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# LA LETTRE DU CEPTI CENTRE D'ETUDES PROSPECTIVES ET D'INFORMATIONS

# Exchange Rate Regimes: With or Without the Sucre?

The exchange rate crises of the 1990s would appear to rule out intermediate exchange rate regimes, in favour of extreme solutions. Several countries have recently adopted a currency board or even abandoned their own currency (for instance, the Ecuadorian sucre). At the other extreme, some countries have officially adopted freely floating exchange rate regimes. However, econometric analysis indicates that many of the latter continue to peg their currencies to a major international currency, such as the dollar. The advantage of such pegging is that it stabilises intra-regional flows, without necessitating monetary coordination. It nevertheless means that these countries have to face exchange rate instability between major currencies. One means of solving this dilemma in choosing between these two forms of instability would be to create regional monetary unions. Were such a policy to be pursued, in South America or in Asia, then it would affect the exchange rate regimes of the countries concerned forthwith. It would also help stabilise the international monetary system as a whole.

## The New Doctrine

The exchange rate crises experienced by the European economies in 1992-1993, and the emerging economies in 1997-1998 all seem to rule out intermediate exchange rate regimes, in which the authorities adopt a parity (or a target range) without setting up institutional arrangements to guarantee such commitments. Given capital mobility, defending a parity in the face of speculative attacks has shown itself to be both expensive and futile. Hence, leading personalities like Barry Eichengreen, Rudi Dornbusch or Larry Summers<sup>1</sup> have put forward the idea that only two, extreme exchange rate regimes - the so-called "corner solutions" - are viable, if capital mobility is to be preserved. They are<sup>2</sup>:

• pure floating, under which the authorities cease to intervene with respect to parity;

• a fixed parity, which would be guaranteed by institutional measures. For emerging countries, this would take the form of a currency board, in which all money issued by the central bank is backed by foreign exchange reserves. Ultimately, the country could give up its money and substitute it for an international currency (the dollar, in the case of dollarisation). A country choosing a pure float would have to expect strong currency fluctuations, with a potentially negative impact on the allocation of productive resources. In contrast, were it to choose a fixed parity, it risks not being able to absorb shocks to output and activity, in the short term, and over the longer term see its competitiveness deteriorate if the inflation differential is not cancelled out with the peg-country. 1

The choice between these two extreme regimes thus depends on the usefulness of preserving an independent monetary policy. Schematically speaking, for a small, highly-open country, exchange rate fluctuations are passed on strongly through to national prices, and monetary policy has little influence on competitiveness, and so is little effective in terms of stabilising activity. Such a country will thus be inclined to give up its monetary autonomy and would prefer a rigidly-fixed, nominal exchange rate. In comparison, a large country of limited openness may prefer to maintain its monetary instrument to promote domestic stability. A typical example of this behaviour was provided by the United States in the early 1980s (benign neglect).

See, for example, B. Eichengreen, *Towards a New International Financial Architecture*, Institute for International Economics, Washington DC, 1999.
This involves a simple application of the Mundell's famous Triangle, according to which countries cannot reconcile free capital movement, a fixed exchange rate and an independent monetary policy.

This would explain why the emerging countries which have recently decided to let their currencies float are generally large (Brazil, Chile, South Korea, and Poland), whereas those countries that have set up currency boards or given up their currencies have small economies (Bosnia-Herzegovina, Bulgaria, Estonia, Kosovo, Lithuania, East Timor)<sup>3</sup>. Are these examples significant? Are so-called intermediate regimes effectively giving way to "corner solutions"?

### Reality Revealed

The exchange rate regimes as publicised by IMF members have shown a very marked trend towards corner-solutions over the last ten years: the share of countries with a currency board or having abandoned their monetary sovereignty (excluding the euro zone) was small in 1988 (2.1%), but rose to 10.7% in 1999. Similarly, the share of floating currencies rose from 12.7% to 32.7% (Table 1).

#### Table 1 - Official Exchange Rate Regimes of IMF Members

in % for	31 Dec. 1988 134 currencies	30 Sept. 1999 159 currencies
Currency board and dollarisation	2.1	10.7
of which on the dollar	0.7	6.3
Intermediate regimes	85.2	56.6
- fixed rate on 1 currency	27.6	12.6
of which on the dollar	24.6	8.2
- fixed rate on basket	29.2	10.7
- limited flexibility and managed		
floating	28.4	33.3
Free floating	12.7	32.7

Sources: IMF, International Financial Statistics, and Annual Report on Exchange Arrangements and Exchange Restrictions (1984 and 1999).

Note: the euro (in 1999), the CFA and the Caribbean are each counted as a single currency.

That said, an econometric study of *de facto* pegging behaviour shows that only a very small proportion of countries (less than 4%) have actually an effectively floating currency<sup>4</sup> (Table 2). In other words, the facts give lie to the supposed benefit which emerging countries are to obtain from pure floating. Nearly half of all IMF member countries (apart from the United States, Japan and the euro zone) have a currency which is *de facto* pegged to the dollar, though only 15% actually publicise such a peg. Curiously, this proportion does not seem to have varied since the crises in 1997-1998. In particular, both Brazil and South Korea have retained currency stability against the dollar, even though their currencies

Table 2 - De Facto Exchange Rate Regimes

As % of 107 currencies	April 95 - June 97 (before Asian Crisis)	October 98 - December 99 (after Asian Crisis)
Peg on		
the US \$	50.6	49.5
the Euro	10.3	10.3
Free floating	4.7	3.7

Source: A. Bénassy-Quéré and B. Coeuré, op.cit.

are officially floating freely. To be sure, this observed exchange rate stability against the dollar can sometimes be explained by links with the American economy, which are particularly strong. This is certainly the case of Mexico. But it is hard to believe that half of the countries of the world are so integrated with the American economy that their exchange rates with the dollar will be stable naturally.

In practice, the international monetary system does not, therefore, appear to be moving towards the situation described by supporters of "corner-solutions". Few countries are willing to let the markets fix the value of their currencies, either because they fear excessively strong fluctuations in narrow markets, or because they esteem that the exchange rate is still a useful instrument of economic policy. This leaves open the question as to why so many currencies are pegged to the dollar.

#### Pegging to the Dollar Versus Regionalism

An essential reason why countries pursue strategies of pegging their currencies to the dollar stems from the absence of monetary coordination in emerging zones. Intra-regional trade is very important in East Asia and South America: 29% of Thailand's exports go to another Asian country other than Japan; 29% of Argentine exports flow to other Latin American countries. Uniform pegging strategies allow for intra-regional exchange rates to be stabilised, without formal consultation. The euro or the yen could fulfil this function just as well, but the countries in question are used to using the dollar.

However, pegging to a dollar-yen-euro basket of currencies is more appropriate when foreign trade is relatively well diversified geographically, as is the case of East Asia and South America<sup>5</sup>. Indeed, instability between the major currencies is a recurring problem for third countries. The appreciation of the dollar against the yen between 1995 and 1997, for example, has been

<sup>3.</sup> There are exceptions to this, the most notably being Argentina which has retained its currency board, even though its GDP and openness to trade (about 10%) characterise it more as a large country.

<sup>4.</sup> A. Bénassy-Quéré and B. Coeuré, "Big and small currencies: the regional connection", CEPII Working Paper, n° 2000-09, June 2000. See also "L'avenir des petites monnaies: solutions régionales contre solutions en coin", *Revue d'Economie Politique*, 110(3), May-June 2000.

<sup>5.</sup> Other factors are also likely to determine the choice of pegging to a currency or a basket, in particular the structure of foreign direct investments, foreign debt and money.

cited as one of the sources of the Asian crisis, as those economies whose currency was linked to the dollar were unable to bear the ensuing loss of competitiveness.

Regional monetary unions are one way of reconciling the necessity for a degree of flexibility with the need for a stable monetary environment (in the face of fluctuations against key currencies). They provide both irrevocably fixed exchange rates for highly-integrated partner countries with flexibility vis-à-vis the rest of the world. Admittedly, it took the Europeans nearly thirty years to construct a monetary union, from the first project (the Werner Report) until the arrival of the euro, 1st January 1999, and this despite ever-deepening economic and financial integration, strong political support and cultural proximity grounded in history. Yet, this does not mean that monetary unions are an unrealistic prospect for other regions in the world, at least in the long term. De facto monetary cooperation appears to be emerging in Asia, even though its concrete implications must be looked at cautiously. In May 2000, the annual meeting of the Asian Development Bank led to the "Chiang Mai Initiative". It consists of extending the swap<sup>6</sup> agreement between the five central banks of the ASEAN countries both quantitatively (the amounts involved) and geographically (to China, South Korea, Japan and to the remaining five members of ASEAN)7.

Nevertheless, the sharing of monetary sovereignty requires great, reciprocal trust among partners, especially since currencies are no longer linked to precious metals. Such trust is founded on the characteristics of existing institutions (for example, central bank independence) and their performance measured in terms of price stability and prudential surveillance. It may be facilitated by cooperation in other areas - the diffusion of harmonised statistics, macroeconomic surveillance combined with peer-group pressure, the exchange of information, especially relating to finance. All these elements take a long time to put into place and to bear fruit. However, a clear commitment by groups of countries to adopt such an approach, indicating to markets that monetary union is the long term objective, may modify the actual choices of an exchange rate regime in the short term, for two reasons:

• First, the "traditional" corner solutions (a floating rate or a currency board) do not facilitate moves towards a "regional" corner (monetary union). On the one hand, floating encourages non-cooperative strategies when shocks affect the various countries in a region in the same way. On the other hand, it is hard to reverse the creation of a currency board, and *a fortiori* dollarisation.

• Second, the viability of an intermediate regime may be reinforced by the prospects of long term monetary union, provided that in the mean time the regime is defined in an appropriate manner and managed on a regional basis at the outset. It is possible to envisage, for example, a smooth peg on a dollar-euro-yen basket. Even if the weight given to each key-currency in the common basket differs from what each country would chose independently, such a difference is minor<sup>8</sup>. The main points are that the major currencies are included in the basket, that the basket is the same for all countries in the region (intra-regional exchange rates are therefore automatically stabilised), and that concerted realignments are possible in the wake of shocks.

For countries which are strongly integrated into one of the key-zones in the international monetary system (for example, Mexico, Canada, Greece, Switzerland, the Central and East European Countries as well as countries south of the Mediterranean), the choice of an exchange rate regime would appear to be easier in the long term, as there is no need for preliminary coordination. This is true whether the country seeks to enter an existing monetary union (as for European countries) or to stabilise its exchange rate with respect to a dominant zone<sup>9</sup>.

#### The Architecture of Exchange Rate Regimes

I he fluctuations of the major currencies are clearly a source of disruption for countries linked to any one of them. At the same time, the monetary strategies of third countries are not without consequences for the stability among the major currencies. In an extreme situation, say, if the only floating exchange rate were that of the euro/dollar parity (all the other currencies being linked to one of the two) then this rate would have to fluctuate more to help external disequilibria adjust<sup>10</sup>. In contrast, truly floating exchange rates in third countries (possibly grouped into regional monetary unions) would stabilise the key-currencies. This phenomenon is shown in the Box. Given Mundell's triangle, the debate over the international financial architecture, which allows for an adequate level of capital mobility and provides the means

<sup>6.</sup> A central bank whose currency is under pressure may temporarily exchange its currency for reserves belonging to the other central banks participating in the agreement, in order to intervene in its own forex market.

<sup>7.</sup> See The Financial Times, 8 May 2000, and Nikkei Weekly, 15 May 2000. The exact amounts, the implementation conditions and the measures for mutual "surveillance" of the economic and financial performance remain to be defined.

<sup>8.</sup> For nine East Asian countries, Williamson has shown that a common basket has practically the same stabilising influence, as far as effective competitiveness is concerned, as a different basket for each currency would have. See J. Williamson, "The case for a common basket peg for East Asian currencies", in *Exchange Rate Policies in Asian Emerging Countries*, edited by S. Collignon, J. Pisani-Ferry, and Y.C. Park, Routledge, London, 1999.

<sup>9.</sup> For an examination of the exchange rate regime of the Central and East European Countries prior to their entry into European monetary union see P. Masson, "Monetary and exchange-rate policy of transition economies of Central and Eastern Europe after the launch of EMU", *IMF Working Paper*, July 1999.

<sup>10.</sup> This phenomenon is called "bloc floating" by S. Collignon, "Bloc floating and exchange rate volatility: the causes and consequences of currency blocs", in Exchange Rate Policies in Asian Emerging Countries, op cit. See also La Lettre du CEPII, n° 133, March 1995.

BOX - THE IMPACT OF PEGGING BEHAVIOUR BY "MINOR" CURRENCIES ON THE EXCHANGE RATES BETWEEN "MAJOR" CURRENCIES

Currency depreciation is less effective in re-establishing external balance if it only modifies the competitiveness of goods exported to certain destinations.

This phenomenon is illustrated by the graph below: the reaction of the euro/dollar exchange rate to a shock to the trade balance with one zone or another is compared for various assumptions made about the pegging behaviour of the "minor" currencies\*.

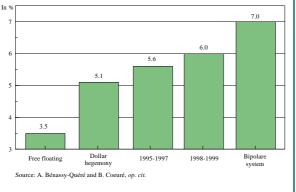
•With a generalised system of floating, i.e. with no currency pegged to the euro or the dollar, the reaction of the exchange rate to a shock is weak.

•With a hegemonic system, in which all currencies except the euro are pegged to the dollar, the reaction of the exchange rate to the same shock will be greater than 50%

• In a bipolar system which assumes that the United States and the euro-zone carry out half their trade with countries belonging to currency zone, the reaction of the exchange rate is the strongest.

• Under the present system, with 70% of American exports and 20% of euro-zone exports insensitive to euro/dollar exchange rate fluctuations, the reaction of the theoretical exchange rate falls between the hegemonic and bipolar systems. The difference between the two periods observed would appear to indicate a slow movement towards a bipolar system.

The reaction of the fundamental euro/dollar exchange rate equilibrium to a 1% shock on the bilateral current account between the euro-zone and the US.



\* The figures are to be compared with each other and not to be taken as absolutes.

for dealing with crises, must include discussion of exchange rate regimes. But exchange rate regimes are themselves the object of such an architecture in as far as a trade-off exists between exchange rate volatility across the "major currencies" and volatility across the "minor" and "major currencies". The former type of volatility would a priori appear to be less costly than the latter, given the existence of highly-sophisticated capital markets in derivatives, which permit the hedging of forex risks. Nevertheless, the destabilisation of the major industrialised economies due to excessive exchange rate fluctuations would have negative consequences for third countries.

Within this context, one way of achieving a balanced architecture would be to reserve currency pegs on a "major" currency for the most-integrated countries in a zone (Mexico and Central America on the dollar, Central and Eastern Europe along with the Maghreb on the euro). This would be accompanied by encouragement for the creation of regional currency unions in Asia or South America. Smooth pegging to a basket of currencies would then only be a means of moving towards a true, regional corner solution.

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