



AMERICA: TOO BIG TO FAIL?

BANKERS, BAILOUTS, AND BLAMING THE STATE

Introduction

The Oscar-winning documentary *Inside Job* has many virtues. It gives a clear and understandable description of what happened in the financial crisis. It does a marvelous job of exposing the conflicts of interest endemic in the economics profession; for example, economists publishing “scientific” proof of the efficiency of markets and the positive role of finance while being paid lots of undeclared cash by the financial services industry for consultancy gigs that tell the industry what it wants to hear. The film is, however, less compelling as an explanation of why the crisis happened in the first place. It goes awry when it begins to focus on the moral failings of bankers. (Apparently, middle-aged men with too much money spend some of that money on prostitutes.) The filmmaker’s point, I think, was to suggest that what underlay the crisis was the moral weakness of individuals. Given all that money, the story goes, morality went out the window.¹

While this story satisfies some, the moral failings of individuals are irrelevant for understanding both why the financial crisis in the United States happened and why austerity is now perceived as the only possible response, especially in Europe. However, you could have replaced all the actual bankers of 2007 with completely different individuals,

and they would have behaved the same way during the meltdown: that's what incentives do. What really matters is how seemingly unconnected and opaque parts of the global system of finance came together to produce a crisis that none of those parts could have produced on its own, and how that ended up being the state's, and by extension, your problem.

But how are we to adjudicate what is important and what is not important in reconstructing the US side of the crisis? After all, as Andrew Lo noted in a recent wickedly entitled essay called "Reading about the Financial Crisis: A 21-Book Review," the crisis is both overexplained and overdetermined.² The crisis is overexplained in that there are so many possible suspects who can be rounded up and accused of being "the cause" that authors can construct convincing narratives featuring almost any culprit from Fannie and Freddie to leverage ratios to income inequality—even though the meltdown obviously was a deeply nonlinear and multicausal process.³ The crisis is overdetermined in that, being a nonlinear, multicausal process, many of these supposed causes could be ruled out and the crisis could still have occurred. For example, three excellent books on the crisis stress, respectively, increasing income inequality in the run-up to the crisis, the captured nature of bank regulation, and the political power of finance. Each book certainly captures an important aspect of the crisis.⁴ But are these factors absolutely necessary to adequately explain it?

I hope to add to these accounts one simple thing: the idea that this crisis is first and foremost a private-sector crisis. In each episode we examine in this book, in the United States, the European Union, and Eastern Europe, we shall see that the crisis was generated by the private sector but is being paid for by the public sector, that is, by you and me. We can establish this by thinking counterfactually. One might ask the question, could we have had the crisis if the income distribution had been less skewed, if regulators had been more independent, and if finance had been less powerful? I believe we could. These were important factors—they turbocharged the problem—but they were not essential to it in and of themselves.

In what follows, I focus on four elements that I believe you cannot remove counterfactually and still explain the crisis. These are the bare essentials that made it possible, and they all lie firmly in the private

sector. They are—and we shall unpack them in plain English as we go—the structure of collateral deals in US repo markets, the structure of mortgage-backed derivatives and their role in repo transactions, the role played by correlation and tail risk in amplifying these problems, and the damage done by a set of economic ideas that blinded actors—both bankers and regulators—to the risks building up in the system. Again, I stress that these are quintessentially private-sector phenomena. I do this so that I can ask one more question as a setup. If all the trouble was generated in the private sector, why do so many people blame the state for the crisis and see cuts to state spending as the way out of a private-sector mess? Answering that question is what concerns us in the rest of this chapter.

The Generator: Repo Markets and Bank Runs

The repo market is a part of what is called the "shadow banking" system: "shadow," since its activities support and often replicate those of the normal banks, and "banking" in that it provides financial services to both the normal (regulated) banks and the real economy. Take paychecks, for example. It would be hugely impractical for big businesses to truck in enormous amounts of cash every weekend to pay their employees out of retained earnings held at their local bank. So companies borrow and lend money to each other over very short periods at very low interest rates, typically swapping assets for cash and then repurchasing those assets the next day for a fee—hence "sale" and "repurchase"—or "repo." It is cheaper than borrowing from the local bank and doesn't involve fleets of armored trucks.

What happened in 2007 and 2008 was a bank run through this repo market.⁵ A bank run occurs when all the depositors in a bank want their cash back at the same time and the bank doesn't have enough cash on hand to give it to them. When this happens, banks either borrow money to stay liquid and halt the panic or they go under. The repo market emerged in the 1980s when traditional banks lost market share because of a process called "disintermediation."⁶ Banks, as intermediaries, traditionally sit in the middle of someone else's prospective business, connecting borrowers and lenders, for example, and charging fees for doing so. Before disintermediation, banks engaged in what

was often called “3-6-3 banking”: they would borrow at 3 percent, lend at 6 percent, and hit the golf course by 3 p.m. It was safe, steady, and dull. But as financial markets became more deregulated in the 1980s, large corporations began to use their own cash reserves, lending them to one another directly—they disintermediated—bypassing banks and squeezing bank profits. What further squeezed 3-6-3 banking was a parallel process called securitization.

The old 3-6-3 model presumed that the bank that issued a loan to a customer held the loan until it was paid off, with profits accruing from the interest payments it received. But what if these loan payments could be separated out and sold on to someone else? What if many such loans, mortgages for example, could be bundled together as a pool of mortgage payments and sold to investors as an income-generating contract called a mortgage-backed security? That way, the bank that issued the loan could borrow cheaper and make more loans because the risk of the loan not being paid back was no longer on its books, and the borrower would get better rates. It was win-win, as they say.

Collateral Damage: American Style

Although securitization was a threat to the traditional methods of banking, it was also an opportunity for the banks that got on board with the new model. They got to offset their risk by selling the loan on, and as a result they were able to borrow cheaper and lend more. What could be wrong with that? What was wrong was that the risks inherent in these loans never really disappeared: they just got pushed elsewhere. Indeed, the process of selling on loans inadvertently concentrated those risks in short-term repo markets. So, how did everyday mortgages end up in a repo market?

When you and I put our money in a bank, the Federal Deposit Insurance Corporation (FDIC) guarantees it against the failure of the bank: this default risk is covered. But there is no such insurance in the repo markets, so repo-market investors protect their cash by receiving collateral equivalent to the cash lent. If the borrower goes bust, the lender can still get the money back, so long as, and this is critical, the

collateral doesn't lose value. What counts as high-quality collateral? Back in the early 2000s, it included such things as Treasury bills, of course. But increasingly, AAA-rated mortgage-debt securities began to be used as collateral, since T-bills were in short supply, which is how mortgages ended up in the repo markets.⁷

A decline in house prices in 2006 hit the value of these bundled mortgage securities. If you were using mortgage securities as collateral for loans in the repo market, you needed to find more collateral (which people were increasingly less willing to hold) or higher-quality collateral (alternative assets that were in short supply), or you would have to take a “haircut” (a discount) on what you would get back, all of which affected your bottom line. Now, if a big player in these markets, Bear Stearns or Lehman Brothers, for example, has problems “posting collateral” because the value of what it holds and can offer has fallen, it may be forced to reassure its investors by announcing publicly that there is no problem with the firm.

Unfortunately, doing so is deadly for a major financial firm. As Walter Bagehot noted over 100 years ago in his book *Lombard Street*, the moment a big bank has to say that its “money good,” it isn't; or at least you can no longer assume that it is, so lending to the bank dries up: it gets hit with a “liquidity crunch.” In the case of Bear Stearns, as house prices fell and mortgage defaults increased, the value of its investments fell, and its “collateral calls” (what the people it borrowed from would accept to continue lending to the company) rose. As a consequence, Bear Stearns' reputation fell and so did its capacity to borrow, which was a disaster given how much it was levered-up (how much debt it carried relative to its assets).

Leverage is how banks make such absurd sums of money. The Germans have a saying, “when you have two marks, spend one.” In modern banking that becomes “when you have one dollar in the bank, lend thirty or forty or more.” Leverage, the ratio of assets (loans and investments out in the world) relative to equity (reserve capital—the cushion you draw upon when things go wrong), rose precipitously throughout the 1980s and 1990s. If a major bank is running thirty times leverage, as was common in the run-up to the crisis, all it takes is a very small change in its asset values against its equity cushion to make

it illiquid, if not close to insolvent. When securitized mortgages started to lose value in 2006, that very small decline became all too real, and the big banks that had funded themselves through the repo market (essentially borrowing overnight to loan for much longer periods with huge amounts of leverage on their balance sheets) saw their funding sources disappear. Liquidity, the very thing repo markets are supposed to provide, dried up, since no one was willing to lend to anyone else at normal rates. And because the banks were so levered up, they didn't need all their funding to dry up—just enough to make them almost instantly illiquid.

Liquidity, however, does not simply evaporate like the morning dew. It burns up in a “fire sale” as a process called “contagion” takes hold.⁸ With everyone in the market knee-deep in mortgage securities and trying to raise money with the same devaluing collateral, they were trying to cash out what were essentially similar assets. And if they couldn't sell mortgages, they sold anything else they could to raise cash and cover their losses, even supposedly high-quality assets that had nothing to do with mortgages. Because the market could not absorb the volume of securities being dumped on the market all at once, asset dumping to raise cash created the very panic everyone had sought to avoid.⁹ Prices plummeted, firms folded, and trust evaporated further.

Note here that this has nothing to do either with the state, which now gets the blame for the debt stemming from this crisis—a wonderful confusion of cause and effect—or with the individual moral failings of the bankers.¹⁰ You can blame regulators for being lax or negligent and politicians for caving to banking interests all you like, but this was a quintessentially private-sector crisis, and it was precisely how you get a multi-billion-dollar financial panic out of a bunch of defaulting mortgages. But it was not yet sufficient to cause a global crisis. To get there, you have to understand how the structure of these mortgage securities combined with unbacked insurance policies called “credit default swaps” (CDSs) to produce a “correlation bomb” that spread the repo market crisis into the global banking system. Again, this had nothing to do with states and their supposedly profligate spending habits and everything to do with weaknesses internal to the private sector.

The Amplifier: Derivatives

It's hard to describe derivatives in the abstract. To say they are securities that derive their value from some other underlying financial asset, index, or referent, which is a typical definition, doesn't say all that much. They also tend to be known by their acronyms (CDO squared, synthetic ETF, and so on), which only increases their mystery. Derivatives are basically contracts, just like mortgage securities. They allow banks to do what banks have always done: link people together while acting as middlemen and charging a fee, but in ways that allow them to trade things that are not assets in any normal sense, such as movements in interest rates or currencies. Whereas an asset is property, or a claim on property or income, a derivative is a contract, a bet that pays out based on how a particular asset performs over a particular time period.¹¹ That is the key distinction. Derivatives come in multiple combinations of four main types: futures, forwards, options, and swaps.¹² The derivatives that concern us here are swaps,¹³ specifically CDSs, and how these interacted with the mortgage securities that were being used as collateral in the repo market.

Key to understanding how derivatives amplified the repo market crisis is the idea of correlation between assets: when asset A goes up in price, asset B reliably goes down in price. These “negative correlations” allow investors to “hedge” their bets. A typical example is the relationship between the US dollar (USD) and the euro. When one goes up, the other (typically) goes down. The problem with relying upon correlations is that they sometimes break down, leaving you very exposed. CDSs were meant to help overcome this problem of correlation, but they ended up amplifying it.

Back in the mid-1990s when the stocks and shares that make up the world's equity markets were about to enter their dot-com-bubble phase, investors looked around for uncorrelated assets as hedges in case equities fell in value. They turned en masse to real estate to hedge their equity bets, and in the process pushed real-estate prices up by between 70 percent (in the United States) and 170 percent (in Ireland) over the next ten years. Real-estate assets were attractive because they were seen not only as uncorrelated to equities, but also as “uncorrelated within their class” and thus safe bets in their own right.¹⁴