Forty two Flawed Arguments for and Against Full Reserve Banking.

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Summary.

The basics of full reserve (FR) banking are set out below, followed by thirty eight flawed arguments **against**, and four flawed arguments **for** full reserve (also known as “100% reserve”).

Each argument set out below has:

1. A heading (which also appears in the table of contents below).

2. Where the heading does not adequately capture the nature of the argument, there is a paragraph below the heading starting “I.e…”, which expands on the heading.

3. There are references one or more economists who have put the relevant argument in almost every case.

4. The answer to each argument which starts with a paragraph beginning with the word “Answer.”

Contents

Full reserve banking in brief.

The term full reserve (FR) refers here to the system advocated by Friedman (1960, 2nd half of Ch3), Kotlikoff (2012, p.43) and Werner (2011) amongst others. That is system sometimes called “100% reserve banking” and which is as follows.

The existing banking industry is split in two. One half offers depositors totally safe accounts (or accounts which are as near total safety as it is possible to get). In order to ensure that the money really is completely safe, nothing is done with the money: it is just lodged at the central bank. Though possibly (as advocated by Friedman) some of that money could be invested in short term government debt. That money thus earns little or no interest, but it is instant access.

The second half of the industry lends to mortgagors, industry and so on. But that half of the industry is funded just by shareholders, or stakeholders who are in effect shareholders. For example under Kotlikoff’s system, both halves of the industry consist of mutual funds (“unit trusts” in the UK), with the first half consisting of money market mutual funds and the second half consisting of non-money market mutual funds. And those with a stake in non-money market mutual funds are in effect shareholders, thought they are not normally referred to as such.

As to Friedman's system, there again, the entities making up one half of the former banking industry are separate from the entities making up the second half. In contrast, under Werner's system, safe accounts and accounts which lend on account holders' money are offered under the same roof. However, the basic principle of all three systems is the same.

One advantage of FR is that no bank or bank like entity can suddenly fail in the same way as banks tend to suddenly fail under the existing system. Thus no taxpayer backing or subsidies are needed to underpin the system. However, any entity can decline SLOWLY given poor management. The reasons why sudden failure is ruled out are as follows.

As to safe entities / accounts, the money there is near completely safe. And as to lending entities, if lending is done in an incompetent manner, all that happens is that the value of the relevant shares (or mutual fund units) falls: the actual entity does not become insolvent.

As Selgin (1988) put it "For a balance sheet without debt liabilities, insolvency is ruled out…"

Flawed arguments against FR.

1. FR limits the availability of credit.

Claimed by Van Dixhoorn (2013, p.21), Vickers (2011, para 3.21.) and Kregel (2012). See Kregel's passage starting, "In a narrow banking system..".

Answer. FR certainly limits the availability of credit in that it requires those who fund loans and investments to carry the risk involved (as opposed to the existing system where the taxpayer carries much of the ultimate risk). And that means the cost of funding loans and investments will rise a bit. But that rise in the cost of borrowing simply reflects the removal of a subsidy: that's the current practice of letting people have their money loaned on or invested, with the taxpayer carrying the ultimate risk.

As to the demand reducing effect of that reduced availability of credit, that is easily dealt with by standard stimulatory measures (the measure favoured by advocates of FR, at least Friedman (1960) and Werner (2011)) being to simply create new base money and spend it into the economy and/or cut taxes).

2. Safe account money is not invested under FR: a waste.

I.e. as regards the safe accounts or safe entities that are set up under full reserve, that involves storing significant amounts of money which on the face of it could be used for loans and investments, and that is a waste.

Claimed by Vickers (2011, section 3.21).

Answer. When full reserve is implemented and £Xbn is lodged in safe accounts (which comes the same thing as people storing £Xbn under their mattresses), it costs nothing to supply the population with the sums that it wants to keep under those hypothetical mattresses. As Friedman (1960, Ch3) 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.”

That argument can be put the other way round and as follows. Assume FR has been implemented, and to keep things simple, let us assume that the economy is at capacity. And assume that the above money in safe accounts is then used to fund loans. That amounts to, or causes an increase in aggregate demand, and that’s not possible, assuming the economy is already at capacity. Thus to counteract that increase in demand, interest rates would have to rise. Thus the net effect would be no increase in lending. Thus the above claim by

Vickers that unused money in safe accounts is money that can be actually used does not stand inspection.

3. Central bank money is not debt free.

I.e. the claim by some advocates of FR that central bank money is “debt free” is false because all money is a form of debt.

Claimed by Van Dixhoorn (2013, p.21).

Answer. In a minor and near irrelevant sense the above “all money is debt” idea is right: that is, base money or central bank created money is NOMINALLY a debt owed by the central bank to the holder of that money. Indeed British £10 notes and other notes actually state “I promise to pay the bearer on demand the sum of £10”.

But of course that “promise” is a farce. That is, anyone trying to get £10 of gold (or anything else) from the Bank of England in exchange for their £10 note, would be told to go away (perhaps assisted by the police). Thus in effect, central bank created money is indeed debt free.

In contrast, for every dollar of money created by commercial banks there is, or so it seems, a dollar of debt (owed by a borrower to a commercial bank). But even that argument is debatable (See No.39 below).

It could be argued that base money is a debt in the following sense. A characteristic of a debt is that it can be used to nullify and equal and opposite debt. Thus when government suddenly demands $X of tax from you, you can use base money to pay them (in fact it's the only money they will accept). Thus it could be argued that base money BECOMES a debt when you receive a tax demand. But that is not the normal meaning of the word "debt".

4. Bank capital is expensive for tax reasons.

I.e. increasing bank capital as occurs when FR is implemented would involve a cost in that the tax treatment of equity is more onerous that in the case of deposits.

Claimed by Elliot (2013) - a Brookings Institution paper.

Answer. The above argument contains an extremely simple flaw, namely that tax is an ENTIRELY ARTIFICIAL imposition, and should thus be ignored. To illustrate, if government taxed red cars more heavily that blue cars, that would raise the price of red cars. But that would not be evidence that the REAL COST of producing red cars was any more than the cost of blue cars.

5. Central banks will still have to lend to commercial banks.

I.e. to deal with any lack of availability of credit, the central bank may need to lend to commercial banks which exposes the central banks to risks. Thus FR does not dispose of risks for taxpayers.

Claimed by Van Dixhoorn (2013). See paragraph starting "Fourth, we consider…" (p.34).

Answer. Possibly some FR advocates claim that central banks may need to lend to commercial banks, but most of them argue that new central bank money should only be spent into the economy when there is room for stimulus. As to lending, most FR advocates believe in leaving that and interest rates to the free market. That is, if demand for credit exceeds supply, most FR advocates believe in simply letting the price of credit rise.

Moreover the logic used by the authorities in the recent crisis to justify assistance to banks is very debatable: that logic being that banks have made large losses, therefor they should be supplied with enough taxpayers' money to enable them to get back to approximately where they were before the crisis.

In any normal industry, the fact that losses are made is a good indication that the industry is too large and needs to contract. And as to the fact that if the total amount of lending declines if the banking industry declines which in turn reduces aggregate

demand, that is easily dealt with by standard stimulatory measures.

Indeed, according to King (2010) the assets of banks in Britain are now TEN TIMES what they were relative to GDP in the 1960s: additional evidence that the banking industry should be shrunk.

Of course, assuming we continue with the existing banking system, giving banks enough assistance during a crisis to prevent a TOTAL COLLAPSE of an economy or the world economy is justified. But the recent trillion dollar bailout of banks is just additional evidence as to the flaws in the existing system: it's not an argument for central banks to lend to commercial banks on a regular basis.

Moreover, the lender of last resort facility available to commercial banks is just one of forms of preferential treatment (i.e. subsidy) enjoyed by commercial banks: other industries do not enjoy the same luxury.

6. FR stops banks producing free money from thin air which can fund investments.

I.e. when a private bank grants a loan, it can be argued that the relevant money comes out of thin air and that money can be used to fund investments. Thus (so it might seem) people do not really need to save in order to fund investments.

Claimed by Pettifor (2014) and Kregel (2012). See Kregel's passage where he claims that FR would create a system "in which all investment decisions…." See Pettifor's paragraph starting "Unlike commodity money…".

Answer. The idea that we don't need to save in order to provide ourselves with investments (houses, office blocks, etc) is just too good to be true. And as the old saying goes, if anything seems to be too good to be true, it probably is.

If an economy is at capacity and a bank grants a loan, the latter will raise demand unless someone abstains from spending (i.e. saves). And if the economy is at capacity and demand rises, then inflation rises. As a result the central bank will raise interest rates, which cuts lending, borrowing and demand. Thus the net effect is zero: back to square one. Thus the idea that commercial banks can create money or wealth out of thin air which enables someone to make real investments is a myth.

The latter "zero effect" obviously plays out slightly differently depending on EXACTLY HOW the authorities counteract the above increase in demand (e.g. they could counteract it with a fiscal tightening up). Plus the zero effect would play out differently depending on whether the country was on the gold standard or not. But certainly the idea that we can enjoy the benefits of new investments without having to save or abstain from consumption to fund those investments is nonsense.

7. Investments under FR might not be viable.

Claimed by Kregel (2012). See his passage starting “First, the real investments chosen….”

Answer. The advocates of FR do not claim that investors will be any more competent under FR than under the existing system. Clearly under both systems there are, or will be competent and incompetent investors.

8. FR will not reduce pleas by failing industries to be rescued by government.

Claimed by Kregel (2012). See his passage starting “There would always be a risk…”

Answer. Advocates of FR do not claim that FR is a solution to corruption: in particular, politically well-connected individuals trying to extract taxpayers’ money from politicians.

9. The cost of converting to FR will be high.

Claimed by Van Dixhoorn (2013, p.21 and by Warner (2014).

Answer. Assuming a country benefits from FR and continues to benefit for the next century or two, then transition costs are probably near irrelevant compared to the long term benefits. Moreover, as one advocate of FR (Friedman Ch3(1960)) put it “There is no technical problem of achieving a transition from our present system to 100% reserves easily , fairly speedily,

and without serious repercussions on financial or economic markets".

10. Central bank committees won't be politically neutral.

I.e. FR involves some committee of economists (and perhaps others) deciding on how much money to create and spend, or deciding on other forms of stimulus, and there is no guarantee such a committee will be independent or politically neutral.

Claimed by Van Dixhoorn (2013, p.22) and by Pettifor (2014). See Pettifor's paragraph starting "Wolf's proposal is problematic….".

Answer. There is no reason why this should be any more or less of a problem than with EXISTING committees that determine stimulus. For example there is the Bank of England Monetary Policy Committee which has a HUGE INFLUENCE on stimulus (via interest rate adjustments, quantitative easing, etc). Other countries obviously have similar committees. And those committees most certainly do not interfere with strictly political decisions, like how much the country should spend on health or education, or what proportion of GDP should be taken by public spending.

Moreover, Dyson (2013) (and doubtless other advocates of full reserve) are VERY SPECIFIC on the point that the above sort

of committee should UNDER NO CIRCUMSTANCES interfere with political decisions. The exact way this is done under Dyson's system is for the "committee" to decide HOW MUCH money should be net spent into the economy over the next six months (or some other period of time), while the EXACT WAY that money is spend (or whether the adjustment to net spending comes in the form of adjustments to tax) is left ENTIRELY to politicians and voters.

Also, the form of stimulus advocated by most supporters of FR (i.e. creating new base money and spending it and/or cutting taxes) comes to exactly the same thing as a form of stimulus that has been applied in very large doses over the last two or three years: that is fiscal stimulus followed by quantitative easing. Thus if political interference by the above sort of committee is inevitable under full reserve, one has to wonder how those sort of committees have managed to avoid interfering in politics to any significant extent over the last few years.

11. Administration costs of FR would be high.

Claimed by Van Dixhoorn (2014) and Krugman (2014). See Krugman's paragraph starting "Cochrane's proposal calls for…".

Answer. Obviously the central bank or some other body of bank regulators would have to do a fair amount of auditing of commercial banks to make sure they were obeying the rules. But such auditing is necessary under the EXISTING SYSTEM. Moreover, compare that with the rules which make up the Dodd-Frank regulations: those stand at 10,000 pages and counting. And then there is the near incoherent ring-fence proposals put by Vickers (2011). Compared to those two, FR is simplicity itself.

For a scathing indictment of Vickers, see Kotlikoff (2012). As to Dodd-Frank, the head of the Dallas Fed (Fisher (2013) said "We contend that Dodd–Frank has not done enough to corral "too big to fail banks" and that, on balance, the act has made things worse, not better." And for two more criticisms of current attempts at bank reform see Schiller (2014) and Brown (2013).

12. The cost of current accounts will rise under FR.

Claimed by Van Dixhoorn (2013, p.22) and Aziz (2014).

Answer. It is true that under FR, those with transaction / safe / current / checking accounts get little or no interest: i.e. probably less interest than on such accounts under the existing system. However interest under the existing system only comes as a result of being able to have one's money loaned on or invested

with the taxpayer carrying the ultimate risk. But the latter is a totally unwarranted “have your cake and eat it” subsidy.

If restaurants had been subsidised for the last century and that subsidy was removed, then (to use Van Dixhoorn’s phrase) “losses would be imposed on” those eating at restaurants. But that would not justify continuing to subsidise restaurants.

A possible solution to the above problem would be to allow bank customers to do debit card transactions or draw cheques on investment accounts (that’s accounts which fund loans to mortgagors, businesses, etc). That would be the equivalent of telling your bank under the existing system keep the balance in your current or checking account to a minimum: i.e. telling them to put any surplus funds into a term or deposit account. However banks would charge for that service, thus costs for customers would probably not be reduced: probably one of the reasons why that sort of service is not normally available from banks under the existing system.

13. FR is dependent on demand injections.

Claimed by Kregel (2012).

Answer. One wonders how Kregel would describe the trillion dollars recently used to bail out the bank industry and the large amounts of stimulus needed to rectify the effects of the recent crisis. Kregel uses the phrase “chronically dependent on

demand injections". The phrase "chronically dependent" would seem more appropriate to the existing banking system, rather than to FR.

Moreover, stimulus costs nothing in real terms: to put it figuratively, printing and spending dollar bills (and/or cutting taxes) costs nothing. (See the quote from Friedman in No.2 above).

14. The effect of FR on inflation and unemployment is unclear.

Claimed by Van Dixhoorn (2013). As Van Dixhoorn put it: "it would be difficult to predict what the ultimate effects on output and inflation would be..".

Answer. There is NO NEED WHATEVER to predict what the effect on output or inflation would be because the latter two can be adjusted (just as they are under the existing system) by adjusting stimulus. That of course is done under the existing system by adjusting interest rates, quantitative easing, the size of the deficit, etc. In contrast, most advocates of FR advocate a slightly different form of stimulus (which actually amounts to fiscal stimulus plus QE). But that's a minor technical point.

Moreover, under the EXISTING SYSTEM, governments have only the haziest ideas as to what inflation and unemployment will be five years from now: e.g. there might be another credit

crunch, or there might not. Thus the above criticism applies to the EXISTING SYSTEM as much as it does to FR.

15. The state cannot be trusted with peoples' money.

I.e. the so called "safe accounts" set up under FR are not entirely safe.

Claimed by (Van Dixhoorn (2013) section VIII, p.32.

Answer. Clearly governments are not entirely reliable and for two reasons. First, governments may cause excess inflation, which means that sums deposited in safe accounts lose their value, and second, governments have been known to renege on promises to return sums they have borrowed or which have been lodged with them. However, neither of those two points stands inspection.

As to inflation, if money lodged at the central bank is losing its value, then money lodged at a private bank will lose value at exactly the same rate.

And as to the point that governments can renege on promises to return monies lodged with them, the sort of government which does that is quite likely to also confiscate monies lodged at private banks.

Moreover, FR is a system suitable for a country with a reasonably responsible government. Obviously where

government is near non-existent or chaotic, citizens would be well advised to keep their savings under their mattress and/or in the form of valuables like some rare metal.

And finally, under the existing system, millions of UK citizens seem to be happy to lodge a portion of their money with National Savings and Investments, a state run savings bank. That is, the reality is that a large proportion of the population in Britain regard government as being responsible enough to be entrusted with a portion of their wealth.

16. FR will reduce innovation by banks.

Claimed by Van Dixhoorn (2013). Van Dixhoorn's actual words are: "will reduce the amount of innovation in the payments system".

Answer. Under the EXISTING SYSTEM, commercial banks introduced debit and credit cards because those cards are more efficient for many transactions than cash or cheques. Any bank that had ignored those innovations would have lost customers. And exactly the same would apply under FR. That is, under FR, commercial banks would open current / checking / safe accounts for customers. And as to the EXACT WAY in which payments are made, that would be up to individual banks. And competitive forces would induce banks to adopt any sort of new technology (e.g. payment by mobile phones) just as

those forces induce them to adopt new technology under the existing system.

17. Lenders will try to turn their liabilities into "near-monies".

Claimed by Van Dixhoorn (2013) p.33.

Answer. Obviously some lenders will try to do that. In fact advocates of FR in the 1930s were well aware of that potential problem as are present day advocates of FR, Dyson (2013) in particular.

But dealing with that problem is not difficult. For example it would be easy to require that all literature and web sites dealing with non-money market mutual funds under Kotlikoff's FR system to declared in bold type something to the effect that "You are not guaranteed $X back for every $X you invest in this fund." In fact legislation in the UK actually requires those selling unit trusts and other stock exchange investments to declare something very similar: a sentence to the effect that "the value of these investments can fall as well as rise".

Moreover, one has to wonder why those selling mutual fund units ("unit trusts" in the UK) seem to make NO EFFORT whatever to portray their liabilities as money (apart from money market mutual funds of course). A possible answer to that is that the existing system supplies the economy with as much

money as it needs, so there is no inducement for non money market mutual funds do the latter. Nevertheless, as Van Dixhoorn rightly points out, portraying one's liabilities as money gives those liabilities an added attraction. But it is striking there seem to be no attempts by non money market mutual funds / unit trusts to pull that trick under the existing system.

18. Anyone can create money, thus trying to limit money creation is futile.

Claimed by Van Dixhoorn (2013) - paragraph starting "The sector will…" p.34).

Answer. The definition of the word money is something like "anything widely accepted in payment for goods and services".

Now the liabilities of banks are "widely accepted" because they are SPECIFICALLY DISIGNED to be easily transferrable. In contrast, it is quite untrue to suggest, as Van Dixhoorn does that an ordinary trade credit is a form of money. To illustrate, if firm A delivers goods to firm B worth $X, B is then indebted to A to the tune of $X. And B could issue an IOU in payment. But is that liability (the IOU) likely to be of any use to A for the purposes of "paying money" to some third party? It is unlikely. Thus an ordinary trade credit just isn't money in a large majority of cases.

The latter form of “IOU” money creation was much more common in the 1700s and 1800s: the IOUs took the form of bills of exchange. But those are rare nowadays.

But that is not to say that after implementing FR there would be a total absence of types of money other than what the average household or firm regards as money: what might be called “official” money. In particular, in the world’s financial centres various types of debt serve the purpose of money: e.g. short term government debt. However for about 95% of households and the large majority of firms, particularly small and medium size ones, there is only one form of money and that is central bank created money and money created by well known commercial bank which trades at par with central bank money.

19. Advocates of FR are concerned just with retail banking.

Claimed by Van Dixhoorn (2013, paragraph starting “Third the critics have..” p.34 and Krugman (2014).

Answer. If advocates of FR really were concerned just with retail banks clearly that would be a serious fault given that the recent crisis in the US was largely a run on shadow banks. However, any idea that retail banks were not part of the problem is wide of the mark: there was a run on the UK bank

Northern Rock during the recent crisis, and that was (and still is) an exclusively retail operation.

But in any case, advocates of FR are not concerned PURELY with retail banking (at least they certainly shouldn't be). That is, there is a FUNDAMENTAL principle involved here which is that ANY ENTITY above a certain size that attracts funds and lends them on or invests them should abide by. It's as follows.

To promise someone you'll return $X to them while investing or lending on their money is basically fraudulent because it's a near certainty that sooner or later the loans or investments go wrong, and you won't be able to return the $X. Indeed the fact is that throughout history banks have gone bust regular as clockwork.

Banning the latter fraud is an important element in FR, and it makes no difference what sort of bank is concerned: investment bank, shadow bank, etc. Nor does it matter whether the relevant entity sees itself or portrays itself as a bank. The above "anti-fraud" principle should apply to all lending / investing entities. At least it should certainly apply to all such entities above some given size. (That is because harmful systemic effects tend not to come from the smallest banks or "lending entities").

20. The government and/or central bank will not be better than the market at regulating the amount of money.

Claimed by Warner (2014) passage starting "..it takes quite a leap to think..".

Answer. We have just been thru a crisis caused by a catastrophic failure of private banks to regulate the amount of money / loans in a stable manner. Thus the above alleged weakness in FR flies in the face of reality.

Moreover, most of those who make the above criticism seem quite happy for government and central bank to regulate aggregate demand (e.g. by regulating interest rates). And that regulation is necessary PRECISELY BECAUSE the free market produces booms and busts.

Of course governments' and central banks' efforts to tone down booms and busts are nowhere near 100% competent. But, the people who make the above criticism clearly think that the latter efforts are better than nothing.

An even more glaring self-contradiction inherent to the above criticism is that the FORM OF stimulus effected over the last two or three years (fiscal stimulus followed by QE) comes to EXACTLY THE SAME THING as the form of stimulus advocated by most FR advocates.

21. FR would drive business to unregulated sector.

Claimed by Krugman (2014) passage starting “If we impose 100% reserve..” and by Diamond (1986).

Answer. Clearly if government regulates just one part of an industry, that will cause a number of operators to flee to the unregulated sector. And that has indeed happened over the last decade. That is, there has been a shift of business away from official banks and into the shadow bank sector. But the simple solution to that is to regulate any entity above a certain size that amounts to a bank.

As the former head of the UK’s Financial Services Authority, Turner (2012) put it: "If it looks like a bank and quacks like a bank, it has got to be subject to bank-like safe-guards."

22. It wasn’t just banks that went wrong in 2008: also households became over-indebted.

Claimed by Krugman (2014).

Answer. So who were those households indebted to? It was banks (or those who banks had sold mortgage backed securities to). It was banks who sold those “No Income No Job or Assets” mortgages.

23. Creation of liquidity / money is prevented.

Claimed by Diamond (1986).

Answer. True, but that is the whole object of the exercise. That is advocates of FR claim that just the central bank should create money, while commercial banks continue to act as intermediaries between borrowers and lenders much as they do at present (with the exception that lenders carry all losses when poor loans are made rather than the taxpayer carrying those losses as occurs at present).

Put another way, central banks (cenbanks) can and do create money / liquidity just as much as commercial banks (combanks). Thus the important question is: should we have just the cenbank doing it, or cenbanks plus combanks or just combanks? Given that we already give cenbanks the job of countering the instabilities created by the free market (including combank money creation), why not just go the whole way and have just cenbanks doing the job?

Having both type of bank do the job is similar to allowing your child access to the steering wheel of a car: you can no doubt counteract any silly moves the child makes (the equivalent of cenbanks countering the “silly moves” of combanks), but it’s

simpler just to bar children / combanks any access to the controls.

24. Funding via commercial paper would be more difficult under FR.

Claimed by Diamond (1986).

Answer. Loans based on commercial paper are just one form of loan. The important question is to work out what is the best banking / lending / borrowing system for ALL TYPES OF LENDER AND BORROWER.

25. FR is nearly the same as monetarism.

Claimed by Pettifor (2014).

Answer. It is true that advocates of FR (just like the advocates of Modern Monetary Theory) claim that the size of the stock of base money (or more generally “Private sector net financial assets” to use MMT parlance) influences demand. To that extent, both groups have something in common with monetarists.

However, advocates of FR (like the majority of economists probably) also claim that THE PROCESS OF spending extra money into the economy also has an effect. I.e. they claim fiscal boost has an effect. That is if government decides to hire an extra thousand employees by this time next month and pay for that with new money, then employment goes up by a

thousand, all else equal (assuming the extra money is not inflationary, i.e. assuming the economy was below capacity before the extra thousand were hired). And that all happens despite there being no “monetary” effect (at least initially). That is, during the first few months of the above thousand employees work, there is a negligible increase in the money supply.

26. Deposit insurance and lender of last resort solves existing banking problems.

I.e. there is no need for FR.

(Claimed by Aziz (2014)).

Answer. Lender of last resort (a luxury not available to other industries) is a SUBSIDY of the banking industry. Same goes for deposit insurance where that is funded by taxpayers. And then there’s the trillion dollar bailout of the banking industry which has taken place over the last five years and the Too Big to Fail Subsidy.

As it explains in the introductory economics text books, subsidies misallocate resources, that is, they reduce GDP (unless some very good social justifications can be found for the subsidies.)

Incidentally, and contrary to common perception, Walter Bagehot did not approve of lender of last resort (Bagehot

(1873), final chapter). He regarded it as something that was so ingrained in the system that it would be impossible to remove.

27. There is no demand for safe or warehouse banks.

I.e. there has been no demand for throughout history for banks which simply lodge money without lending it on and thus earning depositors some interest. Thus there would be no demand for the safe accounts under FR.

Claimed by White (2003) and Van Dixhoorn (2013).

Answer. First, the above contradicts the equally common claim by opponents of FR that there'd be a stampede for safe accounts. See No.28 below.

Second, the claim flies in the face of the facts. That is, most people want to spread their risks: e.g. store some of their wealth (liquid and illiquid) in very safe forms, while doing something more daring or risky with another portion of their wealth. And in fact there are numerous very safe types of bank or quasi-bank: there is National Savings and Investments in the UK and money market mutual funds in the US.

It is true that the latter don't pay a ZERO rate of interest, but the rate paid is very low, reflecting the safe nature of investments made. Thus there would presumably be a finite demand for an

account which involved even greater safety and paid an even lower rate.

Moreover, to the extent that there IS A LIMITED demand for warehouse banking since WWII, that is hardly surprising. Reason is that taxpayer funded backing for conventional banks enables ordinary depositors to enjoy total safety while getting interest. Why go for an account that pays no interest when you can get interest gratis the taxpayer?

28. FR would cause a stampede to safe accounts.

I.e. few existing depositors would want their stake in their bank to be effectively converted to a shareholding.

Claimed by Dowd (2014).

Answer. The reality is that shareholders (in corporations in general rather than specifically in banks) do not demand a particularly high rate of return compared to depositors or bond-holders.

Moreover, the above claim by Dowd contradicts the claim made by several opponents of FR, namely that there'd be no demand for safe accounts - see No.27 above.

29. FR would raise the cost of funding banks.

I.e. it might seem that the cost of funding banks rises because shareholders demand a bigger return on their investment than

depositors. Thus if the proportion of bank funding that comes from shares as opposed to deposits is increased then the cost of funding banks would seem to rise.

Answer. The flaw in the above argument was set out by Franco Modigliani and Merton Miller. As they pointed out, the risks involved in running a bank which performs a given set of activities is a GIVEN. Thus the price charged by those covering the risk involved is also a given. Thus increasing the number of people who cover that risk has no effect on the total charge they make for covering the risk.

30. Fractional reserve is not fraudulent.

I.e. Fractional reserve (that is the existing banking system) has been going for centuries and is not widely perceived as fraudulent.

Claimed by White (2003).

Answer. The first problem there is that White in the latter work doesn’t say what the alleged fraud actually is. Instead, he refers readers on his first page to about ten books and articles which apparently set out the fraud. It is thus impossible to know what fraud or alleged fraud White refers to.

Second, given the number of works he cites that apparently set out the fraud, it’s unlikely those works all agree with each other.

Indeed, there are several popular “fraud” charges made against fractional reserve which are clearly invalid.

It’s thus near impossible to deal with his claim that for fraud to exist, someone must be duped. Reason is that there are all degrees of “duping” from slight misrepresentation to serious and carefully thought out fraud. And the extent of misrepresentation doubtless varies depending on which of the fraud charges levelled against fractional reserve one is considering.

However, as a second best, let us consider White’s arguments as they relate a “fraud” charge against fractional reserve which does have some substance, and which is as follows.

A fractional reserve bank promises to return to depositors the exact sum deposited (maybe plus interest and maybe less bank charges). But of course the flaw or fraud there is that the money is loaned on or invested by the bank and that involves the risk that the loans or investments go bad. And sure as night follows day, once every twenty or thirty years the loans do go wrong, and one or more large banks can’t repay all the money they owe depositors. And as to small banks in the US, they go bust at the rate of about one a week.

So how much fraud or misrepresentation takes place there? Well commercial banks certainly do not advertising the fact that there is a one in twenty chance that depositors will lose their

money! Quite the reverse: their publicity normally stresses the safety of the relevant bank.

Of course the contract governing an account at a typical bank, the small print in particular, may say something different. But that's near irrelevant. The typical bank customer does not read the small print - and probably wouldn't understand it if they did. It is thus indisputable that banks are guilty of a certain amount of misrepresentation or to put it more strongly – "fraud".

31. A 25% or so capital ratio is good enough.

I.e. a 25% or so ratio brings near total safety, which means there is nothing to be gained by going for a 100% ratio, which is what FR involves.

Claimed by Wolf (2012). Wolf's exact words were "I accept that leverage of 33 to one, as now officially proposed is frighteningly high. But I cannot see why the right answer should be no leverage at all. An intermediary that can never fail is surely also far too safe."

Answer. If a very high level of safety COSTS SOMETHING, that could well be an argument for sacrificing some safety in exchange for reduced costs. But if Wolf thinks such costs exist, he needs to tell us what they are.

The Vickers commission (of which Martin Wolf was a member) CLAIMED such costs were involved (see Vickers (2011)). They

claimed that total safety would supress bank lending, which in turn would supress economic growth. However, any such "suppression" can be countered by standard stimulatory measures (or the specific stimulatory measures advocated by those who argue for FR).

Next, if the capital ratio is raised to just 25% (or any other non-100% level) banks will simply bribe and cajole politicians over the years into reducing the ratio back down to the 3% or so that has obtained over the last decade or so. In contrast, 100% is a clear line in the sand.

Indeed, George Osborne, Britain's finance minister, has campaigned against ANY IMPROVEMENT WHATEVER in the capital ratio. The fact that his political party, the Conservatives, is partially funded by banks is of course entirely coincidental. (See Wolf (2013)).

And on the subject of "bribes and cajoling" it should be born in mind that the British finance industry spends £93m a year on lobbying, according to Mathaison (2012), while in Europe as a whole, there are 1,700 lobbyists working for banks (Corporate Europe Observatory (2014)).

Fractional reserve is in check mate.

The next problem with a 25% or so ratio is that it's actually a logical inconsistency: put it another way, it leads the existing system into check mate, and for the following reasons.

If the ratio is 25%, or even nearer 50% as was common in the 1800s, and taxpayer funded deposit insurance is left in place, then banks are still being subsidised. On the other hand if deposit insurance is abandoned, then depositors stand to lose if a bank DOES FAIL, and creditors who stand to lose in the event of bank failure are effectively a sort of shareholder. Thus a 25 to 50% or so ratio minus deposit insurance can be argued to amount to a 100% ratio, which is exactly what FR involves!

Alternatively it could be argued that a 25% or so ratio minus deposit insurance turns depositors in to something resembling standard trade creditors (as distinct from shareholders). But as such, those “trade creditors” have a motive to run in the event of trouble (as distinct from shareholders who do not have a motive to run). And it was a run on shadow banks that were largely behind the recent crisis. So that is a defective solution.

As Cochrane (2013) argued, the best and cleanest system is to simply remove all runnable liabilities from the liability side of bank’s balance sheets, i.e. implement the 100% ratio.

32. A Glass-Steagall or Vickers type split is better than an FR type split.

I.e. splitting the banking industry into a retail half and investment half is better than the FR type split: splitting the industry into safe accounts and investment accounts.

Claimed for example by Vickers (2011) and Pettifor (2014). See Pettifor's paragraph starting "Next, bank's retail arms…"

Answer. Vickers sets out three basic reasons for separating investment from retail banks on p.9 & 10. Their first reason starts "structural separation should make it easier and less costly to resolve banks that get into trouble". Plus Vickers claims that ""Investment banks can fail. Retail ones can't be allowed to." Now that rather conflicts with Vickers's claim that some investment banks (like retail banks) cannot be allowed to fail (3.28).

Indeed, the above first reason goes on to say that each case or "failing bank" should be treated differently or treated on its merits. But that makes a mockery of the investment / retail split. You might as well categorise banks according to which letter of the alphabet their names start with and then "treat each case on its merits".

Their second reason is that the crisis stemmed largely from the investment banking sector and that "Separation would guard against the risk that these activities (i.e. problems in the investment banking sector) might de-stabilise the supply of vital retail banking services."

Well first, Northern Rock was a retail bank, and it got into trouble. And second and as regards those "vital retail banking services", Vickers admits (to repeat) that some investment

banks are also “vital”. So Vickers’s distinction between retail and investment banks is largely spurious.

And their third reason claims that “The proposed form of separation also gives scope for UK retail banking to have safer capital standards than internationally agreed minima..”

Note Vickers does not claim that their proposals render retail banks 100% safe: in other words such banks would still have to have taxpayer funded backing, i.e. such banks would still need to be subsidised (which of course conflicts with Vickers’s claim that taxpayers should not subsidise banks). In contrast, under FR, bank accounts which depositors want to be totally safe really are totally safe, thus no taxpayer funded backing or subsidy of those accounts is needed.

In short, Vickers’s proposals are a mixture of happy talk and self-contradiction, all couched of course, in impeccable English.

In contrast, under FR, the entities that arise to replace the existing banking industry cannot suddenly fail. Thus there is no need for bank subsidies. In short, FR achieves the objectives that Vickers sets itself, whereas Vickers fails to achieve its own objectives.

33. Bank shareholders will demand a high return to reflect their uncertainty about what a bank actually does.

I.e. bank management knows more about its bank that shareholders or potential shareholders, thus the latter will want insurance against possibly being misinformed by bank management, thus equity is an inherently expensive way of funding banks.

Claimed by Elliot (2013).

Answer. Depositors and bond-holders who fund banks suffer from EXACTLY THE SAME asymmetric information problem. Of course depositors are protected from the latter problem by deposit insurance and the too big to fail subsidy, but the latter two are entirely artificial and unjustified subsidies. (That's where deposit insurance is funded by taxpayers rather than by banks themselves, the latter being the case with small US banks).

34. Irresponsible lending under FR would be as harmful as under the existing system.

Answer. There is a big difference between a bank becoming INSOLVENT, and its shares declining in value. As the former governor of the Bank of England (King (2010)) put it:

“And we saw in 1987 and again in the early 2000s, that a sharp fall in equity values did not cause the same damage as did the banking crisis. Equity markets provide a natural safety valve, and when they suffer sharp falls, economic policy can respond. But when the banking system failed in September 2008, not even massive injections of both liquidity and capital by the state could prevent a devastating collapse of confidence and output around the world.”

35. FR reduces commercial bank flexibility.

I.e. under the existing system, an individual bank can lend without being too concerned about whether it has enough deposits to fund those loans, plus the commercial bank system as a whole can expand the total amount it lends without reference to government or central bank. And as to those amounts loaned out, they of course just become deposits somewhere in the commercial bank system. That is, loans precede deposits.

Answer. As to the above first scenario (i.e. an INDIVIDUAL bank increasing the amount it lends relative to how fast other banks are expanding the amount they lend), that will result in the first bank losing reserves to other banks, i.e. becoming indebted to other banks. And there is nothing wrong with that if

the indebted bank has found particulary worthwhile or viable borrowers.

But under FR, almost exactly the same happens. That is, any bank can expand the amount it lends if it can attract funds from somewhere: other banks, shareholders, etc. In other words in both cases, the bank which is expanding faster than others becomes indebted to other entities: the only difference is that under FR the latter bank has to line up its creditors BEFORE it increases its loans, whereas under the existing system those creditors come into existence AFTER the new loans are made.

Aggregate lending.

As to the second scenario (loans by the commercial bank system as a whole expanding) it is hard to see any good reason for any significant gyrations in the TOTAL AMOUNT that commercial banks lend. In fact it is precisely such gyrations which are half the problem. To illustrate, in the three years prior to the crunch, commercial bank created money / loans in the UK were expanding much faster that normal and much faster than the stock of central bank created money (base money). And that resulted in a boom followed by a bust.

Then, as always happens in busts, commercial banks did exactly what we do not want them to do, i.e. put the whole

process into reverse: they called in loans, etc. In short, the commercial bank system EXACERBATES the boom bust cycle.

To summarise, when there is a faster than usual expansion in the amount of commercial bank lending, that's probably a sign of a boom or bubble. In contrast, if the money supply is under the control of the central bank, it can expand the money supply in a way desiged to be in the best interests of the country as a whole: i.e. in accordance with what inflation and unemployment are doing.

Moreover, opponents of FR (i.e. defenders of the existing banking system) are perfectly happy for central banks and governments to try and control the boom / bust cycle via interest rate adjustments, quantitative easing and so on, and the latter necessarily involves influencing the amount of commercial bank lending. Those opponents of FR thus need to explain why they object so much to commercial bank lending being controlled in a slightly different way, as occurs under FR.

36. FR would not stop bank runs.

I.e. given suspicions about a lending entity, it's shares would be dumped in the same way as depositors withdraw their money en masse from a traditional bank about which there are suspicions.

Answer. Runs on stock exchange quoted shares just do not happen. Reason is that given bad news about a firm or corporation, the value of its shares drop before anyone has time to sell (with the possible exception of some inside traders).

In contrast, given bad news about a conventional bank, the bank tries to pretend that its liabilities are still worth 100 cents in the dollar until it finally has to admit they are not, at which point it closes its doors. That is, the banks creditors have a motive to get their money out before the doors close.

As Cochrane (2013) put it, “the financial system needs to be reformed so that it is not prone to runs.

37. Vickers demolished the arguments for FR.

Answer. One of the flaws in the arguments put by Vickers (2011) were set out in No.2 above. That’s the argument that FR involves putting large amounts of money in to safe accounts or entities where such money is not loaned on. And that that, on the face of it, is a waste of resources.

Further flaws in Vickers’s arguments are as follows.

In section 3.20 and 3.21 Vickers deals with what Vickers calls “narrow banking”, which is essentially the safe half of the bank industry as proposed by FR. And Vickers points out that safe / narrow banks are not a source of credit. And the result would

be that "the supply of credit would move entirely to a less regulated sector".

Answer. The phrase "less regulated" is extremely vague, but if it's supposed to mean that the lending half of the bank industry is scarcely regulated at all, then that is totally untrue: under FR, lenders have to obey a VERY SPECIFIC set of rules.

Next, in section 3.22, Vickers makes a whole string of errors, so let us run through it sentence by sentence. (Vickers's actual words are in italics below).

"Limited purpose banking[21] *offers an alternative solution, under which the role of financial intermediaries is to bring together savers and borrowers but risk is eliminated from the intermediary because it does not hold the loan on its books. All of the risk of the loan is passed onto the investors in the intermediary (or fund), so that effectively all debt is securitised. However, limited purpose banking would severely constrain two key functions of the financial system. First, it would constrain banks' ability to produce liquidity through the creation of liabilities (deposits) with shorter maturities than their assets."*

Now what's the word "constrain" doing there? FR does not "constrain banks' ability to produce liquidity". It totally destroys banks' ability to create money / liquidity: the job of creating money / liquidity is handed over to the central bank.

As to “securitisation”, FR does not necessarily involve securitising the loans that banks or lending entities make (though banks would be free to securitise loans if they chose to).

Next, the “21” near the start of the above quote is a reference to Kotlikoff’s version of FR, and Kotlikoff (like other advocates of FR) does not advocate simply turning the existing banking industry into lending entities funded just by shareholders, as Vickers suggests. FR (to repeat) involves splitting the industry into TWO HALVES, one of which consists of lending entities funded just by shareholders, while the other offers totally safe transaction accounts.

Vickers’s next sentence reads:

“The existence of such deposits allows households and firms to settle payments easily.”

Now amazing as it might seem, FR does not involve the destruction of all bank accounts which “allow households and firms to settle payments easily”. All FR does is (to repeat) is to have the central bank rather than commercial banks create the units / money making up those accounts. Plus under FR, accounts which are used to “settle payments easily” are separated from accounts where relevant sums are loaned on or invested.

Next, Vickers claims:

“Second, banks would no longer be incentivised to monitor their borrowers, and it would be more difficult to modify loan agreements. These activities help to maximise the economic value of bank loans.”

Answer. Where loans really are securitised, then obviously “modifying loan agreements” is difficult. But (to repeat) loans would not be securitised under FR any more than under the existing system. And as to the fact that banks are not “incentivised to monitor their borrowers” where loans are securitised, that is no more a problem under FR than under the existing system.

38. Regulating loans is better than FR.

I.e. an obvious way to make banks safer is to impose more stringent regulations on lenders for example insisting on minimum equity stakes for mortgagors (i.e. insisting on maximum loan to value ratios for mortgagors).

Answer. The first problem there is that that is relatively easy to do in the case of mortgages, but not in the case of loans to businesses. For example some bank managers, quite rightly, lend to particular businesses because they know the relevant business proprietors and know the latter to be competent and

trust-worthy. Setting up rules and regulations to cater for those elusive characteristics of business proprietors is impossible.

Second, even if it were possible to forbid the making of risky loans, it is hard to see the case for doing so where lender and borrower now what they are doing, and assuming there are no harmful systemic consequences when a significant proportion of those loans go wrong. And the latter is exactly what FR achieves because when a significant number of loans go wrong, lending entities do not become insolvent: all that happens is that shares in lending entities decline in value.

Moreover, under FR, those who fund loans are free to have their money loaned on in whatever way they want: if they really want to fund NINJA mortgages, they are free to do so.

Flawed arguments for full reserve.

39. We pay interest on privately created money.

I.e. since we seem to pay interest on privately created money and not on central bank created money, the latter is better.

Answer. The above argument is nearly right, but not quite, and for the following reasons.

A private or commercial bank creates money when it grants a loan, or so it might seem: for example when you apply for and get a loan for £X, the bank can create that £X out of thin air, and you pay interest on your loan.

The reality however is that you pay ADMINISTRATION COSTS to the bank, and as to interest, that is a charge made by those who deposit money at the bank. To illustrate that point, consider the following hypothetical scenario.

Assume a private bank sets up in a barter economy, and offers some wondrous new stuff called “money” which disposes of the inefficiencies of barter.

Citizens open accounts and offer collateral so as to enable their accounts to be credited. And let’s assume initially that citizens only want enough money for day to day transactions: i.e. no long term loans are involved.

Now clearly the bank will charge for administration costs (e.g. checking up on the value of collateral). But there is no reason for the bank to charge interest.

Interest is a charge made by a lender for the pain or inconvenience of foregoing consumption (i.e. saving) so that the borrower CAN CONSUME, or “spend”. And in creating money out of thin air in our hypothetical economy, the bank has not foregone consumption, and nor has anyone else, so there is no reason to charge interest.

But of course that's not to say that if you get a loan just to give you enough for day to day transactions from a bank that you won't be charged what the bank CALLS interest. The point is that if the bank does its costings properly (i.e. does not subsidise one type of customer paid for by excess charges on other customers) then the bank won't charge you REAL INTEREST.

Money creation involves debt creation?

Note also, that where a commercial bank creates just transaction money, no real debt is created. To be more exact, a couple of equal and opposite debts are created (plus a third debt if collateral is deposited). That is, when a bank customer induces a bank to credit $Y to the customer's account, that $Y is a debt owed by the bank which the customer can transfer to others (e.g. using a cheque book, debit card, etc). The bank then owes a sum of money to "others". But at the same time, the customer, as part of the agreement with their bank undertakes to repay the $Y to the bank at some stage. So there are two equal and opposite debts there.

Moreover, if the customer deposits collateral at the bank, then the bank owes that to the customer when the $Y is eventually repaid. So, far from money creation by commercial banks involving customers becoming indebted to a bank, often as not

it's the other way round if anything: the bank owes the customer more than the customer owes the bank.

Long term loans.

Where money is created just for day to day transactions, no long term loan is involved: the amount in each citizen's bank account would bob up and down from one week to the next, but that's it.

In contrast, there are long term loans. Borrowers don't get loans just to sit a home admiring their newly acquired pile of money: they get loans in order to spend, i.e. consume the fruits of other peoples' labour.

Now the only way to induce anyone to abstain from consumption is for the bank to offer interest to depositors. If interest is offered, then some people will leave more in their bank accounts than they otherwise would. And clearly the bank will have to pass that interest on to borrowers.

In short the bank will not charge interest simply for creating money. But it WILL CHARGE long term borrowers interest, because for every long term loan, there has to be someone making a long term deposit (or a series of people making longish term deposits).

Of course banks do a certain amount of what's called "maturity transformation", that is funding long term loans from a series of short term deposits. But that does not alter the point that for

every long term loan made, there must be depositors leaving unused money in the bank (some for long periods and some for shorter periods).

Conclusion: the above argument is valid in that it is correct to say that privately created money is inherently more expensive to create than central bank money because of the administration costs involved in privately created money. But it is not true to say that we pay interest in respect of money created by commercial banks.

40. FR benefits the environment and equality.

Claimed by Dyson (2013).

Answer. One can subsidise windfarms (or not) under fractional reserve, and ditto for full reserve. Plus tax in CO2 emitting fuels can be raised (or not) under both full and fractional reserve. Thus the environment has little to do with the full versus fractional reserve argument.

It is also hard to see why the PATTERN of consumption would change much give a switch to FR. That is, the proportion of family budgets spent on cars, food, housing, clothes would not change much. Thus there are no obvious environmental effects.

As for inequalities, same applies. FR ought to ameliorate the boom / bust cycle a bit, which in turn would reduce the periods

of high unemployment that come after the bust. And that clearly reduces inequalities SOMEWHAT. But it is hard to see why equality is an issue that is closely related to the full versus fractional reserve argument.

41. Without debt there would be no money.

I.e. Commercial banks create money when they lend, thus without debt there would be no money.

Claimed by Rowbotham (1998).

Answer. The answer to that point is spelled out essentially in No.35 above. That is, when a commercial bank creates money, no long term debt is involved. While in contrast, when a commercial bank grants a long term loan, it can well be argued that no money creation is involved. See No.35 above.

42. Interest condemns borrowers to perpetual debt.

I.e. the money which commercial banks lend does not supply borrowers with the money to pay interest to said banks, thus borrowers are condemned to permanently increasing or never ending debt.

Claimed by Rowbotham (1998).

Answer. The answer to the above point is very simple. It is that interest paid to banks is subsequently returned to households in numerous forms: 1, interest payments by banks to

depositors, 2, dividend payments to bank shareholders, 3, payments to bank staff and a large range of other administrative costs that banks have to pay, like upkeep of offices and buying computers.

Of course the latter paragraph blurs the distinction between interest and administration costs somewhat. That distinction is spelled out more clearly in item No.35 above.

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