

Asia Beyond the Crisis

Visions from International Input-Output Analyses¹

Satoshi Inomata², Bo Meng³ and Yoko Uchida⁴
Institute of Developing Economies, JETRO

1. Introduction

The characteristic feature of the current Global Economic Crisis is the speed and extent of the shock transmission. The rapid development of cross-national production networks over the past several decades has significantly deepened the economic interdependency between countries, and a shock that occurs in one region, whether positive or negative in nature, will be swiftly and widely transmitted to the rest of the globe. The sudden contraction of world trade and output is a negative outcome of this intertwined global economic system, and the ongoing declining trend is expected to intensify unless decisive countermeasures are taken in an internationally harmonized fashion.

The major focus of the paper is directed at the analysis of “triangular trade through China”, which is considered to form the principal mechanism of shock transmission in the Asia-Pacific region under the Crisis.

The U.S.A., one of the main players of the “triangular trade”, has always been the largest customer for the products of the region. Its consumption demand, backed by enormous purchasing power, was a leading catalyst for regional output growth.

In the last decade, China became a major trade partner for the United States, and rapidly increased its exports of final consumption goods to U.S. markets to meet their unlimited consumption demand. Here, China specialised in the final assembling stage of the production process, since its technical requirement is quite labour-intensive and hence advantageous for a country with a massive labour force.

The growth of China’s manufacturing export is supported by the supply of intermediate inputs from other Asian countries. In contrast to China, other emerging economies in the region specialised in the production of parts and accessories, which usually require higher levels of technology and sophisticated management skills.

Therefore, the “triangular trade through China” assumes a structure of product flows whereby: (1) Asian countries (including Japan) produce parts and accessories and export them to China, and (2) China assembles them into final goods, (3) which are further exported to the U.S. markets for consumption, as shown in Figure 1.

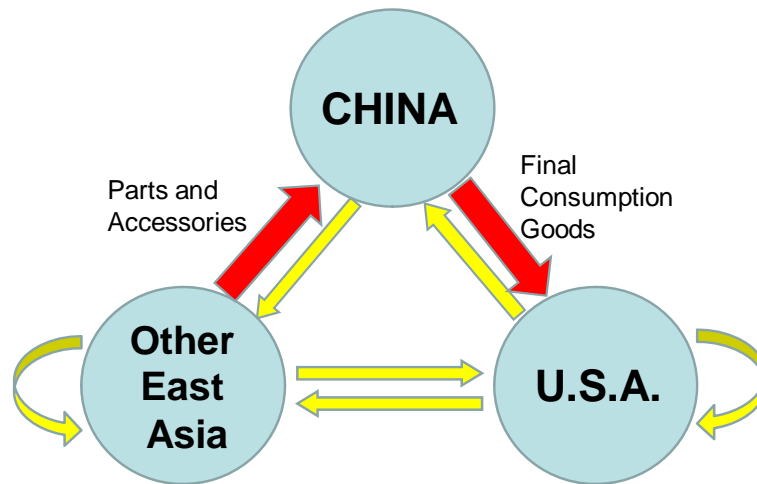
¹ This paper was originally presented at the Joint International Conference of Hong Kong University & Institute of Southeast Asian Studies, “Tackling the Financial Crisis in East and Southeast Asia: Assessing Policies and Impacts”, 24 - 25 February 2010.

² Director of International Input-Output Project, IDE-JETRO

³ Visiting Research Fellow at the Organisation for Economic Co-operation and Development on secondment from IDE-JETRO

⁴ Research Fellow at the Development Studies Center, IDE-JETRO

Figure 1 “Triangular trade” through China



Source: Drawn by authors.

There is no doubt that the “triangular trade through China” prevailed as a primary growth engine for East Asia. The opposite picture, however, is equally possible and valid. The collapse of U.S. consumption demand under the Crisis caused a significant decline of Chinese exports to the United States, which further reduced China’s import demand for intermediate inputs from neighbouring Asian countries. The negative shock of the Economic Crisis propagated quickly and extensively throughout the region via complex production networks among countries, yet, on top of this, the “triangular trade through China” is considered to have functioned as the U.S.-Asia “turnpike” for the shock transmission within the region.

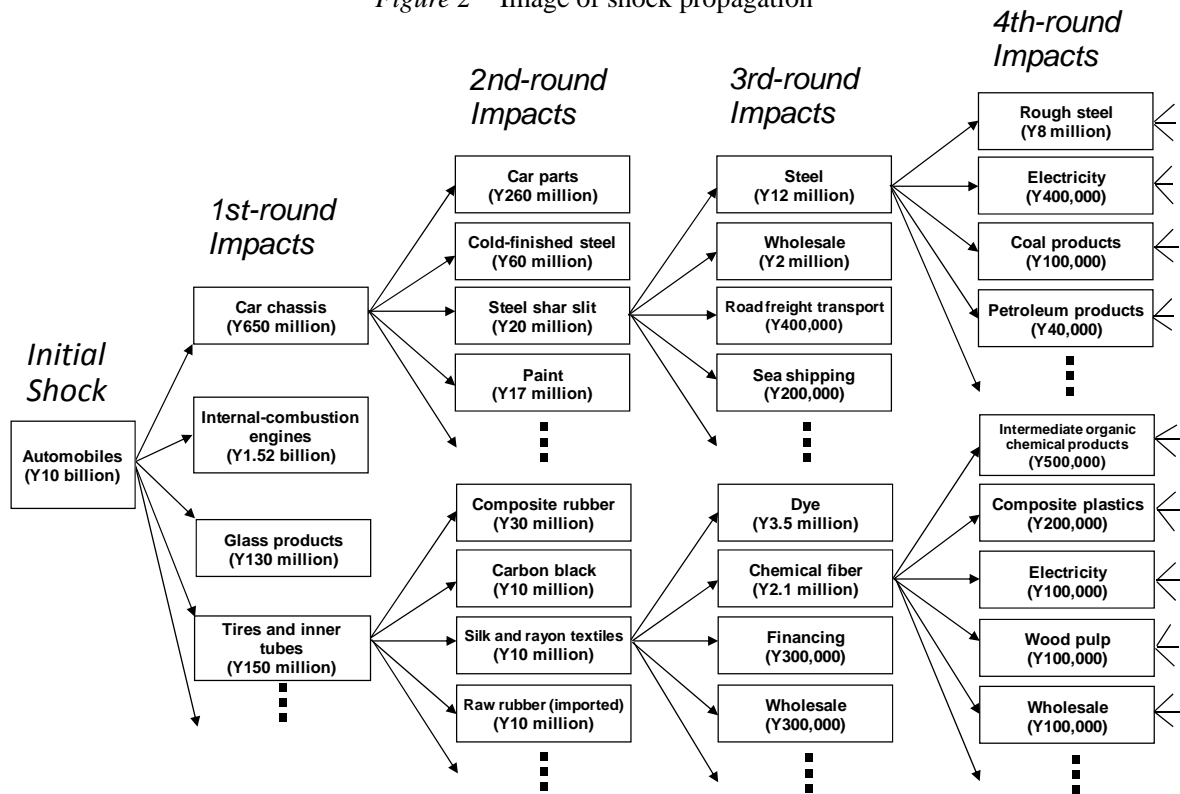
The direct impact of the contraction of the U.S. import demand can be measured by a simple reference to the change in trade statistics, but the entire effect of the impact on industries, both through direct and indirect channels, can be examined only by probing the intertwined production networks among the countries.

The decline in U.S. demand for Japanese cars, for example, causes a decrease of Japanese car exports, and hence of car production in Japan.

Now, the output decrease of cars brings about the secondary repercussion on the production of other commodities. Apparently, it reduces the demand for car parts and accessories such as engines, tires, bodies, handles, etc. The decrease in production of these goods, however, further reduces the demand for, and hence the production of, their sub-parts and materials: ignitions, motors, cylinders, steel, rubber, glasses ... and so on.

This is called a (negative) multiplier effect. A change, or a “shock”, that occurs in one industry (say, a drop of demand for cars) will be amplified through the complex production networks, and bring about a larger and wider impact on the rest of the economy (Figure 2). This is just like an image that when you throw a pebble into a pond the rings on the surface develop slowly.

Figure 2 Image of shock propagation



Source: Drawn by authors.

In the international context, the multiplier effect crosses national borders. The contraction of export of Japanese cars reduces its import demand for tires made in Korea, which then reduces Korea's import demand for rubber from Malaysia. In the last few decades, such cross-national production networks developed extensively in the Asia-Pacific region, and the multiplier effect became increasingly strong and complex.

2. Impact of the Crisis on outputs

So, how do we investigate the impact of the Crisis on such a complex labyrinth of production system? The *Asian International Input-Output Table* (AIO table), constructed by the Institute of Developing Economies, will serve for this particular purpose.

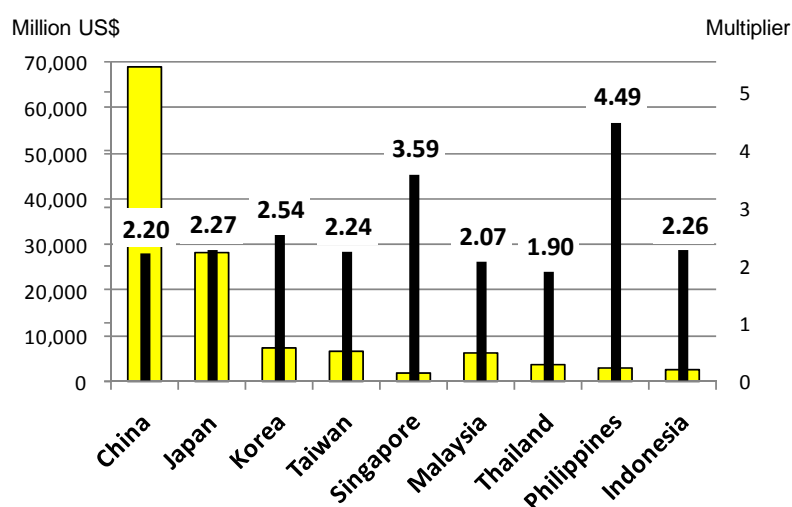
This unique dataset has been compiled for the reference years of 1985, 1990, 1995 and 2000. It covers 10 countries of the Asia-Pacific region, namely, Indonesia, Malaysia, the Philippines, Singapore, Thailand, China, Taiwan, Korea, Japan and the U.S.A. Industrial sector classification has 76 sectors for the most detailed groupings and 26 sectors for analytical tables (See Appendix for the description of the data).

With the help of AIO tables, the impact of the Crisis can be measured by means of calculating the output losses caused by the decline of export to the United States. Table 1 shows the calculation results for each country. It is observed that among the nine Asian countries China and Japan incurred the largest damages

on the industrial production. Figure 3 compares the amount of output losses and the multiplier effect of the impact, which is drawn from Table 1. Again, China's output loss is outstanding, yet in terms of the multiplier effects, it is also observed that other small economies, say, Singapore and the Philippines, show the highest values. This indicates that the production systems of these economies are highly sensitive and vulnerable to the change in external forces, possibly showing their foreign dependant nature.

Table 1 and Figure 3 Output loss caused by the decline of export to the U.S.A.

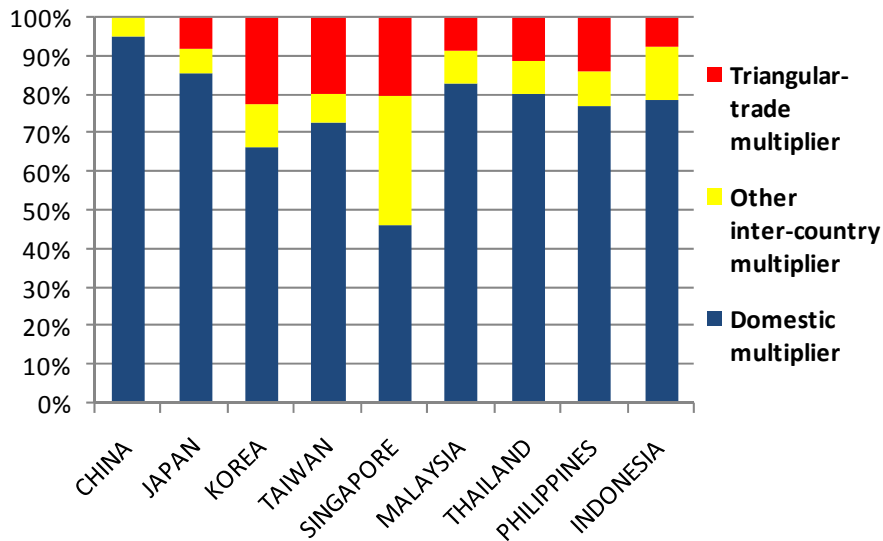
Unit: Million US\$	(1) Export to the U.S.A. (3rd Qtr 2008)	(2) Export to the U.S.A. (1st Qtr 2009)	(3) Decline of export during the Crisis =(2)-(1)	(4) Output loss caused by the export decline	Multiplier =(4)/(3)
China	96,150	64,810	-31,339	-68,987	2.20
Japan	34,174	21,768	-12,406	-28,175	2.27
Korea	12,490	9,665	-2,824	-7,176	2.54
Taiwan	9,676	6,669	-3,006	-6,738	2.24
Singapore	3,915	3,356	-559	-2,007	3.59
Malaysia	7,978	5,016	-2,962	-6,130	2.07
Thailand	6,281	4,358	-1,923	-3,647	1.90
Philippines	2,294	1,630	-663	-2,979	4.49
Indonesia	4,402	3,253	-1,149	-2,602	2.26



Source: U.S. Department of Commerce, Bureau of Census and the Asian International Input-Output Tables, IDE-JETRO. The table and figure are calculated and drawn by the authors.

This is also confirmed by the next analysis. In Figure 4, the impact of the Financial Crisis is decomposed into three effects according to the transmission channels of multipliers; that is, (1) the decrease in output induced by the domestic multiplier; (2) that induced by the triangular-trade multiplier through China; (3) that induced by other inter-country multipliers.

Figure 4 Decomposition of multipliers



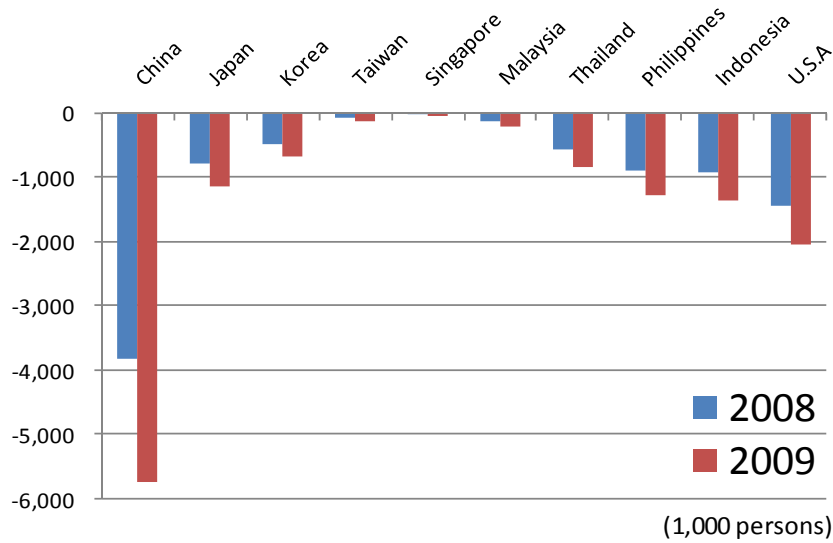
Source: The Asian International Input-Output Tables, IDE-JETRO, and drawn by authors.

From the figure, the inter-country effects of Singapore are the largest, which is not surprising if we consider its high degree of external orientation. What is surprising is the share of triangular trade multiplier through China out of the inter-country effects. Except Singapore and Indonesia, all other countries of the region register more than half of the share for the triangular trade effects, showing the prevalence of triangular trade structure in the regional production networks.

3. Impact of the Crisis on employment

When connected to the labour statistics of each country, the AIO table can be extended to the analyses of employment issues. Figure 5 shows the simulation results for the latest years, 2008 and 2009, of the impact of the Crisis on employment. Particularly outstanding is the magnitude of damage on Chinese labour market. It is much larger than that on the U.S.A., which is the origin of the Crisis. This reflects the heavily labour-intensive industrial structure of Chinese economy.

Figure 5 Impact of the Crisis on employment



Source: The Asian International Input-Output Tables, IDE-JETRO, and drawn by authors.

In order to investigate the background to this observation, we look at the structural transition of labour market of the Asia-Pacific region during the last decade. Table 2 presents a matrix of domestic and cross-national spillovers of employment opportunities by origins and destinations, for the years 2000 and 2008. In this table, it is assumed that there is a flat 1% increase in the final domestic demand of each country, and its impact on employment is calculated thereby. For example, in 2000, the value in the cell at the intersection of China’s row and the U.S. column is 225,989. This indicates that a 1% increase in the U.S. final demand was able to create about 226,000 job opportunities in China in 2000. Moving down the column, we see multiplier effects for other countries including the U.S.A. itself (domestic effect). The sum, about 1.7 million, represents the total employment effect that the U.S.A. exerts on the Asia-Pacific region as a whole while the sub-total of the U.S. inter-country multiplier effect indicates that in 2000 the U.S.A. would have been able to create about 360,000 jobs in other countries of the Asia-Pacific region. We call this the “employment give-out potential” of the U.S.A.

Similarly, the row total of China (6,436,000) represents the total employment opportunities that China receives from the whole region. Again, disregarding the domestic multiplier effect, the sum of inter-country effects for China is 726,000 which can be called the “employment gain potential” of China from other countries of the region.

Table 2 Cross-national spillover of employment opportunities

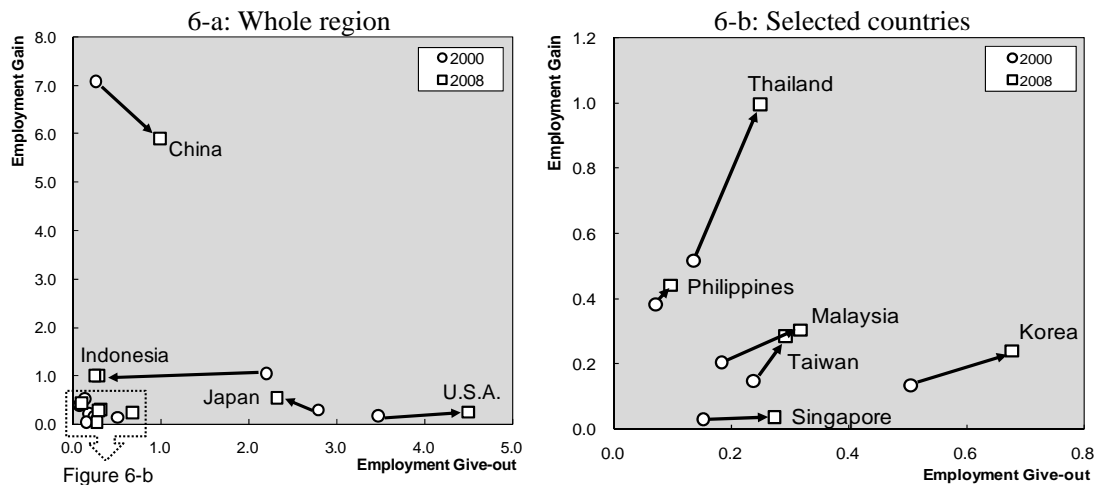
2000	Origin												Domestic multiplier effect	Inter-country multiplier effect	Employment Gain Index
Destination	C	I	J	K	M	N	P	S	T	U	Total				
China (C)	5,709,961	221,455	205,435	37,842	8,677	9,838	3,327	6,223	7,661	225,989	6,436,410	5,709,961	726,449	7.09	
Indonesia (I)	8,336	726,251	32,057	4,838	4,563	4,655	1,640	3,349	2,727	44,984	833,399	726,251	107,148	1.05	
Japan (J)	3,574	571	615,634	2,182	1,001	2,520	407	761	1,033	17,062	644,745	615,634	29,111	0.28	
Korea (K)	2,454	238	3,195	126,657	219	638	172	166	202	6,520	140,460	126,657	13,803	0.13	
Malaysia (M)	1,586	496	4,955	832	45,595	838	379	2,412	601	8,893	66,587	45,595	20,992	0.20	
Taiwan (N)	3,186	215	3,090	481	373	61,767	174	172	332	7,098	76,888	61,767	15,121	0.15	
Philippines (P)	1,769	292	11,110	1,517	522	1,036	200,028	277	593	22,164	239,308	200,028	39,280	0.38	
Singapore (S)	266	85	467	155	254	154	84	10,691	132	1,394	13,683	10,691	2,991	0.03	
Thailand (T)	2,981	1,805	17,270	1,761	2,589	2,399	694	1,547	211,916	22,003	264,964	211,916	53,048	0.52	
U.S.A. (U)	2,224	355	8,301	2,147	571	2,199	304	612	498	1,310,320	1,327,533	1,310,320	17,212	0.17	
Total	5,736,339	951,763	901,513	178,412	64,365	86,045	207,209	26,209	225,695	1,666,428	10,043,977	9,018,821	1,025,156		
Domestic M effect	5,709,961	726,251	615,634	126,657	45,595	61,767	200,028	10,691	211,916	1,310,320	9,018,821				
Intra-country M effect	26,378	225,512	285,879	51,756	18,770	24,278	7,180	15,518	13,779	356,107	1,025,156				
Employment Give-out Index	0.26	2.20	2.79	0.50	0.18	0.24	0.07	0.15	0.13	3.47					

2008	Origin												Domestic multiplier effect	Inter-country multiplier effect	Employment Gain Index
Destination	C	I	J	K	M	N	P	S	T	U	Total				
China (C)	6,030,515	10,246	101,289	29,881	6,897	9,701	2,155	6,773	8,442	214,515	6,420,415	6,030,515	389,900	5.91	
Indonesia (I)	11,531	818,758	13,460	3,597	6,351	2,006	953	3,813	2,773	21,203	884,444	818,758	65,686	1.00	
Japan (J)	11,499	1,361	604,595	3,271	1,075	2,509	390	841	1,747	13,477	640,765	604,595	36,170	0.55	
Korea (K)	6,586	443	2,282	130,388	326	487	121	445	355	4,731	146,163	130,388	15,775	0.24	
Malaysia (M)	4,413	1,122	3,548	847	53,940	566	233	1,986	924	6,296	73,874	53,940	19,934	0.30	
Taiwan (N)	8,205	402	2,340	703	446	63,307	193	446	466	5,558	82,066	63,307	18,759	0.28	
Philippines (P)	7,626	618	7,156	1,638	649	602	209,274	749	1,111	8,855	238,279	209,274	29,005	0.44	
Singapore (S)	510	372	227	144	216	66	65	8,531	124	590	10,843	8,531	2,313	0.04	
Thailand (T)	10,032	3,894	17,163	2,816	4,413	2,134	2,012	2,056	263,226	21,165	328,912	263,226	65,686	1.00	
U.S.A. (U)	4,885	610	5,492	1,837	614	1,188	258	978	530	1,338,440	1,354,833	2,704,781	16,393	0.25	
Total	6,095,801	837,826	757,553	175,122	74,925	82,567	215,653	26,617	279,700	1,634,830	10,180,594	10,887,314	659,620		
Domestic M effect	6,030,515	818,758	604,595	130,388	53,940	63,307	209,274	8,531	263,226	1,338,440	9,520,973				
Intra-country M effect	65,286	19,068	152,958	44,735	20,986	19,259	6,379	18,087	16,473	296,390	659,620				
Employment Give-out Index	0.99	0.29	2.32	0.68	0.32	0.29	0.10	0.27	0.25	4.49					

Source: The Asian International Input-Output Tables, IDE-JETRO, and calculated by the authors.

In order to illustrate the development of the “employment trade” structure from 2000 through to 2008, the above two potentials of each country are normalized by using their standard deviations. The normalized indices are plotted in Figure 6.

Figure 6 Development of “employment trade”, 2000-2008



Source: The Asian International Input-Output Tables, IDE-JETRO, and drawn by authors.

Even at a quick glance, the position of China catches our immediate attention. China, with its huge population and highly labour-intensive industrial structure, is the largest beneficiary of employment opportunities in the region. At the opposite end of the diagram lies the U.S.A., which purchases a massive amount of goods and services from the region generating a significant number of jobs in Asian countries. Japan also works in the same way, though to a lesser extent than the U.S.A. The other Asian countries are less significant players in terms of the contribution to this “employment trade” structure in the Asia-Pacific region.

Looking at the movement of each country, the United States enhanced its position from 2000 to 2008 as a provider of jobs. Japan moved in the opposite direction, but slightly increased its employment-gain potential. Indonesia fell into the group of other countries. If we zoom in on the details of movement (Figure 6-b), however, it turns out that all the other small-open economies have increased their both potentials, indicating that they became more involved in the regional production networks during the decade. As a group, they now have a significant influence on the employment situation of the region.

Referring back to Figure 6-a, the movement of China is particularly interesting. It moved in the south-east direction, indicating that the country has less employment-gain potential but is more capable of providing jobs to the region. This is an important aspect of the structural change that occurred in the Asia-Pacific region. China, which had been a mere “gainer” of employment opportunities in the year 2000, became one of the main providers of jobs during the last decade. The backdrop to this observation was stated in the beginning of the paper, namely, the development of

“triangular trade” through China. On the one hand, China still exports a massive amount of its final products to the U.S.A., the major customer of the region, and thus enjoys the domestic employment opportunities created thereby. On the other hand, in order to produce the goods exported to the United States, the country imports a large amount of parts and materials from neighboring Asian countries, which promoted its position as a provider of jobs to the region.

This structural change in the last decade has a significant consequence when we consider the impact of the Crisis on employment in the Asia-Pacific region: that is, (1) the higher employment give-out potential of the U.S.A.; (2) the deepening dependency of East Asian countries on the regional production networks; and (3) the increasing role of China as a network hub, have formed a systemic mechanism of unemployment transmission from the United States to East Asian countries at a remarkable speed and extension.

4. Impact of the Crisis on production networks

The last few decades were marked by the rapid development of vertical production networks within the Asia-Pacific region. Manufacturing goods are no longer produced in one country. Production processes are fragmented into several stages and countries are specialized in each production stage according to their own comparative advantages.

One popular measurement of international fragmentation is Vertical Specialisation index, developed by Hummels, Ishii and Yi (2001). The VS index is defined as the amount of “imported inputs used for producing a good that is subsequently exported”. So, it is considered to measure a country’s degree of participation in cross-national production networks.

In this paper, however, the VS model is extended by employing the AIO tables as a principal data, the unique feature of which enables to decompose the VS index into two indices: “VS_i”, and “VS_f”. VS_i is the VS index of exports for intermediate usage in foreign countries, which shows the level of participation in the production of parts and components. VS_f, on the other hand, is the VS index of exports for overseas final consumption, which is thus considered to indicate the degree of engagement in the final assembly process.

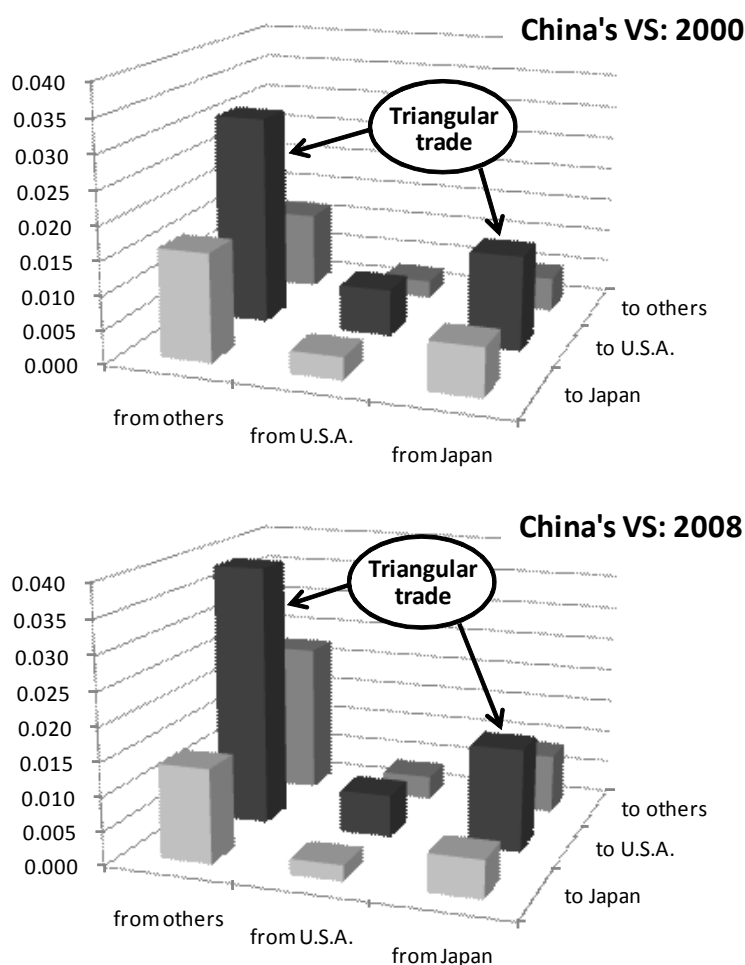
From the viewpoint of vertical production chains, whether a country is mainly exporting intermediate goods or final consumption goods is directly related to the country’s technological profile in the international division of labour. It is generally considered that the production of parts and components requires a sophisticated technology with qualified logistic management for just-in-time delivery. The assembly of components to complete the final consumption goods, in contrast, needs relatively simple routines with low working skills. So, by comparing the values of VS_i and VS_f, the technological development of the countries can be profiled.

Figure 7 shows the geographical decomposition of China’s VS index in 2000 and 2008. Each bar indicates the degree of China’s engagement in a particular segment of cross-national production chains, bridging from input (import) of products from a country in a column to output (export) of products to a country in a row.

Here, the side bars in the middle row markedly stand out, which are of particular importance to

our current study. They are the VS values of China's exports to the U.S.A. for intermediate parts and materials imported from Asian countries, which, of course, refer to the "triangular trade through China". It is shown that the structure steadily developed from 2000 through 2008, particularly with respect to the import contents of intermediate goods from other (non-Japan) Asian countries, which increased by 25% compared to 8% increase for the import contents of Japanese products. The prevalence of "triangular trade through China" is thus verified from the viewpoint of vertical specialization as well.

Figure 7 Geographical decomposition of China's VS index



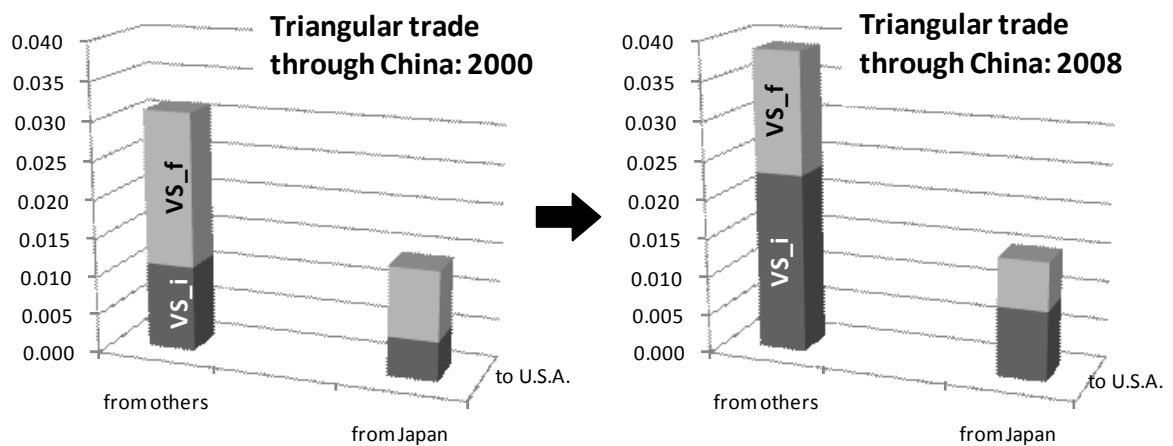
Note: "others" include all AIO countries except China, Japan and the U.S.A.

Source: The Asian International Input-Output Tables, IDE-JETRO, and drawn by the authors.

So, are we just paraphrasing what has been already confirmed in the previous section of the paper? ...In fact, there is more to say.

Figure 8 picks up the bars for “triangular trade” from Figure 7, but stratifies each bar between VS_i and VS_f. It is immediately clear that, from 2000 to 2008, the shares of VS_i remarkably increased, especially for the import from other Asian countries. This is a striking observation. The “triangular trade through China”, which presumed China’s role as a mere assembler of final products, has undergone qualitative change in recent years in response to the promotion of China’s technological profile. The “triangular trade through China” is still prevalent in the Asia-Pacific region, but its contents are no longer the same as what we saw in a decade ago.

Figure 8 Triangular trade through China



Note: "others" include all AIO countries except China, Japan and the U.S.A.

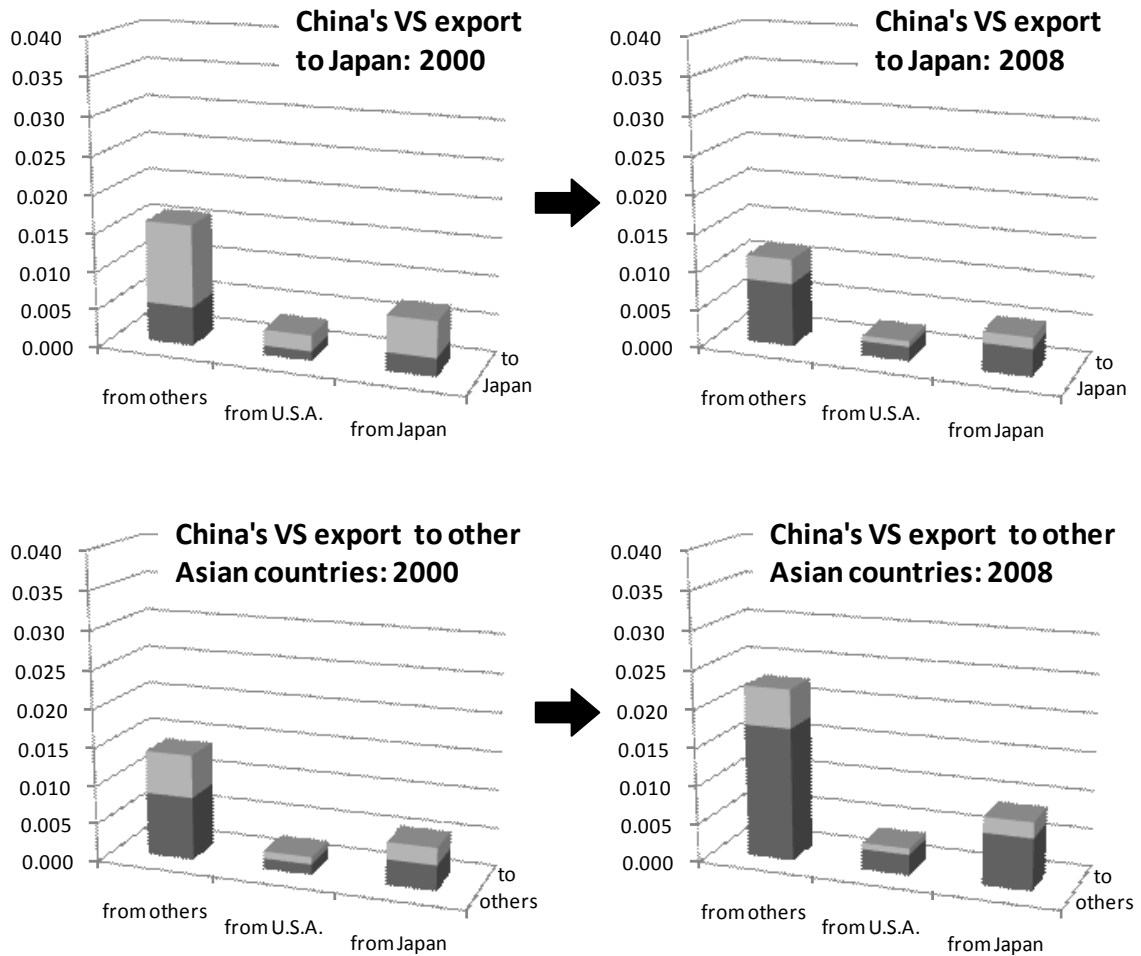
Source: The Asian International Input-Output Tables, IDE-JETRO, and drawn by the authors.

The shift in the role of China in vertical production networks is further confirmed by Figure 9. The diagrams pick up the rest of the rows from the previous slides: the one for China’s export to Japan and the other for export to the rest of Asia. Again, the increase in the share of VS_i is apparent in every bar. Also, particularly outstanding is the development of production chain [Other Asia -> China -> Other Asia]. China imports parts and materials from other Asian countries, and produce intermediate goods to be exported back to them for further processing.

Indeed, we can observe a mirror image of this structural change from the viewpoint of other Asian countries. Figure 10 shows the VS index from the other Asian countries’ perspective. From the 2000 to 2008, there is a dramatic increase (8.6 times larger) in the VS value for the production chain [China -> Other Asia -> China], while other chains destined to the U.S.A. or to Japan show significant declines. Together with the observation in the previous figures, this implies that the extensive and sophisticated production networks began to grow between China and other (non-Japan) Asian countries, where the products crosses the borders multiple times for recursive

value-adding process. Then, if China is to become the biggest customer for the final consumption goods of the region, after the relative decline of purchasing power of the United States, it is possible to envisage the formation of highly self-sufficient production system among these emerging economies of Asia.

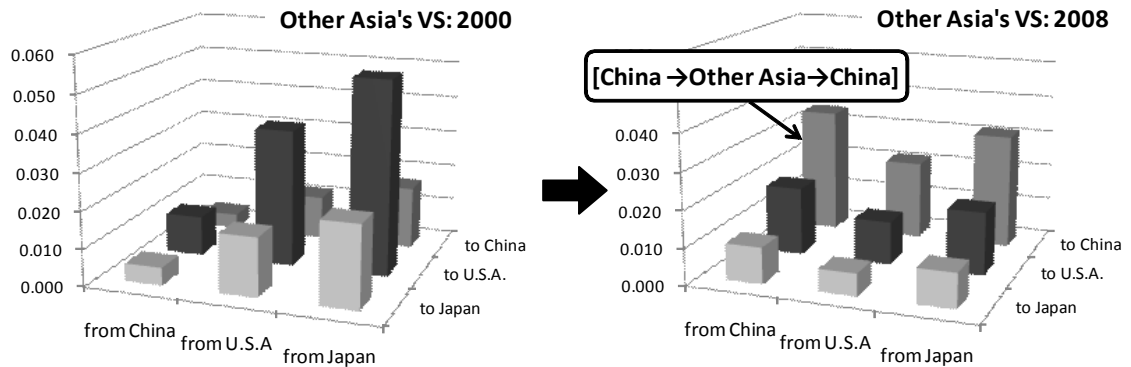
Figure 9 Development of VS_i of China's exports



Note: "others" include all AIO countries except China, Japan and the U.S.A.

Source: The Asian International Input-Output Tables, IDE-JETRO, and drawn by the authors.

Figure 10 Geographical decomposition of other Asian countries' VS index



Note: "others" include all AIO countries except China, Japan and the U.S.A.

Source: The Asian International Input-Output Tables, IDE-JETRO, and drawn by the authors.

5. Conclusions

This paper investigated the nature of the Global Economic Crisis from the perspective of cross-national production networks based on the international input-output analyses, and aimed to envisage the prospect of the post-crisis production system of East Asia. The analyses employed the time-series dataset of the *Asian International Input-Output Tables*, the unique features of which enabled us to measure the impact of the Crisis on both the output and employment of the Asia-Pacific region, yielding the following conclusions.

- (1) "Triangular trade through China" was the principal engine of growth for East Asia, yet, in the time of Crisis, it also functioned as the main transmission mechanism of negative shocks.
- (2) The Crisis had a significant impact on the production system of the region, and may dismantle its structure in near future. The new system is expected to show high self-sufficiency among East Asian countries, with China being the core of the vertical production networks.

-References-

- Feenstra, R. C. "Integration of Trade and Disintegration of Production in the Global Economy". *Journal of Economic Perspectives* 12 (1998): 31-50.
- Hanson, G., R. Mataloni Jr., and M. Slaughter. "Vertical Production Networks in Multinational Firm". *Review of Economics and Statistics* 87, No.4 (2005): 664-678.
- Hummels, D., J. Ishii, and K. Yi. "The Nature and Growth of Vertical Specialization in World Trade". *Journal of International Economics* 54 (2001): 75-96.
- Ng, F., and A. J. Yeats. "Production Sharing in East Asia: Who Does What For Whom, and Why?". *Policy Research Working Paper*, No. 2197, World Bank (1999).
- Ng, F., and A. J. Yeats. "Major Trade Trends in East Asia: What are their Implications for Regional Cooperation and Growth?". *World Bank Policy Research Working Paper*, No. 3084, World Bank (2003).
- Pitigala, N. "Global Economic Crisis and Vertical Specialization in Developing Countries". *Prem Notes* 133, World Bank (2009).

Appendix

Table A1 and Figure A1 presents the sector classification and format of AIO table used in this analyses. Note that each cell herein represents the transactions among 26 industrial sectors; namely, each of them is a matrix of 26 x 26 dimensions. Viewing it column-wise, we have, for both Intermediate and Final Demands, (1) domestic transactions, (2) import matrices by the 10 countries of origin, (3) the values of international freight and insurance incurred on these import transactions, (4) import matrices from other countries, and (5) the values of import duties and import commodity taxes levied on imported goods. Note that BA/BF and DA/DF are presented separately, so that the record of transactions among the 10 member countries are all valued at producers' price, while import matrices from Hong Kong, the EU and the Rest of the World are valued at CIF. At the bottom of the table lie Valued-added and Control Totals (total supply), as in the case of a national table.

Table A1 Industrial classification (26 sectors)

Code	Description
001	Paddy
002	Other agricultural products
003	Livestock and poultry
004	Forestry
005	Fishery
006	Crude petroleum and natural gas
007	Other mining
008	Food, beverage and tobacco
009	Textile, leather, and the products thereof
010	Wooden furniture and other wooden products
011	Pulp, paper and printing
012	Chemical products
013	Petroleum and petro products
014	Rubber products
015	Non-metallic mineral products
016	Metals and metal products
017	Industrial machinery
018	Computers and electronic equipment
019	Other electrical equipment
020	Transport equipment
021	Other manufacturing products
022	Electricity, gas, and water supply
023	Construction
024	Trade and transport
025	Other services
026	Public administration

Figure A1 The Asian International Input-Output Table

	Intermediate Demand (A)										Final Demand (F)										Export (L)			Statistical Discrepancy	Total Outputs
	Indonesia	Malaysia	Philippines	Singapore	Thailand	China	Taiwan	Korea	Japan	U.S.A.	Indonesia	Malaysia	Philippines	Singapore	Thailand	China	Taiwan	Korea	Japan	U.S.A.	Export to Hong Kong	Export to EU	Export to R.O.W.		
Indonesia	A ^{II}	A ^{IM}	A ^{IP}	A ^{IS}	A ^{IT}	A ^{IC}	A ^{IN}	A ^{IK}	A ^{IJ}	A ^{IU}	F ^{II}	F ^{IM}	F ^{IP}	F ^{IS}	F ^{IT}	F ^{IC}	F ^{IN}	F ^{IK}	F ^{IJ}	F ^{IU}	L ^{IH}	L ^{IO}	L ^{IW}	Q ^I	X ^I
Malaysia	A ^{MI}	A ^{MM}	A ^{MP}	A ^{MS}	A ^{MT}	A ^{MC}	A ^{MN}	A ^{MK}	A ^{MJ}	A ^{MU}	F ^{MI}	F ^{MM}	F ^{MP}	F ^{MS}	F ^{MT}	F ^{MC}	F ^{MN}	F ^{MK}	F ^{MJ}	F ^{MU}	L ^{MH}	L ^{MO}	L ^{MW}	Q ^M	X ^M
Philippines	A ^{PI}	A ^{PM}	A ^{PP}	A ^{PS}	A ^{PT}	A ^{PC}	A ^{PN}	A ^{PK}	A ^{PJ}	A ^{PU}	F ^{PI}	F ^{PM}	F ^{PP}	F ^{PS}	F ^{PT}	F ^{PC}	F ^{PN}	F ^{PK}	F ^{PJ}	F ^{PU}	L ^{PH}	L ^{PO}	L ^{PW}	Q ^P	X ^P
Singapore	A ^{SI}	A SM	A ^{SP}	A ^{SS}	A ST	A ^{SC}	A ^{SN}	A ^{SK}	A ^{SJ}	A ^{SU}	F ^{SI}	F SM	F ^{SP}	F ^{SS}	F ST	F ^{SC}	F ^{SN}	F ^{SK}	F ^{SJ}	F ^{SU}	L ^{SH}	L ^{SO}	L ^{SW}	Q ^S	X ^S
Thailand	A ^{TI}	A TM	A ^{TP}	A ^{TS}	A ^{TT}	A ^{TC}	A ^{TN}	A ^{TK}	A ^{TJ}	A ^{TU}	F ^{TI}	F TM	F ^{TP}	F ^{TS}	F ^{TT}	F ^{TC}	F ^{TN}	F ^{TK}	F ^{TJ}	F ^{TU}	L TH	L ^{TO}	L ^{TW}	Q ^T	X ^T
China	A ^{CI}	A ^{CM}	A ^{CP}	A ^{CS}	A ^{CT}	A ^{CC}	A ^{CN}	A ^{CK}	A ^{CJ}	A ^{CU}	F ^{CI}	F ^{CM}	F ^{CP}	F ^{CS}	F ^{CT}	F ^{CC}	F ^{CN}	F ^{CK}	F ^{CJ}	F ^{CU}	L ^{CH}	L ^{CO}	L ^{CW}	Q ^C	X ^C
Taiwan	A ^{NI}	A ^{NM}	A ^{NP}	A ^{NS}	A ^{NT}	A ^{NC}	A ^{NN}	A ^{NK}	A ^{NJ}	A ^{NU}	F ^{NI}	F ^{NM}	F ^{NP}	F ^{NS}	F ^{NT}	F ^{NC}	F ^{NN}	F ^{NK}	F ^{NJ}	F ^{NU}	L ^{NH}	L ^{NO}	L ^{NW}	Q ^N	X ^N
Korea	A ^{KI}	A ^{KM}	A ^{KP}	A ^{KS}	A ^{KT}	A ^{KC}	A ^{KN}	A ^{KK}	A ^{KJ}	A ^{KU}	F ^{KI}	F ^{KM}	F ^{KP}	F ^{KS}	F ^{KT}	F ^{KC}	F ^{KN}	F ^{KK}	F ^{KJ}	F ^{KU}	L ^{KH}	L ^{KO}	L ^{KW}	Q ^K	X ^K
Japan	A ^{JI}	A ^{JM}	A ^{JP}	A ^{JS}	A ^{JT}	A ^{JC}	A ^{JN}	A ^{JK}	A ^{JJ}	A ^{JU}	F ^{JI}	F ^{JM}	F ^{JP}	F ^{JS}	F ^{JT}	F ^{JC}	F ^{JN}	F ^{JK}	F ^{JJ}	F ^{JU}	L ^{JH}	L ^{JO}	L ^{JW}	Q ^J	X ^J
U.S.A.	A ^{UI}	A ^{UM}	A ^{UP}	A ^{US}	A ^{UT}	A ^{UC}	A ^{UN}	A ^{UK}	A ^{UJ}	A ^{UU}	F ^{UI}	F ^{UM}	F ^{UP}	F ^{US}	F ^{UT}	F ^{UC}	F ^{UN}	F ^{UK}	F ^{UJ}	F ^{UU}	L ^{UH}	L ^{UO}	L ^{UW}	Q ^U	X ^U
Freight and Insurance	BA ^I	BA ^M	BA ^P	BA ^S	BA ^T	BA ^C	BA ^N	BA ^K	BA ^J	BA ^U	BF ^I	BF ^M	BF ^P	BF ^S	BF ^T	BF ^C	BF ^N	BF ^K	BF ^J	BF ^U	← International freight and insurance on the trade between member countries (A ^{**} , F ^{**}).				
Import from Hong Kong	A ^{HI}	A ^{HM}	A ^{HP}	A ^{HS}	A ^{HT}	A ^{HC}	A ^{HN}	A ^{HK}	A ^{HJ}	A ^{HU}	F ^{HI}	F ^{HM}	F ^{HP}	F ^{HS}	F ^{HT}	F ^{HC}	F ^{HN}	F ^{HK}	F ^{HJ}	F ^{HU}	← Valued at C.I.F.				
Import from EU	A ^{OI}	A ^{OM}	A ^{OP}	A ^{OS}	A ^{OT}	A ^{OC}	A ^{ON}	A ^{OK}	A ^{OJ}	A ^{OU}	F ^{OI}	F ^{OM}	F ^{OP}	F ^{OS}	F ^{OT}	F ^{OC}	F ^{ON}	F ^{OK}	F ^{OJ}	F ^{OU}	← Valued at C.I.F.				
Import from the R.O.W.	A ^{WI}	A ^{WM}	A ^{WP}	A ^{WS}	A ^{WT}	A ^{WC}	A ^{WN}	A ^{WK}	A ^{WJ}	A ^{WU}	F ^{WI}	F ^{WM}	F ^{WP}	F ^{WS}	F ^{WT}	F ^{WC}	F ^{WN}	F ^{WK}	F ^{WJ}	F ^{WU}	← Import duties and import commodity taxes levied on all trade.				
Import Duty and Sales Tax	DA ^I	DA ^M	DA ^P	DA ^S	DA ^T	DA ^C	DA ^N	DA ^K	DA ^J	DA ^U	DF ^I	DF ^M	DF ^P	DF ^S	DF ^T	DF ^C	DF ^N	DF ^K	DF ^J	DF ^U					
Value-added	V ^I	V ^M	V ^P	V ^S	V ^T	V ^C	V ^N	V ^K	V ^J	V ^U	The parts made out of the Chinese I-O table														
Total Inputs	X ^I	X ^M	X ^P	X ^S	X ^T	X ^C	X ^N	X ^K	X ^J	X ^U	The parts made out of the U.S. I-O table														

Valued at producer's price

In a columnwise direction, each cell in the table shows the input compositions of the industries of the respective country. A^{II} for example shows the input compositions of Indonesian industries vis-à-vis domestically produced goods and services, i.e. domestic transactions of Indonesia. A^{MI} , in contrast, shows the input composition of Indonesian industries for imported goods and services from Malaysia. Cells A^{PI} , A^{SI} , A^{TI} , A^{CI} , A^{NI} , A^{KI} , A^{JI} , A^{UI} , A^{HI} , A^{OI} , A^{WI} allow the same interpretation for imports from other countries. **BA** and **DA** give international freight & insurance and taxes on these import transactions.

Turning to the 11th column from the left side of the table, this shows the compositions of goods and services having gone to the final demand sectors of Indonesia. F^{II} and F^{MI} , for example, map the inflow into Indonesian final demand sectors, of goods and services domestically produced and those imported from Malaysia, respectively. The rest of the column is read in the same manner as for the 1st column of the table. L^{*H} , L^{*O} , L^{*W} are exports (vectors) to Hong Kong, EU and the Rest of the World, respectively. V s and X s are value added and total input/output, as seen in the conventional national I-O table.

