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Regional Monetary Arrangements – Are Currency Unions the Way Forward?

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1. Introduction¹

After the international financial crises of recent years the debate on the appropriate exchange rate regime has again intensified. Pegged exchange rates were often seen as a major cause of the respective crisis. Since then it has been popular to argue that a hollowing out of the middle of the exchange rate regime choice has occurred. This essentially means that only hard pegs, like currency boards, or independent floats are viable regimes among the continuum of exchange rate regimes. All the middle regimes such as soft pegs or managed floats are argued to be either unsustainable and/or too crisis-prone because they lack credibility and are vulnerable to speculative attacks.

While the Optimal Currency Area (OCA) literature still offers a valid framework for analyzing the choice of an exchange rate regime, in the recent literature on exchange rate regime choice, the concept of *fear of floating* (Calvo and Reinhart, 2002) has become popular. Fear of floating rests on the assumption that highly volatile exchange rates limit gains from trade, increase risk premia on interest rates and lower welfare. While *de jure* classified as floating exchange rates, these *de facto* exchange rate pegs involve high risks as evidenced by the financial crises in emerging market countries (EMCs) over the past decade.

This paper will briefly review the sequencing of economic integration, highlight some aspects of the optimal currency area literature, look at the steps taken in the European Union as well as the new EU member states and will after looking at the current regional integration processes in Latin America and Asia, draw some

¹ Helpful comments by Eduard Hochreiter (OeNB) and Franz Nauschnigg (OeNB) and an anonymous referee are gratefully acknowledged. The usual caveats apply.

conclusion for other regions in the world. The European experience offers some valuable lessons, despite the differing macroeconomic challenges that European countries faced in the 1980s compared to the challenges Latin America or Asia are confronted with today. These principally suggest that it will take time before these regions will meet the criteria necessary to successfully start a currency union and proposes that as an initial step inflation targeting possibly accompanied by some fiscal rule may be a suitable and viable foundation for fostering macroeconomic stability. This stability coupled with stronger institutions and a certain policy convergence could help in the long-run towards achieving the aim of a currency union.

2. Steps of Integration

Monetary arrangements have a lot to do with the degree of economic integration. But there are no straightforward ‘laws’ about the degree and depth of regional (economic) integration in the global political economy. Bela Balassa (1962) set out a logical roadmap which places a regional monetary arrangement in the context of regional economic integration. First, countries decide to create a free trade area. This could then lead to a common external tariff, thereby producing a *de facto* customs union. Efficiencies would be further generated by the formation of a genuine internal market amongst member countries. The gains of the internal market could be best achieved through further *deepening* of integration. Therefore, monetary integration – the use of a common currency – would be the next stage. This in turn would generate incentives for further political integration.

A second issue follows from the obvious conclusion of Balassa’s work: at what point does the management of economic integration require political integration? At the very least, some pooling of economic sovereignty seems required, and the development of some sort of region-level regulatory authority would seem rational in the circumstances. This does not imply that a new political entity has to be formed. And whether all forms of integration such as customs unions, common markets and monetary unions must have similar levels of institutionalization remains an open question as well.

The Balassa sequencing however, does not set out a roadmap which exchange rate regime to adopt to accompany regional integration efforts. European countries, before joining the Economic and Monetary Union (EMU) mostly chose to explicitly or implicitly use the DM as an exchange rate anchor. Today, the new EU member states follow different regimes ranging from currency boards such as in Estonia to free float such as in Poland. Provided macroeconomic policy consistency, any exchange rate regime is therefore conceivable with regional integration short of a monetary union.

3. Choosing an Exchange Rate Regime

After the Mexican (1994), the Asian (1997–98), the Russian (1998), the Brazilian (1998-99), the Turkish (2000) and the Argentine (2001) financial crises, the debate on the appropriate exchange rate regime has intensified. This is owing to the fact that pegged exchange rates were very often the root and/or cause of the respective crisis. Since then it has been popular to argue that a hollowing out of the middle of the exchange rate regime spectrum has occurred. This essentially means that only hard pegs and independent floats are viable regimes among the continuum of exchange rate regimes. All the middle regimes such as soft pegs or managed floats are argued to be either unsustainable and/or too crisis-prone because they lack credibility and are vulnerable to speculative attacks.

However, the hollowing-out followers soon went back to the impossible trinity. Fischer (2001) or Mussa et al. (2000) recognize that managed floating and other middle regimes are viable for many countries with certain conditions of capital mobility and economic development. Interior solutions then turn out to be the best for many (small) countries with low capital mobility, underdeveloped capital and foreign exchange markets and diversified trade structures.

The choice of an exchange rate regime depends on several factors. As analytical tools two theories have been advanced that may guide policy-makers and economists alike.

3.1 Optimal Currency Criteria

The classical theory of Optimum Currency Areas (OCA) developed by Mundell, McKinnon and Kenen, defines an optimum currency area as a geographical region in which member countries should use absolutely fixed exchange rates or have a common currency. Mundell and his followers stipulated several criteria to assess whether a country should belong to an optimal currency area. These criteria include the symmetry of external shocks, the degree of labour mobility, the degree of openness; and the extent of economic diversification. The more recent literature uses the same criteria to assess whether a country should fix or float its currency against currencies of countries in a specific optimal currency area. For example, if a country is relatively open in terms of trade to another or a currency bloc, but has no significant labour mobility, its economy is not well diversified, and it faces asymmetric shocks, a flexible exchange rate is likely to be a better choice for that country.

The intuition behind the optimum currency area criteria is that the real adjustment within an economy that has been hit by external shocks, usually takes time if nominal rigidities exist. The absence of labor mobility across borders rules out another adjustment mechanism. Thus, a flexible exchange rate would be the only automatic shock absorber that the country may rely on. Although, Mundell did

not discuss directly the other benefits of using fixed exchange rates such as minimizing transaction costs in trade (see below), he implied that if the cost of adjustment for a country is not large, i.e. if the OCA criteria are met to some extent, it is better to choose a fixed exchange rate in order to get the benefit from the stability of the currency.

A more recent literature discusses another benefit of flexible exchange rates relying on the doctrine of the *impossible trinity*, which simply means the impossibility of having a fixed exchange rate, capital mobility and monetary independence at the same time (Frankel, 1999). Under this doctrine, having a flexible exchange rate under the condition of high international capital mobility allows policy makers to conduct an independent monetary policy for domestic purposes. But if domestic authorities cannot make good use of the independence of monetary policies, it may be better to surrender this independence in order to import stability from other countries. Furthermore, other factors such as central bank independence, administrative capacity, depth and liquidity of foreign exchange markets can also influence the trade-off between monetary independence and exchange rate stability.

Theoretical models that try to formalize these ideas (e.g. Bayoumi, 1994, Calvo 1999) generally confirm the intuition from the OCA and the impossible trinity literature. However, very often they have to use simplified assumptions and thus the results may be of limited usefulness when policy makers have to choose an exchange rate regime. And as Cohen (2000) put it “for every one of the characteristics conventionally stressed in OCA theory, there are contradictory historical examples – cases that conform to the expectations suggested by OCA theory and others that do not. None seems sufficient to explain observed outcomes. This is not to suggest that economic factors are therefore unimportant. Clearly they do matter insofar as they tend, through their impact on economic welfare, either to ease or exacerbate the challenge of sustaining a common currency. But equally clearly, more has gone on in each case than can be accounted for by such variables alone.”

Exogeneity or endogeneity of OCA criteria has also been in debate. Frankel and Rose (1998) argued that some criteria such as the synchronization of business cycles or trade relationships are endogenous. If this is true, an exchange rate peg and a common monetary policy can be self-validating such that countries pegging or fixing to another currency or joining a currency union will move closer to meet the OCA criteria by increasing intra-industry trade and correlating business cycles more closely.

Nevertheless, OCA criteria do matter if a country decides to tie its currency to an anchor, which may turn out to be an unsuitable one. In order to combat a history of hyperinflation and to constrain profligate economic policies, Argentina chose a currency board by tying its currency to the U.S. Dollar. However, the U.S. Dollar was the non-dominant anchor and without supporting fiscal policies by Argentina

coupled with weak institutions, this decision proved disastrous given the weak trade links and business cycles which were out of step with the anchor. This then lead to increased debt, lower investment and lower growth. Endogeneity, therefore, should not be taken for granted to work its magic if the political willingness to subordinate domestic policy objectives does not exist to maintain the currency peg and if the institutions are not in place to support such an exchange rate regime.

3.2 Fear of Floating

The second concept, which has become popular in the recent literature on exchange rate regime choice, has been coined *fear of floating* (Calvo and Reinhart, 2002). There are two main explanations for the fear of floating hypothesis. First, exchange rate variability is one of the most prominent features of open economy macroeconomics and the tendency for nominal exchange rates to move so volatile and unpredictably has been blamed for limiting gains from trade and for lowering welfare. A desire to moderate this volatility has been a motivation behind the managed or fixed exchange rate regimes of many countries. Whether or not a particular exchange rate regime has a significant impact on trade is still contested; empirical evidence points both ways if an effect is seen at all. Nevertheless, there is a widespread belief that exchange rate stability would significantly promote trade in particular for members of a currency union (Rose, 2000). Therefore, it is argued that the use of a fixed exchange rate helps emerging market countries to promote growth through high investment and saving.

The second explanation is euro-/dollarization of liabilities. Since most developing countries cannot borrow overseas in their own currencies², most of their foreign liabilities are denominated in one of the major foreign currencies. Therefore, a sharp depreciation of their exchange rates would put severe pressure on the balance sheet of the financial and the corporate sector (Williamson 2000). Pegging the exchange rate to an anchor currency thus serves as an informal forward hedge, because of the huge flow of short-term dollar payments coming due, it is too risky to let the exchange rate move randomly.

For most EMCs the IMF advocates more flexible exchange rate regimes or at least advocates to choose an exit strategy if they have adopted an intermediate regime. Recent literature (Rogoff et al., 2003) finds that the advantages of exchange rate flexibility increases as a country becomes more integrated into global capital markets and develops a sound financial system. Rogoff et al. find that free floats have, on average, registered faster growth than other regimes in advanced economies without incurring higher inflation. Developing countries with limited access to private external capital, pegs and other limited-flexibility arrangements have been associated with lower inflation, without an apparent cost

² This has been coined the *original sin problem*.

in terms of lower growth or higher growth volatility. However, in EMCs with higher exposure to international capital flows, the more rigid regimes have had a higher incidence of crises.

The usefulness of flexible exchange rates as shock absorbers depends largely on the types of shocks hitting the economy and the exchange rate. Flexible exchange rates can generate rapid adjustment in international relative prices even when domestic prices adjust slowly. This makes them potentially useful absorbers of real shocks, which require an adjustment in relative prices in order to *switch expenditure* and cause output losses or overheating in the absence of price adjustment. A sudden drop in demand would, under flexible exchange rates, cause depreciation which crowds in extra demand.

On the other hand, the exchange rate adjustment in response to monetary and financial shocks leads to undesired changes in relative prices. In the case of a negative financial shock that puts upward pressures on interest rates, the exchange rate would appreciate, amplifying rather than dampening the negative impact on output. Under fixed exchange rates, in contrast, such a shock would be neutralized by an increase in liquidity stemming from a balance of payments surplus. Such asymmetric shocks would not occur in a currency union (Buiter and Grafe, 2002). Thus, the usefulness of flexible exchange rates declines as the relative importance of asymmetric monetary/financial shocks increases. If exchange rate changes do not generate an adjustment in international relative prices because pass-through to import prices is very small, the exchange rate is of little use as a shock absorber even in the case of asymmetric real shocks, though the empirical evidence remains supportive of the ability of the exchange rate to affect relative prices (Obstfeld, 2002).

If the two corner hypothesis is taken for granted, *in fine* many countries should choose to permanently lock in their exchange rates through currency boards or dollarization/euroization. Given the political unpalatability of dollarization/euroization along with significant policy constrictions which also afflicts currency boards, a currency union seems to be left as a practicable alternative. As will be further explored below, monetary unions are a serious long-term proposition for many regions but appear to be unfeasible in the short- to medium-run largely owing to political problems. Therefore, more flexible or intermediate regimes with less emphasis on the exchange rate as a policy target can be stable provided that the exchange rate and domestic economic macroeconomic policies are determined in a mutually consistent manner.

4. European Experience

The Economic and Monetary Union (EMU) was a logical continuation of the Balassa sequencing: political sovereignty and economic interdependence often are in conflict. This conflict was resolved by creating a new supranational authority in

the monetary and exchange rate domain. Problems and conflicts arise among states that, on the one hand, retain control of their national currencies and are able to pursue different monetary and exchange-rate policies and, on the other, have economies that are not only highly interdependent but are being reconstituted into a single internal market. Since economic interdependence was the objective, one remedy when policies conflict and either impose costs on others or impede the development and maintenance of the single market (or both), is to increase the congruence between the scope of political authority and the domain of economic activity. For states that are embedded in a densely institutionalized supranational organization, that in all likelihood means extending the domain of responsibility and institutional capacity of that organization.

This approach has remained largely unchanged since it was first implemented in the late 1960s. It is predicated on the assumptions that attainment of an internal market among the member-states requires stability among the currencies of the member-states, that currency instability can be eliminated by irrevocably fixing the exchange rates among the member-states' currencies, and that maintaining irrevocably fixed exchange rates permanently requires the creation of a common currency and an institution at the supranational level charged with conducting monetary policy.

The move towards monetary union in Europe involved several steps and was very often driven by political considerations. The Economic Community of Six agreed to eliminate all internal tariffs and to establish the first phase of common agricultural prices by July 1, 1968 (the Werner Plan). This reduced the ability of governments to affect, to their advantage, the prices of foreign-produced goods in domestic markets and thus would have made relative prices, and trade, dependent exclusively on costs, profits and exchange rates. Common prices of commodities would also require stable exchange rates since countries were highly sensitive to, and concerned about dampening fluctuations over time in the value of their currencies.

The Single European Act explicitly put EMU back on the agenda of the Community. An important decision was taken in June 1988 to remove all exchange controls that impeded the movement of capital by mid-1990. It created the possibility that capital could, in response to divergent economic performances, move across borders without restrictions. The result of that free movement was that central banks lost much of their ability to control exchange rates, possibly leading to greater variability of currencies, amplifying and exacerbating the volatility of exchange rates. The expected increased volatility of exchange rates was a serious threat to the internal market. The creation of Monetary Union and the European Central Bank enabled members to resolve these tensions and step down further on the road of integration.

The agreement to commence with Economic and Monetary Union can be explained politically by the commitment of member states to the ongoing process

of European integration driven by France and Germany; by the recognition that the process of integration had acquired a life and a history of its own covering over 50 years and that individual governments were bound by the commitments of their predecessors; that none of the Member States wished to be left behind as the EU embarked on perhaps one of the most consequential institutional innovations in its history; and that even though the continued commitment to EMU and the willingness to pursue policies to achieve the criteria of EMU that were at times costly in the end would serve their national interest. This then makes the European experience distinct from other regional integration processes observed today.

European Economic and Monetary Union has proved to be a credible and successful remedy to an enduring European problem – namely, how to create a single internal market for capital, goods and services among member-states with highly interdependent economies in a world with multiple currencies, volatile capital flows, and fragile exchange-rate regimes.

4.1 Costs, Benefits and Long-Run Sustainability

The European Monetary System in 1979 was largely founded in response to the high and rising inflation in the seventies and the demise of the Bretton Woods System of fixed exchange rates. The functioning of the Exchange Rate Mechanism (ERM) in an environment of stability-oriented policies, contributed to the convergence of inflation in the participating countries to that of Germany, the low-inflation anchor. In addition the commitment to maintaining fixed exchange rates with the DM reinforced the benefit of lower mean inflation and helped to speed up convergence once supported by consistent policies.

The Maastricht Treaty of 1991 specified the conditions, EU Member States had to fulfill in order to be eligible for joining EMU. The requirements included the well-known macroeconomic convergence criteria and institutional requirements such as central bank independence.

These preconditions acted as a screening and commitment device such that governments showed their willingness to follow economic policies that did not impose costs on other members. Moreover, high nominal convergence was desirable to avoid large real exchange rate movements after the peg. The experience of the ERM I showed that the path towards a common currency is fraught with difficulties. ERM I painfully made clear that the internal adaptability of some economies participating was insufficient or not credible for a smooth working of the peg. The periodic crises and the recurring need for realignments within the ERM demonstrate that transition arrangements towards a currency union are only sustainable when economic policies are largely subordinated to the maintenance of the agreed exchange rate bands. The fact that the EMU countries were able to attain that goal highlights their strong political commitment to it.

Countries considering participation in a currency union expect that such a move will entail efficiency gains owing to an elimination of transaction costs associated with converting different national currencies as well as the elimination of risk associated with the uncertainty of the price-development of exchange rates³. A reduction in transaction costs also increases price transparency, eliminates price discrimination which could increase competition. Since the study of Engel and Rogers (1995) on the border effect⁴, borders have been found to be very powerful in segmenting markets and for introducing large price differentials in addition to different national currencies. While the euro has not eliminated the border effect per se, it may prompt further integration in other areas which will counteract the border effect.

Uncertainty about the future price of a currency translates into uncertainty about future prices of goods and services which could distort the allocation of resources. A decline in the uncertainty of the real exchange rate can reduce adjustment costs and the price system can send better signals. In addition, price uncertainty can lead to moral hazard and adverse selection. The former because an increase in the interest rate owing to price uncertainty changes the incentives for borrowers; the latter because higher interest rates makes low-risk investment too expensive which in turn leads to an increase in the selection of more risky projects.

An elimination of exchange rate uncertainty may also increase economic growth. One channel is the real interest, which can cause an increase in the accumulation of capital and subsequently of the (temporary) growth rate⁵. Economic growth is further stimulated by the trade channel. Frankel and Rose (2000) found that a one percent increase in trade between countries of a currency union leads to an increase of per capita income of 1/3 of a percent. While their results have been widely contested and are at odds with similar literature that does not find an impact of exchange rate variability on trade⁶, other evidence points to growth effect for countries belonging to a currency union. This, though could also be due to the standard endogeneity problem of currency unions. As Bacchante and

³ For the euro area the European Commission estimated in 1990 that the gains of eliminating transaction costs could amount to EUR 13 to 20 billion per annum. Since these transaction costs are a deadweight loss, an improvement in welfare follows. These gains have increased with the elimination of fees for transfers within the euro area which was caused by the setting up of the TARGET system.

⁴ Engel and Rogers (1995) found that crossing the Canadian-US border was equivalent to travelling 2,500 miles within the same country such that price differences between neighbouring Detroit (USA) and Windsor (Canada) are as high as the ones between New York and Los Angeles.

⁵ In a dynamic setting, the economy can even attain a permanently higher growth path.

⁶ See IMF (2003) for new evidence that underscores the traditional findings. For criticism of the Rose methodology see for example Tenreyro (2001).

van Wincoop recently stated, “(...) the substantial empirical literature examining the link between exchange-rate uncertainty and trade has not found a consistent relationship” (Frankel et al., 2000, p. 1093).

In one of the more recent studies on possible trade creation resulting from EMU, Farquee (2004) finds that EMU has had a positive impact on intra-area trade. EMU increased trade among members by 10% since the advent of the euro. He also points to the fact that dynamic effects have been rising over time and are still increasing. But these gains are not evenly distributed: countries that have engaged predominantly in intra-industry trade within the EU have seen their area trade flows grow faster. Gains in trade should also not be deemed as necessarily guaranteed: structural policies such as ease of sectoral reallocation and market entry help realize full potential of trade gains from monetary union⁷.

Fiscal rules⁸ are based on political economy considerations. Public expenditure often is financed by debt issuance owing to inter-temporal redistribution considerations, thereby shifting the fiscal burden from today to the future. Fiscal rules are then an attempt to reign in the deficit bias of governments. They can act as a commitment device to prevent short-sighted political considerations leading to excessive spending and deficits and to limit discretionary fiscal policy. In a monetary union, undisciplined fiscal policies may impede a stability-oriented single monetary policy and would lead to negative spillovers.

The fiscal deficit and debt criteria which also form the cornerstone of the Stability and Growth Pact (SGP) were designed to ensure that countries were willing to bring their public finances onto a sustainable path. The aim was to avoid negative spillovers from the fiscal imbalances of individual member countries to other members through pressures for an undue relaxation of monetary policy or even a bailout of a government.

Fiscal rules are still an important issue for the long-run sustainability of a monetary union (Christl, 2003, Hochreiter et al., 2003). Fiscal rules also matter because monetary union membership can give rise to moral hazard and free-rider problems: Moral hazard because a member country is expected to be bailed out by others when faced with unsustainable debt levels; free-riding because fiscal laxity in one country can drive up the union-wide interest rate and can induce others to relax fiscal rules.

⁷ An additional benefit of a common currency is wrought by its increased use as an international currency. See for example Portes and Rey (1998).

⁸ How potential fiscal rules should be designed is a contentious issue. Trade-offs to be considered encompass transparency and simplicity against flexibility. If a fiscal rule is very flexible it probably is less simple and transparent and loses credibility. However, simple and transparent fiscal rules tend to be too mechanistic to flexibly accommodate business cycles.

Excessive deficits complicate monetary policy due to demand effects on prices and entail significant medium and long-run costs such as higher real interest rates and tax burdens. Besides, political pressure could be exerted upon the central bank to monetize government liabilities if the monetary authorities of a currency union are not sufficiently independent.

Since the market does not believe in the no-bail-out clause and, therefore, interest rate spreads are only a minor punishment for excessive deficits, fiscal rules are a necessary condition for a credible and successful monetary union. Therefore, rules such as the SGP are necessary to guard the culture of price stability and shift the focus of macroeconomic policies from domestic to currency-union-wide considerations. That's why ongoing discussions on a weakening of the SGP are not at all helpful in this respect.

4.2 Lessons so Far

With the successful cash changeover, the euro has become a familiar notion. While skepticism proliferated before its introduction, the experience so far suggests that the euro can be judged to be a success.

Possible lessons for others that can be learned from the European experience include amongst other things:

Monetary union is contingent upon the presence of monetary anchor currency with low inflation, strong economic integration and also on a strong political commitment focused on long-term gains.

But political union is not at all a requirement *ex ante*.

Outside factors such as systemic shocks and globalization can speed up the pooling of sovereignty in the economic domain.

Convergence criteria are necessary and act as a screening and commitment device to guide expectations.

To remain fully credible, a currency union requires policy coordination especially in the fiscal field coupled with an applicable enforcement mechanism as well as a forward-looking multilateral surveillance system.

5. Preconditions for Closer Monetary Integration in Other Regions?

5.1 Central and Eastern European Countries

After the end of communism, former socialist economies faced the difficulty of transiting from command to market economies. The early goal of EU accession framed the policies of Central and Eastern European Countries (CEEC) that have recently joined the EU and gave them a rationale for pursuing a substantial reform

and adjustment effort. The prospect of subsequently joining EMU provides a further anchor both for monetary policy but also for the ongoing structural and institutional reforms.

Geographic and cultural proximity to Western Europe and a swift liberalization of trade enabled CEECs to redress distortions inherited from central planning and reallocate trade flows away from other transition economies towards Western Europe⁹. A proper sequencing of macroeconomic stabilization and structural reforms in the financial sector enabled many countries to return to international capital markets and attracted foreign direct investment.

Probably the most important effect has been the institutional reform process set in motion by preparing for EMU. Institutional factors play a central role in determining a country's rate of economic growth¹⁰. Douglass North (1990) suggested that it is the incentive structure embedded in the institutional structure of countries that must be the key to solving the mystery of unequal and unpredictable economic growth. Indeed, institutional constraints that foster distortionary policies and worsen economic vulnerabilities account for a significant part of cross-country differences in economic growth and output volatility (see Acemoglu et al., 2003). Institutional inertia could be punctuated by reforms required for the EU accession.

Previous enlargement rounds seem to have fostered an (endogenous) catch-up process of the joining countries leading to a reduction in the per capita income gap, a decrease in inflation, fiscal deficits as well as an increase in foreign direct investment and trade¹¹. The prospect of joining the EU facilitated the adjustment of economic policies as well as the overhaul of institutions to meet requirements by the EU. But the prospect per se was not sufficient. Actual reform effort and implementation of policies were and are still required to bring about real as well as nominal convergence with existing EU members.

5.2 Latin America¹²

According to the Balassa-sequencing higher regional integration has two consequences: First, when regional integration leads from a free trade area to a single market, intra-regional exchange rate stability is of substantial importance to reap the benefits of such a move. Second, more exchange rate stability at the

⁹ Between 1993-95 the EU concluded bilateral Europe Agreements with the CEEC which established free trade areas covering most products. See also Jean-Jaques Hallaert (2003).

¹⁰ Dysfunctional institutions limit a country's productivity and potential growth because potential losers from change can effectively block institutional change given their vested interests.

¹¹ See also IMF (2003) for a detailed analysis of the process of economic convergence of CEECs.

¹² This section draws on Dorrucchi et al. (2003).

regional level can be expected, if at least the stability orientation of monetary policies of the countries involved converge.

The very high intra-regional exchange rate variability in Latin America has served as an impediment for the regional integration process¹³. The Brazilian and Argentinean crisis disrupted the integration process of Mercosur even further rather than spurring regional economic coordination and cooperation. No attempts were made to achieve nominal convergence given that nominal exchange rate variability exceeds the real one. This is also owing to the fact that a credible commitment to regional economic integration is so far has been missing.

Latin American countries follow two different, though not mutually exclusive approaches to regional integration: (a) intra-regional arrangements such as Mercosur; (b) inter-regional arrangements like the Free Trade Area of the Americas (FTAA). Inter-regional arrangements probably limit countries to the establishment of free trade areas especially if one dominant partner rejects deepening of integration efforts. Intra-regional arrangements with the European experience in mind may benefit from deeper regional integration as a result of economies of scale, competition effects and improved resource allocation, which in turn could lead to a liberalisation of factor movements, policy harmonisation and policy coordination. Nevertheless, both options are viable ones and may or may not lead to a regional monetary arrangement.

Institutionally, Latin America is split into several sub-regional arrangements whose interdependencies are increasing only slowly. Mercosur has not taken on the role of engine for a consolidation of regional arrangements. Also, the supra-national element within Latin American regional arrangements is far less developed than within the EU. However, this proved to be instrumental in moving the European integration process further.

While Brazil is at first inspection the dominant Latin American country, it does not provide the region yet with a monetary anchor such as Germany did for the EU until 1998. Most Latin American countries are only now in the process of building-up credible monetary policies geared to price stability after decades of economic mismanagement and hyperinflation as well as institutions for the implementation for time consistent and credible policies, which is a time-consuming process. The only countries which may be on the verge of achieving this seem to be Mexico or Chile. The latter is too small while the former is more involved in NAFTA.

Latin American countries follow nearly the entire spectrum of the exchange rate continuum, comprising managed and independent floating sometimes coupled with

¹³ The apparent increases in regional integration as witnessed by the rise in intra-regional trade is attributable to several factors such as the relative exchange rate stability between Argentina and Brazil during 1993 and 1998, IMF surveillance and programs that stressed *inter alia* an opening of economies and a relatively favourable world economic environment.

inflation targeting as well as dollarization. But none of the Latin American exchange rates has acquired an anchor role for neighbouring countries whereas European exchange rates before EMU were either floats or anchored with respect to the Deutsche mark although a plethora of domestic monetary anchors existed (growth of money supply, interest rates, exchange rate). In addition, Latin American countries are subject to the third currency and interest rate phenomenon with the fluctuations of the USD and U.S. interest rates still creating substantial problems for the region. The different exchange rate regimes employed in Latin America seem appropriate owing to the differences in income levels and (external) economic developments. A currency union therefore may not be appropriate for the time being as long as the third currency problem persists and economic conditions have not stabilized.

As a first step, the region may benefit from anchoring as a group to an outside currency such as the euro or US dollar. A basket including both the dollar and the euro may be beneficial since it is not clear which of the two main international currencies would provide the anchor for the region¹⁴. Alternatively, inflation targeting (see below) could create the conditions conducive to pursue first regional integration and second monetary integration in the medium to the long-term.

5.3 Asia

To a certain extent, the Asian financial crisis of 1997-98 acted similarly as an exogenous shock to promote Asian monetary cooperation as the demise of the Bretton Woods system of fixed exchange rates did for Europe. The main institutional arrangement became the Chiang Mai Initiative¹⁵ agreed upon by the ASEAN plus 3 which mainly acts as a form of self-insurance in case of another financial crisis. Subsequently, a more significant step was the decision by the Executive's Meeting of East Asia-Pacific Central Banks (EMEAP) to set up the Asian Bond Fund (ABF) in dollar-denominated instruments in 2003. The ABF primarily aims at developing a regional bond market. The significance of this is twofold: in Europe monetary cooperation and ultimately currency union was

¹⁴ South America trades with Europe to a large extent, and in many cases the business-cycle co-movements are as high with the euro area as with the United States.

¹⁵ The Chiang Mai Initiative is basically a bilateral swap arrangement (BSA) facility for short-term liquidity assistance in the form of swaps of USD with the domestic currencies of participating countries. Countries drawing more than 10 percent are required to accept an IMF program. The BSA however is complementary to IMF financial assistance otherwise a regional surveillance system would be needed. Thus, IMF surveillance continues to be the main agency for monitoring economic developments in the region and serves as the institutional framework for policy dialogue and coordinating members and impose structural and policy reform on countries drawing facilities.

supported and promoted by the respective European central banks. Second, the ABF creates an operational framework which should advance and focus monetary cooperation.

Yet, Asian regionalism has several characteristics that distinguish it from the EU. First, Asian regionalism is pluralistic. There is no single dominant organization that supplies continental regional integration in the manner of the EU. Membership of many of these organizations is often overlapping. This relates to the ambiguity in defining an economic region in Asia¹⁶ which is owing to a lack of similarity in levels of development and lack of real convergence: as a general rule, the benefits of monetary integration are greater, and the costs lower, for countries which have similar levels of income and economic development. Asia is geographically quite disparate and there are significant differences in basic economic indicators which are narrowing only slowly.

Goals of the various regional Asian organizations are so far more modest than in the EU. The Asia-Pacific Economic Cooperation (APEC) proposes to eliminate trade and investment barriers between its richer members by 2010 and by 2020 for its poorer members. It is no more than a possible free trade area. Originally, ASEAN was not conceived as an economic community. Domestic resistance to free trade and liberalisation have managed to keep them largely off the organisation's agenda such that ASEAN is not a model of economic regionalism.

And not only is Asian regionalism a fairly recent phenomenon it also appears that the political will is lacking given that the *natural* leadership role is contested: China, Japan and to a certain extent India are vying for a regional hegemon position. No country seems to act as the monetary anchor for the region¹⁷. In analogy to the EU experience, China and Japan probably have to go the same way of reconciliation that France and Germany have taken before any serious deepening of regionalism can be considered.

5.4 General Observations

Even though OCA criteria are met only to varying degrees in both regions, more regional integration should not be ruled out. But rather than looking at static OCA criteria, the political willingness supported by realistic objectives as well as

¹⁶ Japan can be placed in a group of mature developed countries. Some countries belong to a high growth Asian group other exhibit more moderate growth. Hong Kong and Singapore form a group of their own as does China which was markedly different from the rest of Asia.

¹⁷ Although many other Asian countries could be said to have informally formed a renimbi-zone with China as the anchor but in contrast to the European experience, the primary motivation for this is exchange rate stability and fear of loss of market share to China rather than attempts to integrate trade or have convergent prices or policies.

regional economic conditions are instrumental whether regional integration will proceed further.

Obstacles exist that impede further regional integration in Latin America and Asia. If an increase in regional trade is the objective, this could be achieved with the right Balassa-sequencing. Some of the intra-regional arrangements are limited in membership similar to the initial EU of 6. Those could form a cluster for deepening trade relations leading to increased cooperation and policy coordination. In particular, the limited membership in Mercosur could make negotiations and co-ordination potentially easier if favourable economic circumstances arise, as happened in the early 1990s and if real convergence proceeds. Of particular relevance will be the external environment: Negative external shocks leading to domestic macroeconomic instability have so far delayed regional integration in Latin America whereas they may have accelerated it in Asia though more in respect to regional monetary stability. Fear of an erosion of political sovereignty or domination by larger countries have hampered real integration efforts. Weak domestic institutions and policy inconsistency have failed to provide a credible basis for most integration efforts.

A regional surveillance mechanism and macro-economic co-operation would suit the need to strengthen nominal stability. Multilateral surveillance has especially helped former EU periphery countries to earn credibility, which transformed the ERM from an exchange rate arrangement into a convergence instrument. But already exchange rate co-operation could lower the magnitude of internal shocks produced by abrupt swings in the nominal exchange rate between the main Asian/Latin American currencies.

A monetary union may also play a role – especially for small open economies – in reducing the relative degree of trade openness, which may contribute to partly shielding the region from external shocks. Enhanced nominal stability and a lower relative degree of openness would help reducing the overall vulnerability. It could be easier to foster market-friendly reform in a regional framework than only within the global context. Finally, deeper integration could also be associated with political benefits such as stronger visibility and bargaining power in the international arena.

But also a non-Balassian approach to regional integration may be conceivable. The relative success of the EMU predecessors in stabilizing their bilateral exchange rates especially the nominal convergence achieved, suggests that exchange rate cooperation or soft exchange rate stabilization objectives, may set the stage for gradual integration. If business cycles are not too asymmetric, a common anchor could facilitate intra-regional exchange stability (Artis, 2002). Most Asian countries have chosen the U.S. Dollar or the renimbi as an explicit or implicit anchor. While this move requires little cooperation, this has already led to an increase in regional trade, thus reducing the relative degree of trade openness

and shielding the region from external shocks. More stable exchange rates and lower trade openness would also reduce overall vulnerability.

6. Stability-Oriented Macro-Policies as an Alternative?

For the reasons mentioned before, for many countries or regions in the world forming a currency union is not a realistic goal in the near future mainly owing to a lack of political will, lack of credible and consistent policies as well as the absence of dominant countries driving such a development. On the other hand, a prosperous development of the world economy needs fair and relatively stable exchange rates to stimulate world trade and the international division of labor. Exclusive policy reliance on the stability of the exchange rate with the exchanger rate entering the monetary authority's objective function directly has often not lead to the desired outcome of stable macroeconomic polices. A necessary precondition for such a development is stability oriented monetary and fiscal policies.

Traditional monetary policy frameworks to achieve low inflation and sustainable growth rested upon intermediate variables such as monetary aggregates to anchor expectations. This concept is often not suitable for EMCs mainly because of instable money demand functions. Targeting of the exchange rate as practiced to varying degrees in Latin America or Asia has not been successful. Experience in some EMCs has shown that an explicit inflation target could provide a credible anchor for inflation expectations. Thus, inflation targeting (IT)¹⁸ may be a successful strategy for larger EMCs to provide the macroeconomic stability desired and to have at the same time enough flexibility for coping with external shocks. Price stability and sound fiscal policy would clearly be preconditions for further monetary integration in the future.

The quite successful experience with IT in a number of industrialized countries has increased the interest in this monetary policy framework also in emerging markets. Hungary, the Czech Republic, Poland, Brazil, Mexico, Thailand or Korea have already moved towards a direct or indirect form of IT.

Generally, IT requires that (a) the central bank is independent such that (b) it can commit to having low and stable inflation as the overriding objective of monetary policy, (c) the central bank announces a point or range target for the

¹⁸ Monetary targeting tries to stabilize the inflation rate around the target value supposing a stable empirical relationship of the monetary target to the inflation rate and on its relationship to the instruments of monetary policy. Many emerging markets however have very instable money demand due to price shocks. With an exchange rate rule, monetary policy is constrained and cannot react to domestic or external shocks and in developing countries/EMCs the exchange rate itself can be a source of instability due to for example, real appreciation of the exchange rate (the Harrod-Balassa-Samuelson effect).

inflation rate and (d) clearly communicates and transparently details the instruments that will be used to achieve and maintain the inflation target.

IT could be useful in several aspects for EMCs. But the potential benefits are also closely linked to implementation issues that many EMCs have to address¹⁹ in order to achieve sustained macroeconomic stabilization and growth.

IT could be a helpful coordination device for inflation expectations;

Since IT requires an independent and credible central bank, this could have positive externalities for the credibility of economic policy in general, though, it also could lead to tensions between the central bank and the government.

If the rule guiding IT is kept sufficiently flexible, it would leave the central bank room for manoeuvre to address domestic as well as foreign shocks; and at the same time it can also focus the public on the real tasks of a central bank which is the control of prices rather than raising long-term growth.

IT could help address the issue of fiscal dominance (i.e. high levels of government deficits and dependence on seigniorage) – which is relevant for any regime.

On the exchange rate inflation nexus Eichengreen (2001) suggests that the IT framework should be extended to account for the shocks that emerging economies are prone to. If EMCs are considering IT challenges are (i) forecasting of inflation in a volatile environment, (ii) liability dollarization/euroization which may affect the credibility of IT regime and could cause a conflict between different nominal anchors and (iii) the openness of the economy which will have implications for the exchange rate channel of monetary policy²⁰ and (iv) the degree of price indexation.

The experience of Brazil or Chile shows that countries can make encouraging progress in reducing inflation and can gain credibility. Another benefit, as pointed out by Bernanke et al., is that the framework is not an automatic Friedman-like rule but rests on constrained discretion: Chile and Brazil, for example, have implemented IT gradually and flexibly targeting a *long-run* inflation rate which removes temporary exchange rate effects. This has helped to reduce inflation

¹⁹ Operational issues such as whether to target a point or a range of inflation, the time horizon of inflation targeting and which measure of inflation to target are not considered here (see for example Bernanke et al., 1999)

²⁰ External shocks often cause strong exchange rate movements in EMCs which translate directly into inflationary pressures that may destabilize the economy. A central bank then may be unwilling to let the exchange rate move and will intervene in the forex market (fear of floating argument) such that the conflict between differing nominal anchors has to be addressed. In addition, explicit or implicit price indexation can lead to inflation inertia which could complicate IT implementation. In order to take account of the exchange rate, EMCs could use a monetary conditions index consisting of the interest rate and exchange rate. However, an MCI could have detrimental effects on employment and output.

without incurring substantial output costs²¹. Therefore, a case can be made for IT in EMCs to frame policy since policymakers will have to deepen financial and fiscal reform, enhance transparency and improve the fiscal stance, in addition to converging to international levels of inflation. Otherwise an inflation target could become non-credible with costs at least as large as the one from a non-credible exchange rate peg²². But as Mervyn King (2004, p. 7) has observed: "Inflation targeting is a way of thinking about policy. It isn't an automatic answer to all the difficult policy questions." However, IT probably should be accompanied by some fiscal policy rule with a view to constrain fiscal policy, discretionary intervention and thereby conferring credibility on the conduct of policy. Similar to the IT suggested for EMCs, these fiscal rules²³ will have to be a lot more discretionary than in developed countries owing to the inherent macroeconomic volatility and poor macroeconomic management. Fiscal rules in addition to IT would be important building stones of the economic institutional infrastructure; the former protecting fiscal discipline through time, the latter ensuring monetary discipline through time.

7. Conclusions

The successful completion of EMU and the introduction of the euro have substantially increased the general interest in regional integration and especially in regional monetary arrangements. The EU experience is not a blueprint for regional integration that can be applied directly and in its entirety to other regions. Unreflective comparison could therefore, lead to the dangerous trap of euro centrism.

It is tempting to see European regionalism and monetary union as a template or basic model because it is so long-standing; the EU has achieved incredible depth and has build up accompanying institutions. Most academic models of political and economic integration have so far been devised with Europe in mind or are drawing upon the European experience. The expectation then would be that *orthodox* integration involves depth via a creation of a single market and/or monetary union as well as institutionalisation through the development of supranational institutions.

²¹ Though the experience of these and other countries could be subject to *mean reversion*.

²² A necessary precondition for IT would have to be prior inflation reduction otherwise it will be difficult to publicly identify the target, which consequently will be missed, jeopardizing the central bank's credibility. In addition, in the presence of high foreign currency liabilities, IT may lead to volatile exchange rates amplifying balance sheet effects.

²³ These fiscal rules could be limits on the government budget deficit, public borrowing or public debt and could be targeted at different levels of government, preferably with an effective sanctioning mechanism for non-compliance.

But the European experience may not be the standard form integration has to take. Especially since European monetary integration did not itself proceed upon traditional lines, which postulates that monetary union is not possible or bound to fail without political union.

If institutional and economic integration were to proceed according to the European template, this would likely imply deeper monetary and exchange rate co-operation. However, the question of whether the political willingness and the other ex-ante requirements for deeper integration exist in other regions remains open to discussion. Discussion is therefore alive on longer-term options for respective exchange rate regimes such as joint anchoring to an outside currency or to a basket of currencies, the adoption of a common regional currency or floating against third currencies. However, the challenge more often seems to be whether credible institutions exist which will get the fundamentals right and which facilitate the implementation of consistent stability-oriented macroeconomic policies. While not a panacea, some regions depending on their overall macroeconomic strategy may be better served with introducing first an inflation-targeting regime accompanied by some fiscal rule rather than opting for a currency union.

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