China's Contribution to Recent Convergence and Integration among the Asian Economies

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The objective of this article is to explore the economic relationship between China and the surrounding dynamic Asian economies. It delves into China's influence over the Asian economies and whether this relationship is a market-led or de facto symbiosis. The three principal channels of regional integration analyzed in this article are trade, FDI and vertically integrated production networks. They are essentially based on the activities of the private-sector in these economies. China methodically expanded and deepened its economic ties with the regional neighbors. At the present juncture, China's integration with the surrounding Asia is deep. Another issue that this article explores is the so-called China "threat" or "fear" in Asia. It implies that China is crowding out exports of the other Asian economies in the world market place. Also, as China has become the most attractive FDI destination among the developing countries, it is apprehended that China is receiving FDI at the expense of the Asian economies. These concerns were examined by several empirical studies, and the inference is that they are exaggerated. This article concludes that the private-sector business activities in China and other rapidly growing Asian economies were (and are) instrumental in bringing together the production structures and real economies. The result is both convergence and integration among the dynamic Asian economies. Over the years China and its Asian neighbors has developed a close and symbiotic economic relationship and a de facto regional integration.

Keywords: Economic Integration, China's Role, Production Networks, Trade, FDI

JEL Classification: F15, F17, F19, F20

I. Introduction

Two relevant and interrelated economic realities are as follows: First, the People's Republic of China (hereinafter China) in 2013 is a large economy in both absolute and relative terms. Over the three decades of macroeconomic

reforms and the resulting dynamism turned it into the largest regional economy in mid-2010. Second, the recent economic transformations in China and the surrounding dynamic Asian economies have been nothing short of thoroughgoing. This group of Asian economies has turned into the most rapidly growing in the global economy. During and after the global financial crisis (2008-09), Asian economy proved to be a compelling and credible force in the global economy. It not only led the global economic recovery from what is being termed the Great Recession but also contributed to it (Das, 2011a). According to Shinohara (2010) it provided a pull force to the global recovery. Asia emerged from the global financial crisis as a growth driver and an anchor of stability of the global economy.

Over the preceding three decades, the mutual relationship of China and surrounding Asian countries has evolved in a pragmatic and synergetic manner. This article delves into their process of progressive economic interaction. The objective of this article is to examine how China is influencing its neighboring Asian economies and to see how their economic relationship is developing into a market-led, private sector driven symbiosis. The principal issue that is being addressed in this article is how private business firms and multinational enterprises (MNEs) in the region, driven basically by profit maximizing motives, are interacting with each other and in the process bringing the economies close together and integrating Asia. Trade, foreign direct investment (FDI) and regional and global production networks has been operating as the principal channels of market-driven or de facto regional integration among the Asian and Chinese economies. In this kind of regional integration business firms reach across national boundaries, expand and coordinate trade and investment, creating larger and integrated markets. No formal or officious agreements are required for de facto regional integration.

II. Asian Crisis Causing China's Strategic Policy Shift

The Asian crisis that started in July 1997 was a watershed point in China's relationship with its Asian neighbors. This was a learning-by-doing phase for the apex Chinese hierarchy, and they treated economic growth and security related issues separately. The Asian crisis was a revelation to the Chinese policy makers revealing that economic wellbeing of China and domestic economic

stability were intertwined with what would happen to the surrounding Asian economies (Zhengyi, 2004). This revelation turned policy makers' attention towards its dynamic Asian neighbors and strengthened the national and regional link. Their understanding regarding the significance of engagement with the regional economies grew.

In general, this was a period when a sense of regional identity and seeking efforts for regional resolutions to regional problems became strong among the Asian economies. A clear evidence of this fact was the informal Kuala Lumpur meeting of the ASEAN leaders with the top political leaders of China, Japan and Korea in December 1997. This was the genesis of the concept of the ASEAN-Plus-Three (APT). This was the newest idea in the regional economic governance.

The APT concept progressed further, and in May 2000 during the Finance Ministers' meeting of the APT countries held in Chiang Mai, Thailand, the Chiang Mai Initiative (CMI) was put together. This was an innovative initiative of a network of bilateral swaps intended for mutual assistance at the time of any future crises. The APT countries agreed to draw on each other's reserves to cover sudden outflows of foreign currency. The regional economies concurred to help and support each other through a network of currency swaps. They did not intend to ask for International Monetary Fund (IMF) or World Bank assistance in any future crises. The expectation was that the CMI would serve as the regional crisis prevention and resolution mechanism. The CMI regional resources were to be utilized for meeting the needs of the regional economies in their hour of financial distress. The CMI initiative was significantly enlarged in 2010 and 2011. And rapidly growing China is seen as an integrative force in promoting regional integration through institutionalization of multilateral cooperation (Li and Zhang, 2011).

III. Asian Economic Integration and the Chinese Business Communities

A supporting phenomenon in this regard was the existence of a large Chinese Diaspora accumulated in countries around China, particularly in South East Asia.

It comprises resourceful and dynamic business communities. And they are credited with connecting China with the rest of Asia. During the early stages of growth, in the 1980s and 1990s, remittances and investments from the Chinese business communities were a substantial part of the total FDI flowing into China. The initial flows of FDI originated from the overseas Chinese business communities in the neighboring Asian economies. They were needed for China's growth. The Chinese business communities took the chancy step of investing into "China's premature market in face of regulatory and political uncertainties". They took the risk of investing in a business environment which was known for "a lack of property law and unclear political systems" (Li and Zhang, 2009, p. 5). Importance of investment by the Chinese Diaspora was high initially, albeit it declined after the mid-1990s.

The capital flows originating from the Chinese business communities in the surrounding Asian economies into China were responsible for the synergy that was created between the Asian investors and markets and the rapidly developing Chinese economy. During the earlier years, FDI that came from the other sources was not able to match these flows. This applied *a fortiori* to the newly established industries in the post-reform period in the coastal provinces of China (Smart and Hsu, 2004). When the production networks grew in Asia and expanded rapidly in the post 2000 era, these regional economic and industrial bonds were significantly strengthened. Thus the Chinese business communities in the surrounding Asian economies became an integrative force for the region.

IV. China and the Evolving Pattern of Regional Integration in Asia

FDI, trade and regional and global production networks are the principal channels through which the Chinese economy has integrated with the neighboring Asian economies in a market-driven manner (section 1). Increase in intra-Asia FDI is a relatively recent phenomenon, which has effectively worked toward integrating the region. This trend successfully advanced China's regional integration with its neighbors as well as general Asian integration.

A significant part of FDI in the Asian economies comes from other Asian economies (Lipsey and Sjoholm, 2011). Although there are data gaps, the WIR

of 2006 found that approximately half of the FDI inflows in the Asian economies were from the other regional economies, largely from the regional emerging-market economies (EMEs). According to this source, around 65 percent of inward stock of FDI in Asia in 2004 was from the other Asian economies. The same source estimated that between 2000 and 2004, average annual intra-Asian FDI flows amounted to \$48 billion. The WIR of 2010 estimated that of the \$875 billion FDI received intra-regionally by Asian economies in 2008, China was the source economy of \$307 billion. Furthermore, the four newly industrialized economies (NIEs)¹ of Asia, that have remained a lucrative source, accounted for \$512 billion. China received a great deal of FDI—as much as 65 percent of total receipt—from the NIEs. Due to increasing labor cost, firms in the NIEs are motivated to invest in China and other Asian economies (Gao, 2001; Kittilaksanawong, 2011).

Taking a balance-of-payments approach, Hattari and Rajan (2009) estimated that 35 percent of FDI flows into the developing Asia during the 1990-2005 period originated intra-regionally. China and Hong Kong SAR dominated both as hosts and sources. After WTO accession China became a significant source country investing not only in the region but also outside Asia. China's role in outward FDI flows strengthened after 2004; in 2010 its share amounted for 8.5 percent of the total FDI stemming from the developing countries (Aleksynska and Havrylchyk, 2011). Intra-regional FDI made by Hong Kong SAR and Singapore is obscured by the fact that it is often made by business firms from other countries, that are both based in Asia and outside. One general characteristic of intra-Asian FDI is that investing firms tend to prefer locating their affiliate operations in more labor-intensive industries.

International trade is one of the principal channels through which Chinese economy integrated with and influenced GDP growth performance of its neighboring Asian economies. In the 1970 and early 1980s Japan overwhelmingly dominated Asian trade. It accounted for almost 60 percent of the regional exports and imports. This scenario morphed as the other Asian economies began liberalizing and improving their trade performance. For successful integration

¹ The four newly industrialized economies are Hong Kong SAR, Korea (Republic of), Singapore and Taiwan.

of China with the Asian economies, it is a necessary condition that they liberalize their external sector as well. Significant trade and investment liberalization took place in Indonesia, Korea, Malaysia, the Philippines, Taiwan and Thailand in the mid-1980s. Vietnam embarked on reforms in the early 1990s. These economies took initiative in unilateral trade liberalization, which was done in a non-discriminatory manner. They also were full participants in the multilateral liberalization measures initiated first by the General Agreement on Tariffs and Trade (GATT), and since 1995 the World Trade Organization (WTO).

Trade among the East and Southeast Asian economies, which includes China, began expanding since the 1980s. Trade among this group of economies was paltry in 1975, less than 1 percent of their total trade. It began increasing and reached 10 percent of their total trade in 2001 and 13 percent in 2004.² During this period China produced almost a half of the regional GDP and a third of exports. High and sustained GDP growth of the Chinese economy in the decade of the 1980s was the principal driver of intra-regional trade. Chinese economy was outward-oriented and by the time it acceded to the World Trade Organization (WTO) became trade dependent. The obvious benefit of WTO accession was improvement in access to export markets and reduction in import cost of raw materials and intermediate products. The latter helped it in its production and exports of manufactures. This made Chinese products more competitive in the world markets vis-à-vis exports from the other regions of Asia.

Developments in the early 1990s were important in this regard. China began improving its complicated and restricting trade regime after 1990 and also its export structure began to diversify towards capital- and skill-intensive products. This was the time point when China began to emerge as a major player in the global economy. The 1990s were a turning point in that during this period liberalization of trade and FDI was accelerated in China and the ASEAN economies. The two liberalizing together created obvious synergy. In the early 1990s exports of the ASEAN economies to China began picking up in value terms. A significant amount of new ASEAN exports to China were in the category of medium-technology manufactures. More technologically advanced ASEAN economies, like Malaysia, the Philippines, Singapore and Thailand

² The source of these statistical data is Coxhead (2007).

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exported semiconductors and computer components. The other ASEAN economies exported natural resources to China.

In 1995 exports from Japan and the four NIEs to China accounted for 10.6 percent of all exports. This group of five economies is resource-poor. In case of ASEAN-4 economies this proportion was merely 3.5 percent (Robertson and Xu, 2010).³ Therefore, in relative terms the larger ASEAN economies were less integrated with the Chinese economy in 1995 than Japan and the NIEs. Principal exports to China from the ASEAN-4 economies were mostly low- and medium-technology manufactured goods. However, ASEAN-4 essentially exported durable goods to Japan and the NIEs.

As for China's exports to these two groups of Asian economies, Japan and the NIEs accounted for 31 percent of the total exports to the region, while the ASEAN-4 for only 4.2 percent in 1995. China's exports as a fraction of its total multilateral exports were again much higher to Japan and the NIEs (8.4 percent) than to the ASEAN-4 (3.9 percent) economies. These statistics show that in 1995 Japan and the NIEs were far more closely integrated with the Chinese economy than the ASEAN-4 economies. What is noteworthy is that trade structures of China and the ASEAN-4 economies were identical at this juncture. This state changed in the mid 2000s. China has become the region's principal engine of growth. In fact this role of China has exceeded to the global economy (Garnaut and Song, 2006).

By 2006, China became the fifth largest export market of the ASEAN economies and the third largest source of imports. A direct influence of China on ASEAN economies was giving an impetus to their exports to its large domestic market. In fact as imports and exports of the ASEAN economies have got increasingly more China-centric, some scholars questioned the relevance of ASEAN grouping (Tambunan, 2005 and 2006). Members of ASEAN have larger trade with China than they have with each other. A quantitative examination using highly disaggregated trade data revealed that a lot of changes had occurred in intra-industry trade over the 2000-05 period between China and the ASEAN-5 economies. These are the five founding economies of ASEAN for which disaggregated data are available. This demonstrates the unique importance of

³ The ASEAN-4 economies are Indonesia, Malaysia, the Philippines and Thailand.

China for the ASEAN economies, both as a market for exports and a source for imports. This empirical study concludes that there is no crowding out of bilateral trade among the five members of ASEAN due to their increasing trade with China. If anything, increased integration with the Chinese economy results in an increase in the intra-ASEAN-5 trade. Thus viewed, while China has influenced and altered trade flows within the ASEAN region, it has not "significantly reorganized trade flows away from intra-ASEAN-5 to that of ASEAN-5-China. There are grounds for suggesting that the ASEAN-5-China trade interaction can be considered an important driver for intra-ASEAN-5 export expansion" (Devadason, 2011; p.143).

As the ASEAN-China free trade agreement (ACFTA) came in force in January 2010 and tariff were reduced to zero, the two economies integrated further. ACFTA is the third largest in the world after the EU and NAFTA. In 2011 ASEAN overtook Japan to be China's third largest trading partner after the EU and the US, with trade \$362.3 billion. China is the largest trading partner of the ASEAN economies. The country has a large import demand for farm products, mechanical processing and marine products from the ASEAN economies. It encourages imports from the countries that have free trade agreements with it. According to the projections made by the China Council for the Promotion of International Trade, ASEAN-China trade would surpass \$500 billion mark in 2015 (King, 2012).

The on-going wave of globalization has became another instrument of regional integration in Asia. Globalization enabled latecomer economies like China to regionally and globally integrate through expansion of production networks. Those countries developed fast in the 1990s and covered an extensive region in Asia, *a fortiori* in East Asia. They involved Asian business firms as well as multinational from the European Union (EU) and the United States (US). These multinationals changed their operational strategy from export to international production. Their newly structured and reorganized businesses in different parts of the global economy enabled them to reduce costs and improve their ability to react to technological advancements. They could meet requirements of their global markets more swiftly by way of globally integrated production and distribution networks. Many Asian economies, including China, were their preferred locations for setting up such cross-border networks. Those

businesses were initially intra-firms but increasingly grew to arm's-length inter-firm networks. They have made invaluable contribution to integration of Asian economies.

One direct consequence of the spread of regional production networks was rapid expansion and increase in both FDI and trade between the Asian economies. These networks have engendered diverse and vibrant industrial enterprises in the region that are interconnected. An influential empirical study concludes that production networks in the region accounted for a large proportion trade flows of most member countries. They entail both intra-firm and arm's-length trade (Ando and Kimura, 2005). The Asian production and distribution networks are idiosyncratic in following three traits: first, they are enormously significant for the regional economies; second, they tend to cover a large part of the region and number of countries; and third, over the years they have grown exceedingly sophisticated in terms covering intra- and inter-firm transactions of regional manufacturing firms. No doubt other parts of the global economy also successfully developed such production and distribution networks. The most salient examples are the Mexico-US networks and Western-Central-Eastern Europe corridor. They are yet to reach the level of sophistication that Asia has been able to achieve (Kimura, 2006).

China was a latecomer, last to be a part of the regional division of labor in Asia—that is if we ignore relatively smaller economies like Myanmar and Cambodia. However, it conclusively illustrates how splitting the value-added chain between different countries at different stages of growth with different comparative advantage can drive the process of industrial development, along with regional economic integration (Gaulier et al, 2009). One direct consequence of the expansion of production and distribution networks in Asia was the evolution of a triangular pattern of trade. Japan and the NIEs, those at a technologically higher strata, exported advanced capital goods, complicated intermediate goods, particularly parts and components to the relatively less technologically advanced economies like the ASEAN countries and China. The latter group of economies processed them and got the final products ready for exports to the largest markets in the global economy, the EU and US. This triangular trade further reinforced regional integration in Asia. Over the 2000s, China importance in the regional production networks has increased substantially

for the neighboring Asian economies.

V. Premonition of China Threat for the Asian Economies

Whether China has crowded out the exports of its neighbors was fervently debated in the academic and policy conclaves. Likewise, whether it has absorbed an increasing proportion of FDI flowing to the region was a moot point. Whether China was growing at the cost of its neighboring Asian economies and having a negative effect on their GDP growth was an open question. For a long time it has remained the most alluring destination for FDI in the global economy. One source of this concern was the fast growing exports of China to the US, the largest market. Between 1990 and 2005 China's share of the US market increased from 3.1 percent to 15 percent. Over this period the shares of Japan and the NIEs declined. China crowding out other smaller Asian economies was a larger concern. This was because the trade structure of the economies like the ASEAN-4 was less complementary to that of China. This was responsible for the so-called the China "threat" or "fear" for the Asian economies. It was intuitively felt that China was growing at the cost of its Asian neighbors. This premonition was seriously examined by many analysts.

5.1 China Threat in Multilateral Trade

Some of the early empirical studies classified exports of Asian economies in different categories to determine the levels of threat from China's burgeoning exports. One of them concluded that the trade performance of neighboring Asian economy is facing threat from China's competitive exports in the global market place. Another methodology that was deployed to examine the crowding out effect was simulation exercises. Both Ianchovichina and Walmsley (2005) and Ronald-Holst and Weiss (2005) provided evidence of China's rapid trade expansion having a favorable impact over trade of Japan and the NIEs, particularly improving their terms of trade. Conversely, the relatively less developed ASEAN economies having similar endowment structure to China faced keen competition from the exports of China. Their terms of trade also

⁴ For instance, see Lall and Albaladejo (2004).

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worsened. Although Ronald-Holst and Weiss (2005) were dismissive of the proposition that China's successful exports and increasing share in multilateral trade were adversely affecting the comparative advantage of the neighboring Asian economies in higher value added goods or skill-intensive activities. Limited theoretical foundations of these empirical exercises made it difficult to come to a final inference regarding economic policy responses of the Asian economies.

Eichengreen, et al (2007), Greenaway, et al (2008) and Athukorala (2010) employed more advanced methodologies like the gravity models to examine the effect of China's fast growing exports on the surrounding Asian economies. Of these three large empirical studies, Eichengreen, et al (2007), Greenaway, et al (2008) concluded in a positive manner. That is, they found a crowding out effect of China's exports over the exports of the neighboring Asian economies. According to their results, this effect was more intense over the ASEAN-4 economies but much less so on Japan and the NIEs.

There were other broad analyses that revealed that the fear of China crowding out the East and Southeast Asian economies from their export markets seems unfounded. For 1969/70 and 2006/7 Athukorala and Hill (2010) computed that the share of East and Southeast Asia including China's exports and imports in total Asian exports increased from 42 percent to 76 percent and in imports from 38 percent to 80 percent. During this period Asia accounted for 40 percent of the total increase in multilateral exports.

Unquestionably China's rise as a large trading economy had a lot to do with its structural transformation, but the other Asian economies also increased their global market shares in exports. This includes the NIEs and the larger members of the ASEAN. Athukorala (2010) reported that the apprehension of China's exports crowding out those from the other Asian economies was highly exaggerated in the policy debate. Viewed in the global context, market share growth of the Asian economies, including that of China, occurred essentially at the expense of the rest of the world, particularly advanced industrial economies (Athukorala, 2011a). Interestingly, during this period the combined share of the other non-Asian developing countries in the global trade also increased, but at a much slower pace than that of the Asian economies. China and the East and Southeast Asian economies were the major drivers of rapid

export growth in Asia. After the 1970s the export structures this group of Asian economies experienced an intense shift towards manufacturing products. Their share of exports of manufactures in total multilateral trade increased from 12.9 percent in 1969/70 to 36.6 percent in 2006/7. Conversely, during this period, the share of Japan declined from 8.9 percent to 7.8 percent.

The more recent research concluded that while China succeeded in penetrating traditional labor-intensive manufactured goods at the cost of the high-wage NIEs, it did not have the same effect on the exports of the other low-wage Asian economies (Athukorala, 2010 and 2011a). If anything China's success in joining in the regional and global production chains or production networks as an important assembly center created opportunities for the other Asian economies to become a part of various segments of the value chains in line with their comparative advantage and boost their trade volumes. These studies also concluded that China's exports were complimentary to the exports of the Asian economies.

To address some of the weaknesses in the theoretical foundations of the previous models and allows for the trade-growth interaction Robertson and Xu (2010) introduced long-run neoclassical steady state factor accumulation conditions into an open economy growth model. Their simulation model included eleven sector and three separate regions and was an improvement over the past such studies. They came up with a strong inference regarding the impact of China's growth over if neighboring Asian economies being both substantial and positive. This result applied robustly to Japan and the NIEs. They computed that the impact of China's rapid growth and trade expansion was a 16 percent growth in both GDP and consumption in a decade in this group of countries. The ASEAN-4 economies also experienced gains of 7 percent to 8 percent in GDP from a decade of China's growth. These economies were found to be less complementary with China than Japan and the NIES and were also relatively less integrated with China. The income gains were long-run steady state results, therefore they included increased income from capital deepening. Growth rate in the Asian economies, particularly the ASEAN-4 economies, would have been lower in the absence of a dynamic China next door.

5.2 China Threat in Foreign Direct Investment

Owing to their economic dynamism, Asian economies became the progressively significant recipients of FDI from the advanced industrial economies during the late 1980s. A lion's share of these FDI flows went first to the NIEs, spreading subsequently to the ASEAN-4 economies in the early 1990s. Intra-regional FDI flows in Asia also intensified (Kharas, et al (2007). FDI has been a valuable instrument of both regional integration as well as global integration for Asia. In 1992, China recorded an uptick in its FDI receipts, which soon turned into a surge. By the mid-1990s became the largest developing country recipient of FDI. The developing country investors, those from Hong Kong SAR and Taiwan, accounted for a disproportionately large proportion of FDI in China until the mid-1990s. In the initial years China suffered from difficulties in the enforcement of contracts. Chinese Diaspora in Hong Kong SAR and Taiwan felt privileged because they had old ties and informal means and channels of enforcement of agreements. Therefore, FDI to China from these economies was large. Subsequently the proportion FDI from these economies declined. An overwhelmingly large proportion, over 80 percent, of FDI flows to Asia originated in the advanced industrial economies (Brandt, et al 2007).

Many of the Asian neighbors apprehended that China's large and growing FDI receipts were depriving them of FDI. The perception among the antagonists was that China was gaining at the expense of its Asian neighbors. This was based on the assumption that FDI was a zero-sum game (Kramer, 2006). Some Asian governments, like Korea and Singapore, were strident in expressing their uneasiness on this count. If this assumption was correct that every year there was an increase in FDI to China, there should have been a fall in FDI flows in the neighboring Asian economies. Casual empiricism failed to establish such a correspondence. This assumption was flawed because there were periods when both ASEAN and China recorded higher FDI flows. For instance, one such period was 1989-97, when both shared an increasing FDI trend. In China's case FDI receipts soared from \$3.4 billion to \$44.0 billion, while for the ASEAN economies it soared from \$7.6 billion to \$27.0 billion (Das, 2007). These statistical data do not support the assumption that China benefitted at the expense of the other Asian economies.

Several regression analyses and other exercises were attempted to resolve the issue of China crowding out FDI flows into the Asian economies. Regression

analysis by Chantasasavat et al (2005) attempted to estimate the impact of inward FDI flows in China on Hong Kong SAR, Indonesia, Korea, Malaysia, the Philippines, Singapore, Taiwan and Thailand for data for 1985-2001. Their strategy was to control for all the standard explanatory variables of FDI in the Asian economies. To proxy for China's effect, they chose the level of FDI inflows into China. Their estimates found that the value of coefficient for inward FDI into China was positive and highly significant in all the specifications. They concluded that a 10 percent increase in FDI inflows into China would raise the level of FDI inflows into the eight Asian economies they considered for their study by 2 percent to 3 percent. Thus, the increases in FDI in China did not occur at the expense of the Asian economies but, if anything, they benefited from it. One obvious explanation for this increase was the regional production networks of which China was an integral and active part. As the Asian economies were heavily involved in vertical trade specialization with China, their production processes were interconnected. Therefore, it was logical and feasible that an increase in FDI in China could lead to an increase in FDI in them. This complementarity hypothesis was based on the fact that the factors that made China a more attractive FDI destination also made other Asian economies more attractive destinations.

The same complementarity between China and the surrounding Asian economies was reported by Zhou and Lall (2005). Supporting this premise Ianchovichina and Walmsley (2005) argued that with China liberalizing FDI inflows, the investing transnational corporations (TNCs) began rationalizing their production processes in Asia, which in turn facilitated and encouraged complementary FDI flows to the Asian economies. Likewise Mercereau (2005) also concluded that China had not diverted FDI inflows from its Asian neighbors. In his study Singapore and Myanmar were the only two exceptions. His results regarding complementarity were similar to those arrived at by Chantasasavat, et al (2005).

Eichengreen and Tong (2007) and Wang, et al, (2007) took larger number of Asian economies for estimating the impact of FDI inflows into China and found that due to complementarities China may have crowded *in* FDI into the Asian economies not crowded *out*. They also explained complimentarities by the vertical nature of production fragmentation in Asia. Another large empirical

exercise concluded that the changing direction of FDI in Asia could lead to welfare losses in the ASEAN-4 economies "only if the ASEAN-4 economies fail to absorb new foreign technologies quickly and to engage in indigenous technical innovation" (McKibbin and Woo, 2003: 22). The ASEAN-4 economies remained technology conscious in the past. There is no reason why they should not continue to be so in the face of China challenge. Salike (2010) applied dynamic panel model to investigate the crowding out effect of Japanese FDI going to Asia. He examined this with industry-level data on Japanese FDI. His results show a significant crowding out effect in three of the twelve industrial sectors, which included electronics and electrical industry. In two industries a complementary effect was found, which included transport. Chemicals did not show any kind of impact. Salike (2010) also inferred that vertically fragmented industries in the region would benefit from China's rise and large receipt of FDI.

China's neighbors are regarded as high-performing economies and have earned global accolades for their post-War II economic dynamism. Many of them created successful niches for themselves in the global economy (Das, 2005). The NIEs did so even before China did. Besides China demonstrated eagerness for regional acceptance and was/is sensitive to allegations of disrupting and dislocating the performance of its neighboring economies (section 3). Since 2000, China has endeavored to manage its economic relations with them by proposing free-trade agreements (FTAs) of different kind. This lack of insouciance towards its neighbor's welfare demonstrated China's commitment not only to the lofty ideals of good neighborliness, but also to responsible conduct in the community of nations.

VI. China's Integration into Asian Production Networks

While calibrating China's impact on the regional economies, most studies took into account the traditional horizontal trade, which is trade in goods and services that are produced in their entirety in an economy and traded. This observation applies to the empirical studies cited in the preceding section. A well known fact is that growing complementarity of production processes leading to vertical

fragmentation of production and trade has turned China into a hub or a major assembly center for Asia (section 4). This fact was ignored by many studies that tried to reckon China's impact over the regional economy. This was serious negligence, because during its reform phase China integrated rapidly into the regional production networks. It does make a great deal of impact over its regional neighbors through the regional production chains or network production. The country has come to acquire a unique position as Asia's production platform for export of final goods regionally and even more globally. China's prominent role in Asia's production networks has been methodically examined by Arndt (2008), Athukorala (2010 and 2011b), Yeats, 2001 and Ng and Yeats (2001).

Due to expansion of production networks, global trade in parts, components and subassemblies has increased fast in recent decades, faster than trade in manufactures. It has come to have increasingly wide product coverage. In keeping with this trend, intra-regional trade in components in Asia got larger and also grew rapidly. In fact, trade in parts, components and subassemblies played a more important role in trade expansion in Asia than in any other region of the global economy (Yeats, 2001 and Yamashita, 2010). With rising level of network production, importance of the Asian economies has increased for the matured industrial economies. Strengthening bonds of network production between China and the NIEs and ASEAN economies also helped in raising global status of Asia in economic and business world (Das, 2011).

In several product lines in SITC 7 category, Asia's export dynamism was primarily driven by vigorous regional production networks. Their active functioning served to this closely integrate group of Asian economies with the global economy. These SITC product lines essentially comprised machinery and transport equipment, particularly information and communication technology (ICT) products and electrical goods. These products fall under SITC 75, 76 and 77 categories.

Trade in components is a function of demand for final products. Since the early 1990s China's importance as the leading final assembly center in Asia has increased. It imports components from the neighboring Asian economies to export the final products. As China assembled a variety of manufactured products, the share of parts, components and subassemblies in its imports of manufactures grew large. Over the years this process also has made Asian

economies highly integrated and interdependent. Many of them also has reduced production of final products because China is doing so. This production paradigm of the region is essentially controlled by TNCs.

As export volume of China grew, it caused a marked shift in the division of labor in the network production in Asia. The pace of final assembly of products in China accelerated rapidly, *pari passu* the role of the NIEs and ASEAN economies also grew in producing parts, components and subassemblies. As China exports the final products, it runs a deficit in components trade with the regional trade partners. The global financial crisis had a large impact over Asian trade. At the beginning of the last quarter of 2007, Asian economies suffered a severe trade contraction. It was caused by precipitous deceleration (down to 2.1 percent) in multilateral exports in 2008 and their further decline in 2009 (-12.2 percent). Decline in world trade in manufactures was over 20 percent in 2009, although in the last quarter of 2008 it was only 10.4 percent. This decline in world trade was the steepest in the last seven decades (WTO, 2010). The synchronized pattern of trade contraction in Asia was consistent with the close trading relationship among China and the other Asian economies that regional production networks had created.

Regional and global production networks in Asia existed even before the emergence of China as a manufacturing powerhouse. With the rise of the Chinese economy a new dimension was added to Asia's standing in global production networks. As proved by the following statistical data, China's trade in components grew at a rapid pace, as its involvement in production networks increased. Between 1992/93 and 2005/06 China's share of world exports of components increased from 1.1 percent to 10.9 percent, and its share of world imports of components increased from 2.4 percent to 11.5 percent. Also, components were a larger share of China's imports in 2005/06 (60.4 percent) than they were in exports (34.8 percent). Unlike China, in the other Asian economies percentage shares of components in exports and imports were largely similar (Athukorala and Menon, 2010). The largest concentration of Asian trade in components is presently in electrical machinery and electronics. Also, in the ASEAN Free Trade Area (AFTA), trade in component is more concentrated in electronics.

Trading activity by global production networks has been rising steadily since

the early 1990s. Table 1 in Athukorala (2011b) reveals how production networks in China and Asia enhanced their status in multilateral trade. In global networks production and exports, Asia's share increased from 32.2 percent in 1992/93 to 40.3 percent in 2006/07. This occurred despite the notable decline in Japan's share from 18.4 percent to 9.5 percent over the same period. Apparently the dynamism of Chinese economy was a major driving force for the Asian economy, whose share had increased from 2.1 percent to 14.5 percent during the period under consideration. These statistics show that China's role in Asian production networks was vital. Among the Asian economies world market share of the ASEAN economies grew faster than the regional average. Singapore was an exception in this regard because its world market share declined. The reason was its changing role from active participation in the production networks to performing oversight function, product design and capital-intensive tasks in the production process. These functions fall under the services category and are not recorded in merchandise trade.

Rapidly growing MNE operations has been playing a decisive role in integrating Asian economies in a market-led manner. MNEs are highly resourceful business organizations that can mobilize resources across borders in different regions of the global economy through their vertical and horizontal networks of procurement, production, distribution and marketing. Consequently their operations result in both regional and global integration. Various rounds of multilateral trade negotiations under the sponsorship of the GATT/WTO system successfully liberalized multilateral trade and foreign investment flows. They facilitated MNE operations. And further support from the information and communication technology (ICT) revolution as well as steadily declining costs of transportation helped. They successfully became the agents for promoting both regionalization and globalization. Global operations of the so-called Forbes Global-2000—the top 2000 business firms—have expanded at an exceedingly rapid pace since 2000. Their affiliates in different countries account for well over a third of multilateral trade, and their operations led to a significant increase in intra-industry trade (UNCTAD, 2002). Not only continuing intra-subsidiary trade in Asia, large MNEs are responsible for the allocation of inter-connected regional FDI. Yang and Huang (2011) computed the correlation coefficient to conclude that large MNC presence is related to higher FDI flows.

China and surrounding Asian economies became an important geographical locale for the MNE investment and operations. China's rapid growth made the region more attractive for the MNEs, and further dynamism was added to region-wide MNE operations. Expanding MNE operation in the region plays a pivotal role in the continued dynamism of Asia and the growth of intra-regional economic interdependence. MNEs are the veritable agents of regionalization and globalization through their vast production networks. This dynamic promoted regional and global convergence and integration. Athukorala (2011b) posited that the strong growth of MNC operations and production networks indisputably depends on the region's extra-regional trade, which is likely to remain the engine of growth for Asia in the near future.

VII. Summary and Conclusions

This article explores the relationship between China and the surrounding Asian economies. It delves into their mutual acceptance, economic interaction and dynamics. It examines how China is influencing its neighboring Asian economies and attempts to establish whether their economic relationship is synergetic and a market- and institution-led symbiosis.

When the Chinese economy has began its resurgence to be the largest regional economy, some of its smaller neighboring Asian economies are on their way to be among the "miracle" economies of the future. As the Chinese GDP growth picked up momentum, it began influencing its Asian neighbors in a significant manner. The two groups that were affected most due to its rapid growth were Japan and the NIEs on one hand and the ASEAN economies on the other. China's becoming a regional economic powerhouse was unquestionably a significant and sensitive issue. Although during the pre-reform era China had not had close economic and political relations with its Asian neighbors, during the reform period Chinese political leadership consciously decided to engage and cooperate with the surrounding regional economies.

China regarded soft power important and its status as a soft power in the region was on the rise. With that is acceptance by the other Asian economies enhanced. The Asian crisis (1997-98) proved to be an opportune period for

China to cultivate close economic ties with the neighboring Asian economies. Mishandling of the crisis and bail-out packages by the IMF made the Asian governments resentful; They were disaffected with the IFIs, particularly the IMF. As an alternative to the IFIs and IMF, they were anxious to create regional frameworks for any future crises. They clearly saw a pressing need for self-reliance and regional mutual support. The Asian crisis was also a reminder to China that its economic fortunes and domestic economic stability are impossible to be disentangled from what happened in the rest of Asia. Importance of regional interdependence dawned on the Chinese policy mandarins. China joined its regional neighbors in their quest for mutual economic reliance. Its partnership and collaboration endeavors with them increased.

China methodically expanded and deepened its economic ties with the regional neighbors. This served to win their trust as well as helped in developing a symbiotic economic relationship with these dynamic economies. To that end China adopted an open trade policy stance. It also unilaterally reduced its tariff rates. Keeping the economy open was instrumental in cultivating regional and global interdependence. Developing a close APT grouping and strengthening it were another policy measure that brought China close to the regional economies. The APT helped develop a sense of regional identity. This regional framework also made it possible to seek regional solutions for regional problems.

International trade and FDI were two of the most important channels that integrated China with its regional neighbors. Trade among the East and Southeast Asian economies, which included China, began increasing in the 1980s. With the passage of time a China "threat" or "fear" perception developed in Asia. It implies that China is crowding out exports of the other Asian economies in the world market place. Also, as China has become the most attractive FDI destination among the developing countries, it is apprehended that China is receiving FDI at the expense of the Asian economies. These concerns were examined by several empirical studies, and the inference from them was that they were exaggerated.

China adopted vertical fragmentation of regional production networks and came to be an important part of them. Over the last two decades, Asian economies has become highly active and successful in innovative regional cooperation through production networks. Due to rapid clip expansion within

the networks, intra-regional trade in parts, components and subassemblies has increased fast in recent decades. Regional and global production networks in Asia existed before the emergence of China as a hub, or a central assembly platform. However, with the rise of the Chinese economy a new dimension was added to Asia's standing in global production networks. Trading activities by global production networks have risen steadily since the early 1990s. Production networks in Asia and China successfully enhanced their status in international trade. In that, dynamism of the Chinese economy assisted Asian economies. Thus, evidence abounds that rapid growth of China added to Asia's dynamism and the two have evolved a symbiotic relationship.

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