Ivan Ribnikar¹

Original scientific paper UDK 339.743 336.74

EXCHANGE RATE REGIMES AND MONETARY ARRANGEMENTS²

ABSTRACT

There is a close relationship between a country's exchange rate regime and monetary arrangement and if we are to examine monetary arrangements then exchange rate regimes must first be analysed. Within the conventional and most widely used classification of exchange rate regimes into rigid and flexible or into polar regimes (hard peg and float) on one side, and intermediate regimes on the other there, is a much greater variety among intermediate regimes. A more precise and, as will be seen, more useful classification of exchange rate regimes is the first topic of the paper. The second topic is how exchange rate regimes influence or determine monetary arrangements and monetary policy or monetary policy regimes: monetary autonomy versus monetary nonautonomy and discretion in monetary policy versus commitment in monetary policy. Both topics are important for countries on their path to the EU and the euro area.

Key words: exchange rate regimes, monetary arrangements, discretion v. commitment in monetary policy.

1. Introduction

There is a rather close relationship between a country's exchange rate regime and monetary arrangements (Stone and Bhundia, 2004) and, if we are to examine monetary arrangements in the final part of our paper, we must start with exchange rate regimes. In the first part we present conventional classifications, for instance that used by the IMF, and other simplified classifications. In the second part we concentrate on less complicated 'polar' (Fischer, 2001) or 'bipolar solutions' (Calvo and Reinhart, 2002) of the problems of exchange rate regimes. In the third part we discuss the more complicated case of 'intermediate' regimes or regimes of the 'disappearing middle' (Crockett, 2003). Although many countries have decided on one variety of the so-called hard peg that is at one polar end, much space remains as against the other end

Full professor of the Faculty of Economics University of Ljubljana

² Article received: 15-01-2005; Article accepted: 06-05-2005.

-a free or pure float. In between there are many countries with very different exchange rate arrangements. Aglietta and Maotti (2000) even stated that intermediate regimes are the only viable form for the majority of countries. In the case of Slovenia, this was clearly so for the period from October 8 1991 to June 28 2004 when, by entering the ERM 2, the target zone exchange rate regime was introduced. Although it is *de facto* a hard peg, formally it is a target zone intermediate regime. Therefore intermediate regimes will be viable until the end of the existence of the tolar.

2. Conventional and/or simplified classification of exchange rate regimes

The official classification of the IMF may be used as a conventional classification. It involves eight different regimes. Since some economists like Von Hagen and Zhou (2002), Frankel (1999) and Crockett (2003) say their classifications are the same as that used by the IMF and, although there are some differences, we have condensed their classifications within Fig. 1.

Figure 1

Classifications of exchange rate regimes according to the IMF, Von Hagen and Zhou (2002), Frankel (1999) and Crockett (2003)

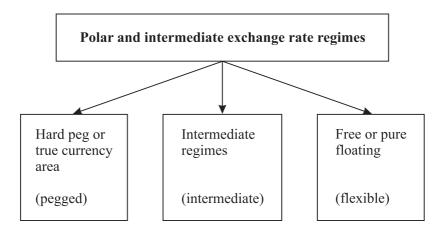
- 1. Dollarisation (euroisation)
- 2. Monetary union*
- 3. Currency board
- 4. 'Truly' fixed exchange rate regime*
- 5. Conventional pegged arrangement or adjustable peg
- 6. Pegged exchange rate within horizontal bands or target zone or band
- 7. Crawling peg or basket peg*
- 8. Crawling band
- 9. Managed floating
- 10. Independent floating
- 11. Free or pure float*

We thereby arrive at 11 (not just eight) different regimes, the regimes marked with asterisks are regimes one finds with Frankel (1999) and Crockett (2003). This difference arises due to the fact the IMF does not distinguish between dollarisation and a monetary or currency union, between an independent and a free or pure float, while it also does not regard a basket peg as a separate regime nor does it recognise a 'truly fixed' exchange rate regime, as do Frankel and Crockett. As concerns a truly fixed exchange rate regime, this is quite logical because that is an exchange rate arrangement that has not been in existence since WWII. As concerns floating arrangements, only Bofinger and Wollmershaeser (2001) consistently distinguish between the three floating exchange rate regimes accepted by Frankel and Crockett. These regimes are a managed floating, independent floating and a pure or free floating.

The regimes in Fig. 1 are grouped into two polar 'solutions' (from 1 to 4 on one pole and 10 and 11 on the other pole) and intermediate regimes (from 5 to 9). If we are to simplify matter, then we can use these three groups as three regimes. Alternatively, we can talk about 'pegged' (or 'hard peg'), 'intermediate' and 'flexible' (or 'pure floating') exchange rate regimes, as can be seen in Fig. 2. Such a simplification could be further extended, whereby there are only flexible exchange rate regimes and exchange rate regimes that are inflexible.

Yet several problems arise as to what the flexibility of the exchange rate should mean. It is often said nowadays that China should have a more flexible exchange rate regime. But it is apparent that what is meant by flexibility here is that China should allow its currency to appreciate against, for instance, the American dollar (The Economist, 2004). In other cases, flexibility means that the currency should depreciate. One should obviously be careful when classifying currencies into flexible and inflexible types.

Figure 2



3. Polar solutions or exchange rate regimes at both extremes

Compared to intermediate regimes polar exchange rate regimes are much less complicated. In some ways they are straightforward. Besides, historically speaking, they precede intermediate regimes.

Let us start with free floating (Mikesell, 1954) or pure floating regimes or, better put, regime, because there is only one variety of it. It is found on the right side of Fig. 2. In French, they talk about 'regime de changes flottants' (Bourget et al. 2002) or sometimes 'flexible', while in German the terms used are 'freier Wechselkurs' or 'flexibler Wechselkurs' (Brokhaus, 2004). In such a regime the central bank does not intervene in the foreign exchange market. The exchange rate is left completely to the market. Yet of course this does not necessarily mean that the exchange rate is unstable. There has not been much experience with this exchange rate regime because there have only been a few examples of it and which lasted a relatively short period of time.

A pure floating exchange rate regime, according to Calvo and Reinhart (2003), reflects more the imagination of economic textbooks than any regime that existed in reality – at least for a longer period of time and in several countries. Yet it is not something that is completely imaginary. Mikesell (1954) and Yeager (1976) mentioned two cases: Mexico during the period from July 1948 to June 1949, and Canada from December 1951 to June 1961. Nevertheless, for two reasons the other pole of the polar solutions is much more important. There are more varieties, for example four, and many countries had and/or still have these exchange rate regimes. Besides, this was the exchange rate regime under the gold standard and it is appropriate to say at least a few words about it.

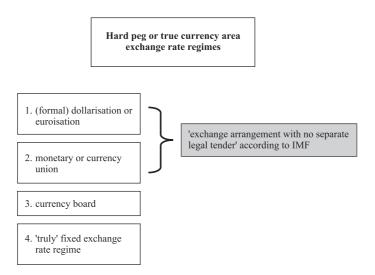
During the time of the gold standard, countries expressed the value of their money in gold and, on the basis of their value in gold, the official exchange rate or par value between two currencies was established. Before WWI the mint par value of the British pound, for instance, was 4,866 dollars (Crump, 1956). But the exchange rate did not always determine the way pounds were exchanged for dollars. Depending on demand and/or supply in the foreign exchange market the value of the pound fluctuated around its par value. Upper and lower limits of this fluctuation depended on: (1) the costs of payment abroad or from abroad in gold; and (2) on the differences in prices at which the Bank of England had been buying and selling gold. This difference was 0.16% at the Bank of England (Keynes, 1930). The exchange rate fluctuated around its par value between the so-called upper and lower gold point. This band of fluctuations was, for example, between 0.5% for the French franc and 1.5% for the Indian rupee (Keynes, 1930). It was 0.75% for the American dollar. So it was quite logical for the original fixed exchange rate regime to see the exchange rate fluctuate around its par value. The market exchange rate could be anywhere within the band going from the lower to the upper gold point.

During the subsequent paper standard, after WWII, countries tried to copy the fixed exchange rate regime of the gold standard by allowing the market exchange rate to fluctuate around the official exchange rate. Up to December 1971 the width of the band was 1% in each direction and 2.25% thereafter. Of course, the difference vis-f-vis the

gold standard was important. For the exchange rate to stay within the allowed maximum limits of fluctuation, the central bank had to intervene through sales and/or purchases in the foreign exchange market. Besides, the central bank could also intervene within the band and not only at its limits, as had been the case with the gold standard. Therefore, it is obvious for the fixed exchange rate regime to involve a fluctuation of the market exchange rate around its official rate or within a band around its official value. But what was the appropriate band? Is it the band that existed under the gold standard? One percentage was close to what it had been during the gold standard. Was it perhaps more – for instance 2.25% in each direction or maybe even 15% in each direction?

Yet before we come to the fixed exchange rate system or better the truly fixed exchange rate system shown in Fig 3, we must say a few words about the second and third systems: a currency union and a currency board. These two arrangements are according to the 'bipolar view' the only consistent ones if a country wants a stable exchange rate and the free international movement of capital. The country has a stable exchange rate in a peculiar way.

Figure 3



It either does not have its own money in the case of a currency or monetary union, or it does not have its own money *de facto* in the case of a currency board. At the same time, there is the complete liberalisation of international capital transactions. The country gives up its monetary autonomy to facilitate a stable exchange rate and the free movement of capital. It gives up its monetary autonomy by abandoning its money – only *de facto* or also *de iure*. Such a decision is credible. In the case of formal dollarisation (euroisation), the country simply introduces foreign money as has been the case of Montenegro.

Now we can come to the fourth arrangement of a fixed exchange rate regime. Here we must draw a distinction between the two cases because only one of them belongs to the polar cases we are discussing. Crockett (2003) includes among hard peg arrangements only the so-called 'truly fixed' exchange rate peg. It is a fixed exchange rate regime where devaluation and revaluation are not allowed. Williamson (1993) talked about an 'unalterable fixed exchange rate'. Frankel et al. (2001) talked about 'firm fixing'. The so-called adjustable peg system has been known since the end of WWII. One of its characteristics is that devaluations and revaluations are allowed. Such an exchange rate regime does not belong to a hard peg but to a soft peg (Reinhart, 2000) and therefore to intermediate regimes.

This distinction between the two kinds of fixed exchange rate regimes is important and is attributed to Mundell (2001). He makes a distinction between a 'true currency area' and a 'pseudo currency area'. Countries which had the gold standard from 1874 to 1914 belong to a true currency area. During that period those countries not only kept the value of their money unchangeable in gold but, in addition to that, the central bank generally did not sterilise gold inflows and outflows. The quantity of money in circulation had been changing according to the monetary approach to the balance of payments. If countries or their central banks do not behave in such a way then we have a pseudo currency area. Mundell (2001, p. 319) said, for instance: 'A true currency area is a zone of fixed exchange rates where the balance of payments determines (or at least dominates) monetary policy. By contrast, in a pseudo currency area, monetary policy may be allocated to domestic objectives'.

Mundell thinks it is wrong to talk about a fixed exchange rate regime if the countries that have such an arrangement form a pseudo currency area. J. Meade introduced the term 'adjustable peg system' for exchange rate regimes after 1945. As we know, countries can devalue or revalue their currencies and their central banks can buy and sell foreign exchanges in a sterilised way.

The important distinction introduced by Mundell is something one cannot find with other authors. Obstfeld and Rogoff (1995) described either a 'fixed' or 'pegged exchange rate'. Williamson (1984) talked about 'pegging' where he had in mind a fixed exchange rate regime, and about 'floating' where he had in mind an exchange rate arrangement at the other extreme or pole. More or less the same can be found with other authors. So we have two fixed exchange rate regimes: a 'hard peg' or 'firm fixing', as Frankel et al. (2001) put it, and a 'soft peg'. The soft peg belongs to intermediate regimes and therefore we will say something more about it in the next part of the paper.

Before we finish with the topic of polar exchange rate regimes, we make a few additional comments about the width of the band within which the exchange rate can fluctuate. We have already mentioned that the width of the band under the gold standard was up to 1,5%. In addition, the central banks of countries that, together with other countries, belong to a true currency area could pursue monetary policy by manipulating the gold points (Bloomfield, 1959). By increasing the width of the band they could carve out some space for independent monetary policy. That means their interest rate could differ at least a bit from the interest rates in other countries. So we

could say the band within which exchange rate can fluctuate is a necessity for a fixed exchange rate regime and it is even more so for a soft peg. Svensson (1994) said that the band gives central banks some leeway or independence in their monetary policy although there is the free international movement of capital.

It is relatively easy with polar exchange rate regimes. On one pole (Fig. 3) there are four regimes. They are, if for the moment we skip the first one, a monetary or currency union, a currency board and a hard variety of a fixed exchange rate regime or, according to Mundell (2001), a simply fixed exchange rate regime. In all three cases we can talk about a hard peg. Some authors like Calvo and Reinhart (2002) or Von Hagen and Zhou (2002) add a fourth one here – dollarisation (or euroisation). Hence there are four regimes (Fig. 3). At the other pole there is a free or pure floating exchange rate regime. In some cases (IMF and Von Hagen and Zhou) the term independent floating is used instead of a free or pure floating.

In between the two poles we have analysed lie intermediate regimes. Some talk about a disappearing middle or a missing middle. A conventional fixed exchange rate regime or a conventional peg belongs to intermediate regimes which we will now examine.

4. Intermediate exchange rate regimes

Intermediate regimes lie between a hard peg on one side and a float on the other (Fischer, 2001). Bourget, Gigliuzzi and Zenou (2002) talk about 'les régimes de change intermediaire', Frankel (1993) about 'vanishing intermediate regimes' or 'missing middle, while Mussa et al. (2000) looked at the 'hollowing of the middle'. They have been crowded out by 'corner solutions' or the 'polar solution' (Frankel, 2001). Whether this has really been happening if something we shall turn to later.

Let us stay with Crockett (2003) and, more precisely, with Frankel (1999) and their five or six varieties of intermediate regimes, if we add the 'crawling band'. They are: a conventional peg or adjustable peg, a crawling peg, a basket peg, a target zone, a crawling band and a managed float (Fig. 4).

Figure 4

Intermediate exchange rate regimes

- 1. conventional or or adjustable peg
- 2. basket peg
- 3. crawling peg (active or passive)
- 4. target zone (hard or soft)
- 5. crawling band
- 6. managed floating

One can relatively easily identify polar regimes, but this is not so easy with intermediate regimes. There may be substantial differences between the exchange rate regime a country formally has and what exists in reality. In general, exchange regimes in reality are much closer to a fixed exchange rate regime or a managed floating, than

one can deduce from the exchange rate regime the country declares it has. Some, for instance Calvo and Reinhart (2002) and Reinhart (2000), talk about a fear of floating. Countries and/or their central banks are afraid to let the exchange rate be exclusively determined by the market, although they desire that. The exchange rate regime a country declares expresses its desire, but the fear of floating makes it intervene in the foreign exchange market. Yet since we want to classify intermediate exchange rate regimes, we will not dwell on this otherwise very important difference between what is de iure and what is de facto.

The first exchange rate regime that follows a hard peg, according to Mundell the only genuine fixed exchange rate regime, is a soft variety of a fixed exchange rate regime (Fig. 4). It is usually designated as an adjustable peg. The IMF calls it a conventional peg. The exchange rate can fluctuate around its official rate according to the IMF and some others, for instance Taylor (1995), by at most up to 1% in each direction. Mussa et al. (2000) think that it is up to 2.25% in each direction. The central bank can also intervene within the margins but through its interventions in the foreign exchange market it is obliged to prevent the exchange rate moving above the upper or below the lower limits. The country can devalue or revalue according to the rules of the IMF.

Closest to this is the so-called basket peg, although according to the IMF it is a crawling peg regime that follows it. A peg to a basket is analogous to a peg to one currency, although in the case of the basket peg due to the changing number and composition of currencies and their weights it is less transparent whether the exchange rate is changing or remaining the same. One characteristic of this regime is what Frankel et al. (2001) think about an intermediate regime in general, namely that they lack verifiability.

We talk about a crawling peg if according to preannounced criteria and on preannounced dates (for instance weekly or monthly) or for economic reasons (balance of payments, wage increases) that are known to the public in advance the government changes (and usually increases) the official exchange rate of the currency on which its money is pegged. Visser (1995) talked of a crawling peg or 'tablita'. By tablita he had in mind the exchange rate regime Argentina introduced in December 1978. If small devaluations take place relatively often due to high domestic inflation, we can talk about a passive or accommodating crawling peg. A crawling peg may also be active if the country wants, for instance, to improve its balance of payments even though its inflation is much higher than in its most important trading partners. But a crawling peg regime may be dangerous if, for example, the country wants, via small and frequent devaluations, to keep the real exchange rate unchanged. The danger is that the country may enter an inflationary spiral, from which there is no easy exit.

The target zone regime differs from the adjustable peg in the first place according to the width of the band within which the exchange rate can fluctuate. In the same way as with the adjustable or conventional peg the country must declare or determine its official exchange rate. The band should be larger. Taylor (1995) and the IMF think that it should be greater than 1% in each direction. For Taylor an exchange rate mechanism (ERM) involving a band of 2.25% in each direction is a typical example of a target zone regime. This clearly can apply to countries that had larger bands within their ERM, for

instance Italy, Spain, Portugal and Great Britain which had 6% in each direction (Obstfeld and Rogoff, 1995). The same is without doubt true of the ERM 2 with its very broad band of 15% in each direction. Before that, there was the well-known target zone proposed by Williamson (1985) involving a band of 10% in both directions. Bands can be either symmetrical or asymmetrical.

For countries with a target zone regime a devaluation or revaluation is allowed. If there is a hard target zone, noting the difference given between a hard and soft target zone found in Beitone and Bassoni (1994) and Williamson (1985 and 1993), the central bank is obliged through its interventions in the foreign exchange market to prevent the exchange rate moving beyond the band. Gibson (1996) thought that the central bank is not allowed to intervene within the band, whereas Frankel (1999) believed it can do that. In the case of a soft target zone or soft margins, the width of the band is primarily an indicator of where the exchange rate should be. Namely, the central bank is not obliged to intervene at the margins.

The target zone regime lies somewhere in between the fixed exchange rate regime and a pure floating. Krugman (1989) regarded it as a halfway house towards a fixed exchange rate regime. Williamson (1985) primarily had in mind the disequilibrium of real exchange rates in floating regimes. A target zone regime should enable countries to achieve so-called fundamental equilibrium exchange rates (FEER) and stay with them.

Just like the crawling peg regime is connected to the fixed exchange rate regime, the crawling band is connected to the target zone. In the case of a crawling band the central bank often changes its official exchange rate and the band, whose width is more than 2% or more than 4.5%, moves up or down.

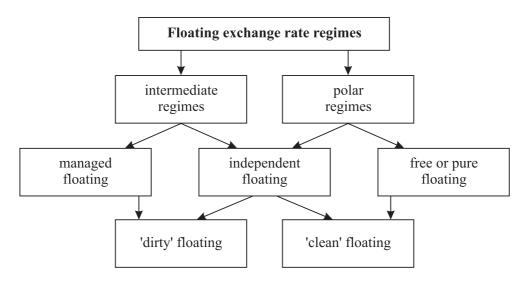
There is a difference between a 'peg' and 'band', albeit it is not always that clear and not accepted by all. Mussa et al. (2000) think, for instance, that we should talk about a 'band' if its width exceeds 2.25% in each direction. Therefore, we talk about a target zone regime and not about a pegged exchange rate regime if the band's width is more than 4.5%. This is not in accordance with the IMF. We have a 'crawling band' if there are frequent and small devaluations or revaluations, as in the case of a crawling peg, but the band's width exceeds 4.5%. Hausmann et al. (2001) even think that we can talk about a 'crawling band' or a 'horizontal band' if its width is 18%.

At one end of intermediate exchange rate regimes there is the floating exchange rate regime, i.e. a managed floating, or there are floating exchange rate regimes if we add an independent floating to intermediate regimes (Fig. 5). For some (IMF and Von Hagen and Zhou) an independent floating is a polar solution, while for others (Frankel and Crockett) a free or pure floating is a polar solution. It is probably right to only include a managed floating in intermediate regimes, as shown in Fig. 4.

A managed floating exchange rate regime means that the central bank intervenes in the foreign exchange market and therefore plays a role in determining the exchange rate. But its influence or impact on the exchange rate can vary significantly. Therefore, substantial differences can be seen within managed floating exchange rate regimes. Calvo and Reinhart (2002) indicated it is sometimes very difficult to distinguish

between a managed floating and a soft peg. Reinhart (2000) said that very often a managed floating exchange rate regime looks like a fixed exchange rate regime with an incredible peg. All of this may be simultaneously good if the central bank does not undermine its relatively great independence as concerns exchange rate policy.

Figure 5



In the case of an independent floating the central bank intervenes in the foreign exchange market but for the sole purpose of preventing the excessive volatility of the exchange rate. Basically the exchange rate is market-determined. It can be included either among intermediate or polar regimes, as seen in Fig. 5. But it is perhaps appropriate to include among intermediate regimes only a managed floating, as shown in Fig. 4. An independent floating is very close to pure or free floating and it should therefore be included in polar regimes.

We talk about a clean floating where the exchange rate is completely market-determined. Otherwise, we have a dirty floating. Since 'clean' is better than 'dirty' this should mean it is better for the central bank not to intervene in the foreign exchange market. But countries have generally had different experiences, especially if we have countries that are not very big in mind , whose central banks have more or less been permanently intervening in the foreign exchange market.

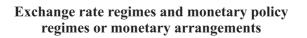
5. Exchange rate regimes and monetary arrangements

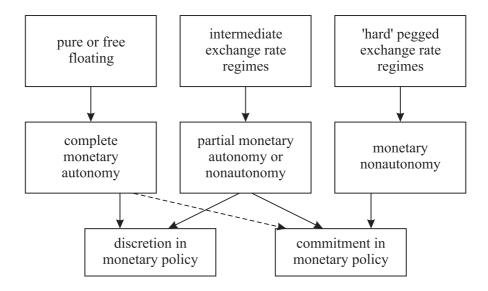
A classification of exchange rate regimes into three groups, even though it is very often found in the literature (Issing, 1996; Lelart, 2003; Pilhon, 1991 and Fischer, 2001), is generally not precise enough. We have found in the literature several regimes within

each of the three major groups and present some more detailed classifications. Especially within intermediate regimes there are many varieties. But even the same regimes can be very different. The variability of the central bank's international monetary reserves and its interest rates can differ widely for countries with the same intermediate exchange rate regime (Hausmann et al., 2001). This means, of course, that in reality these are not the same exchange rate regimes. There is no single currency or exchange rate regime that is right for all countries or at all times (Frankel, 1999) and countries therefore try to find the most suitable one for them.

Yet, if at the end of our paper we want to connect exchange rate regimes with monetary policy arrangements or monetary arrangements (Fig. 6), it is likely to be enough for a more general or tentative answer to stay with the three exchange rate regimes. Initially we are, for instance, interested in whether the central bank can pursue an independent monetary policy or not. We can see that there are two polar cases. The central bank has complete monetary independence or autonomy under a pure or free floating exchange rate regime. This is obvious because a free floating means the central bank is not intervening in the foreign exchange market. Base money can only be created via monetary policy instruments.

Figure 6





At the other extreme is the hard pegged exchange rate regime whereby the central bank has complete monetary nonautonomy. In the case of a small country, the central bank relies completely on the monetary policy of the anchor country or its central bank. In the case of intermediate exchange rate regimes there is partial monetary autonomy or nonautonomy. The central bank has greater autonomy the more it is prepared to change the exchange rate either via devaluations (revaluations) or depreciation (appreciation) of its currency. The price the central bank must pay for this heightened monetary autonomy is greater exchange rate instability.

The next question we are interested in is the question of discretion and commitment. In the case of hard pegged exchange rate regimes there is, as concerns the central bank, no place for discretion. The central bank is completely committed to follow the central bank of the country to which its currency is pegged. At the other extreme, pure or free floating, there may be maximum discretion but the central bank usually does not exploit this possibility to the maximum. If the central bank wants to ensure that its money is good money, it will try to strike an appropriate balance between discretion and commitment. The same is true of intermediate exchange rate regimes.

If there is a disappearing middle as concerns exchange rate regimes, it is disappearing because hard pegged exchange rate regimes are expanding. Intermediate regimes are disappearing partly because they are neither transparent nor verifiable (Frankel, 1999). The number of countries with monetary regimes where there is no monetary autonomy is increasing.

Partly hard pegged exchange rate regimes are replacing intermediate regimes for one very simple reason. The expansion of monetary unions, for instance the euro zone in Europe, reduces the number of states that can have an intermediate exchange rate regime. Besides, via the expansion of economic unions like the European Union some regions of existing states may decide to secede because economically speaking they would not be worse off. The internal market would not shrink but stay the same. In the longer run, the number of countries with monetary nonautonomy would be increasing.

6. Conclusions

Before it abandons its monetary autonomy, assuming that this is the final outcome, each country must probably undertake an intermediate exchange rate regime, partial monetary autonomy or nonautonomy and the proper combination of discretion and commitment in monetary policy. Therefore, it may be important to know which intermediate regimes are available, which combination of monetary autonomy and nonautonomy is available and how to combine discretion and commitment in monetary policy. Once a country opts for a hard pegged exchange rate regime, for instance for a monetary union, there are no more exchange rate and monetary policy choices or dilemmas. But for the time being no transitional economy has come this far. Accordingly, the problems of exchange rate regimes and monetary arrangements may remain important for some time.

Literature

- 1. Aglietta, M. and S. Moatti, 2000, "Le FMI. De l'ordre monétaire aux désordre financiers", *Economica*, 255 p.
- 2. Beitone, A. and M. Bassoni, 1994, *Problèmes monétaires internationaux*, 2. izd., Armand Colin, 191 p.
- 3. Bloomfield, A. I., 1959, "Monetary Policy Under the International Gold Standard: 1880-1914", *Federal Reserve Bank of New York*.
- 4. Bofinger, P. and T. Wollmershaeuser, 2001, "Managed Floating: Understanding the New International Monetary Order", *Discussion Paper, No. 3064, Centre for Economic Policy Research*, 62 p.
- 5. Bourget, J, A. Figliuzzi and Y. Zenou, 2002, "Monnaies et systèmes monétaires", Issue 9, Bréal, 253 p.
- 6. Brockhaus, F. A., 2004, Wirtschaft. Betriebs- und Volkswirtschaft, Börse, Finanzen, Versicherungen und Steuern, F. A Brockhaus.
- 7. Calvo, G. A. and C. M. Reinhart, 2000, "Fixing for Your Life", *NBER Working Paper Series*, 8006, November, 43 p.
- 8. Calvo, G. A. and C. M. Reinhart, 2002, "Fear of Floating", *The Quarterly Journal of Economics*, Vol. CXVII, May, 2, pp. 379-408.
- 9. Crockett, A., 2003, "Exchange Rate Regimes in Theory and Practice", published in P. Mizen (ed.), *Monetary History, Exchange Rates and Financial Markets. Essays in Honour of Charkes Goodhart*, Edward Elgar, 281 p.
- 10. Crump, N., 1956, "The ABC of the Foreign Exchanges", McMillan, London.
- 11. "Economic Focus. The G7 no longer governs the world economy. Does anyone The Economist", 2004. London, 9. October, 80 p.
- 12. Fischer, S., 2001, "Exchange Rate Regimes: Is the Bipolar View Correct?", *Journal of Economic Perspectives*, Vol. 15, 2, pp. 3-24.
- 12. Frankel, J. A., 1993, On Exchange Rates, The MIT Press.
- 13. Frankel, J. A., 1999, "No Single Currency Regime is Right for All Countries or at All Times", *Essays in International Finance*, No. 215, August, 38 p.
- 14. Frankel, J. A., E. Fajnzybler, S. L. Schmukler and L. Servén, 2001, "Verifying Exchange Rate Regimes", *Journal of Development Economics*, Vol. 66, pp. 351-386.
- 15. Gibson, H. D., 1996, "International Finance. Exchange Rates and Financial Flows in the International System", Longman, 355 p.
- 16. Hausmann, R., U. Panizza, E. Stein, 2001, "Why Do Countries Float the Way They Float?", *Journal of Development Economics*, Vol. 66, pp. 387-414.
- 17. IMF, "Compilation Guide. Status Under IMF Articles of Agreement, Exchange Arrangements".

- 18. Issing, O., 1996, "Einführung in die Geldpolitik", Issue 6, Verlag Vahlen, 305 p.
- 19. Keynes, J. M., 1930, *Treatise on Money. Volume II: The Applied Theory of Money*, MacMillan and St. Martin's.
- 20. Krugman, P. R., 1989, "Exchange Rate Instability", MIT Press, 117 p.
- 21. Lelart, M., 2003, "Le système monétaire international", *Issue 6, Éditions La Découverte*, 123 p.
- 22. Mikesell. R. F., 1954, *Foreign Exchange in the Postwar World*, The Twentieth Century Fund.
- 23. Mundell, R. A., 2001, "Money and Sovereignty of the State", published in: A. Leijonhufvud (ed.), *Monetary Theory and Policy Experience*, Palgrave.
- 24. Mussa, M., P. Masson, A. Swoboda, E. Jadresic, P. Mauro and A. Berg, 2000, "Exchange Rate Regimes in an Increasingly Integrated World Economy", *Occasional Paper, 193, International Monetary Fund,* 61 p.
- 25. Obstfeld, M. and K. Rogoff, 1995, "The Mirage of Fixed Exchange Rates", *Journal of Economic Perspectives*, Vol. 9, No. 4, pp. 73-96.
- 26. Reinhart, C. M., 2000, "The Mirage of Floating Exchange Rates", *AER Papers and Proceedings, May*, pp. 65-70.
- 27. Stone, M. R. and A. J. Bhundia, 2004, "A New Taxonomy of Monetary Regimes", *IMF Working Paper*, WP/04/191, 43 p.
- 28. Svensson, L. E. O, 1994, "Why exchange rate bands? Monetary independence in spite of fixed exchange rates", *Journal of Monetary Economics*, Vol. 33, pp. 157-199.
- 29. Taylor, M. P., 1995, "Exchange-Rate Behavior under Alternative Exchange-Rate Arrangements", published in: *P. B. Kenen (ed.), Understanding Interdependence. The Macroeconomics of the Open Economy,* Princeton Univ. Press, pp. 34-83.
- 30. Yeager, L. B., 1976, *International Monetary Relations: Theory, History, and Policy*, Issue 2, Harpers and Row.
- 31. Visser, H., 1995, "A Guide to International Monetary Economics", Edward Elgar, 195 p.
- 32. Von Hagen, J. and J. Zhou, 2002, "The Choice of Exchange Rate Regimes: An Empirical Analysis for Transition Economies", *Working Paper*, *B* 03, *Zentrum für Europäische Integrationsforschung*, 23 p.
- 33. Williamson, J., 1982, "A Survey of the Literature on the Optimal Peg", *Journal of Development Economics*, Vol. 11, pp. 39-61.
- 34. Williamson, J., 1985, "The Exchange Rate System", *Institute for International Economics*, No. 5,110 p.
- 35. Williamson, J., 1993, "Exchange Rate Management", *The Economic Journal*, 103, January, pp. 188-197.

Ivan Ribnikar¹

REŽIM DEVIZNOG TEČAJA I MONETARNA POLITIKA

SAŽETAK

Postoji bliska veza između režima deviznih tečajeva i monetarne politike. Ukoliko želimo istražiti monetarnu politiku, tada se ponajprije trebaju analizirati režimi deviznih tečajeva. U okviru standardne klasifikacije režimi deviznih tečajeva dijele se na čvrsti i fleksibilni devizni tečaj, odnosno na polarne režime (čvrsti i tekući) s jedne strane, te na srednje s druge strane, iako je važno napomenuti da se unutar srednjeg nalazi mnogo vrsta režima deviznih tečajeva. Preciznije rečeno, prvi dio članka usredotočen je na klasifikaciju režima deviznih tečajeva, dok drugi dio rada analizira kako režimi deviznog tečaja utječu i određuju monetarnu politiku, odnosno monetarnu politiku režima deviznog tečaja: monetarna autonomija nasuprot monetarnoj ne-autonomiji, diskrecija nasuprot obvezujućem odnosu u monetarnoj politici. Obje teme su ključne za zemlje koje su na svom putu u Europsku uniju i zonu eura.

Ključne riječi: Režim deviznog tečaja, monetarna politika, diskrecija nasuprot obvezujućeg odnosa

¹ Redoviti profesor Ekonomskog fakulteta Sveučilišta u Ljubljani

