

## 100% Money and Vollgeld, a Solution for a Stationary Economy? A Critical Analysis

Long Abstract (1218 words)

In the post-growth debate a rising number of authors (Binswanger, 2009, Peukert, 2011, Huber, 2012) advocate for monetary reforms, whose intention it is to prevent banks from creating deposits and establish the central bank as the sole issuer of money, known as Vollgeld (Huber, 2013) or 100% Money (Fisher, 1935, Benes and Kumhof, 2013). Several supporters expect a better designed monetary system which is more compatible with an economy in times of low or no growth. They proclaim following benefits: reduction of growth imperatives, prevention from destructive credit cycles, dramatic reduction of public debt and more public funds to provide ecological investments. Although the idea is reaching the policy counselling in European countries, still no extensive critical debate is to be found in the scientific community. As examples, Binswanger (2011) promoted it at the Enquete Commission "Growth, Prosperity and Quality of Life" at the Bundestag and in Switzerland a referendum is planned by the society "Monetäre Modernisierung", which is gaining increasing support from citizens.

Before reviewing the impacts concerning growth imperatives and reassessing the theories itself, I examine the basic expected enhancements of the reforms. Prevention of destructive credit cycles and avoiding speculative asset price bubbles should be achieved through an entirely control of monetary aggregates by the central bank, refer to the monetarism intellectual edifice. As Goodfriend (2007) and Mishkin (2001) pointed out, inflation targeting is superior to monetary targeting. Monetarism is failing to recognize the endogeneity of money and to confess to the uselessness of the quantity theory of money in low inflation countries (de Grauwe and Polan, 2005). Despite the superiority of the inflation targeting (interest rate policy), the regular instruments of monetary policy are not enough to prevent harmful credit cycles. Because consumer inflation rate is in a non-linear relationship to asset prices, rising interest rates (or more worse, tightening the central bank money supply) to fight against bubbles is crowding out social and ecological investments. Therefore a regulation for market players is needed, that can establish different interest rates for different investment activities in distinct regions, like Palleys (2003) developed asset-based reserve requirements. Also the mainstream has realized the must of an ex-ante identification and control of possible destructive macroeconomic developments, named "macroprudential regulation". As examples: countercyclical capital buffers, stricter liquidity requirements or as well countercyclical borrower constraints with loan-to-Income ratios are being discussed and in process of planning (Turner 2012, ESRB 2012).

To evaluate the effects of such reforms regarding to the 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, I 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, I choose a 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. This outcome is important concerning our suggested growth imperative theories at the end.

Binswangers (2009, 2014) growth imperative hypothesis assert, that within the present monetary system a stationary state is impossible, insufficient growth leads to a shrinking economy. This dilemma would be caused by the needs for a continual growing money supply to make interest payments and risk compensation for investors possible, and therefore also requires continual GDP growth. With Vollgeld or a 100% Reserve he wants to throttle the money supply and therefore restrain the growth to a “ecological dose”, conscious that this not solve the growth imperative entirely. As mentioned before, inflation targeting is superior to monetary targeting and constraining growth is easily possible with higher interest rates. But the social and ecological benefit is suspect, environmentally hazardous lending will discriminate green and social investments. Also his growth imperative hypothesis is to criticize. His theory is similar to a popular critique of interest (Walter, 2011), which states that in an economy where money is issued by interest-bearing debt, an immanent growth imperative exists. At the redemption date, the loan could not be repaid inclusive interest burden, because the required amount of money for the interest payments would not exist. But Freydorf et al (2012) and Wenzlaff et al (2012) have shown in a detailed stock-flow consistent model, that the full consumption of interest, capital and labor income no additional indebtedness requires.

Wenzlaff et al (2012, 2014) have provided some more consistent and elaborated approaches for growth imperatives. The combination of income-dependent propensity to save and the liquidity preference of actors lead to stagnation with an underemployment equilibrium. Growth is needed for social sustainability. Moreover a positive interest-rate-growth-differential requires a higher level of GDP to compensate raising inequality, unemployment and government debt. At last the zero lower bound of the central bank represents a barrier to achieve a stable stationary state. Based on these approaches, Vollgeld or 100% Money could admittedly solve the problem of government debt, but as shown before, the rising interest rate for the private sector would exacerbate the problems of a positive interest-rate-growth-differential.

Benes, J. and Kumhof, M., 2013. The Chicago Plan Revisited (Revised Draft). *IMF Working Paper*, 202.

Binswanger, H.C., 2009. *Vorwärts zur Mäßigung : Perspektiven einer nachhaltigen Wirtschaft*. 1. Aufl. ed. Hamburg : Murmann.

Binswanger, H.C., 2011. *Nutzen, Grenzen und Zwänge des Wachstums, 7. Sitzung der Enquete-Kommission Wachstum, Wohlstand, Lebensqualität im Bundestag, Berlin*.

Fisher, I., 1935. *(2007)100%-Money, 100% Geld; übersetzt von Klaus Karwat*. Kiel: Gauke, Verl. für Sozialökonomie.

Freydorf, C., Kimmich, C., Koudela, T., Schuster, L. and Wenzlaff, F., 2012. Wachstumszwänge in der Geldwirtschaft. [online] Available at: <<http://geld-und-nachhaltigkeit.de>>.

Goodfriend, M., 2007. *How the World Achieved Consensus on Monetary Policy*. National Bureau of Economic Research, Inc.

Grauwe, P.D. and Polan, M., 2005. Is Inflation Always and Everywhere a Monetary Phenomenon?. *Scandinavian Journal of Economics*, 107(2), pp.239–259.

Huber, J., 2012. Vollgeld - ein Beitrag zu mehr Nachhaltigkeit. *Postwachstumsgesellschaft*. Available at: <<http://blog.postwachstum.de/2012/05/06/vollgeld-ein-beitrag-zu-mehr-nachhaltigkeit/>> [Accessed 27 Feb. 2014].

Huber, J., 2013. *Monetäre Modernisierung: zur Zukunft der Geldordnung: Vollgeld und Monetative*. Marburg: Metropolis-Verl.

Mishkin, F.S., 2001. *From monetary targeting to inflation targeting: lessons from industrialized countries*. Washington, D.C.: World Bank, Financial Sector Strategy and Policy Dept.

Palley, T., 2003. Asset Price Bubbles and the Case for Asset-Based Reserve Requirements. *Challenge*, 46(3), pp.53–72.

Peukert, H., 2011. Vollgeld als ein Reformschritt in die Postwachstumsgesellschaft. *Postwachstumsgesellschaft*. Available at: <<http://blog.postwachstum.de/2011/09/04/vollgeld-als-ein-reformschritt-in-die-postwachstumsgesellschaft/>> [Accessed 27 Feb. 2014].

Riese, H., 2001. *Hajo Riese. Grundlegungen eines monetären Keynesianismus. Ausgewählte Schriften 1964 - 2001*. Marburg: Metropolis.

Walter, J., 2011. Geldordnung -- eine ordnungspolitische Analyse. *Wirtschaftsdienst*, 91(8), pp.543–549.

Wenzlaff, F., Kimmich, C. and Richters, O., 2014. Theoretische Zugänge einer Wachstumsnotwendigkeit. *ZÖSS Discussion Papers*. [ Im Erscheinen]