Full Reserve Banking: solving the problem of public debt and the positive interest-rate-growth-differential through debt-free money?

Short Abstract

In the post-growth debate a rising number of authors advocate monetary reforms (100%-Money, Full Reserve Banking), whose intention it is to prevent banks from creating deposits and establish the central bank as the sole issuer of money. This paper investigates the macroeconomic consequences of issuing debt- and interest-free money. A central issue in the context of a non-growth economy is the reduction of interest-rate-growth-differential. From a monetary-Keynesian perspective, we conclude that these reforms rather lead to higher interest rates and therewith worsen the conditions of reaching a stationary economy.

Long Abstract

Some authors in Ecological Economics supported monetary reforms, which would prevent banks from creating deposits and establish the central bank as the sole issuer of money, known as Full Reserve Banking, Positive Money or 100% Money (Farley et al., 2013; Douthwaite, 2012; Jackson, Dyson and Hodgson, 2013). Besides expectations about better financial stability and smoother business cycles, the proponents also proclaim for lower public debt and lower interest-rates. The latter should be achieved through issuing debt- and interest-free money.

The reform concepts are increasingly criticized from a post-Keynesian viewpoint (Dittmer, 2015; Cahen-Forout, 2014), but the question whether the concepts could solve the problem that long term interest rate level exceed the growth rate remains unexplored. In our paper we will contribute to closing that gap focusing on the problem of public debt and the positive interest-rate-growth-differential We will investigate to what extent debt- and interest-free money could mitigate or solve this problem and will study the role of public debt.

As Loehr pointed out (2012), according to the “golden rule of capital accumulation” (Phelps, 1961) the consumption of the economy is then maximized, when the real interest rate r is equal to the growth rate g. Kimmich and Wenzlaff (2012, 2013) looked at empirical data and found evidence for persistent higher long term interest rates than growth rates from the 1980thies until today. Theoretically they found also other explanations for the necessity of $r=g$. With a positive interest-rate-growth-differential a higher level of GDP is needed to compensate raising inequality, unemployment and government debt.

As an explanation for $r>g$ itself, Loehr and also Kimmich and Wenzlaff identified the liquidity preference of the wealth owners as a crucial variable. We want to deliver another explanation: since the end of the 1970s, rising public deficits increased government debt at major countries. Empirical studies confirm theories, which identify government deficits and public debt as a driver of increasing interest rates. Ongoing from the neoclassical view, public deficits crowding out private investments and therefore increase the interest rate. But also from the monetary Keynesian perspective, which is not be confused with the post-keynesian theory, rising government debt is causing higher interest rates in the currency area, caused by portfolio decision of the wealth owners.

But now we want to evaluate the effects of Full Reserve Banking regarding to public debt, modelling an economy with four sectors is instructive: banking sector, private households, central bank and

government. Analyzing the balance sheet structure at the end of the transition period, We can confirm the elimination of the public debt in the amount of new required reserves by the banking sector. Additionally, the increased seigniorage provides annual funding for possible social and ecological purposes. But this profit has a crucial drawback for the interest rate of the private sector. For analyzing the dynamics of the interest rate level, We choose the Monetary Keynesian framework (Riese, 2001) where the interest rate is endogenously determined by the portfolio-decision of the wealth owners. They are faced with a trade-off between holding inflation-proof but interest-free tangibles or interest bearing nominal assets. Outgoing from an equilibrium rate of interest and comparing the balance sheet positions before and after the transition period, the required interest earnings for the unchanged quantity of nominal assets are now confronted with a lower amount of interest-bearing claims, caused by the prohibition of using sight deposits for commercial banking activity in combination with governments increasing seigniorage. This forces the central bank to raise the interest rate for avoiding inflationary portfolio switching of the wealth owners.

For Ecological Economics these results are important: issuing debt free money doesn't decrease the interest rate level, rather the opposite. We conclude that solving the problem of public debt and a positive interest-rate-growth-differential is not possible with a monetary reform which includes issuing debt free money Taxing the private sector enough to avoid government deficits is necessary.

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