Financial Crisis & East Asia: Implications of International Production Networks

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1. Two Channels for Spreading Financial Crisis from Europe/US

The impact of the current financial crisis originating from Europe and the United States has spread to East Asia via two channels – financing and the flow of goods.

The impact on the aspect of financing first appeared in the form of apprehension about the possible withdrawal of European and US investment funds, which in turn brought about instability in exchange rates and a decline in asset prices, including stocks. Moreover, as countries around the globe began to show clear signs of economic downturn, banks started to toughen their lending stance. These developments marked the East Asian economy from September 2008, when the collapse of Lehman Brother Holdings Inc. sent a shock wake across the world, to early 2009.

If things should go from bad to worse, the result could be the collapse of the financial sector. As of now, however, such a possibility has apparently receded. The money market is a world dominated by expectations, making it extremely important to forestall an unnecessary panic through the accurate analysis of the situation and do everything possible to that end. East Asian nations deserve commendation in that they have so far taken proper steps on the whole calmly and expeditiously by learning lessons from the Asian currency crisis of 11 years ago.

The impact of the financial crisis on the flow of goods emerged toward the end of 2008. A direct impact took the form of steep falls in exports to the European and US markets, which necessitated the adjustment of production and inventory. The impact, thus multiplied, triggered sharp declines in the operation rate of shipping and other logistic industries. Countries with many migrant workers employed abroad experienced decreases in remittances from those workers as well as a homeward rush of dismissed workers from abroad. Statistics on production and trade are announced after a considerable time lag and, as such, tend to cause a delay in the accurate analysis of the situation. Even so, as of May 2009, it had yet to be confirmed that the worsening economy was bottoming out.

The World Economic Outlook, announced by the International Monetary Fund (IMF) in April 2009, drastically revised downward the IMF's earlier forecasts of East Asian nations' growth rates in 2009 *(Table 1)*. It is no wonder that the growth of Hong Kong and Singapore, directly affected by the impact of the financial crisis on financing, will suffer serious setbacks. But the drastic downgrading of growth forecasts for other Asian newly industrializing economies (NIEs), Japan, Malaysia and Thailand stems from the anticipation of a considerably serous impact on the flow of goods as well.

TABLE 1

Annual real economic growth rates in East Asian economies (%)

	2007	2008	2009 (Forecast)	2010 (Forecast)
Japan	2.4	-0.6	-6.2	0.5
Asian NIEs				
South Korea	5.1	2.2	-4.0	1.5
Taiwan	5.7	0.1	-7.5	0.0
Hong Kong	6.4	2.5	-4.5	0.5
Singapore	7.8	1.1	-10.0	-0.1
China	13.0	9.0	6.5	7.5
ASEAN forerunners				
Brunei	0.6	-1.5	0.2	0.6
Indonesia	6.3	6.1	2.5	3.5
Malaysia	6.3	4.6	-3.5	1.3
Philippines	7.2	4.6	0.0	1.0
Thailand	4.9	2.6	-3.0	1.0
ASEAN latecomers				
Cambodia	10.2	6.0	-0.5	3.0
Laos	7.5	7.2	4.4	4.7
Myanmar	11.9	4.5	5.0	4.0
Vietnam	8.5	6.2	3.3	4.0

Source: World Economic Outlook April 2009: Crisis and Recovery, Summary Version, IMF

2. Reliance on European/US Markets in Long-term Downtrend

Apart from the said forecasts of growth rates, however, this writer has doubt about the view that the adverse effects of the financial crisis on the flow of goods due to the sagging European and US markets will drag on for a long time, causing profound repercussions.

For the manufacturing industries of East Asia, I wonder if the existence of the European and US markets – the latter in particular – carries such great weight. *Table 2* indicates the trends of East Asian nations' intra- and inter-regional export ratios of machinery parts/components, finished machinery products and all commodities.

The East Asian economy is characterized by the development of international production networks centering on the machinery industry. Reflecting the division of labor between nations as well as between various stages of production, machinery parts/components stand out markedly in intra-regional exports. The intra-regional export ratio of those products surged from 40% in 1990 to 53% in 2005. On the other hand, worthy of particular note in this context is the export trend of finished machinery products. The intra-regional export ratio of those products rose from 23% in 1990 to 36% in 2005, whereas the ratio of their exports out of East Asia diminished

TABLE 2

Ratios of intra-regional & other exports by East Asian economies

(%)

	1990	2001	2005
Machinery parts & components			
Intra-East Asia	39.6	51.4	52.6
Out of East Asia	60.4	48.6	47.4
(U.S.)	(28.9)	(20.3)	(14.2)
Total	100.0	100.0	100.0
Machinery finished products			
Intra-East Asia	23.2	26.1	35.6
Out of East Asia	76.8	73.9	64.4
(U.S.)	(32.0)	(34.2)	(26.4)
Total	100.0	100.0	100.0
All commodities			
Intra-East Asia	38.5	42.1	44.9
Out of East Asia	61.5	57.9	55.1
(U.S.)	(24.9)	(24.2)	(18.6)
Total	100.0	100.0	100.0

Source: Prepared from UN Comtrade database by Mitsuyo Ando & Fukunari Kimura for "Fragmentation in East Asia: Further Evidence," Economic Research Institute for ASEAN & East Asia (ERIA)

from 77% to 64%. The ratio of exports to the United States stood at 26% in 2005. To be sure, the ratio of exports out of East Asia is anything but low. Even so, it has steadily continued to display a downtrend.

Moreover, I would like to invite attention to the fact that those international trade data do not include finished machinery products manufactured and sold at home in the respective countries. It is difficult to make an accurate estimate using statistical data, but when it comes to all finished machinery products manufactured in East Asia, the proportion of exports out of East Asia is roughly limited to less than 50%, and the share of the US market falls short of 20%. Thus, the weight of East Asia's own market is mounting steadily.

To be sure, we can still see the trilateral trade pattern – or the "export platform-type production arrangement" – whereby exporting firms in Japan and Asian NIEs first send parts and components to China and ASEAN nations, and assemble them into finished products for shipment to third countries centering on the United States. It is also true, however, that in parallel with the growth of the East Asian market, the proportion of finished goods, ultimately consumed in East Asia itself, has displayed an uptrend. Needless to say, the sustained growth of the East Asian market will enable the growth of intra-regional production as well. We need to be keenly aware of an ongoing great change toward such an economic pattern. I have a feeling that if East Asia's growth pace should remain slack for an extended period in the future, it would be due to the loss of confidence by the East Asian economy itself rather than due to the shrinkage of the European and US markets.

In particular, the slowdown of Japan's economic growth cannot be accounted for simply by the shrinkage of the European and US markets. To what extent has the multiplied impact of inventory adjustment, undertaken to cope with the aftermath of Japan's vigorous export offensive up to the summer of last year, pushed down the growth rate? Business managers, meanwhile, have sought to take advantage of the economic slowdown so as to restructure the equipment and employment of their domestic production footholds, which are losing international competitiveness from a medium- and long-term perspective. To what extent have such moves produced tangible results? These points need to be thoroughly verified in the light of statistical data to be newly announced hereafter.

3. Stability of International Production Networks

The shocking impact of the latest financial crisis on the actual flow of goods has spread through international production networks. Hardest hit are export-oriented manufacturing industries. Consequently, some people in East Asian countries have started to argue that with the age of export-oriented industrialization now over, it is imperative from now on to foster domestic market-oriented industries. Certainly, it may be necessary to rectify the excessive promotion of exports, but it is without doubt a gross mistake to jump at the conclusion that it is all right to do away with the dynamism of international production networks.

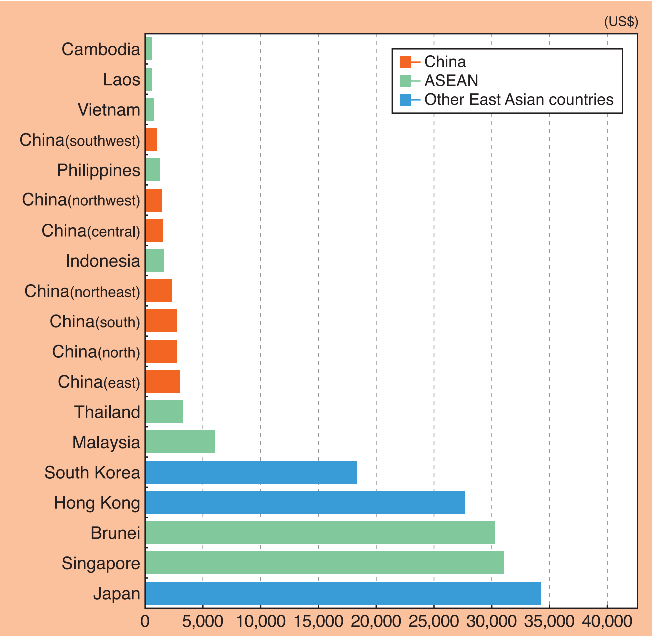
Obviously, it is not that the present financial crisis has resulted from international production networks, but that it so happens that the impact of the financial crisis has spread through such networks. The Asian currency crisis of 11 years ago originated in Asian countries themselves, plunging their domestic market-oriented industries into a dire plight. However, international production networks, scarcely affected by the crisis, continued to maintain brisk activity and helped to support the economies of Asian countries. We must not let the short-term shock hasten us to a wrong judgment.

Countries and regions in East Asia differ widely in income levels and development stages compared with, say, Europe, including Central and Eastern Europe. *Chart 1* shows the income levels of seven regions in China and East Asian countries as of 2006. The international production network of East Asia, making the best of differences in the advantages of plant siting due to such income gaps, has reduced the cost of service links between production footholds, thereby enabling the international division of labor between different production stages. It has thus made tremendous strides without parallel in the world. We must never forget that this has continued to be the very source of economic dynamism in East Asia.

First of all, it is no easy task to take part in international production networks. However, once allowed into networks, participants are assured of stable transactions within them compared with outsiders. If a member country's market for certain finished products falls into a slump, participants have only to switch to the markets of other member countries. In this sense, trade flows can undergo a frequent change. Nevertheless, this cannot be the case with transactions in parts and components because lack of even a single part or component hinders the entire production of relevant goods. Production cost is certainly an important consideration, but even more important is the stability of transactions. Therefore, transactions within production networks necessarily become transactions based on special relationship rather than "spot bidding" that is seen in the open

CHART 1

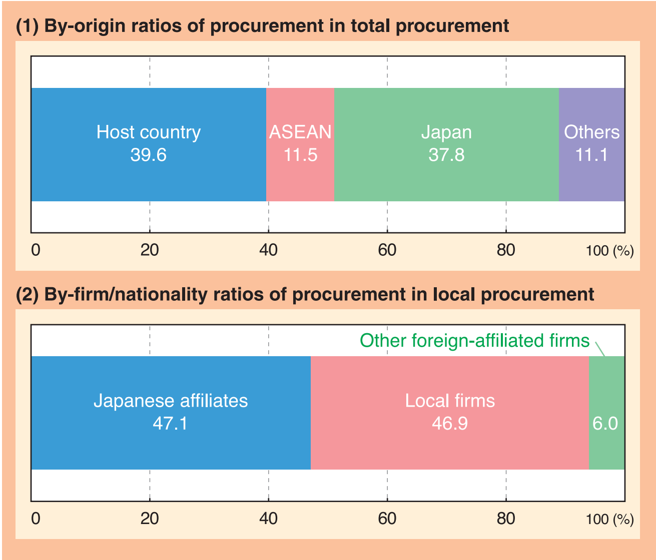
Per-capita gross regional product of regions in China & per-capita GDP of East Asian economies (2006)



Source: Prepared from World Development Indicators Online & China Statistical Yearbook 2007 by Fukunari Kimura & Ayako Ohashi for "International Production Networks: Comparison between China and ASEAN," Economic Research Institute for ASEAN & East Asia (ERIA)

CHART 2

By-origin sources of procurement by manufacturing affiliates of Japanese firms in ASEAN



Source: "2007 Survey of Japanese-Affiliated Firms in ASEAN & India," JETRO, 2008

market. International production networks, although highly resistant to a shock from the outside in normal circumstances, need much time and labor in case of reorganization. The concept of an international production network is utterly different from a shallow idea that globalization signifies "foot-loose" movements.

What is happening amid the present global recession is not the collapse of international production networks, but "restructuring" for building even more efficient production networks in order to provide for the next economic boom. A fairly drastic adjustment of equipment and employment is allowed at the time of recession. Countries receiving investment should not shy away from the stern fact that multinational firms are making an extraordinarily strict evaluation of the investment environment.

4. Deals & Technological Transfer/Spillover between Multinational & Local Firms

Developing countries are often heard to complain that after all, international production networks belong to multinational businesses and, as such, have nothing direct to do with local firms, and that multinational corporations, even though intent on protecting know-how and assets, are extremely reluctant to transfer their technologies and management know-how. However, such arguments contain no small misunderstanding.

In the initial formative stage of an international production network, "production blocks," which represent "slices" taken from a "value chain" – a continuous business process from product development to procurement of materials, manufacture, sale and finally collection of bills – are sited separately in member countries. Certainly, therefore, they have little contact with local firms. However, as many such "production blocks" gather and start to form an industrial agglomeration, the situation changes markedly. At first, multinational businesses commence a vertical division of labor among themselves, but local firms gradually find it possible to make inroads into such a division of labor.

Chart 2 shows the results of a survey of Japanese firms' manufacturing affiliates operating in six ASEAN nations (Indonesia, Malaysia, the Philippines, Singapore, Thailand and Vietnam), conducted by the Japan External Trade Organization (JETRO). The survey has disclosed that procurements from host countries account for 40% of those manufacturing affiliates' total procurements, while 47% of such local procurements are from local firms. Of course, these ratios vary among different segments of the manufacturing industry. Even so, there is no doubt that local firms have made considerable inroads into production networks centering on the machinery industry.

Within an industrial agglomeration, the transfer and spillover of technologies are frequently seen between multinational and local firms. The situation also varies considerably among different industrial sectors, product types and companies. However, now that multinational corporations have chosen local firms as sources of procurement, it is only natural that they should place great expectations on the prices, quality and delivery time of parts/components and intermediate materials produced by the latter. In particular, there are increasing cases in which multinational businesses engage in the active transfer of technologies so as to enhance the quality and delivery stability of local firms' products. In particular, a growing volume of research results adds to evidence that the relationship between upstream and downstream transactions, and person-to-person communication are of decisive importance for the propagation of technological information.

Industrialization strategies, so far intensified by China and ASEAN, should be distinctly interpreted as the presentation of a new economic development model. Thus far, various economic development models have been presented and implemented to expedite the industrialization of developing countries, but almost all of them have turned out to be abortive. In East Asia, however, an entirely new model has been put into practice with signal success. That is, the dynamism of multinational firms has been effectively utilized in a free and open economic environment in order to push ahead with the scattered siting and accumulation of production footholds, while local companies and entrepreneurs have been fostered in this process. There can be no alternative course of forgoing this model and choosing seclusion from the outside.

5. Further Reinforcement of East Asian Model

In East Asia, many countries made a rather belated start in coping with the impact of the financial crisis on the flow of goods. In the past several months, however, all countries in the region have come up with short-term economic stimulus measures mobilizing not only monetary but also fiscal policies. Typical macroeconomic policies, adopted worldwide except in countries placed under the IMF's supervision to cope with the current financial crisis, are expansive-type monetary and fiscal policies. I would like to reconfirm that those policies are quite the opposite of the policies East Asian countries were urged to take during the 1997 Asian currency crisis.

The effectiveness of expansive fiscal policies has been the subject of a prolonged controversy among macroeconomists over the years. Apparently, however, tolerance toward recourse to such policies presently prevails now that Europe and the United States have plunged into a dire situation. Worthy of particular note is the fact that even within the IMF, known for strict internal control of theories, moves are seen to evaluate various specific policies while basically acknowledging the effectiveness of expansive fiscal policies.

Apart from short-term economic stimulus measures, what is most important for East Asian countries is to promote investment from a medium- and long-term perspective and thereby strengthen the basis for economic growth. The current financial crisis has provided us with a significant food for thought, which requires profound self-reflection. That is, East Asia itself has yet to possess the function of "investment bank" in the true sense of the term. The region is marked by the flow of funds in which East Asia's financial resources first flow out to the outside in the form of the purchase of safe assets. Later, investment banks in Europe and the United States invest funds thus acquired in East Asia at their own risk. I deem it imperative for East Asia to gradually strengthen its system for finding out appropriate projects for investment and promoting East Asians' investment in such projects at their own risk. Moreover, in increasing instances since the outbreak of the Asian currency crisis, domestic savings have exceeded domestic investments in several ASEAN nations. Namely, the inability to find adequate investment opportunities in these countries has brought about the overseas outflow of investment funds. It is important for East Asia to build a system for finding superior investment opportunities and promoting active investment inside its own region.

One problem now confronting the East Asian economy is to what extent the dynamism of production networks can be put to active use. Among developing areas in East Asia, only China's coastal areas, Thailand, Malaysia and Singapore have been able to take part in the region's production networks, marked by highly intensive activities. I think that it ought to be fully possible to expand production networks to low-income countries and areas by utilizing "dispersion effects" from industrial clusters, formed in such areas as southern and eastern China, Singapore and Bangkok, and simultaneously achieve the rectification of income gaps. Moreover, such urban areas as Ho Chi Minh City, Hanoi, Jakarta and Manila need to grow into efficient industrial clusters that will permit a tight just-in-time system. Furthermore, relatively advanced areas should make their industrial clusters even more "innovative," for this is indispensable for semi-developed countries to take a leap toward a truly advanced status. To be sure, it is impossible to handle all problems of economic development through discussions from a viewpoint of production networks alone. Yet I think it possible to at least write a scenario befitting East Asia in regard to the route to industrial sophistication centering on the manufacturing industry.

East Asia is also lagging behind in the active use of cooperation between the public and private sectors for the development of infrastructure and the supply of infrastructure-related services. It is essential, therefore, to strive for the active introduction of infrastructure so as to meet future demand for investment and enhance investment efficiency. In a way, however, it cannot be helped if private investment slackens in times of recession. I would like to emphasize that public investment, including development assistance and other government-level fund flows, can play a complementary role in a short-term perspective.

Over the past scores of years, East Asia has continued to be the world's foremost leader in economic growth while riding out various crises. In the background of such remarkable performance is the economic development model of East Asia that is without precedent in the world. At a time when the world economy is losing its way, East Asia should stick to its own belief and show a shining example to the world. JS

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