### Dilemma of Exchange Rate Regime Choice: A survey of the literature and the practice

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## Abstract:

This paper reviews the theoretical and empirical literature on the optimal choice of exchange rate regime. It includes three sections: The First, Taxonomy of Exchange Rate Regimes and the discrepancy between declared and actual regime (de jure and de facto); The Second, the different approaches of the exchange regime choice; And the third, analysis of the evolution exchange rate regimes in recent years, paying particularly attention to two new proposals exchange rate regimes: the Managed Floating Plus (MFP) and the Basket, Band and Crawling Peg (BBC). To conclude there is no consensus on how to select an appropriate exchange rate regime and there will be continuous revisions of theories and empirical results.

Keywords: Exchange rate , regime, De jure, de facto, appropriate.

#### Résumé:

Ce papier revoit la littérature théorique et empirique sur le choix de régime de change optimal. Il inclut trois section: la première, Taxonomie du régime de change et la divergence entre régime déclaré et réel (de jure et de facto; La deuxième, les différentes approches du choix de régime de change; Et la troisième, l'analyse de l'évolution des régimes de change ces dernières années en citant des nouveaux régimes proposés, qui sont : Flottement dirigé bonifié (MFP) et un panier de devises avec marges de fluctuations et parité glissante (BBC).

Pour conclure qu'il n'y a aucun consensus sur le choix un régime de change approprié et il y aura des révisions continues des théories et des résultats empiriques.

Mots clés: Régime, change, De jure , De facto, approprié.

#### Introduction:

Exchange rate regime, also called exchange rate system or exchange rate arrangement, is a series arrangement and regulars made by currency authority for setting, maintaining and managing its exchange rates. The choice of an optimal or of an appropriate exchange rate regime is one of the major unresolved questions of international macroecomics and has been at the center of the debate in international finance for a long time following the collapse of Bretton Woods' architecture of fixed exchange rates in the early 1970s.

After the wave of Financial and currency crisis in Mexico (1994), Thailand, Korea and Indonesia (1997), Russia (1998), Brazil (1999), and Turkey and Argentina (2001) which had severe negative impacts on economic growth, discussion around exchange rate regime choice has been resumed in the last decade because some unsustainable exchange rate regimes were implicated in several economic crises in the nineties.

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The choice of exchange rate regimes is a controversial issue among practitioners and academics alike, and is one of the most relevant economic decisions that any economic authority has to face nowadays. In making the correct exchange rate regime choice some empirical evidence on economic performance is very important. Regime choices are influenced by a vast array of determinants. An exchange rate regime has an important impact on macroeconomic policies. Indeed, a wide empirical literature has arisen in order to identify the most important factors that determine this decision.

This paper reviews recent trends in thinking on exchange rate regimes, and sets out to review the main theories and empirical methods employed in selecting an appropriate exchange rate regime. In order to achieve this, this paper is organised as follows:

- I: examines Taxonomy of Exchange Rate Regimes and distincts classifications (de jure and de facto) of exchange rate regimes and shows their limits;
- II: discribes the exchange rate choice and analyses the determiners of the exchange rate regime choice from two perspectives: traditional and contemporary;
- III: analyzes the evolution of exchange rate regimes in recent years, and paying particularly attention to the new exchange rate regimes, the Managed Floating Plus(MFP) and the Basket, Band and Crawling Peg (BBC);
- And finally a conclusion is drawn.
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#### I. <u>Taxonomy of Exchange Rate Regimes :</u>

Since the breakdown of the Bretton Woods system in the early 1970s, countries have adopted a variety of exchange rate regimes. From 1975 through 1998 the IMF classified members' exchange rate arrangements under three main categories: pegged (against a single currency or a currency composite), limited flexibility vis-à-vis a single currency or group of currencies, and more flexible, including other managed and independently floating. This grouping was based on members' official notifications or declaration to the IMF (De jure classifaction) about their exchange rate policies and flexibility once becoming a member and after making any changes in their arrangements. A main shortcoming is that what countries are officially claiming to be doing (de jure) may differ largely from what they are actually pursuing (de facto). This would reduce the transparency of the undertaken exchange rate policy and make effective tracking, surveillance and analysis of the exchange rate regime evolution and performance for research and policy implications difficult and perhaps less accurate or biased.

Since 1998, the staff of the International Monetary Fund (IMF) has published a classification of countries' de facto exchange rate arrangements. Experience in operating this classification system has highlighted several challenges, notably (IMF-WP/09/211, 2009):

- the residual category of managed floating has become overly heterogeneous; and
- intervention practices, which are used in characterizing arrangements, have become increasingly complex, while adequate data on intervention are sometimes not available.

The existing IMF staff classification system has been modified to address these and other issues and effective February 2, 2009 (AREAER,2009), the classification methodology was revised to allow for greater consistency and objectivity of classifications across countries and to improve transparency in the context of the IMF's bilateral and multilateral surveillance. And the 2009 AREAER in the 2009 Annual Report on Exchange Arrangements and Exchange Restrictions has included this revision.

There is no consensus on the classification of exchange rate systems and this has contributed to both the variety of regimes that have emerged in recent years and to the diversity of their characteristics. For this there is a continuum of exchange-rate regimes that runs from free floating to hard fixes, and in the following we see the evolution of Taxonomy of Exchange Rate Regimes witch include the IMF's classification and the alternative classification.

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### I.1. The Evolution of the IMF's Classification Taxonomies :

Since 1950, the International monetary fund publishes every year The Annual Report on Exchange Arrangements and Exchange Restrictions (AREAER). This one draws on information available to the IMF from a number of sources, including through the course of official IMF staff visits to member countries, and has been prepared in close consultation with national authorities.

## I.1.1 <u>The De jure Classification:</u>

Until the late 1990s, most empirical studies of exchange rate regimes relied on the de jure regime classification reported in the IMF's Annual Report on Exchange Arrangements and Exchange Restrictions (AREAER), which was then based on countries' official notifications to the IMF. The de jure classification distinguished between three main categories: pegged regimes, regimes with limited flexibility and more flexible arrangements, in which the exchange rate is managed or allowed to float freely (IMF:WP/09/155, 2002).

This classification suffered from many schortcomings, the most important was its failure to capture differences between what the countries claimed to be doing and what they were doing in reality. To address the shortcomings of de jure classification, Since Junuary 1999 the IMF adopted a new official classification scheme based on de facto classification.

### I.1.2 The IMF's De facto Classification:

In recognition of the divergence between actual and operational regimes, a number of efforts have been undertaken to develop a classification of de facto rather than de jure regimes, the IMF it self moved to a de facto classification system in 1999. The IMF's de facto classification combines available information on the exchange rate and monetary policy framework and authorities' formal or informal policy intentions with data on actual exchange rate and reserves movements to reach a judgment about the actual exchange rate regime. Indeed, the IMF has classified exchange rate regimes using a system based on actual behavior since the late 1990s (notably leading academic research by years), when it comes to exchange rate regimes, as with so many other things, the words of countries often do not correspond to their deeds.

De facto exchange rate regimes organise countries by what they do. This sorting attempts to ensure that the official classifications are consistent with actual practice. De facto regime classifications attempt to rectify the deficiencies of the de jure coding. Since 1999 there were two classifications:

De facto Classification Taxonomy (November 1998-January 2009): on which IMF distinguished eight "08" categories of exchange rate regimes:

- Exchange arrangement with no separate legal tender;
- Currency board arrangement;
- Conventional pegged arrangement;
- Pegged exchange rate within horizontal bands;
- Crawling peg;
- Crawling band;
- Managed floating with no preannounced path for the exchange rate;
- Independently floating.

## > De facto Classification Taxonomy since 2009:

The revised classification has been published in the 2009 Annual Report on Exchange Arrangements and Exchange Restrictions (AREAER) and in the IMF's 2009 Annual Report. Specifically, the 2009 AREAER include the revised classification at end-April 2009 and end-April 2008, and changes in the intervening period.

The Key changes to the new classification system include (WP/09/211, 2009):

- Replacing the current distinction between managed and independent floating with two new categories: floating and free floating, with clearer definitions;
- Drawing a distinction between formal fixed and crawling pegs, and arrangements that are merely peg-like or crawl-like;

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- Increasing the transparency of the system by basing it on rules that can be implemented using specified information, with a more clearly circumscribed role for judgment.

The classification system is based on IMF members' actuel, de facto arrangements, as identified by IMF staff, witch may differ from their officially announced, de jure arrangements. The system classifies exchange rate arrangements primarily on the basis of the degree to which the exchange rate is determined by the market rather than by official action, with marked-determined rates being on the whole more flexible. The system distinguishes among four major catégories : hard pegs (such us exchange arrangements with no separate legal tender and currency board arrangements) ; soft pegs (including conventional pegged arrangements, pegged exchange rates within horizontal dands, crawling pegs, stabilized arrangements, and crawl-like arrangements) ; floating regimes (such as floating and free floating) ; and a residual category, other managed.

These changes are expected to allow for greater consistency and objectivity of classifications across countries, expedite the classification process, conserve resources, and improve transparency, with benefits for the IMF's bilateral and multilateral surveillance.

The overall composition of arrangements using the previous and revised classification systems is shown in Table 1, below:

	1998 de facto system		2009 de facto system	
Hard pegs		23		23
	Arrangement with no separate legal tender	10	Exchange arrangement with no separate legal tender	10
	Currency board arrangement	13	Currency board arrangement	13
Soft pegs		81		78
	Conventional fixed peg	68	Conventional pegged arrangement	45
			Stabilized arrangement	22
of which: Intermediate pegs		13		11
	Pegged exchange rate within horizontal bands	3	Pegged exchange rate within horizontal bands	3
	Crawling peg	8	Crawling peg	5
	Crawling band	2	Crawl-like arrangement	3
Floating arrangements		84		75
	Managed floating	44	Floating	39
	Independently floating	40	Free floating	36
Other managed arrangements (residual)		n.a.		12
Total		188		188

### Table1 : shares of classification using the 1998 and 2009 systems

Source: IMF Working Paper, WP/09/211, 2009, P4

I.2 Alternative Classifications:

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In recognition of the divergence between actual and operational regimes, and recognizing the merits of classifying regimes more realistically, a number of new de facto classification systems have been proposed and developed during the last decade.

The three best-known alternatives to de jure classifications are those developed by Levy-Yeyati and Sturzenegger (2003, hereafter "LYS"), Reinhart and Rogoff (2004, "RR") and Shambaugh (2004). Each is based on a different technique. LYS combine data on exchange rates and international reserves using cluster analysis; that way they can account for exchange market intervention as well as exchange rate movements. Reinhart and Rogoff rely on the movements of market-determined exchange rates; these often diverge from official ones when there are parallel or dual markets because of capital controls. Shambaugh classifies a country as pegged if its official exchange rate remains within a small band for a sufficiently long period of time. All the methods classify nominal exchange rate regimes.

The three systems based on de facto behavior have one striking common characteristic:

All reveal that the de jure classification is untrustworthy much of the time. Many countries that state they float actually intervene to smooth the exchange rate a lot (a phenomenon known as "fear of floating"). Conversely, many countries that state they peg have a lot of inflation and capital controls so that their currencies actually trade at deep discounts on black markets. Accordingly, the profession has concluded that de facto classifications make a lot more sense than de jure ones.

So there are now four classifications of exchange rate regimes: official IMF, LYS, RR, and Shambaugh (Andrew K. Rose, UC Berkeley, NBER and CEPR, 2011).

We see in the following graphique which shows the difference between de jure and de facto classification of countries.

#### **<u>Graphique1:</u>** Distribution of Countries by Jure and facto Classification regimes

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Source: Andrew K. Rose, UC Berkeley, NBER and CEPR, 2011, p28

The differences between the de jure and de facto classifications are important for three important reasons:

- First, there is consensus that there has been an increase in the use of floats throughout the post-Bretton Woods period.
- Second, that intermediate regimes (including conventional pegs) are inherently vulnerable to capital flows and thus bound to disappear in a world with increasingly integrated capital markets, a fact dubbed by Eichengreen (1994) as "hollowing-out hypothesis" and by Fischer (2001) as the "bipolar view".
- Third, that many countries that claim to float do not allow their nominal exchange rate to move freely, a pattern that Calvo and Reinhart (2000) have referred to as "fear of floating".

## I.3. De jure and De facto Classifications Limits:

## I.3.1. <u>De jure Classification Limits:</u>

Although comprehensive in terms of country and historical coverage, the de jure classification system had a serious drawback: in practice, exchange rate regimes often differed from what they were officially announced to be. For example, some pegged regimes devalued frequently, while many floats typically moved within a tight band. Consequently, the de jure classification characterized inaccurately the distribution of operative currency regimes across the world and over time. Moreover, empirical analyses employing this classification to test theories of regime choice or to assess the relationship

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between regime choice and economic performance risked reaching incorrect conclusions and drawing misleading policy implications.

#### I.3.2. De facto Classification Limits:

De facto classifications are not without their own drawbacks, however. Foremost among these is their essentially backward-looking nature. While the stated regime in principle conveys information about future policy intentions, observed actions necessarily pertain to the past. Again taken to its extreme, the de facto approach implies that a country announcing an exchange-rate based disinflation program—even if fully credible—would derive no credibility benefit in terms of lowering inflationary expectations. While ultimately an empirical question, the assumption seems at odds with much of modern macroeconomic theory, which emphasizes the importance of expectations (Atish Ghosh, Anne-Marie Gulde and Holger Wolf).

Beyond this fundamental concern, de facto measures must contend with a number of conceptual difficulties and practical problems. Stability of the nominal exchange rate -typically the most significant component of de facto measures- may reflect either an absence of shocks or an active policy offsetting shocks; only the latter warrants inferences about policy.

#### II : The choice of exchange-rate regime :

The choice of exchange-rate regime can be better- or worse-suited to the economic institutions and characteristics of an economy. For this the theoretical literature provides broad guidance on exchange rate regime choices, the main criterion for regime choice is to reduce the output cost (in terms of GDP) of an adjustment to exogenous shocks. Thus, the nature and the magnitude of shocks the economy is likely to face, as well as the structural characteristics of its goods, labour and financial markets, are important considerations in choosing an exchange rate regime.

Also the empirical findings on the determinants of exchange rate regimes are numerous and controversial. The reason for the differences among the findings mostly depends on the country samples taken into consideration, time periods, regime classifications used in the analyses, estimation methods and assumptions of econometric models.

The studies on the determinants of exchange rate regimes largely consist of the papers including the developing countries (Rizzo, 1998; Breger et. al, 2000; Poirson, 2001; Zhou 2003; Von Hagen and Zhou, 2005, Bleaney and Francisco, 2005); or both the developing and developed countries (Meon and Rizzo, 2002; Juhn and Mauro 2002; Kato and Uctum, 2005, Levy-Yeyati and Sturzenegger, 2007). A few of the paper (Collins, 1996; Papaioannou, 2003; Markiewic, 2006) considered specific country groups such as Latin American countries, Central American countries, transition economies and etc.

Most studies considered some of the optimum currency area variables, such as trade openness, size of economy, degree of economic development and geographical concentration of trade. In addition, some studies also included such macroeconomic variables as inflation, foreign exchange reserves, domestic credit, real exchange rate, and terms of trade. Also, a few studies contained political or institutional variables.

The choice of regime is not straight forward; It is contingent on a host of factors, such as:

- The size of the economy;
- The degree of openness and economic/financial development;
- The production diversification/export structure;
- The divergence of domestic inflation from its trading partners;
- The degree of labour and capital mobility;
- The vulnerability to real/nominal shocks; and
- The extent of fiscal policy flexibility

#### II.1 Exchange rate regime determiners :

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The determiners of the exchange rate regime choice can be analysed from two perspectives: traditional and contemporary.

# <u>a)</u> <u>The traditional approach :</u>

It includes views that have been present for a longer period of time in the exchange rate regime option analysis. This approach includes the theory of optimum currency area and nominal versus real shocks; Major contributors in this literature include Friedman (1953), Fleming (1962), Mundell (1961, 1963), McKinnon (1963), and Kenen (1969), among others. Mundell (1961) claimed that, a fixed exchange rate regime is advisable in presence of mobility of production factors (works and capital) and/or flexibility of prices and wages. In these two cases the adjustment can be achieved without exchange rate flexibility. Mac Kinnon (1963) argued that, the more open the economy the more it has to benefit from exchange rate stability because it reduces the fluctuations of relative prices between tradable and non-tradable goods and its repercussions to domestic prices. Furthermore, he dismissed the effectiveness of parity changes and said in particular that the expected effects of devaluation (the increase in exports or the decrease in imports) will be limited. Kenen (1969) found that a diversified economy can successfully offset shocks and hence can easily adopt a fixed exchange rate regime and joins an optimal currency area.

 $\checkmark$  The theory of the optimum currency area (OCA) concentrates on trade and geographic characteristics of a certain country and compares, from that aspect, the benefits of a stable exchange rate (in relation to the main trading partners) and flexible regimes. According to the OCA theory, the fixed exchange rate option represents a convenient solution under the following circumstances:

- Significant trade links with the anchor country (countries), i.e. the emphasised geographic concentration of trade activities;
- Greater openness of a country, i.e. greater share of trade activities (export and import) in GDP
- Small size of a country, positively correlated with openness and increase of positive trade effects on the exchange rate stability;
- A country facing similar shock vulnerability as an anchor country (countries), i.e. the existence of symmetric shocks;
- Factors of production (labour and capital) are mobile;
- The existence of fiscal transfers;

It is the matter of characteristics reducing negative aspects of accepting the fixed exchange rate regime in the form of losing the monetary sovereignty and maximizing positive aspects through the disappearance of exchange rate risk and foreign exchange instability.

 $\checkmark$  Monetary efficiency implies a stimulation of international trade and investments through exchange rate stability and reduction of exchange rate risks that are emphasized in circumstances of stronger economic (trade and factor) integration in a currency union.

 $\checkmark$  The loss of economic sovereignty is certainly reflected in the absence of a fixed exchange rate application. The independent implementation of monetary, fiscal and foreign currency policy

measures aimed at the output and employment stabilization is not possible. Significant trade integration, high economic structure correlation, fiscal federalism and capital and labour mobility reduce the necessity for sovereign monetary policy as a necessary sacrifice of entering into the monetary union or implementation of other rigid forms of exchange rates.

 $\checkmark$  From the aspect of the vulnerability to real versus nominal shocks, it is appropriate to choose the fixed exchange rate regime in case of the country's exposure to nominal (monetary) shocks. Flexible exchange rate regimes are adequate in circumstances of real and external shock vulnerability. Thus, a country decides on an adequate regime depending on its vulnerability to real versus monetary shocks, maintaining that the significance of real shock (the significance of monetary shocks, i.e. inflation as a problem, is reduced) has increased in contemporary circumstances of growing international trade and financial integration. A continuation of a flexible exchange rate regime acceptance trend is expected.

b) The contemporary approaches :

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They link the adoption of a fixed parity with economic policy bearing no credibility and yielding dissatisfying results in the establishment of macroeconomic, inflationary stability with the exchange rate as a nominal anchor. Through eliminating capital barriers and forming significant capital mobility, 'impossible trinity' emphasises the difficulty of maintaining parity with speculative impacts, including sudden capital inflows and outflows. The currency mismatching/disparity in denomination of active and passive items aggravates currency fluctuation due to fear of depreciation/ devaluation. Mundell and Fleming (1970) made a step further when they acknowledged that the choice of an optimal regime has to take into account not only the structural characteristics of the economy, but also the nature of shocks. In particular, monetary and real shocks have different implications on the economy if the shocks come mostly from the good's market, a flexible exchange rate should be preferred. On the contrary, a fixed exchange rate would be more appropriate if the origin of the shocks is the money market.10 This is consistent with the Keynesian view on regime's selection, which stresses the importance of achieving simultaneously external and internal equilibria while using the exchange rate.11 During the nineties a significant increase in capital mobility has stressed the importance of sound and stable domestic financial sectors as a condition for the choice of an exchange rate regime, Chang and Velasco (1998). This new economic environment creates the potential for large and sudden reversals in net flows. Thus, the capacity of countries to avoid an exchange rate crisis depends on its capacity to appropriately manage huge amount of inflow and outflows. An excessive capital outflow accompanied with overspending form an immediate source for currency crisis. Krugman (1996) explains that if a small open economy has created an excess of domestic credit over the demand of money, economic agents will observe this misalignment between fixed exchange rate and growth rate of money, and a speculative attack may occur. Even so, a simple rumour on possible devaluation is able, according to selffulfilling hypothesis, to trigger a bank crisis. This problem is more pronounced in countries with an open capital account which can prompt theses countries to move toward either hard pegs or pure float. Nevertheless, capital account controls might make it easier to sustain a fixed exchange rate and thus some developing and emerging market may be still reasonably well off with an intermediate regime.

✓ Exchange rate as a nominal anchor is used as an argument of exchange rate pegging in circumstances when the economic authority does not have the indispensable credibility or when there is no confidence of general public in nominal stability maintenance. The economic authorities 'import' missing elements for macroeconomic stability creation by fixing a currency for strong and stable currency, importing indirectly the recipe of anti-inflationary monetary and fiscal policy. The credibility aspect of a foreign exchange rate as a political crutch forces vulnerable governments to expansive and political pressures, thereby creating the inflation to a fixed foreign exchange rate in such a way to limit the discretionary manoeuvre space for economic policy creators. From the aspect of the considered criterion, strong, credible and disciplined governments with healthy macroeconomic positions are more inclined to choose flexible exchange rates.

 $\checkmark$  'Impossible trinity' refers to the impossibility of simultaneous accomplishment of three important goals: exchange rate stability, monetary policy independence and complete integration in the capital market. In circumstances of comprehensive capital mobility, monetary policy cannot be simultaneously committed to maintaining the exchange rate stability and slowed output fluctuation, which is the consequence of real shock caused by increased capital mobility. As deepening of financial integration and occurrence of new financial innovations weaken the effectiveness of capital controls, the dilemma of monetary policy-exchange rate stability grows in significance. Monetary policy could prevail in the selection process because financial integration bears the threat of significant real shocks, and can be absorbed only by flexible exchange rate arrangements.

✓ Balance of payments effects and financial dollarization as the arguments in favour of the fixed exchange rate stability are used in financially dollarized countries, with significant denomination of private and public liabilities in foreign currency, while receivables are denominated in domestic currency. Circumstances in which liabilities are denominated in foreign currencies – the 'currency mismatching' problem - the country tends to fix the parity of its national currency. Otherwise, significant nominal

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currency depreciation could threaten the solvency of the national economy, defined as a 'fear of floating.' Accordingly, the expressed financial dollarization is positively correlated with the country's inclination to fix the value of its national currency.

# c) other approaches exist :

Aside from the above-mentioned traditional and contemporary approaches in the exchange rate regime selection, other approaches exist. A new aspect of study of the exchange rate choice determiners can be identified through differentiating between the external and structural (internal) macroeconomic performances (Eichengreen et al., 1999).

- External factors include commercial integration, shocks vulnerability, types of shocks, and political integration.
- Structural (internal) factors include inflation level, level of foreign currency reserves, capital mobility, labour mobility and nominal flexibility and product and export diversification.

# **III. EVOLUTION OF EXCHANGE RATE REGIMES CHOICE :**

The choice of exchange rate regimes has evolved considerably in recent decades. Since the end of the Bretton Woods system of fixed but adjustable exchange rate there been an increase in flexible regimes and in the variety of exchange rate systems adopted.

- From the mid-90s the bipolar view, corner solution or hollowing-out won supporters; this holds that because of increasing international capital mobility only the two extreme regimes are sustainable. The bipolar view has been supported by the 'impossible trilogy'. The prevailing view was that flexible regimes are more suitable for large economies, and fixed regimes are only useful in special situations (see Eichengreen and Hausmann, 1999).
- ➢ In the late 90s, however, several authors challenged the idea that intermediate exchange rate regimes are condemned to disappear. Frankel (1999) says that the impossibility for a country to maintain exchange rate stability and monetary independence when international capital mobility increases does not mean that this country cannot simultaneously maintain some stability and monetary policy autonomy. Williamson (2000) and Goldstein (2002) go even further and argue that intermediate regimes are still a viable option for developing countries. Fisher (2001) found that the number of countries adopting an intermediate exchange rate regime declined worldwide from around 62 percent in 1991 to 34 percent in 1999. But he does not suggest that intermediate regimes are disappearing, except in developed countries. In 1999 42 percent of developing countries used these regimes.

Following Fisher's (2001) analysis and using IMF data for 2008, we note that between 1999 and 2008 flexible exchange rate regime use increased from 77 to 84 countries, while fixed exchange rate regimes decreased from 45 to 23.

The intermediate exchange rate regime trend then reversed, with the number of countries that have adopted this type of exchange rate regime increasing from 63 to 81 between 1999 and 2008, so they appear to be a widely used and apparently viable option, especially for developing countries.

Given the above, it could be said that despite the bad past experiences with some intermediate exchange rates regimes, which showed weak response to increasing international capital mobility, this does not mean that intermediate regimes may not emerge as the most appropriate regime for some developing countries, not least because only a small number of developing countries enjoy the conditions needed to successfully use the most extreme forms of exchange rate regimes, given their structural characteristics.

Two new proposals relating to intermediate exchange rates regimes should be noted. They are Managed Floating Plus (MFP) regime and Basket, Band and Crawling Peg (BBC) regime.

Keeping in view different views about exchange rate regime choice, the case still can be made for intermediate arrangements for emerging countries which are not yet sufficiently financially mature to float. One such arrangement that such countries could take for floating exchange rate is Morris Goldstein's (2002) —Managed Floating Plus scheme. It supplements the inflation targeting cum

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independent central bank approach that several advanced countries (U.K, Sweden, New Zealand and Canada) follow. This scheme allows intervention in the exchange market to offset temporary shocks. It also provide a comprehensive reporting system to maintain the level and foreign currency exposures of external debt and perhaps a sequential strategy to the opening up of domestic financial markets to external capital flows. Finally, there is still a case for monetary unions for countries that are closely integrated politically and economically or are very small open economies.

## III.1 The New Proposals Exchange Rate Regimes:

## a) Managed Floating Plus:

The MFP exchange rate regime, defended by Goldstein (2002) as an ideal exchange rate regime for developing countries that are more open to international capital flows, incorporates the view that flexible regimes are preferable to fixed regimes but wants to eliminate some of the excessive volatility of fully flexible regimes. It is based on three main features.

First, 'floating', which means that authorities let the exchange rate float, i.e. they accept that the forces operating in the foreign exchange market are mainly responsible for influencing exchange rate determination. Secondly, 'managed', which concerns the administration of fluctuation, because authorities may intervene to counter short-term movements in exchange rates, but only insofar as these actions do not damage the achievement of the objectives in terms of inflation. Thirdly, 'plus', which itself comprises two components, a nominal anchor for monetary policy based on an announced inflation target, and a set of policy measures to reduce exchange rate misalignment.

Given these characteristics an MFP exchange rate regime will give developing countries tools to reduce exchange rate misalignment and balance of payments vulnerability with respect to capital movements, which both eliminates the 'fear of floating' (see Calvo and Reinhart, 2002) and gives greater monetary independence to deal with economic downturns, a better performance against changes in capital flows and a feasible nominal anchor that will allow control over inflation.

However, despite some similarities to exchange rate regimes currently used by some developed countries, the relative newness of the MFP regime means that we do not yet have any examples of its practical application. Though it seems to be favourable from a theoretical point of view, this does not imply that it is so in practice.

# b) The BBC Exchange Rate Regime:

The Basket, Band and Crawling Peg "BBC" exchange rate regime advocated by Williamson (2000), meanwhile, aims to unite the advantages of the traditional intermediate exchange rates regimes, including the crawling peg and the target zone, in order to reduce its vulnerability to speculative attacks. It has three main elements. First, the basket from which each country with diversified trade should index its currency to a foreign currencies basket, as opposed to a single currency trading partner. The fact that the currency is pegged to a basket consisting of major trading partners' currencies should reduce the tensions that occur when major currencies begin to move in opposite directions, allowing more effective exchange rate stabilization. Secondly, symmetrical and reasonably wide band developing countries must ensure that their exchange rate is within the band, which aims to provide credible guidance to markets about exchange rate fluctuation limits. Being large, the band allows three main features:

- it ensures that authorities will not face a situation of trying to defend a greatly misaligned exchange rate;
- it allows central parity adjustment to keep in line with economic fundamentals without significant changes in exchange rate behaviour;
- it helps the country to cope with strong cyclical and asymmetric capital movements.

Thirdly, the crawling peg, which relates to the band midpoint and which can slide gradually over time in response to changes in macroeconomic fundamentals. This both makes it possible to relieve some tensions that markets suffer due to changes in their characteristics and provides some information about

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where the exchange rate can move to, thereby combating the existence of persistent misalignments in the exchange rate.

The BBC regime is nonetheless subject to some criticism. Goldstein (2002) suggests that in practice a BBC regime would have to cope with many of the problems faced by the Bretton Woods international monetary system of fixed but adjustable exchange rate, like destabilizing speculation. Williamson (2000) himself recognizes that even a well-managed BBC regime is subject to the danger of contagion in the face of foreign exchange crises in nations with which countries maintain close trade or financial relations. Despite the criticism, the weaknesses

of the BBC regime are no greater than those of the more conventional intermediate regimes.

It is therefore not surprising that in the 90s developing countries such as Chile, Colombia and Israel successfully used a crawling band regime similar to Basket, Band and Crawling Peg as a transition route to a more flexible exchange rate system. Let us now see how the choice of exchange rate regime can be important for a country's macroeconomic performance.

#### Conclusion:

The choice of exchange rate regime has considerable impact on trade in goods and services, capital flows, inflation, balance of payments and other macroeconomic variables. For this reason, the choice of an appropriate exchange rate regime is a principal component of economic management in maintaining growth and stability.

From the examination of the the various exchange rate classifications and the survey of the literature on exchange rate regime choice; no single theoretical approach seems to have an overwhelming victory over another, and no empirical regularities regarding the choice of a currency regime have emerged yet.

However, there is no consensus on how to select an appropriate exchange rate regime and there is not an ideal exchange rate regime suitable for all countries.

In essence, the choice of an exchange rate regime is not straightforward and to be sure, there will be continuous revisions of theories and empirical results. Every regime has some benefits and drawbacks: tradeoffs between exchange rate flexibility versus uncertainty; between policy flexibility versus Discipline. The "optimal" choice depends on the specific challenges and circumstances facing the country (which may change over time).

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