

FRACTIONAL BANKING

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Abstract: Understanding the reasons of the present financial problems lies in understanding the substance of fractional reserve banking. The substance of fractional banking is in lending more money than the bankers have. Banking of partial reserves is an alternative form which links deposit banking and credit banking. Fractional banking is causing many unfavorable economic impacts in the worldwide system, specifically an inflation. (JEL: E31, E52, G21)

Key words: fractional banking, banking of partial reserves, Ponzi Scheme, Multiplication Effect

Introduction

The beginnings of fractional banking must be sought in the activities of English goldsmiths of the 16 and 17 centuries because the first bankers were the goldsmiths. When gold started to be taken as a valuable exchange instrument by people, some safe spots needed to be built to store the gold. Therefore the goldsmiths were constructing buildings with safes for their gold. Other wealthy people also needed some safe places for their gold; for this reason a goldsmith gave them the possibility to store their gold in his safe. He issued a certificate confirming the acceptance of the gold; its holder could withdraw his gold from the safe any time he wanted to. In the course of time as this business was spreading, a higher and higher number of people were coming to store their gold and the certificates started to be accepted in the market as if they were the very gold.

Banking of partial reserves is an alternative form which links deposit banking and credit banking [1].

The goldsmiths in their endeavour to increase their profits started to issue more certificates than they could cover by gold. They issued the certificates being covered by the gold of other owners. It was important for all certificates (paper money) covered by gold not to be presented for repayment at the same time, i.e. that not all people wanted their gold at the same time.

„The value of certificates issued by a goldsmith was represented by the gold covering them. But as soon as he issued another debenture which was not covered by anything but the hope that there will be sufficient quantity of gold in stock AT the specific moment, he got in the irrational situation which is the basis of the present day banking“[2]. An official recognition of this practice created so called „fractional reserve banking“, which is the „heart of modern monetary system“ [3].

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The term fractional banking is taken over from the English one "Fractional Reserve Banking", which, when translated, means "banking with partial reserves". The substance of fractional banking is lending more money than the bankers have.

Fractional banking – banking of partial reserves

The effects of fractional banking are reflected in two spheres. The first effect is in the fact that two subjects act as the owners of one "thing", the second one is a multiplication effect.

Two owners of one thing [4]

A holder of deposit (e.g. of the current account) has full right to dispose with his money any time, the bank transfers part of these means in the form of obligatory minimum reserves to the account in the central bank and simultaneously the remaining part is lent to somebody else (or the means are invested). Thanks to this, the bank earns an additional gain which it shares with depositors – it decreases or abolishes the charges for managing the account, it pays the interest on the money deposited (of course a lower one that it earns on the loans using this money).

But this situation is perceived differently by either side. The aim of the deposit holder is to have the money deposited in the bank at his disposal immediately and to be able to use it any time and his intention certainly is not to grant the bank a repeat credit. On the other hand he considers the balance on his account for his own money, but in fact he is only the owner of the receivable towards the bank.

So within fractional banking two different "persons" feel like being the exclusive owners of the deposited money simultaneously, and they are the original depositor and the bank, or alternatively a third person whom the bank has lent the money to.

Multiplication Effect [4]

Another effect of fractional banking is that in this way the banks generate "new" money. Deposits are part of the money supply. Whenever a bank increases the balance on one client's account (it grants him a credit) without simultaneously decreasing the balance of another client's account, it generates new money (of course only in accounting terms) thus increasing the money supply.

Let us suppose that there is only one bank in the market, which keeps permanent reserves at the level of 10 % of the deposits to order. This way we will explain the multiplication effect related to fractional banking using the following example:

Client A deposits EUR 1,000 in the bank. The bank keeps 10 % of the deposit as a reserve and lends the remaining EUR 900 to the client B and credits his account with this amount. Due to this, the money supply has immediately been increased by EUR 900. All the time the client A has his EUR 1,000 (in accounting terms), the client B has EUR 900 at the disposal.

But out of this amount of EUR 900 the bank keeps 10 % as a reserve and the rest is granted to the client C in the form of a credit. The process of multiplication

continues by the time the bank does not reach only the 10 % which it keeps as a reserve out of the deposits. At the end of this process the bank generates another amount of EUR 9,000 on the original EUR 1,000, i.e. the original deposit was multiplied by the bank 10 times (see the Table 1).

Table 1. Process of multiplication

Client	Deposit (EUR)	Reserve (10%)	Credit (EUR)
Client A	1 000	100	900
Client B	900	90	810
Client C	810	81	729
Client D	729	729	0
Total	3 439	1 000	2 439

Source: Own processing

This practice results in an enormous excess of the volume of the bank's money over the existing amount of the money at disposal, i.e. if all the depositors asked to be repaid their deposited money at the same time, the banks would not be able to meet their requirement as there is not such an amount of money physically present. The banks would go bankrupt immediately. And it would not be only them, but the depositors (the clients), the whole banking and financial system would „fail“.

But this banking practice is universal in modern banking. In spite of all mentioned above, fractional reserve banking is functional because:

- a) payables towards clients are to a great extent or totally compensated by new deposits
- b) only few people decide to withdraw their deposits at the same time
- c) people usually deposit their financial means in the bank for longer period.
- d) bank has usually sufficient reserves to meet the payables at particular time.

The Impacts of Banking with Partial Reserves [5]

The system of partial reserves shows that the more deposits the banks multiply, i.e. the more uncovered credits they grant, the more they earn. The easiest way how to do this is to artificially decrease the interest rates to the most attractive level, which increases the demand of entrepreneurs. Entrepreneurs then elaborate and start financing great investment plans which are not adequate to the market needs because the savings of inhabitants have not really increased. First there is a boom and period of economic prosperity, but after some time it grows to an enormous size until the bubble bursts and then there follows a rapid failure. Entrepreneurs cease their projects and repay their loans quickly to minimize

the losses. The amount of money artificially increased disappears from circulation in a chain reaction.

When banks release uncovered loans to the economy, they blow the money supply, thus causing inflation. „Through further injections of artificial money the contemporary central banks keep a more or less stable permanent inflation and behave in the same way as a man drinking one cup of strong coffee after another not to be caught up with by tiredness and headache” [5].

It can also be seen in the following graph which shows the development of inflation in the USA. The inflation started to grow when the American Central Bank FED came into existence in the year 1913; according to some authors it is the FED which is responsible for the existing present world crisis.

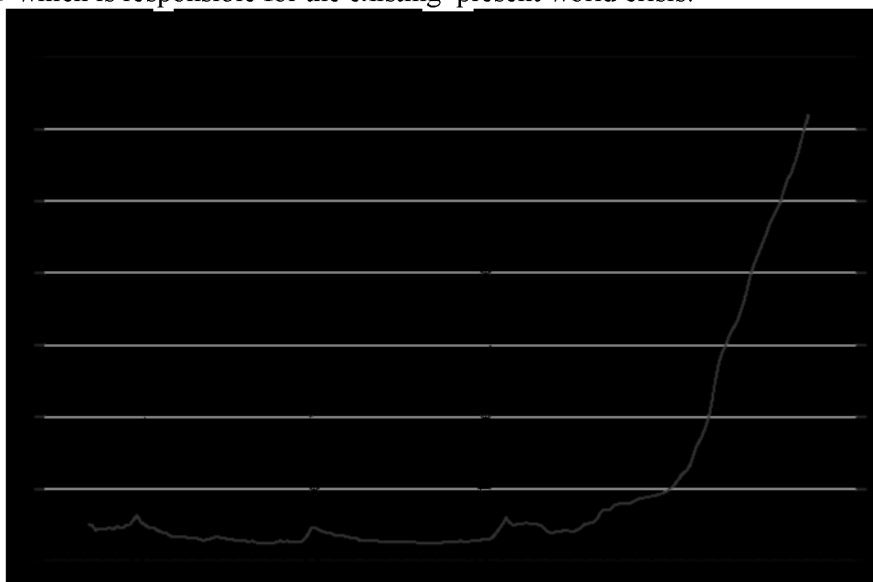


Figure 1. Inflation – the impact of fractional banking

Source:[8]

Generating money in this way and the subsequent inflation have several impacts, one of which is that the system of partial reserves brings the highest gains for the banks and the lowest ones for the „common people“, therefore inflation is also called a disguised taxation. Inflation repels people from making savings (especially if a bank offers the interest rate lower than the inflation rate). All want to get rid of money before they can buy even less for it. Under the illusion of economic boom, all are doing very well; there is no difference between an able and unable entrepreneur which slows down the motivation to produce effectively and at high quality.

„The contribution“ of partial reserves [6]

The contributions of fractional banking are very questionable. The greatest contribution is its support of industrialization. But this does not mean that all are „the winners“, there are also „the defeated“. Some subjects (e.g. the bankers, unwealthy entrepreneurs and government) gain on a faster industrialization financed by banks. But it is unfavorable for others (e.g. the owners of property, entrepreneurs with sufficient capital and craftsmen using the traditional technologies).

It is also true that banking with partial reserves supports industrialization but it does not support economic growth. Banks with partial reserves can shift economy to a different growth level by changing the direction of inflows, but doing it they cannot increase an overall growth of economy. Although in the first phase the economic growth is being accelerated, after some time it makes a massive bubble which sooner or later bursts. Then there follows a keen depression which has a negative impact on the most indebted economic subjects. The system of fractional banking can be functional only as long as the new loans are flowing in economy. As soon as the ability of economic subjects to absorb new loans is stopped, there is a failure of the system. Using the example of the USA, the following picture shows that the indebtedness is growing much quicker in comparison with the GNP growth.

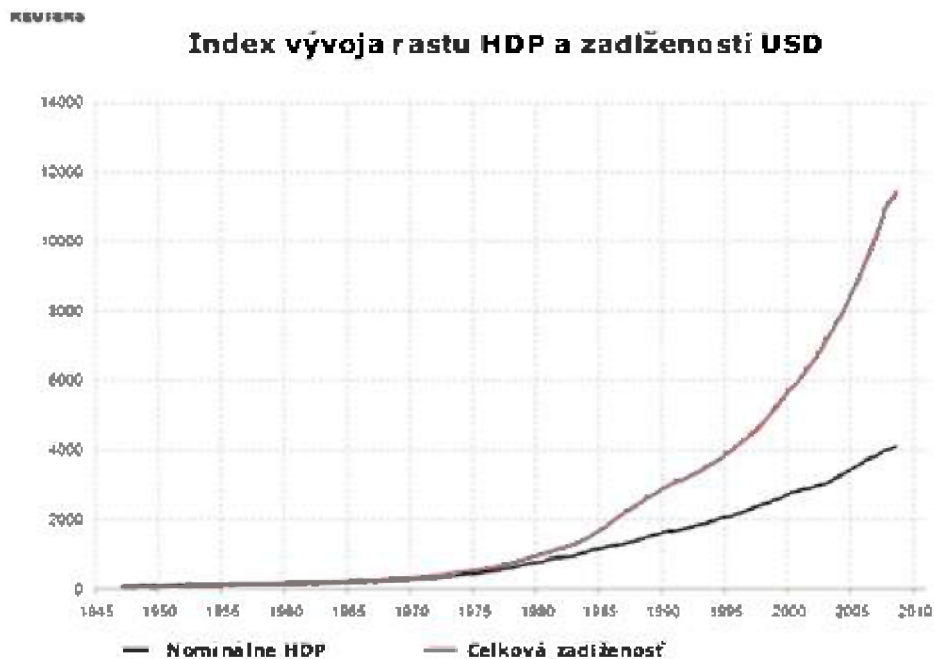


Figure 2. The relation of the growth of GDP and indebtedness in the USA
 Source: [9]

Fractional Banking = Ponzi Scheme?

Many authors as e.g. Ellen Brown compare fractional reserve banking to the Ponzi Scheme. „Banking of partial reserves is nothing but a great pyramid game. It makes some rich sacrificing the others. It brings economic contradictions and serves governments and other influential circles“ [7].

Ponzi discovered the possibility to speculate with international postal coupons which were used abroad for a return mail by coincidence. The prices of these coupons stated by the International Postal Union in the year 1907 were long unreal when the First World War changed the exchange rates dramatically. In Europe a customer paid for them a small amount; he could buy a foreign coupon for one American cent which could be exchanged in the USA for stamps of the value of six cents. It was a 500 % profit. The problem was also in a physical limitation when handling such a quantity of return certificates as well as the lack of such a quantity. One million dollar investment would need one hundred million coupons – which would then have to be exchanged for stamps and sold to the public at a discount price in adirect competition with the monopoly of the American post. The purchase of the asset on one market and its immediate sales on another one at the profit, were also illegal.

Ponzi was offering the investors a 50 percent gain in 45 days or a 100p4 percent gain in 90 days. Later he opened 35 branches and more than 400,000 investors put 15 million dollars at his disposal. His plan failed after eight months when a watchful press and government started to doubt about his business.

After so many decades the Ponzi Schema is unfortunately still alive and healthy and as the saying says „rob Peter, pay to Paul“, it is still appearing. This saying appears in connection with fractional reserve banking where Peter is represented by the depositor of the financial means on his account in the bank; these means are then used to grant a loan to Paul. Thus according to many critics fractional reserve banking means a legalization of the Ponzi Scheme.

Possible solutions

The solution of this chaotic situation is, as in the past already suggested by many economists, among them also being an Austrian economist Ludwig von Mises and an American economist Murray Newton Rothbard, a classical gold standard and free banking with one hundred percent reserves. Under such a system the private banking institutions could not be promising what they cannot fulfil without a relevant bankruptcy and loss of clients after disclosing this deceit. Central banks only made the total situation more unpleasant. If central banks let commercial banks bear the consequences of their strange practices, only a small part of inhabitants would suffer. But with this system of deceits and lies being supported, banks enter more riskful operations and take a deceit for an usual practice because they are aware of being covered by the central banks. In this case the money of all clients is at a risk and moreover by combining these activities

with the inflation ones all economic system is at a risk. In the system of free banking, after several bankruptcies of their competitors, private banks would be made to conclude the contracts containing the commitments which they are able to meet. As in all other cases, the state and its right hand, the central bank, have made the situation which would be settled very easily in the free market, on which banking would flourish with an unexpected advance as well as with the trust of depositors even worse.

Summary

The present times, full of technological inventions would not be complete without the invention of the possibility of an „endless“ growth of economy by means of unlimited generating of uncovered money. Generating money from nothing has become our financial system because we live and realize our business transactions in it. The essence of the present system is the central bank which has been charged with the power to supervise the quality of the currency and to run the flow of money in the country. In reality the power to supervise has been changed to the power to generate money. And this is the weak point of the system because this system generates money from nothing (so called *fiat money*), to say it expressly, it only prints the banknotes which are further distributes across the whole economy. In spite of the reason for the existence of the central bank (the stability of currency) the result of working of any central bank in the world is the inflation which is in contradiction with the declared aim, moreover, this permanent inflation is considered to be kept within the reasonable limits, and this fact is due to the successful activity of the central bank.

The probability of continuation of the present inflation system without its being changed is relatively great, which is also proved by the endeavours of governments to pump further uncovered money into the system even in the period of the crisis.

An important role in this system is played by commercial banks, which through their credit expansion generate money by so called multiplied effect from the accepted deposits, which in great part are used to grant a loan to a further person or company, i.e. another link in the chain. On such a market the central bank acts only as a regulator and creditor of last resort and it manages the whole system by giving regulations, e.g. stating the amount of obligatory reserves of commercial banks, by operations on the free market (purchase or sales of bonds and other securities thus influencing the amount of money in the system) or by changing the interest rate at which it lends money to commercial banks (so called discount rate).

References

- [1] Hučko M., *Chcem celu Zem + 5% navyše* [online]. Paradigma, 16. jún 2005. [cit 2010-04-07]. Dostupné na internete: http://www.paradigma.sk/redakcny_system/clanok.php?id=142
- [2] Britka J., *Kto hybe svetovými peniazmi*. In: Hospodárske noviny, 24. november 2009

- [3] North G., *What is Money? Part 5: Fractional Reserve Banking* [online]. LewRockwell, 10. október 2009. [cit 2010-04-07]. Dostupné na internete: <<http://www.lewrockwell.com/north/north769.html>>
- [4] Kuhn P., *Mi Šuster (host): Právni paradoxy bankovníctví částečných rezerv z pohledu práva a ekonomie (část 1)* [online]. Leblog, 07. december 2008. [cit 2010-04-07]. Dostupné na internete: <http://www.leblog.cz/?q=node/314/print>
- [5] Drobek A., *Půjčky a banky* [online]. Na volné noze, 29. april 2008. [cit 2010-04-07]. Dostupné na internete: <http://navolnenoze.cz/blog/pujcky-banky/>
- [6] Hulsmann J.G., Preklad Andrs M., *Banky nemohou vytvářet peníze* [online]. Zlatý standard, 3. december 2008. [cit 2010-04-07]. Dostupné na internete: <http://www.zlatystandard.cz/?page_id=141>
- [7] Brown E., *The Wall Street Ponzi Scheme called "Fractional Reserve" Banking* [online]. Webofdebt, 29. december 2008. [cit 2010-04-07]. Dostupné na internete: <<http://www.webofdebt.com/articles/ponzi.php>>
- [8] www.chartingstocks.net/wp-content/uploads/2009/02/cpi.png
- [9] www.globalpolicy.org

BANKOWOŚĆ FRAKCYJNA

Streszczenie: Aby zrozumieć przyczyny obecnych problemów finansowych konieczne jest zaznajomienie się z istotą frakcyjnej rezerwy bankowej. Podstawą cząstkowych kredytów bankowych jest pożyczanie większej ilości pieniędzy niż mają bankierzy. Bankowość rezerw cząstkowych jest alternatywną formą, która łączy bankowe depozyty i kredyty bankowe. Bankowość frakcyjna (cząstkowa) jest przyczyną wielu niekorzystnych skutków ekonomicznych w systemie światowym, a w szczególności inflacji.