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RIS
Research and Information System for the Non-Aligned and Other Developing Countries

Core IV-B, Fourth Floor
India Habitat Centre
Lodhi Road
New Delhi-110 003, India.
Ph. 91-11-24682177-80
Fax: 91-11-24682173-74-75
Email: dgoffice@ris.org.in
Website: http://www.ris.org.in

RIS Discussion Papers

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RIS-DP # 71/2004

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RIS
Research and Information System for the Non-Aligned and Other Developing Countries
Core IV-B, Fourth Floor, India Habitat Centre
Lodhi Road, New Delhi – 110 003 (India)
Tel: +91-11-2468 2177 / 2180; Fax: +91-11-2468 2173 / 74
Email dgoffice@ris.org.in

Monetary Cooperation in South Asia: Potential and Prospects

Sweta C. Saxena[*] and
Mirza Allim Baig[**]

Abstract: This paper examines the potential and prospects of monetary cooperation in South Asia. A close appraisal of optimum currency area criteria, macroeconomic convergence criteria, and geo-political factors suggests that there are huge potential and growing prospects for monetary cooperation in the region. The study recognizes that monetary cooperation is essential for growth and prosperity in the region, but a lot more needs to be done to achieve the goal of monetary and economic union. The paper suggests road map on the way to the full form of monetary cooperation in the region.

Introduction

The world economy has become increasingly integrated in the last decade. In order to gain from this globalization process, many developing economies have undertaken extensive reforms to integrate themselves more intensively with the rest of the world. The world financial markets are getting synchronized with the liberalization of capital flows, the opening up of capital accounts, the entry of foreign institutional investors (FIIs) in different markets, and the increase in international trade. The increasing global integration is expected to enable the developing countries to benefit from the emerging international

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[*] Assistant Professor, Graduate School of Public and International Affairs, University of Pittsburgh, 3E15 Posvar Hall, Pittsburgh, PA 15260.
Email: ssaxena@birch.gspia.pitt.edu

[**] Research Associate, Research and Information System for the Non-Aligned and Developing Countries (RIS), New Delhi. Email: mabaig@ris.org.in

specialization, play host to capital movements in the world economy, and absorb spillovers of knowledge and technological developments taking place in the rest of the world. Greater economic and financial integration at international level can provide 'benefits for all' since it is not a zero-sum game. The problems of poverty, education, unemployment, etc. can be solved, and higher output growth with low inflation can be sustained, which can improve the welfare of the society at large.

In order to strengthen international competitiveness and provide an engine of growth, the global economic integration has been complemented with a trend towards regional economic integration. For example, the European Union countries formed the Single Market, which finally resulted in a single currency (the euro) in January 2002. North American countries have formed NAFTA and are moving ahead with plans for a larger Free Trade Area of Americas (FTAA). Latin America has regional arrangements like MERCOSUR and Andean Pact, while Sub-Saharan African has COMESA, SADC and SACU. In Asia, ASEAN is emerging as an important regional grouping with implementation of ASEAN Free Trade Area (AFTA). In fact, the members of ASEAN have now set before themselves a goal of creating an ASEAN Economic Community in the coming decades. These ASEAN countries are also integrating with their neighbors, viz., Japan, Korea and China on the east and India on the west through free trade agreements.

The East Asian Crisis of 1997 further heightened the importance of regional economic cooperation, especially in the area of money and finance. The ASEAN countries expedited the programme of formation of ASEAN Free Trade Area (AFTA) and moved on to further deepen the economic integration. Although a more ambitious proposal to set up an Asian Monetary Fund did not take off due to the opposition by the US and the IMF, the crisis led to the launch of a regional initiative, namely the Chiang-Mai Initiative involving creation of a network of bilateral swaps among the ASEAN and the plus three countries as a way to ensuring exchange rate stability.

While South Asia began with SAARC Preferential Trading Arrangement (SAPTA) in 1995, the progress has been rather slow, especially when viewed against the worldwide trends. However, South Asia needs to take lessons from these experiences. The uncertainty in the exchange rates discourages trade, just like the official trade barriers. The large swings in exchange rates can strengthen political forces hostile to free trade within the region. Hence, a

fixed exchange rate system and an ultimate common currency can eliminate the risk of exchange rate fluctuations, and thus encourage trade and investment. This would further enhance the economic integration process in the region.

Against this background, the broad objective of the paper is to study the potential and prospects of monetary cooperation in South Asia. The rest of the paper is organized as follows. Section 2 discusses the rationale for monetary integration. Section 3 discusses the feasibility of Optimum Currency Area (OCA) in the region. Section 4 concludes with policy recommendations.

The Rationale for Monetary Integration

The idea of Optimal Currency Area (OCA) stems from the seminal work of Mundell (1961) and McKinnon (1963). The idea was to have fixed exchange rates based on regional currencies, rather than national currencies. According to this view, any region that has high intra-regional trade, fiscal transfers, high labor and capital mobility, and that experience the same economic shocks should have a common currency. This common regional currency should float against other currencies. At the time, the notion of a sovereign nation giving up its national currency to adopt a common regional currency was unthinkable. However, the recent adoption of the euro has dispelled all doubts about the reality of monetary unions. Other regions for such economic integration have been analyzed by researchers, for example, see Bayoumi and Eichengreen (1994), and Bayoumi and Mauro (1999) for ASEAN and NAFTA, Masson and Pattillo (2001) for West Africa, and Bhowmik (1998), Jayasurya et al (2003), Maskay (2003, 2001) and Saxena (2002b) for South Asia.

Since there are benefits and costs associated with adopting a common currency, the literature recognizes the following four inter-relationships between the countries that would impinge on the benefits of adopting a common currency, namely:

1. Extent of trade: If the potential members of a union trade a lot with each other, monetary union would reduce transaction costs.
2. Nature of disturbances: If the countries experience similar shocks, the cost of giving up monetary policy independence would decrease.
3. Degree of labor mobility: High labor mobility across borders can be a useful mechanism for adjusting to asymmetric shocks that lead to high unemployment in a subset of the members of the union.
4. Fiscal transfers: If region-specific shocks prevail, a federal fiscal system would provide regional insurance (in the form of federally funded

unemployment insurance benefits), thereby attenuating the impact of regional shocks on interregional income differentials.

The greatest benefit of a common currency can be experienced through intra-regional trade. Rose (1999) finds that the countries sharing same currency trade three times greater than what they would have with different currencies between them. Glick and Rose (2001) show, under ceteris paribus, bilateral trade rises (falls) by about hundred percent as a pair of countries forms (dissolves) a currency union. Frankel and Rose (2000), by using economic and geographic data, show that trade triples for each of the members belonging to a currency union. They also find that every one percent increase in trade relative to GDP raises income per capita by roughly one-third of a percent over twenty years. They suggest that the beneficial effects of currency unions on economic performance come through promotion of trade, rather than through a commitment to non-inflationary monetary policy, or other macroeconomic influence.

Since members of a monetary union give up their independent monetary policies to stabilize their domestic economies, it is recognized that they experience a synchronized business cycle for a single monetary policy in the region to be effective. Rose and Engel (2002) find that members of international currency unions tend to experience more trade and less volatile exchange rates. They also find that business cycles are more tightly synchronized for members of a currency union suggesting closer trade links among themselves. And the members of common currency areas tend to be more specialized. Frankel and Rose (1996, 1997) find that countries with closer trade links tend to have more tightly correlated business cycles. On the other side of the debate, Krugman and Feldstein argue that economic integration would make business cycles more asynchronized as the economies would become more and more specialized.

In the following section, we discuss the conditions for optimal currency area for South Asia. We analyze both the economic and geo-political criteria. We must mention a caveat to this literature on OCA. It suffers from the famous *Lucas Critique* – even if conditions for OCA do not exist *ex-ante*, which does not necessarily mean that the countries should not adopt a common currency. These countries may be more likely to satisfy the criteria *after* the adoption of the common currency than *before* (Frankel and Rose, 1996, 1997).

Criteria for Optimal Currency Area

Economic Structure of SAARC Nations

A similar level of economic development is crucial among potential members of a currency area in order to facilitate economic integration. Table 1 presents the broad economic structure of the SAARC countries.

The SAARC countries grew at 4.2 percent per annum on average in 2002, and are projected to grow at the rate of 5.8 and 6.1 percent per annum respectively for the next two years. Over time, trend in growth rates suggest a convergence towards the late 1990s and early years of the new millennium (see RIS 2004: Chapter 4). The structure of production is reasonably similar across the SAARC countries. The share of agriculture varies from 20 to 25 percent for all, except Nepal (40.6 percent) and Bhutan (33.9 percent). The industrial sector constitutes roughly a fourth of GDP in all countries, varying from 21.8 percent (Nepal) to 37.4 percent (Bhutan) in 2002. Except Nepal and Bhutan, the share of service sector for all other member countries comprises around 50 percent of their total GDP in 2002.

All the countries, except Sri Lanka, registered a very low rate of inflation and it stands at an average of 3.7 percent per annum for the SAARC countries. Maldives registered a very low rate of inflation (0.9 percent) in 2002. The figures indicate that most of the SAARC countries have similar growth rate and inflation rate. The SAARC countries also exhibit a similar demographic structure. The population growth varies between 1.5 and 2.4 percent per annum.

The SAARC countries exhibit similar growth rates in money supply. Except Nepal (6.3 percent), the growth in money supply varies between 19.3 percent (Maldives) and 13.1 percent (Bangladesh).[1] Most of the countries have comfortable levels of foreign exchange reserves. All the countries experienced fiscal deficits (combined states and centre) ranging from –3.9 percent (for Nepal) to –10.1 percent (for India) in 2002. But fiscal deficit can make macroeconomic management difficult.

As far as the value of domestic currency and flow of foreign direct investment (FDI) is concerned, the SAARC countries have experienced significant differences. While India received US $ 21406 million FDI in the year 2002, Nepal did not receive any FDI and Bhutan received only US $ 2 million. As a percentage of GDP, the FDI of India turns out to be 0.8, whereas Maldives and Sri Lanka recorded 2.1 and 1.1 respectively. The total debt

Table 1: Key Economic Indicators of SAARC Countries, 2002

Country / Indicators	Bangladesh	Bhutan	India	Maldives	Nepal	Pakistan	Sri Lanka
GDP Growth*	4.4	7.7	4.3	6.0	-0.5	3.4	4.0
	5.7	-	6.3	2.8	3.5	5.0	5.5
Ag Share	21.9	33.9	25.0	-	40.6	24.2	20.0
Indus. Share	25.5	37.4	29.9	-	21.8	22.4	26.3
Serv. Share	52.6	31.6	49.2	-	40.8	53.4	53.6
Pop. Growth*	1.5	2.4	2.1	1.6	2.0	2.2	1.5
Illiteracy rate	59.4		41.9	2.9	57.1	55.9	8.1
Inflation rate	2.4	2.7	3.6	0.9	2.9	3.5	10.2
	4.5	-	5.0	-	5.0	4.0	6.0
M^s Growth*	13.1	17.6	15.7	19.3	6.3	14.8	13.4
GDI	23.2	48.0	23.9	24.1	24.4	13.9	23.0
GDS	23.6	20.0	24.5	45.8	17.4	15.4	15.8
Fiscal Deficit	-4.6	-6.8	-10.1	-7.3	-3.9	-5.2	-8.9
Export	12.6	16.7	9.2#	23.9	11.5	14.6	80.9
Import	16.3	32.1	11.8#	62.2	25.8	15.1	105.1
Current A/C Balance	0.4	-1.7	0.6	-7.4	-7.0	4.5	-2.5
	-2.5	-	0.2	-	-5.0	0.9	-4.5
Ex Rate (US $)	57.4	48.2	48.5	12.8	76.7	61.4	95.7
FER (US $ m.)	1680.7	320.0	66994.0	130.6	1009.8	8076.0	1563.9
FDI#	0.4	-	0.8	2.1	-	0.5	1.1
Debt (% of Exp)	7.30	3.31	11.70	4.61	4.89	25.76	9.67
Debt (% of GNI)	1.45	1.15	1.96	3.95	1.55	5.12	4.40

Source: World Economic Outlook (WEO), 2003; Asian Development Outlook (ADO), 2003; ADB Key Indicators, 2003.
Note: Figures are percentage of GDP if not mentioned otherwise. Figures in the shaded line are the projected figures for 2004. *: percent per annum, #: corresponds to year 2001. GDI: Gross Domestic Investment, GDS: Gross Domestic Saving, FER: Foreign Exchange Reserves, FDI: Foreign Direct Investment.

services as a percentage of gross national income varies between 1.15 (Bhutan) to 5.12 (Pakistan); whereas, as a percentage of total exports of goods and services ranges from 3.31 to 25.76. The current account deficits, while above the 5 percent danger-level for Maldives and Nepal, are expected to come down in the next year.

Although no significant convergence mechanism has been initiated yet, still the macroeconomic indicators are not very unlike. However, solid macroeconomic policies and performances are required for countries in a potential monetary union in order to prevent a poor performer from imposing externalities on the union. Since most of the members of SAARC currently have low inflation, low current account deficits, similar growth, trade and production structure, it prods us to think of the possibility of monetary cooperation in the region, even if not for all the SAARC countries, certainly for some subgroup(s) of the member countries.

Extent of Trade among SAARC Countries

The benefits from an OCA accrue from a high level of intra-regional trade in the form of lower transaction costs. The volume of intra-regional trade in South Asia is quite insignificant (see Table 2), resulting in a limited interdependence among the South Asian countries. Maldives and Nepal trade a lot within the SAARC region. The high trade figures for Nepal are due to a nearly free trade treaty between India and Nepal since 1996. India has started exporting a lot more to the SAARC nations in the 1990s, while Bangladesh and Sri Lanka have started importing a lot more.

The low level of intra-regional trade stands at odds with the openness of these economies to trade. Except India, the SAARC countries are fairly open to trade (see Table 3). The low openness index for India is a reflection of a huge domestic market and is comparable to other large economies like Germany. However, further liberalization and intra-regional trade may be needed in order to gain the benefits of low transaction costs and elimination of exchange rate risk that accrue from using a common currency.

The SAARC region stands out in terms of its lowest intra-regional trade figures when compared with the Euro Area, ASEAN, NAFTA and Mercosur (See Saxena, 2002b). However, these figures might not be very representative of the total *actual* trade that takes place among these countries because of very high *illegal trade*. For example, the magnitude of formal and informal trade

Table 2: Extent of Intra-regional Trade in South Asia

From \ To		SA (US $ m.)	SA/World* 100	World (US $ m.)	SA (US $ m.)	SA/World* 100	World (US $ m.)
		EXPORTS			IMPORTS		
Bangladesh	1995	83	2.65	3129	1151	17.71	6496
	2001	92	1.6	5736	1299	14.41	9011
	2002	39.9	0.7	5654.5	1134.7	14.13	8022.8
India	1995	1544	5.05	30537	198	0.57	34484
	2001	2349	5.28	44434	436	0.84	51844
	2002	1902	3.84	49479	521	0.84	61969
Maldives	1995	11	22	50	47	13.16	357
	2001	33	19.18	172	107	24.76	432
Nepal	1995	30	9.25	324	132	17.2	767
	2001	199	34.85	571	593	44.25	1340
Pakistan	1995	251	3.14	7991	169	1.47	11467
	2001	264	2.86	9207	294	2.88	10203
	2002	226	2.35	9616	245	2.21	11064
Sri Lanka	1995	101	2.65	3801	545	12.16	4481
	2001	157	3.32	4722	712	12.42	5731
	2002	165.5	3.66	4509.7	772.4	13.24	5830.5

Note: DOTS Yearbook, 2002; DOTS Quarterly, June 2003.

Table 3: Degree of Openness of SAARC countries

Year \ Country	Bangladesh	Bhutan	India	Maldives	Nepal	Pakistan	Sri Lanka
1991	19.16	85.83	18.04	153.33	33.1	39.58	68.01
2001	37.12	91.32	29.10	158.79	59.66	38.87	83.75

Note: Authors' estimation from data from the 2003 WDI CD-ROM, World Bank.

$$\text{Openness} = \frac{(\text{Export of Goods and Services} + \text{Imports of Goods and Services})}{\text{GDP}} \times 100$$

between Bangladesh and India is roughly the same, while informal trade forms almost a third of the value of formal trade between India and Sri Lanka (Taneja, 2001 and 2002). Estimates on illegal trade between India and Pakistan vary from $100 million to $1 billion per year. If only India's informal trade with Bangladesh, Bhutan, Nepal and Sri Lanka is included, it is found that the intra-SAARC trade as a proportion of SAARC's total trade with the world stands at 6.48 percent in 1999, which is much higher than the official figure 4.46 percent (RIS, 2002).

Nature of Disturbances Affecting SAARC

Since an entry into a monetary union means abandoning an independent monetary policy, it is essential for the member countries to face similar economic shocks that would require a similar monetary policy response. Most of the SAARC countries do have similar production and export structure. The Herfindahl indices for the SAARC countries demonstrate that they are specialized in the production of few goods. If specialization is in the same goods, this in fact could be taken as an argument to form an OCA since they will be affected by similar shocks. Agricultural products, textiles, garments, and cotton fabrics are the major exports of most of the SAARC economies. Hence, these countries are more likely to experience symmetric external shocks.

On analyzing the supply shocks, Saxena (2002b) finds that the estimated correlation coefficients of supply shock for South Asia ranged between –0.46 and 0.42, while they ranged between –0.39 and 0.68 for Western Europe, -0.16 and 0.71 for East Asia, and –0.59 and 0.72 for the Americas (Bayoumi and Eichengreen, 1994).[2] From the positive correlations among different countries, she finds that the following groups may be suitable candidates for an OCA: Group 1: India, Pakistan, and Sri Lanka; Group 2: India, Nepal and Sri Lanka; Group 3: Bangladesh, Nepal and Sri Lanka; Group 4: India, Maldives and Pakistan.[3]

While the correlation of supply shocks is important, the size of these shocks and the speed of adjustment to these shocks have major policy implications. Larger disturbances can have very disruptive effects, and may require policy independence (e.g., monetary policy) to offset them. Similarly, if the speed with which the economies adjust to disturbances is slow, then the cost of fixing the exchange rate and losing policy autonomy increases. The SAARC economies experience the smallest supply disturbances compared to the other regions. The speed of adjustment ranks second after East Asia. Almost

all the adjustment to the disturbance is completed within two years. She also finds that most of the SAARC countries are specialized in production of similar goods for exports, the case for a common currency is strengthened on the grounds of similar shocks.

Labor Mobility

The OCA literature argues that labor mobility helps the members of a monetary union to adjust to asymmetric shocks by allowing labor to move from areas of high unemployment to low unemployment. While labor mobility varies across the SAARC region, it is definitely hindered by differences in language and culture. However, labor is more mobile between India and Nepal, but very little official mobility occurs between India and Pakistan. Bangladesh has a very porous border with India that results in a substantial, but mostly illegal, flow of labor from Bangladesh to India. Given the geo-political situation in the region, we do not expect high labor mobility at present. It took the European Union a long time to achieve the current levels of labor mobility and this can be enhanced through integrated labor laws in South Asia once the process of economic integration officially begins.

Fiscal Federalism

If region-specific shocks prevail, a federal fiscal system would provide regional insurance (in the form of federally funded unemployment insurance benefits), thereby attenuating the impact of regional shocks on interregional income differentials. While no official fiscal transfer mechanism exists at present (except in the form of official aid), this issue can be addressed when formal negotiations for adoption of common currency start. These fiscal transfers may not be a panacea for all troubles, since Eichengreen (1997) argues against fiscal federalism, which may discourage factor mobility and may encourage national labor unions to demand higher wages as the burden of unemployment benefits falls on the entire union (and this may create more socially inefficient unemployment). SAARC countries could build a federal budget on the line of the EU, which collects a euro-wide VAT.

Geo-Political Factors[4]

While the economic criteria discussed above are essential for determining the suitability of South Asia for a monetary union, the geo-political factors play an equally important role in this process. Two developments in the international environment make the prospects of South Asian exports to the new markets less promising. First, the weak growth in the world economy since 2000 has adversely affected the export performance of the region. Second, with the formation of regional economic blocs and growing protectionism in both the developed and developing regions, the South Asian countries may find it difficult to gain access to these markets. Given these developments, it will be beneficial for the SAARC countries to focus on intra-regional cooperation.

Dash (1996) recognizes four reasons for low intra-regional investment and trade among the South Asian economies – namely, production of similar products and hence being competitors, high tariff and non-tariff barriers, infrastructural bottlenecks and lack of political willingness. However, there are compelling economic reasons to suggest that it is in the interest of all the South Asian countries to promote intra-regional trade and economic cooperation. Direct trade in products like steel and aluminum, textile machinery, chemical products, and dry fruits currently being diverted through third countries will benefit both India and Pakistan quite substantially in terms of price, quality, and time. The region can expand trade in such products as tea and coffee, cotton and textiles, natural rubber, light engineering goods, iron and steel, medical equipment, pharmaceuticals, and agro-chemicals.

The energy problems in the region can be solved through cooperation. For example, Dash (1996) argues that the water from the Himalayan Rivers flowing through Bangladesh, Bhutan, India, Nepal and Pakistan can be harnessed for flood prevention and inland navigation system. India assisted Bhutan in constructing the Chukha hydroelectric project, which has the potential to benefit Bangladesh, Nepal, and Pakistan.

There are significant complementarities in trade among these countries. For example, Dash (1996) recognizes that Bangladesh can export such items as tea, newsprint, jute goods, and leather to Pakistan and in turn, import such items as textiles, cement, light engineering goods, machinery, and railway rolling stock. He identifies that India can provide security and meet Bangladesh's need for manufactured goods, such as steel, chemicals, light engineering goods, capital goods, coal and limestone. For a balance in trade deficit, India can import products such as urea, sponge iron, semi-processed leather, and newsprint from Bangladesh. The need to improve economic ties for Bangladesh with India and other countries in South Asia has increased in recent years, given the drying up of official development aid (ODA) to the South Asia from international agencies. In fact, India has been showing considerable interest in expanding economic cooperation with Bangladesh.

Nepal has always maintained very cordial relations with her neighbors, which won her the unanimous support for setting up SAARC's permanent secretariat in Kathmandu. However, she depends on India for aid, some critical imports like oil, cement, and coal and for employing her labor. Like Bangladesh, Nepal is facing reduced official foreign aid. Hence, she wants to develop more integration with the other South Asian economies, while trying to decrease her economic dependence on India.

Sri Lanka is an island and the only SAARC nation that does not have a contiguous border with India. Her anxiety about more economic cooperation reflects the overwhelming economic and political power that India exerts in the region. However, Sri Lanka can gain by diverting her trade in cement and ship building with South Korea to India and Pakistan. Adverse terms of trade, protectionism from the West and political instability from the civil war have led Sri Lanka to build local ties. Hence, since 1992, Sri Lanka has consistently advocated improving intra regional trade through the framework of South Asian Preferential Trade Agreement (SAPTA). The bilateral free trade agreement (FTA) with India is a welcoming step in this direction.

Among the SAARC countries, India has the broad industrial base and expertise, technology, and capital in certain sectors to invest and set up joint ventures in the region. Indian companies have emerged as major sources of investment in Sri Lanka and Nepal, the countries having bilateral free trade arrangements with India.

Like all the other SAARC nations and developing countries, Pakistan also has limited access to the markets in the developed world and hence Pakistan has taken initiatives to form Economic Cooperation Organization (ECO) to promote its exports and improve intra-regional trade with Central Asia. But given the competition from developed countries, it will be difficult for Pakistan to capture these markets. So, Pakistan has to concentrate on South Asian market to promote its exports where she enjoys comparative advantages after India.

Of all the SAARC economies, the two smallest countries, Bhutan and Maldives, have always supported the growth of regional cooperation in South Asia.

From the above discussion, it is evident that there is a great deal of potential in the region for developing trade and economic cooperation. Increasing openness of the economies with the removal of tariff and non-tariff barriers and elimination of exchange rate risk will enhance trade and facilitate monetary cooperation in the region. Hassan (2001) suggests that more liberalization is required in order to reap benefits from an economic bloc. India has shown its keenness on reducing non-tariff barriers with the other SAARC countries. Hence, on August 1, 1998, India unilaterally removed quantitative restrictions on imports from SAARC countries, viz, Bangladesh, Bhutan Nepal, and Maldives, Sri Lanka or Pakistan subject to the condition that they comply with the rules of origin principles as stated in the SAARC agreement (Taneja, 2001).

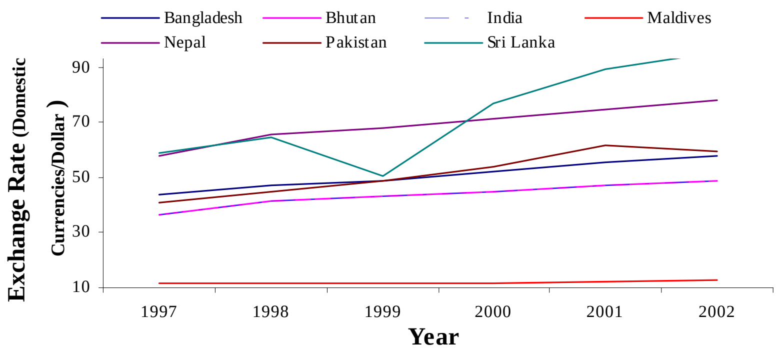
Macroeconomic Convergence Criteria

If the member countries could achieve low inflation, low interest rates and fiscal discipline, and control the volatility of exchange rate, then it will facilitate the formation of a monetary union in the region. Again, if the differences in inflation, interest rates, exchange rates and fiscal positions, among other factors, are very huge within the member countries, then an exchange rate area may involve greater costs. Hence, we closely examine these macroeconomic variables for the SAARC region.

Exchange Rates

The national exchange rates vis-à-vis the US dollar are shown in Figure 1. The exchange rate of Maldives' currency stands at rufiyaa 12.8 whereas that of Sri Lanka at SLRs. 95.7 per US dollar in 2002. The correlations of exchange rates are very high and vary from 0.689 to 0.998 over the period 1997-2002 (see Table 4). It is clear that though there is a wide difference in the value of

Figure 1: Movement Exchange Rates of SAARC Countries



Source: International Financial Statistics, Yearbook, 2003 (IMF)

Table 4: Correlation of Exchange Rates of SAARC Countries (1997-2002)

Country \ Country	Bangladesh	Bhutan	India	Maldives	Nepal	Pakistan	Sri Lanka
Bangladesh	1.000000						
Bhutan	0.981328	1.000000					
India	0.955975	0.969966	1.000000				
Maldives	0.854353	0.756154	0.689812	1.000000			
Nepal	0.982520	0.998871	0.974271	0.764458	1.000000		
Pakistan	0.993254	0.973388	0.950709	0.830346	0.971495	1.000000	
Sri Lanka	0.995811	0.971439	0.942218	0.858349	0.971307	0.997966	1.000000

different national currencies, the movements are very smooth and steady, and are moving together.

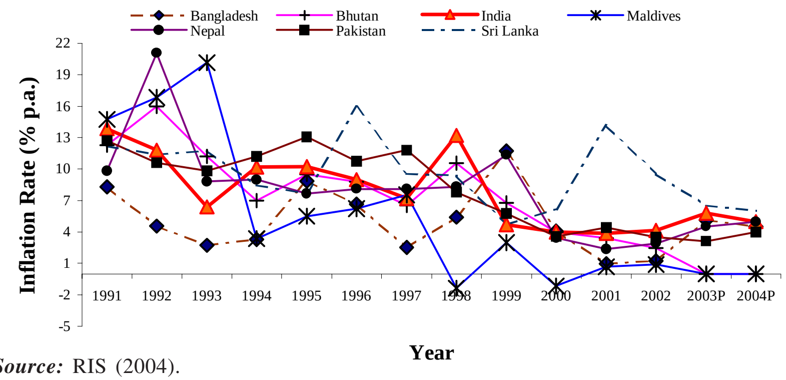
Inflation Rates

The inflation rates based on CPI (WPI for India only) are very low in the recent years as compared to that of 1990s. The volatility has also reduced significantly and the rates are converging for most of the countries in the region (see Figure 2), which is a sign of convergence.

Fiscal Deficits

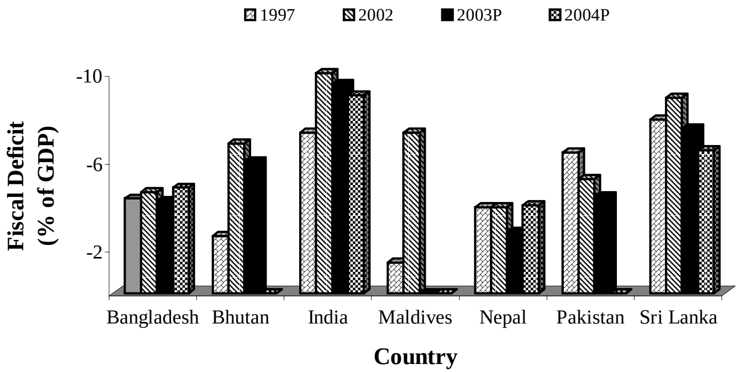
The overall fiscal deficits for the South Asian Countries for selective years are presented in Figure 3. It is clear from the figure that the fiscal deficit of the countries has stood at high level but it is showing a declining trend.

Figure 2: Movement Inflation Rates of SAARC Countries



Source: RIS (2004).

Figure 3: Trend in Overall Fiscal Deficit of SAARC Countries



Note: Figures up to 2000 are from ADB Outlook, 2003, A24, p. 304; and 2000 and onwards from ADB Outlook Update, 2003, A6, p.102.

From the above discussion it is clear that harmonizing inflation and exchange rate may not be a difficult task at present but the countries have to work hard in the direction of containing fiscal deficit.

Possible Alternative Monetary Arrangements for SAARC Countries

Once the countries agree to monetary cooperation among themselves, then the question arises on the practical operation of the system. An important issue arises on the design of a monetary and exchange rate policy framework for the unified system. At the operational level, there are many issues to be looked at, like the distribution of seignorage revenue across countries, the role of each country's central bank for monetary policy, the harmonization of banking supervision and regulations on monetary matters, etc. And at the strategic level, the most important question is about the proper monetary/exchange rate coordination within the region, and between the region and the rest of the world. Here, we focus on the appropriate exchange rate system for a region/currency bloc in the process of monetary integration.

Full monetary integration, in whatever form it takes, implies that there exists a fixed exchange rate and perfect coordination of monetary policy among countries. Financial policy cooperation/coordination reduces the spillover effects of exchange rate changes. Stable exchange rate promotes international trade and investment. In the presence of capital mobility, differing monetary policies can lead to differential real returns and volatile exchange rates. However,

if the exchange rates are fixed, such capital flows make the economies vulnerable to financial crises.[5] Hence, coordinated financial policies can reduce the risk of financial crises.

Once a region decides to form an OCA, then it is left with two possibilities for the exchange rate coordination – i.e., the member countries can either adopt a fixed exchange rate or a single currency for their exchange rate management. But they can have the option of a flexible exchange rate arrangement with the rest of the world. In a fixed exchange rate system, the member countries can have their own currency but their value will be fixed with the currencies of the other member countries. A single currency system is an extreme form of monetary arrangement where there will be one currency for all the member countries. Both arrangements have their own costs and benefits.

A fixed exchange rate arrangement among the member countries on the lines of Exchange Rate Mechanism in Europe has the advantage that it reduces the volatility in exchange rates and hence promotes trade and investment. In addition, the countries retain their monetary independence (how so ever limited it may be due to the fixed exchange rate system) and preserve their national currencies (which may be a symbol of national pride). The member countries retain an escape clause of abandoning the fixed exchange rate system if it is the adequate policy response to avert a financial crisis or revive a slowing economy. This is evident from the European crisis in 1992, when Britain and Italy opted out of the system to prevent further speculative attack on their currencies.

The biggest advantage of adopting a common currency as opposed to the fixed exchange rate system discussed above is the expectations about its permanence and the resolve by the policymakers. This advantage outweighs the cost of renouncing an independent monetary policy. As Mussa (1997) argues that the European crisis of 1992 could have been prevented if the European countries were using the same currency. Under a common currency, all countries follow the common monetary policy and it eliminates any divergence in returns that may exist in national currencies. This could prevent speculative attacks. In addition, the high cost of reverting back to national currencies (if that is even permissible, which is not the case for the European Union) and losing face in the international community encourage economic coordination among the member states.

While adoption of a common currency leads to economic integration, the same level of integration could also be achieved through policy coordination—like between Canada and the United States or Switzerland and Germany. However, movement to a common currency is a political commitment to ensure regional integration, hence it might be desirable in the SAARC region (where political incentives have outweighed economic incentives to establish peace and stability which is crucial for growth in that region) (Saxena, 2002b). Hence, there is a case for common currencies, as opposed to fixed exchange rate system for monetary cooperation.

Conclusions and Policy Recommendations

While monetary integration in South Asia is at present in its infancy stage with limited coordination among SAARC countries on monetary and exchange rate policy, but there exists a huge potential for monetary and financial cooperation. The study finds that the member countries have similar level of human and economic development in terms of GDP growth, per capita income, inflation rates and sectoral contribution to GDP (except Maldives).

The study finds that though the level of intra-regional trade is very low, partly due to the non-accountability of high illegal cross border trade and of course there are some official restrictions, there seems to be huge potential for intra-regional trade. Recently intra-regional trade has increased significantly among most of the SAARC countries and trade is likely to increase further once countries move to free trade agreements. "The complete elimination of tariffs under SAFTA may increase the intra-regional trade by 1.6 times the existing level", (Mehta and Bhattacharya, 1999). Once South Asia Free Trade Agreement (SAFTA) is operational, the region is expected to realize the expansion in intra-regional trade both in terms of official trading and new trade creation. The region is also expected to gain in terms of cost reduction, which further encourage intra-regional trade.[6]

On the basis of nature of shocks criteria, Saxena (2000b) finds that the following groups may be suitable candidates for an OCA: Group 1: India, Pakistan, and Sri Lanka; Group 2: India, Nepal and Sri Lanka; Group 3: Bangladesh, Nepal and Sri Lanka; Group 4: India, Maldives and Pakistan. Even Maskay (2003) finds India and Pakistan suitable candidates for a common currency.

While examining the macroeconomic convergence criteria, the study finds that inflation rates are very low and they are converging for most of the countries.

The exchange rate movements are showing very smooth pattern.[7] While India, Pakistan and Sri Lanka have a managed float, all the other countries have a pegged exchange rate regime, with Bhutan and Nepal pegged against the Indian rupee. There is one-to-one convertibility of Indian rupee and Bhutanese ngultrum over the last twenty years and there is no adjustments in the exchange rate between India and Nepalese rupees since last ten years. With less volatility, the common exchange rate arrangements may not be a difficult task in practice.

It is argued that, under free trade, smaller countries are expected to experience more trade gains that will bring all the economies in the region to converge in terms of macroeconomic performance.[8] Also, in recent years, the region is doing well in terms of macroeconomic performance. There is a high and stable growth of output in the region. The key macroeconomic variables like inflation rates, exchange rates and fiscal deficits are converging. The ongoing macroeconomic reforms and increasing openness of capital account are the positive steps in the direction of monetary cooperation in the region.

Hence, a closer look at the macroeconomic indicators of the SAARC region suggests that there is a huge potential for economic cooperation in the region. Although the monetary cooperation in the region is in the infancy stage, the **prospects** in this direction seem to be encouraging. There has been growing realization in the last decade among the South Asian leaders that the future of SAARC, like any other regional group, lies in concentrating on economic cooperation in specific areas. The conscious efforts at the political level and demonstration of political will by the South Asian leaders will strengthen the regional economic cooperation. With cooperation already in place and progressing in terms of trade, social issues, regional investment promotion, WTO issues, tourism, tea council, steel front, promotion of internet, finance and network of SAARC researchers, the prospects for greater economic integration through coordination of macro economic policies seems to be brighter.

The Group of Eminent Persons (GEP) of SAARC has proposed a roadmap for economic integration through a formation of a South Asia Free Trade Area (SAFTA) and a South Asian Customs Union (SACU) by 2015, and South Asian Economic Union (SAEU) by 2020. South Asian countries have also initiated cooperation within the framework of SAARC in the areas of poverty alleviation and people-to-people contact programs, expansion in the scope of investment and technology cooperation, besides bilateral initiatives such as Indo-Nepal FTA, Indo-Sri Lanka FTA, and some sub-regional initiatives like, Bangladesh-

Bhutan-India-Nepal Growth Quadrangle (BBIN), etc. India, being the largest economy in the region, has to take the initiative and she is showing increasing interest in direction of monetary cooperation. It deserves to be noted that Prime Minister Atal Bihari Vajpayee has elevated the level of discourse by sharing the vision of open borders and a common currency in South Asia at a recent conference.[9]

Some of the more encouraging signs are: *First*, a framework treaty for the South Asian Free Trade Area (SAFTA), which is signed by the SAARC member countries in the SAARC Summit, 2004 will be operational from 2006. This will pave the way towards the eventual creation of a South Asian Economic Union, as envisioned by the GEP. ***Second***, The member countries also signed the SAARC Social Charter at the Summit. The Charter encompasses a broad range of targets to be achieved across the region in areas of poverty eradication, empowerment of women, youth mobilization, human resources development, promotion of health and nutrition, protection of children etc.

In the direction of monetary coordination, an important development has taken place with the establishment of SAARCFINANCE. This is an organization of Governors of Central Banks and Secretaries of SAARC member countries, with the broader objective of promoting cooperation among Central Banks and Financial Ministries, harmonizing banking legislations and practices, working towards a more efficient payment mechanism and higher monetary and exchange rate cooperation, forging closer cooperation on macroeconomic policies, studying the impacts of global financial developments on the region, monitoring international currency and capital flows and reforms in the systems, and undertaking research, training and networking activities in the region.[10] The SAARCFINANCE will help achieve greater monetary cooperation in the region.

The bringing together of the central banks governors of the participants at periodical meetings of the Asian Clearing Union (ACU) board has helped in discussing matters of mutual concern and interest, exchange information and ideas and establish close working relationships (RIS, 1994). At present, except Maldives, all the other SAARC countries are the members of ACU.[11]

With huge potential and growing prospects, the region can gradually form the currency union to derive its benefits. While recognizing that economic integration is essential for growth and prosperity in the region, it is not enough. A lot more needs to be done for complete economic and monetary union – some of these are listed below.

1. *Establishing a Single Market:* The region should achieve the objective of a single market within which there is a free flow of goods and services, capital and people. Greater and free mobility of factors of production in the region will work as a shock absorber in case of asymmetric shocks. Deeper economic reforms with increasing current and capital account openness and removal of trade restrictions will facilitate to establish a single market in the region.

2. *Promotion of Intra-Regional Trade:* Trade integration can be thought of as a first step for moving towards monetary cooperation. The intra-regional trade can be facilitated through a reduction and ultimate elimination of tariff and non-tariff barriers. The attempt to move towards SAFTA appears to be more promising in this direction. Apart from this, the bilateral FTA between the countries in the region can supplements to this. There are compelling economic reasons to suggest that it is in the interest of all the South Asian countries to promote intra-regional trade and economic cooperation by working out the trade complementarities and comparative advantage.

3. *Reducing Transaction Costs:* To reduce the cost of exchanging currencies for intra-regional trade and to improve the transparency in price setting necessary for the promotion of intra-regional trade and investment flows, the Asian Clearing Union (ACU) can be strengthened further to facilitate such transactions. The scope of ACU can be widened to include tourism, service transactions and others. Maldives, the only country of South Asia, which is not the member of ACU, can seek the membership. The other Asian countries may be invited to join ACU. The transaction facilities should also be improved technically.

4. *Convergence Criteria:* The convergence of macroeconomic indicators like inflation rate, interest rate and exchange rate, public debt, fiscal deficits, etc are pre-requisites for common monetary arrangements in the region. The countries have to bring down their fiscal deficit to the minimum possible level to use fiscal policy effectively for stabilization purpose.

5. *Pattern of Shocks:* This is one of the important criteria to decide on the potential candidature for the member of optimum currency area and needs to be studied more meticulously. It is not only the nature of shocks, but

the sources of shocks are important to be identified. If shocks are endogenous in nature – arising mostly from demand side, then the case for common currency area is strengthened, as common monetary policy will reduce the asymmetric shocks. Again, it is very crucial to study the size of shocks and the speed of adjustment. If the size of shocks is small and/or the speed of adjustment is very high then the case of common currency is strengthened on the ground that common monetary can effectively manage this problem.

6. *Coordination of Fiscal and Monetary Policies in the Region:* Fiscal positions need to be strengthened through deficit and debt reduction. There is a need to establish greater harmony in monetary policies in order to reduce currency misalignment and achieve full convertibility, within the region. The central banks could share the informations relating to central bank policies. The SAARCFINANCE could serve to coordinate the monetary fiscal and monetary policy in the region.

7. *Exchange Rate System:* The member countries should have some sort of pegged exchange rate system among themselves with wider band initially. The countries should be working towards achieving macroeconomic stability and full convertibility in both current and capital account before moving to adopt a common currency in the region. A gradual move towards capital account convertibility at least within the region can be thought of seriously. However, the currencies could float against the major other currencies, like the dollar, yen and euro. Moving in this step by step manner we can achieve the objective of common currency in the region.

The idea of introducing parallel currency is also suggested as an alternative exchange rate arrangement in the region.[12] This could serve as an immediate step of monetary cooperation and will facilitate to achieve the common currency, the stronger form of monetary cooperation, in the region. Unlike common currency, the individual countries do not have to surrender monetary sovereignty in case of parallel currency. The countries retain control over their own currencies and the autonomy of the central backs of individual countries on the monetary policy remains intact. The parallel currency can help promoting regional cooperation in trade and investment by funding provision of regional public goods, and the seigniorage from the parallel currency can be used to accelerate the process of convergence in the region, and that can eventually prepare the ground for a common currency.

8. *South Asia Reserve Pool:* There must be availability of sufficient regional funds to act if a financial crisis happens to hit the region. Now all the member countries are blessed with high foreign exchange reserves. The surplus foreign exchange reserves can be pulled under currency swap arrangements in the region. In this context, the proposal to establish Reserve Bank of Asia need to be considered more seriously.[13] The purpose of pulling reserves can be widened beyond to that of Chiang-Mai initiatives, to include financing developmental expenditure and attaining macroeconomic stability. The criteria of surplus foreign exchange reserves one country has, can be decided on the basis of liquidity-at-risk principle rather than trade weights.

9. *Strengthening Political Cooperation:* Strong political cooperation and constant efforts are needed for monetary cooperation in the region. It is very much necessary to remove irritants and building extreme level of confidence and trust before thinking about common currency in the region.[14]

Lastly, which deserves to be the first point, that the member countries should form a final road map for monetary cooperation, and proceed step by step to finally achieve the full form of monetary cooperation in the region and untape the benefits from it.

Endnotes

1 Nepal's smaller growth in money supply may be a result of its fixed exchange rate system.

2 Demand shocks are not discussed since highly related demand shocks may be less important, as they may stem from divergent monetary policies, which would no longer occur after monetary union.

3 Results from Saxena (2002b) are corroborated by Maskay (2003), where he finds India and Pakistan as suitable candidates for a single currency.

4 This section draws from Dash (1996) and RIS (1994)

5 See Saxena (2003) for the link of capital mobility and financial crises.

6 For some estimates on the gain from SAFTA, see p. 49, South Asia Development and Cooperation Report 2004.

7 Maskay (2003) finds a similarity in the movement in the NEER and REER of all the countries.

8 Under SAPTA it is the smaller countries that have experienced trade gains. For the evidences, see pages 48-49, South Asia Development and Cooperation Report 2004.

9 Keynote address at the 'Hindustan Times Leadership Initiative' forum on 14th December, 2003

10 For detail, see the website: http://www.saarc-sec.org/

[11] The member countries can settle the transactions through the ACU common unit of account, the Asian Monetary Units (AMU). For detail on ACU, see RIS (1994).

[12] Robert Mundell, the Nobel Laureate in his recent lecture at Asian Development Bank asserted that while Asia may not be ready for common currency, it might be ready for a parallel currency. The same goes for South Asia. For detail on the characteristics and importance of a South Asian parallel currency, see RIS (2003b) and RIS (2004).

[13] See "Reserve Bank of Asia: Institutional Framework for Regional Monetary and Financial Cooperation", RIS Policy Briefs, No. 3, May, 2003.

[14] Dr. Raghuram Rajan, Chief Economist, IMF replied to the question on his view on the common South Asian currency suggested by the PM of India, in an Interview with Economic Times, December 23, on "Exchange Rate Must be More Flexible".

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