Mish & Steve Debate: Steve Says (I)

I've just taken time-out from the pre-conference social event at the Central Bank of Turkey annual conference, and (as enjoyable as that function was) it's lucky that I did: Mish Shedlock has followed up on some criticisms of my "Modern Debt Jubilee" proposal with a post on real solutions for the debt crisis. I will try to reply to Mish's follow-up before I turn in for the night here in Cappadocia.

Firstly, some praise: Mish and I come from very different perspectives—Austrian versus Post Keynesian—but throughout this crisis, we've learnt from each other a great deal, and exchanged respectfully. When we differ, we try to ascertain why—which is in stark contrast to how Paul Krugman reacted to criticism. We became friends before we had any reason to disagree in public, and I'm sure we'll be friends on the other side of this debate.

The key excerpts from Mish's alternative to my proposal are as follows:

> **Structural Issues**
>
> Giving money away will not cure any structural issues such as the high cost of education, pension underfunding, medical costs, prevailing wages, student loans, etc., etc.
>
> Indeed, I think it would compound those problems.
>
> Likewise, I think the second part of Keen's idea about controlling debt in the future tied to GDP growth (or anything else for that matter) would fail miserably.
>
> A free market, not government mandated fiat money is the solution. We certainly do not have a free market now. Instead, we have fiat mandate, compounded by fraudulent fractional reserve banking.
>
> It is the fractional reserve banking system that is the very root of the credit expansion problem.
>
> **Fractional Reserve Lending Is Fraud**
>
> By lending out more money or gold than exists, asset prices reach unsustainably high levels before they crash. Sound familiar?...
>
> For more on the case against Fractional Reserve Lending please see
> **Fractional Reserve Banking** by Murray Rothbard.
>
> **Case Against The Fed** by Murray Rothbard
>
> On page 46 of the book *Case Against The Fed* Rothbard says "*B*y the very nature of fractional Reserve Lending, banks cannot honor all its contracts".

Since that is known upfront, in advance, how is that not fraud?

Solutions

Before we can address solutions to the debt problem, we have to understand what caused the debt problem in the first place. In this case, FRL is at the heart of it.

Since FRL is at the heart of it, any permanent solution must address that problem.

I propose we start by addressing the root cause of the debt problem which I state is fractional reserve lending.

Not a Transition Plan

My first observation here is that, even if I believed that Mish were correct, his is not a transition plan: this is a plan for an alternative system. But how do we make the move from where we are now, to an alternative?

Let's imagine that we do, one day, make the transition from the system Mish describes as "Fractional Reserve Banking" to one that is fully backed by gold. The day before that transition, one individual—say, someone called Jamie perhaps—may have a net claim to $10 billion worth of fiat-backed money. Someone else—say, Ma Kettle—might be effectively bankrupt with $10,000 more mortgage debt than assets. It may be too that Jamie's immense wealth arose from persuading millions of people like Ma and her relatives to take out a reverse mortgage, or some other form of innovative lending that was popular in the pre-gold days.

How do we make the transition? Do we give Jamie $10 billion worth of gold-backed money, and saddle Ma with $10,000 of gold-based debt? Or what?

This is what my "Modern Debt Jubilee" proposal is about. We currently have a dysfunctional financial system that has imposed unconscionable debt burdens upon some, and created enormous Ponzi-based wealth for others. Do we simply accept that, and move to a new system which allegedly won't have the flaws of the previous system, but sustain the distribution of wealth that resulted from that flawed system? Or do we reduce that unfairness under the current system before we move to a new one?

That is what my "Modern Debt Jubilee"—or "Quantitative Easing for the Public"—proposal is about. By injecting money under the current system into the bank accounts of bank customers (rather than into their reserves as under actual QE), and requiring that the injection be first used to pay down debts, it would dramatically reduce the income and wealth of the finance-sector, while being even-handed in its treatment of borrowers and savers. That would minimize—but far from eliminate—the damage done by the current system, before any transition occurred.

To make a transition to a new monetary system, without minimizing the problems caused by the previous system, would potentially doom that new system to failure, regardless of its merits.

Not a Fractional Reserve System

My second observation is that we don't live under a Fractional Reserve System at all; we live under a private banking system in which there is a Central Bank that once sort-of attempted, unsuccessfully, to regulate private lending by imposing a ratio requirement between private bank money creation and government-created reserves.

I say "once sort-of attempted" because the Fed long ago amended its reserve requirements (see Table 12 in O'Brien, Y.-Y. J. C., 2007. Reserve Requirement Systems in OECD Countries.) so that they apply only to household deposits, and because *there is a lag between deposits and reserves of 30 days*: reserve requirements are based on loans and deposits existing 30 days earlier. This means that, as the European Central Bank recently politely put it in relation to its system:

> In fact, the ECB's reserve requirements are backward-looking, i.e. they depend on the stock of deposits (and other liabilities of credit institutions) subject to reserve requirements as it stood in the previous period, ***and thus after banks have extended the credit demanded by their customers***. (ECB 2012, p. 21, emphasis added)

I say "unsuccessfully" because, as a sensible New York Fed Vice-President admitted decades ago, the actual practice of banking, combined with the lagged nature of the reserve requirement, means that loans determine deposits and reserves follow relatively passively afterwards—the reverse of the argument that people who believe we live in a fractional reserve banking system actually put (ranging from Milton Friedman in the 1960s to critics like Mish today):

> The idea of a regular injection of reserves … also suffers from a naive assumption that the banking system only expands loans after the System (or market factors) have put reserves in the banking system. ***In the real world, banks extend credit, creating deposits in the process, and look for the reserves later***… the reserves required to be maintained by the banking system are predetermined by the level of deposits existing two weeks earlier. (Holmes 1969, p. 73)

(Note that in the 1960s, there was a 2 week lag. Now, with a modern banking system using sophisticated computer technology, we have … a 30 day lag. Guess why!)

Mish has thus embraced the "loans create deposits" and "loans and deposits precede lags" aspects of the empirically-based Post Keynesian analysis of money, without quite realizing that this means the model of Fractional Reserve Banking (*FRB*) is a false model of what currently happens. Instead of *FRB* explaining how banks are "lending out more money or gold than exists", something else has to explain that phenomenon.

That something else is the capacity of private banks to create money, and this capacity exists even under a system of "A free market, not government mandated fiat money". So abolishing "Fractional Reserve Banking" won't eliminate the capacity of banks to "lend out more money or gold than exists", or more strictly speaking, to create money "out of nothing".

Money creation by private banking

There's a fairly simple way to show from double-entry accounting that banks can't lend from reserves, and that a system of pure private banking can result in banks creating money. I'll start from the standard Post Keynesian analysis of money, which was developed to try to explain the empirical data on debt and money creation. It states in its simplest form that "loans create deposits". The next table states this basic argument in an absolutely parsimonious way, following the accounting convention that an increase in assets is shown as a plus and an increase in liabilities is shown as a minus:

Figure 1

$$S_{PK} := \begin{pmatrix} \text{"Priv. Bank"} & A_T & \text{Liab} & \text{Equity} \\ \text{"Account"} & \text{"Loans"} & \text{"Firms"} & \text{"Equity"} \\ \text{"Type"} & \text{Ledger} & \text{Money} & \text{Ledger} \\ \text{"Value"} & 0 & 0 & 0 \\ \text{"Symbol"} & L_F(t) & D_F(t) & E_B(t) \\ \text{"Make Loan"} & \text{Loan} & -\text{Loan} & 0 \\ \text{"Repay"} & -\text{Repay} & \text{Repay} & 0 \end{pmatrix}$$

This implies that banks can create money indefinitely, so long as the rate of creation of new loans exceeds the rate of repayment of old ones:

Figure 2

$$\text{ODEs}(S_{PK}) \rightarrow \begin{pmatrix} \frac{d}{dt}L_F(t) = \text{Loan} - \text{Repay} \\ \frac{d}{dt}D_F(t) = \text{Loan} - \text{Repay} \\ \frac{d}{dt}E_B(t) = 0 \end{pmatrix}$$

The more conventional--but not empirically derived--"Fractional Reserve Banking" model argues that banks need reserves from which to lend. But even if we start from a model in which banks lend from reserves, we can't get the outcome that reserves play any part in lending and remain consistent with double-entry bookkeeping. The dilemma is that to make a transfer from Assets to Liabilities, the sum in accounting terms must be zero: the change in assets (where an increase is shown as a plus) must be balanced by the change in liabilities (where an increase is shown as a minus).

So a direct loan from Reserves to a Depositor's account is simply impossible: that would involve a minus on the assets side and a plus on the liabilities side, which means that the deposit has fallen, not risen!

A way around that is to record that is a two step (but simultaneous) process in which (a) the bank earmarks the money for a loan by increasing its loan ledger and decreasing its reserves and (b) lends from reserves to the borrower's deposit account. That two-step process, together with repayment in the same way, is shown in the following table.

Figure 3

$$S_{FRB} := \begin{pmatrix} \text{"Priv. Bank"} & A_T & A_T & \text{Liab} & \text{Equity} \\ \text{"Account"} & \text{"Loans"} & \text{"Bk Reserves"} & \text{"Firms"} & \text{"Equity"} \\ \text{"Type"} & \text{Ledger} & \text{Money} & \text{Money} & \text{Ledger} \\ \text{"Value"} & 0 & Eq_{Init} & 0 & -Eq_{Init} \\ \text{"Symbol"} & L_F(t) & R_B(t) & D_F(t) & E_B(t) \\ \text{"Commit Loan"} & \text{Loan} & -\text{Loan} & 0 & 0 \\ \text{"Make Loan"} & 0 & \text{Loan} & -\text{Loan} & 0 \\ \text{"Repay"} & 0 & -\text{Repay} & \text{Repay} & 0 \\ \text{"Repay"} & -\text{Repay} & \text{Repay} & 0 & 0 \end{pmatrix}$$

That results in the following system, in which reserves play no part: all the action is between loans and deposits. We're back to a system which, apart from an extra account, is otherwise exactly the same model as the parsimonious Post Keynesian one.

Figure 4

$$\text{ODEs}(S_{FRB}) \rightarrow \begin{pmatrix} \frac{d}{dt}L_F(t) = \text{Loan} - \text{Repay} \\ \frac{d}{dt}R_B(t) = 0 \\ \frac{d}{dt}D_F(t) = \text{Loan} - \text{Repay} \\ \frac{d}{dt}E_B(t) = 0 \end{pmatrix}$$

Another way to involve reserves and try to make them part of the system is to argue that banks lend from liabilities rather than assets, and that one of its liabilities is a working capital reserve--the banking sector's own liabilities to itself. Then you can derive a system which appears to show that banks lend from reserves:

Figure 5

$$S_{PB1} := \begin{pmatrix} \text{"Priv. Bank"} & A_T & A_T & \text{Liab} & \text{Liab} & \text{Equity} \\ \text{"Account"} & \text{"Loans"} & \text{"Bk Reserves"} & \text{"Working Capital"} & \text{"Firms"} & \text{"Equity"} \\ \text{"Type"} & \text{Ledger} & \text{Money} & \text{Money} & \text{Money} & \text{Ledger} \\ \text{"Value"} & 0 & Eq_{Init} & -Eq_{Init} & 0 & 0 \\ \text{"Symbol"} & L_F(t) & R_B(t) & WC_B(t) & D_F(t) & E_B(t) \\ \text{"Make Loan"} & 0 & 0 & \text{Loan} & -\text{Loan} & 0 \\ \text{"Record Loan"} & \text{Loan} & -\text{Loan} & 0 & 0 & 0 \\ \text{"Repay"} & 0 & 0 & -\text{Repay} & \text{Repay} & 0 \\ \text{"Record Repay"} & -\text{Repay} & \text{Repay} & 0 & 0 & 0 \end{pmatrix}$$

Now we have a model in which reserves do play a part in lending:

Figure 6

$$\text{ODEs}(S_{PB1}) \rightarrow \begin{pmatrix} \frac{d}{dt}L_F(t) = \text{Loan} - \text{Repay} \\ \frac{d}{dt}R_B(t) = \text{Repay} - \text{Loan} \\ \frac{d}{dt}WC_B(t) = \text{Repay} - \text{Loan} \\ \frac{d}{dt}D_F(t) = \text{Loan} - \text{Repay} \\ \frac{d}{dt}E_B(t) = 0 \end{pmatrix}$$

However there's a problem with this representation: the second row implies that the amount of money in the system (the liabilities of the banking sector) fall becase of the loan. But they don't: instead the first row shows that the liabilities are simply transferred from the banking sector's working capital to the Firm sector's deposit accounts. So the second row actually makes a false claim (there may well be a fall in one bank's reserves and an increase in another's if a loan is made by one bank and deposited in another; this transfer of funds within the banking sector is one of the main reasons for reserves, and also why they normally run at "frictional" levels).

This is why Neil Wilson suggested that we had to add an intangible asset--the value of the licence to be a bank--to the accounts. Then a loan could be shown as an exercise of the banks' intangible asset.

Figure 7

$$S_{PB2} := \begin{pmatrix} \text{"Priv. Bank"} & A_I & A_T & A_T & \text{Liab} & \text{Liab} & \text{Equity} \\ \text{"Account"} & \text{"Goodwill"} & \text{"Loans"} & \text{"Bk Reserves"} & \text{"Working Capital"} & \text{"Firms"} & \text{"Equity"} \\ \text{"Type"} & \text{Ledger} & \text{Ledger} & \text{Money} & \text{Money} & \text{Money} & \text{Ledger} \\ \text{"Value"} & GW_{Init} & 0 & Eq_{Init} & -Eq_{Init} & 0 & -GW_{Init} \\ \text{"Symbol"} & G_B(t) & L_F(t) & R_B(t) & WC_B(t) & D_F(t) & E_B(t) \\ \text{"Make Loan"} & 0 & 0 & 0 & \text{Loan} & -\text{Loan} & 0 \\ \text{"Record Loan"} & -\text{Loan} & \text{Loan} & 0 & 0 & 0 & 0 \\ \text{"Repay"} & 0 & 0 & 0 & -\text{Repay} & \text{Repay} & 0 \\ \text{"Record Repay"} & \text{Repay} & -\text{Repay} & 0 & 0 & 0 & 0 \end{pmatrix}$$

So this is closer to the mark--and once again reserves play no role in lending:

Figure 8

$$\text{ODEs}(S_{PB2}) \rightarrow \begin{pmatrix} \frac{d}{dt}G_B(t) = \text{Repay} - \text{Loan} \\ \frac{d}{dt}L_F(t) = \text{Loan} - \text{Repay} \\ \frac{d}{dt}R_B(t) = 0 \\ \frac{d}{dt}WC_B(t) = \text{Repay} - \text{Loan} \\ \frac{d}{dt}D_F(t) = \text{Loan} - \text{Repay} \\ \frac{d}{dt}E_B(t) = 0 \end{pmatrix}$$

But now we have a banking sector that is happily marking the value of its goodwill down to zero as its loans increase. What if instead--bearing in mind that this is a model of a private banking system--the banking sector kept the recorded value of its goodwill constant? How could it do that? It could add a positive sum to its Goodwill to offset the Loan, and a negative to its working capital--so that it creates new money by creating a loan.

Figure 9

$$S_{PB3} := \begin{pmatrix} \text{"Priv. Bank"} & A_I & A_T & A_T & \text{Liab} & \text{Liab} & \text{Equity} \\ \text{"Account"} & \text{"Goodwill"} & \text{"Loans"} & \text{"Bk Reserves"} & \text{"Working Capital"} & \text{"Firms"} & \text{"Equity"} \\ \text{"Type"} & \text{Ledger} & \text{Ledger} & \text{Money} & \text{Money} & \text{Money} & \text{Ledger} \\ \text{"Value"} & GW_{Init} & 0 & Eq_{Init} & -Eq_{Init} & 0 & -GW_{Init} \\ \text{"Symbol"} & G_B(t) & L_F(t) & R_B(t) & WC_B(t) & D_F(t) & E_B(t) \\ \text{"Make Loan"} & 0 & 0 & 0 & \text{Loan} & -\text{Loan} & 0 \\ \text{"Record Loan"} & -\text{Loan} & \text{Loan} & 0 & 0 & 0 & 0 \\ \text{"Restore Goodwill"} & \text{Loan} & 0 & 0 & -\text{Loan} & 0 & 0 \\ \text{"Repay"} & 0 & 0 & 0 & -\text{Repay} & \text{Repay} & 0 \\ \text{"Record Repay"} & \text{Repay} & -\text{Repay} & 0 & 0 & 0 & 0 \\ \text{"Restore Goodwill"} & -\text{Repay} & 0 & 0 & \text{Repay} & 0 & 0 \end{pmatrix}$$

We now have a system which is much more complicated, but which dynamically reduces back to the same parsimonious Post Keynesian one we started with.

Figure 10

$$\text{ODEs}(S_{PB3}) \rightarrow \begin{pmatrix} \frac{d}{dt}G_B(t) = 0 \\ \frac{d}{dt}L_F(t) = \text{Loan} - \text{Repay} \\ \frac{d}{dt}R_B(t) = 0 \\ \frac{d}{dt}WC_B(t) = 0 \\ \frac{d}{dt}D_F(t) = \text{Loan} - \text{Repay} \\ \frac{d}{dt}E_B(t) = 0 \end{pmatrix}$$

So the bottom line here is that eliminating "Fractional Reserve Banking" does nothing to eliminate the capacity for banks to create money: that will exist in a purely free market system just as much as it does today.

There are also very good arguments, from a very good Austrian—Joseph Schumpeter—that this capacity to create money is a necessary part of the entrepreneurial process that makes capitalism a dynamic system. My other proposals, Jubilee Shares and "The PILL", are intended to minimize the dangerous use to which bank money creation is put—financing Ponzi Scheme bubbles in asset prices—and maximize this creative use of that power.

OK; it's now the morning, and after another jetlagged sleep I have to present a conference paper in 4 hours. I'll leave my contribution at this point and await Mish's reply.