# Two flaws in fractional reserve banking.

Ralph S. Musgrave.

### Abstract.

The existing bank system, fractional reserve, is inherently risky because it involves accepting deposits while lending out about as much money as has been deposited, and telling depositors their money is safe, which it quite clearly is not and for the simple reason that if a bank makes silly loans, it cannot repay depositors. That problem is currently dealt with via taxpayer backed deposit insurance and billion dollar bail outs for banks. But that state support for banks amounts to preferential treatment for banks relative to other lenders, of which there are several: e.g. peer to peer lenders and trade credit lenders to name just two. That preferential treatment for one type of lender is a misallocation of resources.

Second, having a bank lend on your money is just as much a commercial transaction as having a stockbroker lend on or invest your money, and it is not to job of taxpayers to shield those involved in commerce from loss, unless there is an extremely good reason for doing so, which in this case there is not.

As for the idea which has become popular of late, namely that commercial banks create the money they lend on rather than intermediate between lenders and borrowers, that is not entirely true as was explained in a Bank of England article (McLeay, 2014).

The best solution to the above two flaws in fractional reserve is to abandon all state support for banks while letting those who want their money to be totally safe deposit it with the state, something the people in several countries have actually been free to do for a long time anyway. And that arrangement equals full reserve banking.

Earlier expositions of some of the basic ideas in this paper by the author are detailed in an endnote.

### Introduction.

The existing bank system, fractional reserve, is inherently risky because it involves accepting deposits and lending on most of the money concerned, while telling depositors their money is safe, which it quite clearly is not and for the simple reason that the money has been loaned on. That problem is currently dealt with via taxpayer backed deposit insurance for banks and billion dollar bail outs for banks. But that state support for banks amounts to preferential treatment for banks relative to

other lenders, of which there are several types: e.g. there are peer to peer lenders and trade credit lenders, that is, firms which give other firms to which they supply goods an extended period before paying for those goods. Plus unit trusts ("mutual funds" in the US), private pension funds and individual people lend in that they buy bonds issued by corporations and cities.

Thus banks enjoy preferential treatment relative to other lenders which means a misallocation of resources unless there is a very good reason for that preferential treatment.

Worse still, to accept deposits and lending on the money concerned while suggesting to depositors that their money is safe is classified as fraud when that is done by the above mentioned other lenders. For example, unit trusts and pension schemes, certainly in the UK, have to make it very clear to investor / depositors that those investor / depositors can lose money as well as make money. Thus the existing, i.e. fractional reserve bank system, can quite legitimately be described as legalised fraud.

# Do banks intermediate or create the money they lend?

It has become fashionable recently to claim banks create the money they lend from thin air rather than lend on depositors' money. In fact as an article published by the Bank of England says (McLeay et al (2014)) "banks do not act simply as

4

intermediaries." In other words, banks do act as intermediaries between lenders and borrowers as suggested in the above paragraphs, but it's not that simple. As the article explains, banks do at the same time create a certain amount of money from thin air every year.

The latter "intermediate and create" point can be put another way and as follows. While banks certainly create money / deposits, once those deposits are created, they move from person to person, firm to firm and bank to bank. Plus any bank in receipt of a more than normal amount of deposits is then in a position to lend more. And conversely, a bank which loses deposits is constrained in the amount of lending it can do.

If the latter sort of bank, i.e. one which receives few deposits, lends out more money than it has coming in from those wishing to deposit at the bank, it will simply run short of reserves and will thus have to borrow reserves from other banks or the central bank, and that is not a good position for any bank to be in for any length of time. Thus in effect, when a dollar is deposited at a bank, the bank can then lend out around an extra dollar. Thus banks do in effect lend on depositors' money.

And as for the idea which has been portrayed in recent years as new, namely that commercial banks create money, that is not a new idea either: Fisher (1936) and the rest of the Chicago school in the 1930s objected to money creation by

commercial banks, as did David Hume three hundred years ago (see Fuller (2019), para starting "David Hume (1711-76)....".)

# Fraud is important, but it is not the basic issue here.

Re the above mentioned inherently fraudulent nature of fractional reserve banking, it is true that numerous people have pointed to allegedly fraudulent elements in fractional reserve banking, thus the above fraud point is not entirely original. Indeed, if you do a search for "fractional reserve" and "fraudulent" in a search engine, you'll find a good fifty and possibly a hundred works which make that accusation. Plus clearly there have been thousands of objections to bank bailouts. However, little or no attention has been devoted to the basic point made here, which is along the lines of "the system is fraudulent and/or risky because of the above mentioned "loaned out money is never safe" point, but if that problem is dealt with via taxpayer backed deposit insurance and bailouts, that amounts to preferential treatment for banks."

And the real relevance of that preferential treatment, or "non level playing field" is that the default assumption in economics is that GDP is maximised when firms compete with each other on a level playing field basis. (Though in view of the harmful environmental effects of increasing GDP, it would be better to

refer to "maximising output per hour" (in the hopes that people work fewer hours) than to refer to GDP.)

Incidentally, and returning for a moment to the fraud point, I considered fraud in more detail in Musgrave (2020a), in particular under the heading "George Selgin".

### Non financial institutions.

Having said banks enjoy preferential treatment relative to other financial institutions, they actually enjoy preferential treatment relative to non-financial institutions and corporations as well. Reason is that the latter corporations actually create money in a way not entirely different to the way in which banks do. That is, most countries count money in term accounts at banks where the term is around two months or less as money, which in turn means that anyone holding bonds in a non-bank corporation where the bond has about two months or less to run till maturity ought for the sake of consistency to be counted as the holder of money as well.

But banks, to repeat enjoy taxpayer backed deposit insurance and billion dollar bail outs, whereas non-bank corporations normally do not.

## Peer to peer lending.

Re the above mentioned peer to peer lending and trade credit lending, the total amount of that type of lending is far from negligible. The following are a rough guide to the amount of that type of lending.

Schutte (2015) claims 30% of small and medium size enterprises obtained loans from friends and family as against 53% obtaining loans from banks.

Uesugi (2003) claimed that trade credit amounts to about 15% of Japanese firm's assets/liabilities. And Fitzpatrick and Lien (2013) claimed trade credit amounts to 8% of firms' liabilities in Australia.

# Should lending in general be subsidised?

To summarise, banks enjoy a privileged status relative to other institutions, financial and non-financial, and relative to peer to peer lenders and "trade credit lenders".

A possible solution to the latter problem is that the privileges enjoyed by banks could be extended to all the latter lenders: that is, all forms of lending should be subsidised.

However a weakness in that argument stems from the fact that interest rates are now much lower than twenty years ago. That 8

is, if all borrowers merit a subsidy now, they must have been in dire need of subsidising twenty years ago. But advocates of the "subsidise all borrowers" argument (if there are any) were not shouting from the rooftops twenty or thirty years ago that borrowers faced impossibly high interest rates and should receive large subsidies.

And of course a second weakness in the "subsidise all lenders" idea is the point already mentioned, namely that the default assumption in economics is that GDP is maximised where there are no subsidies, except where there are very good reasons for subsidies.

The conclusion at this stage of the argument is that anyone wanting to put the "subsidise all lenders and borrowers" idea faces an uphill task. In short, the conclusion here is the more widely accepted one, namely that GDP is not maximised where one set of firms in an industry is subsidised or given preferential treatment, absent a very good justification for those privileges, thus banks should have their deposit insurance and billion dollar bailout privileges removed.

But perhaps there are good reasons for banks' privileged status.

## The excuses for banks' privileged status.

One excuse for letting banks claim deposits are safe is that that claim equals claiming banks' liabilities (i.e. deposits) are fixed in value (inflation apart) which turns those liabilities into a form of money, which in turn increases the money supply, which is stimulatory. In fact that is just another way of saying that banks do maturity transformation, the effect of which is to make various assets more liquid, if not turning them into the most liquid asset of all, namely money.

Well the simple answer to that is that central banks can create infinite amounts of money any time for stimulus purposes and at zero real cost (as pointed out by Friedman (1960, Ch3). As Friedman put it, "It need cost society essentially nothing in real resources to provide the individual with the current services of an additional dollar in cash balances."

Moreover, central banks can do that (possibly in conjunction with governments) without fraud in any shape or form being involved and without creating any sort of privileged status for commercial banks. (Incidentally, the above point that deposits are fixed in value, inflation apart, might seem a contradiction in terms, since inflation clearly erodes the value of money. However, the point here is that deposits are fixed in value relative to for example shares, used cars, houses etc which are quite clearly not fixed in value: witness the dramatic fall in shares when the Covid-19 crisis first erupted.)

Having criticised the privileged status enjoyed by commercial banks, it should of course be admitted that central banks also enjoy privileged status of a sort, but then any country absolutely has to decide what its basic form of money will be and has to have some sort of institution to issue that money. If it's not a central bank, then the Treasury can issue money, as was the case in the UK in WWI (see Walker (2012). To object to the privileged status of central banks is like objecting to the privileges enjoyed by the army or the police, e.g. the right to use firearms.

And not only can central banks create whatever amount of money is needed to compensate for withdrawing commercial banks' right to create money, but commercial banks' money creation activities are pro-cyclical, which is the opposite of what is needed. To illustrate, commercial banks tend to create and lend out extra money during booms, when what is needed is actually a <u>reduction</u> in credit / money creation.

The inability of commercial banks to tailor their money creation activities to the needs of the economy has been nicely illustrated in recent years first by the 2007/8 bank crisis and second by Covid-19 crisis. That is, central banks have had to issue astronomic amounts of money so as to deal with those two crises. Thus any idea that we can do without some sort of central money issuing authority, central bank or other authority, is plain unrealistic.

11

## Deposit insurance.

To summarise, the central flaws in fractional reserve banking are first that the basic activity of such banks, namely accepting deposits, lending on depositors' money while telling depositors their money is safe is fraudulent and risky. But if that problem is solved via taxpayer backed deposit insurance and bank bailouts, that means banks enjoy privileged status relative to other institutions, financial and non-financial and relative to other types of lender. Second, taxpayer backing for those who lend on their money via banks amounts, as just mentioned above, to taxpayer support for a clearly commercial activity.

In contrast to the latter defective system, it would be easy to have a system where the latter flaws are avoided. To do that, deposit insurance and bailouts need to be abandoned, and anyone who wants a totally safe account needs to be allowed to lodge their money with government or the central bank. Little or no interest would be earned on that money.

As for those who want to have their money loaned on or invested, there is nothing wrong with that, as long as it is made very clear to them that they may lose as well as make money and that there is no taxpayer funded bailout for them when things go wrong.

It would even be legitimate for a mutual fund or similar to invest or lend on most of depositor / investor's money while promising depositor / investors they can turn a portion of their investment into cash any time and have the fund transfer that money to someone of the depositor / investor's choosing, in much the same way as banks currently do via cheques, debit cards and so on. Indeed Laina (2018) implies in the second paragraph of his abstract that the latter set up would be compatible with a full reserve regime. Nair (2013) and Rozeff (2010) express similar sentiments.

That arrangement would not involve the flaw explained above as long as investors are made fully aware that they may never get as much money back from the fund as they originally put in. After all, any individual is free to engage in the latter activity off their own bat at the moment: that is, anyone is free to buy stock exchange quoted shares, and then sell a few of them when they need cash.

As to whether the latter service would be viable is debatable: if it is, one has to wonder why mutual funds and similar do not already provide the service on any significant scale. But the basic point here is that there is no reason to actually outlaw that service.

And the above "safe account and risky investment account" arrangement is of course the one, or at least is very close to the one that has been advocated by numerous leading economists and organisations for a long time, and under the title of "full reserve banking", "Sovereign Money" or "100% reserves". Advocates of the latter sort of system include

Positive Money (in the UK), Vollgeld Initiative (in Switzerland), Monetative (in Germany), Wolf (2014), Tobin (1987), Kotlikoff (2010), Joseph Huber (2000), Fisher (1936) and Friedman (1960, Ch3, under the heading "Banking Reform". And for a couple of much earlier advocates of full reserve, Fuller (2019) claims David Hume (1711-76) and Thomas Aquinas (1225-74) backed full reserve.

### Conclusion.

Banks are just one of several types of lender, and they enjoy preferential treatment in that they enjoy taxpayer backed deposit insurance and billion dollar bailouts while other lenders do not. The normal assumption in economics is that if firms in a particular industry compete with each other on a level playing field basis, GDP and output per hour will be higher than where one type of firm enjoys preferential treatment. The excuses offered by supporters of the existing bank system for that preferential treatment are unimpressive, to put it politely.

Also, having a bank, stockbroker, unit trust, mutual fund or any other organisation lend on your money is clearly a commercial activity, and it is not the job of taxpayers to support commercial activities, unless a very good reason can be found for that support.

And the final nail in the coffin of the existing bank system is that the need for that preferential treatment stems from the risks that are inherent in the fraudulent / risky promise that has been made by banks to depositors for hundreds of years.

As for the numerous criticisms that have been made of full reserve other than those mentioned above, I dealt with about forty of them in section two of Musgrave (2018b).

### Endnote.

This paper is similar to a paper put online in April 2020 at two sites (Musgrave 2020a and Musgrave 2020b). The basic ideas also appear in Musgrave (2014 & 2018a), though the two latter are much shorter than this paper.

#### References.

Fisher, I. (1936) '100% Money and the Public Debt'. Economic Forum, Spring, pp.406–420. Also published by Michael Shemmann (2009).

Fitzpatrick, A. & Lien, B. (2013) 'The Use of Trade Credit by Businesses'. Reserve Bank of Australia.

https://www.rba.gov.au/publications/bulletin/2013/sep/5.html

Friedman, M. (1960) 'A Program for Monetary Stability' Fordham University Press.

Fuller, E.W. (2019), '100% Banking and Its Advocates: A Brief History'. Cobden Centre.

https://www.cobdencentre.org/2019/10/100-banking-and-its-advocates-a-brief-history/

Huber, J. and Robertson, J. (2000), 'Creating New Money', New Economics Foundation.

http://www.jamesrobertson.com/book/creatingnewmoney.pdf

Kotlikoff, L. (2012), 'The Economic Consequences of the Vickers Commission', Civitas.

https://kotlikoff.net/wp-

content/uploads/2019/03/consequences vickers.pdf

Laina, P. (2018), 'Full-reserve Banking – Separating Money Creation from Bank Lending.'

https://www.onsgeld.nu/archief/diversen/Laina\_full\_reserve\_banking.pdf

McLeay, M., Radia, A. and Thomas, R. (2014), 'Money creation in the modern economy', Bank of England. https://www.bankofengland.co.uk/quarterly-bulletin/2014/q1/money-creation-in-the-modern-economy

Musgrave, R.S. (2014) 'The false logic at the heart of fractional reserve banking'.

https://ralphanomics.blogspot.com/2014/03/the-false-logic-at-heart-of-fractional.html

Musgrave, R.S. (2018a) 'The basic flaw in our bank system is simple.' Medium.

https://medium.com/@ralph\_47183/the-basic-flaw-in-our-bank-system-is-simple-b4b87d4d3b45

Musgrave, R. (2018b), 'The Solution is Full Reserve / 100% Reserve Banking'. KSP.

http://books.ksplibrary.org/978-605-2132-59-3/

Musgrave, R. (2020a) 'The Crucial Flaw in the Bank System'. Munich Person RePEc Archive.

https://econpapers.repec.org/paper/pramprapa/99989.htm

Musgrave, R. (2020b) 'The Crucial Flaw in the Bank System'. Medium.

https://medium.com/@ralph\_47183/the-crucial-flaw-in-the-bank-system-2b1d36b194de

Nair, M. (2013), 'Questioning Rothbard', Foundation for Economic Education.

https://fee.org/articles/questioning-rothbard/

Rozeff, M.S. (2010), 'Rothbard on Fractional Reserve Banking: A Critique', Independent Review. Vol. 14, №4 (Spring 2010), pp. 497–512.

https://www.jstor.org/stable/24562050?seq=1#metadata\_info\_t ab contents

Schutte, S. (2015) 'Telling the truth about SME life today'. Real Business.

https://realbusiness.co.uk/smes-increasingly-relying-on-friends-and-family-for-finance/

Tobin, J. (1987), 'The case for preserving regulatory distinctions'. Proceedings — Economic Policy Symposium — Jackson Hole, Federal Reserve Bank of Kansas City, pages 167–205.

https://www.kansascityfed.org/publicat/sympos/1987/s87tobin.pdf

Uesugi, I. (2013). 'Maximising Value of Non-Performing Assets'. OECD.

https://www.oecd.org/daf/ca/corporategovernanceprinciples/20 216557.pdf

Walker, J. (2012). 'Bankers, Bradburys, Carnage And Slaughter On The Western Front'. UK Column. https://www.ukcolumn.org/article/bankers-bradburys-carnage-and-slaughter-western-front

Wolf, M. (2014), 'Strip private banks of their power to create money'. Financial Times.

https://www.ft.com/content/7f000b18-ca44-11e3-bb92-00144feabdc0

(If you're confronted with a pay wall when trying to access the latter Wolf article, the article can possibly be accessed by Googling the title of the article and the author name.)