

But why even worry about this, as long as everyone is paid in the end! – No. As long as banks are juggling liabilities, there's a threat of collapse, as history has shown again and again, most recently in Cyprus in 2013, where a '**bank run**' had to be prevented by force. Not to mention the very real threat to savers when banks are **too-big-to-fail**.

## How banks destroy money

Remember banks create money by granting loans? When a loan is repaid, the money is destroyed. Together with the debt, this money vanishes into thin air.

Supposedly, we all want to get out of debt ... but only few of us know that this simply isn't possible without **destroying money**.

### MONEY = DEBT

If you personally are struggling with debt, or your community is building on credit, try to see the sunny side: At least, you're keeping the economy going! In this system, we can't reduce total debt without shrinking the money supply.

### DEBT = MONEY

... Someone has to bear the burden.

Were all liabilities to be met, there'd be no more money left at all! There would even be some interest payments left twisting in the wind.

In order to repay them as well, one would have to take out a new loan, and you're back where you started.

Can there be a better way? - *Yes!*

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Sources:

*Where does money come from? (nef)*

Script of video series *Banking 101* by Positive Money adapted, re-adapted, shortened, buried for 3 months, then shortened again by Michael K for *Banks need Boundaries!*

One way to explain where our money comes from, is to walk step-by-step through the three most common misunderstandings about banking.

## How banks (don't) work

### Error number one: The 'piggy bank'

Many people believe banks work like the piggy bank they had as kids. Wrongly. Here's what really happens when you give money to a bank: No matter if it's cash or electronically transferred money, it becomes the property of the bank. The bank records a **liability** toward the customer just as you would make a note to remember that you borrowed \$50 from a friend.

- If it's cash, the bank is particularly happy and adds the bills to its stockpile.
- If the money is "just" electronic, the bank doesn't touch it for the time being.

### Error number two: The 'middle-man'

Most of us believe that banks are some kind of middle-man. In this idea, banks borrow money from savers, and then lend it to people who want a loan. (The difference in interest rates for saving and borrowing is the bank's profit.) If this model were correct, borrowing would depend on savers. Furthermore, banks could run out of money, if they lend too much. It would also mean that it's good for the country if we save, because it would provide more money for businesses to grow, which would lead to more jobs and a healthier economy.

### Error number three: Where the experts fail

Surely, the experts have a more precise view of banking, don't they? Unfortunately not. They trust what's called the 'multiplier model'. At least this image is closer to the truth inasmuch as it shows that the lion's share of money is **created by banks ... as debt**.

Here's how the multiplier works: Julia walks into a bank, and deposits \$1000 (€, £, etc.) The bank can safely assume that she won't need it all at once ... but is more likely to spend small chunks of it over the course of the month. Thus, the bank can consider part of the deposited money as 'idle'.

It holds back a small 'reserve' of say 10% (in this case: \$100), and lends out the other 900 to Fred, who needs a loan. Fred goes out and spends these \$900 on a new computer. The computer salesman banks the money, too. *This* bank in turn realises that it can use the bulk of the \$900 to make another loan . It keeps 10% – i.e. \$90 – and lends out the rest ... and so on, always with the *same* money.

Although there is still only \$1000 flowing around, the sum of all bank accounts has grown and grown ... more money ... and more *debt*.

This money supply is shaped like a pyramid. Our available money is the base on which the rest of the structure is built: Julia's \$1000. And the top is money created by banks through debt, starting with Fred's.

If this process continues until practically all the available money is "locked in" as reserves and there is hardly anything left to re-lend, the pyramid can grow by a factor of ten. If one increases the share that each bank must keep to 20%, the pyramid shrinks, and vice versa.

The pyramid model shows money being created *from nothing*, because the same money is counted twice in each step of the way.

However, there's one small problem: banks haven't worked like this for years. It's an inaccurate and outdated way of describing the banking system.

The multiplier model has three fundamental flaws:

- 1.) It implies that banks have to wait for a deposit before they can start making loans. But they don't.
- 2.) It assumes that banks always go through with the multiplication. They don't. No matter how attractive a framework we provide for them, or if we add money at the base. They control the money supply.
- 3.) This model claims that our money supply cannot grow uncontrollably, because at some point it must reach the tip of the pyramid. But it can ...

Placing our economy in the hands of experts and leaders who do not understand money, is **very dangerous**. It's a house built on sand.

Before we go any deeper, let's list the **three types of money**:

- 1.) Cash.
- 2.) Central-bank reserves.  
This is the money that flows when one bank owes another bank money. This *could*\* happen when you pay your rent (\*but not necessarily: we'll get to that later), i.e. when you transfer money from your bank to your landlord's account in another bank. **Only banks can use central-bank reserves**. It is their preferred form of electronic money, because it's created by the central bank, and is just as safe as cash.
- 3.) Bank liabilities, also known as 'book money' (German: Giralgeld)  
Remember the word "liability" from our 'piggy bank' example?

The third type of money is created neither by the central bank, nor by any other part of state power. It is the numbers on your bank account. This type forms the lion's share of our money.

Who creates it? **Banks!** Not the government, not the state-owned (i.e. *our*) central bank, but commercial banks! This is what the Swiss National Bank (SNB) means when it writes "banks can create book money, by granting loans."

## The BALLOON model

Remember how the multiplier model suggested the money supply was limited by available money and the reserve ratio (i.e. by the base of the pyramid, and the steepness of the sides)? Well, that was just a model, and all models are simplifications. But this one is a lie.

The money supply is not limited at all. It can expand and expand, without ever reaching the top. The money supply is not pyramid-shaped at all, but more like the shape of a big balloon (bank liabilities), around a smaller balloon, which consists of cash and the electronic central-bank reserves.

The banks fill these balloons themselves, specifically the outer balloon, which is the only money we ever get our hands on. The inner balloon is filled at their behest, to meet legal requirements, which they conveniently set themselves.

This manner of money creation can lead to market distortions, for example in real estate, and to boom-bust cycles, where profits can easily be siphoned-off, while lingering liabilities end up with the lender of last resort: **us, the people!**

### HOW BANKS CREATE MONEY OUT OF NOTHING

To quote the central bank of Switzerland: "banks create new money by granting loans" (*SNB*) – let's take a closer look at that.

A customer, whom we'll call Robert, walks into a bank to borrow \$10,000 to rebuild his house. The bank checks the deal, and gives him the green light. Robert gets his loan, and commits himself by signing along the dotted line ...

The debt is worth something to the bank: \$10,000 plus interest (or Robert's collateral). Robert on the other hand sees \$10,000 in his account that weren't there before. All the bank did to create this new money was to type numbers into a computer system. No other account was touched. Nor was anything removed from a pension fund or the like, to transfer it to Robert's account.

Creating **bank liabilities** is this simple:

1. signing a loan contract
2. typing numbers into an account

This newly created money is now ready to spend. Robert can go ahead and transfer money to the people rebuilding his house. If they are with the same bank as Robert, it's all quite simple. The bank just re-arranges the liabilities internally. If, however, Robert and his builders are with two different banks, central-bank reserves might have to change hands.

As hinted above (under **three types of money**), the keyword is "might": Because, if you\* and Robert's builders are with one bank, and Robert and your landlord with another, the two banks will put their heads together before any "real" money changes hands. If Robert's renovation costs the same as your rent, the banks play a zero-sum game! (\*see above)

**The bigger the bank**, the more likely it is that all four accounts are in-house. And the more liabilities banks can offset against each other before transferring any hard currency (a process they call 'netting'), the less reserves they need.