

Rising China and East Asian
Economies: Perspective of China-led
Asian Production Network

DING Dou

Peking University

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The 1st East Asian Community Forum
RISING CHINA AND THE FUTURE OF
EAST ASIAN COMMUNITY

Date: May 28, 2011

ARI WORKING PAPER SERIES NO.23

ASIATIC RESEARCH INSTITUTE

KOREA UNIVERSITY

ANAM-DONG 5GA-1, SEONGBUK-GU

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Rising China and East Asian Economies: Perspective of China-led Asian Production Network

DING Dou *Peking University*

China's striking growth for more than three decades as an alleged economic miracle, has long attracted the interests of both policymakers and researchers. China is now the world's second largest economy in GDP, the biggest exporter and the second largest foreign trader in the world, and an increasingly influential investor across the globe. Nowadays, nobody would cast doubts on whether China is always an economic power in the world, though it looks nascent and fledgling.

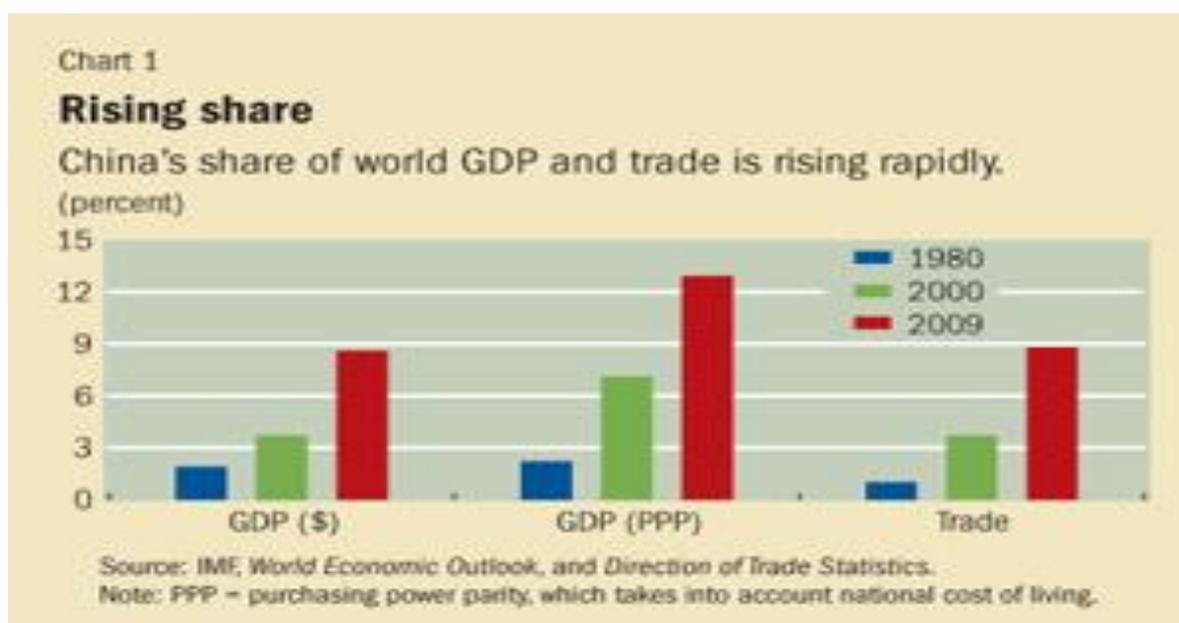
While we try to gauge the ramifications of China's economic rise, we should bear in our mind that what prompts its commercial rise. Chinese always attributes its economic marvel to its new strategic policy "Reform and Opening up" endorsed since 1978. The guideline of opening-up discourse mainly means to integrate Chinese economy into the world, or, the globalization. In part, China's economic rise derives from its trade, investment and other commercial links with the world, benefiting from the uninterrupted globalization for the several decades. Plainly, the rising China would impinge on the world and its neighbors through the equivalent flows of trade, investment and other commercial links. At the core of Chinese robust economic links with the globalization is the China-led production network in Asia.

When we talk the implications of China's rise for Asian countries, we always have a range of potential perspectives. This paper uses the perspective of China-led Asian production network. It has four parts. In Part one, I introduce the Asian production network led by China since 1990s, focusing on its mechanism to link China and East Asian economies. Part two analyzes how the Asian production chain weather the shock of the global financial crisis since 2008, and changed itself to depend more upon China's increasing domestic demand. As a result, East Asia grows more likely to be a growth pole in the world economy. Following in part three, I shift to study on such following things. China has taken several steps to consolidate the growth pole, and replenish the production model into the shape of China-led Flying Geese pattern more likely. In the last part, I give some conclusive remarks.

Logical consistence could be regarded as the advantage of this perspective. Take a note. Asian economies here refers to the economies of East Asia including Northeast Asia and Southeast East, and Japan is always excluded in accordance with the estimates of IMF, World Bank and other major international organizations on East Asia.

China Leads the Production Network in East Asia

In the year of 2009, China's share in world trade got close to 9 percent, growing nearly tenfold over the past three decades. Meanwhile, its stake in world GDP has jumped to 13 percent, while three decades ago it was only less than 3 percent (purchasing-power-parity basis, see chart 1¹).



¹ Vivek Arora and Athanasios Vamvakidis *Gauging Chinese Influence*, Finance and Development, December 2010, pp.12, IMF publication.



China is earned the nickname of world factory, reflecting the vital place of Chinese manufacture hub around the world. Chinese manufactured goods have swarmed to the market around the world, sitting a remarkable share in every major region. Chart 2² showcases China's increasing share in these regions' foreign trade over the three decades. Of particular, in the region of other emerging Asian economies, China's trade with them reached the portion of 13 percent, representing the special fallout of the rising China on its Asian neighbors.

The investments between China and the rest of the world equally assume an important channel for the fallout of rising China. An IMF research said: Inflows of foreign direct investment (FDI) to China, for example, accounted for 7 percent of gross world FDI inflows in 2009, compared with just 1 percent in 1980. FDI outflows from China are a more recent phenomenon, rising from a negligible share

² the same as above.

of gross global outflows as recently as 2004 to 4 percent in 2009³.

When we evaluate the implications of rising China on its East Asian neighbors, we tread the same path abovementioned. Specially, a particular feature to assess the impacts of rising China on its neighbors, is the special economic relationship forged between China and its East Asian neighbors. That is Asian production chain or Asian production network, driven or headed by China's processing trade.

In general sense, China's processing trade is on par with its ordinary trade in trade volume. The processing trade takes on an important role in China's exports of manufacture, whose share is nearly on the par with the non-processing export in the year of 2010. It showcases China's emergence as a central player in many production chains across the globe and the region, including in textiles and electronics. It began in the shape in East Asia since early 1990s. Japan, South Korea, Singapore, China's Taiwan and other East Asian economies have supplied high value-added parts, components, capital equipment and other intermediates to China, and then China, where labor abounds, have capitalized on its labor-intensive works to assemble or manufacture them into finished goods, and then exported the finished goods to the market of European Union, USA and other regions. This kind of processing trade caused the rapid increase of the intra-regional trade in East Asia. Nowadays, the intra-regional trade amount to more than half of East Asia's total trade. Take a deeper example. Electronics products account for one third of China's exports to US, EU and Japan combined, mostly consisting of devices and equipments, and account for one half of China's imports from East Asia (excluding Japan), being largely parts and components.

In accompany with the intra-regional trade flows, capital make a corresponding flow in the region. Japan, South Korea, Singapore, China's Taiwan and other East Asian economies, have poured their direct investment into China to build up the manufacture factories. As a result, the economic dependence of East Asian economies on China, or the economic interdependence between China and its East Asian partners, were ratcheted up higher and higher. In another word, the rise of China could wreck much more impacts than ever on East Asian economies.

As Table 1 indicates, the other East Asian economies surged their export to China & HK from 3.3 percent in 1995 to 22.5 percent in 2005, causing straight the bigger

³ the same as above

share of the intra-regional trade. It is noteworthy that, the weight of China's exports to these other East Asian economies remained flat, as did the share of these other East Asian economies to each other, pointedly stressing the driving force of Chinese market upon its East Asian economies. In fact, for some economies like South Korea and Taiwan, China's imports from these economies have become the key factor to maintain their sustained economic growth.

Table 1. Export Markets⁴

(As % of Own Total Export)

	China & Hong Kong		Other 7 East Asian Economies	
	1995	2005	1995	2005
To USA	27.4	26.3	19.8	14.7
Japan	17.1	12.5	13.1	9.9
EU	20.5	23.3	14.1	13.4
China & HK			13.3	22.5
Other 7 EA Economies	16.3	16.0	22.5	21.3
Rest of World	18.7	21.9	17.1	18.1

Other 7 East Asian Economies refers to Indonesia, Malaysia, Philippines, Thailand, South Korea, Singapore, and China's Taiwan.

The following figure 1 and figure 2 represent the East Asian production chain and China's leading role across it. Remarkably in general, we can conclude that China leads East Asian production chain through its processing trade facing heavily the markets of EU, USA and Japan.

This production network has formed the East Asian production model. It integrates various economies across East Asia into one integral part, and integrates the integral East Asia into the globalized world economy. These Asian economies, especially smaller ones, could get greater access to the world markets, and thus thrive to prosperity together. Although there emerged a debate before mid-2000s on whether China's exports had displaced the exports of other Asian economies, especially Southeast Asian economies, the consensus eventually in part is that

⁴ World Bank: East Asia & Pacific Update, *Ten Years after Asia's Financial Crisis*, April 2007, pp. 29.

growing China could pose more opportunity than challenge⁵.

Therefore, this production chain in East Asia, could be regarded as the point of departure for us to assess the potential implications of rising China on East Asian economies.

Figure 1⁶. Final goods dominate

China's exports
to US,EU and Japan
(in percent of total exports)

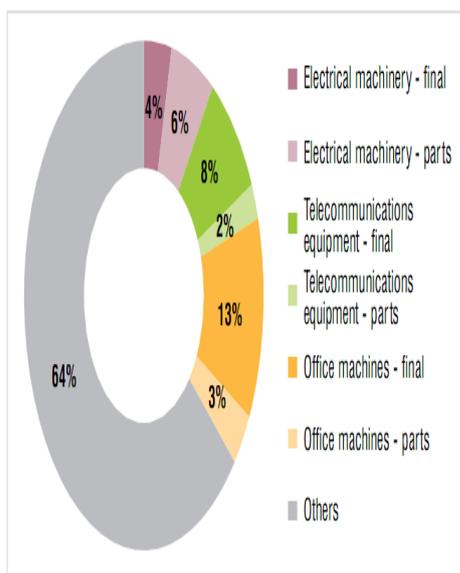
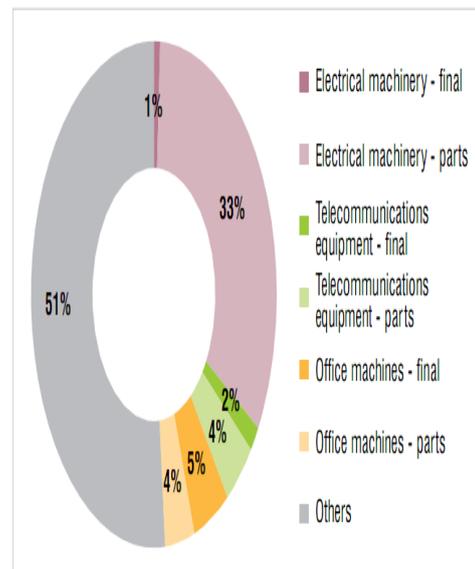


Figure 2⁷. Parts and components

dominate
China's import from East Asia
(in percent of total exports)



Source: datastream, ceic and World Bank staff calculations

China's climbing clouts in the globe economy, and its leading role in East Asian production chain, altogether has raised the possibility that it could provide an independent engine for the world economy.

To Whether the Global Financial Storm

The global financial storm since 2008 changed everything in the world economy, posing a question to much extent how the rising China tackles properly the vicissitudes of the global economy in this more uncertain time. As the financial crisis came worst since the Great Depression, the region of East Asia including

⁵ A famous article about it is *The Impacts of China on the Exports of other Asian countries*, by Barry Eichengreen, Yeongseop Rhee, Hui Tong, NBER Working Paper Series 10768, September 2004

⁶ World Bank: East Asia & Pacific Update, *Transforming the Rebound into Recovery*, November 2009, pp. 10

⁷ the same as above

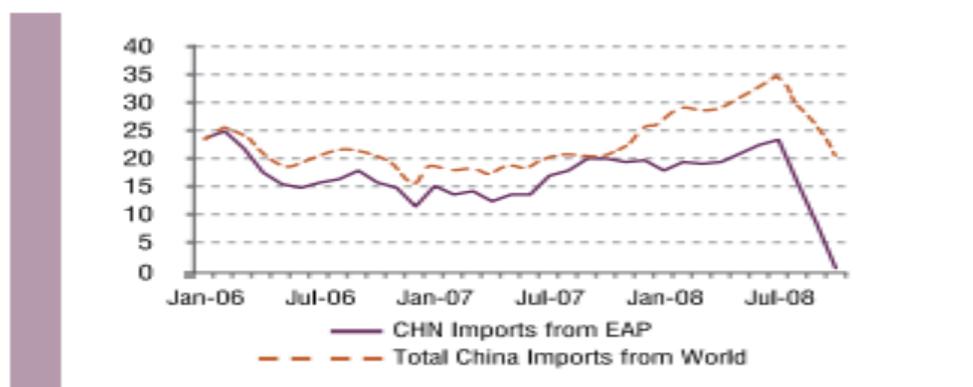
China could not shirk from the full fury of the economic storm.

Without any doubts, the third markets of EU and USA, where East Asian processing trade depend upon as the last export destination, precipitated quickly with the financial crisis, representing a crying negative GDP growth rate. As a consequence, the sharp slowdown in global demand would cause a slowdown in China's exports to the rest of the world, and thus a slowdown in China's imports of intermediates from the rest of East Asia, whereas China may keep its own domestic demand growing quickly. It is noteworthy to mention an intriguing precedent. In the previous global recession in 2001 in the wake of the high tech bust, China's exports to the US fell off sharply. As a result, its imports from the rest of East Asia plummeted to almost zero in 2001 from 36 percent the year before, even though China kept its GDP growth over 10 percent.

As the following figure⁸ shows, since mid-2008, China's imports from the region of East Asia have shrunk sharply, reflecting China's demand for processing trade of importing components and parts from the rest of East Asia was in decadence.

Figure 3. China's imports from the region have fallen sharply since mid-2008

(Percent change year-on-year three-month moving average)



Source: Haver Analytics

As a counterweight to the global economic downturn and potential domestic slowdown, China's government launched a large package of monetary and fiscal stimulus, stimulating domestic demand by government-led investment at the massive scale of 4 trillion RMB (equivalent to 12 percent of its 2009 GDP). The waxing China's domestic demand as the substitute of the waning demand in developed

⁸ World Bank: East Asia & Pacific Update, *East Asia: Navigating the Perfect Storm*, December 2008, pp. 13

economies outside East Asia, remarkably give a well-timed push for East Asian export to China. Therefore, the East Asian economies could keep its momentum of export.

Thanks to China's primary driver in providing market demand and re-shuffling the processing trade for the region, most economies in the region came back to swift rebound at or above the pre-crisis peak. Taiwan is a particular case. In the year of 2010, Taiwan's economic growth rate hit 10.46% markedly, a record high since 1988 for 23 years. But two years before, its economic growth rate was devastated by the financial crisis at only 0.12%. South Korea is another equally showcase. In the year of 2010, the growth rate of South Korea surged to 6.2%, in stark comparison with only 0.3% just one year before. A report⁹ by South Korean KIET pointed out: In the first half year of 2010, South Korean GDP increased 4.2% than in the first half year of 2008, and the 52% part of growth came from South Korean net export to China. Turn eyes on Singapore. Singapore still regarded China as its primary direct investment destination, helping the structure of China-led processing trade unchanged. A report¹⁰ by Department of Statistics of Singapore wrote that: Singapore's direct investment in China grew from \$53.9 billion as at end 2008 to \$58.1 billion as at end 2009. About 55.6 per cent of our investment in China was in manufacturing sector.

The production network or chain in Asia still worked in the times of global financial storm and played a key role in helping the region back on the track of rebound, even though the network has structurally changed quietly. Chart 3 shows China's processing exports rebounded faster after the financial crisis, illustrating China's leading role in the region.

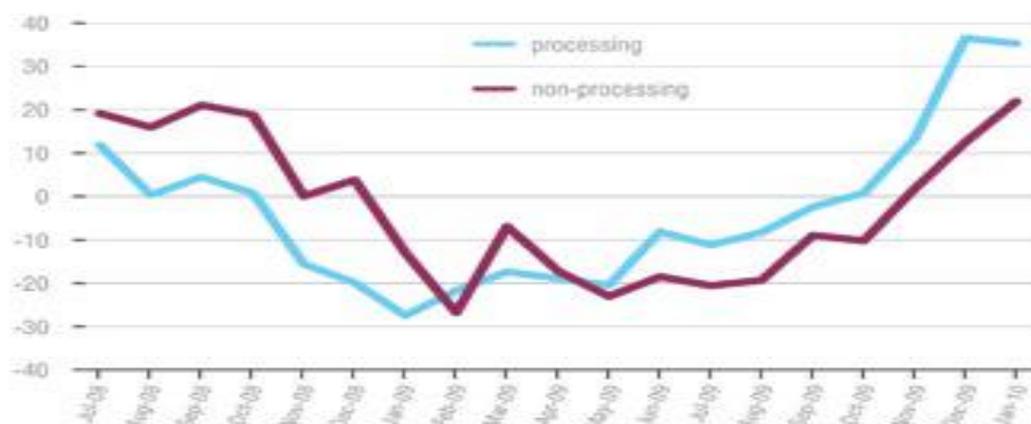
Chart 3¹¹. China's processing exports rebounded faster after the financial crisis

(in percent change, year-on-year, constant prices)

⁹ The report *Increasing Dependency of South Korean Economy upon China and Some Lessons*, KIET(Korea Institute for Industrial Economics and Technology), cited by The Chosunilbo, November 23, 2010.

¹⁰ The report *Singapore's Investment Abroad 2009*, The Department of Statistics, Singapore, accessible at www.singstat.gov.sg/stats

¹¹ World Bank: East Asia & Pacific Update, *Emerging Stronger from the Crisis*, April 2010, pp.8.



Sources: Datastream, CEIC, and World Bank staff calculations

Finally until now, during the financial crisis, China overtook Germany as the world's leading exporter, and overtook USA as the largest automobile market, and led by China, the region of East Asia outperformed the rest of the world generally.

China's yawning domestic demand provided a large boost to the most economies in East Asia. For an instance, Mongolia's exports of copper and iron overwhelmingly go to China, even being equivalent to two thirds of Mongolia's overall shipments abroad.

Inspired by China's stimulus package, most countries in East Asia followed the suit to announce fiscal stimulus packages, though their scales equivalent to GDP's percent was much smaller than China's, promoting the intra-regional trade and investment.

The financial storm highlighted the importance of China's growing domestic demand to most East Asian economies. Meanwhile, thanks largely to its tech improvement, China was stepping up efforts to move up in the production chain, trying to localize parts production within China, and shift the labor-intensive assembly to neighboring Asian partners. Indeed, it gave rise to the structural changes of Asian production network. Those two elements combined explain the reduced trend of processing trade in China (in China's swift recovery, imports related to processing trade networks are lagging than imports of ordinary trade). As noted above, in the financial crisis, while China's export to US and EU declined markedly, its imports from East Asia kept the growth momentum. Indeed, this trend represents both a threat and an opportunity for the rest of East Asia. Some low-income Asian countries, like Vietnam, would strive to take over the assembly works.

Through the deepened structural change of Asian production network, East Asia

led by China could emerge more likely a growth pole in the world economy, proving to be a force for stability at an uncertain time.

To Consolidate Growth Pole

The meaning of the rise of China to the world is much different from of it to the Asian partners. To the advanced economies in the world, the rise of China means how it plays roles as world net saver, or how China rebalances the imbalanced world economy. To East Asian economies, the rise of China means more how it plays roles as the growth pole in the world economy.

The Asian production network is shaped predominantly by the intra-regional trade. And it is subject to changes. The deepened intra-regional trade could be viewed as an implicit Flying Geese pattern led by China, where most economies in East Asia shaped their labor division among them under China's leading role. But it is only in the field of trade. As we know, the traditional Flying Geese pattern in East Asia led by Japan in 1970s and afterwards was forged by Japan's leading dynamics in trade, investment and more close regional links. In light of the logic, the step for China to go in East Asia during and after the financial crisis will shape the Flying Geese pattern in the field of investment and deeper integration. If it succeeds, the implicit Flying Geese pattern in East Asia would mostly become explicit, helping create better economies, expand greater market, improve international competitiveness, and eventually, consolidate East Asia as the growth pole in the global economy.

The first measure China does now is to sharpen regional integration. This region features in profound market-driven integration, but falls short of comprehensive institutional integration. For example, the dialogue under the Asia-Pacific Economic Cooperation (APEC) has achieved little progress over almost two decades. In recent years, China has boosted the establishment of Free Trade Area. The agreement on Free Trade Area between China and ASEAN took effects in 2010, pushing forward largely the mutual trade and investment between the two sides. Meanwhile, China has built up the de facto Free Trade Area with Hong Kong and Taiwan respectively by the agreement of CEPA or ECFA. And in 2008, China signed an agreement with Singapore on FTA. In addition to China's efforts, other economies in East Asia are rushing up to take Free Trade Areas into shape and even deep integration steps in this region. A remarkable example is the ASEAN's commitment to create a single

ASEAN Economic Community by 2015. The latest development in this field is the pledge of the trilateral summit in Tokyo days ago, that the negotiation on Free Trade Area among China, Japan and South Korea will be started next year. Besides the intriguing progress of regional integration in industrial products, East Asian economies have noted it necessary to cut off tariffs in agricultural products and service trade. General to say, the free trade process in East Asia has accelerated in recent years, and is believed to keep this momentum in the near future. China takes a vigorous actor in this process.

The second step China does now is to pour its massive direct investment overseas, including East Asia. In 2005, when China's RMB launched its long march of appreciation, China began pouring its capitals abroad, just as Japan did its massive investment overseas decades ago since 1985 when Japanese yen appreciated in the wake of the Plaza Accord. In 2009, China's outbound foreign direct investment reached 56.53 billion dollars, making China the fifth largest originator of ODI in the world. In the case of South Korea, Chinese direct investment is in robust trend. Many Chinese capitals go to stock market. According to South Korean statistics, the net purchase in South Korean stock market by Chinese investors was 370 billion, 890 billion and 1 trillion Korean Won separately in 2008, 2009 and 2010, occupying 9.3% in Korean stock market¹². Recently, the Ministry of Knowledge Economy in South Korea released a report, saying that FDI in the country totaled 2.01 billion U.S. dollars in the first three months of 2011, up 30.1 percent from the previous year, with China's investment in the country soaring 103.1 percent to 65 million dollars over the cite period¹³. To promote investment from Chinese enterprises, Korean government even established the special institution *China Desk* last year. For low-income Asian countries like Vietnam, because of largely moving up in the Asian production chain, China need to make gradient transfer of processing trade to these partners, leading to considerable scale of Chinese direct investment in these countries.

The third step China does now is to regionalize RMB in East Asia. In general sense, currency regionalization means circulation and convertibility of a particular

¹² Translation from Chinese news article *Korean media say China's capital grows its share in Korean market*, march 29, 2011, accessible at www.huanqiu.com(Global Times)

¹³ News *Foreign direct investment in S. Korea jumps in Q1*, April 5, 2011, Yonhap News Agency, accessible at english.yonhapnews.co.kr/business.

currency across borders, making it to be used as a settlement or even reserve currency for this region. With the immense intra-regional trade and investment within East Asia, especially China's long-standing trade deficits of tens of billions of US dollars with neighboring economies like South Korea and Taiwan, it is ripe for China to export its currency for circulation in these economies. As a first move, China signed a series of currency swap agreement with some Asian economies, including Hong Kong, South Korea, Malaysia, Indonesia, on the purpose to encourage the surrounding economies to frequently use more the RMB for trans-border settlements. As a second move, China step up efforts to allow Hong Kong and then Singapore as an offshore RMB financial market, promoting the RMB level of acceptance abroad. In addition, the Chiang Mai Initiative Multilateralization (CMIM), which came into effects in March 2010, is viewed as an important move for regional financial integration China hopes to see. The CMIM converted a variety of previous swap agreements among the ASEAN countries, China, Japan and South Korea, into a single \$120 billion multilateral swap arrangement in accordance with balance of payments. The maximum amount available for each member country to draw loans is a multiple of its original contribution.

Conclusive Remarks

The economic rise of China is either a process or a phenomenon, but it is still an issue for many pundits to be wondering on its origin, development and trend, so as to on what it means for the rest of East Asian economies. This paper tries to touch on it in the perspective of East Asian production network.

I suppose, the economic rise of China stemmed from the forming of East Asian production network from 1990s onwards, and China's processing trade took a leading role in this process. This production model in Asia is subject to changes with the outward environment. Under the shock of global finances crisis in 2008 and afterwards, the Asian production chain evolved into more dependency upon China's expanding domestic demand, making it more clear the shape of Flying Geese pattern led by China. East Asia led by China looked more likely the economic growth pole in the world economy. To strengthen it, China took several steps, including deeper regional integration, pour of outward direct investment, and its currency regionalization in Asia.

During the long trajectory, the East Asian economies depend upon Chinese economy more than ever, and help create the shaping of Asian growth pole in the world economy, and thus simultaneously benefit profoundly from the process, although some economies stepped up efforts to diversify their reliance on trade, investment and technology from China. While we forebode the implications of China's rise for East Asian countries, we should take it as the basic logic.