Fractional Reserve Banking

16 July, 2020

1501 words

Banker, Mr. & Mrs. Wealthy, Carpenter, Wood Cutter, Leather Worker, Daniel Shays, Farmers

- JM: Who understands money? And Banking and Credit and Debt? Let us explore what is known as "Fractional Reserve Banking."We need a Banker...
- B: Look at my enormous edifice! Look at my my voluminous vault! Now I just need some money to put in it.
- JM: Now, Mr. & Ms. Wealthy... Here you are, 10 Gold Coins.
- W: We are the Wealthies! We have 1,000 acres of land. We rent out half of it to poor farmers and hire locals to work the other half for us. We are so rich that we have 10 Gold Coins that we aren't even using! It's just spare money.
- B: That's a lot of money to keep at home. Perhaps it would be safer in my vault.
- W: An excellent idea! We have known you, M. Banker, all our lives. So we trust you.
- B: Here's your account. I'll put up a tally here. 10 Gold Coins. And I'll put the coins in the vault. Nice and safe. And, as you do not need the coins any time soon, I'll lend them out to other people.

[Transaction 1: Accept 10 GC]

8 are available to loan out. 2 are kept back as my Fractional Reserve.

- JM: How many Gold Coins are there? How much money is there?
- All: 10.
- JM: How much money do you have, Mr & Ms Wealthy?
- W: We have 10 Gold Coins, safe in M. Banker's Vault.
- JM: How many Gold Coins do you common people have?
- All: We have NO Gold Coins.
- JM: It must be very difficult to transact business.
- All: We can do almost no business what-so-ever!
- F1: We can trade food and machinery and labor with our neighbors, but when we require Gold or Sliver, there is none to be found!
- F2: I had to sell my favorite cow, Bessie, to pay my taxes. But Mr.
 Wealthy offered me only half a Gold Coin! I bought her for 1 Gold
 Coin last year, and she is larger and healthier and an excellent milker.
 She is worth TWO Gold Coins. But what could I do? I had to pay my taxes or they'd take my farm. So I was forced to sell poor Bessie.
- DS: My name is Captain Daniel Shays. I fought in the revolution with many another brave man, but I have not been paid. I have been given worthless "promises to pay" -- IOUs and Bonds that no one will accept.

We are loyal Americans, but the Government is not fulfilling its promise to us! We need money to buy & sell with! Paper money is fine for us.

Fulfill your promises to us, or we'll band together as the Regulators and stop the courts from sitting until our rights are respected!

JM: Oh dear. Shays' Rebellion! This is not good. Let us continue with our Banking example.

M. Carpenter...

- C: I found this amazing wood in Georgia that is strong enough to make unbelievable chairs. I made a sample, but I don't have the time or money to buy enough wood to build actual chairs.
- B: How much money would it take?
- C: Well, I'd need 2 Gold Coins to buy the wood, and another Gold Coin to pay my assistant every month. I'd need to do that for several months before our first sale. So I'd need about... 8 Gold Coins.
- B: It just so happens that I have 8 Gold Coins in my vault available for loads. Interest would be 1 Gold Coin a year.
- C: Great!
- B [Transaction 2: Give Carpenter 8 coins. Do bookkeeping.] Here you are!
- JM: Now, How many Gold Coins are there?
- All: ..

- JM: How much money is there?
- All: ...
- C: Wood Cutter! **[Choose someone]** I want to order one shipment of the famous Georgia White Oak. Here's 2 Gold Coins.
- WC: I shall get you that wood right away.
- C: Apprentice! [Choose someone]
- A: Yes, Lead Carpenter.
- C: I want to hire you to work on my chairs. Here's 1 Gold Coin for the first month.
- A: Thank you, Lead Carpenter.
- JM: Apprentice! I believe you would like to purchase a church dress for your daughter.
- A: Yes!
- JM: Find someone to sell you that dress for one Gold Coin.

Now Carpenter, you have 5 Gold Coins that you don't need right now. What are you going to do with them?

C: Put them in the Bank!

B: [Transaction 3: Accept 5 GC. Do bookkeeping.]

- JM: And M. Leather Worker, you want to sew aprons?
- L: Yes. My father was a black smith and he always got these irritating little burns that a normal apron can't protect you from. My special asbestos-lined apron eliminates that weakness and you will not be burned at all!

I just need 4 Gold Coins to rent a shop and get the materials.

B: Well, maintaining a 20% reserve, I can lend you 4 gold coins. You will owe me 1/2 Gold Coin per year in interest.

[Transaction 4: Give 4 coins to L. Do bookkeeping.]

- L: Great!
- JM: Now, How many Gold Coins are there?
- All: ...
- JM: And how much money is there?
- All: ...
- JM: When a bank loans money, we say it "creates" money, because people behave as if there were that much money, even though we all know there's only 10 Gold Coins.

L: I am going to buy some linen. [Buy from someone for 1 GC.]
 And rent a workshop [Pay someone 1 GC.].
 And what should I do with the other 2 Gold Coins that I don't need right now?

All: ...

B: [Transaction 5: Accept 2 GC from L. Do bookkeeping.]

- C: Time to pay my apprentice. M. Banker, 2 Gold Coins, please.
- B: [Transaction 6: Give 2 GC to C. Do bookkeeping.]
- C: I owe you one Gold Coin for this month. [Pay apprentice 1 GC.]
 And I want to buy some ale. [Choose somebody to buy it for 1 GC.]
- JM: Citizens! How many Gold Coins do you have?

All: ...

[Commerce ensues. People with Gold, buy stuff from the farmers...]

- JM: Stop! Did you all buy and sell a lot of cool stuff? Did those Gold Coins make the rounds?
- All: ...
- JM: Mr. Wealthy. I understand that you have admired M. Carpenter's excellent chairs?

- W: Yes. They are superb. I am buying 8 of them, 1 Gold Coin per chair.
- JM: But if the Wealthies go to take 8 Gold Coins out of the bank, what will happen?
- All: ...
- W: Well, I don't want to carry all that money in my pocket anyway. I'm writing note of credit telling the bank to give M. Carpenter 8 Gold Coins from my account. **[Gives Carpenter note.]**
- C: Please deposit this into my account, M. Banker. I feel rich!

B [Transaction 7: Do bookkeeping.]

- B: Do you want to take out your money, M. Carpenter?
- C: No. It's safe where it is. I have all the money I need right now.
- B: You have enough money to pay off your loan. Do you want to?
- C: No.

If I paid off my loan, I wouldn't have enough to buy more wood. Actually, I'd like to borrow MORE money. If I could hire another assistant and buy more wood, I could turn out chairs twice as fast...

- B: I would be willing to make a further loan, should more depositors appear. You've paid your interest regularly. You're a safe bet.
- JM: But M. Banker, don't you want your principal back sometime?

B: No. I don't want to keep any extra money in the bank at all. Just my *Fractional Reserves*.
I want to loan it all out so I can make profit from the interest. As long as M. Carpenter pays the interest, I'm happy to loan it forever.

By the way, M. Carpenter, it's time for your interest payment.

C: Deduct it from my account.

B: [Transaction 8: Do bookkeeping.]

JM: Farmers... I believe you owe the Wealthies some rent money?
[5 Farmers each give one coin to the Wealthies.]

Now let's do some commerce with only 2 Gold Coins.

All: [Discuss]

JM: We are suffering from a recession.

In a recession, men go without jobs, are forced to sell their possessions for a paltry sum, and lose their homes. Yet the men in question are still eager to work and produce goods for others to consume. And the others still desire those goods, yet are unable to purchase them for lack of money.

So money, which we think of as a means for enhancing exchange, becomes a hinderance to commerce.

And this is very much the issue that Shays and "The Regulators" faced in 1786. They were happy to pay their taxes, there just wasn't any money to pay them with.