

South-South Monetary Cooperation: An Option for Emerging Markets and Developing Economies to Foster Regional Financial Development?

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1. INTRODUCTION: FINANCIAL CRISES, LESSONS TO BE LEARNT: STAY OUT OF FOREIGN CURRENCY DEBT

The recent global financial crisis again shows that the current international financial order of uncoordinated exchange rates and external balances and free movement of international capital has the capacity to bring enormous instability to all countries. Emerging markets and developing countries are far from being decoupled from these global effects, as some had expected before. At the same time, most of these countries entered this crisis in much better conditions, in terms of current accounts, foreign exchange reserves, and net external debt. But there is an enormous challenge of protecting from the destabilizing effects of the global financial crisis that started in the last quarter of 2008. with highly unstable international capital flows.

Definitively, this financial crisis differs from the series of crises that hit a great number of so called emerging markets at the end of the 1990s by its starting point at the most industrialized economies and its truly global character. But in one key aspect the consequences of both types of crises are the very same for the majority of emerging market and developing economies: capital inflows turn highly unstable and unpredictable, exercising high pressure on domestic exchange and on domestic economic policy in general.

This kind of vulnerabilities has been key in the ex post analysis of the series of huge financial crises in emerging markets at the end of the 1990s. Capital-flow reversals have been highlighted as a main problem related to the strategy of international financial integration for developing and emerging market economies (Calvo et al. 2004; Stiglitz 2002; Williamson 2005).

But there is another theme running through recent work on capital flows that distinguishes it from previous research on this subject. This theme is balance sheet ef-

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fects. Economic theory today recognises the impact of volatile exchange rates in the presence of a large stock of un-hedged foreign currency denominated debt¹ (Aghion et al. 2004; Allen et al. 2002; IMF 2003; Berganza/Herrero 2004).

Emerging market and developing countries which make use of international debt markets by accumulating a net foreign debt usually assume a balance sheet mismatch, since their obligations will be disproportionately denominated in dollars (or in a few other industrialised countries, currency such as the euro). The concept of 'balance sheet effects' describes the deteriorating effects of the interaction between stocks and flows on net worth and net income that are induced by changes in the exchange rate (currency mismatch) and the interest rate (maturity mismatch) respectively. A negative (positive) currency mismatch emerges when an increase (decrease) in the nominal exchange rate leads to an increase (decrease) in the debt stock and debt service, measured in domestic currency, in the case of a domestic debtor in foreign currency who makes profits not in foreign (or not as much as needed for the debt service) but in domestic currency. A macroeconomic currency mismatch always arises when a country's net external debt is higher than the current export surplus, even if isolated parts of the economy such as the private, the banking, or the public sector are protected against the real debt effects because of sufficient foreign currency income. In the case of exchange rate devaluation, the balance sheet exposure of economic entities – for example, governments, banks, non-financial firms, and households – with differing currency compositions of assets and liabilities leads to a dramatic decline in net worth and credit worthiness. Usually, the crisis spreads quickly through the financial, the real, and the fiscal sector, leading to cumulative devaluations that further deepen the crisis.

The fact that the majority of developing and emerging market economies are able to borrow abroad overwhelmingly in foreign currency has been made prominent by Eichengreen and Hausmann (2005), who have labelled the concept 'original sin' (for a brief synthesis of the concept see Panizza 2006). This concept illustrates the particular importance of the denomination and composition of domestic and external debt for economic growth and development. The authors develop an analysis of the cumulative impact of balance sheet effects as a consequence of forced indebtedness in foreign currency. They find that many developing and emerging market countries, espe-

¹ In the following, I use the term 'external debt' or 'foreign debt' as a short version of the expression 'net foreign exchange denominated debt'.

cially those with open capital accounts, are faced with higher economic volatility and losses in macroeconomic growth and income.

Following the reasoning of the original sin concept, it is rather difficult to change a country's status as an 'original sin' debtor. Eichengreen and Hausmann find no correlations between the level of original sin on the one hand and the level of development, macroeconomic credibility, and institutional quality on the other hand; the only explanation found empirically is economic size.

Effective balance sheet effects, however, can be reduced in manifold ways, even not without costs. Many emerging market economies and developing countries have accumulated high foreign exchange reserves during the last global boom that brought high demand for their exports in terms of quantity and price. Additionally, in order to reduce net balance sheet exposure. In recent years, emerging market countries have started to issue domestic currency-denominated bonds on the international financial market. Still, the volume of these bonds is relatively small and it has yet to be demonstrated that their emergence is not mainly the result of exceptional times of high global growth, high international liquidity, and good terms of trade for commodities (Tovar 2005). In many countries significant effort also has been being directed towards domestic financial market development in order to increase debt financing in domestic currency. What will happen with these efforts in the context of the global financial crisis is still to be seen.

How is the issue of South-South regional monetary cooperation and integration related to the goal of net reduction of exposure to risks linked to foreign debt? It is analysed here, first, for its ability to foster the establishment and maintenance of competitive exchange rate regimes for indebted economies. Second, the question of whether it is able to foster the development of enlarged financial markets at the regional level, with debt contracts in regional currencies, is also examined.

2. SOUTH-SOUTH REGIONAL MONETARY COOPERATION AND INTEGRATION: AN OPTION FOR DEVELOPING ECONOMIES TO REDUCE EXTERNAL DEBT DEPENDENCY?

The debate about exchange rate arrangements, the international financial system and regional exchange rate arrangements in the post-Bretton Woods era is typically framed as a contest between fixed and flexible exchange rates. On the one side,

Milton Friedman, as a critique to Bretton Woods in his 1953 paper 'The Case for Flexible Exchange Rates', argued that regulating the price of foreign exchange had no better argument than that of pegging the price of carrots or potatoes (Friedman 1953). On the other side, authors such as Kindleberger (1981) and McKinnon (1990) found equally eloquent arguments for fixed exchange rates. Ironically, the regimes to be found de facto during the last decades have mostly laid in the rather imprecisely defined middle field between fixed and floating regimes (Levy-Yeyati/Sturzenegger 2005).

These bipolar views regained importance for emerging market and developing economies in the aftermath of the series of financial crises in the second half of the 1990s. The so-called two-corner solution (Fischer 2001) argues that, within an international monetary order characterised by free and large capital movements, explicit exchange rate targets are difficult for national governments to defend.

The problem with this view, however, is twofold: On the one hand, the appropriateness of free-floating regimes for developing and emerging market economies has been questioned by the (above already introduced) 'fear of floating' argument, which focuses on the destabilising effects of currency mismatches in the event of net external debt denominated in foreign currency.² On the other hand, the fixed-corner solution overlooks the fact that the volatility of international capital flows and the increased regionalisation of trade is shifting countries towards the merging of national currencies. Thus, debtor economies have good reasons to prefer soft pegs to either corner. In that sense, Wyplosz (2004: 15) argues that a 'unilateral [soft] peg is not the only option. A multilateral peg organised at the regional level is another option'. In the same sense, Eichengreen (1994) states that the difficulty of choosing an intermediate exchange rate regime implies that countries that have traditionally pegged their currencies will be forced to choose between floating exchange rates on the one hand and monetary unification on the other hand.

Whilst monetary unification seems to fit, at least upon initial examination, in the fixed exchange rate corner, a closer look shows that there exist a range of exchange rate peg options that go far beyond the question of the rigidity of the exchange rate fixing. Unilateral fixing ('dollarisation') has to be clearly distinguished from bilateral monetary

² For exactly that reason, Eichengreen (2005) sees inflation targeting as a monetary policy rule that comes along with exchange rate flexibility only applicable to very specific developing economies where balance-sheet mismatches are low or overruled by other effects.

integration schemes, and the process of monetary unification itself may require an intermediate exchange rate regime that allows for regional monetary cooperation with fixed but adjustable exchange rates prior to the final fixing of exchange rates and complete monetary integration, in order to gradually shift towards convergence (Braga de Macedo et al. 2001). The creation of the euro zone may serve as an outstanding example for the latter argument.

Currency and maturity mismatches in the national balance sheets associated with exchange rate movements, and limited access to international financial markets in domestic currency result in mostly small and undiversified financial markets with limited access to finance also in domestic currency, in terms of maturity and costs. Recent contributions to public debt management suggest ways to mitigate the impact of these constraints, focusing mainly on domestic financial market development (Eichengreen et al. 2006, IDB 2006, Demirgüç-Kunt/ Levine 2001). Therefore, the paper aims to link the debate on available exchange rate options for developing and emerging market economies to the issue of regional monetary cooperation and integration with the aim of domestic and regional financial development in domestic (and regional) currencies.

The analysis is limited to the case of South-South monetary cooperation integration; with the clear exception of a group of countries in Central and Eastern Europe, for the time being the overwhelming majority of countries will not have a realistic chance to integrate into an existing currency union that includes industrialised economies.

South-South monetary integration is defined here as regional monetary cooperation or integration between developing and emerging market economies tainted by 'original sin' (Eichengreen/Hausmann 2005, Fritz/Metzger 2006). In accordance with the 'original sin' concept described above, we determine the assignment of a country to the typological categories of 'South' or 'North' by its ability to accumulate debt in its own currency ('North') or predominantly in a foreign currency ('South'). We thus consider the term 'South' not as a geographical characterisation, but rather as a characterisation of structural monetary constraints imposed by a country's inability to borrow abroad in its own currency that the analysis of South-South monetary cooperation and integration (SSI) needs to take into account. SSI needs to deal with the specific monetary constraints of the countries involved. Their net debtor status in foreign currency imposes major monetary constraints on sustained growth. A large number of

developing and emerging market economies face currency and maturity mismatches in the national balance sheets, associated with exchange rate movements, and have limited access to international financial markets in domestic currency. This results in mostly small and undiversified financial markets with limited access to finance.

The list of existing or projected monetary cooperation and integration schemes among less developed economies is impressively long; the most prominent examples of regional monetary cooperation among developing and emerging market economies can be found in the Association of South East Asian Nations (ASEAN), in the Common Monetary Area of Southern Africa (CMA), and incipiently the Gulf Cooperation Council (GCC) and the Fondo Latinoamericano de Reservas (FLAR). In addition to these, repeated attempts towards regional monetary cooperation are being made in the Mercado Común del Sur (MERCOSUR), among the Eastern European countries of the Commonwealth of Independent States (CIS), among the Caribbean CARICOM Single Market and Economy (CSME) and in the Pan-African Initiative, particularly with regard to sub-regional cooperation such as the West African Monetary Zone (WAMZ). There are a series of studies on each of these cases³. What is missing, among others, is a systematic analysis for the evaluation of potential costs and benefits of SSI, and especially for their potential to foster domestic and regional financial development as part of a strategy of macroeconomic stabilisation and prevention against external shocks.

In the following, we argue that the potential costs and benefits of regional monetary integration are subject to a specific set of criteria in the case of 'Southern' economies in the aforementioned sense. First, in the case of regional monetary south-south integration, exchange rate politics of the integrating countries need to be analysed as a potential source of intra-regional instability rather than as an available monetary policy instrument to adjust to external shocks. Second, the denomination of net external debt, as well as the regional currency denomination of assets and liabilities in general, needs to be considered in order for the influence of original sin and net potential balance sheet effects.

There is no doubt that the decision for regional monetary cooperation, or even integration, has to take into consideration political aspects, as it involves nothing less

³ See, for example, on ASEAN McKinnon/Schnabl 2004, Park 2004, on CMA Metzger 2006, on the GCC Sturm/Siegfried 2005, on FLAR Eichengreen 2006, on MERCOSUR Fritz 2006, on the CIS re-

than the issue of national sovereignty. Nevertheless, by elaborating on the potential deficiencies of traditional, purely economic, integration theory, this paper concentrates on economic and specifically monetary reasons for regional monetary integration.

3. POTENTIAL STABILISATION GAINS OF SOUTH-SOUTH MONETARY COOPERATION AND INTEGRATION

The majority of current theoretical approaches to monetary integration, mostly based on the case of the European Union and the creation of the Euro as a regional currency unit, do not provide a convincing research framework for the analysis of SSI. By integrating the concepts of original sin and balance sheet effects into economic monetary integration theory we first see that for Southern economies the cost of giving up the exchange rate instrument is much lower than in the case of countries less tainted by original sin; and second, the condition of business cycle correlation seems to have less importance as a precondition in this case (Devereux/Lane 2002, Mongelli 2002, Bénassy-Quéré/Coupet 2005).

For a better understanding of the potential stabilisation gains entailed in SSI, we are taking into account systematically the monetary constraints of developing and emerging market economies, namely higher levels of original sin, indebtedness in foreign currency and net potential balance sheet effects. SSI always has to be analysed in comparison with other available monetary policy options to achieve stabilisation and sustainable development, i.e. the unilateral integration into a 'Northern' key currency bloc ("dollarisation" or "euroisation") or the unilateral defence of a domestic currency within a flexible exchange rate regime with its typical boom-and-bust cycles (cf. Eichengreen 1994).

From the perspective of original sin as the major constraint of this type of economies, north-south integration (NSI) offers developing and emerging market economies a 'best of all worlds': bilateral integration with the currency in which their debt is denominated turns their external debt into internal debt denominated in the countries' own currency, reducing both potential balance sheet effects and original sin to zero (Schelkle 2006). The Eastern enlargement of the Euro area can be seen as the ex-

gion Souza/De Lombaerde 2006, on CSME Worrell 2003, and on the WAMZ, Bénassy-Quéré/Coupet

ample of an NSI with the corresponding stabilisation gains for the new member states (cf. DeGrauwe/Schnabl 2005). These benefits of NSI, however, only materialise if the 'Southern' economy's gains from the internalisation of its former external debt exceed the potential costs arising from external shocks that affect the NSI asymmetrically. Second, the formation of a bilateral NSI depends on the willingness of the 'Northern' central bank to expand its lender of last resort function to the 'Southern' economy. As a result, NSI is a policy option that is simply not available for the majority of developing and emerging market economies today.

Unilateral monetary integration, commonly labelled "dollarisation" or "euroisation", in common with NSI and SSI eliminates the need to defend the exchange rate unilaterally. This may be a significant advantage in the case of an economy that already shows a high degree of de facto dollarisation, since a process of currency substitution is usually resistant to reversals ("hysteresis"). But the key disadvantage of a policy of full dollarisation is that the economy loses its domestic lender of last resort function: all debts, including contracts denominated in domestic currency, are turned into debt denominated in the external anchor currency. In contrast with NSI, in the case of unilateral dollarisation or euroisation, the 'Southern' economy's monetary policy becomes entirely dependent on the 'Northern' country's policy decisions on which it has no particular influence. In this sense, it does not reduce, but rather increases, the problems related to original sin.

In this context, stabilised intra-regional exchange rates that avoid the economic costs of beggar-thy-neighbour policies by abandoning volatile exchange rates can be regarded as the major benefit of SSI arrangements that may endogenously enhance economic convergence, openness and industrial diversification of the integrating countries. The second potential stabilisation gain of SSI is the deepening of regional financial markets. By reducing the risks associated with foreign borrowing, deepened financial markets may provide a regional 'insurance' in the case of an asymmetric extra-regional shock through regionally diversified mutual portfolio holdings in regional currencies (Mongelli 2002).

Moreover, the original sin concept shows that the size of an economy rather than domestic policy choices has significant influence on the ability of these economies to borrow abroad in their own currency. Following traditional portfolio theory, the influ-

ence of economic size can be explained by economies of scale in the size of financial markets that influence the portfolio decisions of international investors. Thus the formation of a Southern monetary bloc may create a size effect with positive influence on the deepening of financial markets in developing and emerging market economies.

At the level of monetary integration the size effect is that of adding several economies into one, given that the enlarged financial market increases market capitalisation and liquidity. Yet the supposed threshold value at which the potential size effect of different levels of regional monetary south-south cooperation schemes may lead to lower original sin still remains to be tested empirically.

Already at the level of monetary cooperation, however, the stabilisation of intra-regional exchange rates may enhance financial market integration. In this case, financial deepening can be achieved first and foremost through a facilitated issuing of debt instruments in local currencies, particularly through the creation of an enlarged regional financial market that encompasses a number of regional currencies. Size effects play a crucial role in enhancing the efficiency of financial markets and in minimising a country's exposure to currency and maturity mismatches and the share of foreign currency denominated debt (Blommestein/Santiso 2007, Panizza 2006, see also Eichengreen et al. 2006, Goldstein/Turner 2004, Burger/Warnock 2004, Bossone/Lee 2002).

From the basis of the empirical findings on original sin, we argue that SSI may in fact not lower international original sin. By creating economies of scale in 'Southern' regional financial markets it may nevertheless spur intra-regional financial deepening alongside regional monetary cooperation and integration through stabilised intra-regional exchange rates or a regional currency area.

Existing SSIs, however, show that a deepening of regional financial markets, without either a regional anchor currency or a regional involvement of multilateral institutions that may each bear a regional lender of last resort function in the case of liquidity or balance of payments crisis, is not a likely scenario in the context of SSI. Hierarchies in terms of asymmetrically distributed levels of original sin and net external foreign currency debt among the integrating countries strongly enhance the potential benefits of regional monetary integration, especially for smaller participating countries. If economies less tainted by monetary constraints than their partner countries in the

regional cooperation and integration arrangement establish a lead role in intra-regional financial market development, benefits of SSI increase for both the region as a whole and for the anchor economy – even if international original sin remains high, and the ability to borrow internationally in own currencies remains limited. The realisation of stabilisation gains, however, depends on the net benefits that the anchor economy can realise in the regional monetary integration arrangement, i.e. through enlarged financial markets in its own currency.

4. LEVELS OF REGIONAL MONETARY SOUTH-SOUTH INTEGRATION

Traditional OCA theory focuses mainly on optimality criteria for regional monetary integration at the level of a regional currency area, leaving aside more shallow levels of monetary cooperation arrangements. For the analysis of existing SSI schemes, however, it is important to include these prior levels of monetary cooperation. For that purpose, we identify different levels of south-south regional monetary cooperation and integration which might or might not result in deeper monetary integration. The different levels of regional monetary cooperation and integration are not regarded in a deterministic sense of sequencing but rather as arrangements in their own right.

Irrespective of the chosen extra-regional fixed or floating type of currency regime, each level of regional monetary cooperation may bring about a specific degree of stabilisation to the intra-regional exchange rates that influences the integration and deepening of regional financial markets. As an initial point of reference, the status of non-cooperation is added.

- *Non-cooperation*: is characterised by a lack of commitment and non-fulfilment of binding agreements by the respective neighbouring countries, most often resulting in beggar-thy-neighbour policies in the effect of an extra-regional shock.
- *Monetary cooperation*: is characterised by a closer monetary policy coordination which may appear either in the form of
 - a regional liquidity fund as a binding commitment for mutual provision of liquidity in the event of extra-regional shocks, either through intra-regional swap arrangements, credit lines, or intra-regional reserve pooling;

- intra-regional exchange rate band/target zones either weighted in a regional currency basket or at bilateral exchange rates; or
 - fixed but adjustable regional currencies at par rates or in a regional currency basket.
- *Monetary integration*: is characterised by either the creation of a single currency or the adoption of a regional currency.

Figure 1 – Forms of regional monetary south-south cooperation and integration

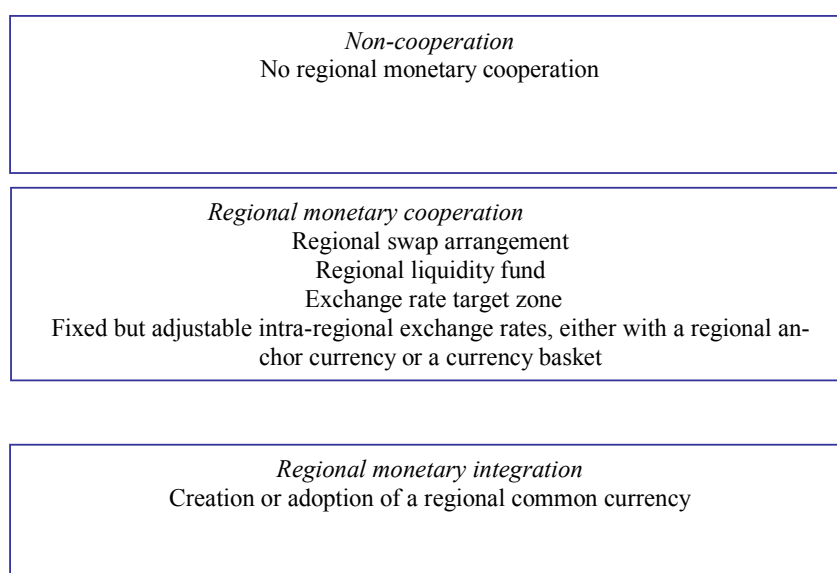


Figure: Fritz, Mühlich

The principal drawback of *non-cooperation* between national monetary policies within regional trade agreements (RTA) is the inability to prevent beggar-thy-neighbour policies among net external debtor countries that can be highly damaging for the whole regional integration process (IDB 2002). Among countries with a net current account deficit and a net external debtor status in foreign currency, the regional rivalry for export earnings, foreign direct investment (FDI) and other capital inflows may easily disrupt trade integration efforts in the case of external shocks, since these countries compete for foreign exchange earnings to achieve current account surpluses (Fritz/Metzger 2006a). In this context, by aiming at harmonised intra-regional exchange rates, intra-regional monetary policy coordination generally provides enhanced prospects for intra-regional stability.

Accordingly, deepened levels of *regional monetary cooperation*, such as a liquidity fund or regionally fixed exchange rates, may reduce the probability of regional macroeconomic disturbances. Potential stability gains of different levels of regional monetary cooperation essentially depend on the extent to which enlarged regionally integrated financial markets can be developed within an SSI arrangement. The ability of the integrating countries to borrow regionally in domestic currencies has to be considered the major stepping-stone of SSI. This may be further enhanced either by the existence of a regional anchor currency; or, under certain circumstances, a regional multilateral financial institution may give fundamental incentives towards market creation.

A *full monetary integration* can create size effects in portfolio diversification of an enlarged regional currency area. With an increased size of stabilised currency area, the portfolio composition of regional investors and households may change in favour of the regional currency and thus mitigate exposure to currency and maturity mismatches in the balance sheets of the cooperating economies (Eichengreen/Hausmann 2005; Panizza 2006). Even in such cases of SSI, however, where the size effect is rather large for the smaller partners owing to integration together with a large emerging market economy, we consider the reduction of the degree of original sin as a long-term and rather difficult endeavour for regional monetary integration in the 'South'.

Taking into account the different potential stability gains rendered by different levels of SSI and different approaches to the realisation of scale effects in regional financial market development the following section sketches these features in three cases of SSI in Southern Africa, South East Asia and South America.

5. EVIDENCE FROM EMPIRICAL CASES

Empirical evidence of both established and intended regional monetary cooperation can be found in several regions of the world. We can identify at least 9 different arrangements in different stages of projection and implementation (see Table 1).

**Table 1: Characteristics of
South-South regional monetary cooperation***

Regional monetary integration arrangement	Point of Reference: EMS II (expanded Euro area)	Partly Commonwealth of Independent States (CIS)	CARICOM Single Market and Economy (CSME)	Mercado Común del Cono Sur (MERCOSUR)	Western African Monetary Zone (WAMZ)	<i>Fondo Latinoamericano de Reservas (FLAR)</i>	Common Monetary Area of Southern Africa (CMA)	Association of South East Asian Nations (ASEAN)	Gulf Cooperation Council (GCC)
Integration category	NSI	SSI	SSI	SSI	SSI	SSI	SSI	SSI	SSI
No. of participating countries	Estonia, Latvia, Lithuania, Poland, Czech Republic, Slovak Republic, Hungary, Slovenia, Malta, Cyprus (10) EU member states (15)	Russia, Belarus, Ukraine and Kazakhstan (4)	Antigua and Barbuda, Barbados, Belize, Dominica, Grenada, Guyana, Jamaica, Montserrat, St. Kitts and Nevis, St. Lucia, St. Vincent and the Grenadines, Surinam, Trinidad and Tobago (13)	Brazil, Argentina, Paraguay, Uruguay, Venezuela (5)	Gambia, Ghana, Guinea, Nigeria, Sierra Leone (5)	Bolivia, Columbia, Costa Rica, Ecuador, Peru (5)	South Africa, Namibia, Lesotho, Swaziland (4)	Brunei, Cambodia, Indonesia, Laos, Malaysia, Myanmar, Philippines, Singapore, Thailand, Vietnam (10)	Bahrain, Kuwait, Oman, Qatar, Saudi Arabia, United Arab Emirates (6)
Level of monetary cooperation	Exchange Rate Band (EMS II); Currency Union	none envisaged monetary union	none envisaged common currency	none envisaged common currency, "Monetary Institute of MERCOSUR"	Exchange Rate Band against the US Dollar envisaged monetary union	Liquidity Fund	Fixed but adjustable exchange rates	Liquidity Fund envisaged common ASEAN currency	Exchange Rate peg to US dollar envisaged Currency Union

Table: Fritz, Mühlich.

* This list includes existing as much as projected integration schemes

In the following we will illustrate our arguments by a closer look at three regional cases:

- a) the Common Monetary Area of Southern Africa (CMA or ‘rand zone’), as a region with different levels of original sin and debt structure, and with strongly hierarchical intra-regional relations;
- b) Association of South East Asian Nations (ASEAN) as an integration process among countries with moderately distinct but higher levels of original sin and differing debt structures; and
- c) the South American Mercado Común del Sur (MERCOSUR) as a case of a stagnating integration process among countries with similar levels of original sin and debt denominated in foreign currency .

Table 2: Characteristics of CMA, ASEAN, and MERCOSUR

Regional monetary cooperation project	CMA	ASEAN	MERCOSUR
SSI level	Monetary cooperation	Monetary cooperation	Non-cooperation
Current level of monetary cooperation	Fixed but adjustable exchange rates	Liquidity Fund; envisaged common currency	None; envisaged common currency
Highest/Lowest level of regional original sin (2001)	South Africa 0.09 other countries n.a.	Malaysia 1.00 Singapore 0.70	Argentina 0.97 Brazil, Uruguay, Venezuela 1.00
Foreign currency share of total debt (2002, per cent)	South Africa 14.63, other countries n.a.	Indonesia 52.53, Malaysia 18.59, Philippines 35.15, Thailand 22.07, other countries n.a.	Argentina 87.71, Brazil 30.95, Uruguay, Paraguay n.a.
Share of the largest country in regional GDP (economic weight) (2004)	98% (South Africa)	32% (Indonesia)	78% (Brazil)

Sources: IMF’s International Financial Statistics 2004 (www.imf.org), South African Reserve Bank 2006, INTAL/IADB 2007, ASEAN secretariat (www.aseansec.org). Data on original sin levels: *(value between 0 and 1 - zero original sin is associated with the full ability of a country to borrow in its domestic currency whereas levels until 1 show a decreasing ability to borrow abroad in domestic currency): Eichengreen/Hausmann 2005, Hausmann/Panizza 2003, Mehl/Reynaud 2005; data on the foreign currency share of external debt: Goldstein/Turner 2004; n.a.: no data available.

(a) SSI with a regional anchor currency: the case of CMA

The Common Monetary Area of Southern Africa (CMA) is the oldest and most sophisticated SSI with regard to the commitment of member countries to shared sei-

gnorage, fixed intra-regional exchange rates, a common foreign exchange pool, and a common capital control system (Metzger 2006)⁴.

The CMA is characterised by a strong intra-regional economic hierarchy. Its leading partner, the economy of the Republic of South Africa, does not exhibit vulnerabilities to external shocks similar to the other member countries, Lesotho, Namibia and Swaziland. South Africa determines the reference values regarding inflation and intra-regional exchange rates for the CMA and – as the South African rand follows a managed floating – regarding extra-regional exchange rates as well. On the other hand, South Africa itself is a typical emerging market economy which has been hit by high exchange rate fluctuations. Original sin of South Africa is, however, strikingly low compared with other emerging markets in Asia and Latin America (Table 2). Approximately two-thirds of South Africa's total foreign debt is denominated in rand (South African Reserve Bank 2006). In contrast, the other CMA member countries have only marginal access to international foreign markets, and limited capability to attract foreign investors.

In both Lesotho and Namibia, the South African rand serves as legal tender; Swaziland abolished the legal status of the rand in 1986, although de facto it is still widely used. Since intra-regional financial markets in the CMA region are liberalised with regard to market access within the partner countries, the CMA can be perceived as one regional financial market, with the South African banks as the major regional players (Wang et al. 2007).

In the case of CMA, the smaller partners within the regional monetary cooperation seem to gain significantly from the SSI through a low level of interest rates and increased macroeconomic stability, compared with other countries in Southern Africa outside the CMA region with similar economic characteristics.

(b) SSI with multilateral institutional involvement: the case of ASEAN

The Association of South East Asian Nations (ASEAN) has become a prominent example for regional monetary cooperation among developing and emerging market economies in recent years. Since the Asian financial crisis at the end of the 1990s,

⁴ This brief exploration of the CMA case is based on additional contributions by Martina Metzger, to

ASEAN monetary and financial integration is supported by strong engagement with its neighbouring 'plus-three' partners, China, the Republic of Korea and Japan, with the goal of financial crisis prevention. A joint multilateral regional swap arrangement for members facing temporary liquidity or balance of payments problems was launched in 2001 ('Chiang Mai Initiative') and transferred into a multilateral liquidity fund of about US\$ 80 billion in 2005.

With strong support from the Asian Development Bank (ADB) and the Executives' Meeting of East Asia and Pacific (EMEAP), the development of regional financial markets through issuance of and investment in local currency denominated government bonds under the Asian Bond Market and Bond Fund Initiatives (ABMI and ABF) has become a major pillar of regional financial cooperation (ADB 2007). These initiatives aim to mitigate the problem of currency and maturity mismatches in local balance sheets by developing regional bond markets (Eichengreen et al. 2006).⁵

The ASEAN countries, together with China, follow similar monetary strategies with an extra-regional orientation to the US dollar in their currency regimes and through the reduction of debt shares denominated in foreign currency. At present this is reflected in an intra-regional exchange rate harmonisation that could provide a valuable basis for enhanced regional monetary and financial integration (Branson/Healy 2005).

The ASEAN economies differ substantially with regard to financial market development as well as access to international financial markets in domestic currencies; Singapore particularly stands out with a deeper financial market. The strongest ASEAN countries are currently developing debt structures that are very similar to those in advanced countries, with a growing share of long-term domestic currency denominated private and public issued debt; in addition, they are gradually turning from debtor to regional creditor countries (Jeanne/Guscina 2006) (Table 2). In contrast, most of the smaller ASEAN economies have only limited access to international financial markets.

whom the authors want to express their sincere thanks.

⁵While the 'Northern' neighbour Japan is involved in EMEAP, the bond market initiatives target the engagement with and of the strongest ASEAN countries Indonesia, Malaysia, Philippines, Thailand and Singapore together with China. The influence of Japan as a 'Northern' partner country in ASEAN+3 is twofold: on the one hand, the regional monetary cooperation dynamics in ASEAN is enhanced by its stabilising potential. On the other hand, the unresolved regional anchor currency dilemma between China as a 'Southern' emerging market and Japan as a 'Northern' industrialised economy seems to have a partly paralysing influence.

(c) Regional monetary non-cooperation among 'Southern' countries involving similarly high levels of original sin: the case of MERCOSUR

In contrast with its ambitious goals, which include monetary coordination and even a common regional currency, the Mercado Común del Sur (MERCOSUR) currently represents no more than a half-way customs union, characterised by repeated episodes of beggar-thy-neighbour policies concerning trade-related conflicts owing to significant intra-regional real exchange rate shifts. Even if all member countries show symmetric reactions to external shocks, exchange rate reaction since the 1990s has often taken place with time delays because of differing monetary and exchange rate regimes (Fritz 2006, Carvalho 2006). Currently the member states follow different and uncoordinated strategies of free respective managed floating, resulting in high nominal and real intra-regional exchange rate volatility.

The MERCOSUR economies are characterised by similarly high degrees of liability dollarisation and original sin and a rather low degree of domestic financial development. Although Brazil, which dominates MERCOSUR with regard to economic weight, shows a lower foreign currency share of total debt (see Table 2), it has not been able in the past to exercise the role of a regional anchor currency. One reason for this is its domestic financial market structure which is marked by indexation of financial contracts, especially to the exchange rate in times of expected negative external shocks, and which makes the economy highly vulnerable to balance sheet effects (Fritz 2006).

The deadlock of the MERCOSUR process is widely attributed to a lack of political and institutional commitment, as illustrated in the diverging positions on bilateral trade agreements with the USA. From the point of view of this study, however, the main problem consists of the similarly high levels of original sin, which make the expected first round stabilisation effects of monetary policy cooperation limited. In addition, regional monetary and financial integration would require sustained efforts to harmonise macroeconomic policies in the region in order to stabilise the intra-regional exchange rate. Table 2 summarises the discussed aspects of SSI in MERCOSUR, ASEAN and CMA.

6. CONCLUSION

The paper analyses the perspectives of South-South monetary cooperation and integration (SSI) for intra-regional exchange rate stabilisation to serve as a tool subsequently to increase intra-regional trade and for regional financial market development. Therefore, we take into consideration the specific macroeconomic constraints of developing and emerging market economies, described by the original sin hypothesis and balance sheet analysis, both resulting from a high share of unhedged foreign currency in most of these countries.

Based on the integration of the debates on original sin, on public debt management, and on financial market development, we argue that the major benefit of SSI consists in the realisation of scale effects that may contribute to a deepening of regional financial markets and consequently to the reduction of potential balance sheet effects in national accounts. This argument is grounded in the assumption that stabilised intra-regional exchange rates, once achieved, contribute to enhanced market size in the regional monetary cooperation area. Deepened levels of regional monetary cooperation, such as fixed intra-regional exchange rates, may reduce the probability of regional macroeconomic disturbances. Potential stability gains of different levels of regional monetary cooperation essentially depend on the extent to which enlarged regionally integrated financial markets can be developed within an SSI arrangement. The ability of the integrating countries to borrow regionally in domestic currencies has to be considered the major stepping-stone of SSI.

Our empirical observations suggest that, to achieve stable intra-regional exchange rates, either a fairly strong hierarchy within the regional monetary cooperation scheme is necessary, as in the case of Southern African rand area (CMA), or, as in the case of ASEAN, a common strategy of avoiding future potential balance sheet effects with multilateral institutional support in the development of financial markets through public bond issuance in regional currencies. Thus, while international access to debt instruments in domestic currency remains limited for SSI, the increasing regional market size of a SSI may contribute to regional financial deepening.

We systematise basically two forms of regional financial market development in SSI arrangements at the level of regional monetary cooperation. The first form is a regional financial market driven by a regional anchor currency characterised by a lower level of original sin compared with other countries in the SSI, i.e. a structure of exter-

nal debt that is characterised by a higher share of debt denominated in domestic currency and long-term financial contracts with fixed interest rates. This case clearly can be observed in the CMA. The other form is the formation of a regional financial market without the presence of a regional anchor currency, but involving strong institutional initiatives on the regional multilateral level, particularly for the issuance of local currency bonds and the establishment of regional financial market infrastructure. Here, we refer to the case of ASEAN.

Our analysis suggests that if both intra-regional hierarchies in terms of original sin and debt structures and a common strategy of avoiding future potential balance sheet effects and the involvement of regional multilateral institutions are missing, the realisation of potential stabilisation gains of SSI seems a rather difficult endeavour, as the case of MERCOSUR shows.

SSI need to be understood as a 2nd best monetary policy strategy compared to the 1st best option of NSI for net debtor economies tainted by original sin. The 2nd best option of SSI emerged not least owing to the present disorder of the international financial, monetary and partly also of the international trade system. SSI are a result of the lack of stability of the international financial and monetary system (cf. Cohen 1998). As such, on the one side SSI may be considered to be stumbling blocs to the global financial and monetary integration efforts. SSI may shift the international financial and monetary system further away from endeavours to global monetary governance and cause further instabilities by boosting regional monetary bloc building rather than international integration. Yet, in the presence of the current disorder, original sin, balance sheet exposure and net debtor status force 'southern' countries to find available monetary policy strategies in order to mitigate the overall economic uncertainty they are exposed to. Thus, on the other side, SSI may equally be considered to be building blocs for greater international monetary stability since they may at least provide a basis for intra-regional financial and monetary stability and contribute to shield emerging markets and developing countries from destabilising external effects at the global level.

Yet, the significance of such stabilisation gains in practice and its effects on the macro-economic stability of the countries involved, require further research on financial market development in regional monetary integration schemes with a solid em-

pirical base. The ongoing process of developing adequate data sets on debt denomination for a broad range of countries and sectors needs to be elaborated further.

REFERENCES

- ADB [Asian Development Bank] (2007): Asian Bond Monitor April 2007.
- Aghion, Philippe / Bacchetta, Philippe / Banerjee, Abhijit (2004): A Corporate Balance-Sheet Approach to Currency Crises, *The Journal of Economic Theory*, No. 119, pp. 6-30.
- Allen, Mark / Rosenberg, Christoph B. / Keller, Christian / Setser, Brad / Roubini, Nouriel (2002): A Balance Sheet Approach to Financial Crisis, IMF Working Paper 02 / 210, Link: <http://www.imf.org/external/pubs/ft/wp/2002/wp02210.pdf> (01.10.07) .
- Bénassy-Quéré, Agnès / Coupet, Maylis (2005): On the Adequacy of Monetary Arrangements in Sub-Saharan Africa, *The World Economy*, Vol. 28 (3), pp. 349 – 373.
- Berganza, Juan Carlos / Herrero, Alicia García (2004): What makes Balance Sheet Effects Detrimental for the Country Risk Premium?, Working Paper, Link: <http://129.3.20.41/eps/if/papers/0408/0408002.pdf> (01.10.07).
- Blommestein, Hans J. / Santiso, Javier (2007): New Strategies for Emerging Domestic Sovereign Bond Markets in the Global Financial Landscape, *The Global Economy Journal*, Vol. 7 (2).
- Bossone, Biagio / Lee, Jong-Kun (2002): In Finance, Size Matters, IMF Working Paper 02 / 113, International Monetary Fund 2002.
- Braga de Macedo, Jorge / Cohen, Daniel / Reisen, Helmut (2001): Don't Fix, Don't Float, *International Development Centre Studies*, OECD.
- Branson, William H. / Healy, Conor N. (2005): Monetary and Exchange Rate Policy Coordination in ASEAN+1, NBER Working Paper 11713, Link: www.nber.org/papers/w11713 (01.10.07).
- Burger, John D. / Warnock, Francis E. (2004): Foreign Participation in Local-Currency Bond Markets, *International Finance Discussion Papers No. 794*, Board of Governors of the Federal Reserve System, LINK: <http://www.federalreserve.gov/pubs/ifdp/2004/794/default.htm> (01.10.07).
- Calvo, Guillermo / Izquierdo, Alejandro / Mejia, Luis-Fernando (2004): On the Empirics of Sudden Stops: The Relevance of Balance-Sheet Effects, NBER Working Paper 10520.
- Carvalho, Fernando Cardim (2006): Perspectives for a Monetary Union between Argentina and Brazil, in: Fritz, B. / Metzger M. (eds.): *New Issues in Regional Monetary Coordination*, pp. 98 - 115.
- Cohen, J.B. (1998): *The Geography of Money*, London: Cornell University Press. Coordination, pp. 147-164.
- DeGrauwe, Paul / Schnabl, Gunther (2005): Exchange Rate Stability, Inflation and Growth in (South) Eastern and Central Europe. Working Paper, LINK: http://www.euroframe.org/fileadmin/user_upload/euroframe/docs/2006/session5/eurof06_schnabl.pdf (01.10.07).
- Demirgüç-Kunt, Asli / Levine, Ross (2001): "Bank-Based and Market-Based Financial Systems: Cross-Country Comparisons", in *Financial Structure and Economic Growth: A Cross-Country com-*

- parison of Banks, Markets, and Developments by Demirgüç-Kunt, Asli / Levine, Ross (eds.), 81-140. Cambridge, MA: MIT Press.
- Devereux, Michael B./ Lane, Philip R. (2002): "Understanding Bilateral Exchange Rate Volatility", CEPR Discussion Papers 3518.
- Eichengreen, Barry (1994): International Monetary Arrangements for the 21st Century. Washington, D.C.: The Brookings Institution.
- Eichengreen, Barry (2005): Can emerging markets float? Should they inflation target?, in: Driver, Rebecca / Sinclair, Peter / Thoenissen, Christoph (eds.): Exchange Rates, Capital Flows and Policies, Routledge, pp. 10-38.
- Eichengreen, Barry (2006): Insurance Underwriter or Financial Development Fund: What Role for Reserve Pooling in Latin America?, NBER Working Paper 12451.
- Eichengreen, Barry / Borensztein, Eduardo / Panizza, Ugo (2006): A Tale of Two Markets: Bond Market Development in East Asia and Latin America, Paper prepared for the Seoul National University Conference on China and the World Economy, 7-8 May 2006, Seoul.
- Eichengreen, Barry / Hausmann, Ricardo (eds.; 2005): Other People's Money – Debt Denomination and Financial Instability in Emerging Market Economies. Chicago: University of Chicago Press.
- Fischer, Stanley (2001): Exchange Rate Regimes: Is the Bipolar View Correct? www.imf.org/external/np/speeches/2001/010601a.htm
- Friedman, Milton (1953): The Case for Flexible Exchange Rates, in: Essays in Positive Economics, University of Chicago Press, pp. 157-203.
- Fritz, Barbara (2006): So Far from God and So Close to the US Dollar: Contrasting Approaches of Monetary Coordination in Latin America, in: Fritz, B. / Metzger M. (eds.): New Issues in
- Fritz, Barbara / Metzger, Martina (2006a): Monetary Coordination Involving Developing Countries: The Need for a New Conceptual Framework, in: Fritz, B. / Metzger M. (eds.): New Issues in Regional Monetary Coordination, pp. 3-25.
- Fritz, Barbara / Metzger, Martina (eds.; 2006): New Issues in Regional Monetary Coordination. London/New York: Palgrave.
- Goldstein, Morris / Turner, Philip (2004): Controlling Currency Mismatches in Emerging Markets, Institute for International Economics, Washington D.C.
- Hausmann, Ricardo / Panizza, Ugo (2003): On the determinants of Original Sin: an empirical
- IDB [Inter-American Development Bank] (2002): Beyond Borders: The Regionalism in Latin America. Economic and Social Progress in Latin America, 2002 Report.
- IDB [Inter-American Development Bank] (2006): Living with Debt: How to Limit the Risk of
- IMF [International Monetary Fund] (2003): The Balance Sheet Approach and its Applications at the Fund, prepared by the Policy Development and Review Department.
- INTAL/IADB [Institute for the Integration of Latin America and the Caribbean, Interamerican Development Bank] (2007): Mercosur Report No. 11, 2005-2006, Link: http://www.iadb.org/intal/aplicaciones/uploads/publicaciones/i-MERCOSUR_Report_11.pdf
- investigation, The Journal of International Money and Finance, Volume 22, Issue 7, pp. 957-990.

- Jeanne, Olivier / Guscina, Anastasia (2006): Government Debt in Emerging Market Countries: A New Data Set, IMF Working Paper WP / 06 / 98.
- Kindleberger, Charles P. (1981): International Money, London, Allen and Unwin.
- Levy-Yeyati, Eduardo / Sturzenegger, Federico (2005): Classifying Exchange Rate Regimes: Deeds vs. Words, in: European Economic Review, Vol. 49 (6), pp. 1603-1635.
- McKinnon, Ronald I. (1990): Interest Rate Volatility and Exchange Rate Risk: New Rules for a Common Monetary Standard, in: Contemporary Policy Issues, 8 (April), pp. 1-17.
- McKinnon, Ronald/Schnabl, Gunther (2004): The Return to Soft Dollar Pegging in East Asia:
- Mehl, Arnaud / Reynaud, Julien (2005): The Determinants of 'Domestic' Original Sin in Emerging Market Economies, European Central Bank Working Paper Series No. 560.
- Metzger, Martina (2006): The Common Monetary Area in Southern Africa: A Typical South-South Coordination Project?, in: Fritz, B. / Metzger M. (eds.): New Issues in Regional Monetary Mitigating Conflicted Virtue, International Finance 7 (2), 169–201.
- Mongelli, Francesco Paolo (2002): 'New' Views on the Optimum Currency Area Theory: What is EMU Telling Us?, European Central Bank Working Paper No. 138.
- Nations, New York July 14-15 2004. Link:
<http://www.un.org/esa/ffd/Independent%20Events/Regional%20Financial%20Arrangements/0704-RFA-YCPark-prospects-paper.pdf> (01.10.07).
- Panizza, Ugo (2006): 'Original Sin' and Monetary Cooperation, in: Fritz, B. / Metzger M. (eds.): New Issues in Regional Monetary Coordination, pp. 26-35.
- Park, Yung Chul (2004): Regional Financial Integration in East Asia: Challenges and Prospects. Paper prepared for presentation at a Conference on Regional Financial Arrangements, United Regional Monetary Coordination, pp. 126–146.
- Schelkle, Waltraud (2006): Comment on 'Original Sin' and Monetary Cooperation, in: Fritz, B. / Metzger M. (eds.): New Issues in Regional Monetary Coordination, pp. 36-41.
- South African Reserve Bank (2006), Quarterly Bulletin Nr. 240 (June).
- Souza, Lúcio Vinhas de / de Lombaerde, Philippe (2006): The Periphery of the Euro. Monetary and Exchange Rate Policy in CIS Countries. Hampshire: Ashgate.
- Sovereign Finance. Cambridge: Harvard University Press.
- Stiglitz, Joseph E. (2002): Globalization and its Discontents. New York, Norton.
- Sturm, Michael / Siegfried, Nikolaus (2005): Regional Monetary Integration in the Member States of the Gulf Cooperation Council, European Central Bank Occasional Paper Series No. 31.
- Tovar, Camilo E. (2005): International Government Debt Denominated in Local Currency: Recent Developments in Latin America, in: BIS Quarterly Review (December), p. 109-118.
- Wang, Jian-Ye / Masha, Iyabo / Shirono, Kazuko / Leighton, Harris (2007): The Common Monetary Area in Southern Africa: Shocks, Adjustment and Policy Changes. IMF Working Paper No. WP/07/158.
- Williamson, John (2005): Curbing the Boom-Bust Cycle – Stabilizing Capital Flows to Emerging Markets, Washington D.C., Peterson Institute.
- Worrell, DeLisle (2003): A Currency Union for the Caribbean, IMF Working Paper WP / 03 / 35.

Wyplosz, Charles (2004): Regional Exchange Rate Arrangements: Lessons from Europe for East Asia, in: ADB (ed.): Study on Monetary and Financial Cooperation in East Asia, Link: <http://www.mof.go.jp/jouhou/kokkin/tyousa/tyou056.pdf> (01.10.07).