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THE TENDENCY TOWARDS SECONDARITY IN MANAGING GLOBAL IMBALANCES‡

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Abstract

In this study, we analyse the factors that have led to the fall of real interest rates on the long term. We show that this tendency, i.e. the fall in real interest rates, which began three decades ago in developed countries is well explained by the emergence and growth of the global saving glut. We formulate the hypothesis according to which the increase in the global excess saving is mostly the result of a process whereby countries place themselves on a secondary position vis-à-vis the US (i.e. secondarity) with regard to taking and managing risks which occur after a crisis. The ensuing peculiarity of global excess saving is that it is generated in an increasing number of countries or economic areas, with the overwhelming part located in a few of them, while the overwhelming part of the global deficit of savings is located in the US.

Secondarity is caused both by governments, which have sought to move to excess saving, as was the case of Asian countries (Bernanke, 2005), or to capping budget deficits, as it happened in the Eurozone and in the EU, and by the free choice of every economic agent in the private sector. Secondarity represents a major cause for a vicious circle in which the decline in interest rates to ever lower levels has led to the emergence of financial bubbles, whose bursting requires the further reduction of interest rates, thus generating new bubbles and so on and so forth. Misinterpreted in real time as the "Great Moderation", this vicious circle went unobserved.

Keywords: Global saving glut; global imbalances; secondarity; current account balance; natural interest rate; real interest rate trends; monetary policy; yield curve; liquidity trap; debt trap; Romanian conundrum; interest rate dilemma

JEL classification: E43, E58, E52, F32, G12.

1. INTRODUCTION

In developed countries, real interest rates have witnessed a downtrend during the last three decades. With every major recession, interest rates fell in order to support the economy and then increased relatively rapidly, generally without regaining the pre-fall levels. However, the 2008 recession illustrated an exception to the rule. In 2015, more than

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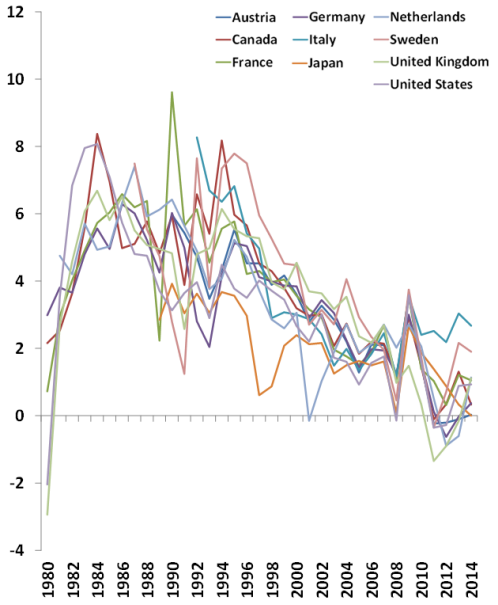
six years after entering recession, real interest rates in some developed countries were either still negative or very low (Figures 1 and Figure 2), while output in developed economies was still below potential and continued to increase at relatively low rates, particularly in the Eurozone[1]. The slow-in-coming return of interest rates to higher or positive levels reflects to a very small extent the reduction of monetary policy rates to zero and the quantitative easing rounds aimed at jumpstarting production and avoiding deflation.

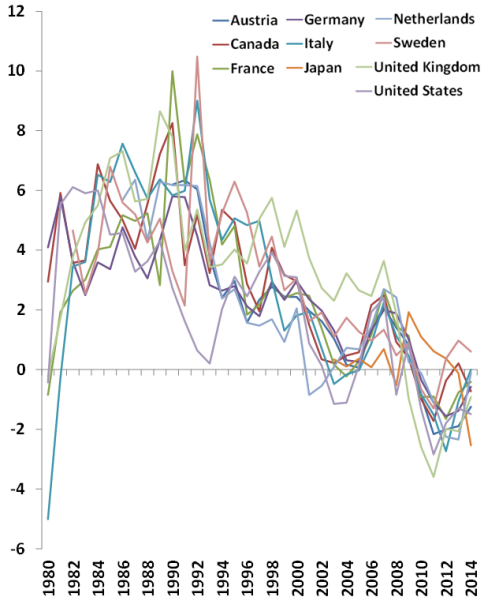
Monetary policy rates have only a temporary and limited bearing on long-term real interest rates. In this paper, we discuss the factors which have led to the falling trend in long-term real interest rates in developed countries, focusing on the special role played by the global saving glut. The purpose of our analysis is to evaluate (i) the consequences for Romania of the extended period in which the monetary policy rates of major central banks stay close to zero and (ii) whether long-term real interest rates will embark on a downtrend sooner rather than later.

In Romania, output is still below potential, although economic growth has returned to relatively high levels in the last two years; moreover, the prevailing view is that had the VAT rate not been reduced starting 1 June 2015, inflation would have probably reverted close to the central target at the end of 2015. However, it might be necessary for the National Bank of Romania (NBR) to lower the monetary policy rate further.



Source: OECD

Figure no. 1 – Long-term real interest rates (%)



Source: OECD

Figure no. 2 – Short-term real interest rates (%)

This necessity does not derive from the VAT rate reduction, which will temporarily lead to deflation. At a deeper level and for a longer period of time, it might derive quite soon from the trade and financial relations between the Romanian economy and those economies where interest rates are expected to remain low for several years to come (for example, in the Eurozone and Japan). Thus, even in the absence of the VAT rate reduction, the low

policy rates worldwide exert pressure to reduce the monetary policy rate in Romania[2]. Given these low rates, an insufficient reduction of the monetary policy rate by the NBR would result in the leu appreciation[3]. At the current juncture, this appreciation would add to the deflation generated by the VAT rate reduction, entailing the risk of turning inflationary expectations into deflationary ones and slowing down economic growth.

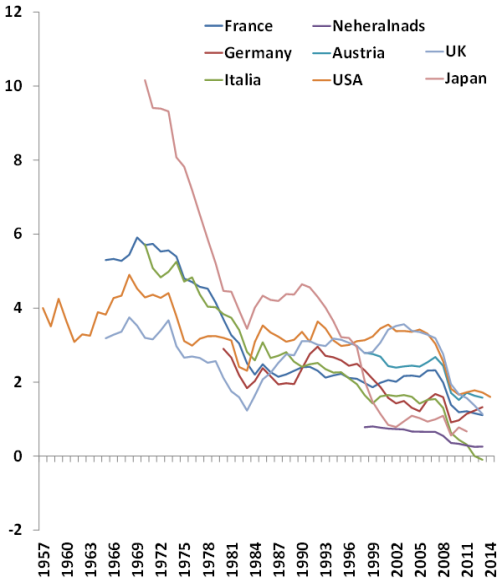
What about the longer term? Will long-term real interest rates in Romania also witness a downtrend towards the relatively low levels seen in developed economies? Will our economy join the group with excess saving or will it return to relatively wide current account deficits? And finally, will economic growth rates embark on a downward path, as in developed countries, relatively soon or at the longer horizon? Given the trade and financial links between the Romanian economy and the advanced ones, these questions cannot be answered without a thorough understanding of the underlying causes of those particular trends in the developed countries.

The paper is structured as follows: the following section analyses the factors which have led to the fall of long-term interest rates and shows the reverse relation between the global saving glut and the real interest rate. The third section describes the combination of elements that allowed the global saving glut to emerge and grow. In the fourth section, we demonstrate that there is a tendency among countries to place themselves in a secondary position vis-à-vis the US (the process of secondarity) with regard to risk-taking and managing the consequences in the aftermath of a crisis. The result of this process is that global saving gluts expand and spread to an increasing number of countries, while the overwhelming part of the global saving deficit tends to occur in the US. In the fifth section, we show that the global saving glut influences the whole yield curve both directly and indirectly, being one of the drivers of a vicious circle where the persistent downtrend in interest rates has come to lead, due to the low interest levels, to the emergence of financial bubbles, whose bursting requires the further reduction of interest rates, thus generating new bubbles. To the extent to which it explains the expansion of the global saving glut, secondarity also explains the negative feedback loop of interest rates. The sixth section discusses the short- and long-term prospects of global imbalances. The seventh section answers the questions above and draws conclusions for Romania.

2. WHY DO INTEREST RATES FALL – AN EXPLANATION BASED ON FUNDAMENTALS

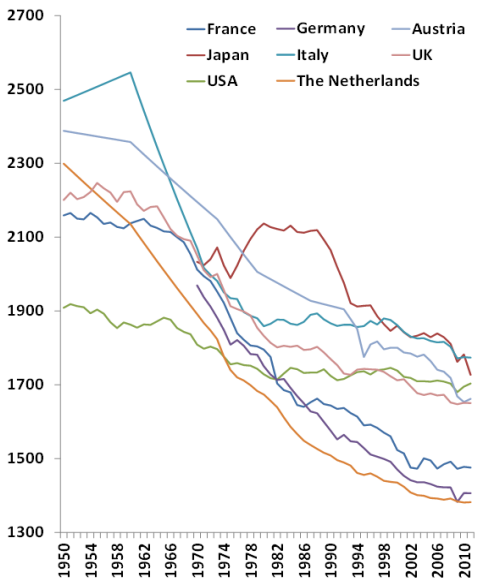
On the long term, the interest rate is determined by technology, which directly affects total factor productivity, by the rise in workforce, as well as by the time preference rate (Woodford, 2003)[4]. The first two are also direct drivers of economic growth. Practically, assuming that output is given by a Cobb-Douglas function in which capital elasticity is zero, economic growth is the sum of the growth rate of total factor productivity and workforce dynamics. Economic growth prospects affect investment demand and hence the interest rate[5].

The other factor, i.e. the time preference rate, shows people's impatience to consume now compared to an upcoming period. The greater the impatience, the greater the compensation (interest) an economic agent needs to delay consumption, i.e. to save. On the short term, the three factors may deviate from the stable condition, triggering interest rate variations[6].



Source: FRED, OECD

Figure no. 3 – Real rates of GDP growth in developed countries (10-year moving averages of annual rates, %)



Source: FRED

Figure no. 4 – Annual numbers of hours worked by an employee (%)

Figure 3 shows that economic growth rates in developed countries embarked on a downward path at the beginning of the ’70s, thus partly explaining the downtrend of long-term interest rates. In turn, the economic slowdown is explained by the reduction in the number of hours per year worked by an employee, which is a form of workforce measurement (Figure 4), and by the downtrend in labour productivity growth rates (Figure 5). However, comparing the trends in real interest rates (Figure 1 and Figure 2) and the GDP growth trend (Figure 3) shows that real interest rates began to fall almost 20 years later than economic growth rates. This means that in those 20 years, the other factor, i.e time preference, exerted a sufficiently strong opposite impact to offset the influence of the declining economic growth rates on interest rates. In that period, the time preference rate was relatively high, favouring consumption to the detriment of saving (which remained relatively low as a share in income).

As stated in the beginning, our analysis will focus on the role played by the global saving glut. Just like the US current account deficit, the global saving glut emerged in the early 80s. Until then, *desired* saving tended to equal *desired* investment. The countries with large current account surpluses/deficits today witnessed current account equilibria until the mid-70s, when relatively slight deviations started to be recorded.

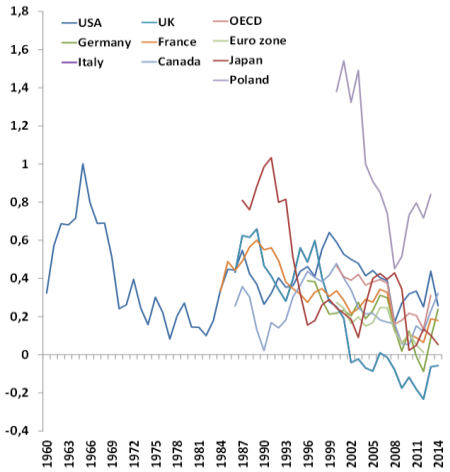


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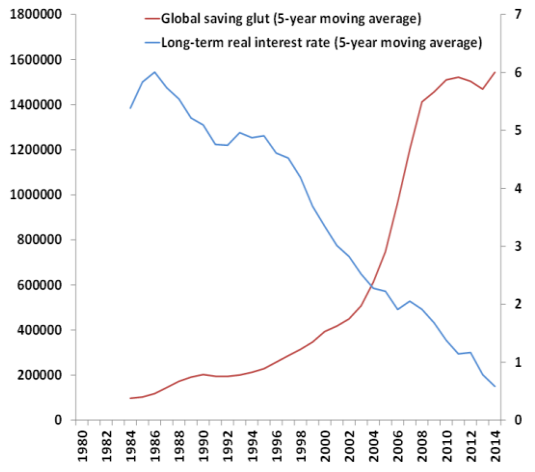
Figure no. 5 – Annual rates of labour productivity growth (%)



Source: author's calculations based on OECD and UNCTAD data

Figure no. 6 – The global saving glut (USD mill.) and long-term real interest rates in some developed countries (%, rhs)

The global excess saving and the US excess investment (current account deficit) increased gradually beginning in the late 80s[7]. This means that, during the said period, in some countries, *desired* saving began to exceed *desired* investment, which finally led to increased individual saving gluts. As the global saving glut widened, long-term real interest rates went down. Figure 6 illustrates the clear reverse correlation between the expansion of the global saving glut and the fall in the long-term real average interest rate calculated for the countries listed in Figures 1 and 2.

3. WHY DID THE GLOBAL SAVING GLUT OCCUR

The global saving glut would not have occurred in the absence of two conditions[8]. The first refers to free capital movement. Capital flow liberalization was achieved gradually after the fall of the Bretton Woods monetary system in 1971. It would have been senseless for countries to save without enabling the migration of saving to countries which needed them and which could have turned them to better account in order to fund the glut of investment over saving (current account deficits). Nevertheless, free capital movement was merely a necessary, but not sufficient condition for the occurrence of global excess saving.

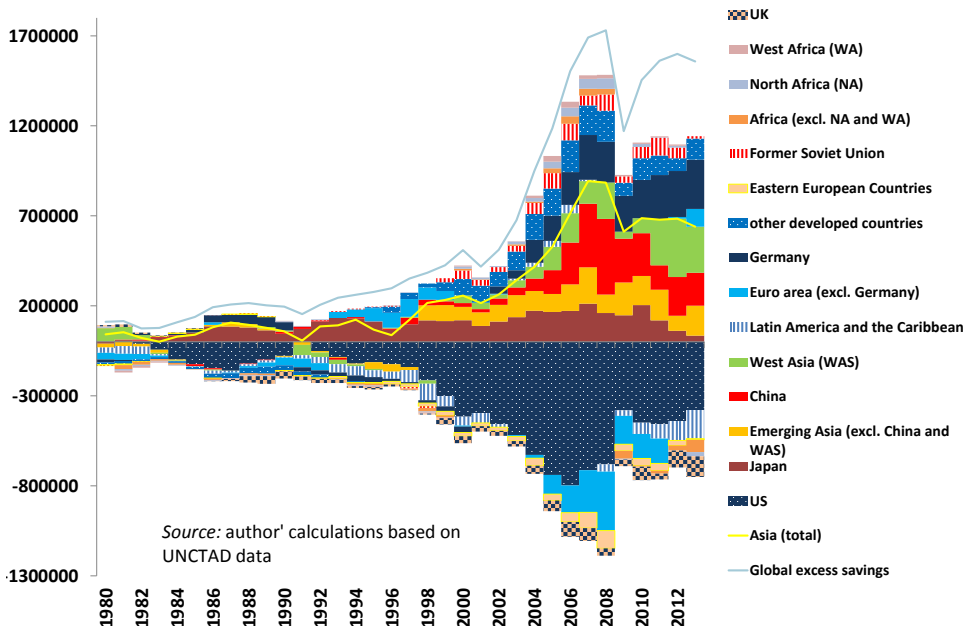
The second condition is the prevalence of relatively low and stable inflation rates. Saving further holds a low share in income and *desired* saving cannot be higher than *desired* investment if inflation is high and volatile. Given these features, the money illusion and other factors make it so that inflation is systematically higher than nominal interest rates, thus acting as an incentive for stepped-up consumer spending. Consequently, economic agents' increased concern to spend before inflation erodes the real value of money prevents the emergence of the desire to save more than invest or reduces the rate of desired saving.

A reduction of the desired saving rate should lead, ceteris paribus, to an increase in real interest rates as a consequence of the additional pressure on available resources. For

example, in the US, the high inflation in 1975-1981 was accompanied by an increase in the real interest rate[9], which signals a reduction in the desired saving rate for that period. In the 70s, the conceptions and theories regarding monetary policy were rather confused and inflation was relatively high and volatile in many developed countries, preventing saving but also stymieing economic growth. Also in the 70s, oil price increased as a consequence of production limitations in Organization of the Petroleum Exporting Countries (OPEC), which contributed to the pick-up in inflation. Figure 3 illustrates that economic growth rates in the 70s witnessed the steepest downward slope, which is consistent both with the supply shock caused by the oil price hike and with the increase in the real lending rate.

It was only in 1979 that an efficient policy to tackle inflation was adopted in the US[10]. Consequently, the inflation rate began to reach relatively low levels as late as 1984. It was precisely the time when the global saving glut became significant. In the context of low inflation, people's behaviour characterized by the tendency to spend as fast as possible in order to avoid the erosion of the value of money, as seen during the Great Inflation, changed and the saving volume as well as the desired saving ultimately began to increase. This explains why interest rates began to fall almost 20 years later than economic growth rates in developed countries.

The profound cause of the increase in saving relates to the aging population in developed economies and the prevalent distribution of the global product to these countries. Old and relatively well-off people save more than the rest of the population, thus contradicting the life cycle hypothesis. In developed countries, the ratio of pensioners to employees began to increase around the mid-70s, which led to an increased propensity for saving of these countries' population. At the same time, the capital-to-labour ratio began to increase and entailed a lower investment yield.



Source: author's calculations based on UNCTAD data

Figure no. 7 – History of savings-investment imbalances across major countries and regions (USD mill., current prices)

Theoretically, saving gluts occurring in developed countries should migrate to finance developing countries and emerging markets. In the latter economies, the labour force increases more rapidly and the capital-to-labour ratio is relatively low, resulting in higher yields.

However, as shown in Figure 7, the data for the last 35 years contradict this basic economic logic. The data illustrate two major tendencies. The first is the saving glut migration mainly towards developed countries, particularly the US. As we will show in the next section, the US displays five features conferring attractiveness over other economies as an investment destination. The second tendency is the countries' move, irrespective of their development level, towards the excess saving group, with some exceptions of which the US is the most notable. This tendency is more readily noticeable when looking at the breakdown by country of the global saving glut after each crisis (recession).

The first countries witnessing excess saving were the major oil exporters in West Asia. The sharp oil price increase of 1973-1982 helped these countries become net exporters of financial capital. Following the 1982 crisis, Germany and Japan joined the excess saving group of countries[11]. After the 1991 global recession, countries that were to become Eurozone members also joined the saving glut group of countries. Following the 1997 crisis, Asian countries and the group of developed economies (other than the US, Japan, euro area countries and the UK) did the same thing. The 1999 crisis in Brazil and the 2002 Argentine crisis brought about excess saving in 2003-2007 in the Latin America and the Caribbean group of countries (which became net exporters of financial capital). Also in 2003, the group of Eurozone countries (defined by excluding Germany) returned to a saving deficit, thus turning into net importers of financial capital; however, in 2013, they re-entered the saving glut group of countries. It is noteworthy that countries in the Eastern European group[12] have never been net exporters of capital after 1990; however, after the 2008 crisis, and particularly beginning in 2012, these countries have massively reduced their current account deficit (investment surplus).

The second tendency we described above is a generalization of Bernanke (2005) idea according to which financial crises are an important factor in changing the current account position in emerging economies, together with higher oil prices and precautionary saving. He shows that, in response to these crises, Asian emerging economies have deliberately chosen or had to choose to give up the financial capital net importer position and thus become net exporters. Among the underlying factors were the significant decline in investment and the changes in economic policies (Bernanke, 2007), warranted by the need to better manage the instability of capital inflows and of exchange rates and to reduce external debt.

4. SECONDARITY: A MAJOR DETERMINANT OF GLOBAL IMBALANCES

The data in Figure 7 show, however, that we are dealing with a more complex process than the one suggested by Bernanke (2005). Our assumption, based on these data, is that countries change their financial capital net importer/ exporter position so that the risks materializing when a financial crisis hits are located in the countries that can best accommodate them. We define these position changes as the *secondarity of excess saving countries in relation to the US*.

Before explaining the concept of secondarity in more economic detail, we take first a wider perspective, by drawing a parallel with "secondarity" as a civilizing process. The concept was introduced by Rémi Brague to explain the role of Rome in shaping the European culture: "To say that we are Roman is entirely the contrary of identifying ourselves with a prestigious ancestor. It is rather a divestiture, not a claim. It is to recognize

that fundamentally we have invented nothing, but simply that we learned how to transmit a current come from higher up, without interrupting it, and all the while placing ourselves back in it" (Brague, 2002, p. 91). In other words, Rome, the conqueror of Ancient Greece, aware of its cultural inferiority to Greece, created a mechanism to „transport" Greek culture to Rome.

In a lecture on modernity, having Brague as starting point, Patapievici (2015) mentions three conditions for "secondarity" to act as a civilizing process of an entity: (i) to understand that the entity does not have the wisdom it is seeking; (ii) to understand that others have this wisdom; and (iii) to have the capacity to assimilate it. Referring to Brague's work, Shiffman (2005) states that "secondarity" is "the consciousness that one's cultural origins and points of reference do and ought to have their source in another culture". In our approach to global imbalances, countries with excess saving place themselves in a "secondary position" in relation to the US.

The countries which do not have the US features to act as "borrower of last resort", which we will mention later in this section do display however the following characteristics: (i) they seek the "wisdom" (i.e. knowledge, instruments, institutions and the synergy among all these) on managing risks; (ii) they understand that this "wisdom" exists primarily in the US; (iii) they have the capacity to acquire "wisdom", but this takes time and hence the "transport" of risks stemming from global imbalances to the country that can best accommodate them , i.e. the US. "Transport" means the creation of excess saving which, at the same development level, entails lower risks as well as lower investment and economic growth opportunities.

Behind this process stand both governments, which sought to move to excess saving, as was the case of Asian countries[13] (Bernanke, 2005) or to limit budget deficits, as in the Eurozone and the EU, and the free choice of every economic agent in the private sector. Obviously, secondarity does not occur directly between each country with excess saving and the US, with the trade relations among countries acting as a go-between.

The US displays several features rendering it best suited to accommodate rapid capital outflows and currency depreciation, abrupt fall of domestic asset prices, the weakening of the banking system and the recession in the aftermath of a crisis. At the core of these features lie: ((i) the US dollar's status as a reserve currency; (ii) increased labour market flexibility compared with other countries; (iii) the increased freedom, the high sophistication and the depth of the country's financial markets, which have available adequate instruments, institutions and investor populations; and, last but not least, (iv) very low political risk and very strong property rights. All these features combine to maintain a powerful competition which leads to adopting new technologies and increasing productivity.

Secondarity is a factor favouring the increase in desired saving in the countries which place themselves on a secondary position, while favouring the reduction of net saving (saving minus investment) in the country towards which the others have assumed secondarity[14]. Therefore, it interferes with the fundamental factors of saving and investment (birth rate, total factor productivity, capital, time preference rate).

In developed countries, the evolution of fundamentals was probably sufficient for *ex ante* (desired) saving to exceed *ex ante* (desired) investment. On the one hand, in these countries, the slower growth of population and of the active labour force or even the decrease in these categories, the emergence of less capital-intensive industries and the slacker growth rate of productivity have led to a fall in investment demand[15]. On the other hand, the aging population has stimulated the tendency towards saving in more and more countries. These tendencies have been virtually present in all developed countries, thus pressing for a saving glut, including in the US. However, the process of assuming secondarity increased the saving glut in the countries which placed themselves in a secondary position and turned it into a saving deficit for the US.

In developing countries, the evolution of fundamentals was probably not sufficient in itself to determine the occurrence of saving gluts. Nevertheless, the process of assuming secondarity, driven by reasons relating to the risk management capacity, led to an increase in the tendency towards saving, resulting in the emergence of saving gluts in these countries as well. Thus, given the virtually open nature of world economies, an increasing number of countries faced saving gluts, which are exported to economies with saving deficits, particularly to the US[16].

According to the view described in this section, the global saving glut is explained by the changes in fundamentals and by the process of assuming secondarity, taken together. Nevertheless, fundamentals play a secondary role in explaining the fact that the global saving glut tends to occur in more and more countries, while the overwhelming part of the global saving deficit tends to occur in the US. This imbalance is primarily explained by the process of assuming secondarity, which leads to a higher propensity for saving (desired saving) in countries placing themselves in a secondary position, regardless of their development level, and to an increase in net investment in the country towards which the others have assumed secondarity.

5. SAVING GLUT, MONETARY POLICY RATES AND THE YIELD CURVE

This section deals primarily with the manner in which the global saving glut influences each component of the yield curve. Risk-neutral long-term interest rates comprise three components: expected inflation, expectations regarding the future real short-term rates (and hence future changes in monetary policy) and the unobservable term premium. The latter refers to the "extra return that lenders demand to hold a longer-term bond instead of investing in a series of short-term securities" (Bernanke, 2015).

Each of the three components has a series of determinants but here the focus is on the global saving glut. Starting from the structure of the yield curve for risk-neutral rates, the other interest rates reflect in addition the credit, market and liquidity risks, as well as the demand and supply for each financial asset[17].

The saving glut directly influences both the shorter and the longer end of the yield curve. The influence on short-term rates occurs due to the fact that, by definition, *the saving glut influences the natural interest rate* – the rate at which desired saving are equal to desired investment at the potential level of output. As the saving glut expanded, the real (natural) global interest rate fell[18]. The drop was more significant in developed countries, with aging population, declining labour productivity growth rate, and a relatively small average number of hours worked by an employee. In global terms, the influence of the saving glut on changes in real interest rates is exerted through the changes that occur in net desired investment in deficit countries, as compared to the changes in desired saving in surplus countries. An increase in net desired investment in deficit countries that exceeds the increase in desired saving in surplus countries leads to a rise in interest rates, and vice versa.

The gradual drop of the natural interest rate called for monetary policy rate cuts, so as to enable central banks to keep inflation at the desired levels. Policy rates have gradually reached lower and lower levels in normal times, particularly in developed countries. Two trends resulted from these developments: on the one hand, the low interest rates fostered the emergence of financial bubbles, whose frequency has increased in the last two or three decades (see Brunnermeier and Schnabel, 2015 for a history of asset price bubbles). On the other hand, with every new crisis, in order to meet the inflation target and potential output once again,

economies needed lower monetary policy rates than the levels required during the previous crises (see Hamilton *et al.*, 2015 for nominal interest rates in 17 countries, and Cúrdia *et al.*, 2015, Barsky *et al.*, 2014 and Laubach and Williams, 2015 for estimates of real natural rates).

Consequently, a vicious circle occurred, in which low interest rates lead to the emergence of financial bubbles, whose bursting calls for the further reduction of interest rates, and so on. Misinterpreted in real time as the "Great Moderation", this negative feedback loop – which showed that developed countries were headed for the liquidity trap – went unobserved. The outcome of this vicious circle, unless it breaks, will be that – during the next recession – an increased number of central banks will not be in the position to properly stimulate growth, since their nominal rates will be too close to zero.

Despite the fall in natural interest rates, inflation targets remained low nonetheless, usually around 2 percent. Thus, as the natural interest rate decreased, the risk emerged that, during a crisis, the natural interest rate might fall to levels which the real monetary policy rate could not reach with conventional approaches.

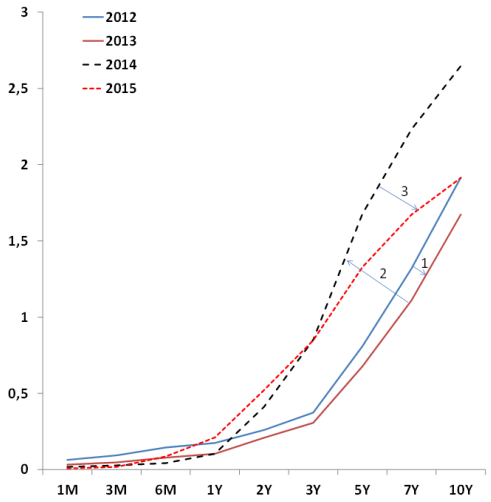
This risk materialized during the current crisis and therefore, in developed countries, monetary policy rates were lowered close to zero. The lesson which can be learned from this experience deals with the inflation target. In order to prevent the natural interest rate from falling to levels which could not be accommodated by the real monetary policy rate, the inflation target should exceed a certain limit, which depends on the natural interest rate (Eggertsson and Mehrotra, 2014; Croitoru, 2015a).

Beside its direct impact on the natural interest rate, *the global saving glut also directly affects the demand for easily salable assets* (the so-called "liquid" or "safe" assets). Bernanke (2015) states that demand for securities depends not only "on their riskiness and expected return", but also on their "easy salability" and/or "ability to satisfy regulatory requirements". The safer the securities, the lower the return lenders demand to invest in such assets. The migration of saving from excess saving countries to deficit countries is associated with keener demand for safe assets. An increased saving glut can trigger a higher demand for such securities, thus contributing to a reduction in their time premium. Quantitative easing, which essentially leads to keener demand for long-term liquid assets, has the same effect.

Finally, beside the two direct effects on the natural interest rate and on the demand for safe assets, *the global saving glut has also had an indirect effect on the expectations regarding the future real monetary policy rates*. In the past few decades, as the monetary policy rate fell in order to remain in line with the natural rate, expectations regarding the future policy rates fell as well, meaning that the time premium added to a relatively low base. In this way, the global saving glut affected directly or indirectly all three components of the yield curve.

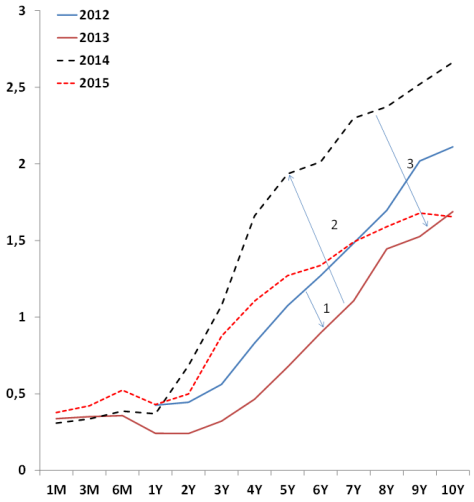
The direct and indirect influences of excess saving were stronger during crises. Bernanke (2015) shows that in the current crisis, all three components – expected inflation, expectations about the future path of real short-term interest rates, and the term premium – "are helping to keep longer-term interest rates low".

Figures 8 to 10 show the yield curves for Eurozone, US and UK bonds in the month of April in the period from 2012 to 2015. A flattening is noticeable 2014 through 2015. Given the stable expectations on inflation and on the short-term real interest rate curve in this period, the flattening must have occurred particularly due to the fall in the time premium, as seen in Figure 11 for the US (Adrian *et al.*, 2013).



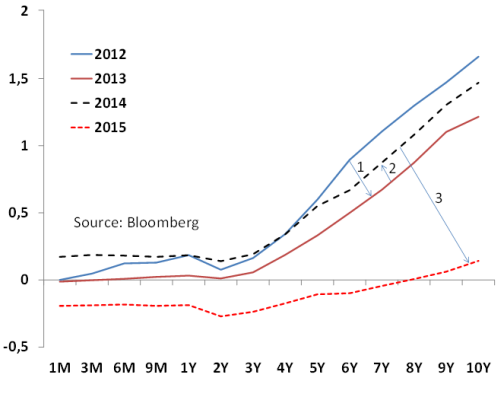
Source: OECD

Figure no. 8 – US - Yield curve for government bonds (%)



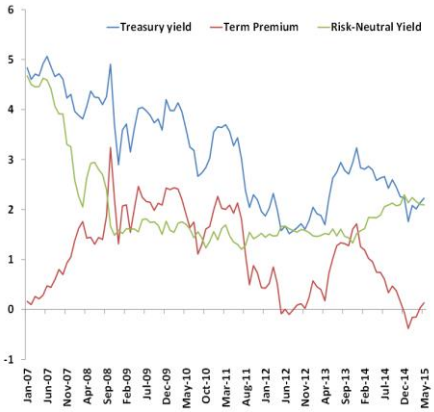
Source: OECD

Figure no. 9 – UK - Yield curve for government bonds (%)



Source: Bloomberg

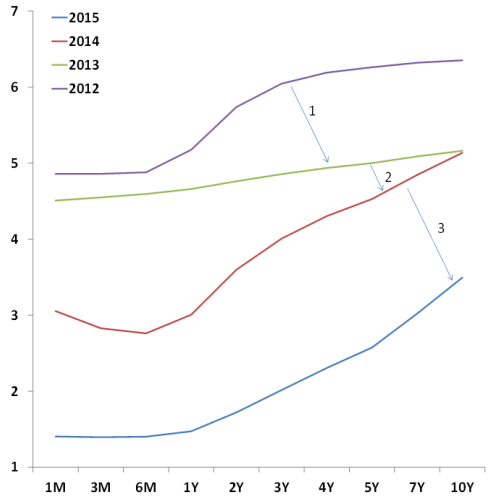
Figure no. 10 – Eurozone - Yield curve for government bonds (%)



Source: Adrian et al. (2013)

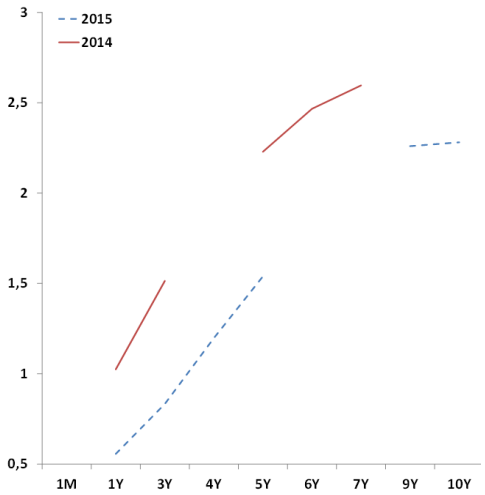
Figure no. 11 – 10-year US Treasury yield decomposition (%)

These developments also influenced Romanian bond yields. The simulations performed based on a VAR model (Radu, 2015) suggest that, for the period from November 2012 to April 2015, the joint impact of a 1 pp change in 10-year US Treasury yields on yields of leu-denominated Romanian bonds over the same maturity was of approximately 0.3 pp. Figures 12 and 13 show the yields on Romanian government bonds in lei and euro respectively.



Source: Bloomberg, NBR estimates

Figure no. 12 – Romania - Yield curve for leu-denominated government bonds (%)



Source: Bloomberg

Figure no. 13 – Romania - Yield curve for EUR-denominated government bonds (%)

6. THE PERSPECTIVES OF GLOBAL IMBALANCES

From a longer term perspective, real interest rates, which have other determinants as well besides excess saving, should decrease sufficiently in surplus countries to eliminate the global saving glut. However, this effect may not occur as long as (a) there are still restrictions on capital flows, (b) some countries intervene on currency markets, aiming at commercial advantages, (c) some countries remain export-dependent, (d) oil prices remain relatively high, facilitating excess saving in oil-exporting countries and, finally, (e) domestic demand in some countries is further constrained by structural factors, so that an interest rate cut would result in currency depreciation and a larger saving glut. Given the above-mentioned restrictions, interest rates will not fall enough to eliminate global imbalances.

A reduction in global imbalances could be possible if the expenditure level began to near the income level in saving glut economies. The economic policy measures which could provide support in achieving this purpose are mentioned by Bernanke (2007). But, as we shall discuss in this section, these chances are, at least in the current conditions, far-fetched for the major economies/areas with excess saving.

Also, some pressure to increase desired saving may occur in the US as population (and potentially labour force) growth slows down. Moreover, the US debt ceiling might be reached at a certain point in time or, the other way round, the surplus countries' capacity to hold US bonds might become saturated, thus generating unsustainable borrowing costs. But, even while taking these possible developments into account, countries remain in the secondarity process, acting either as net exporter or net importer of financial capital, depending on their capacity to manage the consequences of a crisis or of faulty pension schemes, as is the case in some Asian countries like China, for example.

If the hypothesis of taking up secondarity, as described and discussed in this paper, proves right, assuming the US could no longer play its role in the secondarity process, other developed economies will be identified to play, alongside the US, the role that the latter still

plays by itself in the process. Consequently, the widening trend of global imbalances and the effects of lower real interest rates might continue.

For the time being, there is no need to identify another economy to play the role of the US. On the contrary, the Eurozone is among the entities which have recently migrated towards the group of surplus countries. It remains to be seen whether this change was triggered by cyclical factors, reflecting the recession at the euro area periphery, or by structural ones, indicating a strategic move of those particular countries taking up the secondary position, as we assumed in this paper.

On the short term, the factors of influence are different, but act in the same direction. As illustrated in Figure 7, the financial crisis brought about a significant reduction in global current account imbalances in 2009, but these imbalances re-emerged in part as of 2011.

The conditions are in place for these imbalances to widen in the upcoming years (Wolf, 2015; Croitoru, 2015b). On the one hand, in the Eurozone, China and Japan – the area/countries with the largest saving gluts – the chances for domestic demand to grow significantly are rather slim. The Eurozone still faces strong reluctance to spend, to which add the large volume of debt and the lack of fiscal expansion. China's credit-backed investment boom has grown to unsustainable levels, while Japan's public debt is too high for further fiscal policy easing. For these reasons, until the implementation of structural reforms to speed up domestic demand growth in these countries, monetary policy easing remains the only practical solution to stimulate economic growth. Under the circumstances, monetary policy easing will lead to currency depreciation and hence to an increase in export and excess saving in the respective countries.

On the other hand, the monetary policy easing stage seems to have wrapped up in the US and the UK, while the actual demand conditions might call for monetary policy strengthening, at odds with the loose policies in saving glut countries. Against this background, the USD and the GBP could appreciate versus the currencies of surplus countries, which may widen the saving deficit (current account deficit) in the US and the UK.

7. CONCLUSIONS FOR ROMANIA

Interest rates in the developed countries might stick to very low levels over the next years. The factors that led to decreasing long-term rates – the decline in population and labour productivity growth rates and the increase in the propensity for saving in a rising number of countries – have been acting in this direction for decades and their action at global level is likely to continue.

On this background, fluctuations around the above-mentioned trend are manifest over the short term. One of these fluctuations was the recent crisis which pushed interest rates even lower by squeezing economic growth rates and boosting the propensity for precautionary saving. Using quantitative easing programs to push short-term interest rates to very low levels will inevitably give birth to a new financial bubble.

Thus, given a new asset price bubble, for a while, economic growth and interest rates might increase as compared to the current levels. However, if the long-term trend continues, advanced economies are going to experience, more or less, lower-than-pre-crisis growth and interest rates in the future. Moreover, considering the disruptions generated by instances (a)-(e) mentioned in the previous section and the secondarity process, the global saving glut will augment, due also to new excess savings emerging in the countries still posting a current account deficit, but not playing a similar role to that of the US in the global imbalances.

Aware of this context, we may look at Romania's economy in terms of short- and long-term effects. They originate in the fact that Romania is a small, but relatively well-integrated economy in the global economy both financially and commercially, as well as in the changes to the fundamental factors' behaviour once a certain level of development is reached.

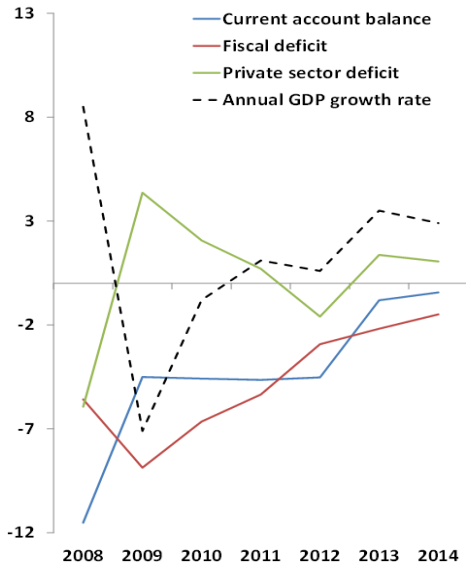
7.1. Short-term effects

The nascent saving glut

One of the short-term effects is that, provided the secondarity hypothesis proves right, Romania might be headed for a saving glut. At present, this hypothesis seems unlikely, but the 2013 saving deficit (excess investment) contraction followed by its halving share in GDP in 2014 came as a complete surprise.

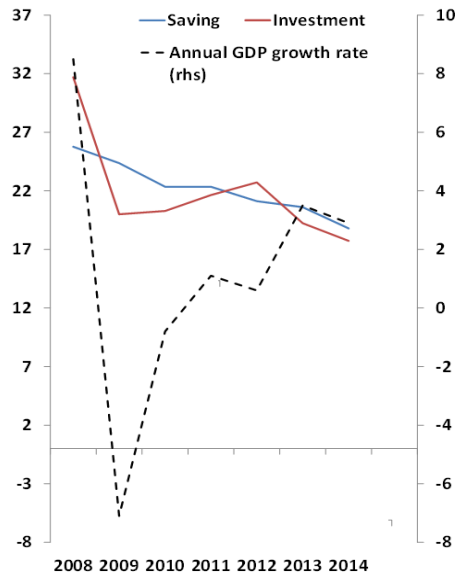
The saving glut that may emerge in the Romanian economy as a whole has already been manifest in the private sector. Except for 2012, the private sector recorded saving gluts from 2009 to 2014 (Figures 14 and 15). This surplus was due to a decline in the share of saving in GDP and an even larger decline in the share of private investment in GDP. In the public sector, the saving deficit was gradually reduced, but it remained larger than the private sector saving surplus.

The increase in public sector savings' share in GDP, which turned positive in 2011, and the decrease in investment's share in GDP (Figure 16) both contributed to the narrowing of the saving deficit in the public sector. The 2014 public budget advance payments for some outlays scheduled for 2015 ultimately caused the economy-wide saving glut to be avoided as early as 2014.



Source: author's estimates based on EUROSTAT, NBR and UNCTAD data

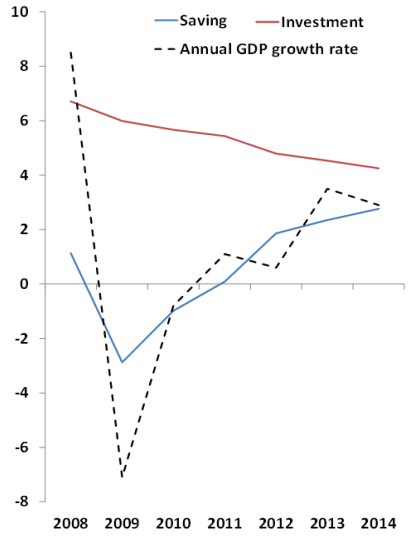
Figure no. 14 – Current account, fiscal, private sector deficits (% of GDP) and the economic growth rate (%)



Source: author's estimates based on EUROSTAT, NBR and UNCTAD data

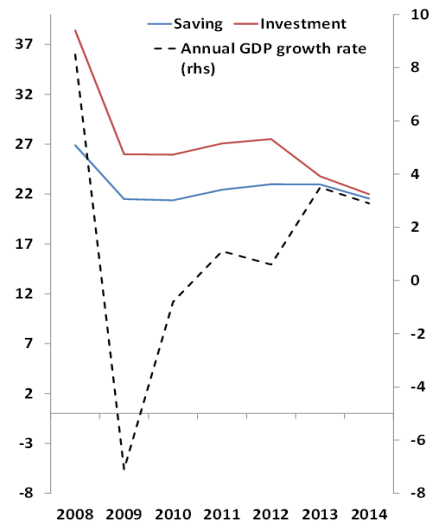
Figure no. 15 – Private sector saving and investment (% of GDP) and the economic growth rate (%)

Perhaps a saving glut will not emerge in Romania in 2015 and 2016, given the tax cuts provisioned in the newly approved Tax Code, which will increase the structural deficit from 1% of GDP, as recorded in 2014, to 3% of GDP in 2016. On the whole, in Romania, the decline in both private and public investment played a major part in the massive reduction of the investment surplus (Figure 17).



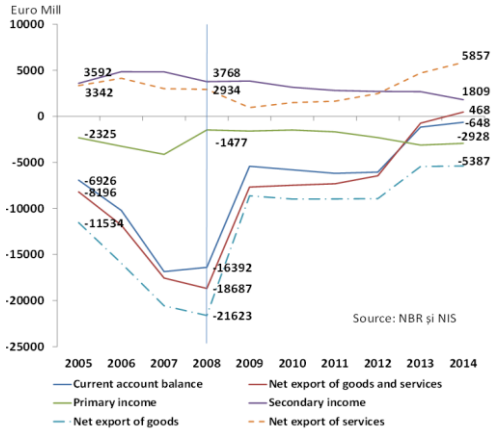
Source: author's estimates based on EUROSTAT, NBR and UNCTAD data

Figure no. 16 – Government saving and investment (% of GDP) and the economic growth rate (%)



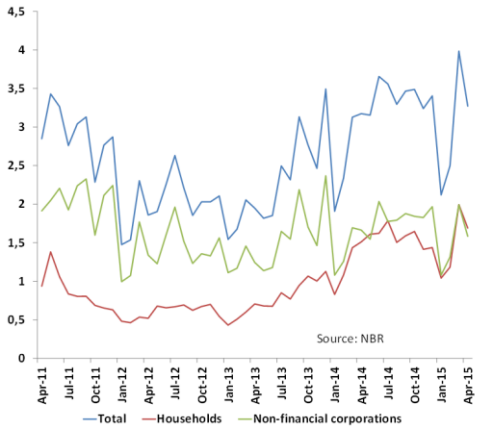
Source: author's estimates based on EUROSTAT, NBR and UNCTAD data

Figure no. 17 – Romania's saving and investment (% of GDP) and the economic growth rate (%)



Source: NBR and NIS

Figure no. 18 – Balance of Romania's current account and component items



Source: NBR

Figure no. 19 – New loans to the private sector on a monthly basis (lei billion)

The conclusion that the current path leads to a saving glut was reached from the saving-investment perspective, but it can be derived as well from the perspective of Romania's foreign trade pattern (Figure 18). Many adjustments which led to the current account deficit narrowing are of a structural, i.e. sustainable[19], nature. The cyclical, or reversible, influence prevailed until as late as 2013, but not any longer.

The signs that Romania is headed for a saving glut became more visible in 2013, when the current account shortfall narrowed to 1.1% of GDP from approximately 4.5% in 2012. The next significant development was the emergence, for the first time in 25 years, of a trade surplus of almost EUR 500 million in 2014 (Figure 18) and of a further decline in current account deficit to 0.5% of GDP in 2014.

The trade balance adjustments were impressive. From EUR -21.6 billion in 2008, the net exports of goods were cut down to EUR -5.4 billion in 2014 and the net exports of services increased from EUR 2.9 billion to EUR 5.9 billion in 2014 (Figure 18). All these developments illustrate the path towards a saving glut.

The Romanian Conundrum

The pick-up in economic growth rates above potential after 2013, together with the saving deficit fall, was seen as a conundrum of the Romanian economy. It was never clear why the current account deficit narrowing in 2013 and 2014 led to an increase in the GDP growth rate[20], estimated in the spring forecast of the National Commission for Prognosis at 3.3% for 2015 and 3.4% for 2016. Exports started rising at a faster tempo as early as 2010, but without an impact on the current account deficit – which reached approximately 4.5% of GDP 2009 through 2012 – and without spurring economic growth.

The conundrum may be explained by starting from the natural interest rate decrease determined by the appearance of a saving glut. In Romania, the fall of the current account deficit near to zero has had an effect similar to the occurrence of a surplus: it determined the rapid reduction of the natural interest rate. Simultaneously, inflation followed a downtrend, thus reflecting positive supply shocks as well as a decline in inflation expectations. Both the reduction of the natural interest rate as well as the fall of inflation generated by the reduction of expectations made it necessary to decrease the actual interest rate, which NBR actually did by lowering it from 5.25% in December 2012 to 1.75% starting in May 2015. Starting 2013, the lower costs associated with leu-denominated loans helped economic growth by diminishing the influence of the balance sheet effect, since the cost of foreign currency loans remained relatively constant (Copaciu *et al.*, 2015).

The combination between the nosedive of the current account deficit, monetary policy rate cuts and liquidity management seems to have pushed the money market rate below the natural interest rate between 2013 and 2015 (stimulative gap). The natural rate is hardly observable and therefore, quite uncertain and, so that uncertainty covers the interest rate gap as well. However, it is only a stimulative interest rate gap that could be consistent with a pick-up in economic growth and a fall in inflation, the latter mostly reflecting the lower inflation expectations, as was the case in the above-mentioned period[21]. Figure 15 sets out that in 2013, once the stimulative interest rate gap has emerged, the monthly volume of loans to the private sector began to increase, which fuelled economic growth.

The interest rate dilemma

On the short term, another relevant effect for Romania might emerge if aggregate demand from advanced economies remains below potential, as is the case of the Eurozone.

In this case, the monetary policy rates in developed countries will continue to remain low. However, as shown above, unlike the Eurozone, in Romania, the actual economic growth rate over the past few years was significantly higher than the potential growth rate, thus speeding up the closing of the negative output gap, likely to be achieved in 2016. This shows that inflation might increase starting 2016.

It is here that a dilemma related to the interest rate in Romania arises. On the one hand, with policy rates remaining low in developed countries, the NBR needs to lower its key rate in order to avoid the appreciation of the domestic currency relative to its equilibrium level. On the other hand, the NBR might need to raise the interest rate with the aim to curb inflationary pressure coming from a positive GDP gap, which, absent shocks, is likely to emerge in 2016, fuelled mainly by the expanding consumption.

During the previous asset price bubble, the NBR dealt with such a dilemma for almost two years. In the period 2006-2008, to curb inflation expectations required upping the interest rate, whereas the capping of capital inflows – which strengthened the currency, but fuelled inflation expectations – required a lower interest rate (Popa *et al.*, 2009; Croitoru, 2014).

Nevertheless, the possible emergence of a saving glut might prevent this dilemma. Unlike during the economic boom, the propensity for saving appears much stronger after the crisis. Once local businesses have reached the conclusion that a saving glut is preferable to a deficit, i.e. secondarity, this trend in saving will be a lasting one and Romania might join the group of saving glut countries. The emergence of a saving glut would lead to a lower natural interest rate, even below the current level, which would make it necessary for the NBR to curtail the policy rate.

The saving glut holds the advantage that it can curb inflation. If the saving glut pushes the natural rate below the monetary policy rate, the central bank can further lower the interest rate in order to prevent the leu from strengthening without overheating the economy. It is as though the saving glut acted as a supplementary monetary policy tool.

Fiscal policy reactions

Finally, another effect is the emergence of fiscal policy changes. Low interest rates and swift economic growth can create the impression that the budget has sufficient steady income and that tax rates can be lowered without causing the budget deficit to widen.

Fiscal policy changes can also be determined by the fact that, *ceteris paribus*, a saving glut may stifle economic growth. Some might say that from the perspective described in this article, the VAT rate cut and other fiscal easing measures planned for 2015-2016 would be welcome since they would entail a wider fiscal deficit that would prevent or at least delay a saving glut in the public sector, which in turn would weigh on economic growth and push interest rates even lower.

Over the very short term, this consequence could be true because it fuels consumption. However, these measures do not address the structural causes depressing economic growth in Romania. For this reason, the fiscal deficit widening by boosting infrastructure expenditure would have been a lot more appropriate. Higher investment spending would have led to both increased consumption and lasting growth of productivity in the private sector and, consequently, of the potential output.

Many analysts believe that the current account surplus registered in the first two months of 2015 will be eroded by the end of the year due to faster economic growth. However, if businesses continue to save, as they had in the last six years, a saving shortfall might emerge in the public sector particularly if the whole of the government-announced fiscal program,

cantered on cutting the VAT rate from 24% to 10%, will be implemented starting January 2016, and another cut to 19% will take place starting January 2017, as planned.

However, as pointed out above, the fiscal deficit widening prevents the emergence of a saving glut which may ultimately prevent the interest rate dilemma. In this case, avoiding the interest rate dilemma remains dependent on when and how fast monetary policy rates will resume the upward path in developed countries.

7.2. Long-term effects

Over the long term, Romania could witness the developments now manifest in developed countries. The population decline that began 25 years ago and the saving glut that might appear will contribute to the slowdown in economic growth and the cut in monetary policy rates. The factors that could counter these influences are the increase in both productivity and the average number of working hours per employee. The latter indicator will nonetheless begin to drop relatively fast once the income per capita has exceeded a certain level, as proved by developments in advanced economies.

In Romania, there are still chances for productivity growth rates to go up and remain relatively high for a long time before they begin falling again. Unlike developed countries, Romania still has some issues which, once they have been dealt with, will remove the current hurdles to productivity growth. It is, first and foremost, about the still disputed property rights and the related rampant corruption. Once these problems have been solved, new mentalities will come up and the resources necessary for new investments (including highways) will be released, which will ultimately entail higher productivity.

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Notes

[1] Deflation occurred temporarily in the US and the Eurozone due to the fall in the oil price and to other supply-side factors. Deflation might not have occurred had actual demand been closer to potential.

[2] In Romania, actual GDP growth rates have been higher than potential GDP growth rates in recent years, prompting a reduction of the demand deficit. However, the latter is still disinflationary, which translates into downward (albeit abating) pressures on inflation.

[3] It is nevertheless unrealistic to imagine a case in which demand in developed countries remains subdued enough vis-à-vis potential to require that monetary policy rates be kept at zero and, at the same time, actual output in Romania exceeds potential, thus calling for an interest rate hike. Such a policy rate increase would strengthen the leu in excess as compared to the appreciation induced by capital inflows, thus contributing even more to the economic growth slowdown. This would lead to

losing the monetary policy tool in Romania, because cooling off large capital inflows and the associated risks would call for a policy rate cut, while inflationary pressures would require an interest rate hike. Some might argue that implementing the measures meant to deter foreign currency lending could, after all, preserve interest rate effectiveness. According to this view, the interest rate increase would continue to determine the leu appreciation, just like before the crisis, but would no longer have as a negative effect the rise in aggregate demand by spurring foreign currency lending. Without this channel, the policy rate hike would lead to the elimination of excess demand and to lower inflation. Regarding this observation, mention should be made that, once the interest rate increase has prompted the significant appreciation of the leu, thus raising markedly the borrowing costs in domestic currency, both banks and the public will jointly find solutions to circumvent the measures which currently lead to capping foreign currency lending.

[4] Woodford (2003) also includes government purchases among the determinants of the real interest rate. Nevertheless, we refer here to fundamentals alone, which do not depend directly on the government. Woodford indirectly refers to the time preference rate, which he includes in a vector illustrating shifts in tastes.

[5] Increased investment demand means that the yields of new investment projects exceed the capital cost. The two are related due to the lack of monetary policy rate arbitrage. Population growth also triggers increased investment demand.

[6] This statement implies that the economy is run according to a general equilibrium model in which the central bank minimizes a loss function, so that the interest rate is set at levels which ensure intertemporal loss minimization. This means that the central bank identifies shocks and addresses them in line with the best-response rule. Alternatively, the bank may have a Taylor function, thus addressing the deviations of inflation from the target and of output from potential (and potentially the exchange rate deviations from an implicitly or explicitly preferred level). In this latter case, the interest rate is no longer set depending on the deviations of the three elements from their stable condition.

[7] In the US, the current account deficit widened in absolute terms until 1987, before gradually narrowing and reaching zero in 1990. This was due to the so-called Plaza Agreement, signed on September 22, 1985 between France, West Germany, the US, Japan and the UK, aimed at forex market interventions to depreciate the US dollar in relation to the Japanese yen and the Deutsche mark.

[8] This is a historical perspective based on the chronological order of events. Obviously, in an ideal world, in which there would be no restrictions on capital movement, no reserve currency and no policies regarding forex reserves, with a fair distribution of energy resources, we would not see major global imbalances as the current ones.

[9] Real lending rates picked up from the 50-year low of -1.5 percent in 1975 to 8.7 percent in 1981 (see www.indexmundi.com).

[10] Inflation targeting, which contributed to lower inflation, without doubt also constituted a factor for boosting confidence in saving. Nevertheless, it cannot be asserted that inflation targeting is a driver of excess saving.

[11] Romania also dealt with a saving glut (current account surplus) between 1982 and 1989 as a consequence of import-reduction policies and forced saving generated by the export of production, although household domestic demand for goods was not met.

[12] Bulgaria, Croatia, Czech Republic, Poland, Romania, Slovakia (until 2009, when it joined the Eurozone), Slovenia (until 2007, when it joined the Eurozone) and Hungary.

[13] The saving glut in Romania in 1982-1989 was also the result of the decision taken by the communist regime of the time.

[14] This means that secondarity does not necessarily affect the tendency towards saving in the country in relation to which secondarity takes place, i.e. the US. Bernanke (2007) claims that the *desired* saving rate in the US did not drop between 1996 and 2004, although net saving (saving less investment) did. Consequently, net desired saving (desired saving less desired investment) increased in countries other than the US and were exported to current account deficit countries, particularly the US.

[15] The slower pace of increase of labor productivity has led to a decline in economic growth prospects, which has in turn depressed investment demand.
[16] In a fantasy world, made up exclusively of closed economies, saving would necessarily equal investment.
[17] Borio and Disyatat (2011) show that, in explaining the decline in interest rates, the focus on the saving glut is logical given the hypothesis that money is neutral on the long term. However, the role of money and finance as well as that of expectations are important and, therefore, interest rates reflect the interaction between the central bank's reaction function and the private sector's beliefs. In their view, the hypothesis according to which money is neutral is unrealistic because successive crises have demonstrated that money and finance can have long-term effects. They have used this view to show that money and financial factors, particularly debt, amplify cyclical fluctuations. For example, the stock of capital can increase during a boom due to favorable financial conditions, which may help constrain inflation and gives the impression that there are no reasons to strengthen monetary policy (Borio and Disyatat, 2014). Once the financial bubble bursts, the large debt stock turns into a "legacy that takes time to resolve", meaning that money is not neutral (this explanation is similar to the one provided by Minsky in 1986 regarding the causes that push an economy into recession following a bust). A consequence of this perspective, explained by Borio and Disyatat (2014), is that "[policies] that do not lean against the booms – but ease aggressively and persistently during busts – induce a downward bias in interest rates over time, and an upward bias in debt levels". From the perspective that interests us here, they conclude that the "trend decline in real interest rates does not just passively mirror changes in underlying macroeconomic fundamentals – it also helps to drive them". Policies (both monetary and fiscal) contribute to the downtrend in interest rates, while low interest rates amplify debt, thus creating a "debt trap" which makes it impossible to up interest rates without damaging the economy. Their view is totally opposed to the "liquidity trap" one (which I share), in which, in some cases, interest rates cannot be lowered to the level of the natural rate in order to jumpstart the economy, as it happened in developed countries during the 2008 crisis.
[18] The factors mentioned in the text – population (labor force, average number of hours worked by an employee), labor productivity and the propensity for saving – are both factors of the real interest rate and of potential output and therefore it was not only the natural interest rate which fell in time, but also the potential growth rate of production. Assuming equal growth rates of the labor force and labor productivity in any two countries, the natural interest rate will be lower in the country with a higher propensity for saving. Nevertheless, since any combination of the three factors is possible, it cannot be stated that countries with excess saving have lower natural rates than those with excess investment.
[19] Among the factors supportive of the massive current account deficit narrowing were the energy efficiency increase and the elimination of some consumers that failed to cope with the natural gas price increase towards the global level, which eventually enabled the reduction of natural gas imports for manufacturing. Moreover, the assimilation of the production (import substitution) of some parts for the exported transport means caused an increase in the value added for the leading export-oriented industry as well as lower imports. Finally, net exports of IT and tourism services grew significantly, resulting in a larger goods and services surplus. A detailed presentation of the structural changes that led to the current account deficit narrowing in Romania is to be found in Iorga (2014). Secondarity and the said structural changes are not contradictory. While secondarity explains these processes from the saving-investment perspective, structural changes illustrate companies' steps to maximize their profits. Secondarity can emerge following any saving and investment change combination having a saving glut as a stable result.
[20] An even sharper fall in saving glut had occurred in 2009. It fell from approximately 13% in 2008 to about 4.5% in 2009 and remained unchanged until 2012, causing a protracted recession to be avoided. From this perspective, things were clear: just like the saving shortfall helps to avoid economic overheating when domestic absorption (demand) is high due to the fact that it places part of aggregate demand abroad by increasing imports, the saving glut helps avoid the recession when domestic demand is weak by increasing exports, i.e. via external demand.
[21] A non-stimulative gap would have led to a slowdown in economic growth and weaker inflation.