South-South Regional Monetary Cooperation: Mere Myth or New Opportunity for Financial Stability?

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Abstract

Small and undiversified financial markets remain a characterizing monetary policy constraint and impediment for financial stability for the majority of developing countries and emerging markets. Does south-south regional monetary cooperation mitigate these problems? The paper presents a comparative perspective on regional monetary cooperation in South East Asia, South Africa and South America, and its potential contribution to financial market development and de-dollarization.

A. Introduction

The number of regional monetary cooperation arrangements in the developing world is on the rise, and gaining new momentum with the ongoing turmoil in international financial markets. The promise of regional monetary cooperation as a safeguard against macroeconomic crises has increased accordingly. Particularly developing countries and emerging market economies recently reclaimed plans for enhanced regional cooperation with the explicit aim to reduce their economies' vulnerability to external monetary and trade shocks.

Yet, whether the stabilizing potential of regional monetary cooperation between developing countries and emerging markets remains merely a promise or whether it will deliver on expected outcomes is still unknown. Are the currently articulated high expectations in terms of macroeconomic stabilization and financial crisis buffering appropriate?

For which countries and under which conditions can regional monetary arrangements in the developing world – ranging from regional liquidity funds to intra-regional exchange rate pegs – be expected to have net benefits for the participating countries? I argue that the degree to which south-south regional monetary cooperation arrangements contribute to financial stability largely depends on whether they support local and regional financial market development and de-dollarization.

Developing countries and emerging markets face specific monetary policy constraints that are mainly caused by financial dollarization¹ and

Cf. P. Honohan 'Dollarization and Exchange Rate Fluctuations' The Institute for International Integration Studies Discussion Paper Series (IIIS Discussion Paper), (2007) No. 201. Here, the term 'dollarization' refers to partial or 'de facto' dollarization. I do not refer to the unilateral adoption of a foreign currency as a legal tender

small size of financial markets.² It is in this context that this paper explores south-south regional monetary cooperation as an available monetary policy strategy that may mitigate monetary policy constraints, in particular for countries that do not consider full dollarization on one hand or a fully flexible exchange rate on the other hand as a viable policy option. I argue that under these conditions, giving up monetary policy autonomy in a regional monetary cooperation arrangement may eventually be less costly than traditionally assumed for industrialized countries with more mature financial markets.³

The idea of this study is to explore whether – and if so how – south-south regional monetary cooperation contributes to regional financial market development, and thus increase financial stability. "Southern" economies with small and undiversified financial markets or a certain degree of financial dollarization are particularly vulnerable to changes in the exchange rate. Under these conditions, exchange rate volatility quickly boosts overall solvency and liquidity risk and thus jeopardizes financial stability. My hypothesis is that regional monetary cooperation can indeed provide a viable monetary policy strategy for increasing financial stability if it contributes to financial market development, either by successful intra-regional exchange rate stabilization or by joint efforts targeted at developing regional financial markets.

I define south-south regional monetary cooperation (SSC) as comprising a wide range of regional monetary cooperation arrangements whose dynamics are not predetermined: at shallow levels, it may consist of regional swap arrangements or regional reserve pooling; deeper forms of cooperation involve regional exchange rate target zones or the fixing of intra-regional

(full or 'de jure' dollarization) unless otherwise stated. For the theoretical argument, I use the terms dollarization, financial dollarization, and deposit dollarization interchangeably to express the same concept: the holding of a significant share of market participant's assets and liabilities in the form of foreign currency denominated instruments. Cf. T. J. T. Baliño, E. Borensztein, A. Bennett, 'Monetary Policy in Dollarized Economies', *International Monetary Fund Occasional Paper* (1999) No. 171.

- Cf. B. Eichengreen & R. Hausmann (eds.) 'Other People's Money Debt Denomination and Financial Instability in Emerging Market Economies' (2005).
- Cf. G. Bird & R. S. Rajan, 'The Political Economy of Sequencing: Monetary versus Trade Regionalism', 17 *The North American Journal of Economics and Finance* (2006) 3, 335-341; B. Eichengreen, 'Can Emerging Markets Float? Should They Inflation Target?' (February 2002) Research Paper, revised version of a paper presented to a seminar at the Central Bank of Brazil, available at http://www.econ.berkeley.edu/~eichengr/policy/nicaragua3jan22.pdf (last visited 07 December 2009).
- ⁴ Cf. A.-M. Gulde *et al.*, 'Financial Stability in Dollarized Economies', *International Monetary Fund Occasional Paper* (2004) No. 230.

exchange rates.⁵ I determine the assignment of a country to the typological categories of 'south' or 'north' by the share of foreign currency denominated debt and financial assets in the portfolios of private and public economic entities: while 'northern' economies are not dollarized at all, 'southern' economies are typically dollarized by shares between 10% (low) up to 70% (high) dollar denominated deposits in total deposits and more. I find the same typological pattern when I determine the categorization by a country's ability to accumulate debt or financial assets in its own currency ('north'), or predominantly in a foreign currency ('south').⁶ Based on this categorization, I examine three SSC in South East Asia (Association of South East Asian Nations, ASEAN), South Africa (Common Monetary Area, CMA), and a case of non-cooperation in South America (Mercado Común del Sur, MERCOSUR).

Cf. B., Fritz & L. Mühlich, 'South-South Monetary Integration: The Case for a Research Framework Beyond the Theory of Optimum Currency Area' (2009, forthcoming), International Journal for Public Policy, first published 2007 as working paper of the Department of Economics of the FU Berlin, available at http://www.lai.fuberlin.de/homepages/fritz/publikationen/Fritz M hlich SSI FB WP.pdf (last visited 07 December 2009). So far, literature lacks a clear definition of neither monetary cooperation nor monetary integration. Rather, various approaches exist in parallel, cf. R.S. Rajan, 'Asian Economic Cooperation and Integration: Sequencing of Financial, Trade and Monetary Regionalis', in Asian Development Bank, Asian Economic Cooperation and Integration: Progress, Prospects and Challenges, (2005), 77-92; A. Bénassy-Quéré & B. Coeuré, 'Big and Small Currencies: The Regional Connection', CEPII-Working Papers (2000) 10. I follow Bénassy-Quéré & Coeuré 2000 in defining cooperation between different countries as a commitment to accommodate not only domestic shocks but to also jointly optimize a common (i.e. regional) loss function. I differentiate between monetary integration as the adoption of a single regional common currency, and various preceding forms of regional monetary cooperation.

Cf. B. Eichengreen & R. Hausmann, *Other People's Money – Debt Denomination and Financial Instability in Emerging Market Economies* (2005), I analyze SSC as a second-best monetary policy option compared to north-south cooperation (NSC) as the 'best of all worlds', in particular for financially dollarized countries: 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 net balance sheet effects to zero (as for example in the Eastern enlargement of the Euro zone). In this case, the 'northern' central bank expands its lender of last resort function to a 'southern' economy – which is not a readily available option for most countries in the developing world today. Thus, I analyze SSC in comparison to other available monetary policy options such as a unilateral integration into a 'northern' key currency bloc ('dollarization' or 'euroization') or a unilaterally floating exchange rate regime (cf. also B. Eichengreen, *Can Emerging Markets Float? Should They Inflation Target*? (2002)).

Following this introduction, the paper is organized as follows: Section 2 reviews the literature that on financial development, financial dollarization and monetary integration theory. I propose possible links between these strands of literature and interim theoretical conclusions. These are tested empirically with a brief comparison of intra-regional constellations of the aforementioned cases in Section 3. Section 4 concludes by summarizing main observations.⁷

B. Literature Review and Theoretical Considerations

I. Financial Market Development and Financial Dollarization

Financial market development plays a major role in economic development: a larger, more liquid, capitalized, and more efficient financial market provides market participants with more specialized and more sophisticated financial institutions and instruments. Financial market development is understood here as the development of size, liquidity, capitalization and efficiency of domestic and regional money (market for short term credits and commercial papers), credit (market for medium to long term credits), and capital markets (market for long term financing, separated into equity (stocks) and debt (bonds) financing.⁸

Under these conditions, less transaction costs, less volatility and a broader spectrum of hedging possibilities facilitate market transactions. Thus, more developed financial markets also contribute to mitigating monetary policy constraints that particularly developing countries and emerging markets are faced with. This holds particularly true in the case of small and

As a final introductory remark I consider important to note that the decision for regional monetary cooperation, or even integration, is of course not entirely based on economic considerations, but rather motivated by political aspects, as it involves not only monetary policy autonomy but also issues of national sovereignty. Nevertheless, this paper elaborates on economic and specifically monetary policy aspects of regional monetary cooperation.

I consider financial market development to be a complementary process of both capital and banking market development, cf. E. Borensztein *et al.*, Building Bond Markets in Latin America, *Inter-American Development Bank Research Paper* (2006), available at http://www.econ.berkeley.edu/~eichengr/research/build_bond_mkt_LA.pdf (last visited 07 December 2009), 5. Nevertheless, this study focuses on those financial market components where long term funds are raised by private and public entities.

B. Eichengreen & R. Hausmann, Other People's Money – Debt Denomination and Financial Instability in Emerging Market Economies (2005); E. Borensztein et al.,

highly dollarized economies. At the same time, the latter have an especially difficult stand in developing domestic financial markets and de-dollarizing their economies out of their own due to their small economic size. ¹⁰

McKinnon (1973)¹¹ and Shaw (1973)¹² laid the grounds for a rapidly growing body of research on the effects of liberalized and well-developed financial markets on overall economic growth and development. They highlighted the importance of market liquidity and capitalization for economic development by showing that higher credit/GDP ratios would substantially increase economic growth. Not only had numerous studies followed in exploring the relationship between financial market development and economic growth, but the developing world also followed the trend and the advice of international financial institutions concerning financial liberalization. However, the experience of severe banking crises in major Latin American countries in the 1980s, among others, due to the fact that their underdeveloped financial systems had been rapidly opened and thus exposed to external shocks, gave rise to a discussion about the appropriate sequencing of financial liberalization reforms.¹³

What followed were studies on the relation between financial market development and financial and currency crises, in particular in the aftermath of the Asian financial crisis. They pointed to the higher vulnerability that particularly financially dollarized economies with less developed financial markets are exposed to. Studies on net balance sheet effects in the presence of major exchange rate revaluations in dollarized economies ¹⁴ caused a growing interest in examining causes and consequences of financial dollarization.

- 'Building Bond Markets in Latin America Areas', *Inter-American Development Bank Research Paper* (2006); J. Hawkins & M. Klau, 'Financial Markets Aspects of Regional Currency', in P. Artus et al. (eds.), *Regional Currency Areas in Financial Globalization: A Survey of Current Iissues* (2005), 17-40.
- Cf. Eichengreen & Hausmann, *supra* note 6; A. Ize & E. Levy-Yeyati, 'Financial De-Dollarization: Is It for Real?' *International Monetary Fund Working Paper* (2005) WP/05/187.
- 11 R. McKinnon, Money and Capital in Economic Development (1973).
- E. S. Shaw, Financial Deepening in Economic Development (1973).
- 13 Cf. R. McKinnon, The Order of Economic Liberalization: Financial Control in the Transition to a Market Economy (1991).
- See for example M. Allen et al., 'A Balance Sheet Approach to Financial Crisis', International Monetary Fund Working Paper (2002) WP/02/210; P. Aghion et al., 'A Corporate Balance Sheet Approach to Currency Crises', Journal of Economic Theory (2004), 1, 6-30.

In addition, more recent and technically elaborate studies¹⁵ confirm the original notion of the importance of mature financial markets for overall economic development, as they find a strong link between credit volume and overall economic growth. A more developed financial market, comprising both capital and banking markets, is expected to deliver more trading partners in the same market at less setup, settlement and clearing costs. Issuance, trading and hedging operations are thus more costly in countries with less developed financial markets.¹⁶

II. Regional Monetary Cooperation

Regional monetary integration literature originates in the Optimal Currency Area Theory (OCA) developed by Mundell (1961, 1973)¹⁷. The OCA framework determines the costs of giving up monetary policy autonomy that are associated with creating or joining a regional currency union. Its major argument being that the more similar the integrating countries are in terms of their reaction to external shocks, the less costly a common currency would be, as monetary policy decisions would serve the same needs.

Yet, more recent debates challenge traditional OCA theory by showing that countries may align economic conditions ex-post introducing a common currency or a regional monetary cooperation scheme. Frankel/Rose (1997)¹⁸ evidenced stimulating effects of a common currency on trade and financial integration. In addition to that, it has been found that the costs of tying monetary policy to a regional monetary cooperation arrangement are thus lower than suggested in the originally developed OCA mindset.¹⁹

See for example R. Levine et al., 'Financial Intermediation and Growth: Causality and Causes', World Bank Policy Research Working Paper Series (2000) No. 2059.

Cf. Hawkins & Klau, *supra* note 9; P. J. Montiel, 'Development of Financial Markets and Macroeconomic Policy', 12 *Journal of African Economies* (2003) 3, Suppl. 2, ii12-ii52.

R. Mundell, 'A Theory of Optimum Currency Areas', 51 *The American Economic Review* (1961) 4, 657–665; R. Mundell, Uncommon Arguments for Common Currencies, in H. G. Johnson & A. K. Swoboda (eds.), *The Economics of Common Currencies* (1973).

J. A. Frankel & A. K. Rose 'Is EMU More Justifiable Ex Post Than Ex Ante?', 41 The European Economic Review (1997) 3–5, 753–760; see also A. K. Rose & T. D. Stanley, 'A Meta-Analysis of the Effect of Common Currencies on International Trade', National Bureau of Economic Research Working Paper (2004) No. 10373.

Cf. F.P. Mongelli: ''New Views' on the Optimum Currency Area Theory: What is EMU telling us?' *European Central Bank Working Paper* (2002), series No. 138; M. Fratzscher, 'The Euro Bloc, the Dollar Bloc and the Yen Bloc: How Much Monetary

"Removing exchange rate variation between the members is likely to boost trade and capital flows between them. [...] In many cases, such considerations outweigh any possible advantages of using an independent monetary policy to offset idiosyncratic external shocks."²⁰

This holds true in particular for financially dollarized economies that are exposed to net balance sheet effects. In this case, flexible exchange rates may rather be a source of economic disruption or at least less disposable as a monetary policy tool than OCA theory suggests. Thus, dollarized economies have more fragile capital and banking systems, and are more exposed to the contractionary nature of exchange rate devaluations, to capital flow volatility, and to public debt and banking crises. ²¹

III. Interim Conclusions: Financial Market Development and Regional Monetary Cooperation

We can conclude that if stabilized intra-regional exchange rates can be achieved, particularly small and highly dollarized economies may gain from regional monetary cooperation. Smaller countries are more dependent on intra-regional trade, and may find more accessible regional financial markets in domestic or a regional currency a viable monetary policy option to enhance domestic financial market development as they are less integrated internationally. For low dollarized large economies, regional market dominance and market diversification may be a beneficial outcome of regional monetary cooperation. While these economies can be assumed to have access to international markets, being a strong economy in a strong region

Policy Independence Can Exchange Rate Flexibility Buy in an Interdependent World?', *European Central Bank Working Paper Series* (2002) No. 154; E. Fernández-Arias *et al.*, 'Trade Agreements, Exchange Rate Disagreements'. *Inter-American Development Bank Background Paper* (2002), available at http://idbdocs.iadb.org/wsdocs/getdocument.aspx?docnum=801427 (last visitied 08 December 2009); Bird & Rajan, *supra* note 3.

²⁰ Cf. Hawkins & Klau, *supra* note 9, 17.

See also the 'fear of floating' argument in G. A. Calvo & C. M. Reinhart, 'Fear of Floating', *National Bureau of Economic Research Working Paper* (2002) No. 7993; E.-Levy Yeyati, 'Financial Dollarization: Evaluating the Consequences'. *Centro de Investigación de Finanzas Documento de Trabajo*, (2006) 03; Ize & Levy-Yeyati, *su-pra* note 10; L. Carranza *et al.*, 'Exchange rate and inflation dynamics in dollarized economies', *Journal of Development Economics* (2009), vol. 89(1), pages 98-108.

on the basis of regionally diversified investment opportunities, a diversified capital and banking market and more or less stable exchange rates with the own currency as the regional anchor currency in the region may be a profitable outcome for these countries.

Regional monetary cooperation can of course not be assumed to come without costs. Necessarily, economic adjustment costs are involved, in particular if the participating countries are diverse. Adjustment costs need to be dealt with particularly by the smaller countries, in order to catch up with the larger regional partner countries. Larger countries are burdened with the costs that are involved in taking on a regional currency leadership role that includes a regional lender of last resort function and monetary policy setting for the region as a whole. Additional costs arise from introducing, maintaining, and developing regulatory and supervisory regional financial and monetary policy instruments and institutions, independent from the level and form of regional monetary cooperation.

Yet, more recent contributions to economic literature find that these costs may be outweighed by the beneficial effects of macroeconomic stabilization in developing countries and emerging markets, more than in the case of Europe, for example.²² Ending beggar-thy-neighbor policies through competitive devaluations would prevent costs of severe economic crises, as for example in the MERCOSUR region at the end of the 1990s.²³

Further to this, regional and domestic financial market development may be a major beneficial outcome of SSC. The latter may support regional and domestic financial market development by:

diversifying hedging opportunities for domestic market participants with access to regional financial debt markets in their own currency – this raises a currency's attractiveness as a unit of account and storage of value rises with the development of liquid and deep financial markets offering a broad range of hedging and investment opportunities ²⁴

²² Cf. for instance Hawkins & Klau, *supra* note 9.

Cf. Fernández-Arias *et al.* (2002) *supra* note 19.

Cf. K. Matsuyama, 'Toward a Theory of International Currency', Discussion Papers 931 (1991), Northwestern University, Center for Mathematical Studies in Economics and Management Science. B.J. Cohen: 'EMU and the Developing Countries', UNU WIDER World Institute for Development Economics (2000), Research No. 177; B. J. Cohen: 'Enlargement and the International Role of the Euro', Review of International Political Economy (2007), Volume 14, Issue 5, December 2007, 746-773; J. Hawkins & M. Klau, supra note 9.

facilitating the issuance of local currency denominated public bonds, as is the case in ASEAN/ASEAN+3; or by enhancing the denomination of financial instruments in a regional anchor currency), as is the case in CMA – rising public bond issues enable the development of benchmarks for corporate bond issues, and encourage regional investment;

enhancing the implementation of regulative standards and institutions by means not only of cooperation and information sharing but also by competitive regulative policy implementation²⁵.

C. South-South Regional Monetary Cooperation in South East Asia, South Africa, and South America

In the first subsection, I draw particular attention to different constellations of financial market development and financial dollarization within each region: Each region comprises countries with high (70% and more) and low (10% and less) levels of financial dollarization – measured as share of foreign currency deposits in total deposits. Also, each region comprises countries with relatively small (less than .3 credit to GDP ratio) and large (more than .3 to .4 credit to GDP ratio) financial markets. In addition, the regions display different intra-regional constellations with regards to the existence or non-existence of a potential regional anchor currency. In the second subsection, I compare the aforementioned intra-regional differences inter-regionally. The examined SSC projects are:

the Association of South East Asian Nations (ASEAN) in South East Asia where I also include ASEAN+3²⁶; the Common Monetary Area (CMA) in South Africa²⁷;

J. P. Danthine *et al.* (2000): 'European Financial Markets After EMU: A First Assessment', *NBER Working Paper No. 8044*; Hawkins & Klau, *supra* note 9.

While ASEAN plus three including the 'northern' partner country Japan is a major driver of the South East Asian monetary cooperation, the region so far faces an unresolved regional currency leadership dilemma between China and Japan. This circumvents a clear-cut conclusion about the influence of Japan. For a discussion of different facets of Japans role in South East Asian monetary cooperation; see H. Dieter, 'Monetary and Financial Cooperation in Asia. Motives, Sequencing and Political Obstacles', *GARNET Working Paper No: 16/07*, available at http://www.garneteu.org/fileadmin/documents/working_papers/1607.pdf (last visited 25 December 2009).

and the Common Market of the South (MERCOSUR) in South America as a case of non-cooperation.

Table C.1 provides an overview about member countries and regional monetary cooperation or non-cooperation in each region.

Table C.1 Overview about ASEAN/ASEAN+3, CMA, and MERCOSUR

Regional monetary coopera- tion arrangement	Mercado Común del Sur (MERCOSUR)	Common Monetary Area of Southern Africa (CMA)	Association of South East Asian Nations (ASEAN)/ (ASEAN+3)
Participating countries	Brazil, Argentina, Paraguay, Uruguay	South Africa, Namibia, Lesotho, Swaziland (plus Botswana)	Brunei, Cambodia, Indonesia, Laos, Malaysia, Myanmar, Philippines, Singapore, Thailand, Vietnam China, Republic of Korea, and Japan in ASEAN +3
Level of monetary coopera- tion	None Consideration of a common currency, "Monetary Institute of MERCOSUR"	Fixed but adjustable exchange rates De facto circulation of the South African Rand as a regional currency	Liquidity Fund (NSC ASEAN+3) Asian Bond Market Initia- tive I (USD) and II (local currencies) Consideration of a common currency basket arrange- ment ASEAN+?

Source: Author.

ASEAN/ASEAN+3 comprises a regional liquidity fund without involving any deeper form of regional exchange rate arrangements – despite repeated announcements that point in this direction. ASEAN is greatly supported by a regional bond market development initiative including the ASEAN+3 countries.

CMA is the longest standing and deepest form of regional monetary cooperation, with bilaterally pegged but adjustable exchange rates.

In contrast to that, MERCOSUR does not involve any regional monetary or financial cooperation arrangement, despite frequent announcements of deeper regional monetary integration purposes.

Botswana is included as it maintains a close exchange rate link through a currency basket peg where the Rand has a weight of two thirds although it withdrew from the original Rand Monetary Area in 1975. Cf. J.-Y. Wang *et al.*, 'The Common Monetary Area in Southern Africa: Shocks, Adjustment and Policy Changes.', *IMF Working Paper No. WP/07/158*, (2007).

I. Intra-Regional Characteristics

1. ASEAN/ASEAN+3

The Association of South East Asian Nations was set up in 1967 between the ASEAN-5 Thailand, Indonesia, Malaysia, the Philippines and Singapore with the objective to support economic and social development, and political stability. Since the Asian financial crisis at the end of the 1990s, ASEAN monetary and financial integration is supported by strong engagement of its neighboring 'plus-three' partners, China, Korea and the 'northern' partner country Japan, with the objective of financial crisis prevention. In 2000/2001, the 10 ASEAN countries together with their plus-three partners initiated a multilateral regional swap arrangement for members facing temporary liquidity or balance of payments problems ('Chiang Mai Initiative'). The latter was transformed into a multilateral regional liquidity fund of about USD 80 billion in 2005, and is being multilateralized and increased to a volume of up to USD 150 billion since 2008.

The ASEAN region is characterized by strong intra-regional differences with regards to the countries' financial market sizes and with regards to financial dollarization. The picture looks different though when it comes to economic size: Malaysia, Singapore, and Thailand, which stand out in terms of financial market development, low levels of dollarization and inflation levels, do not have comparable economic weight. While these countries also stand out in terms of lower levels of external indebtedness, and with regards to reserves holdings, if any, Indonesia dominates the region in terms of economic size. GDP size of the more developed countries of Singapore and Malaysia do not compare to the economic weight that for example South Africa has in the CMA region. ²⁸

Of course, this perspective changes when the plus-three partner countries are included (not displayed here). Japan clearly dominates the region in terms of economic size, whereas China's rapidly increasing reserve holdings of about 1.25 in months of imports (Japan 1.62, Korea 0.8) in 2006, and its strong economic growth (around 11% GDP per capita in PPP terms growth in 2006, Japan 2.2%, Korea around 5%) somewhat challenged Japan's position in the region over the last few years. The leadership dilemma between China and Japan seems to be an open question that fits into the overall picture of less clear-cut intra-regional hierarchies in ASEAN.

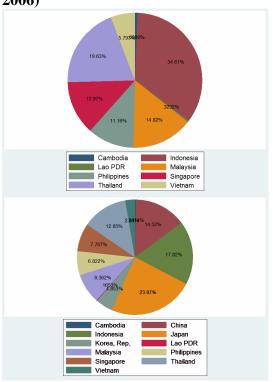


Figure C.1 ASEAN/ASEAN+3 regional GDP % shares (USD billion in 2006)

At the same time, with the creation of the Asian Bond Funds I and II in 2003 and 2004 (with the size of 1 USD bill. and 2 USD bill. respectively), ASEAN and ASEAN+3 countries have made enormous progress in regional as well as domestic financial market development and regional financial market integration.²⁹ Thus, despite a missing regional currency leadership, regional financial markets grew rapidly. Together with overall market growth, the share of local currency denominated financial instruments increased as well³⁰.

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 ABFI+II) is a major pillar of regional financial cooperation. The overall objective of these initiatives is to mitigate problems of currency and maturity mismatches in local balance sheets. Cf. B. Eichengreen *et al.*, '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.

³⁰ Cf. Eichengreen *et al.*, *supra* note 3.

Table C.2 Economic Overview ASEAN 2006

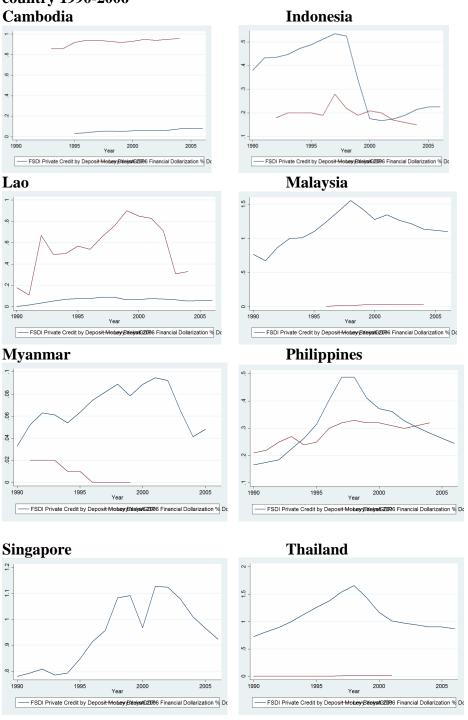
Country (2006)	GDP in USD bill.	Reserves (months of im- ports)	Short term debt	External debt / GNI	CPI change p.a.%	Bank Depo- sits/GDP	Bank Cre- dits/GDP	Financial Dollarization (2004)
Cambodia	7.26	0.37	6%	51%	4.71	0.15	0.08	95%
Indonesia	364.46	0.44	25%	38%	13.11	0.35	0.23	18%
Lao PDR	3.40	0.26	0%	99%	6.8	0.15	0.06	61%
Malaysia	156.09	0.61	22%	36%	3.61	1.16	1.10	3%
Myanmar	n.a.	0.40	23%	n.a.	20	n.a.	n.a.	1%
Philippines	117.56	0.34	8%	47%	6.24	0.47	0.24	31%
Singapore	136.57	0.58	n.a.	n.a.	1.02	1.07	0.92	n.p.
Thailand	206.70	0.43	32%	27%	4.64	0.94	0.87	1%
Vietnam	61.00	0.24	12%	34%	7.39	0.46	0.64	36%

Source: World Development Indicators 2008; IMF International Financial Statistics 2008; FSDI 2008; E. Levy-Yeyati³¹; own calculations; n.a.: not applicable, n.p.: not provided.

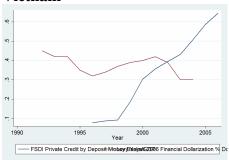
Despite overall progress in regional financial market development, smaller countries in the region with smaller financial markets, such as Cambodia, Laos and Vietnam are still highly dollarized. Only in Vietnam, we see a recent take off with rapid financial market growth, accompanied by a decrease in the level of financial dollarization. At the same time, financial market development in the ASEAN-5 founding countries, Thailand, Singapore and Malaysia, is even close to figures of industrialized countries.

Levy-Yeyati,, *supra* note 10.

Figure C.2 ASEAN financial market size and financial dollarization per country 1990-2006



Vietnam



Source: FSDI 2008; Levy-Yeyati³²; own calculations; blue line: private credit/GDP, red line: foreign currency deposits/total deposits.

2. CMA

The Common Monetary Area was founded in 1986 as a framework for regional coordinated exchange rate policy, based on the former Rand Monetary Area. The objective of the CMA is the provision of sustained equally distributed economic development in the region. National currencies of the smaller countries are pegged at par to the Rand, while these countries still issue their own currencies, and are responsible – albeit to a very limited extent – for their national monetary policy. In Lesotho and Namibia, the South African Rand serves as legal tender; Swaziland abolished the legal status of the Rand in 1986, although it is de facto still widely used.

Bilateral agreements govern the smaller countries' access to the South African foreign exchange market. South Africa determines the reference values regarding inflation and intra-regional exchange rates for the CMA and – since the South African rand follows a managed floating exchange rate regime – regarding extra-regional exchange rates as well. 33

Levy-Yeyati, *supra* note 10.

M. Metzger, 'The common monetary area in Southern Africa: a typical south-south coordination project?', in Fritz, B. and Metzger, M. (eds.; 2006): *New Issues in Regional Monetary Coordination*, pp.147–164.

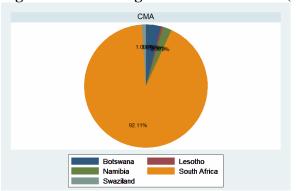


Figure C.3 CMA regional GDP % shares (USD bill. in 2006)

The CMA region is clearly dominated by South Africa as the outstanding regional power in economic, monetary, and financial terms. South Africa counts for more than 90% of the sum of the region's GDP. Its financial market size comes close to levels of industrialized countries, and its level of financial dollarization is low. Only in terms of foreign exchange reserves is South Africa outperformed by the large reserves holdings of Botswana, probably due to the latter's diamond mining business income.

Table C.4 Economic Overview CMA 2006

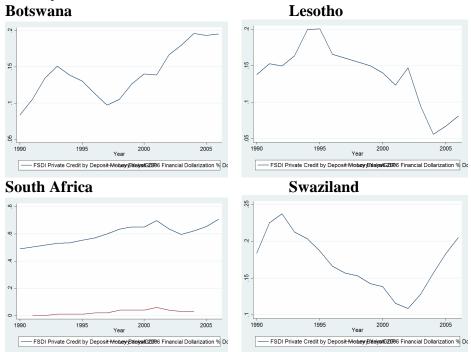
Country (2006)	GDP in USD bill.	Reserves (months of im- ports)	Short term debt	External debt / GNI	CPI change p.a.%	Bank Depo- sits/GDP	Bank Cre- dits/GDP	Financial Dollarization (2004)
Botswana	11.01		n.a.		11.56	0.20	0.20	n.p.
		2.00		n.a.				
Lesotho	1.49		0%		6.05	0.08	0.08	n.p.
		0.37		36%				
Namibia	6.57		n.a.		5.05	n.p.	n.p.	n.p.
		0.13		n.a.				
South	254.99		43%		4.64	0.71	1.04	2%
Africa		0.30		14%				
Swaziland	2.78		9%		5.3	0.21	0.21	n.p.
		0.11		20%				

Source: World Development Indicators 2008; IMF International Financial Statistics 2008; FSDI 2008; E. Levy-Yeyati³⁴; own calculations; n.a.: not applicable, n.p.: not provided.

Levy-Yeyati, *supra* note 10.

Intra-regional financial markets in the CMA region are liberalized, providing market access among the member countries. The CMA can be considered as one regional financial market. While South African financial institutions dominate regional financial markets, the smaller countries in the CMA region seem to gain significantly from regional monetary cooperation in terms of financial market development. Swaziland (and Botswana) show more dynamic financial market growth recently (no data for Namibia available). This is supported by a low level of interest rates and increasing macroeconomic stability, compared to other countries in Sub-Sahara Africa outside the CMA region with similar economic characteristics. Financial dollarization in these countries remains at very low levels, probably due to the bi-currency system with the South African Rand.

Figure C.4 CMA Financial market size and financial dollarization per country 1990-2006



United Nations Conference on Trade and Development 2007 (UNCTAD), 'Trade and Development Report 2007 - Regional cooperation for development'; J.-Y-Wang *et al.*, *supra* note 27.

Source: FSDI 2008; E. Levy-Yeyati³⁶; own calculations; blue line: private credit/GDP, red line: foreign currency deposits/total deposits; no data available for Namibia.

3. MERCOSUR

The Common Market of the South was founded in 1991 with the objective to (1) enhance the size and economic development and growth of the member countries, and to (2) support their integration into international markets. In contrast to its ambitious goals that include monetary coordination and even a common regional currency, MERCOSUR currently represents no more than a half-way customs union, characterized by repeated episodes of beggar-thy-neighbor policies concerning regional traderelated conflicts³⁷.

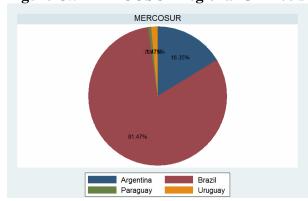


Figure C.5 MERCOSUR regional GDP % shares (USD bill. in 2006)

The MERCOSUR region is clearly dominated by Brazil in terms of economic size. The country counts for around 80% of the region's GDP. Brazil also stands out with low onshore dollarization levels, while offshore dollarization is much higher. While exact data are not available, a level of 10% entirely offshore held dollarized deposits to total deposits on- and offshore can be assumed³⁸. Recently, Brazil reached comparatively low exter-

Cf. B. Fritz & M. Metzger (eds.), New Issues in Regional Monetary Coordination (2006).

E. Levy-Yeyati, *supra* note 10.

Exact data are not available, a level of 10% entirely offshore held dollarized deposits to total deposits on- and offshore can be assumed. Cf. E. Borensztein *et al.* (2004): 'Building Bond Markets in Latin America', *Inter-American Development Bank Reasearch Paper*, p. 52.

nal debt levels. Moreover, the country further increased its foreign exchange reserve holdings. In 2008, the country therefore was hailed as net creditor country for the first time in its economic history.

Table C.5 Economic Overview MERCOSUR 2006

Country (2006)	GDP in USD bill.	Reserves (month of Im- ports)	Short term debt	External debt / GNI	CPI change p.a.%	Bank Depo- sits/GDP	Bank Cre- dits/GDP	Financial Dollarization (2004)
Argentina	214.24	0.95	29%	59%	10.9	0.21	0.11	29%
Brazil	1067.82	0.69	10%	19%	4.18	0.52	0.32	n.p.
Paraguay	9.28	0.34	21%	37%	9.59	0.17	0.16	57%
Uruguay	19.31	0.79	23%	52%	6.4	0.43	0.25	86%

Source: World Development Indicators 2008; IMF International Financial Statistics 2008; FSDI 2008; E. Levy-Yeyati³⁹; own calculations; n.a.: not applicable, n.p.: not provided.

Yet, regional differences in financial market development are far less pronounced than, for example, in the ASEAN region. Brazil does not stand out in terms of financial market development, as does for example Malaysia or Singapore in the ASEAN region. Also, Brazil looks back on a history of high and volatile inflation and exchange rates that repeatedly deteriorated trade-related regional integration initiatives in the MERCOSUR. 40

Levy-Yeyati, *supra* note 10.

Intra-regional trade disputes were caused by uncoordinated exchange rate policies: In face of the Brazilian devaluation of the Real in 1999, the already overvalued Argentinean Peso threw Argentina in a severe economic crisis which resulted in a breakdown of its currency board regime. Paraguay and Uruguay experienced similarly severe economic downturns with heavy deterioration of Uruguay's financial market. Cf. Fernández-Arias *et al.*, *supra* note 19.

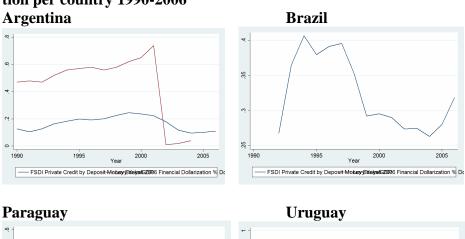
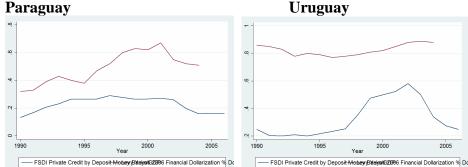


Figure C.6 MERCOSUR Financial market size and financial dollarization per country 1990-2006



Source: FSDI 2008; E. Levy-Yeyati⁴¹; own calculations; blue line: private credit/GDP, red line: foreign currency deposits/total deposits.

II. Inter-Regional Characteristics

The aim of this subsection is to identify major similarities and differences between the regions by looking at simple averages of regionally aggregated data in addition to the country specific data discussed above.

Figure C.7 shows **intra-regional trade shares**. The most dynamic trade integration process is happening in ASEAN with the highest intra-regional trade shares compared to other regions. ⁴² Albeit on a lower level, trade shares in the CMA region have been mostly rising steadily as well.

Levy-Yeyati, *supra* note 10.

Of course, this is still low compared to EU intra-regional trade levels of more than 45% in 2006.

Initially, MERCOSUR trade was similarly dynamic until the region underwent major intra-regional trade disputes at the end of the 1990s. Average intra-regional trade shares of the Southern African Customs Union (SACU) that comprises the CMA member countries and Botswana are relatively low. Yet, regional trade is particularly important for the smaller member countries which depend on close trade links with South Africa. Intra-regional trade is characterized by manufacture exports from South Africa to the smaller SACU member countries.⁴³

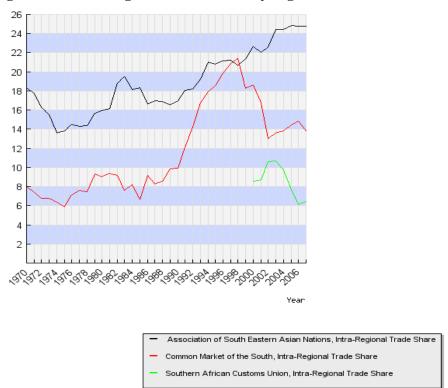


Figure C.7 Intra-regional trade share by region 1970-2007

Source: UN Comtrade ITS index: intra-regional trade as a percentage share of the region's total trade (regional total imports plus regional total exports) 1990-2006. ASEAN plus-three partner countries data are not available. Originally founded in 1910, the South African Customs Union (SACU) renewed statutes in 1969 and 2002 most recently. Member countries are Botswana, Lesotho, Namibia, South Africa, and Swaziland.

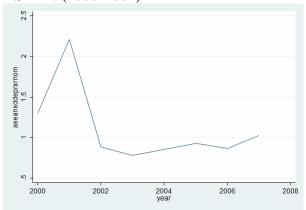
⁴³ Cf. UNCTAD 2007, *supra* note 35, p. 98.

Figure C.8 displays simple average exchange rate volatility in each region, measured as the average standard deviation of the annualized depreciation rate of monthly bilateral nominal exchange rates vis-à-vis the US dollar, starting with the year when the respective regional arrangement officially came into existence until 2007. 44 On average, the MERCOSUR region displays highest standard deviations. Most volatile episodes stem from MERCOSUR countries' adoption of flexible exchange rate regimes at the end of the 1990s, and after the breakdown of the Argentinean currency board system in 2001/2002. In the CMA region, exchange rate movements are rather characterized by small temporary exchange rate depreciations. The change from Rand Monetary Area to Common Monetary Area in 1986 is the reason for a peak in the middle of the 1980s. In the ASEAN region, exchange rate volatility measured by the average regional standard deviation of nominal US dollar exchange rates considerably decreased since the end of the 1990s, and remained even lower than in the CMA region. During the Asian financial crisis in 1997, most countries experienced a crisis induced free fall of their exchange rates, and subsequently adopted what has been coined as the "informal dollar standard" by McKinnon (2005)⁴⁵: ASEAN exchange rate policies are in their majority geared towards Chinas' exchange rate policy that is in essence pegged to the US dollar.

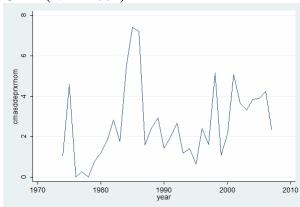
These measures can of course only serve as an approximate estimation of intraregional exchange rate volatility. Nevertheless, bilateral US dollar exchange rates may resemble intra-regional exchange rates to a certain extent as most of the countries have a strong orientation towards the US dollar, except member countries of the CMA in South Africa.

⁴⁵ R. McKinnon, Exchange rates under the East Asian dollar standard – living with conflicted virtue (2005).

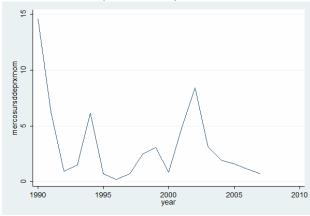
Figure C.8 Nominal exchange rate volatility by region ASEAN (2000-2007)







MERCOSUR (1990-2007)



Source: IMF's IFS 2008.

The picture is much clearer though when considering more sophisticated measures: the index of exchange rate flexibility, developed by Calvo/Reinhart $(2002)^{46}$, measures the ratio of the monthly variance of the nominal exchange rate depreciation in relation to the variance of the nominal interest rate⁴⁷ and the variance in foreign exchange reserves of country i in month k. It takes on values between zero and infinity.

Table C.9 displays simple summary statistics of the Calvo/Reinhart (2002) exchange rate flexibility index. I compare mean values of each continent for the total time period 1960-2007, as well as for the time period of the existence of either CMA (starting 1974), ASEAN (starting 2000), or MERCOSUR (starting 1990).

Table C.9 Calvo Reinhart (2002) index per region 1960-2007

Table C.5 Carvo Renmart (2002) mack per reg	011 1/00	_00;		
Obs	Mean	Std.Dev.	Min	Max
Developing countries and emerging markets in Africa, South East Asia				
and Latin America				
1787	3.253875	74.1306	0	2880.554
Sub-Sahara Africa & North Africa				
989	4.558015	98.49335	0	2880.554
Sub-Sahara Africa (starting 1974)				
886	4.977119	104.0541	0	2880.554
Sub-Sahara Africa (starting 1974, without CMA)				
768	5.661577	111.7546	0	2880.554
Sub-Sahara Africa & North Africa				
989	4.558015	98.49335	0	2880.554
Sub-Sahara Africa & North Africa (starting 1974)				
970	4.646926	99.45222	0	2880.554
Sub-Sahara Africa & North Africa (starting 1974, without CMA)				
768	5.661577	111.7546	0	2880.554
CMA member countries				
118	.522346	5.961512	0	14.44755
East Asia Pacific				
340	1.107161	5.037686	0	87.29896
East Asia Pacific (starting 2000)				
119	.704882	2.115285	0	18.86017
East Asia Pacific (starting 2000, without ASEAN)				
60	.6435772	2.563941	0	18.86017

⁴⁶ Calvo & Reinhart, *supra* note 21.

Instead of the money market interest rate I include the deposit interest rate whenever money market rate data are not available.

ASEAN member countries					
	75	.6990318	1.580992	0	11.08957
Latin America Caribbean					
	380	2.310767	23.73992	0	364.5331
Latin America Caribbean (starting 1990)					
	321	2.654348	2.581351	0	364.5331
Latin America Caribbean (starting 1990, without MERCOSUR)					
	252	1.903601	18.04005	0	250.894
MERCOSUR member countries					
	69	5.396207	43.87161	0	364.5331

Source: IFS, own calculation.

These rough regional averages suggest that exchange rate flexibility is lower among CMA and ASEAN member countries. On average, exchange rates are least flexible among CMA member countries, with .52 index points, compared to a mean flexibility index of 3.25 for the whole sample, and compared to an average 4.56 for the neighboring African countries. Similarly low is the flexibility index of the ASEAN member countries of about .69 index points, although these countries do not follow an explicit intra-regional exchange rate arrangement. However, average index levels are rather low among East Asian countries in general. ASEAN member countries thus meet the mean flexibility level of East Asia Pacific countries in the sample of .70, and are slightly above the index value of their neighboring countries if only considering the time period starting 2000. Interestingly, the picture looks completely different when turning to Latin America where exchange rate volatility is almost three times higher in the MERCO-SUR countries than in Latin America as a whole.

Table C.10 shows **financial dollarization** as shares of foreign currency deposits in total deposits by country, averaged over the period from 1970 to 2004. As a comparative figure, I include the composite dollarization index developed by Reinhart *et al.* (2003)⁴⁸, which also includes countries for which financial dollarization shares are not available in Levy-Yeyati (2006). Among highly dollarized economies (above 10-30 per cent of foreign currency deposits in total deposits), I find mainly smaller ASEAN countries - Cambodia, Laos and Vietnam as well as the smaller MERCOSUR member countries, together with Argentina, the Philippines and Indonesia. Larger countries, such as Brazil in Latin America and Singapore and Thailand in

Reinhart et al., 'Addicted to Dollars', NBER Working Paper 10015 (2003).

Levy-Yeyati, *supra* note 21.

South East Asia stand out with very low levels of financial dollarization. In contrast, CMA countries are among the least dollarized economies throughout, probably due to the fact that the South African Rand is used as second legal tender in the smaller CMA countries rather than the US dollar.

Table C.10 Financial dollarization per country and region

		<u> </u>	
Country	Foreign currency	Foreign currency	Composite dolla-
	deposits/total depo-	deposits/total depo-	rization Index**
	sits (%) (1970-2004	sits (%) (1970-2004	CDI (1996-2001)
	mean)*	max)*	
Cambodia	92%	96%	15
Uruguay	77%	89%	21
Laos	57%	90%	17
Paraguay	45%	67%	15
Vietnam	37%	45%	11
Argentina	34%	74%	20
Philippines	25%	33%	10
Indonesia	20%	28%	12
China	7%	9%	2
Malaysia	3%	4%	7
South	2%	6%	2
Africa			
Korea	2%	5%	4
Myanmar	1%	2%	0
Thailand	1%	1%	9
Botswana	n.a.	n.a.	0
Brazil	n.a.	n.a.	7
Lesotho	n.a.	n.a.	0
Singapore	n.a.	n.a.	2
Swaziland	n.a.	n.a.	0

Sources: Own calculation based on *E. Levy-Yeyati⁵⁰: Bank deposits denominated in US dollars as share of total bank deposits 1970-2006, **Reinhart *et al.*⁵¹: (a) normalized sum of bank deposits in foreign currency as a share of broad money, (b) total external debt as a share of GNP, and (c) domestic government debt denominated in (or linked to) a foreign currency as a share of total domestic government debt; each component is previously transformed into an index that can take a value from 0 to 10; the CDI measures the degree of partial dollarization on a scale that goes from 0 to 30; the variety of dollarization prevalent in each country at any point in time is determined on the basis of two separate criteria: the degree of domestic dollarization and the amount of foreign borrowing by the private sector.

Figure C.10 shows simple regional annual averages of **financial market development** and **financial dollarization** levels over the period from 1970 to 2007. Apart from the ASEAN region, the volume of private credit

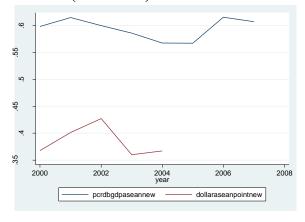
Levy-Yeyati, *supra* note 10.

Reinhart *et al.*, *supra* note 48.

in each region is below the sample mean credit to GDP ratio between .3 and .4, indicating the underdeveloped state of the regions' financial markets.⁵²

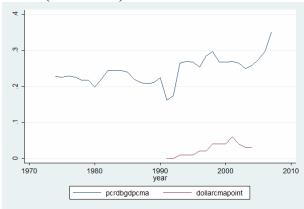
In the case of CMA, South Africa's more mature financial market shows a huge influence in overall financial development in the region, growing more dynamically in recent years. In the ASEAN region, we see that the region's financial markets are benefiting greatly from the joint financial market development initiatives put forward in the region, displaying rather high credit to GDP ratios close to industrialized countries' levels. The downturn at the end of the 1990s is related to the Asian financial crisis in 1997. Average financial dollarization remains low in both the ASEAN and the CMA region, neglecting strong intra-regional differences however (see table C.9). The MERCOSUR region displays the highest average levels of financial dollarization. Interestingly, MERCOSUR member countries also stay behind in terms of financial market development. The sharp decline of foreign currency deposits in 2000/2001 is related to the re-denomination of assets and liabilities in Argentina during the economic crisis. In general, we thus see lower average levels of domestic financial market development occurring together with higher average financial dollarization levels – this picture can also be found in theoretical and empirical dollarization studies.

Figure C.10. Financial Market Development ASEAN (2000-2007)

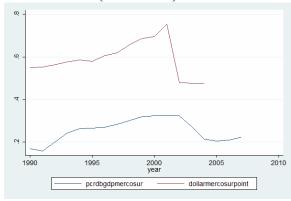


See also Levine *et al.*, *supra* note 15.

CMA (1974-2007)



MERCOSUR (1990-2007)



Source: Financial Sector Development Indicators, World Bank 2008; E. Levy-Yeyati⁵³; blue line: private credit/GDP, red line: foreign currency deposits/total deposits.

Further to this, I compare regional averages of the credit to GDP ratio in the three regions and their respective neighboring countries (see table C.11).

Obs	Mean	Std.Dev.	Min	Max
Developing countries and emerging markets				
in Africa, South East Asia, and Latin Amer-				
ica				
2911	.2366777	.2223164	.0001282	1.767.205
Sub-Sahara Africa & North Africa				
1336	.1580206	.1307789	.0001282	.7712374

Levy-Yeyati, *supra* note 10.

Sub-Sahara Africa & North Africa (starting 1974)				
1169	.1613703	.134427	.0001282	.7712374
Sub-Sahara Africa & North Africa (starting 1974, without CMA)				
1299	.159291	.1322116	.0001282	.7712374
Sub-Sahara Africa				
1205	.1456504	.1177602	.0001282	.7712374
Sub-Sahara Africa (starting 1974)				
1038	.1474327	.1204755	.0001282	.7712374
Sub-Sahara Africa (starting 1974, without CMA)				
908	.1337082	.1018929	.0001282	.725751
CMA member countries				
130	.2432925	.1819181	.0523831	.7712374
East Asia Pacific (excl. Japan, KoreaRep.)				
454	.2929341	.2921357	.0045582	1.659601
East Asia Pacific (excl. Japan, KoreaRep.) (starting 2000)				
118	.3661892	.3201947	.0414969	1.344906
East Asia Pacific (excl. Japan, KoreaRep.) (starting 2000, without ASEAN)				
56	.2963022	.1340224	.0799985	.657654
ASEAN member countries (excl. Japan, KoreaRep.)				
78	.5940418	.5042661	.0414969	1.544871
Latin America Caribbean (starting 1990)				
1012	.3769598	.2311827	.0450422	1.424826
Latin America Caribbean (starting 1990, without MERCOSUR)				
424	.3497092	.2148642	.0322872	1.043335
MERCOSUR member countries				
70	.2570446	.1050152	.096246	.5819536

Table C.11. Credit to GDP ratios per region 1960-2007

Source: FSDI 2008, own calculation.

The strongest difference in financial market size can be found between Southern African countries and CMA member countries. The latter show credit to GDP ratios of about .24 on average compared to an average .13 ratio in its neighboring countries. The same holds true for the ASEAN member countries where credit to GDP ratio means are on average almost twice as high as in other countries in South East Asia. In contrast to that, in the MERCOSUR region credit to GDP ratios are on average only about two-thirds of the size of Latin American countries' financial markets.

D. Conclusions

Expectations about the merits of south-south regional monetary cooperation are on the rise, in particular in the developing world. The ongoing international financial crisis has fuelled the promising power of regional monetary cooperation even further. In this context, I explain the conditions under which these expectations could be met in two SSC in South East Asia (ASEAN), Southern Africa (CMA), and a case of non-cooperation in South America (MERCOSUR). I argue that regional monetary cooperation may indeed have a buffering effect against external monetary and trade shocks if it supports the development of local financial markets.

At the very least, the rather rough description of average data provided in this paper supports expectations associated with south-south regional monetary cooperation in terms of potential financial stabilization. However, more sophisticated empirical analysis is needed to investigate potentially underlying causal relationships between stabilized exchange rates and financial development. Out of the sketchy glance taken at the regions, I consider the following observations to be remarkable with regards to potential benefits of the SSC:

First, I find a tendency for countries in regional monetary cooperation projects to show larger average financial markets that are associated with lower average levels of financial dollarization. That is, in particular ASEAN/ASEAN+3 and partly also CMA countries are characterized by relatively large and developed financial markets, while MERCOSUR financial development remains far below these levels. While the latter show higher levels of financial dollarization, ASEAN/ASEAN+3 and CMA are low dollarized on average.

Second, exchange rates are more volatile in the MERCOSUR region than in South East Asia and in Southern Africa. ASEAN bilateral exchange rates fairly stabilized since a decade ago. This seems to be related to the so-called "informal dollar standard" in South East Asia, which is a common orientation towards the US dollar despite the absence of any formal intraregional exchange rate arrangement. I find even more stable exchange rates in the CMA region, with frequent but temporary exchange rate adjustments that are coordinated, due to the fact that exchange rates are formally pegged to the South African Rand. This is the regional anchor currency and its Central Bank serves as a regional lender of last resort.

Third, intra-regional differences between member countries seem to matter for the process of regional monetary cooperation: In the CMA region, we find very strong intra-regional hierarchies, both in terms of sheer economic size as well as in terms of financial market size. South Africa clearly dominates the region economically, monetarily and financially. CMA countries are among the least dollarized countries, and the smaller countries have access to a larger regional financial market dominated by South Africa. In the other regions, intra-regional hierarchies are less pronounced. While Singapore, Malaysia and Thailand stand out in financial and monetary terms in the ASEAN region, they do not stand out with substantial economic size – though not considering Japan or China. In the MERCO-SUR region, Brazil stands out in terms of economic weight but falls short on financial stability and market size.

Comparing intra-regional constellations in the three regions shows that in order to take on a regional currency leadership role, a country not only needs to have a certain economic weight within the region in terms of sheer economic size. Rather, its distinct role emerges from lower financial dollarization levels, larger financial markets, higher foreign exchange holdings, and maintaining a certain degree of inflation and exchange rate stability.

Summing up, I argue that two major conditions are necessary for potential benefits of SSC to materialize: (a) The existence of a regional anchor currency that is in the position to take on a regional lender of last resort function, as in the case of the CMA. (b) Alternatively, regional financial market development initiatives, as pushed forward in the ASEAN region, contribute to financial development – in particular if a region lacks a straightforward regional anchor currency.

All in all, I see tangible indication of a stabilizing potential for regional monetary cooperation between developing countries and emerging markets if exchange rate variation between the member countries can be removed. I conclude that less volatile intra-regional exchange rates may indeed contribute to increasing capital flows that give rise to financial market development and diversification, including enhanced use of local currency denominated financial instruments. These potential benefits may not only outweigh traditionally considered costs of giving up independent monetary policy, but also increase regional financial stability.