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## **Development in the Indonesia-Malaysia-Singapore Growth Triangle**

*by*

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# **Development in the Indonesia-Malaysia-Singapore Growth Triangle**

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## **ABSTRACT**

In this article, we explore whether regional economic cooperation in the form of growth triangle, made popular during the late 1980s, can continue to be relevant in the face of more formal arrangements as in free trade agreements (FTAs) and other bilateral 'closer economic partnerships' (CEPs) initiatives in the recent years. In particular, the discussion is focussed on the Indonesia-Malaysia-Singapore growth triangle (IMS-GT) which is the pioneering arrangement in Southeast Asia. IMS-GT continues to be a successful mode of cooperation among the three countries and will remain a key and subtle framework for regional economic collaboration amidst the plethora of initiatives relating to FTAs and CEPs. This paper put forth a thesis that GT is part of a spectrum of regional cooperation efforts with convergence interest to be in synchrony with the global value chain. As long as the formation and implementation of GT contribute to the creation of value, it can co-exist with more formal arrangements like the FTAs and CEPs.

# Development in the Indonesia-Malaysia-Singapore Growth Triangle

## 1. Introduction

The end of the Cold War has reduced political tensions between Asian countries and consequently brought the region into a more globalizing production processes and increasing vertical integration. As competition cuts across national and sectoral boundaries and becomes increasingly global, firms everywhere are forced to shift from exports to international production. Countries like those of Thailand, Malaysia and Singapore have embarked on development strategies of attracting foreign capital and expanding exports to lift the economic performance and social well being of their populace. In tandem with active domestic industrial policies, such countries have also made concerted effort to promote regional cooperative arrangements with neighbouring countries. Spatially delineated domestic areas as in EPZ and SEZ, as well as cross-border economic zones as in 'growth triangle' and 'economic corridor' can be useful mechanisms to stimulate and/or synergize existing local economies. Transnational economic zones have utilized the different endowments of the various countries in Southeast and East Asia, exploiting cooperative trade and development opportunities. Furthermore, transfer of technology and manufacturing process between nations has allowed them to develop sustainable growth momentum in the global value chain amidst increasing international competition.

In this article, we explore whether regional economic cooperation in the form of growth triangle, made popular during the late 1980s, can continue to be relevant in the face of more formal arrangements as in free trade agreements (FTAs) and other bilateral 'closer economic partnerships' (CEPs) initiatives in the recent years. In particular, the discussion is focussed on the Indonesia-Malaysia-Singapore growth triangle (IMS-GT) which is the pioneering arrangement in Southeast Asia. In the following section, the genesis and brief overview of the IMS-GT is provided. We seek to abstract some salient features that make the IMS-GT a successful mode of cooperation before considering the pertinent question of whether the IMS-GT, or more broadly GT, can continue to be relevant amidst the plethora of initiatives relating to FTAs and CEPs. In the third section, we put forth a thesis that GT is part of a spectrum of regional cooperation efforts with convergence interest to be in synchrony with the global value chain. As long as the development of GT contribute to the creation of value, it can co-exist with more formal arrangements like the FTAs and CEPs.

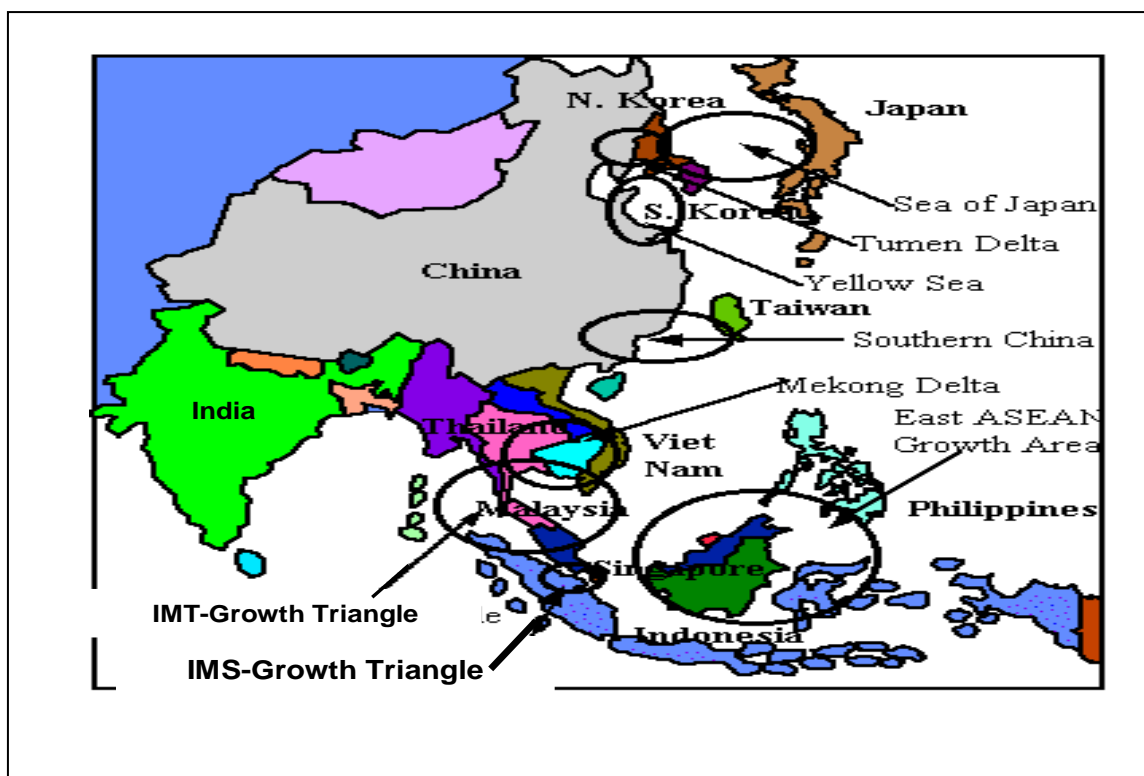
## 2. Historical Overview of the IMS-GT

Concerted actions to exploit complementarities among economic entities which have common national borders give rise to the formation of Growth Triangle (GT). These "sub-regional economic zones" involve areas that may be different in terms of their respective capitals but happen to be near to one another, geographically. The economic development of these areas is stimulated through promotion of trade and investment. The proximity of markets helps reduce costs. Foreign direct investments that are export-oriented should therefore find these growth areas attractive. Existing infrastructures will be improved to support the expansion of economic activities. GTs have played the role of a driving force for growth in Asian economies throughout the

1990s. Four growth triangles have been established since 1989, involving parts of 11 countries. As shown on the map (Figure 1.1), there are currently eight growth polygons in East and Southeast Asia. The GTs typically group remote regions of the nations involved in an effort to exploit complementary assets within the groupings. For example, the Tumen Delta triangle integrates the capital and technology of Japan and the Republic of Korea with the natural resources of Russia and North Korea (i.e., the People's Democratic Republic of Korea) and the labor and agricultural resources of China. The governments of Brunei, East and West Kalimantan, and North Sulawesi of Indonesia; Sabah, Sarawak, and Labuan in Malaysia; and Mindanao and Palawan in the Philippines have given priority to expanding air and shipping routes within the East ASEAN Growth Area, another polygon. Another well known example: Cambodia, Laos, Myanmar, Thailand, Vietnam, and China's Yunnan Province have been discussing ways to develop the Mekong area since 1992. In fact, the Greater Mekong Sub-region (GMS) Corridor has come in existence as a major regional development project strongly encouraged and supported by the Asian Development Bank (Thant, et.al., 1994). Thailand is expected to provide capital and experience in developing the GMS Corridor, though China will be another locomotive. It will encompass a population of over 400 million people offering low wages, rents, and land costs.

The pioneering GT in Southeast Asia is that of the IMS-GT, and its evolution is very much tied to the economic development of the Singapore economy (Toh and Low, 1993, Kakazu, 1997). Effective industrialisation of Singapore economy started in 1965 when it became a sovereign state. Based on a development strategy that make intensive use of foreign capital and technology to supplement its dearth of entrepreneurship and small domestic market, industrial production expanded rapidly to create employment opportunities and export penetration into international markets. Prudent macroeconomic and social policies have helped to hone a workforce that is relatively skilled and facilitated the exploitation of geographical advantage to be a major trading and transportation centre for the region and the world. The Singapore economy grew rapidly at an average growth of seven percent over the last forty years. From the 1970s to the 1980s, there was a shift in Singapore's self-conception from that of a global city to that of a key regional business centre. Since early 1990s, Singapore has concentrated on becoming the technology hub for Southeast Asia, sending labour-intensive operations to low-cost neighbouring countries like Malaysia and Indonesia in special mutual cooperative trade and development arrangements known as growth triangle (GT) or growth polygon. As a member of ASEAN, it will be in Singapore's best interest to have the GT concept endorsed and accepted by the political leaders in ASEAN.

**Figure 1: Growth "Triangles" in Southeast and East Asia**



*Source: Adapted from World Technology Evaluation Centre (<http://www.wtec.org/>)*

Rising labour and land costs have made Singapore a less favourable place for manufacturing activities which are labour and space intensive. Instead of doing nothing and allowing 'footloose' characteristics of foreign MNCs residing in Singapore to materialise, the economic planners in Singapore have been actively interested and involved where possible in the private corporations' plans to relocate their production bases in the face of rising domestic costs and cheaper resource destinations abroad. An orderly decanting exercise was being planned. The long established good will and business relation with foreign corporations were being cherished. Rather than the production bases move far away without any further linkage, it will be useful to have these 'footloose' production bases move to neighbouring countries and continue to maintain gainful economic linkages with Singapore. Production bases in neighbouring countries could still provide Singapore with a good source of income when they make use of Singapore's service hub to meet their needs for transportation, finance and other headquarter services and facilities. Furthermore, the orderly decanting exercise will also add favourably to Singapore foreign policies and international goodwill in helping neighbouring countries to climb the development ladder. Involving Malaysia and Indonesia, Singapore's two nearest neighbours is a natural choice to start a triangular arrangement as there were two existing bilateral arrangements, one linking Singapore with Riau and the other connecting Singapore with Johor. The concept of a growth triangle, encompassing Singapore, Johor, and Riau, with different comparative advantages or factor endowments to form an economic zone was first articulated in December 1989 by Singapore's then First Deputy Prime Minister Goh Chok Tong. With the fall of the Berlin Wall, the intensification of European Economic Integration, and the seemingly righteous policy recommendations of the Washington Consensus, the GT concept has also gained increasing acceptance among ASEAN leaders.

During the Fourth ASEAN Summit in 1994, ASEAN leaders mandated the establishment and promotion of sub-regional economic arrangements among ASEAN members and between ASEAN members and non-ASEAN economies. Such arrangements are designed and expected to stimulate the economic dynamism of the ASEAN region, to sustain the innovative spirit and to complement overall ASEAN economic cooperation. Subsequently, the Governments of Singapore, Malaysia and Indonesia agreed to establish a sub-regional cooperative framework originally known as the SIJORI Growth Triangle, combining politically motivated and market-driven factors. When contiguous provinces joined the Growth Triangle, the arrangement became known as the Indonesia- Malaysia-Singapore Growth Triangle (IMS-GT). The amount of investments generated in the IMS-GT has been very significant. It has attracted \$10 billion in private sector investments during its first five years. Both Malaysia and Indonesia provided tax and financial incentives for firms to move to their jurisdictions to avoid rising costs in Singapore. Although Japan was the largest overall investor in Malaysia for 1981-90, Singapore was the largest investor in Johor state, followed by Taiwan. By 1991, Singapore is the largest investor in Batam, followed by the US and Japan, in real estate, tourism, metal processing, drilling equipment, and electronic component assembly (Toh and Low, 1993).

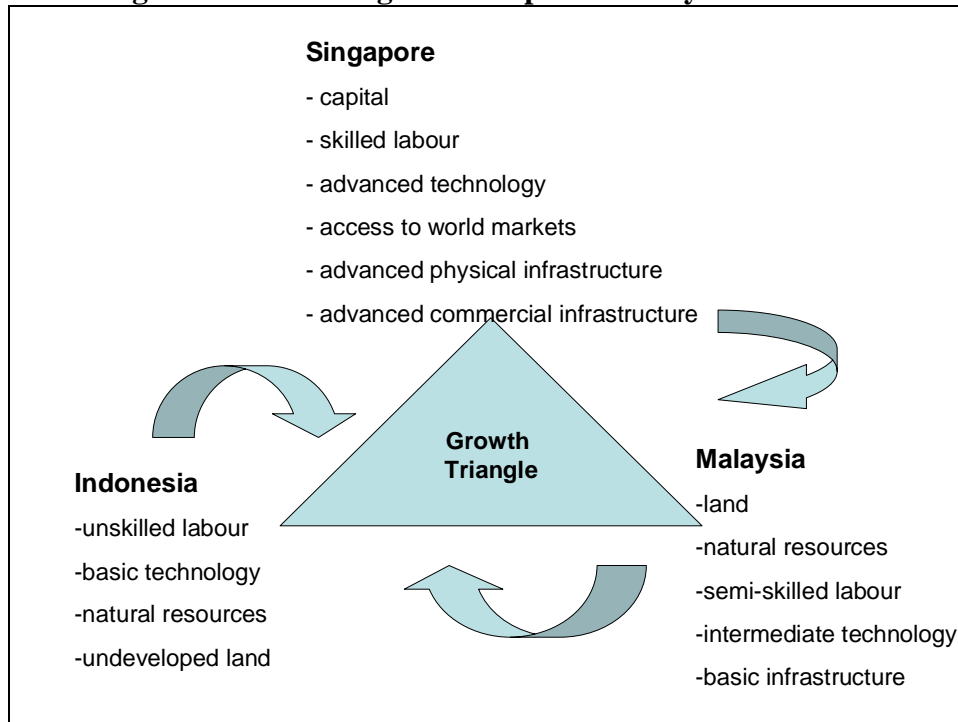
### ***Positive Spillover to Batam***

IMS-GT's development involved political decisions to reduce barriers to investment and trade although, to date, growth has taken place more on the Singapore-Riau and Singapore-Johore axes instead of the Johore-Riau axis because of conflicting complementarities. The Singapore-Johore leg is more informal than the Singapore-Riau segment as the latter is reinforced by bilateral agreements over Batam and Bintan. Figure 2 shows the complementarities in a schematic form. Singapore's enthusiasm for the triangle highlights its desire for greater interdependence ameliorating security concerns with its neighbours. In terms of an internal hierarchy, Singapore has focused more on becoming a regional finance, business and high-technology centre while unskilled and semi-skilled, labor intensive industries (textiles, chemicals, food processing) move to Batam and Johore respectively.

The establishment of the IMS-GT has spurred the development of Batam Island in Indonesia. An island with an area 45km x 25km (about two thirds the size of Singapore) and population of about a million, is located only 20km from Singapore and 25km from Johore in Malaysia, Batam is Indonesia's equivalent to China's SEZ's (Special Economic Zones) - a place where the nation's economic planners test new economic policies and ideas. Strategically located on the Indian and Pacific Oceans, Batam Island is also the second most popular international tourist destination in Indonesia. Due to its Free Trade Zone status since 1971, strategic location, low cost structure, skilled work force, and tax and other investment incentives, Batam Island has attracted over 700 foreign companies from 34 countries and well over \$3 billion in foreign investment. Together with the foreign enterprises, there are around 9,500 local companies spread over 17 industrial estates and swathes of other land made available directly by Batam Industrial Development Authority (BIDA) for major establishments like shipyards. Sectors include, but are not limited to, technology, medical equipment and electronics, telecommunications, agribusiness, textiles, industrial assembly and fabrication, shipbuilding, oil and energy services. Prominent investors include McDermott International, AT&T, PerkinElmer, Bechtel, Seagate Technology, Babcock & Wilcox, Holiday Inn, Matsushita, Kyocera, Hitachi, Sanyo, Nippon Steel, Hyundai,

Siemens, Sony and Philips. Current investment priorities include wastewater treatment, hospital, medical and educational facilities, and port harbor expansion. In parallel with these investments, Bintan island, another island sited next to Batam, has experienced the transformative influx of capital from Singapore in industrial parks and high end tourism facilities. (Chang, 2001)

**Figure 2: The Triangle of Complementarity in IMS-GT**



Source: Adapted from Debrah et al. (2000)

The Indonesian Government investment in Batam to date is put at more than \$US2 billion with private investment amounting to around \$7 billion. The bulk of the economic activities is in export-oriented manufacturing, fostering economic (GDP) growth such as that of 7.7 per cent per annum recorded for 2003 and providing employment for more than 260,000 workers. In 2004, more than 47 new foreign companies with investments exceeding US\$43 million, set up production bases in Batam. Batam reportedly generates about 14 per cent of Indonesia's export income other than oil and gas. There are some 40 shipyard industries and other heavy oil rig fabrication and steel fabrication plants. But most of the enterprises consist of electronics and computer related manufactures like audio and video equipment and printed circuit boards. Other products include leather goods, shoes, garments, toys, household products and health care products. Tourism is emerging as a major industry with around 1.3 million visitors a year, making Batam Indonesia's second most popular destination after Bali. There are more than 6,000 hotel and resort rooms, many of international class. There are two marinas and six international standard golf courses.

The success of Batam in attracting investments is no less due to the willingness and determination of officials to adopt measures that cut through the red tape of other Indonesian regions with one-stop interfaces, speedy processing of development proposals and co-operative handling of visa applications for key people. Potential investors also have been wooed with a raft of investment allowances, tax concessions

and exemptions going beyond the benefits of Batam's duty free status. Laws have been relaxed to allow foreign ownership of houses and commercial property and enterprises can be established without any requirement for Indonesian ownership participation – the business or company can be wholly foreign owned. Secure land leases are available for up to 80 years and are extendable.

Another attraction for investing in Batam has recently been added: the duty-free importation of Batam-made technology and medical equipment components into the U.S. as 'extensions' of Singapore's manufacturing base under the recently enacted U.S.-Singapore Free Trade Agreement. While its proximity to a dynamic Singapore economy is an asset to capitalize on, signs of the future Batam are now emerging with the development of Batam Center, a new and modern administrative hub that ultimately will supplant old Nagoya as Batam's main business district. The modern architecture, obvious planning and permanent presence embodied in the major buildings of the new zone are in striking contrast to the urban environment of the early days.

The pioneering experience of IMS-GT has led to the development of other growth areas. For example, the Indonesia-Malaysia- Thailand Growth Triangle (IMT-GT) represents the second major ASEAN effort at linking three complementary areas that belong to different participating countries, in the northern part of ASEAN. The natural resources of the IMT-GT represent a vast economic potential that could be realized through sub-regional cooperation. As in the IMS-GT, multinational corporations may be interested in expanding their resource-based investments by opting to relocate their industries to the sub-region, thereby increasing their competitiveness.

### **3. Do GTs complement the FTAs and other trade arrangements?**

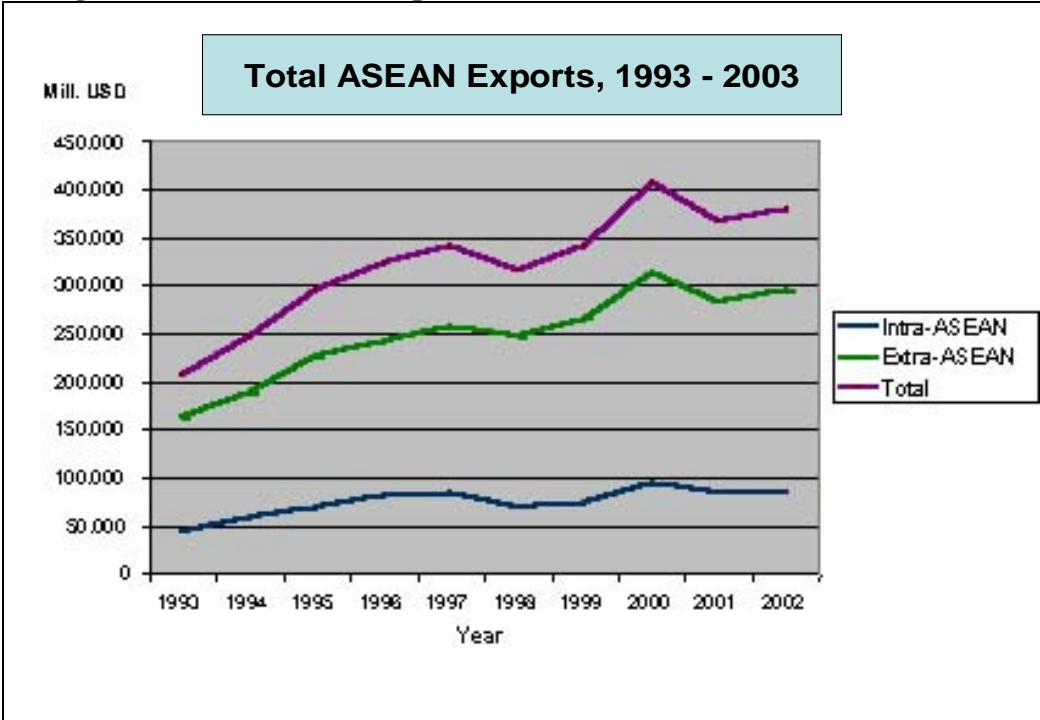
Recent developments in the external environment have worked in tandem to raise awareness of the need to hasten the process of intra-ASEAN economic integration. These developments include (a) the stalling of multilateral trade talks; (b) the economic emergence of China and India and concomitant concerns about the loss of ASEAN's global competitiveness, and (c) the spate of new free trade agreements (FTAs) being negotiated in Asia.(Rajan, 2004). These are impetus for the ASEAN Capitals to review and re-assess their domestic and regional economic policies to cope with new international development. Unilateral actions by individual country to cope with international trends is of grave concern and as they run counter to the spirit and intent of the Common Effective Preferential Tariff (CEPT) agreement signed in 1992, which lead to the establishment of the ASEAN Free Trade Area (AFTA). For instance, deviation and delay in fulfilling liberalizing commitments: in the case of motor vehicles and parts by Malaysia; agricultural products by Indonesia, and petrochemical products by the Philippines, put AFTA in jeopardy. It will also cast doubts on ASEAN being a prime partner in support of the 1994 Bogor Declaration was signed by APEC leaders at a summit meeting in Indonesia, to push for a free trade area in the Asia Pacific by 2020.

While the overall economic impact of the new wave of FTAs remains unclear and somewhat controversial, there is a suggestion that a return to GT as a mode of promoting trade liberalisation and growth is being made (Low, 2003). Looking back in the past thirty or so years, preferential trading arrangements (PTAs) have not played a significant role in the integration of ASEAN economies. Intra ASEAN trade has accounted for only about one-fifth of ASEAN's total merchandise trade (See Figure 3) and this share having



remained stagnant over the last decade (and much of the intra-ASEAN trade is due to Singapore). The share is far lower than other regional economic alliances such as the European Union (65 percent) or the North American Free Trade Area (50 percent). Indeed, the fastest trade growth within the region has been the growth of trade with China since 1979, and this has occurred in the absence of formal trade-liberalization agreements. Such trends toward spontaneous regional integration result from progressive outward orientation of individual economies' trade and investment policies and unilateral liberalization of goods and capital markets (Dobson, 1997).

**Figure 3: Total ASEAN Exports, 1990 - 2003**



Source: ASEAN Secretariat

In recognition of these concerns, at the Bali summit in October 2003, the ten ASEAN leaders agreed to the goal of creating an ASEAN Economic Community (AEC) by 2020. The primary objective of the AEC is to deepen and accelerate intra-regional economic integration by liberalising trade, investment and skilled labour flows and addressing behind-the-border barriers, thus creating a single production base and single market. According to a McKinsey report on the competitiveness of ASEAN, commissioned by the ASEAN Secretariat, deeper integration could shave almost one-fifth off total costs of production in ASEAN. The High-Level Task Force (HLTF) on economic integration established by the ASEAN Economic Ministers suggested specific initiatives to advance the process of regional economic integration. These include: (a) hastening of customs clearance and simplifying custom procedures; (b) eliminating tariff and non-tariff barriers to trade; (c) accelerating the implementation of the Mutual Recognition Arrangements (MRAs) for key sectors; (d) harmonizing standards and technical regulations; (e) creating a more effective ASEAN Dispute Settlement Mechanism (DSM) and (f) fast tracking of liberalization of eleven priority sectors<sup>1</sup>.

<sup>1</sup> These sectors are automotive, wood-based products, rubber-based products, textile and apparel, agro-based products, fisheries, electronics, air travel, tourism, information & communication technologies (ICT), and healthcare.

While it is laudable to have an impressive agenda of action, it does not elaborate on the mechanisms in which the initiatives can be operationalized and implemented. Formation of growth triangles could be one of the mechanisms<sup>2</sup>. GT as a form of regional cooperation provides a competitive model to attract investment and technology as well as a building block towards FTA. As a starter, GT, with relatively less rigid and formal cooperation structure as compared to FTA, is expected to be more innovative, flexible, and most importantly always ready to attend to the ever-changing needs of investors and alike. GT as a strategy promoted by both regional leaders keen on expanding 'embedded exportism' and by global enterprises involved in international production see it as having a 'facilitating effect' upon 'open regionalism' championed in the Bogor Declaration (Bergsten, 1995; Sum 2002).

The next issue of concern is whether GT has become a building block towards free trade arrangements (FTAs)? Huff (1995) argued that the changes that are manifested in the growth triangle strategy provide supports for ASEAN's AFTA and APEC's free trade plans.<sup>3</sup> The emergence and rise of mega economies like China and India has somewhat derailed the development path of large economies like Indonesia in ASEAN; forcing them to 'de-industrialize' and renew the emphasis and reliance on resource industries. The regional discourse in Singapore's foreign economic policy is also influenced by concerns about emerging regional trade blocs, a more assertive local capitalist class concentrated in the financial service sector, and the state's increasing regional economic role. The Singaporean understanding of regionalism sees regions as concentric and overlapping circles of linkage. Inherent in this metaphor is an important ambiguity: concentric circles unlike pyramids do not constitute an economic hierarchy. Its economic health and destiny is very much dependent on the growth and progress of the region consists of countries with disparate level of development. Economic leveling up of the regional economies is viewed positively as a contribution to Singapore's economic future, and economic integration is an avenue to that goal. From the perspectives of other ASEAN members, regional economic integration must show its worth in ameliorating domestic economic woes of lack of capital formation and unemployment, and in fostering a successful path to modernism. ASEAN as a regional grouping has doubled its membership from five in 1967 to the current ten. With a combined population of more than 600 million, ASEAN can be a voice of considerable influence in international fora. Concurrence in views among all members of a large organization is often difficult. Nonetheless, ASEAN has experimented with various 10 minus X initiatives. In other words, some ASEAN projects need not involved every member. For instance, new members to ASEAN are allowed different time durations to complete the liberalization program under AFTA; and the formation of FTA between an ASEAN member and non-ASEAN members despite the existence of AFTA is not restricted. While there are concerns about the complication arising from rules of origin (ROO) in many overlapping FTAs, members are willing to learn how the associated encumbrances can be overcome. Weatherbee (1995) argues the larger the number of participants increases the possibility of non-cooperation. Extensive perceived asymmetries between states will affect the decision of smaller, less developed members.

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<sup>2</sup> One can also observe that sub-regional arrangement within ASEAN is being accepted. A case in point is the establishment of the Singapore-Thailand Enhanced Economic relationship (STEER) targeted as a high level forum to intensify bilateral economic cooperation across various sectors (agriculture and food, life science, automotive parts and components, and financial services).

<sup>3</sup> Huff (1995) page 364-370. Deyo (1987) and Rodan (2001) also share similar views on this issue.

Security considerations will usually outweigh economic cooperation. Cross-border economic zones like GTs will thrive on earlier cooperation. These will spawn future SEZs and provide a transactional structure of sub-regional multilateralism occurring within a larger existing regional cooperation institution. ASEAN's experience with GTs should be harnessed to push for deeper integration.

Amidst the fervor of establishing FTAs with many trading partners, Singapore has included quite an 'extra-ordinary' clause in the US-Singapore FTA which comes into effect in January in 2004. The Integrated Outsourcing Initiative (ISI) included in the US-Singapore FTA is recognition of the nature of global production chain where outsourcing has become a common practice. The inclusion of ISI implies that some 266 types of IT and medical related products produced in off-shore production bases such as Batam, can be treated as originated from Singapore and hence eligible tariff free importation into U.S. This will make products manufactured in Batam more competitive and undoubtedly gives a new perspective and relevance to IMS-GT. FTAs have helped to re-focus investor attention on Singapore and the region which is in danger of dropping out of the radar screen with keen competition from China and India vying for foreign investments.

#### **4. Growth Triangle and the Global value Chain**

Conventionally, GT is viewed as an exercise in spatial economic organization to 're-territorize' contiguous space to achieve economies based on differences in resource, cultural and technological endowments (van Grunsven, 1995; Sparke et al., 2004). From a theoretical perspective, the rationale for a GT can be made via the recognition of international production in a global value chain (GVC). We cannot avoid but to recognize the importance of value chain (VC) as an important ingredient for GT to bear sweet economic fruit. The value chain describes the full range of activities that are required to bring a product from its conception to its end use and beyond. This includes activities such as design, production, marketing, distribution and support to the final consumer.

It is particularly important to note that value chains involve activities of dividing stages of productions among multiple firms and spread across wide range of geographic space, hence the term "global value chain" might be more often used. The importance of value chain is even more pronounced when the stages of production can be divided across multiple firms that reside in nearby geographical location, a situation in which GT is. While many firms have had international operations and trading relationships for decades and a few for more than a century, in recent years we have seen the formation of global scale economic systems which are tightly integrated and often managed on a day-to-day basis. Today, the process of economic development cannot be isolated from these global systems, needless to mention sub-regional system. This means that firms and workers in widely separated locations affect one another more than they have in the past. Some of these effects are quite straightforward, as when a firm from one country establishes a new factory or engineering center in another country, and some are more complex, as when a firm in one country contracts with a firm in another country to coordinate production in plants owned by yet another firm in a third country, and so on. Regions are increasingly tied into global value chains that are characterized by forms of "private global governance" beyond pure market coordination; and increasingly faced with global (technical, social, ecological, etc.) standards which are defined and often monitored by global policy networks (Messner, 2002).

Much of the literature that seeks to categorize cross-border economic activity emphasizes two options: market or hierarchy. Firms either invest offshore directly or buy goods and services from foreign firms. A smaller body of literature has noted the prevalence of network forms of organization where there is some form of "explicit coordination" beyond simple market transactions but short of vertical integration. While this is a useful insight, a broad review of the literature clearly shows differences in such "network" forms of cross-border organization<sup>4</sup>. The GVC framework propounded by researchers of the University of Sussex categorizes and provides an explanation for these variations. Furthermore, if one of the variables changes then value chain governance patterns tend to change in predictable ways. For example, the advent of a new technology can render an established VC based on relation becomes obsolete and perhaps captive networks and even vertical integration would become more prevalent.

The relevance of the above discussion is to highlight the importance of being able to plug into the GVC. IMS-GT will continue to be viable and play a locomotive role for the rest of the economy as long as it can remain an important and useful component of the GVC. It is pertinent for economic actors, firms, workers and policy makers to better understand how VCs function and able to benefit from thinking about their competencies relative to other actors in the chains they participate in or hope to participate in. What is the division of labour in the chain, how might this be changing, and why? Where are the various functions within VCs located geographically? Are there nodes of excellence to be found in particular places? What are the prospects for upgrading one's position with VCs? Are there competencies to be acquired, codification schemes to learn, or kinds of relationships to develop or steer away from? The formation and implementation of GT with officials well versed with the tools in VC analysis will be in a good position to bring success to regional economic integration in a wider scale.

The emergence of growth triangles could be seen as an example of cooperation in managing economic interdependence. It is part of a changing regional and global division of labor where industrial restructuring in growth zone participants' economies are driven by political, technological and economic factors. For MNCs located in the triangles, they may be pursuing a globalization or global localization/glocalization strategy. The former involves a worldwide intra-firm division of labor where vocational strategies are based on scale economies and comparative advantage. Production is geared to world markets and standardized tastes with R&D research spread throughout. The latter is based on a geographically concentrated inter firm division of labor with integrated supply, distribution, and production chains in major regions. Production is geared towards local/regional markets and tailored to suit differences, while basic research is concentrated at home and applied research is decentralized.<sup>5</sup>

Ability to accommodate both strategies will be a double assurance for being 'locked' into the GVC. Put plainly, it is important to recognize "producer-driven GVC" in contrast to 'buyer-driven GVC'. "Producer-driven VCs" involve transnational subsidiaries linked to a core manufacturer, which then distributes its mass production to

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<sup>4</sup> The network forms and VC governance, according to the University of Sussex GVC Initiatives, can be categorized into (a) Pure Market, (b) Modular Value Chain, (c) Relational Value Chain; (d) Captive Value Chain, and (e) Hierarchical Value Chain. For more detail discussion, see <http://www.globalvaluechains.org/>

<sup>5</sup> A more detail discussion can be found in Oman (1994) and Ruigrok and van Tulder (1995).

distributors and retailers<sup>6</sup>. Examples characteristic of such capital and technology intensive sectors, include cars, computers, aircraft, and heavy machinery. Transnational subcontracting and alliances are common. In contrast, "Buyer-driven VCs" involve decentralized, flexible production networks where branded companies and retailers have both primary and secondary ties to trading firms, overseas factories, and trading companies. These labor-intensive consumer goods include toys, footwear, garments, and consumer electronics. Profits are derived from design, marketing, and retail service, rather than economies of scale or advanced technology. GTs such as the IMS-GT, can be effective handmaidens to intensify export oriented industrialization in ASEAN countries with indigenous firms and subsidiaries developing export niches in textiles, consumer goods, electronics, and transport equipment initially, moving into semiconductors and integrated circuits more recently.

IMS-GT can currently be identified as part of the buyer-driven VC involving exports primary commodities, export processing or assembly, component subcontracting, original equipment manufacturing (OEM), and original brand name manufacturing (OBM). OEM requires producers to make finished products to be sold under another brand name. This requires design interpretation, quality control, and on-time delivery by the producer and supporting firms, which learn to develop backward linkages. The IMS-GT with more than 6000 MNCs located in one of its partner: Singapore will be in an advantageous position to be securely plugged into the GVC.

## **5. Conclusion**

In this article, we have explored whether Growth Triangle as a mode of regional economic cooperation can continue to be relevant amidst growing activities in the formation of FTAs. The IMS-GT will be a role model in ASEAN. Its vibrancy and continued growth will have positive spillover effects to all the participating countries. Looking at both the past records and the prospective international trends of international production, GT is expected to co-exist with FTAs. In fact, it is argued that GT will play a significant role in regional economic development if GT can be established as conduits for both local and foreign corporations to be immersed in the global value chain. It is imperative that economic planners in developing economies recognize the importance in value chain analysis and knowledge of it will help greatly in shaping and formulating policies that will deepen integration and engender larger economic benefits.

As a matter of fact, following the recent meeting on 18 March 2006 between Indonesian Vice-President Jusuf Kalla and Singapore Minister of Foreign Affairs George Yeo, the two Indonesian Islands of Batam and Bintan are once again in the limelight. Indonesia is keen on tapping Singapore's experience in developing industrial estate<sup>7</sup> to help improve the investment climate and competitiveness on the two islands, as well as establishing SEZs in other provinces. Singapore will be helping Indonesian authority to hammer out policies for SEZs and to train manpower. Concurrently, the Indonesian government is pro-actively addressing complaints received from businessmen on poor enforcement of law, tangled tax policies, frequent demonstrations, dualism between Batam city administration and Batam authority agency amongst other problems. The

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<sup>6</sup> Similar to value chain, commodity chains and their link to the global capitalistic system is discussed extensively by Gary Gereff (1994 and 1995).

<sup>7</sup> Singapore's expertise and experience in industrial estate development have been tapped and refined in several emerging economies: China, Vietnam, and India.

Indonesian government recognizes the urgency in fixing these problems and how these resolutions will have critical bearing on the success of the economic policy reforms in the country. These developments augur well for brighter economic prospects for the IMT-GT.

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