In defence of Sovereign Money.

Ralph S. Musgrave.

Abstract.

The phrase "Sovereign Money" is now widely used to refer to a system where only the state (government and central bank) can create or issue money, which is in contrast to the bank system in existence in 2018 where commercial banks issue most of the money in circulation.

The arguments put by Philippe Bacchetta in a recent paper against Sovereign Money (sometimes known as full reserve banking or 100% reserve banking) are examined. The conclusion is that many of the arguments he puts against Sovereign Money are flawed. Also, Bacchetta does not mention the basic flaw in money creation by commercial banks, so those flaws are set out.

Introduction.

Bacchetta (2018) made various criticisms of Sovereign Money (SM). According to Gomez (2017) Bacchetta's paper was sponsored by the Swiss Banking Association. If that is true, then it is tempting to attach about as much importance to Bacchetta's paper as a paper on climate change sponsored by Exxon. However, that is all I will say on Bacchetta's motives. That is, the rest of material below is devoted to examining his arguments.

Bacchetta actually makes a large number of points, many of which cannot be dealt with adequately in less than several hundred words. The paragraphs below are therefore limited to dealing just with some of the points I do not agree with. In other words I agree with some of the points he makes not mentioned below. But hopefully enough of Bacchetta's points are rebutted to show that he does not have a good grasp of the subject.

His points are addressed below in the order in which he makes them, and using his actual sub-headings for the most part.

At the end of this paper, the basic flaws in the existing bank system are explained, since Bacchetta does not mention these. The basic flaws are first that commercial bank issued money is more costly to produce than sovereign money (aka "base money"). Commercial banks nevertheless manage to barge their way into the money creation business via lending: those banks can undercut the free market rate of interest because those banks can in effect just print the money they lend out. Obtaining money that way is clearly cheaper than earning it or borrowing it. In short, what commercial banks do is very similar to what traditional backstreet counterfeiters do as explained by the economics Nobel laureate Maurice Allais (Phillips (1999)). Also, it is precisely the fact of letting commercial banks create money that is the cause of nearly every bank failure throughout history.

A simple example.

Under the above heading, the author gives an example of how money is created when someone borrows to buy a house and he correctly explains that the increase in the money supply resulting from that loan will not necessarily equal the amount of the loan because for example the seller of the house may put the money into a long term deposit account which is not included in the money supply.

Then Baccetta says "It is not clear how things would change under sovereign money. If my bank grants me a loan, the funds still end up in the seller's checking account and initially increase money." In fact things certainly would change under SM.

Under SM, or at least most versions of SM, bank loans can only be funded in two ways. One is via equity: that is, someone who wants their money loaned out purchases equity or what amounts to equity in a bank. (That stake in the bank does not necessarily take the form of actual shares: it can take the form of units in a unit trust (UK parlance) or a mutual fund (US parlance)). But the important point is that the value of those shares or units floats along with the value of the underlying loans. And shares or "unit trust units", are not money.

Thus the lending process there is as follows, (and sticking with the example of someone buying a house). Someone purchases \$X worth of the latter units sold by a bank. The bank lends on the \$X to the house buyer who gives the money to the house seller, who places the money (at least initially) in an instant access account. No money has been created. That is in contrast to the existing system where the equivalent series of transactions are as follows.

Someone deposits \$X at a bank. The bank lends on the money. The depositor still has access to their money, but at the same time the borrower also has access to the money! \$X has been turned into \$2X, at least initially. Money has been created!

Advocates of SM systems which involved the above equity / unit trust idea include Kotlikoff (2012) and Friedman (1948 & 1960). Re Friedman (1948) see under his heading "The Proposal". Re Friedman (1960) see his Ch3, under the heading "How 100% reserves would work".

Klein (2013) also advocates having loans funded via equity. As he puts it, "What about the lending side of today's banking industry? There would be lending companies instead — funded exclusively by equity investors, who consciously choose to put their savings at risk rather than hold them as deposits or other money-like bank liabilities."

Incidentally, later on in his paper, Bacchetta claims that SM and the "100% reserve" system advocated by Friedman are different. In fact, as is shown below, they are the same thing.

Funding loans via deposits under SM.

In contrast to funding loans via equity, loans can be funded via deposits under SM. However, the terms and conditions attached to those deposits would not be the same as under the existing system. Under the existing system it is permissible to fund loans via instant access deposits.

In contrast, under SM, loan can only be funded via special bank accounts where there is a clear intention by the depositor to tie up their money for a significant period, perhaps a minimum of two or three months. (Dyson (2012) and other Positive Money literature call those accounts "investment accounts")

There is no sharp dividing line between money and non-money, but most countries do not count money in term accounts to which the depositor loses access for more than two or three months as money. So on that basis, loans funded by those sort of accounts would not involve money creation for the same reason as loans funded via equity do not involve private money creation. (Indeed Bacchetta himself points out (as mentioned above) that money in term accounts, where the term is long enough, do not normally count as money.)

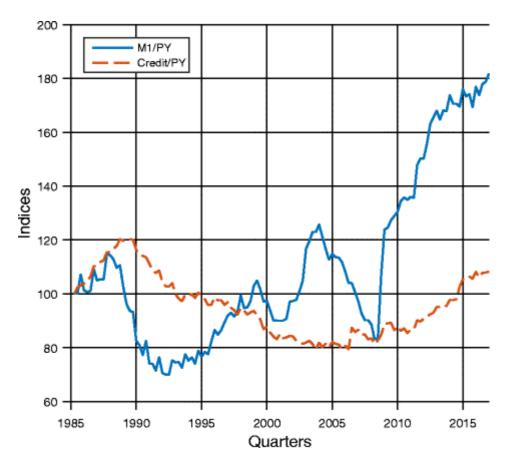
But to the extent that money in two or three month term accounts <u>is</u> <u>counted</u> as money, government under SM would have another means of clamping down on private money creation: government or auditors just need to ensure that the total amount in a bank's instant access accounts plus "sums put into investment accounts but not yet loaned on" tie up with what the bank has in its account at the central bank. Dyson (2012, Ch6) goes into that in more detail.

So in the case of loans funded via deposits, and contrary to Bacchetta's claims, there is a big difference between SM and the existing system. Under the existing system, a bank can grant a loan regardless of whether enough money has been deposited with it to fund the loan. In contrast, under SM, it cannot do that.

As to whether "investment accounts" are offered state backed deposit insurance, opinions differ on that. Personally I don't see anything wrong there, as long as the deposit insurance system is run on strictly commercial lines, which it already is in the US in the form of the FDIC.

A decoupling between money and credit.

Under the above heading, Baccetta then shows a chart which shows the very tenuous relationship between money and credit (See below).



Unfortunately that chart does not add much to the argument. Baccetta is right, at the start of his paper, to criticise the naïve SM advocates who claim there is a dollar for dollar link between money and credit, at the same time, it is undeniable there is **some sort of** link. The fact is that over the decades, money and credit in every country in the World have expanded.

Also in the years where the blue M1 line on that chart goes way above its trend line, i.e. on the right of the chart, were years during which QE took place. That will have added greatly to the amount of M1 without any corresponding rise in credit. That point may not have been applicable to Switzerland to any great extent, but it certainly applied to the US and UK.

Bank runs may not be avoided.

Under the above heading Baccetta argues that it is not only depositors who run when a bank is in trouble, from which he concludes that "To avoid any bank run, the sovereign money reform should add severe restrictions on banks' other liabilities."

The first answer to that is that if a bank (or bank subsidiary or unit trust) is funded just via equity (as per Kotlikoff (2012) and others), insolvency is plain impossible. Share-holders can run if they want, but all that happens is that the value of the shares falls. To illustrate, if a bank is funded entirely by equity and the value of its loans turns out to be half of book value (which is unheard of in the case of large banks) then the shares would fall to about half of their book value. The bank is still not insolvent. And much the same goes for a bank funded via bonds.

The latter point very much applies in the case of systemically important banks: banks which cannot be allowed to fail. That is, their capital ratios must be sufficiently high (even under the **<u>existing</u>** bank system) that failure is virtually impossible.

As to smaller banks, they will not suffer runs if their deposits are insured. And if some of them do fail, what's the problem? Over twenty banks failed in the US last year. The US deposit insurance system, the FDIC is quite used to dealing with failed banks.

Iceland in 2008 as an example.

Under the above heading, Baccetta then claims that in the particular case of Icelandic banks, SM would not have helped. It is hard to see why not. To repeat the points made just above, under SM it is plain impossible for a bank to go insolvent if it is funded just by equity (as

7

per Friedman, Kotlikoff etc) or if it has a sufficiently high capital ratio. That is surely a very significant form of "help".

A lender of last resort is still needed.

Under the above heading Bacchetta claims that under SM, central banks will still need to offer lender of last resort facilities because banks can still fail.

It is important here again to distinguish between small banks and systemically important banks or "too big to fail" banks as they are sometimes called. Indeed most of the discussion of bank reform in recent years has made that distinction.

As to small banks, there is no harm (to repeat) in letting them fail as long as depositors are insured.

As to systemically important banks, i.e. banks which allegedly cannot be allowed to fail, they certainly can be protected via lender of last resort, but the problem is that in the heat of a crisis, governments panic and offer those banks billion dollar loans at near zero rates of interest, which is a blatant subsidy of those banks. Far better is to insist on a sufficiently high capital ratio that it is next to impossible for those banks to fail. That makes lender of last resort near surperfluous.

Mistaken claim 3: money is not a liability.

The author starts this section by saying "A major assumption behind the benefits of sovereign money is that money would no longer be a liability of the central bank." Unfortunately he does not quote any instances of SM advocates actually making that claim, and certainly I do not know of any.

The question as to whether base money really is a liability of central banks is one to which there are no clear answers, and a clear answer is not really needed. To illustrate, Bank of England notes say that the BoE promises "to pay the bearer on demand the sum of £10". But if you go to the BoE and demand £10 worth of gold in exchange for your £10 notes, you'll be told to go away. And if you don't, the BoE will get the police to escort you away. So in what sense is a £10 note a liability of the BoE?

Moreover, government (owner of the central bank) is entitled to grab any amount of money it wants off you anytime via extra tax. So in what sense is central bank money a real liability of the central bank and its owner, i.e. government? As Warren Mosler put it, base money is like points issued by an umpire in a tennis match: the points are assets from the players' point of view, but are not a liability from the umpire's point of view.

Of course base money appears on the liability side of a central bank's balance sheet, but that is done mainly to have the bank's books comply with the rules of double entry book-keeping.

No reason to change fiscal policies.

Under the above heading, the author suggests that SM might cause unwanted changes to fiscal policy. The section ends by claiming "Whatever can be done with money can be done with debt."

As to the first claim, and given that any amount of stimulus can be imparted simply by having the central bank create money with government spending that money (and/or cutting taxes), it's hard to see why SM need have any adverse effect on stimulus in general.

As to specifically <u>fiscal</u> stimulus, there is an obvious fiscal element to the "print and spend" form of stimulus that takes place under most versions of SM: for example if the state (government and central bank) print and spend extra money on state schools, more teachers are employed.

As to "Whatever can be done with money can be done with debt", that is not actually true. Reason is this. Under traditional fiscal stimulus, government borrows \$X, spends \$X and gives \$X worth of bonds (government debt) to lenders. Trouble is that that additional borrowing tends to raise interest rates, thus given a recession and given some traditional fiscal stimulus, central banks at the very least will negate any interest rate increasing effect, and are quite likely to go even further, and actually cut interest rates. But how do they do that?

Well they simply print money, i.e. Sovereign money (aka base money) and buy up government debt. Thus it is not true to say that debt alone can do everything that sovereign money can do. That is, sovereign money printing is needed even under the existing system.

But there are further question marks to be put over debt. For example what is the point of a government which issues its own money (e.g. Switzerland, the US, UK etc) borrowing money to fund its spending when the object of the exercise is stimulus? That is, why borrow money when you can print it?

Moreover, the effect of borrowing is to reduce aggregate demand: why do something tends to cut demand when the object of the exercise is the opposite, i.e. to **raise** demand? That makes as much sense as throwing dirt over your car before washing it.

Indeed, Friedman (1948) and Mosler (2010) and 2004) argued that governments should borrow nothing: that is, those two economists argued that governments should pay no interest on their liabilities. (Re Mosler (2010) see his second last paragraph, and as to Friedman, see his paragraph starting "Operation of the proposal…".

A central bank needs to hold assets.

In the section with the above title Bacchetta argues that central banks need a stock of government debt in order to be able to raise interest rates when they want to: interest rates are normally raised by having the central bank sell government debt.

In fact, in the absence of government debt there would be nothing to stop a central bank simply wading into the market and offering to borrow at above the going rate. Whether a central bank is actually allowed to do that under the laws of any given country is irrelevant: if it's not allowed, the law can be changed, because there is no good reason not to change it.

The author continues as follows: "The second reason for the central bank to hold assets is to provide a guarantee for the currency. Currently, banks hold deposits at the central bank because they trust the central bank and because they know that they can withdraw their funds immediately."

Well certainly in the case of a <u>commercial</u> bank depositors like to be assured that the bank has assets. But central banks are owned by governments or are effectively part of the government machine. The Bank of England is actually owned by the UK Treasury lawyer. But that gives the Treasury lawyer no powers at all because the laws and customs governing the BoE give the Treasury lawyer no powers.

Much the same applies in other countries: that is everyone knows that the government of a country stands behind its central bank. Thus whether a central bank actually holds some pieces of paper which say "we, the government owe the holder of this bit of paper \$Y" is largely irrelevant.

To illustrate, if the Fed was allowed to go bust, that would indicate chaos at the top of the US government machine, which in turn would mean holders of US government debt would demand a much higher rate of interest for holding that debt: not a prospect the US government would want.

Mistaken claim 4: the Benes-Kumhof paper gives support to the Swiss sovereign money reform.

Under the above heading, the author claims that the support that the SM movement claims to get from Benes (2012) is flawed because BK consider what the author calls "full reserve" which is allegedly different to SM.

In support of the latter "difference" claim, the author refers to Huber (2015). The latter Huber paper does not give any significant explanation as to what the difference is between 100% reserves and SM, but Huber does refer to a paper of his which he says gives a few more details – Huber (2013).

In the latter paper, Huber claims that under 100% reserves, there is still a dual circuit: i.e. commercial bank created money and central bank created money. Indeed, he says "In a 100%-reserve system the money supply continues to be credit money, i.e. debt money." Unfortunately that is contradicted by two of the supporters of 100% which Huber himself cites: Irving Fisher and Milton Friedman. Fisher (1936) says (p.15 under the heading "Money a government function"), "The government should take away from banks all control over money, but should leave the lending of money to bankers. We could leave the banks free, or at any rate far freer than they are now, to lend money as they pleased, provided we no longer allow them to manufacture the money which they lend". Seems clear enough wouldn't you say?

And Friedman (1948) under the heading "The proposal" (p.247) says that one of the elements of his "proposal" is "...a reform of the monetary and banking system to eliminate both the private creation or destruction of money and discretionary control of the quantity of money by central bank authority. The private creation of money can perhaps best be eliminated by adopting the 100 per cent reserve proposal, thereby separating the depositary from the lending function of the banking system."

The conclusion is that contrary to the claims of Bacchetta and Huber, both 100% reserves and SM involve a ban on private money creation, thus SM and 100% reserves are very nearly the same thing.

To repeat, that is not to say there are <u>no differences</u> between the various proposals that come under the "SM umbrella": indeed none of them are exactly the same as any other. But they clearly all have something in common: basically just the state creates money, with private money creation being banned or at least severely curtailed.

Indeed, there is another difference which Bacchetta seems to think is important. It is one I have always been aware of, but have largely ignored: it's the question as to whether the central bank pays a small amount of interest on reserves under SM. Friedman and Bennes & Kumhoff claimed interest should be paid. Others say not.

But that difference is irrelevant to the basic pros and cons of SM.

Need for alternative funding by banks.

In his first paragraph under the above heading, Bacchetta argues that on implementing SM, it is possible that a rather small proportion of instant access depositors would choose to tie up their money in the term accounts mentioned above, and hence that the cost of credit might rise.

One answer to that is that whatever the aggregate demand reducing effects there, it is easy for a state which issues its own currency to counteract that effect via stimulus. The net result would be less loan based activity and more non-loan based activity. If the concerns often expressed about dire effects of excessive amounts of debt are correct, then that outcome, far from being harmful, as Bacchetta suggests, would be beneficial.

But as Bacchetta admits in the second paragraph, it is not really clear what the effect on the cost of credit would be.

Also in that first paragraph, the author expresses concerns about what happens if banks want to expand the amount they lend suddenly.

There are three answers to that.

First, it is certainly true that if a bank can simply print money and lend it out rather than being forced to find the money first, they can expand the amount they lend more quickly. However it is debatable as to whether that speed is beneficial: the really dramatic expansions in lending over the last two decades in the West have largely fuelled house price bubbles rather than industry. At least the total loaned by banks to mortgagors in the UK is over ten times what they lend to small and medium size enterprises. (As for large firms and corporations, they tend not to use banks as a source of funds.)

Second, where a bank spots a particularly worthwhile lending opportunity under SM, and it does not have funds to make the loan, it could borrow from other banks, as is the case under the existing system.

Third, any well run bank under the existing system or under SM keeps something in reserve so as to be able to lend to the above sort of particularly worthwhile borrowers which can appear from nowhere at any time.

Next, in the paragraph starting "What type of alternative funding would be available?" the author says "some alternative sources of financing may not be more "responsible" and some other may make banks more prone to crises." I similar vein, in the fourth and fifth paragraphs in this section, the author suggests that some of funding for banks may be "fickle".

The answer to that is that "irresponsibility" and "fickleness" is tightly controlled under SM. That is, as already explained, under SM those wanting their money loaned out by a bank have limited options. They can buy equity or what amounts to equity in the bank. In that case irresponsibility in the form of suddenly withdrawing your funds from a bank is difficult. Second, money can be put into term deposits. There again, money cannot be withdrawn in a hurry.

Then in the same paragraph, Bacchetta suggests people might get round the rules by having sight deposits in Swiss banks denominated

in Euros. The answer to that is that denominating deposits in a different currency has no effect on the operation of the basic ideas behind SM, which are basically to cut down on "borrow short and lend long". For example if a Swiss bank lets customers put Euros into what Positive Money calls "investment accounts", those Euros would be locked up for a few months, just as would Swiss Francs. Thus "borrow short and lend long" is thwarted in both cases.

Another answer to the latter "Euro" problem is that on introducing SM, banks are absolutely guaranteed to try to evade the rules. But banks do that REGARDLESS of what set of rules are in place. So to that extent, the idea that banks would try to find loopholes under SM is not a flaw in SM.

Moreover, one of the beauties of SM is that it is basically very simple to control. That is in contrast to the Dodd-Frank bank rules in the US which run to well over ten thousand pages. In short, the appearance of loop-holes and the need to close those loop-holes is not a problem unique to SM.

Implications for monetary policy.

Under the above heading, the author argues that under SM, conventional monetary policy would be less effective because monetary policy could not be implemented so quickly.

Well it is certainly true that under conventional arrangements, a central bank can cut interest rates almost instantaneously. However that does not prove that interest rate cuts actually have an effect all that quickly or that they are particularly effective at boosting demand. In fact there is much debate on how effective and quick interest rate adjustments are compared to fiscal adjustments, and it would be easy to write an entire book on that topic. For a small sample of the literature that casts doubt on the effectiveness of interest rate cuts, see Dyson (2011, p.10).

Also, there is a fundamental theoretical flaw in interest rate adjustments: there is no obvious reason why a recession is necessarily caused by a lack of investment – recessions can equally well be caused by a fall in one of the other constituents of demand, like consumer spending or exports. Also the basic purpose of the economy is to produce what people want: both the goods and services they purchase out of disposable income and the goods and services they want supplied for free by the state. Thus best cure for a recession on that basis, absent any very good reasons for thinking otherwise, is to boost household incomes, e.g. via tax cuts and boost public spending, and that is what fiscal stimulus consists of.

Next, the author says "The Swiss National Bank may have to find other, less efficient, ways to influence monetary policy. In particular, it is not obvious to foresee how the SNB would operate when monetary policy has to become more restrictive for a sustained period."

The answer to that is that the way fiscal and monetary policy would work have been clearly set out by various advocates of SM, e.g. Dyson (2012). Basically, where there is a need for stimulus, the state (i.e. the central bank and government combined) simply prints money and spends it (and/or cut taxes). First, that has an immediate fiscal effect: e.g. if government spends more on state schools, more teachers are employed. Second, there is a delayed monetary effect: that is, the fact of printing and spending money increases the private sector's stock of money (base money to be exact) and that also has a stimulatory effect. In contrast, there is the possibility that the opposite of stimulus, i.e. deflation, is needed. In that connection Bacchetta says "An alternative could be to issue central bank bills to reduce money supply. But how safe would central bank debt be perceived if its assets do not match existing liabilities?"

Well certainly, as explained several paragraphs above, it would be possible to impose deflation by having a central bank offer to borrow at above the going rate. In that case, following the rules of conventional book-keeping, and contrary to Bacchetta's suggestions, the central bank **would** have matching assets and liabilities: as to liabilities, it would owe \$Z to those it had borrowed from. As to assets, it would have an extra \$Z of base money.

However, the reality is that money in the hands of the bank which issues that money is essentially a meaningless concept. Any central bank or indeed commercial bank can create a trillion trillion trillion dollars or Euros anytime simply by pressing buttons on a computer keyboard. Thus while conventional double entry book-keeping is a very useful system, it needs to be treated with caution.

Another example of where the simple fact of the rules of double entry having been adhered to proves nothing is that the people who perpetrate Enron type frauds normally produce an impeccable set of books for auditors and for the tax authorities to look at.

Targeting the money supply.

Bacchetta then says "Another issue for monetary policy is that the initiative implies that the SNB would return to monetary targeting, since it focuses on money supply." That criticism of SM was also made by Pettifor (2014).

The answer to that is that Positive Money (e.g. see Dyson (2011)) explains perfectly clearly that SM does not target the money supply. What it does is to implement stimulus when stimulus is needed, and that stimulus consists of creating and spending base money. As already explained, one side effect is that that stimulus comes about partly as a result of the money supply having been increased. But there is certainly no specific targeting of the monetary aggregates.

Indeed most Western countries have implemented a steady rise in their money supplies over the last century, with the rise being particular pronounced in recent years as a result of quantitative easing. But no one accuses those countries of targeting the money supply for the whole of the last century, or even most of that period.

Basic flaws in the existing bank system.

This final section of this paper sets out the two basic flaws in the existing bank system, since Bacchetta does not deal with them. The first is that allowing money creation by private / commercial banks amounts to a subsidy of those banks. The reasons for that can be nicely illustrated by considering an economy which adopts money for the first time.

Such an economy has the choice between SM and a system (as per the existing system in 2018) where the majority of money is privately issued. SM has a big advantage in that it costs almost nothing to issue. As Friedman (1960, Ch3) put it in reference to sovereign / base money, "It need cost society essentially nothing in real resources to provide the individual with the current services of an additional dollar in cash balances." In contrast, where a private bank supplies money to a customer, the bank has to check on the customer's credit-worthiness, allow for bad debts and so on. Those are significant costs.

Thus in a simple hypothetical economy where the private sector simply wants a stock of money with which to do daily transactions and there is no borrowing or lending, there is little to be said for privately issued money.

Moreover, there would be no difficulty in principle in issuing enough base / sovereign money to bring about full employment without excessive inflation: peoples' tendency to spend varies with the size of their stock of money, thus increasing the private sector's stock of money tends to raise aggregate spending. So in principle, if the right amount of money is issued, the result will be that unemployment is as low as is feasible without excessive inflation.

Moving on from the above very simple economy where no lending takes place, if borrowing and lending began to take place, some of it via banks and some direct person to person, some sort of genuine free market rate of interest would establish itself.

Note that the fact of lending taking place requires little or no increase in the money supply. The reason is that once a person has the stock of money they need for daily transactions and similar, if they then want to borrow, that is not simply to acquire an additional stock of cash: it is to purchase goods and services. And those goods and services are necessarily supplied by those who want to lend. To illustrate with the simplest possible economy which consists of just two people, A who produces product alpha and B who produces beta, if A wants to borrow some beta from B, B can lend A the money needed to purchase the beta. A would then spend the money, thus the money returns to B. A and B end up with their original stock of "transaction" money.

To summarise so far, commercial bank issued money makes little sense in that it costs more to issue than base money. Moreover, even if our hypothetical economy does opt for a mainly commercial bank money system, the central bank will still have to issue significant amounts of money: witness the astronomic amounts of money issued by central banks over recent years as a result of quantitative easing.

But that all raises an obvious question, namely that if privately issued money is such poor value for money, how do private / commercial banks manage to muscle in on the money creation process in the real world? The answer is that they do it via lending.

If commercial banks are allowed to create and lend out their home made money, they can come by that money at no cost to themselves: they simply open accounts for borrowers and credit those accounts with money produced from thin air, unlike a "base money only" system (i.e. SM) where banks, if they want to lend money for extended periods, have to pay interest to depositors who are willing to lose access to their money for extended periods. So where private banks are allowed to create and lend out money in a hitherto SM economy, they can undercut the above mentioned free market rate of interest, as explained by Huber (2000, p.31, 2nd para). (Incidentally Selgin (2012) also considers the latter hypothetical scenario where privately issued money is introduced to a "base money only" economy.)

It might seem that it does actually cost banks to create their own money in that before making a loan, a bank has to check up on the credit-worthiness of borrowers. However that sort of cost has to be

21

born under SM as well. So the important difference between the two systems is that under SM, banks must pay interest to depositors wanting their money loaned on, whereas under the existing system, banks can obtain some of the money they lend on without having to pay interest to anyone.

The net effect, after borrowers have spent banks' home made money, is that various depositors then have more than their desired stock of money at the new and lower rate of interest. They will therefor try to spend away that excess stock, which raises demand, which in turn causes excess inflation, given that the economy was initially at the maximum level of employment that is possible without excess inflation.

In contrast to depositors, there are borrowers. They can be assumed to have their desired stock of "negative deposits" (i.e. debt): the reduced rate of interest has induced them to borrow more, so they will not add to or subtract from the inflationary effect.

Thus the net overall effect is that inflation rises. And that in turn means government has to impose some sort of deflationary measure, like raising taxes and thus robbing the citizenry of some of its stock of base money.

Thus the end result is that when banks create and lend out their home made money, taxpayers in general are robbed. That is, commercial banks' money creation is subsidised by the community at large. And that is very much what happens when traditional backstreet counterfeiters print imitation central bank notes and spend them: government has to compensate for the increased demand by robbing the community at large. (Incidentally and as already mentioned, Selgin (2012) also considers the hypothetical scenario where commercial banks are allowed to create money in an economy which was previously "base money only". However Selgin assumes that the resulting inflation is not controlled. But the end result is the same, namely that the citizenry are robbed via inflation rather than being robbed via tax, though that is not to suggest Selgin would agree with the basic thrust of this paper.)

It would be easy to have a system under which car manufacturers were the only issuers of money: they could use home made money to buy steel and so on. That would clearly be a subsidy of car manufacturers.

The main reason why money lenders, i.e. banks, manage to issue their own home made money is that money creation merges seamlessly with what they do anyway. That is, money lenders credit the accounts of borrowers. But under the existing system, there are no checks to determine whether banks are using their stock of central bank money to make loans, or whether they are simply lending out home made money.

Private money creation causes bank failures.

The second basic flaw in letting commercial banks create money is that it is precisely that money creation which makes banks fragile, as mentioned above, and as Diamond (1999) points out in his abstract. Put another way, it is "borrow short and lend long", i.e. maturity transformation, which enables private banks to create money. But that fragility is totally unnecessary because the state (i.e. central bank and government) can supply the economy with whatever amount of money is needed to bring about full employment. Thus private money creation would seem to be in check mate. It should of course be said that under the particular form of SM advocated above, i.e. where loans can be funded via relatively short term deposits (two months or so), there is still some maturity transformation. But it can be argued that since term deposits lasting two months or more are not really a form of money, that in fact no money creation takes place there. That may seem a bit of a fudge, but that apparent weakness in the argument here is not actually a weakness: it stems from the fact that there is no hard and fast definition of money, i.e. no sharp dividing line between money and non-money.

Conclusion.

Letting commercial banks create or "print" money amounts to a subsidy of those banks. Subsidies reduce GDP unless there is a good social reason for subsidies. Therefor commercial banks should be barred from creating money or at least that activity should be severely restricted.

Also it is the very fact of money creation by commercial banks which makes them prone to failure. The heavy costs involved in dealing with those failures are completely unnecessary because government and commercial banks can very easily create and distribute enough money to keep the economy at capacity. Ralph Musgrave is an economics blogger (<u>http://ralphanomics.blogspot.co.uk/</u>) and author of "The Solution is Full Reserve / 100% Reserve Banking" (<u>https://www.yumpu.com/en/document/view/57025889/fulresbk17</u> <u>9senttocrspto</u>).

References.

Bacchetta, P. (2018). The sovereign money initiative in Switzerland: an economic assessment. Swiss Journal of Economics and Statistics, 154(1), 3.

https://sjes.springeropen.com/articles/10.1186/s41937-017-0010-y

Benes, J., & Kumhof, M. (2012). The Chicago Plan Revisited, IMF Working Paper, 12/202.

https://sjes.springeropen.com/articles/10.1186/s41937-017-0010-y

Diamond, D. W., & Rajan, R. G. (2001). Liquidity risk, liquidity creation, and financial fragility: A theory of banking. Journal of political Economy, 109(2), 287-327. http://www.nber.org/papers/w7430 Dyson, B., Greenham, T., Ryan-Collins, R. & Werner, R.A. (2011) Towards a twenty-first century banking and monetary system. http://b.3cdn.net/nefoundation/3a4f0c195967cb202b_p2m6beqpy. pdf

Dyson, B. & Jackson, A. (2012) Modernising Money. London. Positive Money.

Friedman, M. (1948). A monetary and fiscal framework for economic stability. American Economic Review. https://miltonfriedman.hoover.org/friedman_images/Collections/20 16c21/AEA-AER_06_01_1948.pdf

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

Gomez, C. (2017). M. Bacchetta, the Swiss Banking Association and the Economic science: An ill-assorted Love Triangle. https://www.vollgeld-

initiative.ch/fa/img/English/2018_01_25_Christian_Gomez_Reply_Ba cchetta_The_Sovereign_Money_Initiative_in_Switzerland.pdf

Huber, J. & Robertson, J. (2000). Creating New Money. London. New Economics Foundation.

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

Huber, J. (2015) Split-circuit reserve systems in contrast to a singlecircuit sovereign money system.

https://www.sovereignmoney.eu/100-per-cent-reserve-chicago-plan

Huber, J. (2013) The Chicago Plan (100% Reserve) and a Single-Circuit Sovereign Money System.

https://www.sovereignmoney.eu/the-chicago-plan-100-per-centreserve-and-plain-sovereign-money/

Klein, M. (2013) The Best Way to Save Banking Is to Kill It.Bloomberg.https://www.bloomberg.com/view/articles/2013-03-27/the-best-

way-to-save-banking-is-to-kill-it

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

https://www.kotlikoff.net/files/consequences_vickers.pdf

Mosler, W. (2010) Proposals for the banking system. Huffington. http://www.huffingtonpost.com/warren-mosler/proposals-for-thebanking_b_432105.html

Mosler, W. and Forstater, M. (2004) The Natural Rate of Interest is Zero.

http://www.cfeps.org/pubs/wp-pdf/WP37-MoslerForstater.pdf

Pettifor, A. (2014) Why I disagree with Positive Money and Martin Wolf. Open Democracy.

https://www.opendemocracy.net/ourkingdom/ann-pettifor/why-idisagree-with-positive-money-and-martin-wolf

Phillips, R.J. (1999) Credit Markets and Narrow Banking. Levy Institute Working Paper No. 77.

https://papers.ssrn.com/sol3/papers.cfm?abstract_id=160532

Selgin, G. (2012). Is Fractional Reserve Banking Inflationary? Capitalism Magazine.

http://capitalismmagazine.com/2012/06/is-fractional-reservebanking-inflationary/