## **How Banks Create and Destroy Money**

by Robert Bonomo via stan - The Cactus Land *Sunday, Jun 12 2011, 10:42am* international / injustice/law / other press

## **The Mechanics of Fractional Reserve Banking**

The mechanics of modern banking are opaque, misunderstood and arguably dishonest. Modern fiat money, the dollar, euro, yen etc are all based on debt. For every dollar in existence, there is somewhere an IOU for the same amount. This is best illustrated with an example of a typical mortgage.



Money Lenders, 1466

Imagine Jack wants to by Jill's house for \$100,000 and he has no money to buy it so he goes to his local bank and asks for a mortgage which is approved. The bank will ask Jack for a promissory note, an IOU, for the \$100,000 and once he signs it, they open an account in which they create from nothing \$100,000 for Jack in exchange for his IOU. That \$100,000 is a liability for the bank, their asset is the IOU. The bank just 'created' \$100,000 which is backed by the good faith of Jack to pay it back as well as the deed to the house he bought. Now the bank loans that money to Jack, with compound interest. The interest is the fee the bank charges for monetizing the debt. Jill would not have wanted an IOU from Jack for the 100K, so the bank did him the service of converting his IOU into dollars, and for this service they charge him interest. As Jack pays down his mortgage principal, the value of the IOU will be drawn down as well, until all the money 'created' is destroyed, and the IOU is worthless.

The money never existed before Jack signed his IOU. It was created entirely and only as an expression of his promissory note. All car loans, student loans and personal loans are created in this way, and it is the exclusive right of banks and the Fed to create money except for coinage which is handled by the Federal Government. Banks are restricted as to how much money they can create by the amount they have on reserve with the Fed. The formula is complex, but, for simplicities sake, it is around 10 times as much as they have on reserve, (actually more). If the bank has 1 million dollars on reserve with the Fed, for which they are now paid interest, they can create and loan out about 10 million dollars. Banks are paid for the privilege of creating and leasing money. This is our modern, fractional reserve banking system.

How does this differ from how other things that are borrowed or leased? When a house is leased, the owner must buy the house, then rent it, forfeiting his capital in exchange for an asset, the house. The typical return on residential real estate is about 5%, anything with a return of 10% would be

snapped up in an instant. So how much do banks make when they loan their 'created' money out? Let's assume Jack has been a good boy, and gets a fixed rate loan of 5% on his \$100,000 mortgage for a period of 10 years. The bank is obligated to leave \$10,000 in reserve, or 10% of the amount loaned out, but they do not give up the money, and they are now paid interest on it, so the bank now has no borrowing cost, only an opportunity cost. The return on the bank's \$10,000 is Jack's compound interest payments of 5% on \$100,000, or \$5,000, a neat 50% return on their money. As he pays off the principal, the banks also frees up the corresponding amount in reserves, so the margin stays the same. On a 20% interest credit card with an outstanding balance of \$10,000, the bank is holding \$1,000 in reserve on which it is making 200% a year. Of course the bank has salaries to pay, rent, administration fees, marketing etc. but it is, nonetheless, a very lucrative business model.

What is special about banks that allows them such profitability? First, what is money? Money is two things: a store of wealth, and a means of exchange. Many would define money as human labor. Let's say Jack is a truck driver and makes \$50,000 a year, (very close to median US household income). Jack has recently married, bought a house and become a good boy and doesn't pitter his money away anymore on wine and women, he now saves \$1,000 every month, about one week's work for Jack and the average American family (before taxes). When he asks his bank how much they will pay him on his saving account, they say 1%. This seems legitimate to Jack, since they loaned him \$100,000 at 5%. In fact, it seems like a very low margin to him as he assumes that the banks are loaning the money that other people like Jack have on deposit. Banks do not loan out deposits, deposits are used for reserves.

For Jack to earn \$100,000 would take him two years of driving a truck, for which he would be paid by a bank a few thousand dollars in interest a year. For a bank, however, \$100,000 is created digitally in miliseconds, and they are paid \$5,000 a year in interest and if the borrower defaults, the bank will foreclose on the house with the full force of the law. Jack drove a truck for 2 years to make 100k, it is a store of value of his work, but what did the bank do in exchange for the interest on the 100k they loaned Jack?

Money is human labor transferred to a store of value, like dollars, euros, gold or silver. For example, when someone pays \$30 for a kilo of fish, they are not paying for the fish in the ocean, they are paying for it on their plate. The difference between a happy fish swimming in the deep blue sea and a grilled halibut glistening before you is human effort. All other businesses that want to get a return on an asset must first buy the asset with money earned through work. This is not the case for banks. They earn interest on something they don't create.

In fact, a Minnesota Judge, Martin V. Mahoney, and a jury threw out a foreclosure on defendant Jerome Daly for just that reason. Daly argued that the there was no consideration in the contract between himself and the First National Bank of Montgomery. Consideration means both parties must give up something for there to be a contract. For example, if Jack offers to paint Jill's apartment for free, there is no contract between them. If Jack bails on his offer to paint, Jill cannot sue him. Judge Mahoney ruled the bank gave up nothing in the contract. They created the money out of thin air hence they did not commit anything to the contract; there was no consideration and the bank could not foreclose.

For everyone except banks, money is an expression of human labor, creativitity, or even luck. But for banks, money is something they simply 'create' in exchange for IOU's. What Jack works ten years to pay back should not have the same value as what the bank created in the blink of an eye. They are two different things, yet they are treated as one.

How do Banks Lose Money?

It seems incredible with such a business model how banks could ever lose money, but they do. The problem for the banks is always the IOU's. Fiat money is based entirely on outstanding debts. Modern money is based on debt and every dollar must be tied to outstanding IOU. But when the underlying IOU that backs up the debt becomes worthless, the bank must back up the 'created' money up with real money: deleveraging.

Let's say Jack loses his job and stops paying his mortgage, and his \$100,000 house is now worth \$50,000 due to a crash in housing prices. Once Jack has been found to be certifiably broke, the bank must replace the IOU with reserves in the amount of the loan outstanding. Assuming Jack never made a payment, the bank must now add \$90,000 to its reserves which, plus the original \$10,000, will constitute the full amount of money they created. Once they foreclose on his house and get the \$50,000 the bank is now in the whole for 50 grand. This is why banks traditionally only loaned 80% of the value of a home. The 20% was calculated to pay for expenses and fees, leaving them in a breakeven scenario in the case of an initial default.

But the bank's bag of tricks seems to have no end, according to Forbes:

"They (the commercial banks) are allowed to accrue interest on non-performing mortgages until the actual foreclosure takes place, which on average takes about 16 months. All the phantom interest that is not actually collected is booked as income until the actual act of foreclosure. As a resull, many bank financial statements actually look much better than they actually are. At foreclosure all the phantom income comes off the books of the banks. This certainly explains some of the reluctance of banks to speed up the foreclosure process."

The same leverage that allows banks to make 50% returns on mortgages, and 200% returns on credit cards works in reverse when people default on loans, and it sucks up the bank's liquidity like a thirsty sailor.

The liquidity problems of banks are directly tied to the very same leverage they use to make their immense margins. Banks are given a machine that makes money, for which they must leave deposoit of 10% of the money they want to 'create'. When they give the machine back, they must show that all the money they created has been 'destroyed' (paid back) or they must make up the difference.

Banking is a fabulous busniness on the simple condition that risk is always controlled. When greed trumps risk, banks go south.

## The Lure of Sub-prime

Banks will often package loans, securitize them into mortgage backed securities, and sell them off. The principal money is destroyed and the IOU is passed on to the buyer of the security. The banks keeps the margin they make on the deal, plus whatever interest had been paid before they sold the loan, along with fees etc. The problems began when greedy souls noted the difference between a 5% mortgage and 8% mortgage. For the Ivy league trained, this is no mere 3%, but a healthy 30% (10 leverage \* 3%). Over a ten year period, the difference in the amount of interest paid on a 5% \$100k mortgage (\$27K) and an 8% \$100k mortgage(\$45K) is a whopping 66% increase in ROI. Jack sees 3% and says big deal, Lloyd Blankfien sees 66% and gets himself into a frenzy doing God's work...

Combine the greed with a rising prices that kept foreclosures to a minimum (who defaults on a house they can sell and make money on?) and it is clear how the leveraged orgy began and what kept it going. As Citibank's John Prince put it "you have to keep dancing while the music is playing".

Perfect Games and Rigged Games

From The New York Times :

"Perfect trading quarters on Wall Street are about as rare as perfect games in Major League Baseball. On Sunday, Dallas Braden of the Oakland Athletics pitched what was only the 19th perfect game in baseball history. But Bank of America, Citigroup, Goldman Sachs and JPMorgan Chase Company produced the equivalent of four perfect games during the first quarter(2010). Each one finished the period without losing money (trading) for even one day."

Did the same "beautiful minds" doing "God's work" that blew up the world financial system suddenly find their fast ball? More like Vaseline and a razor blade, or in banking lingo, the carry trade.

The Fed Discount Window was a mechanism used by the Fed to make very short term loans to member banks facing liquidity problems, the loans where generally paid back within hours and the rate was 100 basis points (1%) above the Fed funds rate. During the credit crunch in 2008 the Fed loosened the terms on the Discount Window, extending the terms up to 90 days (one quarter) and reducing the rate to 25 basis points (.25%).

So how did the banks turn this into a money machine? They borrowed from the Fed using around 30 times leverage at .25% and immediately bought US Treasury 10 Year Notes at 3.5%. Doesn't seem like a big spread? Imagine that you start with \$10 million in assets. You borrow \$300 million, you make 3.25% (3.5% - lending cost .25%) on 300 million dollars. The banks interest earnings are \$9.75 million a year, or about \$800K a month on an initial outlay of \$10 million, 8% return a month or 97% a year. One hell of a big strike zone.

This begs the question of how interested are the banks in stopping wars and reigning in the federal budget deficit. The moral hazard here is twofold as the banks reap risk free, incredibly high returns from budget deficits and all the destruction they entail and the taxpayer ends up paying the spread. The Fed charges banks .25% and the Treasury pays the banks 3.5% and the difference is paid by Jack and Jill.

In the current PIGS crisis, Portugal, Ireland and Greece are being 'bailed out' to insure that the banks recieve full payment on the bonds they hold. At least one generation will live and work in austerity in order to pay back banks with 'real' money raised with hard earned taxes to pay for that which was created without a drop of sweat and with a few clicks of a mouse.

The New York Times

In May of 2010, two months after the banks 'perfect' quarter, The New York Times ran a front page piece about a middle class family in Florida that had opted without qualms for strategic default on their home .

"Foreclosure has allowed them to stabilize the family business. Go to Outback occasionally for a steak. Take their gas-guzzling airboat out for the weekend. Visit the Hard Rock Casino."

The article had over 800 comments, a lot even for The New York Times. The blogoshpere lit up with outrage over these 'deadbeats'. But how many people understand how banks actually work? Would there be the same outrage if people understood that the money they were given was made with a few clicks of a mouse? You don't see cover stories in The New York Times on the mechanics of banking. It just doesn't happen.

Everywhere banks are foreclosing on homes and even forcing austerity on entire nations as payment for the money they loaned, and the risks they assumed. But did they actually lend real money? Was the money they lent created through work or was it simply a slight of hand for which they now demand their pound of flesh? As the entire world financial system becomes undone people will begin to understand that money as a store of value and work and the money banks lend are two very different things for which the banks want you to think they are one and the same.

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http://www.thecactusland.com/2011/05/moral-hazard-of-modern-banking-how.html

Cleaves Alternative News. http://cleaves.lingama.net/news/story-2549.html