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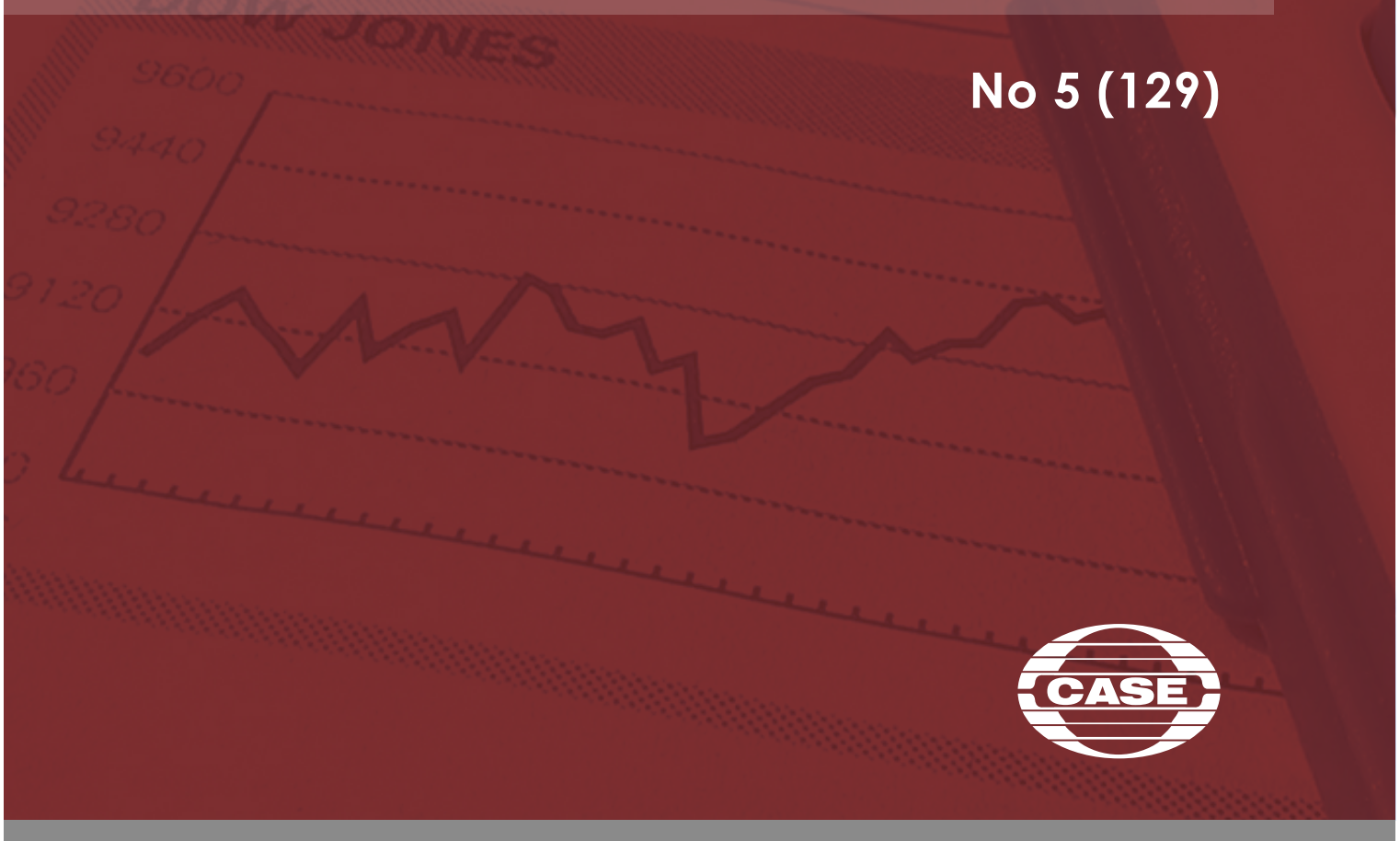
CASE 25th Anniversary Papers

Domestic Cycles, Financial Cycles, and Policies. What Has Gone Wrong?

Daniel Daianu

No 5 (129)



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This working paper is a part of the CASE 25th Anniversary Papers series which features papers from the CASE 25th Anniversary Conference "The Future of Europe" (November 17–18, 2016). CASE 25th Anniversary Papers are sponsored by Narodowy Bank Polski, the patron of the conference.

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

JEL classification:
E31, E32, E44, E51, E62, F21, F34, F44, F62

Graphic Design:
Katarzyna Godyń-Skoczylas | grafo-mania

EAN: 9788371786518

Publisher:
CASE – Center for Social and Economic Research
al. Jana Pawła II 61, lokal 212, 01-031 Warsaw, Poland
tel.: (48 22) 206 29 00, 828 61 33, fax: (48 22) 206 29 01
e-mail: case@case-research.eu
www.case-research.eu

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Author

Daniel Daianu is a Professor of Economics at the School of Political and Administrative Studies in Bucharest. He is also a Member of the Romanian Academy, the Board of the National Bank of Romania, and the EU High-Level Group on Own Resources (HLGOR). He is a co-editor of "The Crisis of the Eurozone and the Future of Europe" (Palgrave Macmillan, 2014) and the author of "Which Way Goes Capitalism?" (CEU Press, 2009). He is the former First Deputy President of the Financial Supervision Authority (2013-2014), former Member of the European Parliament (2007-2009), former Finance Minister of Romania (1997-1998), and former Chief Economist of the National Bank of Romania (1992-1997). He is Chairman of the Romanian Economic Society, Member of the European Council for Foreign Relations, Member of the Board of Trustees of Friends of Europe, Fellow of CASE (Warsaw), and Member of the Black Sea Region Commission. His other writings include: "The Macroeconomics of EU Integration: The Case of Romania" (Rosetti Educational, Bucharest, 2008); "South East Europe and the World We Live In" (Bucharest, the Romanian Diplomatic Institute, 2008); with Radu Vranceanu (ed.), "Ethical Boundaries of Capitalism" (Ashgate, UK, 2005); with Thanos Veremis (ed.), "Balkan Reconstruction" (London, Frank Cass, 2001); "Transformation as a Real Process" (Aldershot, UK, Ashgate, 1998); and "Economic Vitality and Viability. A Dual Challenge for European Security" (Frankfurt, Peter Lang, 1996). He is a contributor to European Voice, Eurozine, EuropesWorld, Les Echos, and World Commerce Review, among others.

* Comments made by Adrian Alter (IMF), Mihai Copaciu (National Bank of Romania), Mojmir Hampl (The Czech National Bank), Laurian Lungu (Cardiff Business School), Pawel Samecki (National Bank of Poland), Gyorgy Szapary (National Bank of Hungary), and Radu Vranceanu (Paris, ESSEC) are much appreciated. Data assistance provided by Wilhelm Salater is acknowledged. I bear sole responsibility for the views expressed in this paper.

Abstract

The financial crisis and its ensuing effects have brought back into the limelight the issue of cycles and of policies which fuel or mitigate crises. Cognitive and operational models in economics and business are questioned. There is a specter of much lower economic growth in the industrialized world. Central banks are over-burdened. This makes central bankers' lives much more complicated and obfuscates the boundaries 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 the European Central Bank'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. 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. The experience of European emerging economies is taken into account.

Introduction

The last decade was dominated by a financial crisis that engulfed the industrial world – the "Great Recession," to differentiate it from the *Great Depression*, which plagued the fourth decade of the past century. Averting the meltdown of the financial sector, which was seen by most policy-makers and academics as a must in order to prevent a generalized depression, forced governments and central banks to resort to highly increased budget deficits and massive injections of base money (quantitative easings).

This financial crisis and its ensuing effects have brought back into the limelight the issue of cycles and of policies which fuel or attenuate crises. The glorious decades of post-war economic reconstruction after the second world war and Keynesian policies, which were a hallmark of that period, came to a halt in the 1970s. *Stagflation* and the excesses of Keynesian policies led to a rethinking of the dominant paradigm. Central banks gained more independence and monetarism, which was based on rules (control of monetary aggregates, or the inflation targeting regime with Taylor-type rules), gained 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.[1]

Cognitive and operational models in economics and business are questioned, and how to model non-linearities (tail events) is a big challenge, as is the integration of finance in macroeconomic models (Brunnermeier et al., 2011; Borio, 2012). There is a paradigm shift underway. Conventional and non-conventional shocks (including cyber-attacks and big frauds) proliferate and harm system robustness and resilience. Rising complexity and the inability to understand it is further proof that there is a need for simple, more transparent finance. Once again, the realm of influential ideas and policies is going through a period of "soul searching" – of reexamination and rethinking of models.

There is a specter of much lower economic growth (stagnation) in the industrialized world: *balance-sheet recession* (Koo, 2011), *secular stagnation* (Summers, 2014), and *super-cycles* (Rogoff, 2015) all are linked with, among others, demographics, debt overhang,

1 Dani Rodrik quotes Robert Lucas, who asserted in 2003, that the problem of "depression prevention" had been solved (2016).

income inequality, technical change, and zero-sum games in the world economy.[2] There are massive social and political implications from the economic slowdown and rising economic inequality. International policy coordination is often ineffective, although the G20 does play a role in the reform of finance. Finance continues to have destabilizing features (Stiglitz, 2010; Blanchard and Ostry, 2012) despite efforts undertaken to reform its regulation and supervision.

Central banks are overburdened in many countries; they can no longer rely on simple rules (like Taylor's rule). This makes central bankers' lives much more complicated and obfuscates the boundaries between monetary policy and fiscal policy, especially when financial stability gets to center stage. Shadow banking brings about new systemic risks.

The euro area has escaped collapse owing to the European Central Bank's (ECB's) extraordinary operations and large macro-imbalance corrections in its periphery. But major threats persist: debt deflation could rekindle the menace of a break up; 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);[3] market fragmentation is still alive, although the periphery pays much less currently for issuing its debt (but due to the ECB's special operations primarily); and internal demand in most of the eurozone is suffering from negative loops between weak activity, fragile banks, weak firms, diminished incomes, and the need for fiscal consolidation, among others.

Policy-makers in European emerging economies (EEEs) are facing major policy dilemmas. Can catching up be resumed under the "new normal"? Is "secular stagnation" the probable scenario for the industrial world and how would that impact EEEs? Can the economic growth model be reengineered and rely more on domestic savings? 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 profoundly?[4] Such questions concern EEEs tremendously. Most of them have benefited considerably from the proximity of the European Union (EU) and from becoming Member States. However, despite

2 Paul Samuelson has talked about such type of economic competition in the global economy where emerging economies combine modern technologies with very cheap labor (2004).

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

4 The disenchantment with debt-fueled growth and 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 a).

impressive catching up during the past 10–15 years, economic gaps are still significant, and there is substantial variation among the EEEs. The Czech Republic, Slovakia, and Hungary seem to be well inserted into the EU's core industrial networks; their GDP/head is quite high among the EEEs. Poland is a special case because it avoided a recession after the crisis erupted. Instead, because of very large external imbalances and massive short-term borrowing, Romania and two Baltic economies went through very hard times once the crisis erupted and the freeze of financial markets forced them to ask for financial assistance from the EU and International Financial Institutions (IFIs). Currently, the broad picture is much better in these economies, too.

This paper focuses on economic cycles and policies in an international (European) context. The financial cycle (Borio, 2012) is a key concept in the logic of this paper. Attention is paid to the linkage between domestic cycles and the European financial cycle, drivers of financial cycles, finance deregulation and systemic risks, the international policy regime, and global stability. The experience of EEEs is amply taken into account. 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; and part five sketches a policy agenda under the "new normal." Final remarks conclude the paper.

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

There are several perspectives from which to judge EEEs 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 the economy, institutional reforms, and the introduction of *hard budget constraints*.[5] The "transformation recession" (Kornai, 1994) of the years 1990–1992, following a series of deep institutional changes and the introduction of market-based mechanisms, portrays the transition to a new economic regime. In 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 and Bulgaria) during the first decade of this transition. Overall, it became increasingly clear that the burden of the past, structural rigidities, and power of habits condition change considerably. Post-command transition can be seen as a peculiar long cycle, which can be compared with "Kondratieff cycles"[6] 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 also be explained by coming closer to and joining the EU. An EU integration-related cycle can, therefore, be detected for the economies that joined the EU in 2004 and 2007.

It is also worth focusing on the cycle that links national economies with the Single Market, with the dynamic of the financial system and of credit; it is the financial cycle, which refers to the expansion and the ebbing of credit (Borio, 2012). This cycle is longer (10–15 years, or possibly longer) than a business cycle. As Kenneth Rogoff (2015), Claudio Borio (2012, 2014), and others show, financial cycles are accompanied by over-borrowing

5 Janos Kornai pointed out that in command economies soft budget constraints are ubiquitous (1980).

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

(debt overhang). The financial cycle concept is key to 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, for which money (finance) plays an insignificant role.

The New Keynesian macro modelling, on which the inflation targeting regime is based (Clarida et al., 1999; Galli, 2015), has, arguably, underestimated the role of finance, of its overexpansion in amplifying cycles and augmenting systemic risks. As the current deep crisis shows, the neglect of finance, the almost blind belief in the self-regulatory virtues of markets and in the non-existence of major market failures has crippled the ability to think of and mitigate systemic risks, leading to major misunderstandings of what drives economies up and down. Borio puts it quite ominously by saying that "without finance, macroeconomic models are like Hamlet without the prince" (VoxEU, 2013).[7] Central Banks have been implementing inflation targeting by paying insufficient attention to monetary aggregates (see also Weber, 2015).

As Borio says, 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 because it precludes the adoption of macroprudential measures (MPMs that could mitigate boom and bust dynamics and 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, as an analytical construct, provides an illuminating explanation for boom and bust dynamics. This is clearly evident in Europe during the past decade, and not just in a few EEEs, but in the euro area as well. In the Baltic economies, Romania, Bulgaria, and Hungary, credit expansion was staggeringly high in real terms over a period of several years. Figure 1 illustrates the evolution of credit and economic growth in various groups of European countries; the explosion of credit in the pre-crisis years and its implosion after markets froze are quite visible.

Notwithstanding the lessons of the Asian crisis of 1997–1998 and similar episodes of crisis in Latin American economies, international financial institutions and the European Commission continued to prod quick financial liberalization. While Romanian policy-makers did try to sequence the opening of the capital account, the EU rules of the game (the Single Market)

7 See also Brunnermeier et al., 2012

forced a faster pace which, ultimately, enhanced a boom-and-bust cycle.[8] Central Banks' attempts in EEEs to stem the skyrocketing pace of credits was offset due to euroization (especially where it was massive) and parent bank funding, and possibly also due to little experience with what are now called macro-prudential tools and the sheer size of capital inflows (Daianu, 2015). 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 is quite relevant. This is why major central banks have a key responsibility in considering their monetary policies and ensuing externalities. Both Rey's "dilemma" and the "Tosowsky dilemma" indicate 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). While making sense as a direction of movement, downhill flows did not move into tradable sectors in the main. Romania, Baltic economies, Bulgaria, and euro area economies like Spain and Ireland received enormous amounts of private capital which drove up external imbalances. It may be that a European financial cycle[9] was reinforced in the EU after the introduction of the euro and against the backdrop of financial markets' myopia regarding the performance differences among various economies (Daianu, 2015). Much of the inflow was private borrowing, and, like in the Asian crisis of 1997–1998, financial markets were found to care, in the end, about the overall external indebtedness of an economy, be it driven by the private sector.[10]

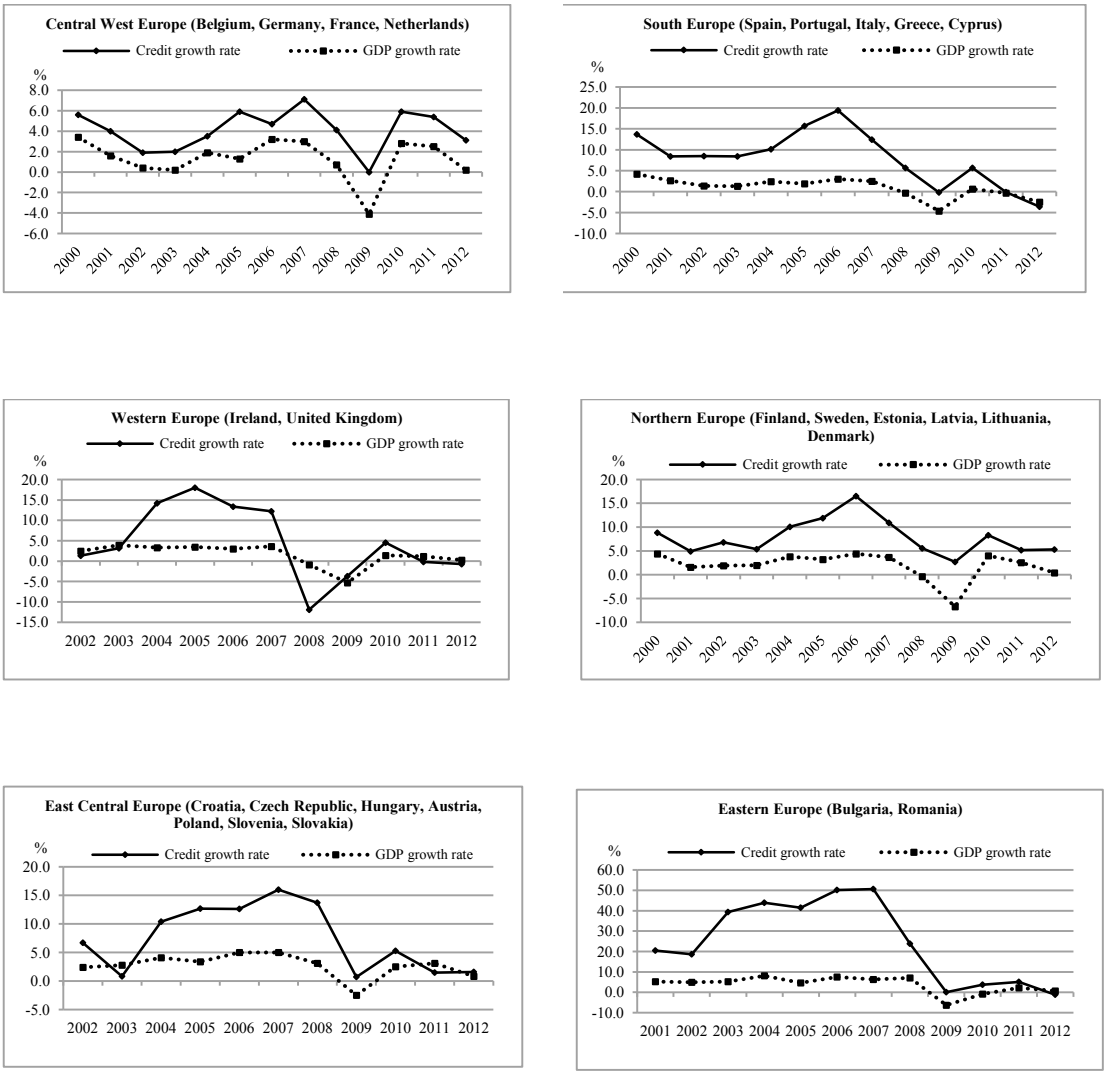
One can draw an inference about the importance of private borrowing in judging resilience to shocks and the triggering of balance of payments crises. Some new EU Member States faced a liquidity crisis as markets froze, with external financial support and the *Vienna Initiative* being instrumental in averting a worst-case scenario.

8 In a domestic debate at the time on the pace of financial liberalization, 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 emerging economies, the threats posed by hot money, and the need to sequence financial liberalization. For an analysis of the economic cycle in Romania, see the annex.

9 Were it to operate, a European financial supercycle would mix with what the Bank for International Settlements experts (Borio, 2012) call the global financial cycle.

10 This part of analysis relies on Daianu (2015), especially when it deals with the pace of financial liberalization.

Figure 1: Bank lending and GDP growth

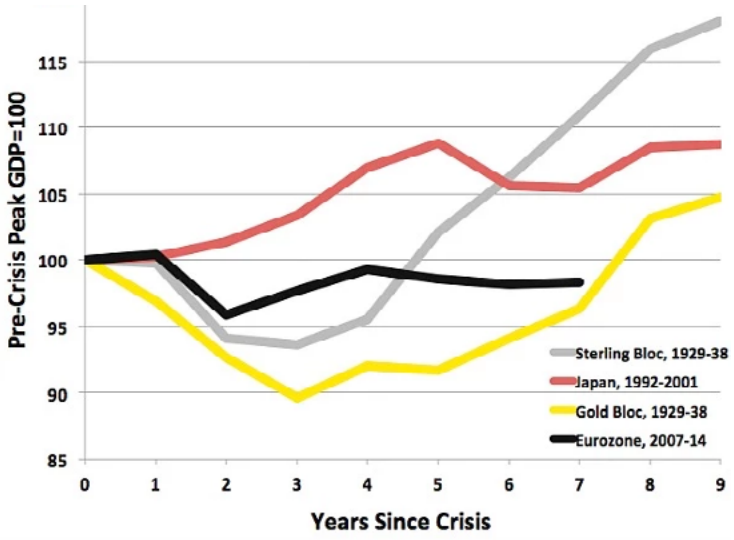


Source: Eurostat, European sector accounts (national central banks; other monetary financial institutions), own calculations (see Daianu in Nowotny et al., 2016)

How serious the situation has been in Europe during this crisis is illustrated by Figure 2, which compares the *Great Recession* in the EU with the crisis of the sterling bloc (1929–1938), the crisis of the gold standard bloc (1929–1938), and the crisis in Japan dur-

ing 1992–2001. By 2014, the level of output in the euro area was below that of 2007. And, as IMF and OECD studies suggest, there are high chances for a significant economic slowdown in the years to come due to demographics, technological change, the burden of over indebtedness, and hysteresis, among others. One should not forget that in several Member States, unemployment has gone above 20% during these years, which can be compared with the fall of employment in the US in the Great Depression (when a quarter of the workforce was jobless at that time). And the average rate of unemployment in the euro area is still hovering around 9%, while it is below 5% in the US.

Figure 2: "The big impasse" in Europe



Source: Wonkblog, Barrelperday, September 5, 2014

2. When the Financial Cycle Meets "Secular Stagnation"

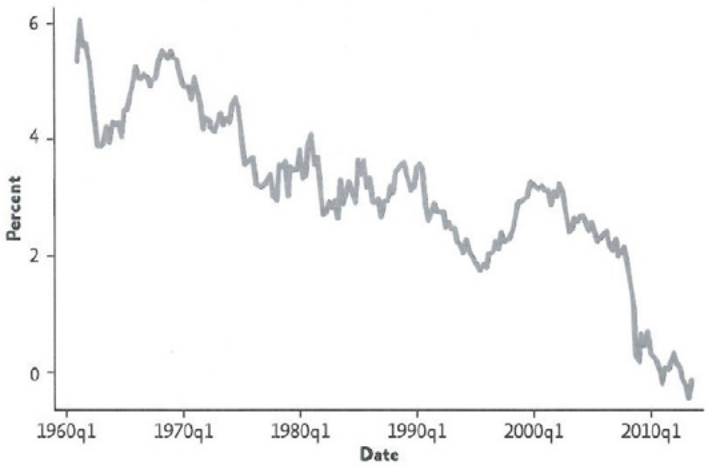
The Great Recession has stunned many policy-makers and academics, for the Great Moderation period obscured the significance of a big rise in indebtedness (both public and private) and the exponential growth of finance against the backdrop of financial deregulation.

There are several issues for debate when considering how a financial cycle ends up in such a deep financial and economic crisis. One issue is related to structural trends, which 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. While cycles and crises are unavoidable (Minsky's *financial instability hypothesis*, which has roots in Keynes' works), their amplitude depends on various factors and on the functioning of finance.

While the financial crisis plays a major role in the current economic malaise, *secular stagnation* (Summers, 2014) should be judged in terms of a long-run decline in productivity, demographics, technological change, and rising income inequality, among others. OECD studies[11] show that potential growth in the EU slowed down from about 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, 2014). 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 (Rawdanowicz et al., 2014). Low and ultra-low interest rates come into the picture in this context (see Section 4) as they juxtapose the dynamics of saving and investment over the longer term (William and Laubach, 2003; Figure 3, quoted by Summers, 2014; Figure 4), which are also shaped by the financial crisis. Technological optimism (e.g. robots, information technology) versus pessimism is also an issue for contention. Finally, what is the role played by debt overhang (Rogoff, 2014) – of big debts in the public and private sector? Balance-sheet recession (Koo, 2011) is to be highlighted in this context.

11 Rawdanowicz et al., 2014

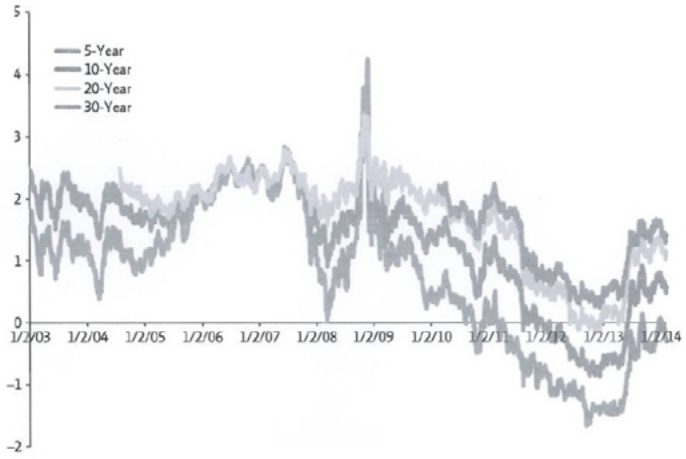
Figure 3: Evolution of real interest rates (William and Laubach, 2003)



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

Source: Summers, 2014

Figure 4: Real interest rates



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

Source: Summers, 2014

It is common sense to say that cycles cannot be avoided. But their amplitude is, arguably, influenced by policies. And it is a fact that, for the past four decades, a simplistic paradigm underpinned the policies of central banks and regulators. This paradigm (based on *the efficient markets hypothesis*) equates price stability with financial stability and has underestimated systemic risks. And as the financial crisis shows, it has also downplayed the role of debt in the funding of economic activity (Modigliani-Miller theorem[12]) and could not capture tail events (non-linearities).

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

- the deregulation of financial markets;
- lax monetary policies: a long cycle of boom and bust in advanced economies (the Great Moderation), which was littered with episodes of possible major tremors, which were prevented by central bank intervention (e.g. the Long-Term Capital Managements debacle and the indirect Federal Reserve (FED) intervention: and
- structural tendencies, including the *glut of savings* (Bernanke, 2005) and the scarcity of safe assets (Caballero and Fahri, 2014).

These narratives can be brought to a common denominator. A "drifted" financial cycle has, arguably, been at work in the global economy during the past two decades. This drifted cycle is reflected by *oversize finance* (Pagano et al., 2014), rising debt overhang, and huge fragilities in highly interconnected markets. As BIS experts point out, the Great Moderation years hid a huge resource misallocation (Caruana, 2014),[13] which shows up in "debt overhang" and a "balance-sheet recession."

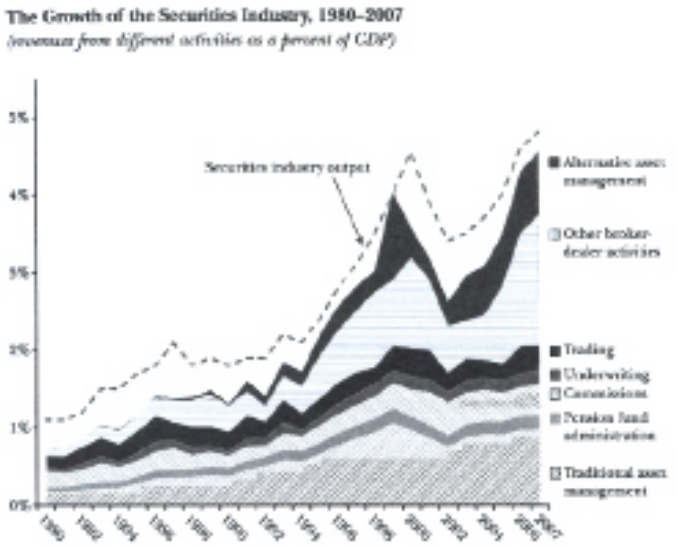
12 The Modigliani-Miller theorem says that equity and debt are equivalent in funding a business. This may have bolstered the inclination to borrow and to use high leverage.

13 "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 the monetization of quasi-fiscal deficits. Firms themselves created their own pseudo-money via inter-enterprise 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 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 financial crisis, whereas money printing after price liberalization in post-command economies created high inflation (since inflation expectations were fairly 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 5: Value added shares of finance in GDP

Source: Philippon and Reshef, 2013

Figure 6: Growth of securities industry 1980–2007



Source: Greenwood and Scharfstein, 2013

2.1. Finance deregulation

Finance deregulation, arguably, has played a major role in derailing the financial cycle. Key moments were 1986, 1998, and 2000 (the Big Bang in the UK and the promotion of the "light touch regulation," the repeal of the Glass Steagall Act, and the Commodity Futures Modernization Act in the US, among others). As Greenwood 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; 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).

Oversized 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 recent backlash against globalization is proof in this regard.

Financial deregulation stimulated credit expansion (Reinhart and Rogoff, 2010), the development of shadow banking (Figure 5), a rise in interconnectedness, and an increase in the fragility of the international financial system.

2.2. Debt overhang

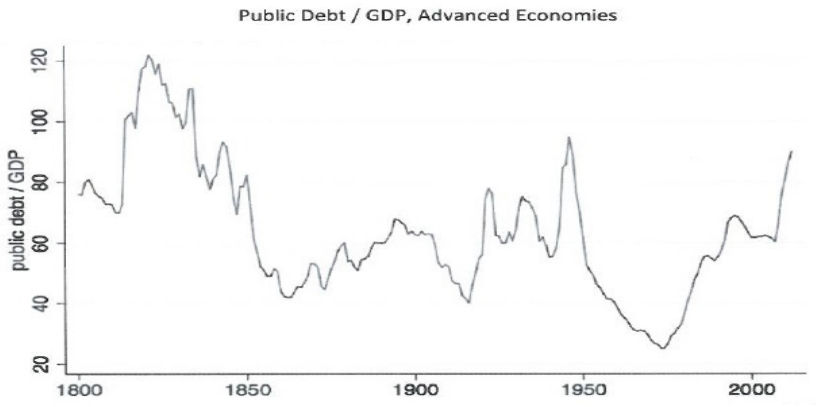
When is debt too much? It depends on the circumstances, as the current financial crisis amply shows. This crisis, itself, was invited by the binge of borrowing during the Great Moderation period. Balance of payments crises, too, signal too much indebtedness (and the latter itself can trigger such crises).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

Reinhart and Rogoff (2010) suggested that 90% of GDP is a threshold beyond which debt is menacing. Some scholars (Herndon, Ash, and Pollin, 2013) had qualms about the data used by Reinhart and Rogoff, 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 many developed economies in recent years. 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. [14] Figure 7 below shows the evolution of debt in 22 advanced economies over two hundred years; the data are provided by Reinhart and Rogoff (2010) and are quoted by Lo and Rogoff (2015).

Figure 7: Public debt/GDP in advanced economies

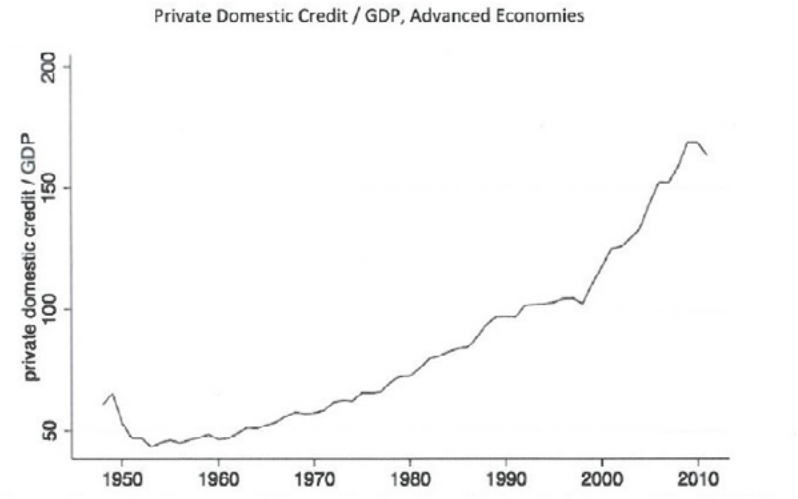


Source: Lo and Rogoff, 2015

Figure 8 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 advanced European economies, respectively.

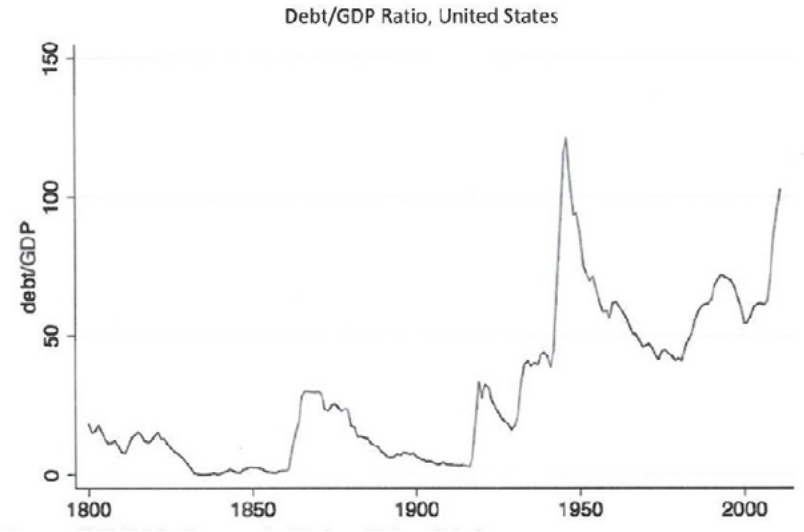
14 Jens Weidmann, speech at a Bundesbank conference on debt and financial stability, March 27, 2015.

Figure 8: Private domestic debt in advanced economies



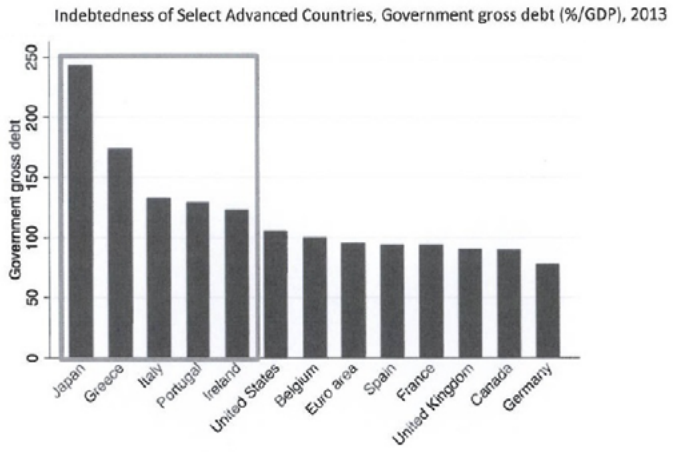
Source: Lo and Rogoff, 2015

Figure 9: Debt/GDP ratio in the United States



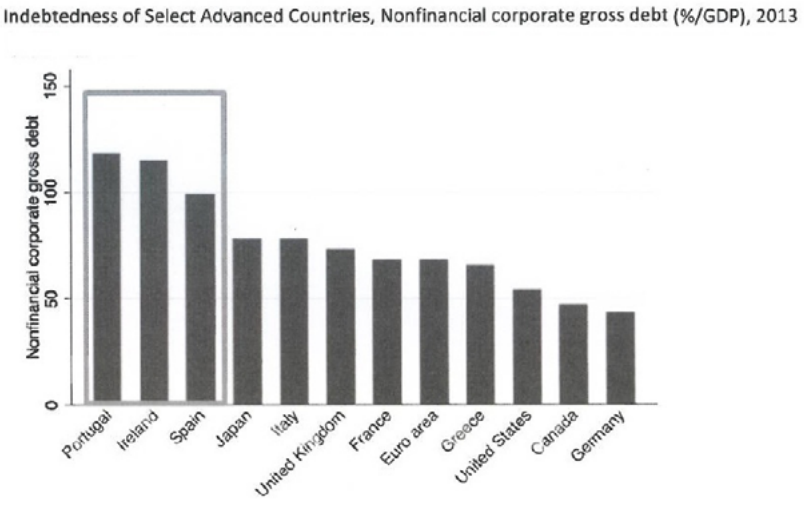
Source: Lo and Rogoff (2015)

Figure 10: Government gross debt (% GDP), 2013



Source: Lo and Rogoff (2015)

Figure 11: Nonfinancial corporate gross debt (% GDP), 2013



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 make sense to do it in view of the amount of economic failures, bankruptcies, underutilization of production capacities, and labor unemployment, among others. 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" (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.

3. An Age of Ultra-Low Interest Rates?

The financial cycle has ended up in a very deep financial crisis. Very low interest rates, ultra-low – even negative – policy rates epitomize this crisis; they have raised concerns about the global economy and have triggered heated debates among economists and decision-makers (Den Haan, 2016). Central banks, especially those that set the tone in a world deeply interconnected via financial markets, are under scrutiny, taking the center stage of debates. Top ECB officials cite structural conditions in the European and the world economy as an explanation for the very low interest rates.[15] In essence, these conditions refer to the balance between investment and saving. The IMF also became involved in the debate by saying that ultra-low rates (even negative) are not unjustified in the current context.[16] The BIS, instead, warns repeatedly about the side effects of non-standard measures.

3.1. The natural/neutral equilibrium rate

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

- increased saving relates to demographics, income distribution, and uncertain revenues, among others;
- 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 in his interpretation of Keynes, uncertainty is fundamental for understanding economic cycles;[17]

15 Mario Draghi, speech at the ADB annual meeting in Frankfurt, ECB website, 2016; Constancio, 2016

16 Vinals, Gray, and Eckhold, 2016. But an IMF staff paper argues that at some point, substantial interest rate cuts may outweigh the benefits from higher asset values and stronger aggregate demand. And that monetary accommodation may need to rely more on credit easing and an expansion of the ECB's balance sheet (Jobst and Lin, 2016).

17 Minsky, 1975. This thesis is further elaborated in his "Stabilizing an Unstable Economy (1986)."

- over-indebtedness ("debt overhang") generates a slowdown of economic activity, a balance-sheet recession (via deleveraging), as Richard Koo (2011) 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 (2014 a, b), Summers (2014), and others to suggest that we have, quite likely, entered a period of lasting stagnation (secular stagnation, as Alvin Hansen put it back in 1938). Such an assumption may seem strange if it is juxtaposed to the thesis of an incoming new Industrial Revolution, but it is not without plausibility when new technologies are likely to eliminate rather than create jobs; and
- decreasing inflation after large emerging economies entered global competition; an import of disinflation has occurred, from China, in particular. The financial and economic crisis was a shock in itself, that combined effects on both supply and demand sides. The decline in commodity prices (i.e. oil) sped up the fall of inflation.

The factors mentioned above suggest that the equilibrium interest rate, 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 (BIS data, 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 and 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 below zero (hitting the zero-bound).[18] Finally, the financial and economic crisis and 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.

If monetary aspects are disregarded, the natural/neutral equilibrium interest rate – according to Knut Wicksel's definition—balances investment and saving at full utilization of resources. This can be shown in a diagram that relates investment (I) and saving (S) to the interest rate (r) (see Figure 12). The hypothesis of full resource utilization, that the economy is not in the vicinity of after a recession, or a major crisis, is implicit. The natural/neutral interest rate (R) reflects the trade-off between current consumption versus future consumption. As the interest rate goes up, the cost of postponing spending becomes more tempting. Concerning investment, higher interest rates (credit cost) reduces its volume. The movement along the two curves reveals the dependency of saving and investment on the interest rate level; shifts of these curves indicate a change in the propensity for saving and for investment.

18 In practice, a central bank cannot take policy rates much below zero. There is a limit to how far central banks can lower their rates into negative territory. If commercial banks pass on the costs to their clients, we could witness a variant of a bank run as clients rush to withdraw their savings. Though, such an inclination may be offset by the need to manage personal cash holdings and by transaction and protection costs.

During a major crisis, both preferences might change substantially. The level of investment also influences potential GDP. Such a thesis is valid provided good resource allocation takes place. If too many investments are misguided, the seeds of a crisis are sown. Figure 13 outlines the IS curve that shows the equality of saving and investment at various levels of the equilibrium rate, in line also with agents' expectations. In the same diagram, Qn represents potential output, while Rn is the corresponding equilibrium rate.

The natural interest rate depends on the propensity to invest and save. If the appetite for saving is on the rise, due to, say demographic trends and/or uncertainties, there is a shift of the S curve to the right, which, ceteris paribus, means a fall of the equilibrium interest rate (in Figure 12, S1). In such a case, for the same returns on their capital, companies are inclined to save more. In other words, at a higher volume of saving (S1>S0), the equilibrium interest rate edges down, more investments could therefore be financed at this level, and this might push up future output. But the structure and quality of investment remain key, given their effects on the potential GDP.

The preference of households/consumers and companies for investment may change due to circumstances. Therefore, the investment curve may shift sideways, with the appetite for investment on the rise or on the wane. For example, fear of what the future may bring weakens investment propensity as long as expected returns stay the same. A more unfavorable economic, social, political, or geopolitical environment, as well as various uncertainties as we see now in many economies, are to be included here. And a lower cost of machinery and equipment will diminish investment volume at constant interest rates. When both curves drift sideways, the interest rate deemed appropriate for potential output would fall considerably, even below zero (see R1 in Figure 12).

3.2. Monetary policy in a depressed economy

The US economy – the nearest to a closed economy model by size and depth – has witnessed a steady decrease of real interest rates over the past decades, from 4–5% toward almost zero at present (among others, Williams and Laubach, 2003; King and Low, 2014; Summers, 2014; Haldane, 2015; Williams 2016). 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 14 and 15; Rachel and Smith, 2015; Holston, Laubach, and Williams, 2016); Figure 15 mentions factors that moved global saving and global investment.

Lawrence Summers argues that the equilibrium rate, which allows full capacity utilization, is negative at present (2014, 2016). But a legitimate question is posed by the low unemployment rate in the US, which is currently below 5%. Is this a sign of a massive

under-utilization of resources? Such a figure should nevertheless be adjusted for labor market participation and income levels.

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 (2016) argues, there is need for another narrative. The latter should be centered on a Fisher equation (i = ir + π (exp)), where (i) is the nominal interest rate, (ir) is the real rate, and (exp π) 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 rule turns into a Fisher equation.[19] 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 shift," 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 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 premature by risking a new recession? In any case, this is a significant policy conundrum.

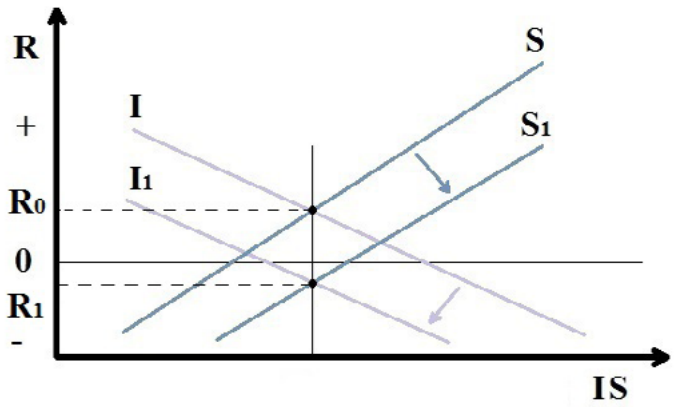
Two key issues emerge: first, whether negative equilibrium interest rates are justified, and second, whether negative policy rates are effective. If resource allocation were adequate, the equilibrium rate should not be below zero. It is economic common sense to think so. But there is a different story 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 or debt-deflation. If such arguments (the ECB's current stance, 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

19 In the circumstances of zero interest rate policy (ZIRP), of "permazero," which has, arguably, characterized the G7 in recent years, a Taylor rule collapses into a Fisher equation. Thus, i = ir + π (exp) + μ π(gap) + β Q (gap) = ir + π (exp), where (i) is the nominal policy rate, π (exp) is expected inflation, (i)r 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+ π (exp), a Fisher equation (James Bullard, "A tale of two narratives," presentation, St. Louis Federal Reserve, July 2016). See also his "Permazero in Europe," International Research Forum on Monetary Policy, Frankfurt, March 18, 2016.

entailed side effects, among which are 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. With his secular stagnation argument, Summers claims 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 resorting to fiscal tools. According to DeLong and Summers (2012), the main reason would be that at very low interest rates, high budget deficits should not be a cause for concern, and that extra deficits would be easily financed via an increased fiscal multiplier and a rise in potential GDP. This state of affairs would be the case in a depressed economy. As De Long and Summers say "...although the conventional wisdom articulated by John Taylor (2000) rejecting discretionary fiscal policy is appropriate in normal times, such policy has a major role to play in a severe downturn in the aftermath of a financial crisis that carries the interest rates down to the zero nominal lower bound (2012). Figure 16 describes fiscal expansion at the zero lower bound with a constant real interest rate (Delong and Summers, 2012). In this model, the monetary policy (MP) curve is flat; thus, the real long-term interest rates do not rise to mitigate the expansionary impact of fiscal policy.[20]

Figure 12: Investment (I) and saving (S), equilibrium rate



20 As De Long and Summers (2012) say, "In a depressed economy where short-term interest rates are at the zero bound, a constant spread between short-term safe and long-term risky rates means the MP curve is flat. Thus, real long-term interest rates do not rise to attenuate the impact of fiscal expansion on real GDP but neither do they fall to amplify it."

Figure 13: IS curve and potential output Qn

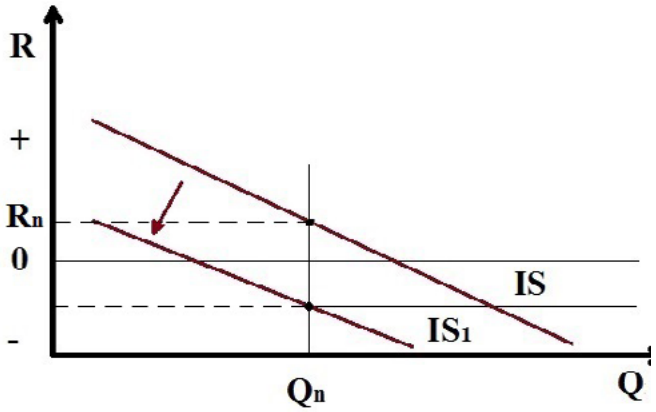
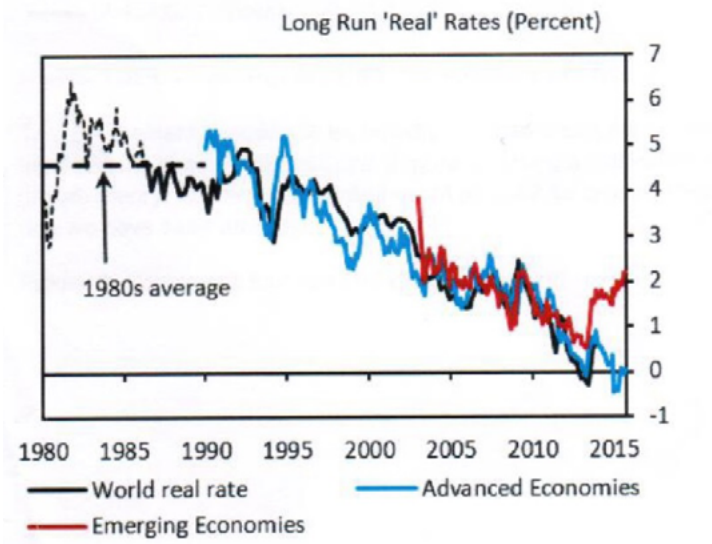
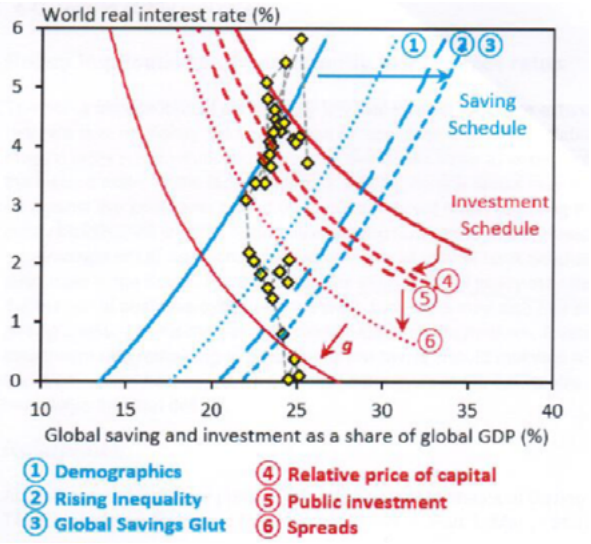


Figure 14: The fall of real rates in the world (1980–2015)



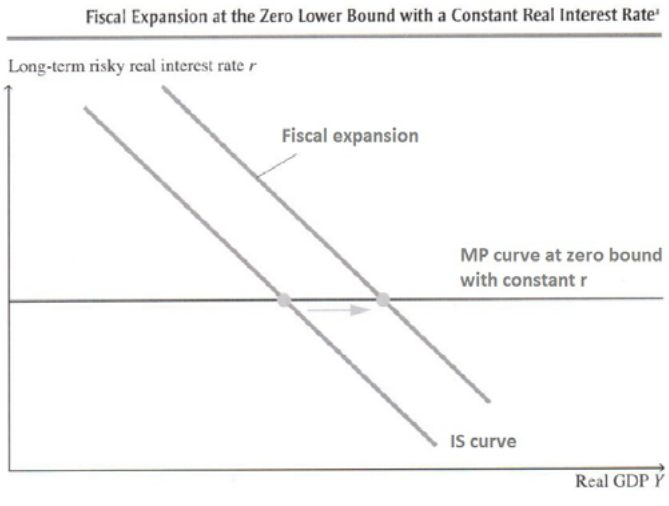
Source: Rachel and Smith (2015), who quote King and Low (2014), Consensus Economics, IMF, DataStream

Figure. 15: Shifts in saving and investment schedules in the world economy (1989–2015)



Source: Rachel and Smith, 2015

Figure 16: Fiscal expansion at the zero lower bound with a constant real interest rate



Source: DeLong and Summers, 2012

3.3. Negative policy rates?

When inflation is persistently very low, policy rates can hit the zero lower bound. If real rates need to be negative to bring output to its potential (R2 in Figure 12) and avoid damaging hysteresis (high structural unemployment or the erosion of potential GDP), a dilemma and a technical problem appear: is it possible to take policy rates into negative territory? Looking at the past years' experience, the technical barrier can be overcome up to a point. However, the policy dilemma remains.

Massive capital movements complicate the picture. This is what Mario Draghi pointed out at the ADB's annual meeting in Frankfurt by referring to the balance between investment demand and the supply of saving in the global economy.[21] Such a statement is substantiated if one takes into account not only the savings glut (Bernanke, 2005) in the global economy following the past decades' development in China (where savings accounts for almost half of household income) and Asians and Eastern 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 approximately 3% of GDP currently, which is also putting pressure on the global investment and saving balance.

An economy may have an initial internal investment-saving equilibrium, but if massive capital inflows take place, interest rates may fall dramatically; output may exceed its potential for a while and speculative bubbles will quite likely occur. A speculative bubble emerged in the euro area periphery, in the EU's emerging economies, where external imbalances grew dramatically in the pre-crisis years. It has also happened in the global economy due to recent quantitative easings, which moved much liquidity to emerging economies.

The financial crisis led to a dramatic drop in investment and boosted saving. According to various estimates, average investment fell to 17–18% of GDP in the EU, from 22% before the crisis. A basic question is whether the ECB has enough reasons to set negative policy rates; the debate cannot ignore the currency war in the global economy (a depreciated euro versus the US dollar can help the euro area periphery), debt-deflation fears,[22] or how to discourage savings in a bid to boost consumption, among others.

All in all, real interest rates are low as a result of developments in the investment-saving balance. Central banks' moves may try to influence short-term rates, but, over the longer run, these steps are effective only if economies get out of the doldrums and the erosion

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

22 See also Calvo, 2016.

of potential GDP is limited. Central banks cannot be all-problem solvers; reform measures are needed to address structural weaknesses which relate to demography, education, public investment, and innovation, among others; fiscal policy may have to play a stronger role.

3.4. Can equilibrium rates be nudged upwards?

Should central banks raise policy rates, for instance, for reasons linked with an assumed policy shift? In Europe, this issue is rather complicated as the increase in credit cost along with a higher saving propensity (amid rising interest rates) might push the European economy back into recession, into a possibly new acute crisis with deteriorating bank balance sheets. A factual example is Sweden a few years ago, where Riksbank tried to stem the boom in the mortgage market by raising the policy rate. This pushed the economy back into recession, as Lars Svensson (who was deputy governor at the time) feared.[23] The fear of a new recession is legitimate.[24]

Moreover, could large central banks induce an upward thrust in real rates in the global economy above the level implied by structural conditions? In the short run, maybe yes. Assuming concerted actions, such a development can be imagined. This action would imply a massive absorption of liquidity (of base money)—a large-scale drainage via sizeable bond sales that will take yields higher and would again strain financial markets, inducing a new recession, heightening the debt-deflation threat, and triggering a string of bankruptcies. Banks will face major asset losses similar to those in central banks' balance sheets (though, some may say that these losses should not be a concern for the issuer of a currency even in case of political impediments). Markets would freeze anew by forcing central banks to, supposedly, intervene again in the reverse. Therefore, structural changes are needed for long-term equilibrium interest rates to pick up; this means productivity growth, demographics, and uncertainty, among others.

Returns on savings are slim, or almost nil, and insurers and private pension funds are hurt. But it is unfair to blame recent years' policies for the structural conditions in the global economy. The cheap money policies of the Great Moderation period, when the massive

23 "Central Banks: Stockholm Syndrome," Financial Times, November 19, 2014.

24 There are here two additional questions. What if the ECB intervention was distortionary in the first place and now the answer should rather be a policy reversal; second, what if the first ECB intervention (after 2008) was right, in order to address liquidity issues, while solvency related ECB intervention was less appropriate. Both questions need an answer to the issue of banks' legacy and the burden distribution across the euro area. The problem with both these two questions, however, is that the ECB was the only institution that could intervene in order to rescue the euro area. Moreover, distinguishing between liquidity and solvency problems is quite complicated in the real world.

misallocation of resources and the global financial cycle were fueled, is an issue for debate, however.

3.5. 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 and high external debt are more vulnerable and prone to balance of payment crises. The fall in commodity prices is also hitting countries that rely on basic commodity exports hard.

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 of GDP compared to developed EU countries (their legacy problem is much smaller). Likewise, their US dollar exposure is relatively low, which protects them somehow from the impact of Federal Reserve policy changes.[25] But they are facing significant dilemmas, such as:

- 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;[26]
- is it reasonable to foster a reduction of the currency substitution (euroization) by all means when euro adoption is mandatory at one point?[27] One may be tempted to say yes due to the rise in the room for maneuver of monetary policy; and
- if the impossible trinity (autonomous monetary policy, stable exchange rate, and free capital movements) is actually a dilemma (Rey, 2013), then capital controls are needed – be they under the guise of macro-prudential measures. The IMF itself has reassessed the appropriateness of capital controls. These measures require a good coordination among central banks and regulators;[28] and

25 However, the Federal Reserve's interest rate changes could be followed by a strong appreciation of the US dollar, which, in turn, could trigger other advanced economies to follow.

26 It is the Tošovský dilemma, specific to inflation targeters.

27 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.

28 The 2006–2008 experience indicates that the strong rise in real credit growth was also stimulated by loan externalization which was practiced by foreign banks' subsidiaries.

- the ECB should ensure facilities similar to those available in the euro area, given the integrated EU financial market, the heavy presence of foreign banks from the euro area in the non-euro area banking sectors, and the high currency substitution (euroization) in some of these economies.

3.6. 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 and 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. This is why some voices (Turner, 2016 b; Buiter, 2014) mention helicopter money as a solution to repair financial intermediation. But this distribution of free purchasing power is not devoid of threats. On the other hand, if there is enough fiscal space, a boost in public spending may be used especially when it would target clear domains (like infrastructure), which can have a strong impact on the whole economy and would bolster aggregate demand.

The still fragile financial system is mirrored by developments across shadow banking and 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. The bottom line is that there is need for continuing reforms of finance in view of the risks posed by interconnectedness, the too-big-to-fail syndrome, and the bad practices of this industry. A simpler and more transparent financial system and a reform of the international system aimed at cushioning negative externalities are badly needed.

4. The *Financial Cycle* and Macro-Prudential Policies

The current financial crisis has highlighted financial stability as a paramount objective of economic policy. Macro-prudential measures (MPMs), as are contemplated and, in some instances, implemented by European national authorities, aim at enhancing financial stability. The purpose of MPMs is, therefore, to diminish the dynamics that lead to boom and bust cycles while there is wide acknowledgment that price stability is not sufficient for achieving financial stability. This objective is all the more important at a time of still significant injections of liquidity in global financial markets which, against the backdrop of investors' intense searches for yield, causes considerable overvaluation of financial assets. In the US, Federal Reserve top officials stress that macro-prudential instruments, rather than monetary policy, are the means for dealing with macro-prudential financial stability. This view is also echoed by ECB officials.

Macro-prudential policies can have diverse effects in highly integrated financial markets, and spillover effects, which do influence their effectiveness, need to be taken into account. In Europe, although there is market fragmentation under way under the impact of the deep financial crisis and the euro area crisis, the single market for financial services is not a chimera, for it has a concrete meaning and content. Moreover, the need for MPMs in the euro area is to be seen against the backdrop of limited macroeconomic policy instruments in its member countries. One could even argue that the need for MPMs in this area gives more salience to its incompleteness as a monetary union—that these measures are a substitute for capital controls and that they are a sui generis way of dealing with the "trilemma" of open macroeconomics. In the EU, spillover effects that derive from the implementation of MPMs can entail positive as well as negative effects.

Making judgments on MPMs is to be seen from the need in the EU to: a. coordinate policies for the sake of achieving common goals; b. have a collective policy stance wherever it is suitable, which is clearly the case in an economic area that aims at establishing a banking union; and c. consider the linkages between monetary policy and financial stability policy, however much one would entrust each of them with particular goals (fitting the Tinbergen assignment problem).

4.1. Nature and drivers of the financial cycle matter

Regarding the current circumstances in the world economy, one can detect a clash of views with regard to the policy effectiveness a central bank can obtain in combining its monetary stance with MPMs. While BIS experts seem to favor a monetary policy geared toward a sooner rather than later policy rate rise for the sake of weakening boom and bust dynamics (Caruana, 2014), the Federal Reserve and the ECB would rather maintain a relaxed policy stance. In Europe, the threat of debt deflation has been judged by not a few central bankers as quite menacing and a reason for a continued soft policy stance.

While the assessment of the various tools central banks have at their disposal in order to deal with macro-prudential concerns is of great importance, another key issue pops up: the shape and nature of financial cycles, and, especially, of the "global financial cycle." It is useful here to distinguish between an "ordinary" and what could be named a "policy-drifted financial cycle." The former would be an unavoidable (endogenous) financial cycle, which is not considerably biased by suboptimal policies, whereas a derailed, drifted cycle would be heavily influenced by drifted policies—as it is argued in Section 2 of this paper. In this context, the role played by major economies, as "market-makers," is to be highlighted. Whether a "dilemma," rather than a "trilemma," operates for policy-makers is less relevant, for both views acknowledge that well-targeted capital controls can play a useful role in broadening national policy space. As the spillover effects of the MPMs adopted by EU Member States are so much more important for the ECB, and for the EU as a whole, the same logic can be applied to the global economy with regard to the policies of the central banks that provide reserve currencies. This is why what the Federal Reserve does is of enormous significance to the shaping of macro-prudential policies in Europe and elsewhere in the world.

Consequently, a fundamental question arises: what is the relationship between national macro-prudential policies and the financial cycle in the global economy, with the latter being so much under the impact of major central banks' policies? Quantitative easing, among others, comes to one's mind in this regard. Policy coordination between the Federal Reserve and the ECB would be welcome under such circumstances. But how much is it feasible in view of central bank policy mandates, which focus, primarily, on domestic economic conditions? Several related policy inferences can be made following the observations made above, including:

- MPMs need to consider the drivers of financial cycles—namely, whether there are policy drifts that derail these cycles;
- what drives the global financial cycle is critically important and, in this context, the role played by market-makers' policies – what could appear a justified macro-prudential measure to a major central bank may cause tremors in other markets;

- there is, arguably, an optimal degree of financial liberalization, for emerging economies, in particular (one reason being that they cannot borrow in their local currencies);
- targeted capital controls can play a useful role in underpinning financial stability in economies that can be ravaged by massive flow reversals. This observation should be examined in conjunction with the risks posed by growing inter-connectedness in financial markets and, correspondingly, by an erosion of robustness and resilience of economic systems;
- there is need to think about and try to shape inter-connectedness (Haldane and May, 2011);
- the reform of the regulation and supervision of financial markets and the change of business models in the financial industry could bring about more robust and resilient organizations and economic systems; and
- rediscovering the logic of the Bretton Woods arrangements would bolster the resilience of the international financial policy regime (see also Stiglitz, 2010).

Designing proper regulatory and supervision frameworks of finance in "market-maker" (big) economies is essential for dealing with the negative spillover effects of their policies. How the ECB can coordinate its policies better with the Federal Reserve and other major central banks for the sake of mitigating boom and bust dynamics in the global economy has to be given more clear answers. Is the Financial Stability Board an effective instrument to this end? What about G20 in this regard? Can the IMF play a significant role in this respect? There is so much still to be figured out in order to make macro-prudential policies effective instruments.

5. Elements of a Policy Agenda

The worst has been averted, but a very unusual situation is prevailing: quasi-zero policy rates, very low yields, and very low growth rates (the three big zero). 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 integrated markets and non-standard measures have significant side effects; quantitative easings create speculative bubbles and produce havoc in many emerging economies. A huge challenge is whether, when, and how to start normalizing policy rates.

Financial cycle logic says that there is a trade-off between economic growth over the longer run and financial stability. In the new, highly uncertain environment, policy-makers confront enormous policy dilemmas, some of which are mentioned below.

5.1. Monetary policy

Exceptional conditions in the global economy have forced central banks to lower policy rates at levels unimagined a few years ago. And quantitative easings have become "standard" practice in recent years. Is it temporary business, or is it a harbinger of a longer-term shift in monetary policy conduct? Are "non-standard" measures to stay with us a long period of time? Can we bet that the enormous 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? If resource allocation were adequate, natural rates should not go, presumably, below zero. Should we target a higher inflation rate (as Blanchard, 2013; Williams, 2016) 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? Monetary policy conduct may have to change considerably if one sets price levels and nominal GDP as targets (Williams, 2016).

Monetary policy rethinking is to be related to its theoretical underpinnings. Williams (2016), White (2013), 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, and financial stability. White goes so far to invite a closer look at narrow banking (2013) and at a reform of finance. This is a line of reasoning one finds in more radical ideas (King, 2016; Kay, 2015; and Benes and Kumhof, 2012; among others). It is increasingly clear that price stability cannot be divorced from financial stability concerns, monetary aggregates should be monitored closely (Weber, 2015), and macroprudential policies need to be used.

5.2. 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 relationship 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 made economies drift from sustainable trajectories (have amplified boom and bust dynamics) and resources be misallocated (see BIS annual reports of recent years). Not delaying rises in the policy rates would be a means to combat future boom and bust cycles and new big crises. Another view (linked with the secular stagnation thesis) highlights the threat of being stuck in a very bad equilibrium with intense hysteresis phenomena, which may invite social and political troubles. Income inequality and highly skewed wealth distribution, which would impair economic growth, is a factor that should be factored in in both visions; it can bring them closer and reconcile policies that can bolster aggregate demand (for the sake of avoiding debt deflation) with measures that take into account resource misallocation.

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 and volatile. What drives a financial cycle is of utmost importance for emerging economies, since their macroeconomic policies are heavily influenced by what happens in big economies.

With regard to the macro picture, macroeconomic fundamentals (external imbalances, gross external debt and short-term debt, and budget deficits, among others) matter much, but they do not provide insulation against a tidal wave of a great scale unless macro-

prudential polices are of help. This is, not least, because of: a. the size of liquidity that is circulating through global markets; b. much borrowing has taken place primarily via bond markets (capital markets) in EEEs; and c. the emergence of index-tracking exchange traded funds (ETFs), which has increased the indiscriminate nature of emerging markets flows, and which leaves them vulnerable to across the board withdrawals. Sound macroeconomic fundamentals can make the difference between a recession and a balance of payments crisis (a "sudden stop"). Private indebtedness matters as much as public debt, and external indebtedness and gross external financing requirements (GEFR) lie behind fragility to external shocks.

5.3. A trade-off between economic growth and financial stability?[29]

This is, probably, one of the most profound "Grosse Fragen" for academic economists and policy-makers nowadays. As mentioned in this paper several times, one view takes a longer-term perspective; the other pays attention to what may push an economy toward a bad equilibrium and keep it stuck there because of hysteresis phenomena. On the other hand, if one considers the logic of financial cycles, with inevitable exuberance followed by falls in confidence and economic activity and rises in uncertainty, the trade-off should be nuanced from a dynamic perspective. The distinction should therefore be made between what is linked with the unavoidable cyclical motion of economies and policy-induced too-large oscillations. A related question is the growth potential of mature economies. Gordon (2014 a, b) argues that it is lower than in the past owing to a range of structural factors including demographics and education, among others. Summers (2014) would argue that this growth potential may be eroded by not adopting the right policies now, in the wake of the current crisis. But attempts to foster short-term growth may sow the seeds of future crises by enhancing the search for yield and risky behavior (Borio, 2014; Rajan, 2013). Can a way be found out of this conundrum? Summers (2014) seems to be quite pessimistic in this regard.

One would have to consider also the relationship between economic growth and income distribution. It is quite an amazing change to hear top officials of major central banks voicing concerns in this regard—their worries that income distribution may hurt economic growth (Draghi, 2014; Yellen, 2014; Mersch, 2014; among others); IMF experts (Ostry et al., 2014) voice similar concerns. The debate encompassing these issues is of enormous importance

29 This section relies on Daianu (2015).

to central banks, as their mission cannot be divorced from what policy-makers do in order to resuscitate their economies.

5.4. Finance reform

Measures have been taken to bolster capital and liquidity requirements, reduce leverage, limit pay, enhance transparency, and discourage excessive risk-taking, among others. But, arguably, more should be done (Admati and Hellwig, 2013). 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, as after the Great Depression. Ring-fencing retail from trading activities is, arguably, not sufficient for protecting tax-payers. More own capital and less reliance on debt (as against the Modigliani-Miller theorem which implies that where capital comes from does not matter) along with 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). Misconduct in finance is also an issue as it can foment systemic risks (Carney, 2014)

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. The Chicago plan is brought back into the picture and, interestingly, IMF and Bank of England scholars are involved in this analytical demarche (Benes and Kumhof, 2012; McLeahy, Radia, and Thomas, 2014; among others). Mervyn King, a former Governor of the Bank of England, is also quite critical of current banking (2016). Adair Turner comes up with radical proposals (2016 a), as do Martin Wolf (2015) and John Kay (2015).

Regulators and supervisors of capital markets will arguably think like central bankers ever more 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 the sudden stops that can occur in these markets).

5.5. Economic repair of the euro area

If the euro area had not existed, the German surplus would have pushed the Deutsche mark toward steady appreciation, as it constantly did during the decades of German economic miracle, after the second world war. The same would have happened with the

Dutch and, maybe, other currencies. But now, the fracture between the North and the South in the euro area 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 must consider that economies do not have the same capacity to absorb shocks. The unemployment rates are quite ominous: in Germany, it is below 6%, in Austria, it is similar, while it is above 20% in Spain and Greece; in these latter countries, external imbalances have been internalized via internal devaluation. A union that does not have tools to combat asymmetric shocks is prone to go from one crisis to another.

The euro area 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. Unconventional monetary policies aimed at breaking the deadlock of the transmission mechanism need to be combined with bold public investment policies which should prop up aggregate demand at the euro area level and enhance chances for longer term recovery. More stimulus at the euro area level must be accompanied by structural reforms as a senior partner. Mario Monti (2014) rightly points out that, when funding is so cheap and basic infrastructure is in a dire state, it is more than justified to undertake investment via public borrowing. The European Investment Bank could be the conduit for funding such a program, which would be of much assistance in those economies that meet biting fiscal constraints; it could also provide a range of safe financial assets at a time of increasing scarcity of good paper (Caballero and Fahri, 2014). At the same time, symmetric adjustments need to become a rule of the game in the euro area, which brings external imbalances and their connection with national policies to the fore.

Structural reforms fit the logic of individual responsibility fully. But however responsible national policies may be, a union still asks for a lender of last resort and tools for dealing with asymmetric shocks. Unless the governance of the euro area improves considerably, what Olivier Blanchard (2013) calls "dark corners" will likely engulf it. Economic recovery in the eurozone depends not only on national economic policies, but on euro area level policies: on whether there is a significant bolstering of aggregate demand in the euro area. It also depends on reforming the policy arrangements in the euro area, which imply completing the banking union and 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).

5.6. The policy space issue

For economies to adjust smoothly to shocks, they need to rely on highly flexible markets and be able to resort to an array of adjustment tools. In Europe, for instance, in the single currency area, where the monetary policy and exchange rate policy are gone, the tasks for policy-makers can easily turn into a mission impossible unless local markets are sufficiently flexible and productivity gains in the local economy match those of neighboring economies. In emerging economies, policy-makers must deal with the workings of a "global financial cycle" that can overwhelm their policies.

Here, too, one finds a dilemma when it comes to economies that are bound by treaties to join the euro area. Accession should take place once there is a critical mass of structural convergence achieved and the euro area would have reformed its policy arrangements (governance) properly.

5.7. 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 euro area). It is never futile to stress how important for global markets is *the international policy regime* and what the 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 shed, as much as possible, of its speculative and destabilizing nature, to downsize it.

Final Remarks

Let us conclude with a few inferences:

- structural trends, oversized finance, and a drifted financial cycle have provided the conditions for the eruption of the financial crisis;
- the slowdown of the global economy (which is due to structural factors) 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;
- 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. The reduction of huge debts (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, as Reinhart (2016) emphasizes;
- income inequalities create tensions in society; this is fueling populist and protectionist movements in both developed and emerging economies; globalization limits come to the fore (Birdsall, 2016);
- can new technologies bring in a new upswing? Can a better resource allocation, able to alter the distortions caused by policy errors and the exuberance of the past decades, help? 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 and big uncertainties. Moreover, new technologies may destroy rather than create jobs, at least in the short and medium run;
- global economic conditions are extremely unusual (*the New Normal*), fueling great confusion and uncertainties; and
- limits of cognitive models are increasingly clear and policies are navigating uncharted waters; but we can take comfort in the fact that a generalized Great Depression was avoided, at least until now.

We need patience. 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. It is too early to speak about the future of economic policies (monetary policy and not only) since there are fundamental aspects to be clarified in this regard.

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Annex 1: Economic cycle and policy cycles in Romania

Cycles can be relatively normal, with ups and downs, linked with the inherent meandering of an economy, or strongly distorted, with large amplitudes. A distinction can be made between business and financial cycles, with the latter spanning a longer period of time (10–15 years) and accompanied by an increase and then a decrease of lending (Minsky, 1986; Borio, 2012; Rogoff, 2015). The hardships faced by the Romanian economy in the past decade resulted from a blend of the "financial cycle" in Europe and domestic economic policy measures that widened imbalances in the economy.[30] The analyses made by macroeconomists distinguish between potential GDP, which expresses the potential level of employing the resources in an economy at a given point in time, and the potential growth rate of the economy. In its evolution, the economy may surpass the potential level for a while; it may also grow at an actual rate above the potential one. When both occur, there is no way the imbalances will not widen. That assessments on potential GDP and potential growth rate imply major imponderables does not invalidate efforts to gauge them, or the usefulness of these concepts in terms of rendering macroeconomic policies operational.

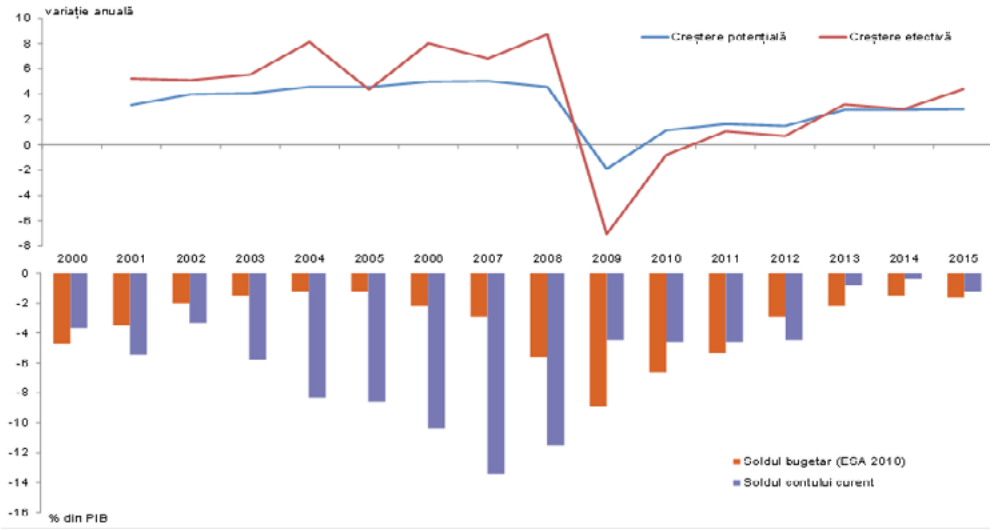
Chart 1 illustrates the relationship between the Romanian economic cycle, influenced by several underlying factors, and the dynamics of imbalances. The chart displays the path of the actual growth of the economy vis-à-vis its potential growth and the values recorded by budget and current account (external) deficits in the period from 2001 to 2015. It is thus readily noticeable that, during the years with actual growth considerably above potential growth, the imbalances were high (widened). During 2006-2008, current account deficits reached 10.4%, 13.4%, and 11.5%, 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% in 2006, 1.8% in 2007, and 4.2% in 2008. The budget deficits of 2006 and 2007 came in below 3% of GDP, yet they masked much wider structural deficits (adjusted for the business cycle) – in 2008, the budget deficit was markedly above 3%. Actual growth had run above potential during 2001–2004 as well, but back then there was a wide negative output gap (see Chart 2). Mention should be made that, as long as the difference

30 For an analysis of economic cycles in Romania over the past quarter century, see also Grigoras and Stanciu (2015).

between actual and potential GDP is significant, it may be assumed that the effective growth rate of the economy can exceed the potential one without leading to major imbalances. If the latter does 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," as shown in Section 1. The charts there capture the credit boom of 2002–2008 in European economies (the European cycle was influenced by the introduction of the single currency, while in the case of emerging economies in CEE, the incentive was the prospect of joining the EU).

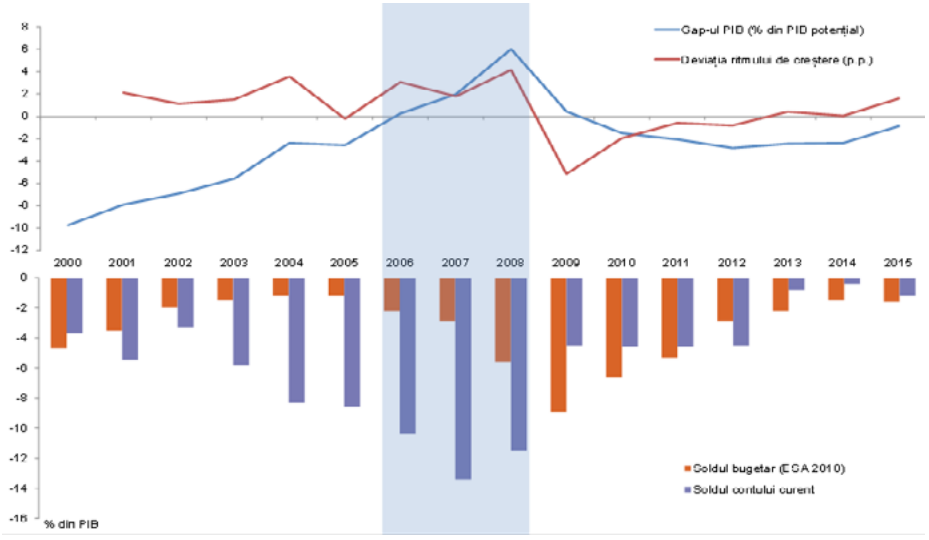
Some colleagues make a noteworthy remark: that economic activity in recent years has no longer been based on credit (debt), as before, and therefore we are allegedly dealing with sound growth; it is a thesis advocated by other analysts as well, although not articulated as explicitly. On one hand, this remark is in line with what both theory and practice have referred 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 view – 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 and the way in which the structure of public spending was affected. The general government budget execution has recorded ever lower deficits in recent years, but the drop in investment is dramatic (more than 45% overall) in both public and private sectors (although the latter has witnessed a slight, albeit not meaningful yet, rebound in investment in 2015). However hard we might try to explain this drastic cut in investment as an inherent correction after years of misallocation of resources (many of which were channeled to non-tradables), it is difficult to admit that the economy may grow without investment, with technical progress ensuring comparative advantages and possibly a different growth pattern (based more on domestic saving and better use of resources). Technological progress out of the blue is inconceivable, and substantial efficiency gains are not 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, and 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 and proven.

Chart 1: Potential and actual growth; budget and current account imbalances



Data: National Institute of Statistics (NIS), Ministry of Public Finance (MPF), European Commission, National Commission for Prognosis, National Bank of Romania (NBR)

Chart 2: GDP gap, the growth rate deviation, and macroeconomic imbalances



Source: NIS, MPF, European Commission, National Commission for Prognosis, NBR

Chart 2 deserves attention, pointing to moments when domestic economic policies were strongly pro-cyclical and stimulated the economy, although activity dynamics were 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% of GDP ESA (EU methodology) deficits, except for 2008). Wide external deficits were brought about especially by the quick rise in private sector indebtedness, with a lot of resources channeled 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. While after 2005 we faced a credit boom that widened imbalances, we now run the risk of recklessly increasing budget deficits.

What would be the moral of the charts used? Judgments should take into account the business cycle and its determinants, namely domestic policies and the external cycle. It is desirable for domestic policies not to be pro-cyclical – not to attempt to stimulate the economy by fueling imbalances. When the economy is way below potential in terms of resource utilization, there may be a recovery at a faster pace than the potential growth rate of the economy, without seriously jeopardizing macroeconomic equilibria. Such a recovery does not necessarily imply government intervention. In fact, Romania has witnessed in recent years rather an economic recovery, judging by the still very low investment level. However, "reparations" – be they even partial – played a significant role in the incomes of certain categories of individuals compared to the levels prior to the massive cuts after 2009. But, in the medium and long run, the advance of the economy depends on its potential – on investment, technical progress, and better resource allocation. Stimulating consumption per se is not of much help from this point of view, no matter how much credit is given to the opinion that it is a form of providing indirect impetus to supply/investment; it could rather spell trouble if carried out in a reckless manner. Oddly enough, the advocates of boosting consumption have become vocal precisely when this main driver of aggregate demand is on a strong rebound. To what extent should consumption be encouraged, given the need to safeguard macroeconomic equilibria? Granted, external deficits have seen significant corrections these past few years (not the least through the dramatic drop in investment), but we run the risk of pushing the budget deficit towards 4% of GDP, if not further. It is an anomaly to deliberately increase budget deficits when the economy is recovering firmly.

And one more thing: it is not by encouraging consumption that the major imbalance in GDP distribution in Romania can be solved. I am referring to the share of labor income (approximately 31.5%) compared to the share of capital ownership (around 55%), making up one of the most heavily tilted ratios across the EU. Even when factoring in liberal professions, the share of subsistence agriculture, and the underground economy, the figure points to an out-of-the-ordinary situation. And arguments such as "fiscal easing is demanded by the business sector" overlook the fact that economic policy should be formulated with due consideration paid to the interests of all stakeholders. If things go wrong due to the emergence of too large imbalances, everybody will pay the bill and the low-income categories will bear the brunt.

Steroids, therefore, can come on different channels: via pro-cyclical economic policy measures and from the external environment, to the likes of fast-paced lending by banks a decade ago. In case of the latter type of steroids, macroprudential measures have a preventive role, although they are not always effective in the absence of proper cooperation with other central banks. At the same time, domestic policies should not make, through their layout and dosage, any blatant mistakes such as aggressively stimulating the economy and hence jeopardizing equilibria.