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Monetary Regimes in Post-Communist Countries. Some Long-Term Reflections

Nikolay Nenovsky

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Monetary Regimes in Post-Communist Countries. Some Long-Term Reflections

Nikolay Nenovsky*

Summary

This article offers an attempt at typologisation of the evolution of monetary regimes in post-communist countries (1990-2008), which is exceptionally varied by character. Two large groups have emerged: type 1 – countries, which started their reforms with a regime of fixed exchange rate and dominating external sources of money supply, and type 2 – countries starting their reforms with a floating exchange rate and predominating internal sources of money supply. The first type is much more successful and appropriate for managing the problems of transition. Some other elements of typologisation have also been suggested based on specific definitions of monetary system and monetary regime. The article also presents various approaches, which can explain the evolution of monetary regimes observed in the former socialist countries.

Keywords: monetary regimes, post-communist countries, comparative economics

JEL classification: E5, P2

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I. Introduction

Almost twenty years have passed since planned economy officially collapsed. The period is long enough to allow a number of theoretical generalisations. The countries have followed different paths, their trajectories diverging at some point in time, converging at others. Yet in spite of the great diversity some of the trends can be captured. A number of typologisations become possible which could enrich not only the "history of transition", but also comparative economics as such. The development of monetary regimes is particularly interesting due to their key role in determining the overall dynamics of post-planned economies. The debate over the optimal monetary and exchange rate regimes has a long history, which is continuously enriched by new historical examples and new theoretical arguments, even in spite of the fact that it does not leave the scope of the traditional cost-benefit approaches and is therefore unable to integrate a number of traits of these economies – institutional, political, or sociological, etc. Of course things are very complex, and it is hardly possible to construct within a short time a whole new theory, or integrate all possible elements and factors into a single uncontroversial theoretical model. My task in this article is a more humble one – to present some of my reflections drawn on the 20 years' history of the post-communist regime and to give some guidelines for future analyses. Clearly, the various approaches to monetary regimes will coexist for quite a long time and in a way the diversity of approaches will continue. The aim is that these compete and mutually enrich each another, rather than eliminate one other.

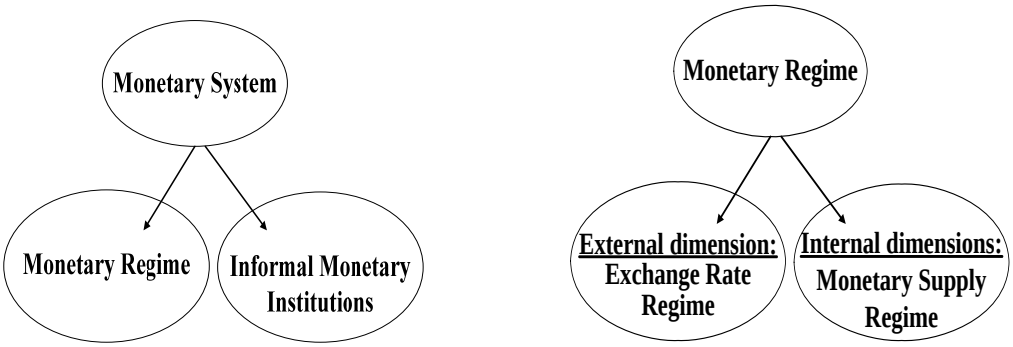
Thus, I think two large models of monetary regime dynamics have become discernible (*two archetypes* if we can use this term), which we will further discuss below, and which in a sense have determined the success of reforms. The first group, i.e. the *successful archetype,* includes the countries that started with a fixed exchange rate regime and a strict control over money supply (in most cases backed by foreign reserves and tied to balance of payments) and subsequently moved to a floating exchange rate regime, inflation targeting, or those that kept their fixed exchange rates throughout the period under study. I will call these countries a "fixed-start" type. The second group of countries (the *losing archetype*) starting with a floating rate and later on introducing rigorous monetary regimes (Bulgaria) or keeping their floating rates (Albania, Romania and others) throughout the period I will call a "floating start". The first group of countries achieved greater success; their transition was much more disciplined and "uncorrupted" while the second group underwent an extremely mafia type of transition (frequently named "crony" transition), with some of them significantly slowing down their development, and only over the last years making an attempt to compensate for lost opportunities. My purpose here is to reflect below upon possible explanations of this fact. Of course, pure types do not exist; a number of other factors account for the dynamics of development of the individual economies, and some of the countries changed their positions in the course of time (for example Bulgaria and Russia).

For the two attempts at typology of monetary regimes to become clearer, it would be useful to provide a survey of the key moments in the history of monetary regimes in the different countries. This will allow us to see monetary

regimes in the light of the overall economic, political and social developments of the individual economies.

To convey my understanding of monetary system and monetary regime, I have given some short definitions (see Chart 1). In my view a monetary system has two key aspects – the first one is the formal monetary regime, which is established by a set of norms (mainly legal) and the second – the informal monetary institutions (practices) and mechanisms of their enforcement. They are often neglected while they are actually important. On the other hand, a country's monetary regime is of two basic dimensions – external and internal. The internal includes the mechanisms of money supply, and the external – the exchange rate regime. The discussion of determining the money supply regime includes the whole range of problems oconcerning covered or uncovered money, monetary rules and monetary discretion, etc., and as regards the exchange rate regime – the various types of exchange rates (floating, fixed, etc.). Of course, the two dimensions are closely interrelated; however the above distinction is useful as it enables capturing the various combinations between a monetary regime and an exchange rate regime; besides, these combinations provide new analytical possibilities. The latter distinction attracted the attention of researchers (partly within the optimum monetary areas), but I think it has rarely been brought into focus as crucial distinction (exceptions to this are Kurt Schuler and Steve Hanke - Schuler, 1999, 2007, Hanke, 2002).

Chart 1. Monetary system and monetary regime



So let's now switch back to the subject of monetary regimes. ▼

II. Monetary regimes – short historical chronology

The crash of planned economy and the restoration of market economy proved a historically unknown process of discovery that was hard to explain and harder still to plan. This could not be achieved either by Marxist theory (which was extremely aggregated, macroeconomic and macrosociological by character), or by neoclassical economics whose microeconomic, equilibrium nature was unable to encompass the large social transformations[1]. The case in point was the unprecedented historical change (a new "Great transformation") for which no theoretical model existed *a priori*. Of course there were a number of intuitions and past practices, mostly drawn on the reforms in Latin America[2] and late socialism, but on the whole solutions were unclear, or those that seemed clear quickly proved to be much more difficult and often led to unexpected outcomes. Some countries had traditions in economics, partially preserved during the period of communism, such as Poland and Hungary; still others were extremely poor and doomed to coping and imitate (such as Bulgaria). As to Russia, a number of economists began recalling the first years of the socialist revolution when an attempt was made to revive market economy (New Economic Policy) and the stable money; however they either overestimated this experience, or almost lacked control over the events. Indeed, history could hardly repeat itself and hardly the few years of New Economic Policy could serve as a solution in a different historical period[3].

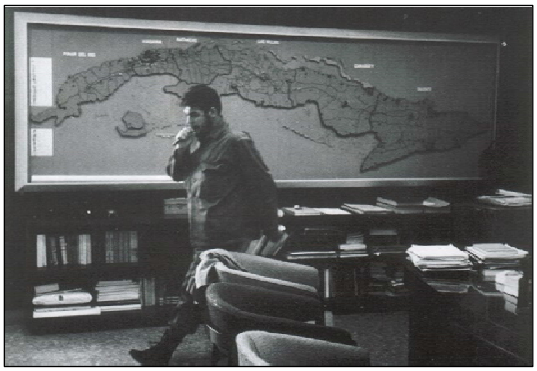
As regards monetary regimes and the type of monetary system, things were quite the same – no consistent ideas or reform models. The choice of monetary systems was rather accidental (arbitrary) and contingent upon the concrete circumstances and the balance of forces and ideas of the various economic actors. No matter how we view these events, the purpose was clear – to restore the monetary mechanisms in the banking system, which had totally lost their character during the period of planned economy. Today, looking from the distance of time, we can say that symbolically a jump was needed to be down "*from Che to Trichet*", i.e. from the Ernesto Che Guevara model (Che Guevara was the first governor of the Central Bank of Cuba who accidentally took the position) to the Jean Claude Trichet model where the European central bank is an independent and conservative authority. This of course is symbolic; still it

[1] Signifying in this respect is the evolution of Janos Kornai who has increasingly shifted his attention from the neoclassical interpretation typical of his previous works on the "*deficit*", "shortage" under socialism to developing the institutional aspects of the transition. See for example Kornai (2005), Csaba (2007), Chavance (2008). It is interesting to note that in spite of the numerous publications and entire journals discussing transition economy, Nikolay Bukharin's book "The Economics of the Transition Period" is rarely mentioned (Bukharin, 1989, [1920]), which although written on a different occasion and in a different time, suggests very interesting directions of analyses (mostly the transition seen in terms of conflict of interests, etc.).

[2] See for instance Commander, ed., (1991). Informative and stimulating survey of the reforms in Eastern Europe, former USSR countries is written by Anders Aslund (Aslund 2002).

[3] Although the New Economic Policy some times is compared to the actual Chinese model of reforms,

demonstrates well the jump that the former communist countries had to make from the ruble area to the euro area.



Ernesto Che Guevara in his bureau if Central Bank of Cuba Governor

Jean Claude Trichet, Governor of the European Central Bank

Despite the common past and overall common ultimate goals, the former socialist block countries demonstrated a large variety of monetary regimes[4]. I start with Poland and Hungary, which in a sense were a symbol of resistance against the traditional socialist model and of a number of innovations during that period. The two countries were the first radical reformers, soon followed by Czechoslovakia and in even more radical way by the Baltic States.

2.1. Poland and Hungary

The initial conditions for the reform in *Poland* were relatively bad with a large external debt, high inflation, monetary overhang, weak foreign reserves and a coexisting strongly expanded foreign exchange market. Poland started with a shock therapy (Leshek Balcerowicz's reforms and Jeffrey Sachs's advices) and the so-called "extraordinary politics)". In 1990 the decline in GDP reached 12%. The importance of stable money as an initial anchor of reforms was realized even

[4] The short historical sketches do not claim exhaustiveness – they note only some major, in my view, stages in the evolution of monetary regimes. The Council of Mutual Economic Assistance was officially dissolved in 1991 although the process of disintegration started earlier.

at the onset of the transition and in 1991 a fixed exchange rate regime was chosen (to a basket of five currencies and following initial zloty depreciation). A stabilization fund of USD 1 billion was formed (with the help of loans from 17 countries), which today we can assess as a money backup mechanism, i.e. a kind of a currency board. To control wages growth the famous compensating mechanism *popiwek* was introduced. The appreciation of the zloty led to capitals inflow. Over time the monetary authorities were compelled to introduce more and more flexibility to the exchange rate to reach 1994 when the first open market operations (reverse repo transactions) were realised. In 1995 the exchange rate was limited within the interval +/- 7%, and in 1998 it was decided to move to inflation targeting which led, from 2000, to a fully floating rate. Today, Poland strives to imitate the ECB monetary policy. I believe Poland should also be remembered as the place where the discussion of unilateral euroisation originated, and indeed it was in Poland where the idea was most exhaustively and consistently promoted already in 1999 (both at the economic and legal level). This was done by Jacek Rostowski, professor of economics, and a finance minister at present (2008), and Andrzej Bratkowski (Bratkowski and Rostowski, 2000, Rostowski, 2002)[5].

In spite of the relatively better initial conditions, *Hungary* too started a regime of a more or less fixed exchange rate fluctuating within a narrow band. Often is claimed that Hungary, unlike Poland, did not use at the beginning exchange rate targeting (because of lake of hyperinflation menace or because of already introduced current account convertibility in 1989), but the cautious research have shown that in fact close to fixed exchange regime was applied (Frömmel and Schobert, 2006)[6]. Nevertheless over the time the existed flexibility deepened the conflict between the goal of fighting inflation and the efforts to maintain competitiveness, and after loosening the fiscal policy double deficits occurred. All this was coupled with capitals inflow. In March 1995, Lajos Bokros undertook reforms, which in the area of monetary regime were expressed in a single depreciation of 9% and shifting to a preannounced crawling band of depreciation on a weekly and monthly basis and the forint was pegged to a basket of mark and dollar. In May 2001 the band was expanded to +/- 15%, and in June 2000 Hungary officially introduced a regime of inflation targeting. Later on, the double deficits occurred again, but what we should keep in mind is that like Poland, Hungary too started with a *de facto* fixed exchange rate and after gradually increasing its flexibility, moved to a regime of inflation targeting.[7].

2.2. The Czech Republic and Slovakia

Czechoslovakia followed Poland and Hungary liberal reforms, and in mid 1991 similar to Poland stabilization fund was established and koruna was pegged to the

[5] Regarding Poland see also Kokoszczynski (2001) and Gronkiewicz-Waltz (2003). About the views of Leshek Balcerowicz see Balcerowicz (2006). On euroisation see Schobert (2003).

[6] Notwithstanding some hesitations in Hungarian reforms, I do not consider Hungary as a gradualist reformer, as it claimed frequently.

[7] See for details Frömmel and Schobert (2006).

dollar. After the Velvet divorce of 1993 in the *Czech Republic*, each of the two countries took their own paths. A fixed exchange rate was introduced as early as January 1991. Later on the Czech Republic moved to a monetary aggregate targeting. After a strong capital inflow (debt capital) and a rise in the cost of monetary sterilization of these capital inflows (a point was reached when 80% of the monetary base came from net external assets) in 1996 a shift was made to a greater flexibility of the exchange rate (+/-7.5%). Nevertheless, the appreciation of the crone continued and the banking crisis in 1997/1998 changed the monetary policy completely. Since January 1997 the Czech Central Bank has pursued an inflation target trying to copy the ECB's behaviour. In 1999 a special privatisation account was introduced, aimed to achieve sterilisation of the capital inflow (mostly equity capital)[8].

After some considerations (weighing up) of the forms of reform (during Vladimír Mečiar's term of office) and following the period of mass privatisation (similar to that in the Czech Republic), in 1998 the *Slovak* liberal government of Mikulas Dzuringa came to power (1998-2006). Together with finance minister Ivan Miklos, Dzuringa (sharing a liberal ideology similar to that of his Czech counterpart, Vaclav Klaus) undertook radical tax reforms (a flat tax in 2004) and foreign capital attraction. The country joined the OECD (2000), NATO and EU (in 2004), and since the beginning of 2009 is a member of the euro area (the second country after Slovenia). Both the Czech Republic and Slovakia follow, with some variation, the logics in the evolution of monetary regimes in Poland and Hungary. For example exchange rate since 1993 to 1998 was more or less fixed.

2.3. The Baltic countries

The Baltic countries (Estonia, Latvia and Lithuania), in spite of the difficulties experienced at present (2008), should be considered extremely "successful stories". The reforms were more courageous and more radical that Poland, Hungary and Czechoslovakia. Even from the very beginning they strived to break away from the ruble area and from Russia's influence, to "break with the past". In the beginning they introduced temporary currencies, and very shortly after their own currency as a part of national identity[9]. The most radical in this respect was *Estonia* which from the very start established a currency board arrangement (even against IMF recommendations) in August 1992. Subsequently, the liberal reforms and measures followed one after the other (flat tax, budget surplus and extremely low public debt), and the country experienced unprecedented periods of high growth. The Baltic countries also managed to protect themselves from the Russian crisis in 1998. Estonia is remarkable for its liberal politicians such as Mart Laar who became a symbol of reforms and as he himself admits he undertook these

[8] See Böhm and Źdárský (2004).

[9] The 16th century French political philosopher Jean Bodin the first how define national sovereignty, explicitly put national money as integral part of it.

reforms because the only book of economics he had read before becoming a prime minister (at the age of 32) was "Free to Choose" by Milton Friedman[10].

After the example of Estonia, L*ithuania* too introduced a currency board (in April 1994), but unlike Estonia its politicians were continuously reconsidering their choice as regards the exchange rate, which reflected on the currency board credibility. Without officially announcing a currency board arrangement *Latvia* also observes its rules (monetary base coverage and a fixed exchange rate). In February 1994 the lat was fixed to SDR, and later, in February 2005, – to the euro. Today, Latvia is a member of ERM 2, with a narrow band of +/-1%.

In general, The Baltic countries started with a fixed exchange rate which they still maintain today. Their geostrategic goal was to break away as quickly as possible from the ruble zone and to integrate themselves into the European and global monetary system[11].

2.4. Russia and Ukraine

Russia and Ukraine, as well as most other former Soviet Republics (which I will not discuss here) tell a different story from the one we have seen so far. Of course it is difficult to expose the history of monetary regimes in brief; yet I will mention some turning points of their monetary history. All the more so as discussions of monetary regimes have a tradition in the Russian economic and monetary thought (Goland, 2006, Yurowsky, 2008, [1927], Barnett, (2004).

Following the disintegration of the USSR, officially declared in December 1991, as a result of uncontrolled currency issue (monetary over emission) of the former republics the ruble zone disintegrated. In April 1991, within the range of reforms carried out by Egor Gaidar, copying the reforms in Poland, prices were liberated, and later on a model of mass (voucher) privatisation was chosen[12]. The banking sector was liberalised very quickly and 1400 new banks were registered in only in 1991. In 1992 Jeffrey Sacks than adviser of Russian government proposed to fixed exchange rate of the ruble via stabilization fund of 6 billion dollars, but the international institutions declined to provide such funds. In 1995/1996 the ruble totally lost its functions and the economy created numerous barter and "virtual money" schemes, which even today are an object of researchers' interest (Volkov, 2005, Yakovlev, 2006). This increase of non-formal economic practices coincided with the formation of the new social structure of the post-Soviet society, and the so-called oligarchs came into existence in this period[13]. They had to play the role of new capitalists and of those who later got the whole economy going. Most of them were former party and nomenclature people who managed to convert their power positions into financial and equity capital. These practices were supported by an increase of money supply by the Central Bank. Things went so far that the Duma made an attempt to restrict, though unsuccessfully, the extremely expansionist policy of the Central Bank. At

[10] In 1994 Mart Laar was blamed for selling the stock of rubles withdrawn from circulation (in 1992) of the Chechen Republic of Ichkeria instead of delivering it to Gosbank.

[11] See for details Nenovsky, Hristov, and Mihailov (2002).

[12] See Gaidar (2007).

[13] See for more Yavlinski (2005), Bunich (2006), Kosals (2007).

that time it was led by Viktor Gerashchenko, an old Soviet nomenclature and contradictory figure declared by some Western bankers as the worst central banker of all times (the principle that Gerashchenko followed was "The higher the currency issue – the higher the economic growth!")[14]. These, of course, are subjective judgments, but the facts remain. The ruble credit and the ruble money supply were out of control as far as the republic started issued rubles. In July 1993 the Bank of Russia started to print new ruble without the face of Lenin and declared old rubles not legal tender. At the end of 1993 new ruble zone was proposed and new principle of sharing seigniorage but was not realized and the news independents states started to issue their own currency following the period of intermediate stages. Later on, in August 1998, Russia experienced a debt collapse when servicing of the internal debt stopped, the foreign reserves declined to critical lows, inflation and depreciation of the ruble reaching record values.

With Vladimir Putin coming to power a number of changes in Russia's monetary regime started. A fixed exchange rate regime was chosen and in 2001 a flat income tax was introduced. In principle, Putin introduced a number of elements of power centralisation („*вертикаль власти*") which led to restoring the functions of the ruble. Favorably, Putin's time coincided with a money supply increase as a result of revenues from petrol and gas, and the Central Bank formed a substantial amount of foreign reserves. Later, several state funds were set up to sterilize the inflow of capitals. The capital inflows however led to increase in investments, which was supported by the low interest rates. Today (2008), Russia is experiencing the difficulties of the global financial crisis and the low petrol prices. Its external and internal corporate debt is extremely large; its foreign reserves are quickly diminishing and the ruble is depreciating smoothly. Since 2007 the ruble is tied up to a euro/USD basket, and today a regime of inflation targeting is officially discussed.

What could happen from now on, we can only guess. Of importance to us from the short and incomplete history presented above are two things: first, Russia maintained a floating exchange rate until the crisis in 1998 and a fixed one after that, and second, the period of a floating exchange rate was the time of initial capital accumulation, the emergence of oligarchs and in general a period associated with banditism and forceful appropriation and redistribution of wealth and resources. The developments in *Ukraine* are similar to those in Russia. The transition was extremely "corrupted" and "bandit". Many close observers to Ukrainian reality agree that Ukraine presents the very best example of rent seeking model of transition (Aslund, 2002, p. 6, Abdelal, 2001).I will only mention the case with prime-minister professor Pavlo Lazarenko (1996-1997), who according to various estimations succeeded to misappropriate 0.5 – 1% of the country's GDP and who was sentenced in USA for fraud. I will mention without comments one more case of another economist and ex governor of the Central Bank of Ukraine – Victor Yushchenko (1993-1999) who managed in 1998 to defend a doctor's thesis on the subject of "Money supply and demand in Ukraine" a little before he became president of the country.

[14] Similar thinking of another Russian politician and professor of economics Ruslan Khasbulatov is witnessed in Aslund, 2002, p. 110.

2.5. Former Yugoslavia

Similar to the USSR, Yugoslavia's monetary system disintegrated with the individual counties each taking a different trajectory, and one of them – today's *Slovenia* (2008) is a member of the euro area. Serbia experienced a period of hyperinflation, which was put under control by means of the stabilization program of the American professor of *Serbian* origin Dragoslav Abramovic (March 1993 – May 1995)[15]. Abramovic's reform based on the principles of a fixed exchange rate and restrictive monetary reform already at the time attracted the attention of economists from other countries also because of its courage and monetary orthodoxality. The war and ethnic conflicts delayed the reforms. In 2002 a bold banking reform was carried out and a great number of banks with bad loans were declared bankrupt. The rehabilitation of banks was carried out at the cost of writing off 60% of the balance-sheet value of banks' assets. Curiously, in this period an adviser to the Yugoslavian government was Mart Laar.[16].

Croatia maintained a fixed exchange rate over the whole period of transition and in a way it was close to the principles of currency board operation. Of course, the new generation of currency boards allows a variety of forms of monetary policy. One of them is a change in the reserve requirements for commercial banks and that was exactly the instrument most often used by the Central Bank of Croatia. In a sense, it emerged as a champion of creativity in manipulating reserve requirements (see Winkler, ed., 2008), and subsequently their experience was used by Bulgaria. Even today, typical for Croatia is the high level of currency substitution (Stix, 2008). Interesting and with a moral is the case of the failure of Rijecka bank (the third largest bank in the country)–, which became victim to a trader's speculation and was not rescued by the parent-bank (Bayerishe Landesbank)[17].

Slovenia, as I mentioned, adopted the euro on January 1, 2008. The transition in Slovenia is often given as an example of successful implementation of a heterodox program, and it is often mentioned that the country has always followed a monetary discretion regime and a floating exchange rate; however, a more thorough empirical analysis of the facts (such as the study of Frommel and Shobert, 2006) shows that the foreign exchange rate has *de facto* always been targeted, especially after 1997. In 2001 the country's monetary policy began to follow that of the ECB.[18].

Macedonia uses a floating exchange rate and currently inflation targeting within an extremely broad range (+/-35%) is discussed. *Montenegro and Kosovo* use the euro (for in-depth discussion of the euroisation in Montenegro see Fabris and al. 2004), while Bosnia and Herzegovina operate a currency board. Without going to extremes we can say that the experience of the Yugoslavian Republics

[15] See Mladenovic and Petrovic (2000).

[16] An exhaustive historical review of reforms in the banking sector of the post-communist countries is made by Barisitz (2008), and Sevic, ed., (2002).

[17] See Vujčić (2004).

[18] See Kozamernik (2004).

indicates that the sooner a country starts using a fixed exchange rate, the more successful its reforms prove to be.

2.6. Albania, Romania and Bulgaria

The other Balkan countries also have an interesting experience and the three of them started with floating rates. While Albania and Romania have retained theirs, Bulgaria had to radically change its monetary policy in mid 1997. A curious fact to mention here is that the currencies of the three countries (lek, leu and lev, respectively) bear the names of the king of animals – the lion.

Albania became a champion of financial pyramids in the period 1996/1997 when 2/3 of the population was drawn into these schemes and whose liabilities were ½ of GDP (see Jarvis, 2000). People sold their homes and property to participate in the financial pyramids with the politicians playing an active role. The country turned into one big Ponzi scheme in the spirit of the popular Charles Kindlerberger's book on financial manias and speculations. In 2000, as a result of the fall of the pyramids there were mass riot outbursts, in which around 2000 people were killed. From 2000 the Central Bank announced a new monetary policy, inflation targeting with a 3% inflation target and +/-1% band. Of the three countries, Albania is the country of the most deeply rooted informal monetary and economic practices (bandit or not). Although Bulgaria and Romania can not boast on great success, it is a fact that pyramid schemes did not find some enormous place in these countries comparing to Albania.

Nicolae Ceausescu left *Romania* a heritage of lots of problems as well as an extremely low external debt which was one reason why the leu was not fixed and foreign reserves not accumulated. Despite the proclaimed float, similarly to Slovenia, the study of Frommel and Shobert (2006) indicates that *de facto* a crawling peg to basket was followed. From 2005 the Central Bank of Romania moved to an inflation targeting regime and accession to the euro area is planned for 2014/2015. We can mention the largest bank privatisation – in 2005 Banca Comerciala Romana was sold to Erste bank for 3.75 billion euro. As a curious fact I would mention that Romania is among the few countries printing their banknotes on polymer and not on paper. From August 2005 redenomination was carried out at the ratio of 10 000 ROL = 1 RON[19].

Bulgaria started the transition with a bad heritage, high external debt and deeply integrated in COMECOM trade. In spite of the early proposals for orthodox monetary reforms Richard Rahn, Steve Hanke, etc.) until mid 1997, a floating rate and a monetary aggregate targeting was used in the country[20]. The crisis came as a logical ending to the bad trajectory followed and at a time when the monetary policy was monetising the losses of the unrestructured real sector[21].

[19] See some facts about the monetary regime in Romania in Pelinescu and Caraiani (2006), as well as in: Popa and al. (2002).

[20] Anders Aslund calls Bulgaria "the most disappointing case" because of 1993 reversal of radical steps taken in 1991(Aslund, 2002, p. 164).

[21]See for details Berlemann and Nenovsky (2004), Dobrinsky (2000) and Vutcheva H. (2001), and for extremely interesting analysis of elite and wealth transformation see the voluminous book of Tchalakov and Bundjulov; eds., (2008).

After a period of hyperinflation, banking crisis and drastic reduction of the foreign reserves to below 1 billion euro, as well as under IMF pressure, in July 1997 a currency board was introduced similar to those in the Baltic countries. The Central Bank was subdivided into two departments; Issue Department reduced the monetary base creation only within the scope of increasing foreign reserves and internal assets were taken out of the balance sheet.

III. Attempts at typology of monetary regimes

Thus, the overview, regardless of the diversity of developments across countries, allows a number of theoretical generalizations and typologisations of monetary regimes.

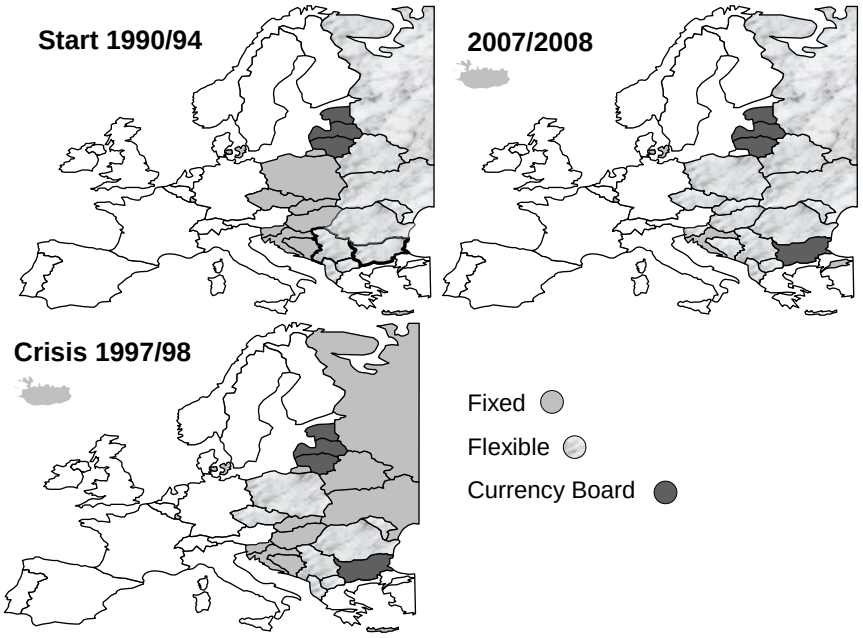
3.1. Attempt at typology

The trajectory of monetary regimes over the last nearly 20 years (1990-2008) allows us (of course under certain conditionality and with some simplification) to distinguish between two monetary models, or two monetary "archetypes" of behaviour. The first type, Type 1 countries, we can call "**fixed start**" countries. They are characterized by hard budget constraints, to one extent or another, of money supply and a fixed exchange rate. In this group we can include countries that start with a fixed exchange rate, then move to an interim rate and end with a floating rate (Poland, Hungary, the Czech Republic, Slovakia, etc.), as well as those that start with a fixed exchange rate and maintain it over time (Estonia, Lithuania, Latvia and partly Croatia). The second type, Type 2, which I call a "**floating start**", includes the countries starting with a floating exchange rate and a strongly discretionary monetary policy (Russia, Ukraine, Bulgaria), and which subsequently, around mid-1990s, adopted a fixed exchange rate regime, restricted money supply, as well as those that have maintained various forms of floating exchange rate all through the period (Albania, Macedonia, Romania)[22]. The evolution of monetary regimes is illustrated in Chart 2.

Type 1 is characterized by externally orientated monetary regime, and money supply dynamics tied up to the balance of payments position. The countries in that group have from the very beginning aimed to break away from the economic relations with COMECOM and the ruble zone, and quickly redirect to the European Union and in general to integrate into the world economy (this can be clearly seen on the map 1990/94). The best and most logical way to do this is by pegging their currencies to the currencies of advanced countries thereby importing monetary credibility from abroad. At the same time, these countries are characterized by a substantially higher culture and traditions of monetary practices, monetary theory and policy, and in general a lower level of monetary "informality". The fixed exchange rate and strict monetary policy enabled the creation of tough budget constraints, which created conditions for preventing the bandit redistribution processes. A monetary framework was developed which put restructuring and modernisation on the right track. Conditions were created for attracting foreign capital (later on for participation in the privatisation) with all familiar positive effects. From a sociological perspective this type of monetary regimes created frameworks for debtors and allowed creditors to protect their own rights.

[22] Abdelal (2001) propose interesting way of thinking about monetary regime in post soviet period trough the main characteristics of national identity. His research is a good example of successful integration of non-economic processes to the economic phenomena like monetary regime or exchange rate regime.

Chart 2: Evolution of monetary regimes in the years of transition



The *Type 2* countries are characterized by processes which are to some extent contrary to those previously discussed. In contrast to the first type, these countries had deeply rooted practices from the past as well as some informal and low-efficient monetary institutions. If following the Abdelal (2001) terminology, these countries unlike the countries of the first group do not have "clear" national indentify and consensual national goals. Floating exchange rates and accommodating monetary policy reproduced the soft budget constraints inherited from the period of socialism and protected the interests of losing industries and debtors and of various groupings and groups that were after the wealth. The state was captured and the economic and monetary practices fell into a range of "institutional traps", analyzed by the Russian economist Victor Polterovich[23]. Of these institutional traps we can mention the various barter and monetary schemes in Russia during the first half of 1990s, the financial pyramids, etc. In most cases this type of models went hand-in-hand with diverse schemes of mass privatisation, thus creating further channels for redistribution of wealth and losses, and in general for transformation of power resources into ownership and money.

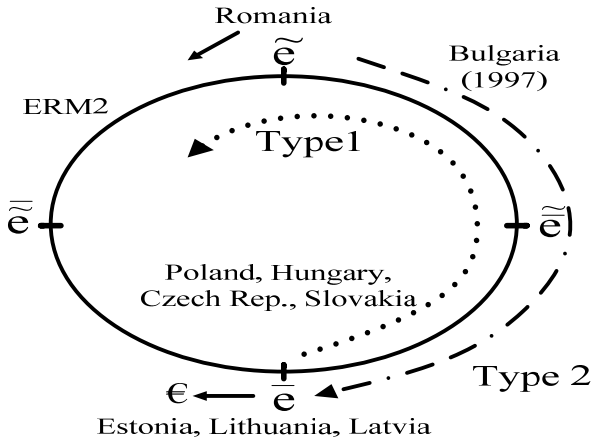
In my view, in spite of some stipulations, it is possible to suggest certain hypotheses, which of course need further be proved. I have given here some hypotheses as a flow of reasoning. Under these hypotheses it can be claimed that Type 1 was much more appropriate for post-communist economies as it creates tight budget constraints and leads transition along a relatively normal trajectory by significantly restraining the elements of banditism and cronyism. This made it possible for the countries to get out of a number of institutional traps and to build

[23] The "institutional trap" (*институциональная ловушка*) is a stable but inefficient equilibrium of the system where the agents choose a norm of behaviour (institution) among numerous possibilities (see Polterovich, 2008)

much faster the basic market and monetary institutions. Once these institutions were created and with an *already* clear prospect of euro membership at hand, the euro membership itself became a pulling anchor, which began replacing the coordinating role of the fixed exchange rate. In this train of thought we can argue that the lack of a common social goal at the beginning of the transition and the low level of cooperation (kind of a "prisoner's dilemma" game) required a fixed exchange rate which resulted, where it existed, to (at least partial) resolution of these difficulties. Whereas the economies that lacked such a goal bifurcated along an extremely bad trajectory and ended in the well known crises of mid-1990s. As I already mentioned, the emergence of a common goal at the end of 1990s, i.e. euro membership, led to closer cooperation and support among economic actors[24].

A complete idea of the evolution and possibly of the future development we can obtain from the following Chart 3. A few explanations. With $\bar{e}$ we denote a fixed exchange rate; $\tilde{e}$ stands for a floating exchange rate, and $\tilde{\bar{e}}$ for a fixed exchange rate with some fluctuation, while $\tilde{\tilde{e}}$ means an exchange rate floating within a certain range (corridor, band or some other form). ERM 2 is the exchange rate mechanism according to which before joining the euro area (€) a country is required to maintain an exchange rate within a band of at least +/- 15% around a preannounced and preagreed with the European institutions pivot rate.

Chart 3 Evolution of monetary regimes in the new EU member-states



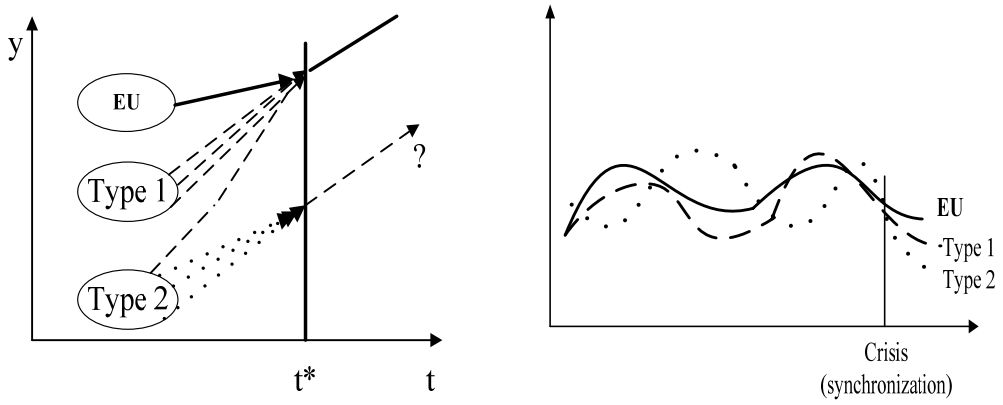
The *Type 1* movement can be illustrated with a red arrow, indicating a movement from fixed to interim exchange rate to floating rate, and now back to the euro area (passing through ERM2). The Baltic countries (from the very start) and Bulgaria from 1997 are positioned "below" with a fixed exchange rate. The Chart 3 shows that most logically would be that they move directly to the euro –

[24] Without going into details I will note that it is possible to make interesting parallels with monetary stabilisations in these countries in the past and especially between the wars. For instance, between the wars the monetary stabilisation of Alois Rašin in the Czech Republic is the only heterodox stabilisation based on a monetary aggregate rather than on a exchange rate. In fact, Rašin succeeded to cut the Czech currency off the depreciating Austrian currency (1919). The currency split of the Czech Republic in 1993 was also successfully directed, which could be attributed specially (along with many others) to Josef Tosovsky. In Poland, also in the past, reforms were significantly more orthodox and based on an exchange rate (See the reform of Wladyslaw Grabski in 1924, see Głowiński, pod red., (2004)).

at that point the track would be shortest and with the least turbulences. Nevertheless, this variant does not fit into the standard procedure and is not accepted by the ECB and the European Commission[25]. They maintain that the chosen fixed exchange rate level is not a market one, i.e. non-optimal (?). For now, a trade-off alternative has been agreed upon whereby the countries operating currency boards are allowed, under a unilateral arrangement, to cut the long path of the circle short, yet on the whole things are not fully clarified and uncertainty remains.

Of course, to what extent the various types of regimes are appropriate for a quick convergence (nominal and real) and to what extent they would be able to mitigate today (2008) the effects of the crisis is a subject of a different analysis[26]. The Chart 4 below illustrated a hypothetical model of a conditional real convergence (*y* is GDP in real terms). Overall, Type 1 countries have more possibilities to catch up with EU incomes, but it is also possible that individual countries leave Type 2. The other Chart (on the right) indicates a possibility for synchronization of the economic cycle: in this particular instance the possibility for euro adoption is higher with Type 1. It is nevertheless unclear whether the global crisis will lead to synchronization or divergence of cycles across countries. This requires in-depth analyses.

Chart 4: Conditional income convergence and synchronization of economic cycles



3.2. Theoretical addendum to typology

As I mentioned in the beginning, monetary regime comprises two basic components – external (exchange rate regime) and internal (money supply regime). In this case, the analytical division can be used to typologise monetary regimes in order to reflect their complexity.

The Table 1 below shows nine combinations under the condition that three exchange rate regimes and three money supply regimes are involved. In addition to the exchange rate symbols already given, here we have added symbols for

[25] The ideas of two anchors (EU membership and exchange rate pegging) is proposed and analyzed in Ialnazov (2003)

[26] See Arratibel, Furceri and Martin (2008), and also Figuet and Nenovsky (2005).

money supply: $\overline{m}$ stands for money supply which grows only as a result of increase in net foreign assets (NFA) according to an automatic rule (currency board or some other), and $\widetilde{m}$ – a regime entirely conditioned by increase in net domestic assets (NDA). Similarly to the symbols used for exchange rate, $\overline{\widetilde{m}}$ stands for the interim state where money supply grows either from the two sources (NFA/NDA) or a mixture of automatism and discretion. As I already mentioned, such a division, to my knowledge, is used by Steve Hanke and Kurt Schuler (in some aspects the above view comes close to the ideas of the bipolar view of exchange rate regimes, which has been quite popular in recent years. In my view, the most stable combinations are two: ($\overline{e}$ $\overline{m}$) and ($\widetilde{e}$, $\widetilde{m}$) because they are the least discretionary (and misjudgments are lowest), and of the highest institutional complementarity. In the first instance, balancing is achieved mainly through money supply, whereas in the second – exclusively through the exchange rate.

Table 1 Configuration of monetary regimes

	$\overline{m}$	$\overline{\widetilde{m}}$	$\widetilde{m}$
$\overline{e}$	$\overline{e}$ / $\overline{m}$	$\overline{e}$ / $\overline{\widetilde{m}}$	$\overline{e}$ / $\widetilde{m}$
$\overline{\widetilde{e}}$	$\overline{\widetilde{e}}$ / $\overline{m}$	$\overline{\widetilde{e}}$ / $\overline{\widetilde{m}}$	$\overline{\widetilde{e}}$ / $\widetilde{m}$
$\widetilde{e}$	$\widetilde{e}$ / $\overline{m}$	$\widetilde{e}$ / $\overline{\widetilde{m}}$	$\widetilde{e}$ / $\widetilde{m}$

Seen from the perspective of this Table, the most advantageous seem to be the currency board arrangements, on the condition of course that their rules are observed. Of course, this model can be disputed, and a variety of sophistications or elaborations are possible, etc.[27] ▼

[27] See for example the original analysis of Raybaut and Torre (2005).

IV. In lieu of conclusion

As we have seen, the diversity of monetary regimes is great. Even so, and with regard to some simplifications while taking into consideration the various aspects of monetary system and monetary regimes, it is possible to identify certain types. How could we explain, however, this great diversity and which are the contending theoretical models? Studying the diversity of monetary regimes and the emergence of monetary regimes is crucial because show their efficiency. I will only try to enumerate the various theoretical approaches that could explain this diversity.

The problems of monetary regimes are traditionally explained within the scope of the neoclassical cost-benefit approach. Such is the traditional set of instruments of the theory of monetary zones (optimal, endogenous, etc.)[28]. Within the framework of the mainstream approaches are the discussions of "foreign exchange v/s monetary aggregate based stabilisation", as well as the numerous classifications of *de jure* and *de facto* exchange rate regimes.[29] Here comes the whole range of problems of time inconsistency, the rules v/s discretion dilemma, credibility and flexibility, etc. Without dismissing the cognitive and especially the quantifying power of the cost-benefit approach, I believe that the 20 years' experience of the monetary regimes of former planned economies gives grounds to explore new approaches and theories (Nenovsky, 2006). Certainly, this is not new. Alternative theories do evolve although not always at the required pace and still as part of the neoclassical approach rather than as its opponents. In this group of *expanded* neoclassical approach I would note the inclusion of a number of institutional aspects, the problems of initial conditions, inertia, culture, etc.[30] Very often institutional indices are constructed, which are subsequently incorporated into econometric models. EBRD started years ago to construct database of different reform indicators for transition economies.

In spite of the adherence to the basic principles of neoclassical economics, in the recent years the new political economy has been developing quite successfully, especially the international political economy with its own journals and discussions. The *International Organisation* journal featured a number of interesting articles by Jeffrey Frieden**,** David Leblang, Lawrence Broz, and others, who continue the tradition of viewing monetary regimes through the prism of interests and strategies of various groups of actors (among the first to start using this methodology were Charles Kindleberger, Benjamin Cohen and Eric Helleiner, and others. In this line of International relations approach could be viewed the study of Abdelal (2001), where the link between national identity and

[28] Here the various econometric VAR simulations, impulse response shocks, variance decomposition etc. are continuously used and (although I am not against their usage) I do not think that these contribute much to the development of economic theory or the theory of monetary regimes. This type of studies are so numerous and so alike that I will not cite all of them (see for example Kočenda, 2001).

[29] See for example Genberg and Swoboda (2005) and recently Tavlas, Dellas and Stockman. (2008).

[30] See for ex. Beck and Laeven (2005), Pejović (2003), and Winiecki (2004).

monetary regime choice is established. Today, Cohen and Helleiner successfully develop their new geography of money approach, and a number of historians of monetary regimes offer interesting comparisons between the practice and discussions on monetary institutions in the past and the present (Barry Eichengreen, Michael Bordo, Mark Flandreau, etc.). One of the few empirical studies of foreign exchange rates in the economy of transition from the perspective of political economy is that of Frieden, Leblang and Valev (2008).

The sociology of monetary regimes is yet to be developed and the *Austrian economic analysis* is still not frequently applied although its methodology is extremely appropriate and with definite achievements in the theory of money, capital, production structure and economic cycle. I think that all these approaches help throw light on different aspects of the functioning of monetary regimes and none of them in isolation could give a truthful explanation and good practical solution.

To sum, I have attempted to show in this article that in spite of the diversity of monetary regimes there exist theoretical and methodological tools to group these monetary regimes by formulating a number of traits typical for each group. This makes it possible to move one step further (forward) by linking these types (in this particular instance they are two: “fixed start” and “floating start”) with the overall dynamics of the economic development across countries. The very choice of monetary regime, or rather of a monetary regime type, has its own grounds (explanation). Monetary regimes can be explained and recommended within the framework of various theories, but I believe that a diversity of explanations gives the greatest cognitive and practical possibilities. ▲

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