Tudor Gherasim Smirna "From commodity standard to deposit standard: the near completion of a secular cycle in monetary globalization", Journal of International Studies, Vol. 8, No 1, 2015, pp. 107-113. DOI: 10.14254/2071-8330.2015/8-1/9

> © Foundation of International Studies, 2015

# From commodity standard to deposit standard: the near completion of a secular cycle in monetary globalization

#### **Tudor Gherasim Smirna**

Bucharest University of Economic Studies Romania tudorsmirna@gmail.com

**Abstract.** The advent and international proliferation of unconventional monetary policy is the logical consequence of interventionism in the monetary and banking field. It was made necessary by central bank policies of managing and constantly lowering the interest rates. Once the zero lower bound is reached, the next logical step for the monetary authorities is to look for ways to continue lowering rates through it. To abolish cash and institute the exclusive use of bank deposits is one enticing proposal to overcome this limitation. Thus, the potency of monetary policy can be preserved by the new capacity of charging negative nominal interest rates. However, the arguments against cash are not new. We are going to show in this paper that the same arguments that were previously used to impose banknotes are today used to forbid them.

Received: February, 2015 1st Revision: April, 2015 Accepted: May, 2015

DOI: 10.14254/2071-8330.2015/8-1/9

Keywords: Central banking, monetary standards, zero lower bound, negative interest rates

JEL Classification: E43, E52, F36, F42

#### INTRODUCTION

In this article, we are going to analyze the transformation of the global monetary standard in the last century, from the commodity standard, such as gold or silver, towards the bank deposit standard, i.e., a type of money that is strictly monitored by the monetary authority. We will show how this transformation is closely related to the evolution of monetary policy. We argue that this dynamic eroded recently the paper money standard and, at the same time, took monetary policy from the use of conventional means to the use of unconventional means. We are going to show how the two dynamics are related. Also, we are going to discuss the new standard that some economists argue is a condition for the return of monetary policy from unconventional to conventional means.

The first section contains a description of the evolution of the interest rates and the zero lower bound problems. The second section addresses the conceptual problems of the negative nominal interest rate. The third section focuses on the evolution of the banknote as money substitute and then money proper. The fourth section comments on the possible outcomes of the negative nominal interest rates policy.

# 1. EVOLUTION OF THE RATE OF INTEREST AND THE ZERO LOWER BOUND

Since more than a century and a half, the monetary policy of the developed economies was made by the central bank, through the lowering of the policy interest rate that would influence all the other market interest rates downward and thus generate a series of effects deemed beneficial for economic growth and development. The market interest rate was constantly lowered in real and nominal terms. The secular trend towards lower interest rates took them to values close to zero in nominal terms and even negative in real terms, as we can see below in the case of the Federal Reserve policy (fig. 1).

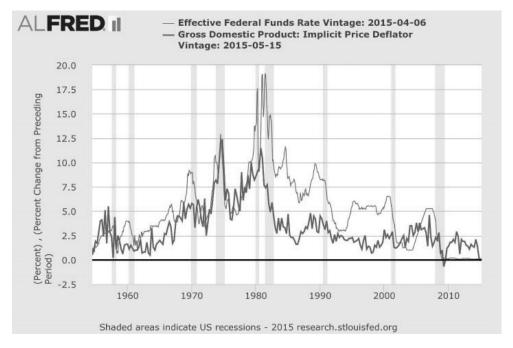


Figure 1. Federal Reserve policy interest rate and price deflator in the USA

Source: The Federal Reserve Bank of St. Louis.

The reaching of the zero lower bound two decades ago in Japan and more recently in US and throughout other developed economies posed challenges for monetary policy that had to abandon the traditional, conventional means and switch to unconventional means (Borio & Disyatat, 2010). The conventional means implied the increase of the supply of money and credit by the banking system as orchestrated by the central bank. The increased supply would affect market interest rates, pushing them below the level they would have attained in the absence of the extra supply. Thus, the businesses demanding investment funds would be marginally more active and would engage more intensely in existing and new processes of production. According to mainstream thought, this in turn would lead to growth.

With interest rates at (or close to) zero, the above mechanism is lost, as the market interest rates cannot be lowered more and the extra investment activity cannot be stimulated. This is what prompted monetary authorities to resort to what was called unconventional monetary policies. According to Bernanke and

Reinhart (2004), unconventional monetary policies consist in three types of actions: managing investor expectations, altering the structure of the central bank balance sheet, and increasing the size of the central bank balance sheet ("quantitative easing"). There is a consensus that claims unconventional monetary policy is a satisfactory substitute for conventional monetary policy at the zero lower bound, although it has its disadvantages (Eggertsson & Woodford, 2003).

We are going to focus here on another proposed solution for the zero lower bound problem. This solution consists in penetrating downwards the zero lower bound, towards negative nominal interest rates. Thus, the unconventional monetary policies can be again exchanged for conventional monetary policies, with no concern for the zero lower bound. Willem Buiter, following Keynes (2006), and drawing on Gesell (1958), Eisler (1932) and Fisher, Cohrssen, and Fisher (1933), offered three ways for reaching negative nominal interest rates (Buiter, 2007, 2009; Buiter & Panigirtzoglou, 2003). They are all dependent on eliminating the free use of banknotes as a barrier towards monetary control and thus an effective monetary policy.

The first solution consists in outlawing the use of banknotes. Money would then consist only in deposits with banks, they would be "registered instruments", as opposed to "bearer instruments". It would then be possible for the policy makers to easily apply the desired nominal negative interest rate. The second solution consists in leaving banknotes (and coins) in circulations, but having them periodically marked, stamped or otherwise taxed, again in order to obtain the negative interest rates. Mankiw has recently presented another such proposal (Mankiw, 2009). Keynes, while agreeing with the intentions in Gesell and Fisher, sees practical problems, related to the fact that the market participants would choose to abandon official money for different alternative moneys and even for means of exchange that are not yet money (Keynes, 2006).

The third solution is more elaborate and it consists in an attempt to separate the function of money as "numéraire", from the function of money as medium of exchange. Thus, the existing money would be taken out of circulation and kept by legal tender only for monetary calculation purposes, while a new money would be defined and introduced to fulfil the means of exchange function. For the circulating money, the zero lower bound would still limit policy, but for the old money there will be now possible to introduce negative nominal interest rates (Buiter, 2009, p. 226).

# 2. THEORETICAL CHALLENGES FOR THE CONCEPT OF NEGATIVE NOMINAL INTEREST RATES

According to the time-preference theory of interest, the ultimate source of interest is the universal fact that man prefers to consume a valued good sooner rather than later. From this point of view, originary interest would always be positive, otherwise the time-preference theory would have to be false. However, the market interest rate also has other components that are not related to time preference, but, respectively, to entrepreneurial judgements – the entrepreneurial premium – and to price change expectations – the price premium (Mises, 1998, pp. 536-542). It is these other components of the market rate of interest that could become negative. Let us discuss now what circumstances could lead to negative values of these components of the interest rate, on the free market.

The entrepreneurial premium forms as the creditor anticipates that a part of the credits he extends to different investors will not be returned. He will then try to cover for such a contingency by raising the general price of the credits he offers on the market. A negative entrepreneurial premium would then have to signify that the credit supplier expects, ceteris paribus, that some of the debtors will return more money than he asked for in the credit contract, therefore justifying his decision to subtract from the general interest

rate that he asks on the market. While this situation is not impossible, we think it is readily evident that it is also not at all relevant for the real world.

The price premium forms as the creditor anticipates a different price level and therefore a different purchasing power of money at the end of the credit contract. If he anticipated inflation, than he would include the expected inflation as percentage points in the gross market rate of interest. If he anticipated deflation, then he would subtract the expected deflation from the gross market rate of interest. We can thus see that it could be conceivable for the price premium to be negative in a deflationary environment, and we can conceive that it could lead to a situation where the negative price premium would completely swallow the originary interest component so that the gross market rate of interest would become nominally negative (Mises, 1998, p. 539).

However, let us dwell more on this prospect. It would mean that when the moment for the payment of interest comes, the creditor would credit the debtor's account, instead of debiting it. Also, by definition, the money that the creditor passes to the debtor as interest is also money of increased purchasing power. As in the case of the negative entrepreneurial premium, we have to point out that the situation, while not impossible, is very unrealistic, ex ante. No creditor would, in competitive market conditions, enter voluntarily into such contracts with negative nominal interest rates unless he intended to make gifts. It would be logical on his part to simply keep the money and thus enjoy the profits that the credit activity would have accrued to him, plus the differential between zero and the nominal negative interest rate, that he does not have to transfer to the debtor.

Incidentally, we have to observe here that this situation amounts to a virtual cessation of saving, investment, and credit intermediation. It could also be mirrored by a virtual cessation of direct investment in new production processes by owners of money, because entrepreneurs anticipate that costs incurred during production will not be covered by turnover at the end of it, thus incurring losses. To the extent that they lead to less goods and factors of production on the market, they will help reverse the deflationary trend (Hülsmann, 2003).

#### 2.1. The negative interest vs. the demand deposit fee

Demand deposit fees should not be confused for negative nominal interest rates. Traditionally the concept of banking covers two analytically distinct activities: credit intermediation and money warehousing (Huerta de Soto, 2012). They are two distinct types of services with distinct modes of remunerations. In the case of credit intermediation, the owner of the money lent to the bank is remunerated by the bank for the service of renouncing his savings for a definite amount of time specified in the credit contract.

On the other hand, in the case of money warehousing – possibly coupled with transfer services – it is the bank that is remunerated by the owner of the money who receives security for his cash holdings, while keeping instant availability. We have to emphasize that the source of the deposit fee is not time preference, and that therefore this fee cannot be confused for negative interest, as it has nothing to do with interest.

#### 3. THE ROLE OF THE BANKNOTE IN MODERN MONETARY DEVELOPMENTS

According to Mises (1980), Rothbard (1983) and Block, Hoppe, and Hülsmann (1998), among others, the principle of fractional reserve banking, backed by the privilege of suspension of payments, has created the premise and the necessity for the appearance of the central bank, as coordinator and regulator of the fractional-reserve banking sector activity. Also, the central bank was established as banknote issuing author-

ity and, in time, monopoly. The evolution of the monetary standard is closely linked with the evolution of central banking.

While the XIX century witnessed the establishment of gold and silver as global commodity money standards, the emergence of central banking has created the conditions for the abandonment of commodity money and its gradual replacement with other standards. First the metallic standard was replaced with a mixed international standard – the gold-exchange standard. Subsequently, the gold-exchange standard was replaced with paper money, a standard decreed by the political or monetary authority, under which the banknotes issued by the central bank became the reserve currency, replacing metallic money. Thus, the banknote became, from money substitute for the previous monetary standards, a monetary standard in itself (Hülsmann, 2008; Mises, 1980). In the new setting, the bank deposit, or bank electronic money, has kept the role of money substitute, but instead of being money substitute for the old commodity or commodity-exchange standard, it is now a money substitute for paper money.

Banknotes (and coins) offered by the private privileged banks and then by the central bank as a monopoly issuer, have been favored by authorities because they offered more flexibility than the money proper, either gold or silver, that they were substitutes for. However, they offered only temporary flexibility. Upon generalized redemption requests, monetary policy had to be abandoned, reversed, or continued with suspension of payments.

The paper money standard was instrumental for the achievement of monetary policy goals with conventional central bank means, because it is indefinitely elastic. The increase in money supply and in the volume of circulation credit has made it possible for the central banks around the world to lower the interest rate constantly. According to authors like Buiter or Mankiw, the zero lower bound is causally linked with the existence of the banknote as we have come to know it. We can now see that, for the zero lower bound to be penetrated downward, the banknote has to be abandoned and its role as fiat money standard has to be transferred to bank deposits.

We can state that each change of monetary standard that we witnessed in the last decades was a managed change, not chosen by free market forces, but by monetary authorities. Moreover, we can state that the changes were prompted by the reaching of monetary limits, in moments of policy crisis (Smirna, 2014).

The adoption of the paper money standard has overcome the limit that a metallic standard imposed on monetary policy on account of its relative scarcity when compared to paper money. With the proposed abolition of banknotes (and coins) and the imposition of bank deposit money as legal tender and economic calculation standard, a new change will be made, that will allow the monetary authority to enjoy not only the prior elasticity of money supply – as in the case of paper money –, but also the complete transparency and control over the use of money by its holders. Consequently, the authority will have the power of imposing "negative interest rates" on money and other financial instruments. Thus, it will be possible for conventional monetary policy to be used again for stimulating economic activity. However, as we have shown above, it will not be interest in an economic sense, but a tax.

Next, we will analyze the probable course of this monetary dynamic in case the post zero lower bound measures are implemented.

# 4. THE EFFECTS OF TAXING MONEY HOLDINGS

We will describe what we think will be the consequences of taxing the use of money by measures such as those presented above. According to these proposals, when faced with the prospects of monetary prohibition

or taxation, money users will only decide to lend at a negative rate or consume more, and these actions will spur aggregate investment and demand, with positive macroeconomic consequences.

However, we have to point out that the demand for money has fundamental causes that the measures proposed will not abolish. The relative height of monetary holdings is given by the holder's perception of uncertainty (Mises, 1998). With absolute confidence about the fruition of plans in all time horizons, holding money is renounced for the alternative of holding assets of lower liquidity, that reward (higher) interest.

We can anticipate that monetary demand will not be lowered by the measures, but will be spurred, on account of increased regime uncertainty (Higgs, 1997). Market participants will then look for monetary alternatives. They will try to adopt competing moneys and, in case this option is not available, they will reorient towards next-best alternative, such as means of payment that are in a pre-monetary state. We refer here to goods that present all or part of the characteristics of money: divisible, portable, fungible, non-degradable, etc. Depending on the technological advancement of the market, recent inventions such as peer-to-peer electronic money (bitcoin) could be adopted.

Concerning lending activity, we can anticipate that such a measure could be perceived as a menace to the value of the monetary standard and it could increase the entrepreneurial and price premiums to hyperinflationary levels. Thus, we can anticipate that lending will be abandoned, this time not because the market interest is pushed at zero by deflation, but because it is taken to very high levels that are incompatible with the negative levels desired by the monetary authority.

Last but not least, we observe that the change towards a strictly monitored standard can have pernicious effects on economic calculation. Money used freely by its owners is an essential counterpart to private property of the means of production in creating the realist constellation of market prices that is used in the entrepreneurial calculative anticipation of profit and loss. With a monetary standard that allows no discretion for private users, the means for the creation of market prices is practically lost. This, contrary to the intentions of the authors that propose the implementation of negative nominal interest rates, is not conducive to increased productivity and growth, but to the kind of chaos and resource waste that are characteristic of socialism (Hayek, Pierson, Mises, Halm, & Barone, 1935).

# **CONCLUSION**

We have analyzed in this article the recent proposals for the abolition of the use of cash that are linked explicitly or implicitly with the monetary policy limits imposed by the zero lower bound for interest rates. We have shown that these proposals are part of a secular dynamic that is ported forward by the inherent contradictions of central banking with fiat money and fractional reserves.

We have shown that the sequential exchange of monetary standards is prompted by crises in monetary policy and the need of authorities of different, more potent means to overcome them. The last measures proposed for the downward penetration of the zero lower bound and the introduction of negative nominal "interest" rates constitute a new change of monetary standard, this time from the fiat paper standard to the fiat bank deposit standard, a type of electronic money that would increase the control of monetary authorities over private money holdings and over saving, investment, and consumption decisions.

While it is true that such a measure would facilitate planning towards a seemingly better macroeconomic outlook, we have raised the traditional doubts that such type of central planning elicits. We have argued that the consequences of imposing a deposit standard and negative nominal "interest" rates would take the monetary policy dynamic to an increased level of interventionism that is very close to the complete planning of economic activity, also known as socialism.

# ACKNOWLEDGEMENT

Tudor Gherasim SMIRNA is Ph.D. student at the Bucharest University of Economic Studies and beneficiary of the Sectorial Operational Programme Human Resources Development (SOP HRD), financed from the European Social Fund and the Romanian Government under the contract number POSDRU/159/1.5/S/133675, within the Romanian Academy, Iasi Branch.

# REFERENCES

Bernanke, B. S., & Reinhart, V. R. (2004), Conducting Monetary Policy at Very Low Short-Term Interest Rates. The American Economic Review, 94(2), 85-90.

Block, W., Hoppe, H. H., & Hülsmann, J. G. (1998), Against Fiduciary Media. Quarterly Journal of Austrian Economics, 1(1), 19.

Borio, C., & Disyatat, P. (2010), Unconventional Monetary Policies: An Appraisal. The Manchester School, 78, 53-89.

Buiter, W. H. (2007), Is Numérairology the Future of Monetary Economics? Open Economies Review, 18(2), 127-156.

Buiter, W. H. (2009), Negative nominal interest rates: Three ways to overcome the zero lower bound. The North American Journal of Economics and Finance, 20(3), 213-238.

Buiter, W. H., & Panigirtzoglou, N. (2003), Overcoming the zero bound on nominal interest rates with negative interest on currency: gesell's solution\*. The Economic Journal, 113(490), 723-746. doi: 10.1111/1468-0297.t01-1-00162

Eggertsson, G. B., & Woodford, M. (2003), Zero bound on interest rates and optimal monetary policy. Brookings Papers on Economic Activity, 2003(1), 139-233.

Eisler, R. (1932), Stable money, the remedy for the economic world crisis: a programme of financial reconstruction for the International conference, 1933: The Search Pub. Co.

Fisher, I., Cohrssen, H. R., & Fisher, H. W. (1933), Stamp scrip. New York: Adelphi Company.

Gesell, S. (1958), The Natural Economic Order. London: Peter Owen Ltd.

Hayek, F. A. v., Pierson, N. G., Mises, L. v., Halm, G. N., & Barone, E. (1935), Collectivist economic planning; critical studies on the possibilities of socialism. London,: G. Routledge.

Higgs, R. (1997), Regime uncertainty. Independent Review, 1(4), 561-590.

Huerta de Soto, J. (2012), Money, Bank Credit, and Economic Cycles: Ludwig von Mises Institute.

Hülsmann, J. G. (2003), Optimal monetary policy. Quarterly Journal of Austrian Economics, 6(4), 37-60.

Hülsmann, J. G. (2008), Ethics of Money Production. Auburn, ALA: Ludwig von Mises Institute.

Keynes, J. M. (2006), General theory of employment, interest and money: Atlantic Publishers & Dist.

Mankiw, N. G. (2009), It May Be Time for the Fed to Go Negative. Retrieved from http://www.nytimes.com/2009/04/19/business/economy/19view.html

Mises, L. v. (1980), The Theory of Money and Credit. Indianapolis: Liberty Classics.

Mises, L. v. (1998), Human Action: A Treatise on Economics (Scholar's ed.). Auburn, Ala.: Ludwig Von Mises Institute.

Rothbard, M. N. (1983), The mystery of banking (1st ed.). New York, N.Y.: Richardson & Snyder.

Smirna, T. G. (2014), Financial Reform in (Eastern) Europe: Which Way? Paper presented at the Monetary, Banking and Financial Issues in Central and Eastern EU Member Countries: How Can Central and Eastern EU Members Overcome the Current Economic Crisis?, Iași.