Mugur Isărescu: Monetary policy during transition. How to manage paradigm shifts

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Ladies and Gentlemen,

I started my career back in August '71, the day after President Nixon announced the suspension of gold-convertibility of the US dollar and the introduction of a 10 percent surcharge on American imports, thus marking the dismantling of the Bretton Woods System. We all know what happened next: in an attempt to preserve a system of fixed exchange rates, the Smithsonian arrangement – which set a fluctuation band of +/–2.25 percent – was introduced in December 1971. It only lasted for six months, so that during 1972–73 fixed exchange rates were replaced by floating regimes in most economies around the world. Exception made the countries of the European Economic Community, which decided to implement a joint floating arrangement and introduced rather funny concepts such as the "snake in the tunnel".

Those were also years of intellectual controversy – I remember reading alternatively the Newsweek articles of Samuelson and Friedman, one preaching the virtues of Keynesian policies, while the other praised free markets and non-intervention. I witnessed the end of an era and the dawn of another.

I also remember a conference in Salzburg in 1975, when Richard Cooper and Robert Aliber invited Friedrich Hayek – recently awarded the Nobel Prize in economics – to give a lecture on stagflation. I cannot forget the striking answer he gave: stagflation was the result of Keynesian policies.

In the decades that followed I witnessed many other policy and paradigm shifts, but I have to confess that some of them – such as quantitative easing and close to zero policy rates – I could hardly have imagined a few years ago. However, in this paper I will deal neither with quantitative easing nor with close to zero policy rates.

I will focus on those paradigm shifts that challenged the monetary policy conduct in Romania during the transition years, while also approaching the theoretical controversies in the field. Starting with the search for a better nominal anchor and the emergence of inflation targeting as one of the mainstream monetary policy strategies, I will then tackle the issue of exchange rate regimes and how the focus changed from intermediate arrangements to corner solutions and back again. As this issue cannot be separated from the one of capital flows, I will then turn to the debate "capital controls versus free movement of capital". The last three topics are especially relevant in the context of the financial crisis, referring to the consequences of having a majority foreign-owned banking system, the rethinking of central bank objectives with special attention paid to financial stability and, finally, the choice of the optimal inflation target.

1. From monetary anchors to inflation targeting

During the nineties, giving up the intermediate objective as an anti-inflationary anchor in favor of direct inflation targeting marked a major change in the way of thinking the monetary policy framework around the world.

Monetary strategies based on a nominal anchor, be it the exchange rate or a monetary aggregate, still prevailed in the early nineties. While exchange rate pegs are currently still in place in some countries (and I will come back to this later), monetary targeting slid into oblivion.

But, at the time when the National Bank of Romania had to choose a strategy for conducting its monetary policy, monetary targeting was not yet out of fashion. Moreover, this strategy was adopted and implemented in the context of the stand-by arrangements signed by the Romanian authorities with the IMF, which stipulated the monitoring of monetary aggregates developments. The same as with fiscal and income policies and with structural reforms, the programs agreed upon with the IMF were a strong anchor for coherent policies in the nineties.

Another reason for choosing monetary targeting was that the alternative strategy, i.e. exchange rate targeting, was not really an option, given the particularities of the Romanian economy. The explicit use of the exchange rate as an anti-inflationary anchor would have been extremely risky considering the threat of an excessive current account deficit widening, as well as the low foreign exchange reserves in the first decade of the transition period. The latter would have left the central bank little room for maneuver to protect the exchange rate in the event of a speculative attack.

By the mid-nineties, the literature on monetary policy strategies came to include recommendations varying from exclusive focus on monetary anchors to ignoring them altogether. In 1996, Mishkin and Estrella wondered "Is there a role for monetary aggregates in the conduct of monetary policy?" in an article that stirred heated debates. "Not really", was the conclusion.

Even the classical example of successful monetary targeting – the Bundesbank – did not apply the strategy "by the book". They managed to keep inflation at low levels, but the monetary targets were missed in several years. The success of the Bundesbank's strategy lay to a greater extent in the credibility of its clearly anti-inflationary stance – also reflected in announcing annual inflation targets – than in strict compliance with monetary targeting rules.

Although central bankers tend to think of themselves as upholders of timeless values – as Mervyn King put it – a new fashion started to attract followers. The era of inflation targeting was dawning.

However, for Romania it was still too early, as it was rather unclear whether the new strategy was appropriate for developed economies only or for emerging economies as well. Anyway, at that time, i.e. mid to late nineties, Romania fulfilled none of the inflation targeting prerequisites: the annual inflation rate was still far from single-digit levels, fiscal dominance was strong, central bank credibility was not yet consolidated, while the possibility to forecast inflation two-years ahead was wishful thinking.

In the end, as financial innovation and the unstable money velocity weakened the money-inflation relation, monetary aggregates did abandon us. In the case of Romania – and probably in the case of other transition economies, as well – another reason for the monetary aggregates unsuitability as intermediate target may be attributable to the lack of financial discipline which led to the build-up of arrears in the inefficient SOEs (largely, towards the state and among themselves). As the arrears acted as money substitute, the role of monetary aggregates in guiding monetary policy became increasingly irrelevant – restricting money supply often resulted into an accumulation of arrears. Although the arrears ceased to be an issue during the boom years, they emerged again as a problem during the crisis, the build-up being significant in socially-sensitive sectors such as public utilities and healthcare.

Coming back to mid-2000s, after several years of preparation, the NBR joined the club of inflation targeters in August 2005.

Nevertheless, it is worth noting that, when Romania gave up monetary targeting, Estonia was its only peer among Central and East European countries in terms of longevity of the

monetary policy regime, with its currency board adopted in 1992. Shifts from one end to another of the spectrum of monetary and exchange rate arrangements were common in the region. Specifically, the Czech Republic, Poland and Hungary had various forms of exchange rate pegs during the nineties, before shifting to inflation targeting. As for Romania, the transition between the two regimes was smoother, since the monetary targeting framework included elements such as the disinflationary stance, exchange rate flexibility and, of course, the major role of monetary aggregates, which are also seen in the inflation targeting regime.

Amid the never-ending, heated debates on rules versus discretion in monetary policy, which are so time- and energy-consuming in the academic world globally, inflation targeting may be viewed as an attempt to make both ends meet. This strategy has the merit of combining tight constraints in terms of the final objective (the inflation target) with a certain degree of discretion as regards the calibration of monetary policy instruments so as to provide an adequate response to shocks. While theoretical orthodoxy used to claim that inflation targeting needs a free floating currency, in practice, many inflation targeters opted for a light version of the strategy. So did many Marlboro smokers. As a rule, small open economies that joined the club over the nineties felt that a managed float regime would serve them better.

This was also the line pursued by the NBR when introducing inflation targeting in 2005, with the extensive technical support generously offered by the IMF and the Czech National Bank.

At that time, inflation targeting seemed poised to become the monetary policy framework in most countries that did not have fixed exchange rate regimes in place – and this was still the case only a few years ago. However, the global crisis broke out and changed the order of priorities on policymakers' agenda. It remains to be seen how inflation targeting will adapt to the post-crisis economic and financial environment, which also challenges the overriding importance of the low inflation goal. While monetary targeting failed to survive for reasons of the break in the monetary aggregates-inflation relation (in other words, the nominal anchor was unable to actually "anchor" inflation), inflation targeting will have to rely more on its flexible component, be it constrained, in order to be successful in an environment where financial stability needs particular attention.

2. Exchange rate arrangements: from managed float to corner solutions and back again

As I mentioned earlier, let me turn now to the developments in exchange rate arrangements. In the early nineties, when I became Governor, almost two thirds of the countries had some form of managed float. By the end of the same decade, their share had dropped to around one third. In a seminal paper (Fischer, 2001) this "move towards corner solutions" was viewed as a response to the impossible trinity under free capital movements. At that time Romania still had capital controls in place. But when we completed the capital account liberalization, in September 2006, the issue had become not only academic, but also a practical one. By then Romania had adopted inflation targeting and the problem seemed to have been solved: such a regime seemed incompatible with any type of managed float of the exchange rate.

In reality, things proved to be much more complicated. Despite NBR interventions, the exchange rate of the leu witnessed a significant nominal appreciation immediately before and after EU accession (January 2007). In retrospect, I would say that it was more difficult to conduct monetary policy when confronted with massive capital inflows than with the scarcity thereof. When flooded by capital inflows (especially when concentrated in non-tradable sectors), a conflict between price stability and external equilibrium emerges. Interest rate hikes may be needed in order to manage aggregate demand and anchor expectations, but this would entail further capital inflows and an unsustainable nominal appreciation of the exchange rate.

This was the dilemma the NBR faced between 2006 and 2008, when the current account deficit exceeded 10 percent of GDP, a level which was clearly unsustainable, despite being largely financed through foreign direct investments. Amid the ongoing international financial crisis, a significant adjustment of the current account deficit became unavoidable. Indeed, it narrowed from 11.6 percent of GDP in 2008 to 4.2 percent of GDP in 2009 (a level around which it remained thereafter). Had Romania been on a fixed exchange rate, the entire burden of the adjustment would have fallen onto the real sector of the economy, with the ensuing social and political costs. Conversely, had Romania allowed a completely free floating of its currency, no adjustment in the real sector would have probably occurred (including a 25 percent wage cut in the public sector and the redundancy of more than 200,000 public employees). At the same time, too abrupt a depreciation would have generated a much larger share of non-performing loans (currently, they stand at nearly 16 percent of total loans), with the result of worsening banking indicators. The flexibility we have retained in managing the exchange rate proved a valuable tool in mitigating the consequences of the crisis.

At the same time, theory has evolved and the "managed floating plus" concept (introduced by Goldstein in 2002) gained recognition. In the aftermath of the Argentine crisis it became obvious that hard pegs could not solve the problems of an overvalued real exchange rate, limited flexibility of domestic costs and prices, and too much public debt to allow countercyclical fiscal policy. (Incidentally, outside of the EMU, all other 37 economies with no independent legal tender were small, with the exception of Argentina and Hong Kong SAR).

Let me briefly recall the benefits of the "managed floating plus" strategy, as described by Goldstein: the more currency mismatch is brought under control, the less should there be fear of floating; if the exchange rate is allowed to move, the greater will there be the awareness of currency risk and the incentive to hedge against it; the less necessary it is to see the exchange rate as a target, the more likely inflation targeting will be successful and, hence, the more willing will foreign investors be to lend in local currency; the greater the availability of domestic-currency denominated instruments, the better the prospects for reducing currency mismatch.

Let me add two comments: first, monetary policy alone cannot ensure current account sustainability in the long run. It also takes good fiscal and structural policies. The best monetary policy can achieve is "buying time" for these policies to be implemented, without jeopardizing its own objectives.

Second, managed floating faces a composition problem on the global scale. Attempts by many countries to keep their currencies at an undervalued rate may end up in a race to the bottom — akin to the "beggar-thy-neighbor" policy of the '30s. Multilateral or global arrangements are perceived as the best solution to such problems (Flassbeck, 2004). As changes in the exchange rate, deviating from purchasing power parity, affect international trade the same way as changes in tariffs, they should be governed by multilateral regulations.

As we can see, both theory and practice have moved, in the last two decades, full-circle: from managed float to corner solutions and back again. Under these circumstances, the best a policymaker can do is to stay open-minded and assess the merits of each individual theory in the context of the country's particularities.

3. Capital controls vs. free movement of capital flows

Now let me briefly turn to capital flows and related issues. The crisis that broke out in 2007 entailed a massive reduction in private capital flows, which had previously generated developments that led to the accumulation of imbalances conducive to the crisis itself. These imbalances were manifest in the overheating of emerging market economies, the over-appreciation of currencies, the swelling private foreign debt, credit and asset prices, as

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well as in the wider current account deficits and the larger currency mismatches in the private sector. However, towards end-2009, the global economy looked poised to exit the financial crisis and capital flows to emerging market economies in Latin America, Asia and Central and Eastern Europe seemed to rebound. This trend looked set to strengthen and expand, in Romania as well, in the early months of 2011.

Against this background, the idea of introducing capital controls in emerging market economies has gained increasing support. Even the IMF, which has historically opposed controls, has softened its hard-line approach. Thus, the Fund has recently published several papers concluding that, under particular circumstances, controls are justifiably part of the policy toolkit of emerging market economies faced with massive capital inflows. There were some economists in Romania who opposed the removal of controls, as it acted as an obstacle to the shift from monetary targeting to inflation targeting back in 2005. Similar recommendations were formulated by the IMF mission under Romania's first precautionary stand-by arrangement, which suggested that the liberalization of monetary flows, scheduled for 2005–2006, be postponed until the interest rate differential narrows sufficiently and the banking system is prepared to deal with large inflows of volatile capital. Such a postponement was not possible as Romania's entry into the European Union in 2007 was conditional upon full capital account liberalization.

In order to better understand the role of capital controls, we need to look first at the benefits of capital inflows. Supporters of free capital movement rightly point out that capital flows are actually a source of additional financing for emerging market economies, while also providing opportunities for risk diversification and helping avoid abrupt changes in consumption (Ostry et al., 2011).

The keyword here is the capital volume. Excess capital triggers the aforementioned imbalances. Then it is only reasonable to admit that the actions we need to take should contain capital inflows to levels that (i) allow the economy to operate at its potential rate, (ii) do not lead to the accumulation of foreign reserves above the adequate level, and (iii) do not determine currency overvaluation.

Controls might very well ensure the fulfillment of these criteria, but there are two problems here. First, it might happen that such controls are not effective, meaning they can easily be circumvented. Nearly two thirds of the increase in the liabilities of foreign-owned banks in Romania during 2005–2008 occurred after the reserve ratio was raised to 40 percent. Second, even assuming they cannot be evaded, controls need to be discriminatory¹, so as to allow, for instance, equity inflows and discourage debt flows.

But controls come at a very high price. Capital flows were subject to controls in all countries until the end of the sixties. Moreover, controls were also in place for lending and deposit rates, the volume of private sector credit, as well as for the business scope of certain groups of intermediaries. The positive effect of these controls was enhanced stability of the financial system: no banking crisis broke out during 1945–1971 (Eichengreen and Bordo, 2003). But the negative consequences were not negligible. Banks innovated less, they limited lending to large and secure firms, and operated on a less efficient basis. Once controls provided protection against crises, central banks became less interested in financial stability and preserved minimum expertise in this respect (Goodhart, 2010).

There is also the issue of anteriority. Recent research concluded that controls yielded better results in countries where controls had been in place beforehand. Should we therefore consider preventive controls? This would mean ignoring the fact that large capital inflows are temporary in nature. Judging by the fact that controls are more efficient provided they are in place before the resumption in large capital inflows, should we use them from the very start

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A recent classification of control instruments is provided in Qureshi, M., Ostry, J., Ghosh, A., Chamon, M. (2011).

of a wave of capital inflows, before resorting to macroeconomic policies? I don't think so. And what would be the best choice for emerging countries that are members of economic areas based on free capital movement, such as the European Union?

Any scheme indicating where controls should be positioned in the policy toolkit of emerging countries needs to be based on a clear-cut distinction between risks associated with large capital inflows and the actual quantities (flows). Controls have a direct impact on quantities. But macroeconomic policies can have an indirect influence on quantities. Once the exchange rate has appreciated enough to near its equilibrium level and foreign reserves have reached a point beyond which any further purchases are suboptimal, changes in macroeconomic policies may go on.

We may move from a deficit position to public budget surplus. The lesson that can be drawn from recent experience is that policymakers' hesitations in this regard may prove costly. Monetary policy has room to lower interest rates just as long as this does not jeopardize the inflation target objectives. From that point on, fiscal policy is the only macroeconomic policy left in the fight against capital inflows. As soon as the bubble associated with massive capital inflows unavoidably bursts, the fiscal surplus will help the government make up for the squeeze in private demand by allowing the public budget to slip into deficit.

At the same time, potential risks associated with large capital inflows may be addressed via micro- and macroprudential measures. Two processes aimed at safeguarding the stability of financial institutions were initiated as early as the seventies, along with the liberalization of capital flows. One of these processes, set at microeconomic level, marked the establishment of a system of capital requirements. This led to Basel I back in 1986, followed by enhanced versions, including Basel III, which is a response to the ongoing crisis.

The other process consisted in creating a closer link between prudential regulations and macroeconomic issues. In this vein, the Cooke Committee coined the term "macroprudential" in 1978. The concept was refined later on. Lamfalussy pointed out that the risk perception could be inadequate since it focused narrowly on the past performance of individual sovereign loans. The Cross Report (ECSC, 1986) warned against the risks that financial innovation (in particular derivatives and securitization) posed to the financial system as a whole. Finally, Crockett (2000, 2001) referred to the impact of regulation on the procyclicality of the financial system and the implications of the failure of systemically-significant institutions.

Today we know that micro- and macroprudential measures are effective in addressing risks associated with capital inflows. But macroprudential measures need to be resorted to with a certain degree of precaution as well, since they may actually foster capital inflows and thus run counter to macroeconomic policies. Potential output declined severely in the aftermath of the crisis. A possible resumption in capital inflows would take aggregate demand higher and hence generate an inflationary production gap. Emerging countries would resort to fewer forex market interventions, allowing their currencies to appreciate in order to contain inflation.

However, the long-term financial stability gains derived from macroprudential measures entail further capital inflows. The tolerance for currency appreciation (fewer interventions) may be reversed in light of the larger capital inflows. Moreover, a stronger currency may foster further inflows of portfolio investment. This goes to prove that not all measures trying to fend off capital flows are necessarily successful in reducing the incentives for capital inflows.

Let me conclude by saying that the available measures to address large capital inflows are not safe from side effects. The policy mix needs to be conceived so as to maximize the benefits of capital inflows while insulating against related risks (Zhu, 2011). In a world where sustainable economic growth hinges on free markets, capital controls should only be considered as a measure of last resort, if at all. Prudential measures should be designed to minimize the distortions they trigger and should be resorted to only after all macroeconomic options have been exhausted.

Foreign-owned banks – asset or liability?

Another dominant paradigm which came under scrutiny in recent years is that of the superiority of foreign-owned banks *vis-à-vis* domestically-owned banks, both in times of sustained growth and in times of crisis. The arguments for this view are well-known and they have to do with improved efficiency, better expertise, alleviation of the shortage of domestic capital, and increased competition. Also, some authors (for instance, Haas and Lelyveld in 2009) claim that the presence of international banking groups on local markets has a positive effect in mitigating the consequences of a crisis.

Before making my own remarks on this matter, let me introduce some caveats: first, nobody disputes the superiority of foreign-owned private banks with respect to domestically-owned state banks in newly emerged market economies. The comparison needs to be made between foreign-owned private banks and domestically-owned private banks. In this respect, it is worth mentioning that Central and Eastern Europe is the only region in the world where foreign-owned banks dominate as a share of total assets, whereas in the developed markets, Latin America or Asia, domestic private banks are prevalent. Second, this dominance is a relatively new phenomenon: the share of foreign-owned banks became prevalent as late as the first years of this century, even in Central and Eastern Europe. In other words, it has been possible to verify the paradigm in practice only in the last few years.

It is fair to say that foreign-owned banking prevalence in Central and Eastern European countries has happened more by default than by design. After a few banking crises which hit the region in the late nineties, the lack of domestic private capital, combined with the fragile situation of the state budgets, made it compulsory to privatize the existing banks by selling them to foreign entities.

I must confess that I also advocated the penetration of foreign capital into the Romanian banking sector. When my tenure as Prime Minister ended in late 2000, one piece of advice I gave to my successor was that the privatization of banks should continue as a means to promote restructuring of the loss-incurring SOEs and to stimulate convergence to the EU. I still believe that it was the right call, as foreign-owned banks had a favorable impact on economic growth and therefore played their part in the catching-up process, even if – ten years later – Nouriel Roubini sees the large share of foreign-owned banks in the Romanian banking system as a liability.

The counterfactual argument "What would have been the performance of domestically-owned private banks?" does not withstand scrutiny: domestic private capital simply did not exist. However this intellectual exercise is worth doing, given some shortcomings of foreign-owned banks, which were revealed afterwards.

One such shortcoming was the excessive euroization of some economies in the region (Romania, Hungary, Baltic states), given the reliance of foreign-owned banks on their parent banks for cheap financing. Excessive euroization has proved to be a liability for all parties concerned: for the public, which became hostage to exchange rate risk without being properly hedged, for the central banks, which saw their transmission mechanism eroded, and even for the commercial banks themselves, which quite often had a large mismatch between loans and deposits in foreign currency. Moreover, some of the banks have extended credit in "exotic" currencies (Swiss franc, Japanese yen), the strict regulations in their home countries (Austria, Belgium) notwithstanding, thereby increasing the vulnerability to adverse shocks (Banai, Kiraly and Varhegyi, 2009). Would a predominantly domestically-owned private bank system have behaved differently? Probably, given the limited access to external financing and hence a more balanced portfolio. Witness in this respect the situation in Asia or Latin America, where foreign exchange credit did not skyrocket in the same way, even in times of economic boom.

Other criticisms related to the behavior of foreign-owned banks during times of boom are, probably, undeserved: first, the claim that their lending went mainly into non-tradables, such as retail or real estate, where profits were larger and more rapidly made. Domestic private

banks would have probably done exactly the same: empirical evidence points to the fact that they were not longer-sighted than their foreign-owned competitors. Second, foreign-owned banks are often criticized for "cherry-picking", their customers being highly profitable, reliable corporations (often headquartered in the same state of origin). I think this criticism is also undeserved, because the alternative of lending indiscriminately to unknown clients (into which many banks have indulged) has proved to be even worse.

Turning to the behavior of foreign-owned banks during the recent crisis, the evidence is also mixed. On one hand, it is true that international banking groups are the ones which easily spread the contagion (Goldberg, 2009). Even in the absence of abrupt deleverage, foreign-owned banks had to cope with much diminished foreign financing and shifted from financing the private sectors to financing the public sectors of their host countries. Despite the reductions in monetary policy rates, credit in domestic currency remains sluggish at best.

For the time being, however, it is fair to say that foreign parent banks have maintained their support for the branches and subsidiaries in Central and Eastern Europe. Most of them had not been engaged into trading sophisticated instruments such as derivatives, so that this type of losses has been relatively contained. It has also helped that the banks present in the region are not major global players, so that contagion is often limited. On the other hand, many of the banks had been involved into financing the real estate boom, and the ensuing losses are only gradually being recognized.

As a conclusion to this paradigm, the dominance of foreign-owned banks proved to be both an asset and a liability and it is too early to draw a final balance before the international financial crisis is over. Another conclusion is that in an environment of good, swiftly and decisively-implemented policies that are accepted by the public, the euroization of the economy is not mandatory. Witness in this respect is the experience of the Czech Republic, which has brought inflation down early on, making lending in domestic currency as attractive as that in foreign currency.

5. Central bank's objective: should financial stability be added?

Before the outbreak of the global financial crisis, the conventional lines of thought advocated the idea that markets do self-correct always. The overconfidence in the infallibility of the invisible hand of the market generated a widespread belief that ample interventions by the authorities were not warranted in order to contain economic and financial imbalances at an early stage.

Moreover, there was a prevailing view in the academic world that inflation was the main culprit for financial instability. By way of consequence, safeguarding price stability was looked upon as an almost sufficient prerequisite for promoting financial stability. Against this background, central banks' core contribution to preserving and strengthening financial stability consisted in delivering low inflation rates.

However, not everyone agreed. Prior to the outburst of the crisis, several economists had publicly expressed doubts on the viability of mainstream economic thought or had warned against some of its vulnerabilities. Special mention deserves Crockett, who claimed ever since 2003 that the "peace dividend" yielded by the successful war against inflation had not lived up to expectations and therefore the battlefront against financial instability should not be overlooked. Also worth mentioning is Caruana, who pointed out in 2005 that, while a highly-developed decision-making framework was in place for pursuing monetary policy, financial stability was less deeply looked into. Let me add that, back in 2006, the key message of my dissertation at the University of Piteşti was that financial stability is, in turn, instrumental to monetary policy effectiveness and hence to safeguarding price stability.

At the end of the day, it was the global crisis that invalidated once and for all certain elements of mainstream economics. Nothing new, as a matter of fact: economic thought has always been influenced and spurred by major crises.

It became readily visible that threats to financial stability do not necessarily go away once inflation is brought down to a low level – they merely change their nature. And this has been shown at a global level by the "detail" (after all, "the devil is in the details", as Professor John Bonin kindly reminded us from the very title of the presentation he delivered earlier) that the financial crisis broke out in an economic environment with relatively low inflation rates. In other words, the price stability that set in during the Great Moderation could not prevent the start of the Great Recession.

Furthermore, the "mop up after" strategy in the aftermath of the financial crisis proved much costlier than "leaning against the wind" would have been. It was now visible to the naked eye, without requiring sophisticated econometric models, that distortions from relatively high inflation are second order relative to losses from financial sector distortions (Stiglitz, 2010).

That being said, it is safe to assume the crisis also shattered the illusion that the great challenges to the monetary policy decision-making framework have been overcome at least in part. Reality proved much too complicated to be managed based strictly on ideal theoretical schemes. In other words, textbook economics was no longer in tune with financial market realities. This also calls for rethinking the connections or retracing the boundaries between price stability and financial stability.

The global crisis has once again drawn the attention of economic policymakers and theorists to the issue of separating or integrating price stability and financial stability tasks. The idea that the two tasks should be completely separated had gained ground before the outbreak of the crisis. The rationale behind this view was to free the monetary policy conduct from conflicting objectives and thus render policymakers' mission and life easier. Following this line of thought, it was considered that two distinct entities should be in charge of the two tasks respectively. In particular, it was advocated that banking sector supervision should no longer be assigned to the central bank, but rather to an independent agency (which might also ensure the consolidated supervision of all financial markets).

I, myself, found the idea rather interesting at the end of the nineties, when the collapse of several Romanian banks influenced the decision-making process at the National Bank of Romania. I realized at the moment how costly it was in terms of reputation for a central bank to be in charge of supervision and prudential regulation – not to mention that the separation appeared quite fashionable after the newly-established FSA had become operational in the UK. At the same time, I vividly remember the conflict between price stability and financial stability, when I had to mediate the divergent positions taken during Board meetings by the deputy governors coordinating the two functions, not by virtue of personal affiliations, but due to the very nature of the specific task they had been entrusted with.

Romania opted for preserving banking supervision as a prerogative of the central bank, despite some talks on "outsourcing" this activity. Moreover, the concern for ensuring and strengthening financial stability in Romania was visible in several significant changes of the institutional framework, which were operated prior to the outbreak of the global economic and financial crisis. Specifically, the NBR's Financial Stability Department was created as early as 2004, with the first edition of the annual Financial Stability Report being released two years later. The year 2007 saw the establishment of the National Committee for Financial Stability, whose key objective is to ensure the exchange of relevant information, as well as to prevent, appraise and manage any issues with a potentially systemic impact. The acting Chairman of the National Committee for Financial Stability is the NBR Governor, while its members include the Minister of Public Finance, the President of the National Securities Commission, the President of the Insurance Supervisory Commission, the President of the Private Pension System Supervisory Commission, and the CEO of the Bank Deposit Guarantee Fund.

At hindsight, I believe we have made the right choice – although at the end of the nineties I was wondering, in light of the aforementioned Board disputes, whether separating the monetary policy and the supervision functions was preferable, at the end of the day, I think it is better to sort out such disputes under the same roof. Moreover, the ongoing complex

challenges to financial and economic stability call for identifying, using and corroborating tons of information in order to articulate the adequate policies. The central bank relies on its database and expertise, which are prerequisites for managing such a challenging environment. Besides, clearly acknowledging the links between price stability and financial stability means that they need to be taken into account when formulating the monetary policy.

The issue of multiple objectives that may sooner or later become conflicting objectives remains, of course, a matter of concern. There is a single monetary policy rate and its adequate level, at a given point in time, for reaching the inflation target may well differ – or even completely differ – from the level required for ensuring financial system soundness. Hence, macroprudential policies need to play a very important role.

But what a central bank can or cannot do is and will remain an interesting topic of debate. It now seems beyond all doubt that the "inflation first" approach may become counterproductive in an environment of financial instability, which would rather call for preserving a certain tactical flexibility in conducting the monetary policy.

Over the medium and long term, failure to maintain financial stability may only lead to a renewed flare-up in inflation. This reminds me of standard aircraft safety instructions, according to which, in case of cabin depressurization, the parent should put the oxygen mask on his own face and only afterwards tend to the child (who, in most cases, is the parent's reason to live). While looking at long-term price stability as its fundamental objective, the central bank needs to keep a close eye on financial stability and, I would add, on the overall developments in macroeconomic indicators. Otherwise, disinflationary gains — however spectacular they might seem at a given point in time — would become utterly unsustainable.

6. The adequate level of inflation: "low and stable" vs. "moderate and stable"

The present crisis brought forward for discussion not only the primary objectives of the monetary policy I have already referred to, but also the adequate level of such objectives. Apart from semi-accepting the idea that financial stability must be a monetary policy objective, economists have also called into guestion the inflation level that must be targeted.

Recently, Blanchard et al. (2010) stated that "it was tempting for macroeconomists and policymakers alike to take much of the credit for the steady decrease in cyclical fluctuations from the early 1980s on and to conclude that we knew how to conduct macroeconomic policy. We did not resist temptation. The crisis clearly forces us to question our earlier assessment".

Since we participate today in a seminar dedicated to banking and financial history, please allow me to put things into perspective. In the 1970s, inflation was high and there was a divorce between theoreticians and practitioners concerning the monetary policy effectiveness on real variables. In line with Sargent and Wallace's Policy Ineffectiveness Proposition (1976), towards the end of the 1970s many were thinking of monetary policy as being powerless also in the short term, not only in the long term, as Friedman (1968), Phelps (1968) and Lucas (1972) had already stated. However, practitioners were aware that their monetary policy decisions were effective in the short run with respect to both inflation and activity.

This divorce lasted for a while, until the New Keynesian economists, starting with Fischer (1977) and up to Taylor (1980) and Calvo (1983), found solutions to incorporate nominal rigidities into their models with a view to putting them in line with practice. The economists belonging to the Real Business Cycle mainstream opted for exploring the lack of rigidities to the maximum and created general equilibrium models. Later on, the two mainstreams merged in order to create the dynamic stochastic general equilibrium models based on which monetary policy has been conducted ever since the early 1990s.

After practitioners and theoreticians agreed on the above mentioned issue, low and stable inflation became the main, and sometimes the only objective of monetary policy. Blanchard et al. (2010) showed that "this was the result of a coincidence between the reputational need of central bankers to focus on inflation rather than activity (and their desire, at the start of the period, to decrease inflation from the high levels of the 1970s) and the intellectual support for inflation targeting provided by the New Keynesian (NK) model". According to the NK standard model, low and stable inflation is indeed the best policy to pursue, since the "divine coincidence", as Blanchard and Gali (2006) called it, is assumed to hold, so that by maintaining a stable inflation, the output gap equals zero. Thus, within this framework, central bankers were able to take care of production without further debating the issue. Moreover, this suited the practitioners since, according to this model, the interest rate was the only instrument resorted to for attaining the inflation target, just like in practice.

Nevertheless, preserving stable inflation does not ensure a zero output gap, where the economy also faces other imperfections than the nominal ones. Although both theoreticians and practitioners were aware of this, they maintained their view that low and stable inflation was beneficial for the economy. However, some economists suggested that low inflation might be detrimental should real rigidities and shocks arise. Gertler and Trigari (2004), Shimer (2005), Hall (2005), Krause and Lubik (2007), Christoffel and Linzert (2005) and Faia (2006), as well as Blanchard and Gali (2008) introduced labor market in the standard New Keynesian model along with real wage rigidities. For instance, Blanchard and Gali (2008) showed that "in the presence of labor market frictions and real wage rigidities, strict inflation stabilization does not deliver the best monetary policy [...] the reason is that distortions vary with shocks. As a result, strict inflation stabilization can lead to inefficient, large, and persistent movements in unemployment in response to productivity shocks. [...] Optimal monetary policy implies some accommodation of inflation and limits the size of the fluctuations in unemployment".

On the other hand, in spite of sticking to their message on low and stable inflation, central bankers were flexible in implementing this model as shown by three practices in particular (Blanchard et al., 2010). The first one refers to the return to the inflation target after experiencing certain deviations, which was smooth rather than abrupt. The second one refers to the fact that supply side-induced deviations from the target were allowed when expectations were well-anchored. Finally, many central bankers, myself included, were of the opinion that fluctuations in asset prices, especially those in the exchange rates, should be considered not only in relation with their impact on inflation, but also in connection with their effects on the competitiveness of the economy and on balance sheets. In practice this was seen as a heresy and faced severe criticism.

The ongoing crisis brought to the fore the liquidity trap that economists have lately analyzed especially in light of the Japanese experience. The Great Moderation had given the impression that shocks capable of pushing inflation down to zero might no longer emerge and therefore the issue saw little debate. The Great Moderation showed that low and stable inflation may induce complacency, which is a prerequisite for expectations to become exuberant.

The present crisis has proved, however, that a low inflation level – somewhere below 2% – may not be adequate. At this low level, in the context of larger cyclical fluctuations – such as the ones we have been experiencing recently – inflation can easily enter negative territory, whereas policy rates cannot go below the zero bound. From that point on, monetary policy must resort to quantitative easing in order to boost the economy that runs the risk of recession. This is the reason why Blanchard et al. (2010) proposed a change in the inflation target to more than 2% to, maybe, 4%, to give the central bank enough room for maneuver to lower the interest rate. As recent as in January 2012, Paul Krugman said in an interview for Le Monde that "inflation is not the problem, but the solution". Likewise, my advisor on monetary policy issues is of the opinion that Minsky's Financial Instability Hypothesis teaches the lesson that when a credit-fuelled bubble bursts, it is better

if inflation is high in order to support balance sheets. He proposes to enhance the monetary policy objective from "low and stable inflation" to "moderate and stable inflation" (Croitoru, 2012).

Although I am not opposed to the aforementioned judgments and to the idea of moderate and stable inflation, I believe that "moderate inflation" should be clearly defined. However, I am afraid that, from this point on, my views depart from the theories of moderate inflation, because, in my opinion, "moderate" as it might be, inflation needs to be low enough in order not to trigger adverse consequences such as disanchoring inflation expectations and the emergence of a wage-inflation spiral, in which widespread wage indexation magnifies the impact of inflationary shocks and hampers monetary policy effectiveness. Experience has taught me that inflation is an insidious disease and should not be toyed with. As a matter of fact, one of the first pieces of advice I received as Governor from experienced central bankers was that for a Governor there is no such thing as too low inflation and too high foreign exchange reserves.

7. Conclusions

By way of conclusion, I would say that, during periods of great transformations, while theory should still guide reasoning, close contact with the shifting economic reality is essential for efficient policy action. Therefore, in such circumstances, the normal rule-based monetary policy should probably give way to a larger degree of flexibility.

Regardless of the objectives and rules set for monetary policy conduct, they should not be pursued or applied mechanically. A central banker cannot afford to live in an ivory tower; quite on the contrary, he needs to keep at all times abreast of the latest developments and trends economy-wide and in the financial system. Such an approach should not be assimilated to promoting a discretionary stance, but rather to a solid anchoring in the day-to-day realities, which often prove more complex than imagined by policymakers or theoreticians.

When faced with completely unexpected developments requiring swift action, one cannot rely solely on recommendations derived from more or less mainstream economic theory. In spite of the significant progress achieved over the past decades, both monetary theory and economic science, in general, have their limits and imperfections. A full understanding of economic and financial realities – which stubbornly evade the patterns put forth by researchers – also calls for steady and diligent efforts to monitor and interpret such realities

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