crisis unique in this regard. When the dot-com bubble collapsed, at the end of the 1990s, what everybody talked about was the losses that investors incurred on their holdings of telecom stocks. But the fact that the price of these stocks had been too high means that the cost of capital to the firms issuing them was too low, and so U.S. telecom firms laid hundreds of millions of miles of fiber optic cable that have never been lit and probably never will be. Further, all of these direct costs in the form of wasted real resources, then and now, are aside from the collateral costs associated with the consequent downturn in aggregate economic activity.

I have been suggesting research agendas to many of the people in this room for a long time, and so let me conclude my remarks today, at this Federal Reserve Bank conference, by suggesting a research agenda in part for the Federal Reserve System and in part for academic economists. First, in collaboration with the Commerce Department's Bureau of Economic Analysis, the Federal Reserve should undertake a serious effort to quantify the cost of operating our economy's capital allocation mechanism—to repeat, not just the profits



earned by the firms that carry out this activity, but the salaries and wages, the real estate expenses, the utilities, the advertising, the travel, and everything else. This task is an important one, but it should be straightforward for our organized statistical agencies to do.

The task for economic economists is conceptually more challenging. It is to assess this mechanism's efficiency. The reason this part of the assignment represents a different level of challenge is that it requires a counterfactual: some alternative to which the existing capital allocation mechanism can be compared. Most of us are rightly skeptical of such potential alternatives at the overall level (central planning being the most obvious, and most obviously discredited, possibility). But perhaps it is possible to make progress on the question more incrementally. For example, the market that figured most centrally in the recent financial crisis was that for securitized mortgages and derivative instruments based on them. Was our economy's scarce investment capital allocated better because of securitization? Or, even more specifically, because there was a market for collateralized debt obligations? Assessing the costs versus the efficiency of our financial system on a piece-by-piece basis may be possible even if the lack of a plausible counterfactual renders a more aggregate-level assessment beyond reach.

Perhaps I should be reluctant to repay everyone's overwhelming kindness and generosity toward me at this conference, and the Federal Reserve's hospitality to all of us, by handing out more work. But among the friends assembled here, doing so seems only natural.