

WHEN POLICIES FUEL ECONOMIC CYCLES:

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Abstract

The Great Recession has brought back into the limelight the issue of cycles, of policies which fuel, or mitigate crises. There is a specter of much lower economic growth in the industrialized world. Central banks are over-burdened. This makes central bankers' life much more complicated and obfuscates the borders between monetary policy and fiscal policy, especially when financial stability gets to center stage. New systemic risks show up in capital markets. The Eurozone has escaped collapse owing to ECB's extraordinary operations and large macro-imbalance corrections in its periphery, but major threats persist. This paper focuses on economic cycles and policies in an international (European) context. The financial cycle is a key concept in the logic of this paper. The experience of European emerging economies is taken into account. Attention is paid to linkages between domestic cycles and financial cycles, drivers of financial cycles, finance deregulation and systemic risks, ultra low interest tates, the international policy regime and global stability.

Keywords: financial crisis, financial cycle, secular stagnation, debt overhang, low interest rates, policy rates, fiscal policy, monetary policy

JEL Classification:

1.Introduction

The Great Reccession has brought back into the limelight the issue of cycles, of policies which fuel, or attentuate crises. The glorious decades of postwar economic reconstruction after the second WW2 and Keynesian policies, which were a hallmark of that period, came to a halt in the seventies. Stagflation and excesses of Keynesian

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policies led to a rethinking of the dominant paradigm. Central banks got more independence and monetarism, which was based on rules (control of monetary aggregates, or the inflation targeting regime with Taylor's type rules), got prominence. But the Great Recession has highlighted limits of a thinking that equates price stability with financial stability. "The problem of depression prevention" has resurfaced strongly.³ Cognitive and operational models in economics and business are questioned; how to model non-liniarities (tail events) is a big challenge, as is the integration of finance in macroeconomic models (Brunermeier *et al.*, 2011; Borio, 2012).

There is a spectrum of much lower economic growth (stagnation) in the industrialized world: *balance-sheet recession* (Koo), *secular stagnation* (Summers), a "supercycle" (Rogoff) all are linked with demographics, debt overhang, income inequality, technical change, zero-sum games in the world economy, etc. There are massive implications of economic slowdown and rising economic inequality. Finance continues to have destabilizing features (Stiglitz, 2010; Blanchard and Ostry, 2012) in spite of efforts undertaken to reform its regulation and supervision.

Central banks are over-burdened in many countries; they can no longer rely on simple rules). This makes central bankers' life much more complicated and obfuscates the borders between monetary policy and fiscal policy, especially when financial stability gets to center stage. Shadow banking brings about new systemic risks.

The Eurozone has escaped collapse owing to ECB's extraordinary operations and large macro-imbalance corrections in its periphery. But major threats persist: the link between sovereign debt and bank balance-sheets has not been severed (and it may be quite unrealistic to think that a total delinking is feasible)⁴; market fragmentation is still alive, although the periphery pays much less currently for issuing its debt (but due to ECB's special operations primarily).

Policy makers in European emerging economies (EEEs) are facing major policy dilemmas. Can catching up be resumed under the "New Normal"? Can policies be devised to mitigate the amplitude of financial cycles? What is the role of macroprudential policies in this regard? Is banking going to change profoundly⁵? Such questions concern EEEs hugely. Most of them have benefited considerably on the proximity of the EU and on becoming member states. But, in spite of impressive catching up during the past 10-15 years, economic gaps are still pretty high, be there substantial variation among the EEEs.

³ Dani Rodrik quotes Robert Lucas, who wrote in 2003, that the problem of "'depression prevention" had been solved (2016, p.134).

⁴ The only entity which has taxation power, irrespective of how financial markets deem its reputation, is the government. Safe bonds (based on securitization of sovereign bonds, as Brunnermeier et al. (2016) propose) may help weaken the "diabolic loop" between sovereign and bank balancesheet, but a final solution demands, arguably, genuine fiscal integration in the euroaria. Moreover, safe assets cannot be increased by securitization in a fundamental sense; their amount hinges on how sound economies are.

⁵ The disenchantment with debt fueled growth, with credit-fueled financial-cycles, make some think that a fundamental change of banking is needed. Some air again the Chicago Plan idea (Benes and Kumhof, 2012) by criticizing fractional reserves systems. Mervyn King, the governor of the Bank of England until 2013, is also highly critical of current banking models (2016). See also John Kay (2015) and Adair Turner (2016).

This paper focuses on economic cycles and policies in an international context. The experience of EEEs is amply taken into account. Attention is paid to linkages between domestic cycles and the European financial cycle, drivers of financial cycles, finance deregulation and systemic risks, ultra low interest rates, the international policy regime and global stability. Part one deals with the impact of financial cycles on domestic economic cycles and considers the past decade in the EU in this respect; part two considers the *Great Recession* through the lenses of financial cycles and points out likely causes of this very deep crisis; part three examines the syndrome of ultra low interest rates; part four judges macroprudential policies when markets are deeply interconnected; part five sketches a policy agenda under the "New Normal". Final remarks conclude the paper.

2. Domestic Cycles and the Financial Cycle: The Story of a Big Bubble

There are several perspectives from which to judge European emerging economies after the fall of the Berlin Wall. One is the transition to a new economic and political regime, which has asked for privatization, price liberalization and the opening of economy, institutional reforms and, not least, the introduction of hard budget constraints⁶. The "transformation recession" (as Janos Kornai called it) of the years 1990-1992, following the series of deeply going institutional changes and the introduction of market based mechanisms, potrays the transtion to a new economic regime. In some countries, Hungary and Poland, to a certain extent, transition was much easier due to reforms which had been undertaken before the fall of the command system. In other countries, reforms followed a more tortuous path and a new episode of recession visited some of them (e.g. Romania, Bulgaria) during the first decade of this transition. Overall, it became increasingly clear that the burden of the past, structural rigidities, and the power of habits condition change considerably. Post-command transition can be seen as a peculiar long cycle - which can be compared with "Kondratieff cycles" to the extent regime change brought about inflows of new technology and entailed better resource allocation and higher efficiency.

Another approach for reading transition in EEEs is the EU accession process. Not only did the EU accession process help the EEEs build their new institutional setups, but the big rise of investment in the past two decades can be also explained by coming closer to and joining the Union. An EU integration-related cycle can therefore be detected for the economies that joined the EU in 2004 and 2007, respectively.

It is also worth focusing on a cycle that links national economies with the Single Market, with the dynamics of the financial system; it is the financial cycle, which, as BIS experts emphasize recurrently, refers to the expansion and the ebbing of credit (Borio, 2012). This cycle is longer (10 to 15 years, maybe longer) than a business cycle. As Kenneth Rogoff (who talks about "supercycles') said: financial cycles are accompanied by over-

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⁶ Janos Kornai pointed out that soft budget constraints are ubiquitous in command economies.

Nikolai Kondratieff is a Russian economist who died in a gulag in the 1920s. He is known for his research on long waves of economic activity, which can be seen similar to Schumpeter's description of secular cycle, and which is linked with clusters of key (revolutionary) technologies.

borrowing (debt overhang). The financial cycle concept is key in understanding the role of finance in the motion of economies, with their upswings and downswings, which are caused by money non-neutrality in a deep sense. The financial cycle approach should be contrasted with the real business cycle (RBC) approach, in which finance plays an almost insignificant role.

The New Keynesian macro modelling, on which the inflation targeting regime is based (Clarida, Galli, Gertlet, 1999; Galli, 2015), has arguably underestimated the role of finance in augmenting systemic risks⁸. Central banks have been implementing inflation targeting by paying insufficient attention to monetary aggregates (see also Axel Weber, 2015).

As Borio observes, financial cycles are shaped by self-reinforcing interactions among perceptions of value and risk, which translate into booms followed by busts (2012). This evolution is correlated with a big rise in debt (private) relative to income (GDP). A key tenet of the Financial Cycle paradigm is that financial liberalization enhances the amplitude of financial cycles. Another tenet is that a one-sided (focused exceedingly on inflation) monetary policy is inadequate since it does preclude the adoption of MPMs that could mitigate boom and bust dynamics, resource misallocation. Borio and Disyatat (2012) talk about a 'policy drift' when there is maintenance of low interest rates for too long. Such a drift would accentuate over-borrowing and debt overhang.

The financial cycle provides an illuminating explanation for boom and bust dynamics. This is clearly evident in Europe during the past decade, in not a few EEEs, in the Euro Area too. Figure 1 illustrates the evolution of credit and economic growth in various groups of European countries; the explosion of credit is visible in the precrisis years and its implosion after markets froze.

Central Banks' attempts in EEEs to stem the skyrocketing pace of credits was offset due to euroization, parent bank funding, and possibly also due to little experience with what are now called macro-prudential tools. One easily detect here Hélène Rey's insight that the *impossible trinity* (trilemma) turns, when a global financial cycle operates, basically into a 'dilemma' (2013), and that capital controls could play a useful role in mitigating the destabilizing features of massive capital flows. An ensuing inference is that major central banks, the Fed in particular, have a key responsibility in considering their monetary policies and ensuing externalities. Rey's 'dilemma' compounds the 'Tosowsky dilemma', both indicating how hard it is to conduct an effective monetary policy in small open economies when facing substantial capital flows.

The ample boom-and-bust cycle was not limited to EEEs, but also hit other large parts of the EU (see Figure 1). One wonders whether a European financial cycle was at play in the EU after the introduction of the euro and against the backdrop of the myopia of financial markets regarding the performance differences among various economies. Much of the inflow was private borrowing and, like in the Asian crisis of 1997-1998,

emerging economies, the need to sequence financial liberalization. For an analysis of the

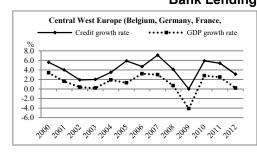
economic cycle in Romania see the Annex.

⁸ See also Brunermeier et al. (2012).

⁹ In a debate on the pace of financial liberalization in Romania, which went beyond the implications of the 'Tosowsky dilemma', supporters of fast financial liberalization faced proponents of a cautious approach (Daianu and Vranceanu, 2002), which considered structural features of

financial markets were found to care, in the end, about the overall external indebtedness of an economy, be it driven by the private sector.

Bank Lending and GDP Growth



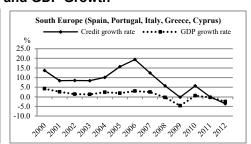
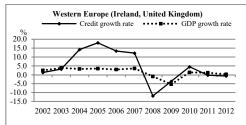
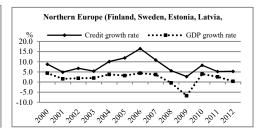
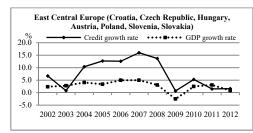
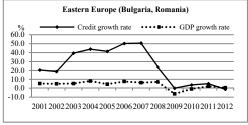


Figure 1









Source for all graphs: Eurostat, European sector accounts (national central banks; other monetary financial institutions), own calculations (see Daianu in Nowotny et al., 2016, p. 201).

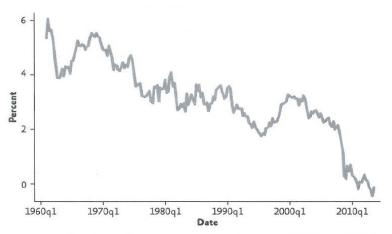
3. When the Financial Cycle Meets "Secular Stagnation"

There are several issues for debate when considering how a financial cycle ends up in such a deep financial crisis and economic crisis. One issue is related to structural trends, that predate the start of the financial crisis, and which have, arguably, fueled the financial cycle. Finance deregulation has been a key driver in this respect. For, while cycles and crises are unavoidable (Minsky's *financial instability hypothesis*, which has roots in Keynes' works), their amplitude depends on various factors, on the functioning of finance.

While the financial crisis plays a major role in the current economic malaise, *secular stagnation* (Summers) has to be judged in terms of a long run decline in productivity,

demographics, technological change, rising income iequality, etc. OCDE studies¹⁰ show that potential growth in the EU slowed down from cca 2.5% in the late 1990s to 2% during 2005-2007, while trend growth in the 1970s and 1980s was around 5% on average. An analogous evolution can be ascribed to the US economy, too, over that period of time (see also Gordon, 2016). The impact of the financial crisis is also significant: estimates are that the Great Recession has brought GDP potential growth below 1.5% in the EU for the next 5-10 years (OECD and Economic Commission numbers). Low, ultra-low interest rates come into the picture in this context (see section 4) as they juxtapose dynamics of saving and investment over the longer term (William and Laubach, Figure 2, quoted by Summers; Figure 3) which are also shaped by the financial crisis. Tehnological optimism (robots, IT) vs. pessimism is also an issue for contention. And finally and not least, what is the role played by debt overhang (Rogoff), of big debts in the public and private sector? Balancesheet recession (Koo) is to be highlighted in this context.

Figure 2 Evolution of Real Interest Rates (William and Laubach, 2003)



Estimate for the real interest rate by Laubach and Williams (2003)

Source: Summers (2014).

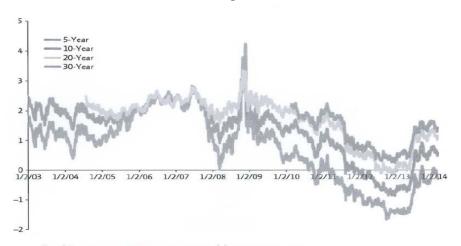
Cycles cannot be avoided, but their amplitude is, influenced by policies. And it is a fact that, for the past four decades, the paradigm which has underpinned policies of central banks and regulators and which equates price stability with financial stability, has underestimated systemic risks; it has also downplayed debt in the funding of economic activity (Modigliani-Miller theorem¹¹) and could not capture tail events (non-liniarities).

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¹⁰ Rawdanowicz et al. (OCDE, 2014).

¹¹ The Modigliani-Miller theorem says that equity and debt are equivalent in funding a business. This may have bolstered the propensity to borrow, to use high leverage.

Figure 3



Real interest rates as measured by returns on Treasury Inflation-Protected Securities (TIPS).

Source: Summers, (2014).

Competing narratives try to explain the current economic malaise, among which:

- deregulation of financial markets;
- lax monetary policies: a long cycle of boom and bust in the advanced economies (The Great Moderation), which was littered with episodes of possible major tremors, that were prevented by central bank intervention (e.g., the LTCM crisis and the indirect FED intervention)
- structural tendencies, including the glut of savings (Bernanke, 2005) and the scarcity of safe assets (Caballero)

These narratives can be brought to a common denominator. Arguably, a "drifted" financial cycle has been at work in the global economy during the past two decades. This drifted cycle is reflected by *oversize finance* (Pagano *et al.*), rising debt overhang and huge fragilities in highly inter-connected markets. The Great Moderation years hid a huge resource misallocation (Jaime Caruana, 2014)¹², which shows up in "debt overhang" and a "balance-sheet recession".

crisis by major central banks in advanced economies – a similar fiscal dominance takes center stage, blending two policy tools. But inflation is very low in the economies afflicted by the

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^{12 &#}x27;Structural strain' can provide an analogy with overburdened monetary policy during the current financial and economic crisis. Following the collapse of the command system and a dramatic change in relative prices, many enterprises were found to be unprofitable and faced increasingly hard budget constraints. The system, due to its rigidities, was incapable of undergoing massive resource reallocation rapidly. Hence the need to subsidize firms and even sectors involving monetization of quasi-fiscal deficits. Firms themselves created own pseudo-money via interenterprise arrears. This quasi-fiscal task of central banks during the initial stage of post-command transition resembles the quantitative easing practiced during the current financial

Finance Deregulation

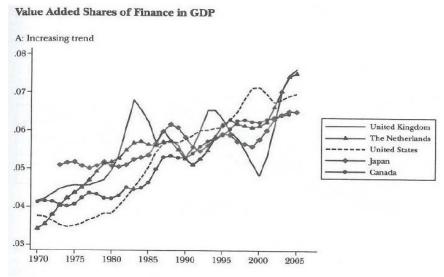
Finance deregulation has played a major role in derailing the financial cycle. Key moments were 1986, 1998, 2000 (the Big Bang in the UK and the promotion of the so called "light touch regulation;" the repeal of the Glass Steagal act and the Commodity Futures Modernization Act in the US, etc). As Greenwod and Scharfstein (2013) show, finance has grown enormously during the last three decades. In 2006, finance contributed 8.3% to US GDP, compared to 4.9% in 1980 and 2.8% in 1950 (p.1); the financial share of GDP increased at a faster rate since 1980 (13 basis points of GDP per annum) than it did in the prior 30 years (7 basis points of GDP per annum).

Oversize finance and volatile financial markets make the whole system more unstable and prone to sudden stops; financial deregulation amplifies financial cycles, booms and busts. It is likely that there is an optimal degree of economic/financial openness (Stiglitz, 2010). The latest years' backlash against globalization is a proof in this regard.

Finance deregulation stimulated credit expansion (Rogoff and Reinhart), the development of shadow banking (Figure 4), a rise in inter-connectedness, and in the fragility of the international financial system.

Figure 3

Value Added of Finance in GDP



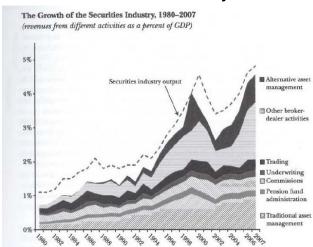
Source: Phillipon and Reshef, 2013, p. 81.

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financial crisis, whereas money printing after price liberalization in post-command economies created high inflation (since inflation expectations were pretty high after years of suppressed inflation and because money balances were considerable). This is due to an overwhelming liquidity trap and low or even declining inflation expectations in advanced economies. This difference explains why tolerating high inflation, in the initial years of transition, entailed the threat of entrenched high inflation expectations (Daianu, 1994, 1997).

Figure 4





Source: Greenwood and Scharfstein, 2013, p. 9.

Debt Overhang

When is debt too much? It depends on circumstances, as the current financial crisis amply shows. This crisis, itself, was invited by the binge of borrowing during the Great Moderation period. Balance of payments crises, too, signal too much indebtedeness (and the latter itself can trigger such crises). *Debt overhang* harms sustainable economic growth, as too feeble growth can lead to debt overhang.

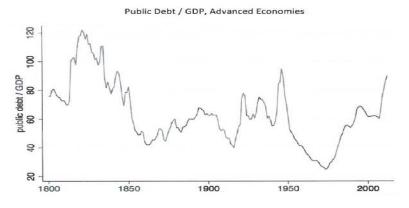
Reinhart and Rogoff suggested that 90% of GDP is a threshold beyond which debt is quite menacing. Some scholars (Th. Herndon, M. Ash, R. Pollin, 2013) had qualms about the data used by their two clolleagues, but it is unquestionable that the bigger is debt, the more of a handicap it is likely to be under similar conditions. Whether very low interest rates change the analytical picture is a sensible question, especially when monetary policy and non-standard measures turn ineffective and there is need to enlarge aggregate demand. But even then the nature of spending is key for such a course of action to make sense.

Data on the rise in debt in recent decades are quite telling. There was a big rise in indebtedness, public and private, in the developed world, which was accentuated by the crisis - the stock of debt went over 250% of GDP in recent years in many developed economies. At the end of 2014, public debt in the Euro Area stood at 91% of GDP, corporate debt at 105% of GDP, and household debt at 62% of GDP. ¹³ Figure 5 below shows the evolution of debt in 22 advanced economies over two hundred years; the date are provided by Reinhart and Rogoff (2012) and are quoted by Lo and Rogoff (2015).

¹³ Jens Weidmann, speech at a Bundesbank conference on debt and financial stability, 27 March, 2015.

Figure 5

Public Debt/GDP, Advanced Economies

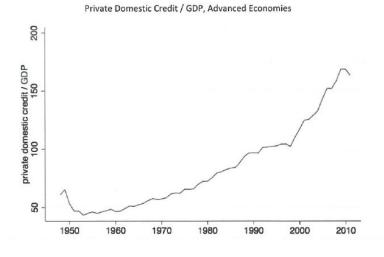


Source: Lo and Rogoff, 2015.

Figure 6 shows the big rise in private domestic debt in advanced economies since 1950, while Figures 9 and 10 illustrate the growth of overall debt in the US and European advanced economies, respectively.

Figure 6

Private Domestic Debt in Advanced Economies



Source: Lo and Rogoff, 2015.

Financial integration has bolstered the significance of external indebtedness, while the rise in overall debt in the industrial world is exceptional during the past three decades –

ironically named the Great Moderation. When growth is very feeble, debt turns more threatening. This explains the fear of debt deflation, especially in the Euro Area, where policy space is so limited and adjustment has taken place in less competitive economies via domestic devaluation.

Analogies can be made between the Great Recession and the Great Depression. And it does mase sense to do it in view of the amount of economic failures, bankruptcies, underutilisation of production capacities, labor unemployment, etc. But there are notable differences, nonetheless. One is that a financial meltdown was averted in the current crisis, at least until now. Secondly, due to persistent low inflation, central banks "may need negative policy rates to produce negative real rates" (Carmen Reinhart, 2016), as a means to stimulate economies and ease the service of debts (via financial repression). We have entered, seemingly, an age of ultra-low interest rates

4. An Age of Ultra-Low Interest Rates?

Demographic and productivity trends, globalization, the financial crisis, overburdening debts, income distribution, new technologies, growing uncertainties, all these have impacted strongly on investment and saving. More specifically:

- Increased saving relates to demography, income distribution, uncertain revenues,
- The crisis has dented investment appetite, a natural reaction if one considers exuberance and bad investment choices in pre-crisis years; heightened uncertainties are reducing overall risk appetite - as Minsky remarked, uncertainty is fundamental for understanding economic cycles¹⁴;
- Over-indebtedness ('debt overhang') generates a slowdown of economic activity, a balance-sheet recession (via deleveraging) as Richard Koo noticed for Japan ever since the early 1990s;
- Productivity growth diminished in the US as well as in other economies over the past decades, which made Gordon, Summers and others suggest that we have, quite likely, entered a period of lasting stagnation. Such an assumption may seem strange if it is juxtaposed with the thesis of an incoming new Industrial Revolution, but it is not implausible when new technologies eliminate rather than create jobs;
- Decreasing inflation after large emerging economies entered global competition; an import of disinflation has occurred, from China in particular. The current crisis was a shock in itself that combined effects on both supply and demand sides. The decline in commodity prices (i.e. oil) speeded the fall of inflation.

The factors mentioned above suggest that the equilibrium interest rate (in Knut Wicksell's sense), at which there is full resource utilization, has fallen significantly in industrial economies. This is also seen in the trends of long-term real interest rates and yields on 10-year bonds (King and Low, 2014; Rachel and Smith, 2015). In the context of a chronic under-use of resources, with intense hysteresis taking place (depreciation of idle capacities, of human capital), real policy rates would need to turn negative. If inflation is very low (even negative), central banks would be forced to take policy rates

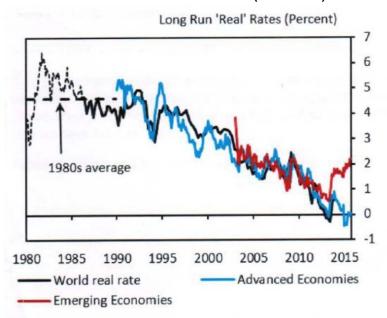
¹⁴ Minsky (1975). This thesis is further elaborated in his "Stabilizing an Unstable Economy".

below zero (hitting the zero-bound). Finally, the financial and economic crisis, the decline in economic activity and potential GDP fuel governments' propensity for intervening in a drive to prop-up their economies. As a matter of fact, there is a worldwide competition via competitive devaluation.

Monetary Policy in a Depressed Economy

The US economy - by size and depth, the nearest to a closed economy model – has witnessed a steady decrease in real interest rates over the past decades, from 4-5 percent toward almost zero at present (Williams and Laubach, 2003; King and Low, 2014; Summers, 2014; Haldane, 2015; Williams 2016, etc.). In the global economy, which may be viewed as a closed one, real equilibrium interest rates had also fallen steadily over the past three decades (Figures 7 and 8; Rachel and Smith, 2015; Holston, Laubach and Williams, 2016); Figure 8 shows factors that moved global saving and global investment.

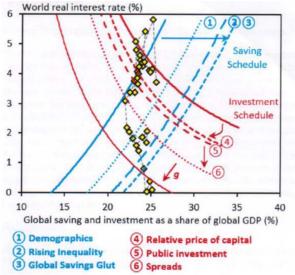
Figure 7
The Fall of Real Rates in the World (1980-2015)



Source: Rachel and Smith, who quote King and Low (2014), Consensus Economics, IMF, Datastream.

Lawrence Summers argues that the equilibrium rate, which allows for full capacity utilization, is negative at present (2014, 2016). But a legitimate question is posed by the pretty low unemployment rate in the US currently.

Figure 8
Shifts in Saving and Investment Schedules in the World Ecnomy
(1989-2015)



Source: Rachel and Smith, 2015.

If the severe unemployment case is dismissed, how does it come that inflation does not pick up? And why are inflation expectations persistently so low? It may be that, as James Bullard argues, there is need for another narrative. The latter should be centered on a Fisher equation ($i = ir + \pi \ (exp)$), where i is the nominal interest rate, ir is the real rate, and $(exp \ \pi)$ is expected inflation; the line of reasoning is that, under conditions of persistent low inflation, and when output and unemployment gaps almost disappear, the Taylor's rule turns into a Fisher equation¹⁵. Bullard suggests that since the real rate is determined by markets, the "pegging" of policy rates can be put in relation with persistently low inflation expectations. It may be that markets take their cues from resilient low policy rates. And there can also be a "regime shiff", which depends on productivity growth, real interest rates on short-term government bonds, and the state of the business cycle. Optimal monetary policy is regime dependent. But would this policy rate pegging and its impact on inflation expectations imply that policy rates need

In the circumstances of zero interest rate policy (ZIRP), of "permazero", which has, arguably, characterized G-7 in the recent years, a Taylor rule collapses into a Fisher equation. Thus, $i=ir+\pi~(exp)+\mu~\pi(gap)+\beta~Q~(gap)=ir+\pi~(exp)$, where i is the nominal policy rate, $\pi~(exp)$ is expected inflation, ir is the real interest rate, and output and inflation gaps are considered. When the unemployment and the inflation gaps close (which is mostly the case of the US economy currently) the Taylor rule turns into $i=ir+\pi~(exp)$, a Fisher equation (James Bullard, "A tale of two narratives", presentation, Saint Louis Fed, July 2016). See also his "Permazero in Europe", International Research Forum on Monetary Policy, Frankfurt am Main, 18 March, 2016.

to climb again in order to move inflation expectations upwards? This would fit into BIS'view that policy rates need to move upwards to combat new speculative bubbles. On the other hand, what if markets would not see it as a credible policy change and inflation expectations may continue to stay low due to low economic growth, low productivity, and demographics? And what if raising the policy rate would be, yet, premature by risking a new recession?

Two key issues emerge: a) whether negative equilibrium interest rates are justified, and b) whether negative policy rates are effective. If resource allocation were adequate, the equilibrium rate should not be below zero. It is economic common sense to think so. But there is a different story when resources are grossly misallocated and structural conditions are unfavorable. During massive and chronic under-use of resources intense hysteresis may take place. Such circumstances may erode not only the value of current resources, but potential GDP too. Therefore, there are arguments for policy intervention to exit the state of considerable under-use of resources and to avoid deflation, debt-deflation. If such arguments (the ECB's current stance now, for example) are accepted, the issue that needs to be clarified is what kind of a policy mix should be used in the context of non-standard measures (such as those adopted by various central banks and which have entailed side effects (among which speculative bubbles and the impact on non-banks' financial balance-sheets).

Another important question is linked with resource misallocation and heightened bad distributional effects (Stiglitz, 2016) when policy rates are very low. Summers, in his secular stagnation argument, says that there is a trade-off between the need to boost output and financial stability, while monetary base expansion is fueling the search for yields and new speculative bubbles (2014). Therefore, he calls for increased resort to fiscal tools (see also DeLong and Summers, 2012)

Massive capital movements complicate the picture. ¹⁶. Let us just take into account not only the savings glut in the global economy following past decades' development in China (where savings account for almost half of household income) and Asians and East Europeans' low wages in a global competition which favored disinflation and deflation pressures. Moreover, the Euro Area, which is highly divided in terms of competitiveness (North and South division) is showing a current account surplus of cca. 3 percent of GDP currently, which is also putting pressure on the global investment and saving balance.

Emerging Economies

Small and large emerging economies are trapped in this highly complicated and uncertain environment and bear the fallout from speculative capital flows. Countries with large budget and external deficits, high external debt, are more vulnerable and prone to balance of payment crises. The fall in commodity prices is also hitting hard countries which rely on basic commodity exports.

European emerging economies have undergone remarkable macroeconomic adjustments in recent years. They have an apparent advantage since their overall public and private debt is almost half as a share in GDP compared to developed EU countries (their legacy problem is much smaller). Likewise, their USD exposure is relatively low,

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¹⁶ See also Eggertson, Mehrotra, and Summers (2016).

which protects them somehow from the impact of Fed policy changes. But they are facing significant dilemmas:

- if inflationary pressures operate, should central banks in these countries raise
 policy rates while the ECB and other central banks continue setting very low, even
 negative rates? Would such moves lure speculative capital inflows? It is worth
 mentioning that wherever there is a gap between money markets and policy rates,
 it may dampen speculative inflows.
- is it reasonable to foster a reduction of the currency substitution (euroization) by all means when euro adoption is mandatory at one point?¹⁷ One may be tempted to say yes due to the rise in the room for maneuver of monetary policy
- If the Impossible Trinity (autonomous monetary policy, stable exchange rate, and free capital movements) is actually a dilemma (as Rey says), then capital controls are needed be they under the guise of macro-prudential measures. IMF itself has reassessed the appropriateness of capital controls. These measures require a good coordination among central banks, regulators.

High Liquidity and, Yet, Sudden Stop Threats

Fresh financial market turmoil cannot be automatically prevented via lower real interest rates and an expansion of high-powered money in the global economy; markets may freeze again and balance of payment crises may occur if large macroeconomic imbalances operate. Unconventional shocks can also frighten markets. Real rates were actually low even in the pre-crisis years. The global financial system is rife with vulnerabilities, not least because of a higher degree of interconnectedness, high leverage, and sophisticated financial instruments. In spite of more severe capital and liquidity requirements, of a new regulatory and supervision regime, transmission mechanisms continue to be precarious and sudden stops may emerge in areas of capital (money) markets, triggering contagion. This poses a tremendous challenge for governments and central banks, the latter having exhausted much of their ammunition. The still fragile financial system is mirrored by developments across shadow banking, by systemic risks which evolve in capital markets. One should not rule out that the lender-of-last-resort function would be called upon for such markets too.

■5. Elements of a Policy Agenda

Policies have prevented a new *Great Depression* in most of the industrial world, but their limits are obvious while prevailing theories are not of much help. We are going through a crisis of cognitive and operational models. Financial risks are ubiquitous in highly intregrated markets and non-standard measures have significant side effects; QEs create speculative bubbles and produce havoc in many emerging economies. A huge challenge is whether, when, and how to start normalizing policy rates.

¹⁷ Though it is fair to say that euro adoption makes sense when the Euro Area would have overhauled its policy design and arrangements and a candidate economy would have achieved a proper degree of real and structural convergence.

Monetary Policy

Are "non-standard" measures to stay with us a long period of time? Can we bet that the enourmous injection of base money in the global economy will stay "silent" for years to come? Will a "liquidity" big premium operate and extinguish big surges of money velocity, eventually, and, therefore, of inflation? Are substantial negative equilibrium rates to be seen as normal? Are negative policy rates effective? Should we target a higher inflation rate (as Olivier Blanchard, John Williams, and other economists recommend) to reinforce the monetary policy instrument? A change of the inflation target seems to be wishful thinking in current circumstances, even though in theory it may seem to make sense. Should we target a price level, or a nominal GDP? The monetary policy conduct may have to change considerably if one sets price levels and nominal GDP as targets (John Williams).

Monetary policy rethinking is to be related to its theoretical underpinnings. John Williams, William White, and other scholars argue that there is need to rethink the monetary policy analytical framework that we need to dismiss a paradigm that focused narrowly on price stability and neglected complexity, systemic risks, financial stability. White goes so far to invite a closer look at narrow banking (2013), at a reform of finance. It is increasingly clear that price stability cannot be divorced from financial stability concerns and that monetary aggregates have to be monitored closely; and macroprudential policies need to be used.

Financial Stability

Financial stability has been brought back at the very center of central banks' concerns. Though, one needs to mention that financial stability is a concern not quite of recent vintage in emerging economies. There, high dollarization/euroization has always suffused monetary policies with a concern for balance-sheet and wealth effects and their relation with financial stability.

There is a clash of visions with regard to optimal policies in current circumstances. A Basel (BIS) view takes a long term perspective and stresses factors and policies which have amplified boom and bust dynamics. Another view (linked with the secular stagnation thesis) highlights the threat of being stuck in a very bad equilibrium with intense hysteresis phenomena that may invite social and political troubles.

There is need to revisit the pluses and minuses of deep financial markets in relation to the size of economy. In addition, one wonders whether the use of highly sophisticated financial products is warranted when markets can be so erratic, volatile. What drives a financial cycle is of utmost importance for emerging economies, since their macroeconomic policies are heavily influenced by what happens in large economies.

Finance Reform

Measures have been taken in order to bolster capital and liquidity requirements, reduce leverage, limit pay, enhance transparency and discourage excessive risk-taking, etc. But, arguably, more has to be done (Admati and Helwig). For example, dealing with the "too big to fail" syndrome requires the application of anti-trust legislation; this would imply splitting big financial entities. A sort of Glass-Steagall legislation should be restored, like that after the Great Depression. More own capital and less reliance on

debt (as against the Modiglian-Miller theorem which implies that where capital comes from does not matter), rules that prohibit the use of depositors' money for the own trading of banks would also contribute to making systems more robust. And as Haldane argues, inter-connectedness should be reduced by reshaping finance (Haldane and May, 2011).

The disenchantment with the current banking model, which is based on fractional reserves and as some argue, fuels financial cycles, prompts influential voices to ask for radical reforms (Mervyn King, John Kay, Martin Wolf). Regulators and supervisors of capital markets will arguably think increasingly like central bankers to the extent shadow banking creates new systemic risks (think just about the role central counterparties are asked to play, the volume of funds moved by hedge funds and money market funds worldwide, and sudden stops that can occur in these markets).

Economic Repair of the Eurozone

If the Eurozone had not existed the German surplus would have pushed the DM toward steady appreciation, as it constantly did during the decades of German economic miracle, after the Second World War. The same would have happened to the Dutch and, maybe, other currencies. But now, the fracture between the North and the South in the Eurozone can have very deleterious effects unless its institutions and governance policies change. Recent years' internal devaluation in Ireland, Spain, Portugal, and Greece have diminished their external imbalances dramatically. But does it change the essence of the problem? Are such adjustments the path to follow in the future for whichever member state gets into trouble? Is such a process sustainable socially and politically? Because one has to consider that economies do not have the same capacity to absorb shocks.

The Eurozone needs a new design and policy arrangements which should fit a genuine monetary union. The way it does function now resembles more the gold standard regime of the interwar period and this should be quite alarming. Economic recovery in the Eurozone depends not only on national economic policies, but on Eurozone level policies: on whether there is a significant bolstering of aggregate demand in the Eurozone. It also depends on reforming the policy arrangements in the Eurozone, which imply completing the Banking Union; adding to the SSP and the SRM a collective deposit insurance scheme and, eventually, a *fiscal capacity*. More debt restructuring may be needed to help the private sector be reignited (Corsetti *et al.*, 2016).

A New Bretton Woods is Needed

We are not yet at the end of a bumpy ride in world financial markets, for the crisis is not yet over in the industrial world (in Europe, the impact of the financial crisis blends with the crisis of the Eurozone). It is never futile to stress how much important for global markets is *the international policy regime*, what big players in the global economy do. In highly integrated financial markets the "trilemma" is frequently a "dilemma" and the degree of euroization/dollarization matters much in emerging economies, be they less indebted.

Like almost 60 years ago, in order to create adequate policies one has to come to grips with the profound roots of the financial and the Eurozone crises and, arguably, rediscover the Bretton Woods spirit and logic – which were imbued with concern for the

fate of the free world, of helping economic recovery in an open international system. Finance must be reined in. For economies to start to grow again on a sustainable basis and create jobs, a sound financial intermediation system is needed. There is need to bring the financial system 'back to reason', to make it get rid of, as much as possible, its speculative and destabilizing nature, to downsize it.

Final remarks

Structural trends, oversize finance, and a drifted financial cycle have provided the conditions for the eruption of the financial crisis;

The slowdown of the global economy was obvious before the eruption of the financial crisis:

Structural factors have changed the propensity for investment and saving. Against this background, real interest rates have turned much lower since long;

Over-indebtedness is a huge burden; it may be softer in the US where capital markets are well developed, whereas the EU relies heavily on banks, with their overloaded balance-sheets. Deleveraging is a lengthy process;

When inflation is so low, central banks may need negative policy rates to produce negative real rates - this is a big novelty in today's world;

Income inequalities create tensions in society; this is fueling populist and protectionist movements in both developed and emerging economies;

Can new technologies bring in a new upswing? It is not impossible, but it is time consuming given that debts are high, the financial sector is still fragile, and there are numerous tail events, big uncertainties. Moreover, new technologies may destroy more than crerate jobs, at least in the short and medium run;

Global economic conditions are extremely unusual (the New Normal), fueling great confusion and uncertainties;

Limits of cognitive models are increasingly clear and policies are navigating unchartered waters; but we can take comfort that a generalized Great Depression was avoided, at least until now.

We need to bank on the reinvigorating force of the entrepreneurial spirit and pragmatic policies (some would call them non-standard). There may be a recovery underway, be it a very slow one.

References

Admati, A. and Hellwig, M., 2013. The New Bankers' Clothes. What's wrong with banking and what to do about it. Princeton: Princeton University Press.

Benes, J. and Kumhof, M., The Chicago Plan Revisited. IMF Working Paper, 12/2012. Bernanke, B., 2005. The Global Savings Glut and the US Current Account Deficit, Sandridge lecture. Virginia Association of Economics, Richmond, Virginia.

Blanchard, O. and Ostry, J., 2012. The multilateral approach to capital controls. VoxEU. Borio C. and Disyatat, P., 2014. Low interest rates and secular stagnation: is debt a missing link? VoxEU, 25 June.

- Borio, C., 2012. The financial cycle and macroeconomics: what have we learned and what are the policy implications. BIS Working papers No. 395, December.
- Borio, C. Karroubi, E. Upper, C. and Zampoli, F., 2016. Financial cycles, labor misallocation, and economic stagnation. VoxEU, 14 April.
- Brunnermeier, M. et al., 2016. The Sovereign-Bank Diabolic Loop and ESBies. updated version of an initial paper of 2011; a shorter version was published in The American Economic Review, Proceedings, May, 2016.
- Brunermaier, M.K. Eisenbach, T.M. and Sannikov, Y., 2012. Macroeconomics with financial frictions: A survey, NBER Working Paper No. 18102, Cambridge MA"
- Bullard, J. 2016. A tale of two narratives. Presentation, Saint Louis Fed, July.
- Butiglione, L. Lane, P. Reichlin, L. and Reinhart, V. 2014. Deleveraging? What Deleveraging?, Geneva Reports on the World Economy, 16, CEPR Press.
- Caruana, Jaime, (2014. Stepping out of the shadow of the crisis: three transitions for the world economy", speech at the General Meeting, BIS, Basel, 29 June.
- Clarida, R. Gali, J. and Gertler, M., 1999. The Science of Monetary Policy: A New Keynesian Perspectives. The Journal of Economic Perspectives, 37(December), pp.1661-1707.
- Corsetti, G. et al., 2016. Reinforcing the Eurozone and protecting an open society. VoxEU, 4 May.
- Daianu, D. and Vranceanu, R., 2002. Opening the capital accound of developing countries: some policy issues. William Davidson Institute Workin Paper, No.511 and Acta Oeconomica, No. 3, 2003.
- Daianu, D., 1994. Inter-enterprise arrears in a post-command economy. IMF Working Papers, No. 54.
- DeLong, Bradford and Summers, L., 2012. Fiscal policy in a Depressed Economy", Brookings Papers on Economic Activity, Spring.
- Eggertson, G. Mehrotra, N. and Summers, L., 2016. Secular Stagnation in the Open Economy. The American Economic Review, Papers and Proceedings, May, pp. 503-508.
- Eichengreen, B., 2014. Secular stagnation: a review of the issues. In: Badwin and Teulings, pp. 41-46.
- Galli, J., 2015. Monetary Policy, Inflation, and the Business Cycle, Princeton, Princeton University Press.
- Gordon, R.J., 2014. The demise of US economic growth: restatement, rebuttal and reflections. NBER Working Paper, No. 19895.
- Greenwood, R. and Scharfstein, D., 2013. The Growth of Finance. The Journal of Economic Perspectives, 27(2), spring.
- Haldane, A. and May, R., 2011. Systemic risk in banking ecosystems. Nature, 469, pp.351-355.
- Herndon, T. Ash, M. and Pollin, R., 2013. Does High Public Debt Consistently Stifle Economic Growth? A Critique of Reinhart and Rogoff. Manuscript.

- Holston, K. Laubach, T. and Williams, J., 2016. Measuring Natural Rates of Interest. Trends and Determinants. FRBSF, Working Paper, June.
- King, M., 2016. The End of Alchemy. Money, Banking and the Future of the Global Economy. London, Little Brown.
- King, M. and Low, D., 2014. Measuring the "world real interest rate. NBER, Working Paper No.19887.
- Koo, R., 2011. The World in balance-sheet effect recession: causes, cure and policies. Real World Economics Review, 58.
- Korinek, A. and Kreamer, J., 2014. The redistributive effects of financial deregulation: Wall Street vs. Main Street. BIS Working Papers, No. 468, October.
- Laubach, T. and Willams, J., 2003. Measuring the Natural Rate of Interest. The Review of Economics and Statistics, 85(4), November.
- Lo, S. and Rogoff, K., 2015. Secular stagnation, debt overhang and other rationales for sluggish growth, six years on. BIS Working Paper, January.
- Lucas, R., 2003. Macroeconomic Priorities. American Economic Review, 93, March.
- Minsky, H. John Maynard Keynes. New York: McGraw Hill, 1976 (reprinted 2008).
- Minsky, H., Stabilizing an unstable economy (First published 1986), New York, McGraw-Hill, 2008.
- Modigliani, F. and Miller, 1958. The Cost of Capital, Corporation Finance and the Theory of Investment. American Economic Review, No.48 (3), 261-297.
- Nowotny, E. and Ritzberger-Gruenwald, D. and Schuberth, H., 2015. The Challenge of Economic Rebalancing in Europe, Cheltenham, Edward Elgar.
- Ostry, J.D. Berg, A. and Charalambos Tsangarides, 2014. Redistribution, Inequality and Growth, IMF Discussion Note, February.
- Pagano, M. et al., 2014. Oversize Finance. ESRB.
- Philippon, T. and Reshef, A., 2013. An International Look at the Growth of Modern Finance. The Journal of Eonomic Perspectives, 27(2), Spring.
- Piketty, T. and Saez, E., 2013. Top incomes and the Great Recession. Recent evolutions and policy implications. IMF Economic Review, 61(3), pp. 456-478.
- Rachel, L. and Smith, T., 2015. Secular drivers of the global interest rate, Bank of England, Staff Working Paper No. 571.
- Rajan, R., 2013. A step in the dark: unconventional monetary policy after the crisis.

 Andrew Crockett Memorial Lecture, Basel, BIS, 23 June.
- Rawdanowicz, L. et al., 2014. Secular stagnation: evidence and implications for economic policy. Paris, OCDE, 14 October.
- Reinhart, C., 2016. What is new about todays's low interest rates?. Project Syndicate, 28 July.
- Rey H., 2013. Dilemma not trilemma: The global financial cycle and monetary policy independence. Global Dimensions of Unconventional Monetary Policy, proceedings of the Federal Reserve Bank of Kansas City Symposium, Jackson Hole, 22-24 August.
- Rodrik, D., 2016. Economics Rules: The Rights and Wrongs of the Dismal Science. New York, Norton.
- Rogoff, K., 2015, Debt supercycle, not secular stagnation. VoxEU, 22 April.

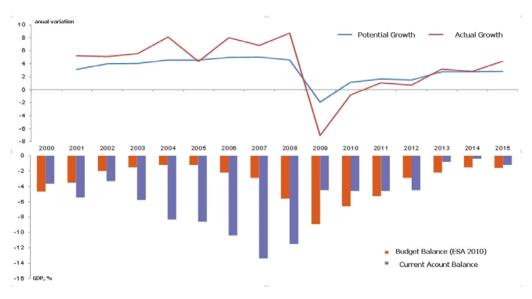
- Stiglitz, J., 2010. Contagion, Liberalization, and the Optimal Structure of Globalization. The Journal of Globalization and Development, 1(2).
- Stiglitz, J., 2016. What is wrong with negative interest rates?. Project Syndicate, 13 April.
- Summers, L., 2014. Reflections on the New secular Stagnation Hypothesis. in C.Teulings and R. Baldwin (eds), Secular stagnation: facts, causes and cures, VoxEU.org eBook, CERP Press.
- Teulings, C. and Baldwin, R., 2014. Secular Stagnation: facts, causes and cures, a VoxeBook.
- Vinals, J. Gray, S. and Eckhold, K., 2016. The Broader View: The Positive Effects of Nominal Negative Interest Rates. IMF blog, 10 April.
- Weber, A., 2015. Rethinking inflation Targeting. 8 June.
- White, W., 2013. Is Monetary Policy a Science. The Interaction of Theory and Practice over the Last 50 Years, Federal Reserve Bank of Dallas, Working Paper no.155, September.
- Williams, J., 2016. Monetary Policy in a low R-star World. FRBSF Economic Letter, 15 August.
- Yelen, Janet (2014. Perspectives on inequality and opportunity from the Survey of Consumer Finances. speech at the Conference on Economic Opportunity and Inequality, Federal reserve bank of Boston, Boston MA, 17 October No.19887.

Annex: Economic Cycle and Policy Cycle in Romania

Hardships faced by the Romanian economy in the past decade resulted also from a blend of the "financial cycle" in Europe and domestic economic policy measures that widened imbalances Figure 1 illustrates the relationship between the Romanian economy cycle and the dynamics of imbalances. The chart displays the path of the actual growth of the economy vis-à-vis its potential growth and budget and current account deficits during 2001-2015. It is thus readily noticeable that, during the years with actual growth considerably above the potential one, imbalances were high (widened). During 2006-2008, current account deficits reached 10.4 percent, 13.4 percent and 11.5 percent respectively, largely financed through debt. During that period, the growth rate deviation (i.e. the difference between actual growth and potential growth as a share in GDP) stood at 3 percent in 2006, 1.8 percent in 2007 and 4.2 percent in 2008. The budget deficits of 2006 and 2007 came in below 3 percent of GDP, yet they masked much wider structural deficits (adjusted for the business cycle) - in 2008, the budget deficit was markedly above 3 percent. Actual growth had run above potential during 2001-2004 as well, but back then there was a wide negative output gap (see Figure 2). As long as the difference between actual and potential GDP is significant, it can be assumed that the effective growth rate of the economy can exceed the potential one without leading to major imbalances. If the latter do occur (because there were considerable current account deficits in 2003 and 2004 as well), they may result from lending dynamics influenced by the "European financial cycle".

Some make a noteworthy remark: that economic activity in recent years has no longer been based on credit (debt), as before, and therefore we are allegedly dealing with sound growth. This remark is in line with what both theory and practice refer to as "creditless recovery"; usually, deep recessions are followed by economic recoveries that do not call for an increase in lending. This has been observed in Europe's emerging economies in recent years, not only in Romania. On the other hand, this opinion – which also puts the level of potential GDP on the agenda - seems to underestimate the manner in which fiscal consolidation was carried out in the domestic economy. Budget execution has recorded ever lower deficits in recent years, but the drop in investment is dramatic (more than 45 percent overall) in both public and private sectors. However hard we try to explain this cut in investment as an inherent correction after years of resource misallocation, it is difficult to admit that the economy will continue to grow without more investment. Technological progress out of the blue is inconceivable, nor are substantial efficiency gains easy to achieve, although changes seem to be underway in the Romanian economy (as suggested by exports of IT goods and transport services). Not to mention the wide shortfall in terms of basic infrastructure, the chronic underfinancing of education and healthcare, or the hidden public goods deficit, which cannot be made up for by the private sector, no matter how weak of an administrator the State might be considered to be.

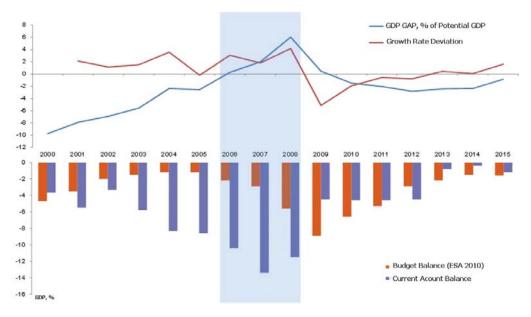
Figure 1
Potential and Actual Growth; Budget and Current Account Imbalances



Data: NIS, MPF, European Commission, National Commission for Prognosis, NBR.

Figure 2 deserves attention, pointing to moments when domestic economic policies were strongly pro-cyclical and stimulated the economy although activity was close to the potential growth rate and the GDP level was in the vicinity of the potential one. It is thus noticeable that the output gap (vis-à-vis potential GDP) had closed after 2005 after a long period of time. The flat tax, which was introduced in 2005, marked a radical change of fiscal paradigm that boosted lending, which was already expanding at a very fast pace, in line with the European financial cycle and the local banks' obsession with market share. Romania ended up with large, double-digit external deficits, although budget deficits seemed reasonable in nominal terms (below 3 percent of GDP ESA deficits, except for 2008). Wide external deficits were brought about especially by the quick rise in private sector indebtedness, with a lot of resources channelled elsewhere than to tradables sectors. Then came the 2009 implosion of the economy, which was much more severe than in countries with low current account deficits.

Figure 2 GDP Gap, the Growth Rate Deviation and Macroeconomic Imbalances



Source: NIS, MPF, EC, National Commission for Prognosis, NBR.