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Research and Information System
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Core IV-B, Fourth Floor
India Habitat Centre
Lodhi Road
New Delhi-110 003, India.
Ph. 91-11-2468 2177-80
Fax: 91-11-2468 2173-74-75
Email: dgoffice@ris.org.in
Website: <http://www.ris.org.in>
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Welfare Gains from Regional Economic Integration in Asia: ASEAN+3 or EAS

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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

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Welfare Gains from Regional Economic Integration in Asia: ASEAN+3 or EAS[#]

S.K. Mohanty* and Sanjib Pohit**

Abstract: The experiences of Asian countries suggest that the region has substantial economic potentials and synergies between these countries and they can be better tapped with comprehensive economic cooperation. With this approach formation of an Asian Economic Community is not too far away from now. Next phase of liberalisation in Asia should focus on deep economic integration. Sitting on the driving seat, ASEAN's economic interest should be given priority while taking a view on further regional economic liberalisation in Asia. The core issue is, which group of countries between ASEAN+3 and East Asian Summit (EAS) countries, would elicit maximum benefit to the region in general and ASEAN in particular? Using an Applied General Equilibrium (AGE) model in a monopolistic framework, the paper suggests that next Round of economic liberalisation should start with EAS.

Introduction

Asia is emerging as a vibrant economic space in the new millennium, and it is gradually reviving its earlier position as a dominant global economic power as exhibited at the beginning of the nineteenth century.¹ In this new episode of Asia's resurgence in the twenty-first century, the integration of some of the East Asia countries has played an important role in inducing other Asian countries to engage in the high growth process. Consolidation of ASEAN countries in the 1990s, and their efforts in roping-in 'Plus' countries in regional economic integration, have triggered rapid economic growth in Asia during the last decade (Lamberte, 2005). A major step in this direction was a decision to launch the East Asian Summit (EAS) to deepen their level of integration.

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* Fellow, RIS and ** Senior Fellow/Chief Economist, National Council of Applied Economic Research (NCAER), New Delhi.

Several studies (Kumar, 2005) have observed that EAS could be the beginning of a process which would take the region towards the formation of an Asian Economic Community (AEC). These Summits have come at a time when Asia is expanding rapidly amidst new economic challenges. At the beginning of this decade, certain positive developments occurred in Asia that provided encouragement for the formation of AEC. After a prolonged phase, Japan has made a smart recovery from its recession (IMF, 2007). China and India have continued to maintain their high economic growth and such performances have been sustained over a long period of time (Rajan and Sen, 2005; Rahman and Andreu, 2006). As a result of the surging economic prosperity, the middle income group in ASEAN and Plus countries has been growing with high consumption propensity. This has been a major contributing factor for the fast expansion of the regional markets in Asia for production, investment, technology and skilled human power through integration of regional economies. Besides, regional economies have shown greater resilience to various forms of crisis including natural disasters such as earthquake, tsunami, and external shocks such as hike in petroleum prices, etc. The platform for wider Asian regional integration is near set for 'take off' and, therefore, a regional initiative like EAS is an important step in this direction.

The readiness of Plus countries is not different from that of ASEAN countries to join further integration process in AEC. Japan and Korea are already better placed in terms of their economic development than ASEAN and other Plus countries to complement the EAS process. India and China have achieved major strides in their economic development in recent decades. The emergence of these countries with their enormous import-dependence on neighbouring countries, has begun to transmit growth impulses to their partner countries, providing them the opportunity to also grow fast (Mohanty and Chaturvedi, 2006).² These large and fast growing countries have large synergies with ASEAN countries, and this would improve prospects of welfare effects mutually. Australia and New Zealand are developed countries that have complementarities with ASEAN in diversified sectors.

In the recent surge of Asia in terms of its robust economic performance, ASEAN has played a major role. During the last two decades, not only has trade among the ASEAN partner countries increased but even intra-regional trade of ASEAN+4 countries has increased substantially, which has contributed to surge of overall economic activities in Asia in terms of trade, investment and movement of skilled persons (Sinharoy, 2004). Regional countries have revealed their strong preference for trade with close neighbours, and this has been an important factor in making Asian global trade 'Asia centric'. This trend would be even more profound with a deeper level of integration.

Unlike North America and Europe, Asia has not benefited substantially from the regional process due to lack of effective leadership in the long run. In the present situation, ASEAN commands effective leadership to take emerging Asian countries towards the right track. The 'Plus' countries have rallied around the 'Core ASEAN' countries to optimize synergies existing between them. In the absence of ASEAN in command, the possibility of economic integration in Asia with the mutual cooperation between 'Only plus Countries' or/and other Asian countries, is perhaps very low. Since, ASEAN is at the driver's seat, it has to think about the appropriate group of countries (ASEAN+3 or EAS) which are to carryout another liberalisation initiatives under the AEC, taking into account which group of countries is likely to generate the maximum welfare gain to ASEAN (Pitsuwan, 2007).

Two issues need attention in order to take a view on the future membership architecture of AEC. These two pressing issues are: (a) what is the ideal size of AEC, and (b) what should be the coverage of economic liberalization to make AEC an effective regional trading arrangement.

Membership: It is apparent that the organisational architecture of AEC is closely linked to the economic interests of ASEAN. To what extent the large economic interest of ASEAN can be better served— whether with a small group of 'Plus countries', or with a larger group of 'Summit level' countries—is a critical issue which must be looked at by ASEAN keeping in

view the absolute economic gains from the alternative arrangements. Ideally speaking, if ASEAN gets maximum advantages by forming close economic cooperation with ASEAN+6 than with ASEAN+3 (APT), then ASEAN should give a positive indication to ASEAN+6 to be the basis for forming AEC. The right to resolve the membership issue in AEC rests with the ASEAN and the regional caucus is yet to decide on this issue.

In the literature, two divergent views are discussed regarding the membership structure of AEC. Some of the Plus countries have taken the lead in arguing out the shape of the future AEC. While a few members have argued in favour of ASEAN+3 as natural partners for forming the AEC, some others favour ASEAN+6 as the ideal group for the proposed AEC (Kawai and Wignaraja, 2007 and Kumar, 2006). The genesis of the first proposal was that 'Plus Three' countries worked very closely during the period of the 'Asian financial crisis'; and they jointly mooted several initiatives to overcome the same AEC. Since they have worked together closely from the days of the economic crisis, they (APT) should exclusively form the core of the EAS. The position of another group of countries is that ASEAN+3 countries in 2004 decided to form the AEC with ASEAN+6, and this decision may be implemented when AEC is eventually formed (Kawai and Wignaraja, 2007 and Kumar, 2006). There is another view on the architecture of the AEC. Some others feel that if AEC is to start with a smaller group, then it should be with 'Plus' countries rather than including other 'new members' like Australia and New Zealand (Smith, 1998). In that case AEC may be formed with ASEAN+4 than with ASEAN+3. This may be treated as third alternative proposal on AEC. The alternative responses to the question of membership of AEC, ASEAN+3, ASEAN+4 or ASEAN+6, are an area for further empirical examination.

Trade Liberalization: The trade liberalization issues would remain complex when EAS resolves its membership issue, and then proceeds to adopt a scheme of economic reforms which would enhance its regional welfare gains. In order to optimize the benefits and gains from regional initiatives to the individual partner countries, attempts need to be made to forge a broader regional framework, which will provide a seamless market

and facilitate harnessing synergies more effectively. In the milieu of the large financial gains for the region, implications of wider and deeper regional integration are empirically examined by several studies, and the results are indicative of the need for a broader regional integration (Kumar, 2005).³

The member countries may start with a Free Trade Area (FTA) with reduction of trade protection in the form of tariff and non-tariff barriers. It is often argued that economic liberalization may not be effective with an FTA because several FTAs are operational in the region and overall global tariff and non-tariff barriers are being lowered under multilateral trade negotiations. Therefore, in recent regional/bilateral trade arrangements, wider issues are included, for example, trade in services. Such agreements not only cover trade in services in specific sectors but also the mode of delivery of services. Many studies emphasize the fact that the largest interest of developing countries in services negotiation could be in the movement of natural persons, that is mode 4 (Mohanty, Pohit and Sinha Roy, 2004). Therefore, GATS issues need to be covered in the proposed trading arrangement. Some of the investment issues need to be incorporated in the regional integration arrangements (RIAs). In various RTAs, investment is prominently covered (Globerman and Shapiro, 1999). According to the existing laws in many countries, investment is restricted to flow within the political boundaries. In case mobility of investment is allowed freely within the AEC; welfare gain for the region can be enhanced through allocative efficiency of capital. In fact, allocative efficiency will enhance the productivity of the regional production process (Schiff and Winters, 2003), and the region is likely to be placed on a higher growth trajectory. Therefore deep trade integration in the AEC may be envisaged with comprehensive liberalization in several areas including trade investment and liberalization of trade in services.

This chapter makes an attempt to examine the optimal package of regional economic liberalisation which would maximize the benefit of ASEAN countries from further economic liberalization initiative. This would address two issues: (a) which ideal group of countries would benefit ASEAN the most from the three alternatives of country-combinations, that is, ASEAN+3, ASEAN+4 or ASEAN+6, (b) which comprehensive economic liberalization scheme (FTA, FTA+ investment or FTA+investment+trade in services) would be appropriate for EAS countries to optimize the welfare of ASEAN countries. The simulation exercise is undertaken using a monopolistic version

of Computable General Equilibrium (CGE) and assuming a seamless East Asian community without taking into account the existing bilateral/sub-regional/regional arrangements. In this chapter nine alternative simulations are considered, taking different combinations of country-groupings and depth of trade liberalization. The focus of the paper is to identify which country combination to provide maximum economic welfare to ASEAN countries in a comprehensive economic liberalization framework.

The Model

It is apparent from the recent spate of activities that AEC is to be reconstituted keeping ASEAN at the driver’s seat. ASEAN is in full command to decide on the architectural design of the new caucus, based on its own economic interest from the regional grouping. The Applied General Equilibrium (AGE) model in this chapter is designed to accommodate alternative membership criteria as also various schemes of economic liberalization taking trade, investment and trade in services into consideration. As far as trade liberalization is concerned, the identified sectors are considered to be large to be put in a general equilibrium model, therefore certain key factors⁴ in each of these sectors are considered for liberalization.

A monopolistic⁵ version of the multi-regional AGE model is used in the present simulation analysis to estimate welfare implications of the AEC, which can take shape based on its present ‘Summit level partners’ and also to pursue some scheme of economic liberalisation from various alternative schemes available in the literature, taking into account world economic activity in 26 different aggregated sectors and 15 aggregated regions/countries and rest of the world.⁶ The model estimation is primarily based on GTAP database, version 6, but it is supplemented by additional data from other sources.⁷ Based on the country disaggregations available in GTAP 6, 11 out of the 16 country/regional groups are considered for the AEC country-grouping in the model. Similarly, global and regional/country economic activities are categorized into 5 agricultural sectors, 17 manufacturing sectors and 4 services sectors in each economy represented in the model.

This model accords special attention to three principal factors of production, namely, unskilled labour, skilled labour and capital. Among these factors, unskilled labour is considered perfectly mobile across sectors within a country and not across the AEC. This assumption is common for all scenarios in the model. However, it is assumed that factors such as

skilled labour and investment are perfectly mobile across AEC, depending upon the model specifications in different scenarios.⁸

Based on the above factors and alternative country groupings of the AEC, this exercise resulted in nine alternative scenarios. The core issue is which alternative country grouping of AEC is likely to generate optimal welfare gains for the ASEAN countries. The choices of country-groupings are ASEAN+3, ASEAN+4 and ASEAN+6. Optimization of economic welfare from liberalization by these groups of countries would identify the group most suitable for the formation of the AEC.

For effective regional arrangement, deeper integration is required in EAS. For this consideration we have gradually intensified the depth of integration in the proposed region in various scenarios. To begin with, the first scenario could be liberalization of tariff, followed by liberalization of tariff and investment together and the last scenario covers simultaneous liberalization of trade, investment and movement of natural persons.

Table 1: Alternative Scenarios for Economic Liberalisation

	ASEAN+3	ASEAN+4	ASEAN+6
FTA	I	II	III
FTA+ Investment	I	V	IV
FTA+ Investment+Services	VII	VIII	IX

Note: These scenarios are simulated using monopolistic CGE models.

Source: Authors.

In this paper, nine alternative scenarios are conceptualized (see Table 1). We focus on the sequence in which the three alternative groups of countries are expected to perform—from shallow to deeper level of integration. Even in each simulation, variations in the performances of individual countries are examined along with the extent to which regional countries are coping with a deeper level of economic liberalization. (In the subsequent discussions on scenario analysis, the numbering pattern of simulations as presented in Table 1 will be followed.)

Towards an Optimal Size of EAS and Depth of Trade Liberalization: Simulation Results

The experiences of some of the successful RTAs across the world suggest that significant welfare gains to individual member countries occur due to

substantial trade liberalization along with free cross border investment and movements of skilled labour.⁹ With the fast increasing growth in the global demand for technology-intensive products (UNCTAD, 2004; Mohanty and Arockiasamy, 2007) and rapidly growing capital intensive production process of such products, free movement of investment within the region combined with industrial technology is bound to rise (Kumar, 2004). Many countries in East Asia have acquired competitiveness in desired lines of production and are becoming production power houses for Asia and also for the rest of the world (Wilson et al., 2005). In recent years, several Asian countries have strengthened their skilled manpower through massive investment in human development; and management of human resources is considered to be a key area of potential gains for these economies. Moreover, in the WTO negotiations, developing countries hope to achieve their long-term interest of free movement of skilled labour, with the phrase ‘movement of natural persons’ under GATS mode 4. In the regional context, free movement of skilled labour has immense potential for the development of the region as it allows temporary engagement of skilled labour for the facilitation of specialized assignments prevents permanent migration (Mohanty, Pohit and Sinha Roy, 2004).

In the context of the East Asian Caucus, welfare gains arising from complete trade liberalization along with free cross-border investment and movements of skilled labour within the region are examined. Regional countries are better placed to benefit more by adopting an overarching FTA among East Asian countries, instead of engaging themselves in bilateral FTAs and sectoral cooperation. The implications of deepening of regional integration among the AEC countries in different schemes of regional cooperation, is empirically examined. Since the structure of the AEC at present is in a fluid state, we confine the scope of our discussion to welfare gains for the AEC which is yet to take the shape of formal country-grouping and to the adoption of a scheme of economic liberalization from among many alternatives.

Alternative Schemes of AEC and Regional Welfare Gains

Very often the regional process is not preferred to a multilateral process on the ground that the former is trade diverting in nature, which would increase regional welfare at the cost of global welfare. Hence, to make the process of AEC more meaningful, it should be trade creating in nature rather than trade diverting. The trade liberalization policies, following the formation of

AEC, would result in reallocation of productive factors across sectors owing to an increase in demand for tradable sectors within the region. In the process, allocative efficiency of the existing factor endowments would be altered, and so also relative real prices of different factors. The scale of production and the level of production would also undergo significant changes in different regional economies. On the whole, the implications of such restructuring are reflected in the estimation of welfare gains, which are physically quantifiable.

With the formation of an FTA under AEC, the regional welfare gains could be within a range of US\$40 billion to US\$176.1 billion, depending upon the composition of membership and the depth of economic liberalization between member countries as shown in Table 2. The results indicate that the proposed FTA is likely to enhance the welfare of both region and individual member countries. The AEC would be trade creating in nature where both the AEC and the global economy are likely to benefit in terms of positive welfare gains. The magnitude of absolute gains in regional welfare will also enhance global welfare. Depending upon the membership structure of AEC and the level of trade liberalization, the additional global welfare could range between US\$6.7 billion to US\$740.1 billion in a year. All the major regions of the world would benefit from the trade liberalization in AEC when its sequence of liberalization is more comprehensive (it covers all issues including trade, investment and trade in services among the regional partners).

It is shown in Table 2 that ASEAN and ‘Plus 3’ countries would have limited welfare gain when AEC takes the shape of APT, and their overall regional gain increases when they move from a shallow to a deeper level of integration. Most of the countries in the regional caucus show a similar experience.

When India is included in the regional caucus, it makes significant difference to the whole region and also to individual countries in terms of welfare gain. For example, the absolute level of welfare rises between 30.5 per cent to more than 34 per cent in various schemes of trade liberalization when India joins ASEAN+3 in AEC as compared to a situation when ASEAN+3 alone forms AEC. If APT forms AEC and the group resorts to comprehensive liberalization covering trade, investment and skilled labour movement, the additional welfare gain for the region could be to the tune of US\$87.3 billion per annum, but on adding India to the group, regional welfare is likely to be enhanced to US\$113.6 billion per annum. The gains could be

Table 2: Absolute Change in Welfare Gains from the East Asian Economic Integration

(million US\$)

Country	Scenario:I		Scenario:II		Scenario:III		Scenario:IV		Scenario:V		Scenario:VI		Scenario:VII		Scenario:VIII		Scenario:IX	
	ASEAN+3		ASEAN+4		ASEAN+6		ASEAN+3		ASEAN+4		ASEAN+6		ASEAN+3		ASEAN+4		ASEAN+6	
	FTA		FTA		FTA		FTA and Investment		FTA and Investment		FTA and Investment		FTA, Investment and Trade		FTA, Investment and Trade		FTA, Investment and Trade	
Indonesia	2091	2434	2670	903	995	2320	13004	15806	22300									
Malaysia	1942	2270	2435	1897	2992	3243	1692	1956	2670									
Philippines	597	733	809	806	981	1076	1179	1383	2005									
Singapore	1060	1281	1300	1180	1457	1483	698	755	1164									
Thailand	2554	2981	3272	3202	3806	4236	1958	2520	3765									
Japan	22090	24786	27804	56639	66118	70451	40236	61313	91029									
Korea, South	4857	5749	6271	8382	9971	10716	6503	7650	10976									
China	7402	9362	10832	380	4683	8571	11561	17193	30128									
India	-122	2680	2947	124	5352	5803	3428	5026	6462									
Australia	-222	-225	3683	-308	-221	6534	1477	5369	5926									
New Zealand	-21	-3	893	5	52	1582	224	655	1667									
South Asia	-256	-185	-242	-310	-396	-559	634	2295	3336									
NAFTA	-7330	-7375	-10122	-15881	-17261	-26502	20910	98944	151839									
EEA	-9988	-9486	-11875	-12845	-11591	-17810	17516	84667	125641									
Oceania	-16	-18	-22	-14	-16	-23	46	138	230									
Rest of the World	-17287	-17064	-22260	-29051	-29264	-44894	39106	186044	281046									

Notes: Additional increase in welfare in terms of GDP for each country in the event of regional integration.

Source: Authors' computations.

even higher if ASEAN+6 form the core of AEC. The region is likely to benefit more when investment and skilled labour are allowed to move freely within the AEC. The magnitude of absolute increase in welfare gains under the comprehensive trading arrangement would be US\$ 176.1 billion per annum.

Liberalization among AEC countries may lead to different levels of welfare gain for individual countries depending upon the maturity of economies, composition of trade, level of openness, trade potential, etc. As the size of member countries differs significantly, the welfare effect of a country/region is viewed in relation to its GDP. Table 3 provides the estimates of the potential welfare effect with respect to GDP for each country and also for the region. The overall responses of member countries indicate that the level of gain increases as one moves towards deeper level of integration, though there are some exceptions. Within the ASEAN, countries such as Indonesia and the Philippines, which are performing well to catch up with other, more advanced countries of the region, are likely to gain more from the most comprehensive economic cooperation than others. Some countries have been articulating the structure of AEC as APT to start with, but the results show that China's economic interest in AEC lies in comprehensive economic cooperation with a wider group of countries, that is, with ASEAN+4 or ASEAN+6. India may be comfortable with either investment liberalization along with trade or comprehensive economic cooperation.

There are concerns about the implications of the formation of EAS on regions which fall outside the AEC. For ASEAN and Plus countries, NAFTA and European Economic Area (EEA) are extremely critical economic units for trade and investment. Several studies have displayed concern about the negative fall-out of the EAS on those regions outside AEC. In order to avoid such a situation, some studies argue that an APEC type of RTA may be pursued based on the principle of 'open regionalism' (Ethier, 2000; Soh, 2004). In this chapter, we analyse the issue in order to mitigate the concerns of the adverse effects of AEC on those regions/groupings. The negative impact of the AEC on regions like NAFTA and EEA is of different magnitude in some simulation scenarios in the AGE model because those country groupings are not engaged in this regional arrangement. NAFTA and EEA are engaged in negotiations with ASEAN and Plus countries on a bilateral basis. When those cases are examined separately, the positive effects generated in the bilateral engagements may possibly be over compensated

Table 3: Percentage Change in Welfare from the East Asian Integration

(in percent)

Country	Scenario:I		Scenario:II		Scenario:III		Scenario:IV		Scenario:V		Scenario:VI		Scenario:VII		Scenario:VIII		Scenario:IX	
	FTA		FTA		FTA		FTA and Investment		FTA and Investment		FTA and Investment		Investment & Trade in Services		Investment & Trade in Services		Investment & Trade in Services	
	ASEAN+3	ASEAN+4	ASEAN+4	ASEAN+6	ASEAN+3	ASEAN+6	ASEAN+3	ASEAN+4	ASEAN+4	ASEAN+6	ASEAN+3	ASEAN+4	ASEAN+4	ASEAN+6	ASEAN+3	ASEAN+4	ASEAN+4	ASEAN+6
Indonesia	0.4	0.5	0.5	0.6	0.2	0.6	0.2	0.2	0.2	0.2	0.5	2.7	3.3	2.7	3.3	2.7	3.3	4.7
Malaysia	2.3	2.7	2.7	2.9	2.1	2.9	2.1	3.3	3.3	3.6	3.6	2.0	2.3	2.0	2.3	2.0	2.3	3.1
Philippines	0.8	1.0	1.0	1.1	1.1	1.1	1.1	1.3	1.3	1.5	1.5	1.7	2.0	1.7	2.0	1.7	2.0	2.8
Singapore	1.3	1.6	1.6	1.6	1.4	1.6	1.4	1.8	1.8	1.8	1.8	0.9	1.0	0.9	1.0	0.9	1.0	1.5
Thailand	2.3	2.6	2.6	2.9	2.7	2.9	2.7	3.2	3.2	3.6	3.6	1.7	2.2	1.7	2.2	1.7	2.2	3.3
Japan	0.5	0.6	0.6	0.7	1.3	0.7	1.3	1.5	1.5	1.6	1.6	1.0	1.5	1.0	1.5	1.0	1.5	2.2
Korea, South	1.2	1.4	1.4	1.5	1.9	1.5	1.9	2.3	2.3	2.5	2.5	1.6	1.9	1.6	1.9	1.6	1.9	2.7
China	0.6	0.7	0.7	0.8	0.0	0.8	0.0	0.3	0.3	0.6	0.6	0.9	1.3	0.9	1.3	0.9	1.3	2.3
India	-0.1	1.9	1.9	2.0	0.1	2.0	0.1	3.5	3.5	3.8	3.8	-0.4	3.5	-0.4	3.5	-0.4	3.5	4.5
Australia	-0.1	-0.1	-0.1	1.0	-0.1	1.0	-0.1	-0.1	-0.1	1.8	1.8	-0.4	1.5	-0.4	1.5	-0.4	1.5	1.7
New Zealand	0.0	0.0	0.0	1.8	0.0	1.8	0.0	0.1	0.1	3.0	3.0	0.5	1.3	0.5	1.3	0.5	1.3	3.3
South Asia	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.2	-0.2	-0.2	-0.2	0.3	1.0	0.3	1.0	0.3	1.0	1.5
NAFTA	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.2	-0.2	0.2	0.9	0.2	0.9	0.2	0.9	1.3
EEA	-0.1	-0.1	-0.1	-0.1	-0.2	-0.1	-0.2	-0.1	-0.1	-0.2	-0.2	0.2	1.0	0.2	1.0	0.2	1.0	1.5
Oceania	-0.1	-0.1	-0.1	-0.2	-0.1	-0.2	-0.1	-0.1	-0.1	-0.2	-0.2	0.3	1.0	0.3	1.0	0.3	1.0	1.7
Rest of World	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.2	-0.2	0.2	0.9	0.2	0.9	0.2	0.9	1.4

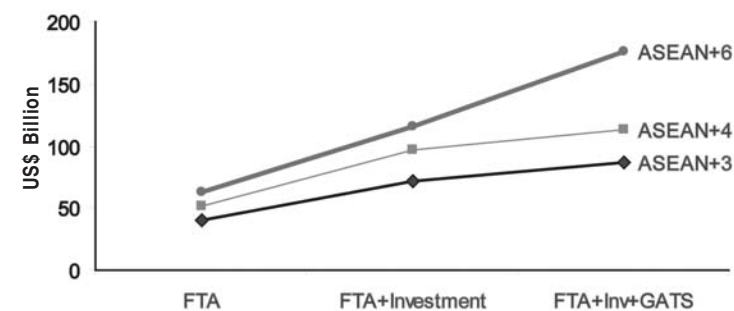
Note: Additional increase in welfare as a percentage of GDP of individual countries in the event of FTA and CEC in the region.
Source: Authors' computations

which they are losing under the shallow form of regional integration in AEC. The results show that NAFTA and EEA are likely to benefit positively when there is a deeper level of regional integration in AEC, covering investment and free movement of 'natural persons' along with trade liberalization. These results may hold good irrespective of nature of size of membership architecture of the AEC. It is interesting to note that the percentage change in welfare gain may be significantly large for NAFTA and EEA, when the membership structure of AEC is large and there is deep regional integration.

Implications of Deeper Integration on Different Schemes of AEC

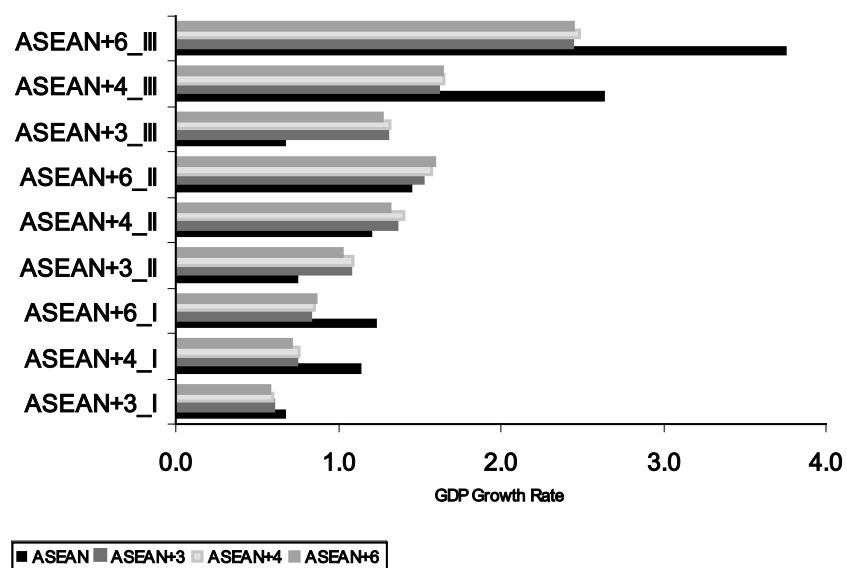
The existing literature presents the fact that deep integration is more advantageous than shallow integration (El-Agreaa, 1999). When member countries are placed at different levels of economic development, the effect of different levels of integration may be diverse (Frankel, 1997). From nine alternative simulations, it is observed that the effects of regional integration with ASEAN+6 are better than the with ASEAN+3 because of the size of welfare effects accruing to the AEC region. The larger the size of the AEC, the larger would be the quantum of gains from the regional caucus as shown in Figure 1. Between ASEAN+3 and ASEAN+4, the gain from integration jumps up significantly from simple FTA to FTA combined with investment liberalization, while liberalisation with 'free movement of natural persons' adds little to overall welfare of AEC.

Figure 1: Effects of Deep Regional Integration



Source: Based on CGE simulation results

Figure 2: Gains for the ASEAN Group in Various Schemes of Liberalisation



Source: Based on simulation results

Note: ASEAN+3_I denotes ASEAN+3 in FTA, ASEAN+3_II in FTA and investment Liberalisation and ASEAN+3_III in FTA, investment and free movement of liberalisation natural Persons.

A comparison between ASEAN+3 and ASEAN+6 is striking in terms of gains from regional integration under different liberalization schemes. Regional engagement in only tariff reduction may have differential effects on the two alternative country-groupings. When the two country-groupings engage in a deeper level of regional integration, that is, FTA along with investment, the rate of increase in welfare gains would be much higher in ASEAN+6 than in ASEAN+3. If both the groups again engage in further trade liberalization, the divergence in welfare gains would increase sharply between the two groups. While the rate of incremental welfare gain is likely to decline in case of ASEAN+3 (under comprehensive economic cooperation or CEC), it may rise steadily in case of ASEAN+6 (under CEC scenario). This suggests that AEC is likely to benefit more if its membership base is relatively larger. The results support the Japanese suggestion that AEC should comprise of ASEAN+6 rather than ASEAN+3. The second observation is that there should be a deeper level of integration rather than a shallow level in order to maximize regional welfare effects.

The Gain for ASEAN Countries in Different Groupings

As discussed earlier, ASEAN is on the driver’s seat in AEC and its economic interests should be accorded priority while deciding on the membership issue in AEC. The membership composition should be such that ASEAN as a group gains the maximum welfare from the formation of new regional caucus. For this reason, we have regrouped welfare gain in each of the nine alternative scenarios separately and each scenario, we have estimated percentage welfare gains with respect to the group’s GDP for the four groups separately, namely, ASEAN, ASEAN+3, ASEAN+4 and ASEAN+6.

The results show that ASEAN with any group of countries (that is, ASEAN+4 and ASEAN+6) is likely to gain if it is engaged in a deeper level of integration (see table 2). With ASEAN+3, ASEAN group of countries is not likely to gain much, irrespective of the level of economic integration. As the size of the AEC increases, the prospects of ASEAN getting welfare gains increases. ASEAN is likely to gain more with ASEAN+6. The results support the Japanese argument that AEC should be ASEAN+6 to optimize regional welfare.

Conclusions

The experience of Asia with regionalism is very recent, but its achievements from the regional process have been unique and commendable. The trade pattern of the ASEAN-Plus countries is steadily tilting in favour of developing countries, and is also becoming more ‘Asia centric’. With a strong trade bias towards neighbouring countries, surge in intra-regional trade has been the hallmark of this region. Intra-regional trade in the ASEAN+6 region comprises both resource-based and technology-intensive products, and the divergent export basket provides ample opportunities to its member countries, which are at different levels of economic development.

The Asian countries have learnt to depend on the regional process to maintain high economic growth, despite the periodic external shocks. It emerges that the formation of AEC can improve production efficiency in a number of sectors in the region. The proposed AEC region consists of both capital-surplus and capital-deficient segments, and the free flow of capital within the region can optimize investment opportunities in the region. The impact on the real rate of return on investment is also found to be positive, which strengthens with deepening of liberalization across sectors in AEC countries. The results corroborate the fact that labour gets an impetus from

the regional arrangement, and that skilled labour gets an advantage over others due to renewed focus on knowledge intensive industries. Hence, a free movement of natural persons may further improve intra-regional trade.

ASEAN is in the driver's seat of the AEC and, therefore ASEAN interest may be given priority while considering Membership architecture of the process of AEC. The theory on regional integration stipulate that deeper integration is preferred to shallow integration, and therefore economic liberalization in the proposed AEC should consider wider coverage of regional arrangements covering FTA, investment and free movement of skilled labour. In an AGE model, different country-groupings for EAS are combined with different levels of regional integration to identify the appropriate size of AEC and the suitable level of trade integration to optimize welfare gains of the AEC and the ASEAN as a group.

The empirical findings show that welfare gains from the formation of AEC may range between US\$40 billion to US\$176.1 billion per annum, depending upon the composition of membership and depth of economic liberalization in the proposed arrangement. The formation of the AEC would be global welfare enhancing rather than trade diverting which is a typical feature in many RTAs. Depending upon the structure of AEC, including membership and depth of liberalization, global welfare effects (including other regions of the world), are likely to be enhanced between US\$6.7 billion to US\$ 740.1 billion per annum.

India's inclusion in the AEC makes a significant difference to the whole region, and the region gains substantially in terms of additional economic welfare. When India joins the ASEAN+3, the absolute level of welfare of the caucus rises between 30.5 per cent to more than 34 per cent depending upon the level of liberalization. In case the AEC is formed with ASEAN+3, and liberalization takes place with comprehensive economic integration covering trade, investment and skilled labour movement, the additional gain for the region could be US\$87.3 billion per annum. However, the regional gains go up substantially to US\$113.6 billion in a year when India joins the caucus. Under the similar conditions, the entry of Australia and New Zealand in EAS may enhance incremental gains of the region to the extent of US\$ 176.1 billion per annum.

Most of the regions of the world and AEC countries are likely to benefit from the trade liberalization in AEC when its liberalization is more

comprehensive covering trade, investment and free movement of skilled labour simultaneously and AEC covers all 'Plus' countries in it. If AEC comprises ASEAN+3, the group of ASEAN countries may not gain much irrespective of their level of economic integration. ASEAN is likely to gain more only when the EAS group is larger in size, particularly with ASEAN+6. The results support the alternative argument that AEC should comprise EAS Member Countries to optimize regional welfare.

Endnotes

- ¹ In a seminal work, Maddison (1998) found that Asia contributed 59.4 per cent of global income in 1820, and the continent is likely to regain its past global economic status by 2030 following the rapid growth of Asian countries. The early symptoms of such predictions are taking shape as many Asian countries have been maintaining sustained and high economic growth over a long period.
- ² See, for example Mohanty and Chaturvedi (2006).
- ³ For details, see Kumar (2005).
- ⁴ We have taken tariff liberalization to cover trade; investment and 'movement of natural persons' representing services.
- ⁵ In the AGE model, we have taken three sectors, agriculture, manufacturing and services, where the manufacturing sector is assumed as having a monopolistic structure and other two sectors are operating under perfect competition.
- ⁶ The present model is an updated version of an earlier model, which was used to analyse the implications of the formation of JACIK (Japan, ASEAN, china, India and South Korea) on individual countries and on the region as a whole (Mohanty, Pohit and Sinha Roy 2004).
- ⁷ The database provided by the GTAP is not sufficient to solve an AGE model based on monopolistic competition. Therefore, other databases have been used to meet the requirements of the model, for example, *Handbook of Industrial Statistics*, UNIDO; World Development Indicator, UNDP; etc.
- ⁸ In certain scenarios in this model, free movement of skilled labour and investment are not allowed.
- ⁹ The experiences of NAFTA and EU indicate that the effects of deeper level of regional integration have been significant and enduring for the member countries of the RIAs.

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