Fractional Reserve banking and boom-bust cycles

By Dr Frank Shostak

In his various writings Murray Rothbard argued that in a free market economy that operates on a gold standard the creation of credit that is not fully backed up by gold (fractional reserve banking) sets in motion the menace of the boom-bust cycle. In his The Case for 100 Percent Gold Dollar Rothbard wrote,

> I therefore advocate as the soundest monetary system and the only one fully compatible with the free market and with the absence of force or fraud from any source a 100 percent gold standard. This is the only system compatible with the fullest preservation of the rights of property. It is the only system that assures the end of inflation and, with it, of the business cycle.[1]

Prominent Austrian School of economics economists George Selgin and Lawrence White have contested this view. In his article in The Independent Review, Summer 2000 George Selgin argued that it is not true that fractional reserve banking must always set in motion the menace of the boom-bust cycle.

According to Selgin,

> In truth, whether an addition to the money stock will aggravate the business cycle depends entirely on whether or not the addition is warranted by a pre-existing increase in the public's demand for money balances. If an expansion of the supply of bank money creates an overall excess of money, people will spend the excess. Borrowers' increased spending will, in other words, not be offset by any corresponding decline in spending by other persons. The resulting stimulus to the overall level of demand for goods, services, and factors of production, together with changes in the pattern of spending prompted by an artificial lowering of interest rates, will have the adverse business-cycle consequences described by the Austrian theory.[2]

However, argues Selgin, no business-cycle will emerge if the increase in the money supply is in response to a previous increase in the demand for money.

> Such an expansion, instead of adding to the flow of spending, merely keeps that flow from shrinking, thereby sustaining normal profits for the "average" firm. The expansion therefore serves not to trigger a boom but to avoid a bust. As far as business-cycle consequences are

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[1] Murray N. Rothbard – The Case For A 100 Percent Gold Dollar, Cobden Press 1984.

[2] George Selgin – Should We Let Banks Create Money?, The Independent Review, Summer 2000 p 93-100.

> concerned, it makes no difference whether the new money is or is not backed by gold.[3]

Likewise in their joint article Selgin and White wrote,

> We deny that an increase in fiduciary media matched by an increased demand to hold fiduciary media is disequilibrating or set in motion the Austrian business cycle.[4]

Note that Selgin and White raise several issues here. First, for them the business cycle emerges only if the increase in the supply of money exceeds the increase in the demand for money.

Second, a bust is set in motion if an increase in the demand for money is not matched by a corresponding increase in the supply of money.

Finally Selgin and White imply that an increase in the supply of money, which is fully backed up by gold, in excess of the demand for money, will also trigger the menace of a boom-bust cycle.

Money out of "thin air" and boom-bust cycle

According to Selgin and White it would appear that if counterfeit money enters the economy in response to an increase in the demand for money no harm will be done. In other words, the increase in the supply of money is neutralised so to speak by an increase in the demand or the willingness to hold a greater amount of money than before. As a result the counterfeiter's newly pumped money won't have any effect on spending and therefore no boom-bust cycle will be set in motion. But does it make sense? What do we mean by demand for money? And how this demand differs from demand for goods and services?

Now, demand for a good is not a demand for a particular good as such but a demand for the services that the good offers. For instance, individuals' demand for food is on account of the fact that food provides the necessary elements that sustain an individuals life and well being. In other words, demand here means that people want to consume the food in order to secure the necessary elements that sustain life and well being.

Also, the demand for money arises on account of the services that money provides. However, instead of consuming money people demand money in order to exchange it for goods and services. With the help of money various goods become more marketable – they can secure more goods than in the barter economy. What enables this is the fact that money is the most marketable commodity.

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[3] Ibid.

[4] George Selgin and Lawrence White. In Defense of Fiduciary Media; or, We Are Not Devolutionists, We Are Misesians! Review of Austrian Economics 1996, 9:83-107.

An increase in the general demand for money, let us say, on account of a general increase in the production of goods, doesn’t imply that individuals’ sit on the money and do nothing with it. As we have seen the reason an individual has a demand for money is in order to be able to exchange money for other goods and services.

In the process of exercising their demand for money some individuals lower their demand by exchanging their money for goods and services whilst other individuals raise their demand for money by exchanging goods and services for money. Note that whilst overall demand did not change individuals’ demand did change. We will show below that it is individuals’ demand and not the overall demand for money is what matters in setting boom bust cycles.

Some holders of money may lend the money to some other individuals in return for an IOU. By accepting the IOU the lenders are relinquishing their claims on final consumer goods and services for the duration of the loan to borrowers. The borrowers can now exchange the money for goods and services they require. (Note that the existence of banks helps to match between lenders and borrowers).

Now let us assume that for some reason some individuals demand for money has risen. One way to accommodate this demand is for banks to find willing lenders of money. In short, with the help of the mediation of banks willing lenders can transfer their gold money to borrowers. Obviously such a transaction is not harmful to any one.

Another way to accommodate the demand is instead of finding willing lenders the bank can create fictitious money – money unbacked by gold - and lend it out.

Note that the increase in the supply of newly created money is given to some individuals. There must always be a first recipient of the newly created money by the banks.

This money, which was created out of “thin air”, is going to be employed in an exchange for goods and services i.e. it will set in motion an exchange of nothing for something. The exchange of nothing for something amounts to the diversion of real wealth from wealth to non-wealth generating activities, which masquerades as economic prosperity. In the process genuine wealth generators are left with fewer resources at their disposal, which in turn weakens the wealth generators’ ability to grow the economy.

Once banks curtail their supply of credit out of “thin air”, this slows down the process of an exchange of nothing for something. This in turn undermines the existence of various false activities that sprang up on the back of the previous expansion in credit out of “thin” air - an economic bust emerges.

We can thus conclude that what sets in motion the boom-bust cycle is the expansion of credit out of “thin air” regardless of the state of the general demand for money. Again, irrespective of whether the total demand for money

is rising or falling what matters is that individuals employ money in their transactions. As we have seen once money out of ‘thin air’ is introduced into the process of exchange this lays the foundation for the boom bust cycle.

Contrary to Selgin and White we can further infer that it is not the failure to accommodate the increase in general demand for money that causes an economic bust, but actually the accommodation by means of money out of “thin air” that does it.

Does an increase in commodity money in relation to demand cause boom-bust cycles?

The introduction of money made it possible for individuals to specialise and engage in trade on a much wider scale than the barter economy would have permitted.

In the early stages of the emergence of money it was an ordinary commodity that people demanded because it contributed some tangible benefits to their life and well being. In other words, people already attached some importance to this commodity. In addition to offering benefits pertinent to this commodity people also discovered that this commodity, let us call it X, had some other features that made it more marketable than other commodities. For instance, commodity X is durable and it is also portable. The various producers of perishable goods found that it was to their benefit to exchange their produce for commodity X and then use commodity X in exchange for other goods.

Would an increase in the supply of X, in response to an increase in the demand for X, undermine the process of real wealth formation? The answer is no. Since X is a commodity it implies that individuals attach importance to it on account of the benefits it offers. So the fact that producers of this commodity derive a much greater benefit than otherwise on account of the fact that X is also demanded as a medium of exchange is no different from any other commodity which for some reason suddenly experiences much stronger demand than before.

Now, if all of a sudden the supply of X were to increase sharply in excess of demand, people would find that its purchasing power would fall and this in turn would diminish its marketability. Should this persist, the demand for X as a medium of exchange would decline and people would seek the services of another commodity as a medium of exchange. Once a commodity loses its appeal as the medium of the exchange it remains in demand for its other attributes. However, all this is not going to set the boom-bust menace in motion.

Now the introduction of paper money, which is fully redeemable into commodity X, doesn’t alter anything we have said so far. Paper money should be seen as a receipt or a claim on the commodity X. So whenever this certificate is exchanged for goods and services the seller of these goods acquires a claim on X while the seller of the claim acquires goods and

services. Note that in the process of the exchange useful goods have been traded.

This is however, not so when a bank prints a certificate which is unbacked by X. The bank then lends this unbacked certificate to some individual. What we have here is a claim on money that was created out of “thin air”. Note that in the case of a fully backed certificate an exchange of useful goods takes place i.e. something useful is exchanged in return for something useful. In the case of unbacked certificate we have a situation that once this certificate is employed in an exchange it leads to an exchange of nothing for something useful. We have shown above that the exchange of nothing for something is what sets in motion the menace of the boom-bust cycle.

We can thus conclude that in contrast to money out of “thin air”, a market chosen money can never be harmful to individuals well being – it cannot set in motion the menace of boom bust cycle. An increase in the supply of fully backed money in relation to demand will only lead to a fall in the purchasing power of money. This however, will not give rise to a misallocation of resources and to the boom-bust cycle. Again, an increase in the excess supply of proper money doesn’t set in motion an exchange of nothing for something. (We still retain here the act of an exchange of some useful goods for some other useful goods). Contrary to Selgin and White then, as far as the business cycle is concerned of course it matters whether the new money is or is not fully backed up by gold.

Selgin also maintains that fractional reserve banking (the creation of money out of “thin air”) was responsible for the industrialization of developed countries.

> According to many scholars, including Adam Smith, the industrialization of the West and of developed countries elsewhere was crucially dependent on funds mobilized by fractional reserve banks. Other nations’ failure to industrialize has to a significant extent been due to their repressive financial legislation, including laws (typically aimed at enhancing central bank profits) forced banks to maintain needlessly high reserve ratios.[5]

This does not make much sense once it is realized that fractional reserve banking (creation of money out of “thin air”) is actually instrumental in creating the dilution of real wealth formation and boom-bust cycles. After all if fractional reserve banking is an important source of wealth formation surely world poverty should have been eliminated a long time ago.

It seems that Selgin is confusing funding with money. What gives rise to the expansion of real wealth is the expansion in the pool of real savings. It is real savings that funds the making of various capital goods i.e. tools and machinery. In short, it is real savings that sustain various individuals that are engaged in various stages of production. All that money does in all of this is to

[5] George Selgin – Should We Let Banks Create Money?, The Independent Review, Summer 2000 p 93-100.

provide the facility of the medium of the exchange. It makes it possible for individuals to exchange goods and services.

The services of money are not enhanced on account of its greater supply. If anything the increase in the supply undermines the services of money. After all when people's demand for money rises they don't want more money as such but rather more purchasing power – it is the increase in the purchasing power of money that makes goods and services more marketable. The increase in the supply of money only prevents an increase in the purchasing power of money from taking place.

According to Mises,

> The services money renders are conditioned by the height of its purchasing power. Nobody wants to have in his cash holding a definite number of pieces of money or a definite weight of money; he wants to keep a cash holding of a definite amount of purchasing power.[6]

Conclusion

Also, on a gold standard - contrary to Selgin and White - fractional reserve banking will always set the platform for boom-bust cycles. The main problem in Selgin and White analysis is that they look at the demand for money from a macro perspective rather than from the perspective of the individual. In short, Selgin and White macro-analysis forces them to ignore the misallocation of resources that unbacked credit expansion produces.

[6] Ludwig von Mises, Human Action, 3rd rev.ed. (Chicago: Contemporary Books, 1966) p 421.