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# 1

## Monetary Coordination Involving Developing Countries: The Need for a New Conceptual Framework

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### **Introductory remarks**

As the East Asian crisis has impressively shown, sudden U-turns in capital flows and volatile exchange rates must today be identified as major sources of instability, even in a favourable world economic climate. Countries not engaged in a regional monetary coordination arrangement and therefore unilaterally exposed to these instabilities fall back on a combination of monetary and fiscal policies to avert depreciation, and if – as is regrettably too often the case – the struggle is lost, on competitive devaluations. The balance-sheet effects of devaluations and increased domestic interest rates depress domestic income generation and result in a deterioration of public budgets. Moreover, this policy mix has an extremely deleterious impact on regional integration, as the case of Mercosur compellingly indicates.

Against this background, we would like to elaborate on whether regional monetary arrangements, including a monetary union, might offer a significant potential for handling prevalent economic and financial instability in a more sustainable manner for both a given single member country and for the economies of other developing countries connected with it in a regional integration project. With very few exceptions, the research to date has neglected the question of the specific conditions and potential benefits of monetary South–South coordination in which, unlike in North–South arrangements, none of the international key

currencies, the dollar, the euro or the yen, would be involved.<sup>1</sup> Furthermore, most South–South monetary arrangements are ‘under construction’, and their results still rather uncertain. Nevertheless, we believe it is crucial to intensify the debate on monetary coordination projects, and thus analytically differentiate between arrangements that involve international key currencies and one those that do not – a qualitative difference that most of the existing literature ignores or underestimates.

Therefore, we shall begin with a discussion of the limitations of a South–South coordination (SSC) projects compared with North–South (NSC) coordination arrangements, focusing on the specific monetary restrictions to which developing countries are subjected in stabilizing their exchange rates and initiating a sustainable development process, for example: currency mismatch, a restricted lender-of-last-resort function, and the costs of ‘original sin’. Our preliminary conclusion is the argument that although an SSC offers a developing country less potential for stability gains and fewer benefits for the domestic income-generating process than an NSC, the latter is not available as an option for the majority of developing and emerging market economies. Hence, the establishment of an SSC is an option ‘competing’ not with the establishment of an NSC, but only with the familiar, forlorn option of unilateral management of typical boom-and-bust waves.

This will be followed by a discussion of some features of a South–South coordination project (p. 9). As a point of departure, we use conventional OCA criteria, e.g. trade interdependence and macroeconomic convergence, together with the oft-repeated call to establish independent institutions, especially central banks. We conclude that both the OCA criteria and its institutions are endogenous in the sense that they are the result of a successful monetary coordination project rather than of preconditions, and that cooperation between institutions is more decisive for success than the formal independence of institutions.

Finally, our main findings will be summed up in the Conclusion.

### **Original sin and regional monetary coordination**

‘Original sin’<sup>2</sup> is measured by the index of securities issued in domestic currency as a proportion of all the securities issued by a country. The resulting ranking of economies shows that the key currency economies with an original sin of zero are located in the North, and economies with a very high share of foreign to total securities are in the South. Based on broad empirical tests, the authors show that original sin significantly

increases economic volatility. Three main reasons for this are:

*Currency mismatch.* When external debt is denominated in foreign currency, exchange-rate depreciation, by increasing the real value of the foreign debt stock, increases the costs in national currency of servicing that debt. Fears of payment difficulties create a vicious circle, making capital flows highly pro-cyclical and limiting national authorities' capacity to sustain counter-cyclical policies. This makes economies marked by original sin more volatile, and reduces growth rates.

*Restricted lender-of-last-resort function and credibility.* Foreign currency liabilities restrict the central bank's ability to provide domestic banks with unlimited liquidity, as its capacity of issuing money is restricted to its own currency. The higher the index of original sin, the higher is the financial sector's exposure to liquidity risks that may eventually translate into solvency problems. A high probability of solvency crises not only hinders economic growth by increasing uncertainty, but also creates extremely high contingent liabilities for the public sector in the form of potential bail-outs.

*Costs of original sin.* The costs of devaluation due to currency mismatch in the short run and the increased uncertainty in the long run cause an output reduction, the amount of which depends on the degree of original sin.

Against the background of this perception of net external debt in foreign currency as the key problem of developing economies with regard to monetary and exchange rate stability, the implications of original sin for regional monetary coordination will be discussed in the following section.

### **Currency mismatch**

Currency mismatch<sup>3</sup> severely limits the possibility of using exchange-rate devaluation as an instrument for cushioning the effects of external shocks. Therefore it is no wonder that much of the debate on the original-sin hypothesis was first centred on the pros and cons of policies of full dollarization.<sup>4</sup> The higher the original sin, the more natural it seems at first glance to opt for abandoning the national currency, adopting instead the currency in which the foreign debt is denominated.<sup>5</sup>

But the differences between unilaterally adopting an international key currency and integrating into a key-currency area in a coordinated manner are decisive. While coordinated integration puts a definitive

end to the problem of original sin for the Southern economy and re-establishes a full lender of last resort, unilateral dollarization has quite the opposite effect. When the national lender of last resort ceases to exist, all debt is transformed not into the domestic currency, but rather into the respective foreign currency.

From the perspective of a country marked by original sin, North–South cooperation projects – in contrast to unilateral submission to a hard currency – (NSCs) have the potential for providing all the advantages of reduced interest rates (due to the reduced risks incurred by the country or currency), combined with an expanded lender-of-last-resort function which includes the debtor currency (quite the reverse applies for the ERM II mechanisms; see Chapter 5). In the case of multilateral exchange-rate coordination, all participating central banks formally commit themselves to intervention. However, the most decisive form of intervention is that of the Northern country’s central bank seeking to stabilize the intra-regional exchange rate at a level compatible with the foreign-exchange restrictions of the debtor country. A more advanced scenario involving the integration of the developing country into the hard-currency zone could even entail the cancellation of the foreign currency debtor status for the participant economies of the South.

In the medium term however, bilateral entry to the US dollar or euro zone does not seem feasible in practice for developing countries and emerging markets, except for the new eastern European members of the European Union. Therefore, for the majority of economies tainted by original sin, SSCs are the only viable alternative to the choice between either trying to unilaterally stabilize exchange rates, or pursuing no monetary coordination at all.

### **Restricted lender-of-last-resort function and limited credibility**

The key problem of South–South coordination, from the viewpoint of original sin, is that it does not provide a switch from an external debt status to an internal debt position. Whereas the first generation of OCA literature, following Robert Mundell’s famous study (Mundell, 1961), puts more emphasis on the symmetries of the participants as a precondition for a common currency, more recent literature has extended its reach to cover monetary aspects, asking whether, and in what form, monetary coordination could lead to successful stability import. While the first generation of OCA approaches regarded monetary coordination between currencies that respond asymmetrically to a key-currency interest-rate shock as anything but an optimal currency area, the second generation of literature, focused on the European monetary integration

process, has emphasized the credibility aspect of economic policy within regional monetary coordination,<sup>6</sup> where it is precisely the integration of asymmetric participants that is seen as a key to success.

But this mainstream interpretation is in effect a ‘discipline’ argument against floating exchange rates. An inflation-prone country, according to this line of thinking, could gain much credibility by placing monetary policy decisions in the hands of a ‘conservative’ central bank; and in the context of an international exchange-rate arrangement, the political costs of violating the agreement could restrain the government of a Southern economy from depreciating its currency to gain the short-term advantage of an economic boom at the long-term costs of higher inflation.<sup>7</sup> If this were so, one extreme of the corner solution – i.e. a very extreme exchange-rate fix – would put an end to the monetary instability of southern economies.

We argue, however, that in the case of an economy tainted by high original sin, an effective increase in credibility of a southern currency – imported or otherwise – does not depend so much on such a policy switch as on the northern central bank’s willingness to intervene in favor of the exchange rate of the southern currency, effectively extending its lender-of-last-resort function (or, in the case of an unsustainable exchange-rate level, enabling gradual devaluation without the destabilizing effects of overshooting).

In this sense, the main credibility gain from monetary cooperation among Southern currencies with a *similar* original-sin index could stem from collective protection against domestic pressures through a regional exchange-rate arrangement. Such an arrangement might help to make policy orientation less inflation-prone, but it would not change substantially the region’s exposure to external shocks.

At the same time, the success of an SSC seems to depend on the existence of internal hierarchies, i.e. regional monetary coordination of economies with *unequal* ‘original-sin’ indices, where the strongest partner shows a capacity to intervene in favour of the weaker ones. Taking this aspect into account adequately could greatly enhance the empirical comparative analysis of cases of regional monetary coordination.

### Costs of original sin

Within SSC schemes, regional reserve funds or swap arrangements often are regarded as early and easy steps on the road toward a regional common currency. The idea is that the pooling of national foreign exchange reserves in a regional fund should result in a leverage effect for protection against external shocks, especially speculative attacks.

This indeed is plausible in the case of an external shock hitting the region in an asymmetrical manner, for instance a destabilization of the current account of one of the member states which triggers devaluation expectations, but which does not affect the other members in the same way. But if we assume that the major source of instability derives from the capital account, the symmetric reaction of the regional economies implies that the foreign-exchange reserves pooled in a regional fund are effectively nothing more than the sum of national reserves and intervention capacities. Moreover, given low regional exchange-rate coordination, or none at all, the collective efforts could easily evaporate due to variations in national responses to such an external shock.

One argument that has emerged in the debate on original sin and the possibilities – or impossibility – of fighting it at the national level could moderate the rather sceptical appraisal of regional stabilization funds. A certain degree of protection from the potentially destabilizing financial consequences of original sin can be achieved by accumulating international reserves at the national central bank, even if this implies costs due to the negative interest-rate spread (see Eichengreen, Hausmann and Panizza, 2003, p. 13ff). This is the case for the current strategy of a number of Asian economies, the pooled regional exchange reserves of which would indeed constitute a regional fund with significant weight in the world economy.

Even if such accumulated reserves do not change the original sin index, defined as gross debt in foreign currency compared to total debt, they signal the possibility of moving out from original sin. Foreign currency reserves that quantitatively match a significant part of net foreign debt could be used to sell off part of foreign-currency debt to counter devaluation expectations and the ensuing currency mismatch. Yet the accumulation of foreign exchange stocks large enough to cope with at least a significant part of net external debt represents a viable option only for those economies which, while suffering from original sin, are still able to generate sufficient current-account surpluses to provide net foreign-exchange income. This may be seen as an indicator of a decreasing original sin index, but applies only to a limited number of dynamic Asian countries, not to the majority of southern economies.

Another argument stemming from the original-sin hypothesis is that the only variable that is robustly coordinated with original sin is country size. Hence, as Panizza argues in Chapter 2, it is to be expected at least for monetary unions that encompass large and well-diversified economies that the increase of the currency-zone size may increase its



participation in the portfolio of international investors, i.e. decrease the degree of original sin.

At first sight, it is rather obvious that by applying the concept of original sin to the issue of regional monetary coordination involving developing countries, an NSC arrangement – or at least an SSC of Southern economies with significantly different levels of external debt – would offer significant potential for solving the original-sin-derived problems of net debtor economies, i.e. permitting them to limit economic volatility and enhance sustainable economic growth. For monetary unions of large size, a certain decrease of original sin is to be expected, as the increase in currency size could increase the presence of that currency in international portfolios. Therefore, for most Southern economies, it is not only the lack of viable means of achieving access to an NSC arrangement that leads us to insist on the need for discussion of the SSC option. In order to argue how and to what extent SSCs might be a meaningful instrument for countering economic and financial instability, we will examine central features of the SSC model in the following section.

## **Features of monetary regional coordination**

In the following, we will discuss some features of a South–South coordination project. As a point of departure for our arguments we use conventional OCA criteria (Mundell, 1961), e.g. trade interdependence and macroeconomic convergence together with the often-repeated call for the establishment of independent institutions, especially central banks. Against this background, we intend to identify particular criteria which should apply to regional monetary coordination projects among developing countries – and others which, although dictated by conventional wisdom, should not. In so doing, we propose several components of a new, albeit incomplete framework.

### **Interdependence**

Interdependence is often mentioned as one of the preconditions for a successful monetary coordination between two economies. In addition to the mere fact of geographic proximity of two countries, interdependence, especially with regard to trade, still serves as the major selection criterion for the decision as to which country should be selected for deepened monetary integration. It is argued in this context that benefits and costs of coordination are more equally shared among key trading partners than between two economies which are only loosely related. Furthermore, monetary integration is required to

maintain and deepen real integration by smoothing out intra-regional exchange-rate instabilities and stabilizing expectations of agents involved in intra-regional activities. Thus, the argumentation draws the line from trade flows and factor movements to capital flows and asset price fluctuations. But if the major source of instability derives from the capital account and not the current account, and if exchange-rate volatility rather than factor mobility enforces financial and economic adjustment,<sup>8</sup> then the potential for reducing this instability by monetary coordination should constitute the decisive criterion for the selection of member countries. This does *not* necessarily imply high trade interdependence at the outset.

As discussed in the last section, a South–South coordination project (SSC) offers neither the advantage of a lender-of-last-resort function nor the switch from an external debt status to an internal debt position. Hence, the question arises as to what (other) benefits can be expected from an SSC (see for example the contributions of Kregel, Nunnenkamp and Kohnert in this book). To gain more clarity on this issue, it is necessary to differentiate between potential benefits at the outset and those arising from a successful process of monetary coordination.

From the outset, an SSC has the potential for limiting the consequences of exchange-rate volatility caused by extra-regional factors and global economic conditions, such as changes in the international interest-rate structure or the euro-US dollar exchange rate. In such cases, an SSC should engage in common managed bloc floating *vis-à-vis* the rest of the world, to pre-empt relative shifts in the intra-regional exchange-rate structure due to shocks from the outside.<sup>9</sup> Thus, we would argue that the SSC should be seen *not* as a buffer absorbing the direct impacts of external shocks on each member economy of the SSC, but rather as a multilateral policy-induced shield pre-empting mercantilist beggar-thy-neighbour-policies between member countries. Therefore, while a monetary coordination project between developing countries is not able to counter the first-round effects of external shocks from the very beginning, it can serve as an instrument for dampening second-round effects, which would otherwise reinforce adjustment costs and induce setbacks in development.

One important precondition for common managed bloc floating is that member countries share a similar vulnerability with regard to extra-regional factors, so that they can expect to be hit in the same way and to a similar extent by external factors. This applies especially to the phenomenon of contagion, which was deliberately induced during the tequila crisis in 1994–5, and the Asian crisis and its aftermath. Again,

while contagion as such cannot be avoided by an SSC alone, since the member countries have high levels of foreign indebtedness, the sequencing of events – countries being hit one after the other – can be broken, and thus the severity of adjustment can be dampened. By contrast to non-coordination when contagion triggers a chain reaction of competitive devaluations aimed at gaining mercantile advantages over other competitors under pressure, an SSC can limit the rate of depreciation by keeping the intra-regional exchange rates at the pre-contagion level. Increased monetary coordination between member countries involves, first, the bilateral obligation to marginal and intra-marginal interventions by the respective central banks when current exchange rates deviate from formerly agreed-upon par values; second, financial assistance in the form of the provision of short-term credit denominated in the appreciating member-currency; and, third, an agreement about the privileged use of regional currencies for intra-regional trade and financial flows. Thus, fiscal and monetary authorities of the member countries create the structural preconditions for facilitating intra-regional financial and trade flows by stabilizing key prices for exporters and importers as well as for banks, and hence also their expectations. If private actors of the member countries pick up these opportunities, the SSC will result in a deepening of regional capital markets and an increase of trade interdependence. Hence, in the medium term, even a monetary coordination project involving exclusively developing countries may diminish domestic and, to limited extent, international original sin. Over the long term, a currency union among developing countries, as the most sophisticated form of monetary coordination, could even completely remove bilateral exchange rates, both as an autonomous source of permanent instability and as an additional transmission mechanism for global shocks. Furthermore, by transforming the previously fragmented currency areas to a single currency area for the entire SSC, a currency union could induce further deepening of regional financial markets, with contracts denominated increasingly in regional currency that makes them less prone to crisis, and increases the size of the regional market as such.

Following the original sin hypotheses (see Chapter 2), we expect a decrease in domestic and international original sin as a result of monetary coordination among major developing countries in the medium to long term. For this reason, we would advance the thesis that contrary to traditional contentions, the formation of a regional currency union within an SSC does *not* rob participant economies of a large degree of monetary autonomy, but rather reduces their degree of vulnerability to external shocks and financial crisis.

## Convergence

Divergence of nominal parameters within the member countries of an SSC such as inflation rates, budget deficits or debt levels make it more difficult to stabilize intra-regional exchange rates. Therefore, macroeconomic convergence understood as budget discipline and price-level stability is considered favourable for a successful monetary cooperation project. In any case, macroeconomic convergence is said to be an indispensable requirement for the transition to a currency union, for which the convergence criteria laid down in the Treaty of Maastricht can serve as the most referred-to and comprehensive example.

Although we do not deny that macroeconomic convergence facilitates monetary coordination, we would point out that this argument mixes up cause and effect. After widespread financial liberalization in the 1980s and 1990s, developing countries nowadays show a high variability of inflation rates, budget deficits and foreign debt levels *because* they are both unilaterally exposed to sudden portfolio shifts and affected by large-scale capital outflows in sequence, rather than simultaneously. Therefore, considerable divergence in inflation rates, budget deficits and debt levels should not be very surprising. Even if we assume a relatively simultaneous shock (e.g. due to interest rate changes in the US or Euroland), a variability of nominal indicators is not ruled out. Lacking a multilateral coordination mechanism, every country will to a greater or lesser extent unilaterally take such countermeasures as increasing interest rates, devaluation, acceptance of automatic stabilizers or even a partial bail-out. Thus, macroeconomic convergence should be seen not so much as a precondition for enhanced monetary integration, but rather as a result of successful monetary coordination. Or in other words, monetary coordination serves as a vehicle for macroeconomic convergence.

With stable but adjustable exchange rates within an SSC and different inflation rates at the beginning of enforced monetary integration, a market-induced process will automatically set in, at the end of which policy-induced adjustment based on foreign-exchange interventions by the central banks in question, managed devaluations, and interest-rate policies will have to be undertaken in order to correct over and undervalued bilateral exchange rates within the SSC. Alternatively, if coordination fails, the SSC will break up altogether. Thus, an SSC does not relieve countries of the need to adjust and also harmonize at least their inflation levels within the region over the long term (for which, by the way, the EMS member countries required almost twenty years).

The differences between an adjustment under the umbrella of a monetary coordination project and an adjustment without it are the time horizon involved, and the lower adjustment costs.<sup>10</sup> The bilateral obligation to intervene within an SSC serves to create a much lengthier intra-regional period of adjustment for all domestic actors involved in a currency under downward pressure. Experience with nominal pegs, even by developing countries, has shown that delayed par-value changes result both in a decrease in the domestic inflation rate as such and in a reduction in its variability. There is no reason why delayed managed par-value changes within a monetary coordination project should show different results, except that delaying the depreciation and limiting the extent of depreciation is easier with the intervention partners at hand. The reduction of costs stems from the marginal and intra-marginal interventions and support purchases by the central bank of the currency under upward pressure, which otherwise would be borne unilaterally. Thus, we expect that the interest-rate policy of the currency area under downward pressure should be more effective, and therefore on average less restrictive within an SSC than in the case of a unilateral defense of exchange rates.

Nevertheless, the above-mentioned reduction in adjustment costs must not obscure the fact that the main burden of adjustment is still on the side of the country whose exchange rate is confronted with depreciation pressures. Whether the most price-stable central bank of an SSC will be in a position to decrease its interest rates to ease the adjustment of the other member states of the SSC depends on its exchange rate *vis-à-vis* hard currencies. As a point of departure, one could probably assume that it might not. Therefore, even if intervention on the foreign exchange market is symmetrical, the adjustment process as such will be asymmetrical.

Within a regional monetary coordination project, asymmetry also applies to the intra-regional inflation-rate and extra-regional exchange-rate targets toward which adjustment is geared and which will be set by the most stable country. Although inflation differentials between developing countries may be high, they are certainly lower than those between developing countries and industrialized economies. Thus, compared with the extremely low reference values of the inflation rates of hard-currency areas, the benchmarking effect of the most stable country within an SSC could be less harsh.

With regard to harmonization of business cycles, the result is more ambiguous. On the one hand, we identify an integration-induced trend

to *roughly* harmonize business cycles as a consequence of the necessary adjustment policies and the deepening of the integration process. Thus, we exclude a market constellation in which all but one member of an SSC are in a severe recession. On the other hand, we do not exclude the possibility that during an upswing, one member country could lag in its activity level and its growth rate, e.g. due to structural problems limited to that country. For these reasons, we assume an assimilation of business cycles in a bust phase whereas intra-regional business cycles might diverge during boom phases, as member countries might be differently able to take advantage of them. With regard to the bust phases, we acknowledge that cycles could be reinforced, thereby increasing variability of intra-regional activity level. But we would consider such harmonization an advantage which would facilitate common bloc-floating and reduce intra-regional instability. By contrast, diverging trends of income generation within the boom phases would require an active policy-induced redistribution within the SSC to compensate for the lack of a market-induced harmonization during the upswing.

### **Institutions**

Institutional change is often considered necessary for the good functioning of a regional monetary coordination arrangement. Thus, the proposed institutional change refers to the establishment of rules and the creation of organizations, which could obviously not be established and created by the domestic or regional market itself. Therefore, institutional change is just another word for state regulation, albeit less suspect. To assess what kind of institutional change or regulation a regional monetary coordination arrangement would require, it is necessary to clarify the objective, the target group and the executing agency. With regard to our subject, regulations should be introduced which would reduce monetary instability and promote the sustainability of an SSC. In the following, we will discuss only regulations which in principle apply to all economic agents active within the SSC, and concentrate on macroeconomic policy, *in concreto* monetary policy, fiscal policy and incomes policy and the respective macro-players' central bank, central government, trade unions and employers' associations.<sup>11</sup>

### *Monetary policy*

It is no exaggeration to state that the issue of the independence of central banks from central governments dominates the debate on institutional change in monetary policy, and that the assertion of its importance has advanced to the level of an oft-repeated truism. Based on the

experiences of the 1970s and 1980s, we acknowledge that a fiscal policy which ignores financial and monetary stability can be implemented much more easily with a central bank which is merely a department of the finance ministry. However, from our point of view, this debate is flawed when it comes to discussing criteria for successful monetary coordination.

Yet it is not independence which is decisive for the relationship between monetary policy and fiscal policy, but rather the extent to which monetary and fiscal policy actors cooperate in a consistent manner, which characterizes a successful monetary coordination. If monetary policy is too restrictive, it may not only severely distort domestic budget consolidation, causing domestic revenues to shrink and domestic debt service and social outlays to rise, but it may also turn intra-regional exchange rates upside-down, thus inducing par-value changes. While the first would counteract the goal of stabilization, the latter would tend to undermine the sustainability of the SSC. In the worst case of a non-cooperative central bank, a disastrous combination of an economic slump and wide-spread unemployment, widening budget deficits and an influx of hot money could arise as a result of too-high interest rates. If all domestic macro-actors but the central bank behave in a cooperative manner favourable to the SSC, the central bank will on the one hand benefit from the stabilization efforts of all other actors – as the inflation rate drops – and on the other, from not having to ‘pay’ for the common stabilization efforts by decreasing its interest rates; on the contrary, it will be passing on the cost of stabilization to other domestic and regional actors, thus increasing their burden. We call this a free ride for the central bank to the disadvantage of the domestic economy and of the monetary integration project as a whole.

Thus, cooperation between macro-players, both at the domestic and the regional level, is essential for successful monetary coordination, while non-cooperative behaviour, especially by a central bank, will call regional monetary integration into question. In the case of a currency union, which describes the most integrated form of monetary coordination, the abolition of the intra-regional foreign exchange market and the transformation of the different domestic central banks to a single central bank constitute the most important institutional changes in this policy area. The establishment of one single central bank will be required to unify monetary policy and to guarantee the coherence of a currency area.

### *Fiscal policy*

What has been said about the necessary cooperative behaviour of central banks naturally applies to central governments as well. If fiscal

policy is too expansive, it may not only enforce inflationary pressures, and hence fears of depreciation, but it may also reduce the effectiveness of interest-rate policy through an increase in public indebtedness in domestic or foreign currency. The first results in a setback for inflation assimilation, while the latter reduces the scope of intervention for both the central bank and the central government.

To preclude behaviour by central governments inconsistent with regional monetary coordination, it is often recommended that a formal agreement on explicit quantitative criteria be concluded, to which member states would commit themselves. However, redefining qualitative characteristics as quantitative, checkable criteria is no easy task, as it is necessary to fix, first, which indicators are to be adopted, and second, which target level should be set for the indicators. In our opinion, budget deficits are unsuitable, because in developing countries, both sides of the budget inherently suffer from great uncertainties, and are therefore partly or even predominantly beyond the control of the central governments. Fiscal agents indebted in foreign currency, as is predominately the case of central governments in developing countries, face the risk of steep and sudden increases in capital expenditures, due only to the depreciation of their domestic currencies against key currencies. Furthermore, maturity of domestic public debt is significantly lower in developing countries than in industrialized countries. Thus, central budgets in developing countries, and hence their level of budget deficits, are much more dependent on events and changes on domestic and world financial markets than their counterparts in industrialized countries. Even if all regional macro-actors within an SSC could be brought to a pattern of cooperative behaviour geared toward reducing monetary instability, any external shock which hit exchange rates and resulted in increased interest rates in the region could cause inland revenues to dwindle and, with a certain level of foreign indebtedness and if domestic social security systems are in place, also cause expenditures to rise. With regard to the target level it can be stated that binding budget deficit ceilings generally contain an inherent risk of pro-cyclical enforcement of current market constellations, thereby increasing the variability of inflation and growth rates.

With regard to binding debt level ceilings, a similar argumentation applies. For developing countries it is not reasonable to fix a standardized target level, as the sustainability of public debt depends, first, on the specific currency-mix in which the public debt is denominated and, second, on the various opportunities for raising sufficient revenues in the necessary currency by the repayment deadline. Hence, we would



place greater priority on the reduction of foreign-currency debt in favour of debt denominated in domestic currency by the member states of the SSC, even if interest rates on regional currency bonds and credits were higher, and hence even at the expense of lower budget deficits and absolute debt levels. An additional cost of this proposed switch in domestic debt is the lower maturities with which domestic credit lines are vested, in comparison with international credit lines.

As it is not only the public sector which is accumulating foreign debt, central governments in an SSC should keep open the option of implementing region-wide capital-import controls, thereby setting incentives for private agents not to accumulate foreign debt.<sup>12</sup>

In general, one should be cautious in the selection of so-called convergence criteria and the compulsory fixing of target levels, as they are actually based on expectations which result from current market constellations. Targets that initially appear to be quite easily within reach could be difficult or even impossible to meet later on. A formal agreement which does not make allowances for a changing economic situation has the effect of a straight-jacket which deprives fiscal policy of its already low flexibility, and hence leaves governments with no exit options. Thus, instead of enhancing credibility, such an agreement to meet specified quantitative indicators might even considerably damage the credibility of fiscal policy and of regional monetary coordination.

While the formation of a common central bank is widely agreed upon as an indisputable requirement for the formation of a currency union, a similar institutional change for fiscal policy is less seldom proposed, although similar reasons can be put forward for establishing a common macro-actor and unifying fiscal policy. Instead, it is assumed that the decision-making powers in fiscal policy will remain at the national level. Thus, the introduction or even the continuation of already existing fiscal policy rules – for which the most notorious example is the Stability and Growth Pact of Euroland – is suggested to coordinate the nationally biased fiscal policies and to prevent free-ride behaviour after formation of the currency union. However, from our point of view, the lack of a common fiscal policy at the central level constitutes a harmful institutional deficiency for a currency union which cannot be adequately compensated by governments committing themselves to the fulfillment of rules, even if the latter are flexible enough. For that reason, we recommend that the common currency area be provided with institutions which are both adequate and able to function, not only with regard to monetary but also with regard to fiscal policy. This is especially relevant if it is acknowledged that cooperation between monetary and

fiscal policy is essential for the success of a regional monetary coordination.

The question occasionally arises why national governments of developing countries do not take the initiative to launch SSCs, if they offer such potential benefits (see Nunnenkamp's comment on pp. 54–8). A monetary coordination project is a continuous process which begins with ad hoc measures by some members moving toward a structured harmonization of specific policy areas and a coordinated policy intervention procedure in a region, culminating in the formation of a currency union. Hence, the evolution of an SSC will entail the loss of national fiscal sovereignty, a loss which will only be compensated by a gain of greater global steering capacity and evolving fine-tuning ability for the whole currency area by means of a unified fiscal policy. With the – from our point of view – essential transmission of fiscal policy from a domestic to a regional level, the then-remaining scope of domestic fiscal policy would be reduced to a level comparable to that of states of a federal union, in terms both of its area of activity and its effectiveness. From the point of view of political economy, this perspective might not be the first choice of existing nationally-oriented decision-makers.

### *Incomes policy*

In contrast to oft-proclaimed flexibility of nominal wages and the labour market (e.g. prominently Eichengreen, 1998), we are convinced that both upward and downward rigidity of nominal wages are essential for the survival of any regional monetary coordination, and especially for that of an SSC. As the labour market inherently does not tend toward nominal wage rigidity, we favour the establishment of central bargaining systems, both at a central domestic and at a regional level within an SSC. We will develop this argument in greater detail in the following, by discussing first a case of upward pressure on nominal wages, and second, a case of downward pressure on nominal wages.

The upward pressure on nominal wages is the result of devaluations due to common bloc floating and intra-regional par-value adjustments during the years of inflation assimilation, which can be assumed to be necessary from time to time. Every devaluation results in a price level push, be it via the transmission belt of current accounts or of capital accounts. If nominal wages are highly flexible, such price level pushes will immediately be transferred into equivalent nominal wage increases, thereby fueling inflation and increasing variability of regional inflation rates. Thus, to prevent a depreciation-inflation-spiral and to dampen growing variability in regional inflation rates from the outset, central

banks in the region would have to increase interest rates to such an extent that domestic income-generating processes would be severely depressed to a level at which the destruction of production capacities would thwart the compensation of wage earners for the price-level push. With regard to the goals of monetary regional coordination – reducing monetary instability and improving sustainability – a more adequate alternative would consist of central agreements in which limited real-wage losses would be accepted in return for the regional central banks' pledge to refrain from restraining the income-generating process during the course of devaluations.<sup>13</sup> Such an operative incomes policy relies on (i) a centralized institutionalization of wage-fixing processes in the labour market, with which monetary policy can cooperate in any case; and (ii) a high level of organization, both in the workforce and among employers, so that the outcome of the agreement at the central level will be accepted by the vast majority of local workers and enterprises at least in the formal economy, which also is a lead for activities in the informal economy. If, on the contrary, the labour market is highly fragmented – or flexible – with different wage levels by industry, internal region, sector or trade union/ employers' association, such an incomes policy will hardly be possible.

The downward pressure on nominal wages and therefore the second line of our argumentation for a centralization of incomes policy, especially at a regional level, is based on the success of inflation assimilation within the SSC. If regional inflation rates are gradually brought into line, regional differences, especially with regard to competitiveness in prices, will continually diminish. Instead of competitive devaluations, which would be ruled out by a successful regional monetary coordination, one member country could nevertheless gain mercantile advantages over the others if its domestic wage increases were to lag behind their nominal wage increases. Hence, nationally biased incomes policies within a successful regional monetary coordination always tends to inherit deflationary risks, and may induce a race to the bottom. An instructive, albeit not advisable, example is demonstrated by the non-coordinated wage-bargaining policy existing within the Eurozone. Given the high unemployment and the huge size of the informal economy combined with rudimentary social security systems in developing countries, the deflationary risk in uncoordinated wage policies is considerably higher. Therefore, a central incomes policy at the regional level is required to prevent national free-ride behaviour which, leaving times of devaluation aside, should be based on productivity increases, thereby fully exhausting the inflation-neutral distributional scope.

The lack of a central incomes policy within an SSC marks an institutional deficiency as grave as the lack of a central fiscal policy, which also cannot be compensated for by a formal regional agreement on wage-bargaining lines between different national trade unions (and employers' associations).

Although central wage-bargaining processes do not automatically guarantee nominal wage rigidity, we suggest that an institutionalized incomes policy at the regional level involves the lowest economic costs in comparison to the alternatives. The alternatives would bring with them a slump both in economic activity and of growth due to high interest rates in case of an upward pressure, and in case of deflation, a real appreciation of domestic debt. All this cannot be without negative effects on public budgets. This underscores once again that the design of the three macroeconomic policy areas, monetary, fiscal and incomes policy, involves strong mutual repercussions, and therefore requires close cooperation between the respective actors. Furthermore, the negative effects that inflation assimilation will necessarily impose upon some of the member countries in any case will make redistribution policies between member states via fiscal policy necessary. As the financial scope for far-reaching redistribution in developing countries is relatively low, it is even more relevant that wage bargaining processes not cause additional distributional pressure on public budgets.

## **Conclusions**

Viewing net external debt in foreign currency as the key problem of developing economies, the concept of original sin enables us to differentiate between North–South and South–South regional monetary coordination. Taking into consideration the negative impact of currency mismatch implied by original sin in terms of increased volatility and reduced growth rates, North–South coordination, in the sense of coordinated integration into a key currency region (preferably the currency in which most foreign debt is denominated), seems to be a very attractive option.

By contrast, SSCs, particularly between economies with similar original-sin indices, neither induce changes in net debtor status nor do they broaden the lender-of-last-resort function from the very beginning, except if they integrate a group of medium-range emerging markets, where the increase in currency-zone size resulting from the establishment of a common currency may at once induce an increase of the attractiveness of this currency for international investors' portfolios. Furthermore, depreciation against key currencies cannot be ruled out by

an SSC. We argue, however, that with common bloc floating, a mercantilist race to the bottom due to changes in world financial markets or contagion could be prevented. Hence, we assume that in relation to a unilateral defense of the exchange rates at the national level, SSCs have a greater potential for reducing monetary instability and intra-regional exchange-rate volatility. However, in the medium to long term, we also expect a reduction, first, of domestic original sin, gradually followed, second, by a decrease in international original sin as a result of a continuing process of monetary coordination among developing countries. This improvement is due to the creation of structural conditions which facilitate intra-regional trade and financial flows, and induce a deepening of regional capital markets.

The pooling of foreign exchange reserves in a regional fund in order to obtain a leverage effect for protection against external shocks seems to be effective against a type of shock that does not affect the other members in the same way. For symmetrical shocks, however, these reserve funds have to be exceptionally high, thus signaling the possibility of decreasing the original-sin index to achieve additional stabilization effects. Otherwise, and assuming that the major source of instability derives from the capital account, a symmetrical reaction of the regional economies implies that a regional reserve fund effectively is little more than the sum of national reserves and intervention capacities.

One precondition for an SSC is that member countries share similar vulnerability with regard to extra-regional factors, so that they can expect to be hit in the same way and to a similar extent by external factors. However, conventional OCA criteria, e.g. trade interdependence and macroeconomic convergence, are not necessary preconditions, although they facilitate the establishment of an SSC. We rather see inflation assimilation and trade interdependence as endogenous to a lasting process of monetary coordination. With regard to fiscal convergence, greater priority can be placed on the reduction of foreign-currency debt in favour of debt denominated in the domestic currencies of SSC member states, in contrast to fixing standardized so-called convergence criteria, which is not reasonable for SSC members. Escaping original sin is not without costs: particularly, higher interest rates must be paid on regional currency bonds and credits which are generally vested with lower maturity.

Another necessary prerequisite affects the implementation of different policy areas. The extent to which monetary, fiscal and incomes policy are coordinated at the domestic and regional level determines, first, whether the monetary coordination project will continue to exist or,

alternatively, break up altogether in a crisis; and, second, at what economic and social costs in terms of growth, unemployment and social misery monetary coordination can be realized.

The conceptual framework we have outlined here is still wide open and entails open questions:

First, much experience remains to be made, as many South–South monetary arrangements today are not much more than sketches and political intentions with a more or less uncertain outcome. Therefore, future research should closely follow the evolution of new South–South monetary arrangements.

Second, a closer look at the degree of monetary integration may bring quite different results in terms of macroeconomic stabilization rewards, as for instance the long history of monetary integration in Europe shows. Therefore, future analysis should pay more attention to that point.

Third, the role of a clear hierarchical structure between SSC members is ambiguous. On the one hand, a clear hierarchical structure seems to be highly favourable to harmonizing intra-regional inflation rates and stabilizing expectation-building by agents engaged in intra-regional activities at the point of the establishment of an SSC. The existence of internal hierarchies commits the strongest partner to intervene in favour of the weaker ones. The process of monetary convergence from the establishment of an SSC to the creation of a full currency union gradually eliminates the intra-regional instability potential, as a result of which the hierarchy should eventually be phased out. On the other hand, if there is a strong hierarchical relationship between potential SSC member countries, a similar vulnerability with regard to external shocks cannot be assumed as a precondition, and the economic basis for a common bloc floating of the SSC *vis-à-vis* the rest of the world will dwindle.

All these questions point to the necessity of intensified research on the perspectives of monetary integration involving developing countries, a question that is highly relevant, both for academic debate and for policy issues.

## Notes

1. For an economic definition of the terms ‘South’ and ‘North’, see the Preface.
2. Eichengreen, Hausmann and Panizza (2002) and *idem* (2003). For a concise summary of the concept see also Panizza’s chapter in this book. The expression ‘original sin’ stems from the fact that the inability to borrow abroad in domestic currency is not viewed as a consequence of national policy error or weak institutions in the country, but as an outcome of investors’

portfolio decisions concentrated mainly on the five strongest currencies with the highest share in international financial transactions.

3. The effects of increasing uncertainty induced by exchange-rate variations have been discussed intensively in the literature (Aghion *et al.*, 2000, 2004; Allen *et al.*, 2002; Cespedes *et al.*, 2000; IMF, 2003). The debate was motivated by the series of currency crises during the 1990s, especially in Southeast Asia. One of the most outstanding academic results is the so-called third generation of balance-of-payments crises that focus primarily on balance-sheet effects (Chang and Velasco, 2000; Corsetti *et al.*, 1998; Krugman, 1997 and 2003).
4. The expression 'dollarization' is somewhat imprecise, as it is not necessarily only the US dollar which may be chosen as a substitute for the abolished national currency. A number of eastern European countries for example have unilaterally tied their currencies to the euro.
5. This was the message of one of the first articles on the topic (Hausmann, 1999). Later on, the proposal turned towards the creation of a unit of account based on a basket of emerging-market currencies (originally published in Eichengreen and Hausmann, 2002). In addition, it influenced the debate over inflation-indexed or growth-indexed securities in foreign currency to finance developing economies' current-account deficits.
6. See Alesina and Barro (2000); Bayoumi and Eichengreen (1994); De Grauwe (1994); IDB (2002). For a rather sceptical discussion of the argument, see Schelkle (2001).
7. For an important contribution for this argument, see Rogoff (1985).
8. For a review of recent financial crisis and policy responses see Bisignano, Hunter and Kaufman (2000).
9. For a similar argument with regard to Asia see Williamson (2000).
10. For a discussion of adjustment costs in course of a unilateral defense of exchange rates by developing countries see Metzger (1999).
11. For a discussion of macroeconomic cooperation at a regional level in Latin America see IDB (2002), Ocampo (2002), Heymann (2001).
12. For the role of increasing foreign debt for the outbreak of currency crises see Metzger (2001).
13. A similar argumentation applies to a boom-phase when nominal wages might be under upward pressure.

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