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Prospects of economic cooperation in the Bangladesh, China, India and Myanmar region: A quantitative assessment

By

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Executive Summary

This paper quantifies the economic impact of Bangladesh, China, India and Myanmar (BCIM) economic cooperation and compares it with the alternative option of expanding South Asian Free Trade Area (SAFTA) with China and Myanmar. The paper examines the macro-economic performance of the individual countries and the current level of trade among the BCIM member countries at the regional level. In addition, the paper attempts to explore the level underlying rationale, peripheral benefits and primacy of forming BCIM rather than expanding SAFTA. In a quantitative analysis, a SMART simulation shows that, the merchandise trade in the BCIM region would increase by US$ 5.7 billion, US$ 4.1 billion and US$ 2.7 billion under full, moderate and partial tariff liberalization, respectively. On the other hand, trade would total US$ 12 billion, US$ 9 billion and US$ 5 billion in case of adding China and Myanmar to SAFTA. The paper identifies most trade potential products for the BCIM region under full tariff liberalization. Finally, it explores the logic of forming BCIM even though the quantitative results support the expansion of SAFTA to include China and Myanmar. It explores the fact that the strength of the BCIM region lies in expanding cooperation along with north-east India, south-west China, Bangladesh and Myanmar in the case of forming a subregional development hub or quadrangle with expanded cooperation in the transport, energy and tourism sectors. This quadrangle may have large potential for enhancing economic growth by increasing intraregional trade among the member countries and will have a positive impact both on economic and on human development in the region.

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1. Introduction

The BCIM forum is a Track-II initiative[1] that was floated in 1999 and comprises Bangladesh, China, India and Myanmar. It is an effort primarily by the non-government sector of the member countries to influence policymakers, business people and government representatives in boosting regional cooperation by transferring it into a growth quadrangle or Regional Economic Development Area (REDA).

The idea of Growth Zones in development economics and the success of existing growth zones – the Greater Mekong Subregion (GMS) and the southern China Growth Triangles, and the Growth Triangle comprising Johor State of Malaysia, Singapore and the Riau Islands of Indonesia – inspired the non-governmental sector of those countries to initiate a debate on forming a BCIM growth zone. It has been argued that formation of growth zones or REDA will initiate a faster economic growth process by increasing the possibility of efficient use of the region's unused resources (ESCAP, 2002).

Resource endowments in the BCIM region vary from country to country, which supports the precondition for the formation of this type of regional integration. China and India have comparatively better technology, a more efficient labour force, and improved physical and commercial infrastructure. On the other hand, Bangladesh and Myanmar have a large unskilled and semi-skilled labour force as well as basic and intermediate technology.

On the other hand, these countries are already involved in different trade agreements with each other on a bilateral or regional basis, e.g., SAFTA, the Asia-Pacific Trade Agreement (APTA) and the Bay of Bengal Initiatives for Multi-Sectoral Technical and Economic Cooperation (BIMSTEC). Hence, in the case of analysing the potentiality of this new regional initiative, it is necessary to compare BCIM with another possible alternative regional cooperation initiative, SAFTA + Myanmar + China..

This paper attempts to assess the potential economic gains of this regional cooperation initiative in real terms by quantifying the likely economic effects, such as "trade creation" and "trade diversion" together with "revenue and welfare effects", with the help of a partial equilibrium analysis. In addition, using a gravity analysis, the direction and magnitude of trade flow of this region are assessed with regard to population, per capita income, border area and maritime distance. The paper also justifies this initiative by comparing it to the alternative option of incorporating China and Myanmar with SAFTA instead of forming another regional bloc. To assess this alternative, the benefits of SAFTA + Myanmar + China have been calculated in comparison with the proposed BCIM perspective.

The paper is divided into seven sections. Section 1 explores the importance of the proposed BCIM economic cooperation and rationale for the study, while sections 2 and 3 review the literature and the tariff profile of BCIM vis-à-vis SAFTA + China + Myanmar. Section 4 reviews the data and methodology used. In section 5, the findings of the gravity model and SMART simulation are given. This section also describes some important products that have high trade potential for this regional bloc. Section 6

[1] "Track-II" initiatives are initiatives taken by the non-governmental sector, whereas initiatives taken by the government sector are known as "Track-I" initiatives.

discusses the other rationale for forming BCIM as another regional cooperation initiative. Section 7 provides some policy recommendations for boosting this regional cooperation.

2. Importance of BCIM economic cooperation and rationale for the study

Both proposed regional cooperation initiatives, i.e., BCIM and SAFTA + Myanmar + China, comprise very large markets, with a total gross domestic product (GDP) of around US$ 3 trillion (as of 2006). In terms per capita GDP, the countries heterogeneous in nature, both within the BCIM region and in the SAFTA + Myanmar + China region; however, every country except Myanmar and Nepal has achieved a moderate level of growth (table 1).

Table 1 shows that there are differences in the contribution by each sector to total GDP for most of the countries. The services sector contributes most to national income, except for China where industry is the major source and for Myanmar where agriculture accounts for the largest portion of the national income. Again, although the share of international trade in terms of each country's total GDP provides an important contribution, this varies among the countries, with lowest ratio for Pakistan and the highest shares for Bhutan and China in 2006.

Table 1: Macroeconomic overview of the SAFTA + Myanmar + China region in 2006

Indicator	Afghanistan	Bangladesh	Bhutan	China	India	Myanmar	Nepal	Pakistan	Sri Lanka
GDP (US$ billions)	2.96	65.42	0.70	2 095.95	703.33	8.80	6.70	100.89	21.27
Per capita GDP	143.00	419.41	1 086.34	1 597.77	633.74	174.00	242.48	634.50	1 069.66
GDP growth	6.50	6.63	8.47	10.70	9.20	2.90	2.80	6.92	7.35
Share of GDP									
Agriculture	32.60	19.61	22.34	11.71	17.53	50.00	34.36	19.39	16.46
Industry	27.80	17.21	7.37	48.48	16.28	35.00	7.68	19.47	13.93
Services	39.60	52.48	39.77	39.91	54.58	15.00	49.31	53.41	56.47
International trade-GDP ratio		44.22	76.79	72.39	48.78		45.29	38.61	74.78

Source: World development Indicators, 2008, World Bank.

On the other hand, when conceptualized as a region, BCIM accounts for about 40 per cent of world's total population (2.62 billion persons in 2007) and about 7.5 per cent of total global GDP (about US$ 3 trillion). The sectoral composition of GDP of these countries indicates that the presence of complementarities in economic activities can make cooperation beneficial. For example, in financial year 2007, the dominance of the industrial sector in China (49 per cent of total GDP), the agriculture sector in Myanmar (50 per cent of total GDP) and the services sector in India and Bangladesh (55 per cent and 49 per cent of total GDP, respectively).

Again, when looking at the trading pattern for these regions, some variation can be seen in their intraregional shares, although all shares of imports and exports at the regional level are increasing over time (tables 2 and 3). For the small economies, the regional countries are the most important sources of their imports and even their exports (e.g., Myanmar, Nepal and Bhutan). On the other hand, for the medium-sized economies (e.g., Pakistan and Bangladesh), regional countries are more important from the perspective of their imports compared with their exports to the same region, whereas for the two major economies, China and India, the regional countries are more important

from the export perspective compared to imports. However, again one distinguishing factor supports the formation of BCIM cooperation. Although SAFTA is already an established regional free trade agreement, whereas BCIM is only under consideration, the share of intraregional trade in terms of both exports and imports, the latter is gaining in importance compared to the previous one.

Table 2: Pattern of intraregional trade in BCIM

Country	Export to BCIM as % of world					Imports from BCIM as % of world				
	1990	1995	2000	2005	2007	1990	1995	2000	2005	2007
Bangladesh	2.80	1.79	1.08	1.96	2.39	8.06	24.62	18.16	27.82	29.49
China	0.96	1.35	1.19	1.61	2.39	0.40	0.45	0.66	1.53	1.58
India	1.78	4.14	3.91	8.36	10.41	0.57	3.05	3.39	7.74	10.98
Myanmar	19.10	23.88	14.97	19.64	22.15	20.98	30.11	19.73	32.27	37.21
BCIM as a whole	1.37	1.91	1.86	3.04	4.40	0.96	1.45	1.89	3.15	4.07

Source: Estimated from the International Monetary Fund Direction of Trade Statistics Database, 2008.
Note: Export data are taken as FOB and import data as CIF.

Table 3: Pattern of intraregional trade in SAFTA + Myanmar + China

Country	Exports to SAFTA + Myanmar + China (% of world)					Imports from SAFTA + Myanmar + China (% of world)				
	1990	1995	2000	2005	2007	1990	1995	2000	2005	2007
Afghanistan	14.57	22.30	45.86	43.24	46.48	19.91	19.20	30.83	46.20	45.65
Bangladesh	5.17	3.34	1.84	2.73	3.09	10.24	26.98	19.37	28.98	30.73
China	1.99	2.10	1.72	2.22	3.02	0.57	0.63	0.89	1.67	1.71
India	3.17	6.06	6.16	11.98	13.91	0.97	3.37	4.14	8.56	11.65
Maldives	13.99	22.63	18.14	17.42	9.74	14.07	13.62	23.30	19.51	12.44
Myanmar	23.59	26.32	15.95	20.71	23.41	21.14	30.24	19.88	32.42	37.29
Nepal	9.91	9.29	42.90	67.45	72.36	20.74	24.87	45.05	65.26	72.74
Pakistan	5.25	4.92	7.27	13.93	18.13	6.33	6.26	7.92	12.41	19.26
Sri Lanka	3.96	2.76	3.58	10.77	8.78	11.49	15.78	14.35	29.51	33.13
SAFTA	2.19	2.43	2.19	2.79	3.39	1.13	1.55	1.72	2.30	2.24
SAFTA + Myanmar + China	2.67	3.05	2.72	3.71	4.56	2.21	3.21	3.00	4.27	5.36

Source: Estimated from the International Monetary Fund Direction of Trade Statistics Database, 2008.
Note: Export data are taken as FOB and import data as CIF.

Together with the economic factors, the strong cultural affinity, the closer geographical proximity and presence of a huge informal border trade among the countries also provide strong optimism for forming a regional trading bloc comprising BCIM. Again, BCIM cooperation is expected to help to revive the centuries-old Silk Road[2] running from Chittagong to Yunnan through Myanmar, a fact that will help to facilitate transit and thus trade among these countries. The potential benefit of utilizing the two ports of Bangladesh, i.e., Chittagong and Mongla, is a vast increase in trade and investment in this region and will be particularly useful to India in communicating with its "Seven Sisters" provinces, i.e., Arunacha, Assam, Manipur, Meghalaya, Mizoram, Nagaland and Tripura. .

[2] The Silk Road, or Silk Route, is an extensive interconnected network of trade routes across the Asian continent connecting East, South and West Asia with the Mediterranean world, including North Africa and Europe.

For the above reasons, this cooperation is expected to bring about a process that reveals growth potential for the region as a whole, and for north-east India, south-west China and the two least developed country members, Bangladesh and Myanmar, in particular. In this context, to foster BCIM cooperation and make the policy makers proactive it is felt that an in-depth analysis of the potential outcome of closer integration among the four countries should be carried out.

3. Literature review

In the theoretical and empirical literature, attempts to identify the likely impact of forming RTAs on the member countries are mixed. Viner (1950), Leamer (1983) and Bhagwati and Panagariya (2006) concluded that Preferential Trading Arrangement (PTAs) were a "two faced" system. Ghosh and Yamarik (2004) found no evidence of trade creation or diversion for any PTAs. However, in the trade literature, it is generally argued that with close geographical proximity of the trading partners, and different stages of economic growth and specialization of production, there exists a possibility of welfare gain through mutual cooperation among them (Sayan,1998). Magee (2008) also estimated that regional agreements had significant anticipatory effects on trade flows among the member countries.

Using the case of seven RTAs from different regions, Coulibaly (2004) found mixed evidence. His study concluded that RTAs could be conceptualized as intra-bloc trade creators, where some are net trade creating, and some are net trade diverting. Baltagi, Peter and Pfaffermayr (2007) found that trade policy as reflected in RTAs had an impact not only on trade but also on foreign direct investment. In a study of the Greater Mekong Subregion Economic Cooperation, Krongkaew (2004) found that the potential benefits from this cooperation were large, although he identified some problems related to its implementation. Lee and Shin (2005) concluded that if an RTA involved geographically proximate countries (measured either by distance or by border), trade was likely to increase significantly among them. They concluded that the East Asian RTAs were likely to create more trade among members without diverting trade from non-members.

A gravity analysis of the Andean Community (AC) and MERCUSOR region by Carrillo and Li (2002) concluded that the presence of common borders and availability of land transportation would create 5.7 times and 3.1 times more trade between the countries, respectively, compared with countries that did not have those features. Roberts (2004), in analysing the effects of trade liberalization on the United States-Australia FTA, highlighted the facts related to reaching different conclusions, even contradictory ones in evaluating the effects of bilateral or multilateral trading arrangements when using a gravity model-based approach. For this malfunctioning of the gravity modelling approach, he identified the incorrect specification of models and omitted variable biases, which are, in most cases, the result of data unavailability. Cernat (2001) found that the South-South RTAs, i.e., the RTAs among developing countries, did not divert trade so much. He concluded that the removal of different "invisible" trade barriers, e.g., different steps to facilitate trade, could substantially enhance trade among those countries.

In evaluating the potential impact of the ASEAN-China Free Trade Agreement (ACFTA), which will come into effect from 2010, using the computable general equilibrium analysis approach, Doughyun and others (2008) reached the conclusion that

there was some “guarded optimism” for its role in strengthening economic cooperation among the countries concerned. Zhao and others (2008) quantified the economic implications of the ACFTA on merchandise trade flows among member countries and other trading partners, which implies that tariff reductions alone among regional and bilateral trade arrangements have very little impact on trade flows. They concluded that only under a multilateral liberalization would all member countries of a regional trade arrangement and the rest of the world experience any benefit.

Since the BCIM initiative is still under process, to date there have been very few studies that have attempted to quantify the potential gain and loss that would be generated as a result of the implementation of this initiative, especially any ex ante analysis; rather, almost all the papers are based on theoretical grounds of the regional trading blocs. Even with some political mistrust among some countries, together with a huge market size presence of diverse natural resources, a rich biodiversity and potentiality of enormous energy generation can transform the region into a Growth Zone (Islam, 2008). The similarities in culture and closer proximity among the countries can increase the potentiality of economic integration among South Asian countries (De and Bhattacharyay, 2007).

Again, the increase over time of trade complementarity indices (TCI) in the South Asian Association for Regional Cooperation region (for the four major economies of India, Pakistan, Bangladesh and Sri Lanka), gives grounds for strong optimism that greater opportunity will arise for intraregional trade. Therefore, a case can be argued for supporting BCIM formation as an entity, especially for the big economies of this regional cooperation initiative, i.e., China and India (Asian Development Bank, 2008). A study on BCIM economic cooperation by Rahman and others (2007) concluded that depending on the market size and the different stages of economic development, together with their proximity in terms of geographical location, a huge potential existed for trade and investment complementarities among BCIM countries. Using different trade indices, such as RTOI, GI and TII, they illustrated the scope of regional integration among those countries.

Although extensive literature exists that attempts to estimate the possible effects of RTAs on the member countries vis-à-vis the impact on the non-member countries and on the world as a whole, relatively little attempt has been made to quantify the likely impact of economic cooperation within the BCIM region. This paper is aimed at reducing this shortage, despite its limited extent, by (a) quantifying the magnitude of potential trade and welfare effects of the region, both combined and individually, and (b)