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Taxpayers Subsidise Private Money Creation.

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Abstract.

Publicly created money, i.e. base money, costs much less to produce than privately created money because amongst other things private banks have to check up on the credit worthiness of borrowers before supplying them with money. In contrast governments do not need to do those checks when creating and spending base money into the economy. It might be claimed that the cost of private money creation is the cost of organising loans and hence that the cost of private money creation as such is **not** particularly high. That claim does not stand inspection.

Despite the high cost of private money, it nevertheless manages to drive public money to near extinction (except in the current very low interest scenario). Reason is that private banks can create and lend out money at below the going rate of interest because they are not burdened with one of the main costs normally involved in lending, namely earning money and abstaining from consumption (so that borrowers **can consume.**)

When an economy is at capacity, the result of that extra lending is inflationary, so government has to withdraw base

money from the economy, i.e. rob taxpayers, in order to counteract the inflation, for example by cutting the deficit / raising the surplus or by raising interest rates. In short, private money printing is subsidised by taxpayers, and subsidies reduce GDP, unless there is a good reason for a subsidy.

The net result of letting private money displace base money is an artificially low rate of interest and an artificially high level of debt, plus GDP is reduced.

Thus GDP would be increased if privately issued money was banned, though its **complete elimination** is not necessary.

The central bank of a monetarily sovereign country (i.e. a country that issues its own currency) can create money at will: so called “base money”. Private banks also create a form of money as the opening sentences of a Bank of England publication explain (McLeay (2014)). That is, in the case of private banks, “loans create deposits” as the saying goes.

Publicly created money, i.e. base money, is inherently cheaper to produce than privately created money because private banks have to check up on the credit worthiness of those they supply money to, whereas governments do not

need to do those checks when creating and spending money into the economy. (The word “government” is used here to refer to government and central bank as one unit unless otherwise stated)

Indeed those costs involved in checking up on the credit-worthiness of borrowers are significant: in fact the **only reason** banks charge borrowers more than banks in turn pay to those who fund them (depositors, bond-holders, etc) is because of those costs, plus something for profit (i.e. a reward for shareholders). That difference in interest paid and interest charged is called “net interest spread” and just by way of illustration FDIC (2004) gives that spread for community banks in the US in 2003/4 as 3.79%.

The reason why competing private banks have to check up on the credit-worthiness of borrowers is that a private bank cannot afford to lend to customers who cannot repay loans. Too many of those non performing loans ultimately means the relevant bank becomes indebted to other banks, and eventually goes insolvent.

Thus if setting up an economy from scratch or converting from a barter to a money based economy for the first time, it would clearly be preferable to have publicly created money rather than privately created money.

Aggregate demand.

A further way in which public money is superior to private money is that when creating and feeding increasing amounts of public money into the private sector, there must come a point at which demand rises by enough to bring full employment. Witness the fact that when people win a lottery, they go on a spending spree.

The reason for that rise in demand, as advocates of Modern Monetary Theory keep pointing out is that base money is what MMTers call a “private sector net financial asset”. In contrast, privately created money is not a net asset as viewed by the private sector: in particular the private non-bank sector (the sector that does the spending). As the saying goes, private bank issued money “nets to nothing”.

Incidentally, private sector net financial assets are composed of two elements: base money and government debt. The latter, government debt, is simply a chunk of base money which government has borrowed, and there isn't much difference between those two elements. As Martin Wolf (2014) chief economics correspondent at the Financial Times put it, “Central-bank money can also be thought of as non-interest-bearing, irredeemable government debt. But 10-year Japanese Government Bonds yield less than 0.5 per cent. So the difference between the two forms of government “debt” is tiny...”

The conclusion of this section is that if an economy is set up with a private money system, it will still probably have to issue some public money.

A public money only economy results in a GDP maximising rate of interest.

Let's now assume that in a hypothetical economy being set up for the first time that enough money is issued to households and firms to induce them to spend at a rate that brings full employment. Assume also that, as in the real world, lending and borrowing take place. Some lending would be direct person to person or firm to firm, and some would be done via private banks, as in the real world.

Assume also (at least initially) that those who lend lose access to the money they have lent. That's the equivalent of what happens in a barter economy. That is, if someone on a desert island economy lends a fishing rod to someone else, the first person loses access to the fishing rod as long as the second is using it.

As long as those who lend (direct or via banks) lose access to their money while it is loaned out, private banks do not create money. But as soon as banks make the semi-fraudulent promise (which private banks in the real world make) namely that customers can retain access to their

money at the same time as it is loaned out, then private banks are into the money creation business.

That is, if £Y is deposited at a private bank and is then loaned on, then relevant lenders have £Y to play with, while depositors still see £Y on their bank statements: £Y has been turned into £2Y. So let's assume that that money creation trick carried out by private banks in the real world is not allowed initially.

There is no obvious reason why in that “public money only” regime interest rates would not settle down to some sort of genuine or optimum free market rate. In particular, a free market is one where the producers of each commodity bear the full cost of production, and in the case of loans, that means (first) that lenders suffer a loss when loans go wrong. Though lenders can always insure against those losses (for example via some sort of FDIC system). Second, it means that lenders forego consumption in order to enable borrowers to consume (as implied above).

Commercial banks begin to create money.

Having suggested above that the way private banks create money is to lend on depositors' money, there is actually a second way they create money, as follows.

Banks don't actually need depositors' money, or indeed bondholders' money or anyone's money before lending. Put

another way, if all of depositor's and bondholders' money is already loaned out, that doesn't stop a private bank lending out **even more**, as long as other private banks are doing likewise. Reason is that most of the money created ex nihilo and loaned out by one bank is deposited in other banks. Thus if every bank creates money approximately in proportion to its total assets or liabilities and lends it out, no individual bank will end up short of depositor or bondholder's money.

So let's assume that in our newly set up economy, private banks are allowed to create money via one or both the above methods. What they would then be doing is very much what the goldsmiths in London did 300 years ago when they loaned out receipts for gold well in excess of the gold they actually had in stock.

The banknotes issued by private banks in Britain up to 1844, when the issue of those notes by private banks was banned, came to the same thing as those goldsmith receipts. But that 1844 ban didn't make much difference because banks simply concentrated on creating money via book-keeping entries instead of creating it via physical notes. Likewise, in our hypothetical economy, whether private money creating banks create money in physical or book-keeping form doesn't matter.

Private banks cut the rate of interest.

Now there is a problem with lending out privately created money. The first is that on the above assumptions (full employment equilibrium, etc) all those who want to borrow at the prevailing rate of interest will already have done so. Thus there would seem to be no market for commercial banks' funny money.

Well there's a simple solution to that problem. The solution stems from the fact that it costs nothing for private banks to create money – just as it costs counterfeiters almost nothing to print money. That is, a money printing private bank does not need to endure the main cost that lenders normally endure, namely foregoing consumption. I.e. if you can, in effect, print \$100 bills and lend them out, well that's nice work if you can get it. And private banks can indeed "get it".

As Huber (2001) put it "Allowing banks to create new money out of nothing enables them to cream off a special profit. They lend the money to their customers at the full rate of interest, without having to pay any interest on it themselves. So their profit on this part of their business is not, say, 9% credit-interest less 4% debit-interest = 5% normal profit; it is 9% credit-interest less 0% debit-interest = 9% profit = 5% normal profit plus 4% additional special profit. This additional special profit is hidden from bank customers and the public, partly because most people do not know how the system works, and partly because bank balance sheets do not show

that some of their loan funding comes from money the banks have created for the purpose and some from already existing money which they have had to borrow at interest.”

Note that Huber refers to a slightly different situation to the one assumed in this paper. That is, Huber assumes the economy is working at **below** capacity, in which case commercial banks can indeed lend at the going rate of interest, while not paying the full cost that lenders normally pay. The alternative scenario (the one assumed in this paper) is that the economy **is at** capacity, in which case, as pointed out above, all viable loans that can be made will already have been made. In that case banks will have to lend at **below** the going rate of interest if they are to make extra loans. But that can still leave them with some of the illicit profit to which Huber refers.

At any rate, assuming banks do make the latter extra loans, that in turn gives rise to a problem, namely that people borrow money to **spend it**, and that additional spending will be inflationary (given the above starting assumptions).

Moreover, whoever receives that money will then have an excess stock of money and will try to spend it away, which adds to the inflationary pressure. Thus government has to implement some sort of compensating **deflationary** measure. For example it could raise taxes and rather than spend the money it collects, and simply extinguish that money. (That's actually the opposite of what governments have done since

the 2007/8 bank crisis, namely implement fiscal stimulus followed by QE – see the end of this article under the heading “Grab and extinguish” for more on that)

An alternative deflationary measure would be for government to remove base money from circulation by borrowing it off the private sector. But to pay interest, government would have to grab money off the private sector via tax, and tax is not a free market phenomenon (which is not to suggest that tax is never justified). Either way, to counteract the inflationary effect of the money created by private banks, government has to rob taxpayers.

The conclusion so far is that taxpayers subsidise private money creation.

Let inflation rip?

Re dealing with the above mentioned inflationary effect of private money printing, there is actually an alternative to grabbing money off taxpayers, and that is simply to let inflation rip until the real value of base money has been reduced to near nothing and is almost totally replaced with privately issued money. George Selgin (2012) actually describes that process, which is not suggest that he would agree with this paper.

In that case it is existing holders of base money who are robbed or who subsidise private money creation, rather than taxpayers. But that robbery / subsidy is equally unjustified.

So the net effect is that taxpayers or savers subsidise private banks' "print and lend out money" activity. And subsidies misallocate resources: they reduce GDP (unless there is some good social justification for the subsidy, or market failure can be proved). So the conclusion is that GDP would be higher if private money printing / creation was banned.

Bits of new economy are being created all the time.

The above hypothetical scenario - where an economy is set up from scratch or converts from barter to a money economy for the first time – might seem a bit unrealistic and of no relevance to the real world.

In fact what might be called "a bit of new economy" is **constantly** being set up in the sense that most economies are constantly expanding. And that raises the question as to what parallels there are between the above hypothetical scenario and the real world. Well the answer is that the parallels are very close.

That is, what governments effectively do all the time is to print new base money and spend it into the economy. Private banks then create more of their own money which displaces some of that new base money. I'll enlarge on that.

Contrary to popular perception, there is nothing new about governments creating and spending new money into the economy (aka helicopter drops). It's just that that process takes place via a circuitous route in the real world.

That is, governments (in the narrow sense of the word) are constantly borrowing, which tends to raise interest rates, and central banks are constantly printing new money and buying back that government debt so as to keep interest rates down. And whenever there is an excess supply of base money, private banks can do their "private money displaces public money trick" resulting in interest rates falling even further.

Governments and central banks of course are constantly juggling with that extra supply of base money, and with interest rates and so on. But the important point is that **overall** the stock of base money rises (unsurprisingly) to keep pace with rising GDP and inflation. In fact the US monetary base rose from \$33bn in 1950 to \$600bn in 2000. It then rose very much faster, as a result of QE, to \$4,000bn in 2014 (StLouis Fed (2016)).

So the basic process described here, namely "government creates base money, then private banks force government to convert some of that new money to privately issued money" goes on all the time.

Reverting to a “public money only” scenario.

Having argued that were an economy to be set up from scratch, the best option would be publicly issued money rather than private money, is it possible, given that private money is well entrenched, to revert to the former ideal? The answer is that it is easy to do so. It can be done by insisting that deposits do not appear on the liability side of the balance sheets of banks or bank subsidiaries / departments which lend. That would reduce lending and debts, and that deflationary effect would need to be countered. But that is easily done by simply creating and spending publicly produced money (base money) into the economy via tax cuts and/or public spending into the economy. That is, the base money which was so to speak robbed from taxpayers and the private sector in general in order to make room for privately issued money is returned to those taxpayers. And that reversion to a “public money only” regime is what is involved in full reserve banking.

Full reserve banking is a system under which the bank industry is split in two. One half accepts deposits which are supposed to be totally safe. To reflect that complete safety, depositors' money is simply lodged at the central bank. Though Milton Friedman (1960 Ch3) who advocated full reserve, thought that money should also be invested in short term government debt).

The second half lends to mortgagors, businesses and so on, but those funding that second half buy shares or relatively long term bonds in the relevant bank. Shares and bonds are not money, thus that second half of the industry does not create money.

Can the cost of private money creation be attributed to the cost of lending?

There might seem to be a weakness in the above argument, and that weakness stems in a sense from the well-known phrase “loans create deposits”. That possible weakness is thus.

When a private bank lends and creates money at the same time, it could be argued that the costs involved, like checking up on the value of collateral, are attributable to the lending process, not the money creation process, and hence that the costs of private money creation are not in fact any more than the costs of public money creation. Put another way, can't private money creation be said to be a free by-product of private banks' lending? The answer to that point (in ultra brief form) is that in fact private banks issue money without granting loans, and when they grant loans, they don't create money.

The reasons for that can be illustrated by imagining a hypothetical economy where (understandably) people and

firms want a supply of money with which to do day to day business, but no one wants a loan, particularly a **long term** loan.

Would private banks be able to supply what people and firms wanted? The answer is “yes”, and as follows.

Assume it is initially agreed what the basic money unit is (a gram of gold for example). Also assume our hypothetical economy, as has occurred in the real world over the last century or so, subsequently goes off the gold standard.

Assume banks open their doors and offer to credit money for anyone who wanted same. Obviously banks would demand collateral from less credit-worthy customers and/or charge them a higher than normal rate of interest.

Now at the moment when money is credited to someone's account, there is no net debt owed by anyone to anyone else. That is, there are two equal and opposite debts, as follows. Money is debt owed by a bank to a customer: if you have \$X in your bank, then the bank owes you \$X. So one debt is the debt owed to the customer. Second, a bank customer when supplied with a stock of money by a bank undertakes to give that money back at some point in the future. That's the second (equal and opposite) debt.

To summarise so far, at the moment that a bank supplies money to a customer, there is no **real** net debt. No loan has been made. That is, all the bank has done is make some

book-keeping entries: it has not transferred anything of **real value** to the relevant customer.

But as soon as the customer starts to spend money, a debt arises. That is, if one customer (Ms A) uses her money to buy goods or services from Mr B, A is then in debt to B with the bank acting as intermediary (assuming, to keep things simple, that A and B have accounts at the same bank). It now becomes relevant to talk about a **real debt** and the possibility of charging interest on that debt.

However, assuming (to repeat) that everyone is simply after a float or stock of money with which to do day to day business, peoples' bank accounts will bob up and down above and below the sum originally credited to their accounts. Reason is that money leaving one person's account must be paid into someone else's. (I've assumed, to keep things simple, there is no physical cash. Anyway, physical cash forms a minute proportion of the total amount of money in circulation.)

So on average over a month or so, no one will be in debt to anyone else.

Of course in that scenario, banks **could** charge interest to any customer whose balance dipped below the original amount of money supplied by the bank. But equally, that customer would be entitled to charge the bank interest when the balance was **above** the original balance. Banks and their customers could go for that interest arrangement.

Alternatively, it could make sense to dispense with the administrative cost of those interest payments as long as a particular account was not above or below the original balance on average over the year.

But whatever the arrangement, it remains true that assuming the balance on everyone's account remains on average at its original level, then no one is in debt to anyone else, and no one is in debt to a bank.

To be more accurate, banks would charge **all customers** for **administration costs**, but they would not charge them for what might be called "genuine interest".

And finally, the above hypothetical economy where people obtain so called loans, or more accurately, "a supply of money" from private banks with a view to simply having a float that enables them to get from one pay day to the next is not a completely unrealistic hypothesis. That is, in the real world, a proportion of so called loans obtained from private banks are for the latter purpose. And in the case of firms, they obtain so called loans not just to enable them to invest in new machinery and so on: the motive is partly just to tide them over from supplying goods to customers and being paid by those customers.

The conclusion of this section is that private banks can issue money **without** granting or organising any sort of loan in the normal sense of the word loan: in particular a long term loan. Banks would charge for that service, but those costs are

clearly attributable to money creation, not loan creation. Thus the above possible criticism of one of the basic ideas put here (that criticism being that the costs of private money creation can be attributed to the associated loan creation) does not stand inspection.

Banks start to grant real long term loans.

Now suppose, with a view to making the hypothetical economy more realistic, private banks start to grant long term loans. Bearing in mind the phrase “loans create deposits”, can it be said that those loans create deposits in the sense of creating money? The answer is “no”, and for the following reasons.

There are essentially two types of deposit: first there are current accounts (UK parlance) or “checking accounts” (US parlance), and second there are deposit accounts – also sometimes known as “term accounts”. And the **tendency** is for the contents of checking accounts to be counted as money, while the contents of term accounts tends not to be counted as money, though clearly there is no sharp dividing line between the two.

At any rate, when a bank grants a set of loans, the relevant money is spent, which raises aggregate demand. And assuming the economy is at capacity, that extra demand is not allowable. Thus some other set of people must **abstain**

from spending so as to keep AD constant. That abstinence can come in the form of robbing taxpayers as suggested above, or it can come in the form of some set of people **saving**, that is, putting their saved money into term accounts, where it will tend not to be counted as money.

Alternatively the saved money can just pile up in checking accounts and not get used. But that effectively comes to the same thing as dumping the money in term accounts. I.e. that surplus money is in effect a long term loan to a bank.

To summarize so far, a possible weakness in the basic argument set out here was proposed above to the effect that the cost of private money creation is actually the cost of granting loans, thus arguably, private money creation is no more costly than public money creation. The first answer to that is that private banks can create money **without** at the same time granting loans. In that instance, the cost of money creation obviously cannot be attributed to the cost of granting loans. Plus in that instance, private money creation is costly because of the need to check up on the credit-worthiness of bank customers. Moreover, when private banks grant genuine loans or long term loans, the tendency is for no money to be created in consequence.

Conclusion: private money costs more to create than publicly create money.

An alternative free market scenario.

It could be argued that there is a flaw in the initial assumptions above. That is, it was assumed that our hypothetical economy has a fiat style monetary base and that in turn assumes the existence of some sort of government and central bank to organise the monetary base, and governments and central banks are arguably not free market phenomena. To answer that criticism, let's consider what happens where there is no government apart from just enough "government" to maintain law and order.

In that scenario if private banks are free to print fiat money units and lend them out, there'd be no constraint on inflation (assuming no gold standard). Banks would just print away and when anyone entered a bank demanding something (like base money) in exchange for the bank's "100 unit" notes, the bank would simply say: "There's no base money. Go away."

So that scenario is just chaos. And that conclusion lends support to that common phrase "money is a creature of the state". In other words, the idea that it is possible to have a form of fiat money without government and without a gold standard or similar is just not on.

A gold monetary base.

In contrast to the above unworkable free market scenario, another and more realistic scenario is a gold monetary base

regime (or one based on any other rare metal). That was situation in Britain about 300 years ago when goldsmiths started hiring out gold receipts for non-existent gold.

Now the beauty of a gold base is that it blocks inflation (except of course where there is a big increase in the supply of gold, as happened in Europe when the Spanish brought large quantities of gold back from central America.) In fact the price of bread in Britain in 1900 was the same as it had been a hundred years earlier, in 1800.

In that zero inflation environment, private banks clearly cannot print limitless amounts of funny money and hope that the resulting inflation will get them out of trouble.

The actual history.

However, in the 1700s and 1800s, the amount of privately issued money expanded by leaps and bounds. That requires an explanation.

The explanation is that the 1700s and 1800s were periods of unprecedented economic growth – at least in Europe and North America. Growing economies need a growing money supply and private bank money printing met that need.

The alternative would have been to bar privately created money, which in turn would have meant deflation and falling

prices, which in turn would have made it economic to expand the monetary base by digging up more gold.

But a gold monetary base suffers from a defect: the high real costs of producing gold. Thus private money printers in the 1700s and 1800s did perform a useful service: they obviated those “high costs”.

But that does not mean that the best way of increasing the country’s money supply, given economic growth, is to have private banks print and lend out money. Reason is as follows.

The purpose of economic activity is to produce what people want, both by way of publicly produced items (roads, education, etc) and items people buy out of their disposable income (beer, cars, clothes, etc).

Thus when more money is required, there is no obvious reason to feed that extra money into the economy exclusively via more borrowing to fund investment than there is to feed it in via subsidies for cars, ice cream or lollipops, or spending more on education. Given that the basic purpose of the economy is to produce what people want (to repeat) and assuming there is scope for letting them have more of what they want, the logical course of action is give people more of what they want (in the case of publicly produced items) and/or plain old cash (e.g. tax cuts / helicopter drops) when it comes to items purchased out of disposable income. Moreover, employers will **automatically** invest more when they see the additional demand stemming

from tax cuts and more public spending. There's no need for any artificial encouragement to invest. As Prof J.K. Galbraith put it, "Firms invest when they can make money, not when interest rates are low."

To summarise, while the private money printing that took place in the 1700s and 1800s under a gold standard did serve a purpose (obviating the cost of digging up gold), that doesn't justify the printing of money by private banks in a non-gold standard or "fiat base money" regime.

What is a free market?

A further weakness in the idea that an economy with a powerful government and central bank is not a free market economy is that a free market is a regime where the most efficient producers survive and the less efficient or less cost effective producers go out of business.

Whether those producers are public sector or private sector is irrelevant. And it's clear that money creation can be done more cheaply by the public sector than the private sector. So in that sense, governments and central banks are successful free market entities.

As to why, in that case, there is so much privately created money in circulation, the answer (to recap) is that as soon as commercial banks have more base money than they need to settle up with each other they are then in a position to print

and lend out money at below the going or free market rate of interest. Indeed that's exactly how central banks cut interest rates: by increasing the stock of base money.

Alternatively, if the economy is at capacity and private banks create and lend out money, that (to repeat) causes excess inflation, which forces the state to grab base money off the private sector. Indeed that's exactly what happens when counterfeiters produce money: if there were no counterfeit money and counterfeiters managed to print and put their own money into circulation to the tune of X% of the money supply, then government would have to grab money off the private sector to the tune of roughly X% of the money supply to forestall inflation.

A low interest rate scenario.

Having said above that private money creation enables private banks to make loans by undercutting the going rate of interest, an exception to that comes where the free market rate of interest has dropped to very low levels, as seems to have happened recently. Indeed, interest rates have been falling for twenty years or so. In that case the scope that private banks have for undercutting the going rate of interest is diminished. And that helps explain why in recent years there has been a huge increase in the amount of base money, but very little inflation as a result.

Privately issued money gives private banks flexibility?

A popular argument in favour of letting private banks create and lend out money without their having to attract suitable amounts of money from depositors, bond-holders and so on, is that that gives banks the freedom to lend immediately to any particularly worthwhile projects that come their way.

The answer to that is that a bank can perfectly well allocate money to the MOST worthwhile looking projects while ignoring the less viable ones. Indeed, any bank with a grain of sense will already be doing that. Thus in practice, forcing banks to obtain funds before lending them out does not stop them lending to the most worthwhile looking firms or projects.

“Grab and extinguish”.

It was claimed above that where the state grabs money off the private sector via tax and extinguishes that money, that's the opposite of the fiscal stimulus combined with QE that has been implemented in recent years. The reason for that is quite simple and is thus.

Fiscal stimulus consists of government borrowing \$X, spending that back into the economy and giving \$X of bonds to those it has borrowed from. QE consists of the state printing money and buying back those bonds. So the net effect is: “the state prints money and spends it”.

“Grab and extinguish” is the opposite of that. I.e. the state, instead of spending money into the economy, takes money **away from** the economy and “unprints” it, i.e. extinguishes it.

Conclusion.

Public money (base money) is inherently cheaper to produce than privately created money. However private money printers / issuers can get round that because they can lend at an artificially low rate of interest because they do not need to carry one of the main costs normally involved in lending, namely abstaining from consumption.

Letting any private sector entity print or create money is a subsidy of that entity because taxpayers have to be robbed to prevent the inflation that would otherwise occur. That point applies both to respectable private banks and backstreet counterfeiters. In other words it doesn't matter whether the private sector money creator **lends out** the money created or whether it simply spends it (which is what counterfeiters do): in both cases taxpayer – citizens subsidise the private money creator.

The normal assumption in economics is that subsidies misallocate resources and reduce GDP (except where a subsidy can be justified on social grounds or because of market failure). Since there is no obvious crying social justification for allowing private money creation, it follows

that if private money creation were abolished, GDP would rise in consequence.

But that is not to suggest that **every form** of privately issued money should be abolished. There are minor forms of private money which probably do very little harm and quite possibly do some good: local currencies for example. Plus there are small shadow banks which will doubtless always get away with a small amount of money creation. However, their liabilities are not widely accepted, thus it is debatable as to whether they are able to create money at all.

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