



**CAN DEMAND FROM CHINA SHIELD EAST ASIAN ECONOMIES  
FROM GLOBAL SLOWDOWN?**

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**Abstract**

This paper quantifies how much of exports from eight East Asian economies were consumed by consumers in China, US, Japan, other developed economies, and the rest of the world. We control for the indirect exports through China, i.e., the parts and components that East Asian economies exported to China and subsequently re-exported to other countries. A unique firm-level database is utilised to get an accurate measure for such indirect exports. The main findings are: (i) US consumers still account for more exports from East Asian economies than Chinese consumers do, and the total gross exports from East Asian economies to China overstate the importance of final demand from China; and (ii) the share of exports from East Asia that were consumed by the US, Japan, other OECD countries, and China did not change drastically from 2000 to 2006. Chinese consumers did become more important, noticeably for Japan and Korea, but even in these two countries, the magnitude of change is only about 5-6 percentage of their total exports. These findings indicate that the final demand side of trade in East Asia has changed only moderately since 2002.

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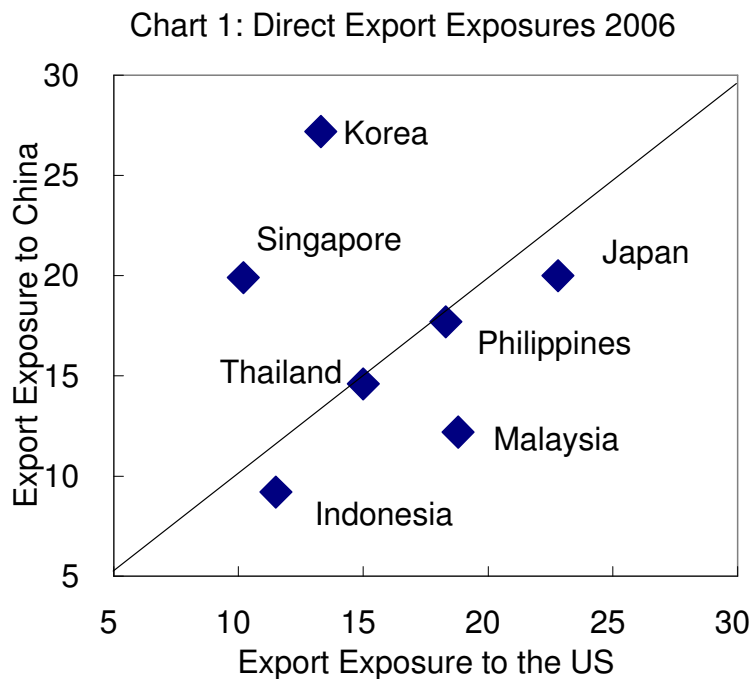
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**EXECUTIVE SUMMARY:**

- *This paper quantifies how much of exports from eight East Asian economies were consumed by consumers in China, US, Japan, other developed economies, and the rest of the world. We control for the indirect exports through China, i.e., the parts and components that East Asian economies exported to China and subsequently re-exported to other countries.*
- *A unique firm-level database is utilised to get an accurate measure for such indirect exports. The database covers the imports and exports by every firm that engaged in international trade in China from 2003 to 2005. It records the source of each import transaction and export market of each export transaction for each firm. It also records whether the imported goods were used for processing trade, i.e., if they were used as intermediate inputs for export purpose. Tax rebates are granted for such imported goods. The classification of processing versus normal trade makes it possible to control for the indirect export exposure between East Asian economies and their trading partners.*
- *The main findings are: (i) roughly half of the exports from East Asian economies to China were used as intermediate inputs and exported from China to its trading partners; (ii) the role of demand from developed economies only declined slightly from 2000 to 2006, and the US consumers still account for more exports from East Asian economies than the Chinese consumers do; (iii) the demand from China is less important than commonly thought – it accounts for about 6-7 per cent of exports from Indonesia, Malaysia, and Thailand, about 10 per cent of exports from Singapore and Japan, and 13.7 per cent of export from Korea; and (iv) the share of exports from East Asia that were consumed by the US, Japan, other OECD countries, and China did not change drastically from 2000 to 2006.*
- *These findings indicate that the demand side of trade in East Asia has changed only moderately since 2002, and that the slowdown in developed economies will affect the exports from East Asian economies through their impact on China's processing trade.*

## I. INTRODUCTION

The economic slowdown in the major developed economies is set to affect the emerging markets in East Asia. Some believe that the rise of China as a major trading partner with east Asian economies will mitigate the decline in demand from the US, Japan, and Europe. Take the case of Korea's export markets as an example. In 2000, the US was a more important export market to Korea than China. Twenty-two per cent of Korea's exports went to US, while 17 per cent went to China. Gravity seems to have shifted since then. In 2006, China accounted for 27 per cent of Korea exports, while the US accounted for only 13 per cent. Similar dynamics also took place for other emerging markets in East Asia. Chart 1 illustrates the relative importance of China and the US as export markets for a group of East Asian economies in 2006, using bilateral trade data as the basis. According to this chart, to Korea and Singapore, China is more important than the US as an export market. To Japan, Thailand, and the Philippines, China is about as important an export market as the US.



Source: Staff estimates

But a large share of the exports from the East Asian economies to China might actually be driven by demand from the developed economies rather than from China.<sup>2</sup> The vertical integration in global supply chain has led to higher exports from EMEAP economies to China and higher exports from China to OECD countries (Hummels, Ishii, and Yi (2001), and Yi (2003)). Can China be the "engine of growth" for East Asia despite the economic slowdown in developed economies? Haltmaier et al (2007) explored the trade linkage between East Asian economies and China using aggregate trade data, and concluded that China is mainly a "conduit" rather than an engine for growth in Asia. Their conclusion is based on the observation that the exports from East Asian economies to China are mostly parts and components rather than finished products. This indicates that China plays the role of the end of assembly lines in the global supply chain. He, Cheung, and Chang (2007) also concluded that the Asian economies are not likely to decouple from the slowdown in the US economy. These papers did not provide a clear answer how much of East Asian economies' exports are consumed by consumers in the US, Japan, Europe, and China respectively, because the aggregate data can not provide basis for precise estimates.

This paper is the first in the literature to gauge quantitatively the bilateral trade linkage between East Asian emerging markets and their major trading partners through the processing trade channel in China. Once the processing trade factor in China is controlled for, the picture on the supply and demand for exports from East Asian economies changed drastically.

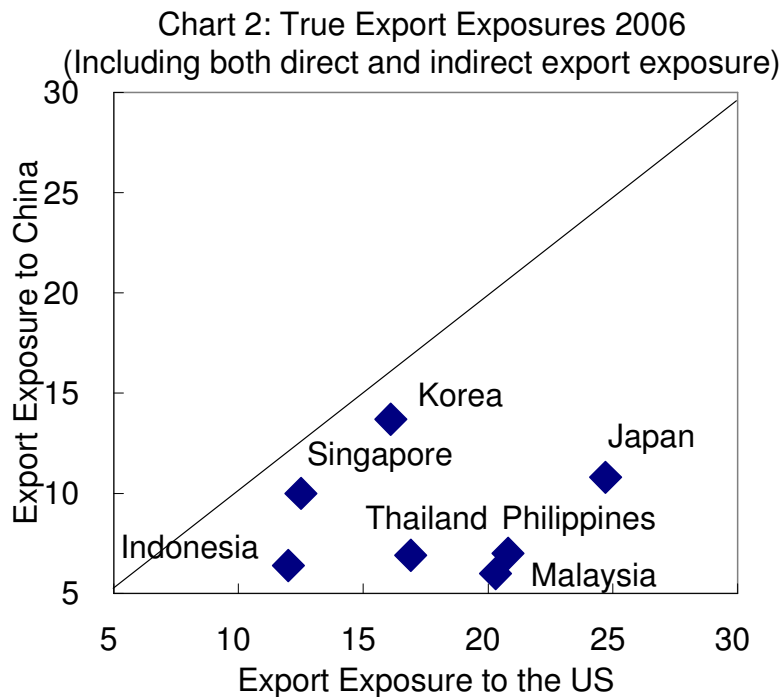
- Roughly half of exports from East Asian economies to China were used as intermediate inputs and exported from China to its trading partners. This share is consistent across East Asian economies except for Indonesia and Vietnam.
- The role of demand from developed economies only declined slightly from 2000 to 2006. Indeed, the US consumers still account for more exports from East Asian economies than the Chinese consumers do.
- The demand from China is less important than commonly thought. It accounts for about 6-7 per cent of exports from Indonesia, Malaysia, and Thailand, about 10 per cent of exports from Singapore and Japan, and 13.7 per cent of export from Korea.
- The share of exports from East Asia that were consumed by the US, Japan, other OECD countries, and China did not change drastically from 2000 to 2006. Chinese consumers did become more important, noticeably for Japan and Korea, but even in these two countries, the magnitude of change is only about 5-6 per cent of their total

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<sup>2</sup> For a discussion on the value added in China's exports, see Dean, Fung, and Wang (2007), Wang and Wei (2008) and He and Zhang (2008).

exports.

Chart 2 plots the export exposures for East Asian economies to China and the US, taking into account both the direct exports from these economies to the US and their exports to China that were re-exported to the US and the other markets. The difference between Chart 1 and Chart 2 is striking. According to Chart 2, the US market is more important than the China market for all East Asian economies. For instance, roughly 20 per cent of exports from Malaysia and the Philippines were eventually purchased by US consumers, while less than 10 per cent were purchased by Chinese consumers.



Source: Staff estimates

The estimates for processing trade is based on a unique firm-level database which covers the imports and exports by every firm that engaged in international trade in China from 2003 to 2005. The advantage of using this firm-level data is that it allows us to calculate accurately how much each East Asian economy's exports to China was processed and re-exported to Japan, the US, and other industrial countries. It records the source of each import transaction and export market of each export transaction for each firm. It also records whether the imported goods were used for processing trade, i.e., if they were used as intermediate inputs for export purpose. Tax rebates were granted for such imported goods. The classification of processing versus normal trade makes it possible to control for the indirect export exposure between East Asian economies and their trading partners.

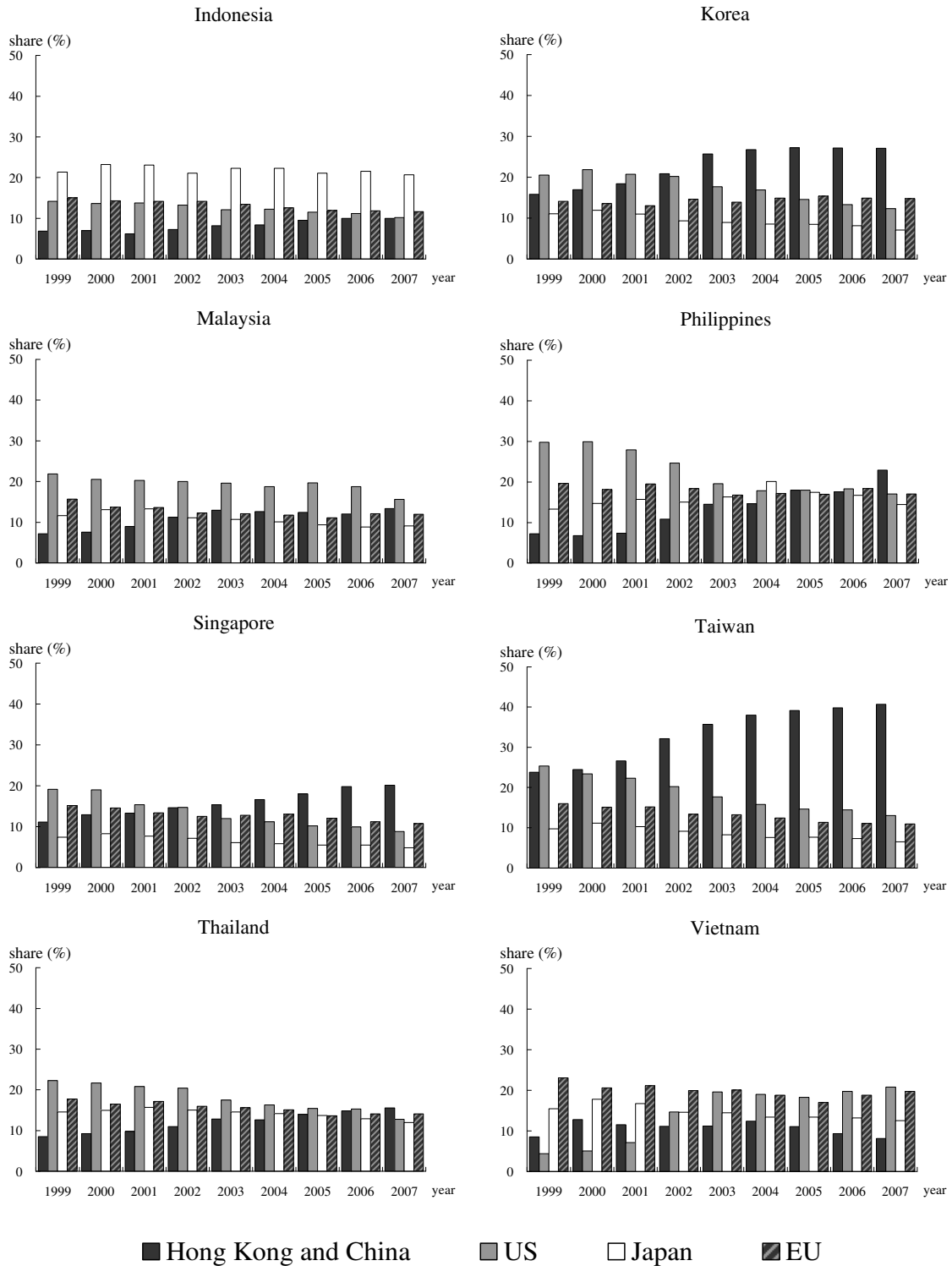
The paper is arranged as follows. Section II reviews the evolution of direct export exposure for East Asian economies after the Asian crisis using bilateral trade data. Section III provides some estimates on how much of each East Asian economy's exports to China was channelled to the US, Japan, and other developed countries. Section IV concludes.

## **II. EVOLUTION OF TRADE IN ASIA AFTER ASIAN CRISIS**

China has become more important as a trading partner of East Asian economies. Chart 3 illustrates how much exports from 8 East Asian economies went to China, the G3 economies (US, Japan, and EU), and the rest of the world. Two features stand out from the charts. First, China has become more important as an export market to almost every economy after the Asian crisis (with the noticeable exception of Vietnam). This is not surprising given the WTO accession of China in Dec 2001 and the relative competitiveness of the Chinese labour force. The fact that China has not become more important to Vietnam's exporters indicates that the two economies are not in complementary positions in the global supply chains. They are more likely to be competitors for the labour intensive components for globally manufactured products.

Another feature of the trade patterns is that there are some interesting variations across exporting economies in terms of the importance of China. To Korea, Taiwan, Singapore, China has become the most important export market for several years. To Malaysia, Philippines, and Thailand, China and the US account for roughly similar export market shares. China's imports have become more important than the imports by the US for Philippines and Thailand, and Malaysia is on track to experience the same trend. For Indonesia and Vietnam, the role of China as an export market is still far less important than the US and Japan.

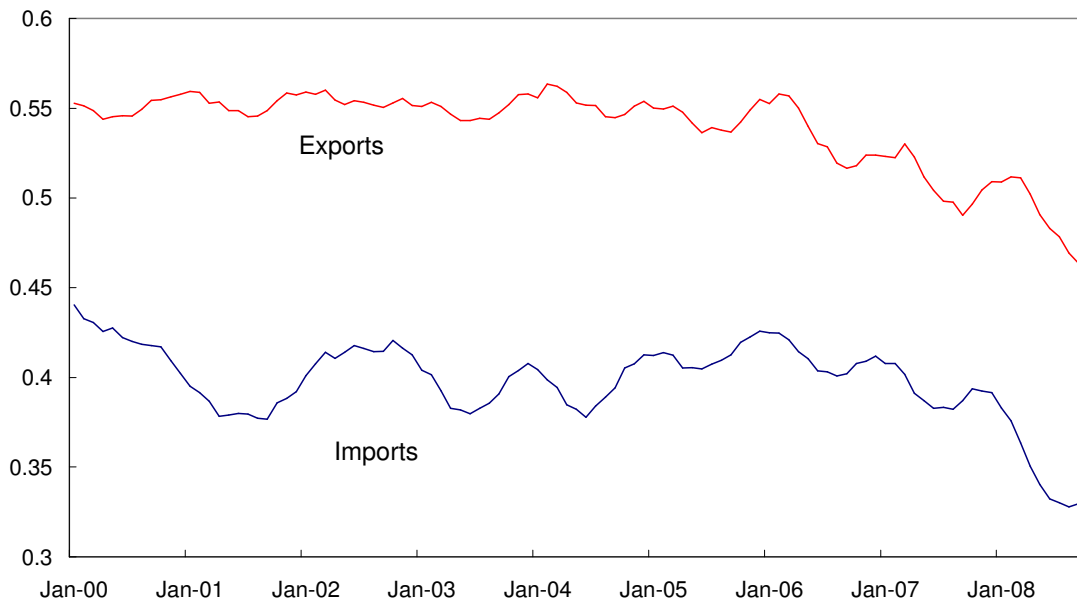
**Chart 3: Export Markets for Selected East Asian Economies**



Note: Each bar indicates the share of exports from an East Asian economy to a particular market in its total exports. Data are from CEIC.

The fast growth of China's imports is to a large extent due to the vertical integration of the global supply chain. Its accession to the WTO in December 2001 substantially enhanced the competitiveness of China for foreign investors. Many multinational corporations integrated China into their production chains to utilise the competitive and abundant supply of labour and other resources. Some of them moved their production bases into China, while others outsourced their production to Chinese suppliers. Chart 4 shows that the processing trade accounted for about 50-55 per cent of exports and 40-45 per cent of imports in China from 2000 to 2006.<sup>3</sup> These figures indicate that the exports from East Asian economies might be processed and re-exported to other countries rather than consumed by domestic demand in China.

Chart 4: Share of Processing Trade in China's Exports and Imports



Source: CEIC

The bilateral-trade data provides a picture that shows the trade linkage in Asia has changed drastically, but it does not control for the exports from East Asian economies to China that were processed and re-exported to other countries. The following section explores the issue of processing trade in China and quantifies the trade linkage between East Asian economies and their trading partners.

<sup>3</sup> The shares of processing trade in exports and imports have come down since 2007. The reason for this fall is unclear and shall be explored in future research.



### III. TRACKING THE EXPORTS FROM EMERGING ASIA THROUGH CHINA

#### Database and Methodology

The database covers the whole universe of firms that operate in China. For each firm, the database provides information on the value and volume of products that it exported to and imported from each economy from January 2003 to December 2005 on a monthly basis. The products are classified at HS-eight-digit level. The database has been used by Manova and Zhang (2008) to study the trade patterns in China, by Zhang (2008) to measure the hot money flows into China and the bias in China's current account, and by Wei and Zhang (2008) on the exchange rate pass-through in China.

The objective of this paper is to provide a quantitative estimate on how much of the exports from East Asian economies to China are processed and re-exported to the developed economies, and how much are consumed in China. The estimates are constructed in the following way.

$$Trade\_Exposure_{j,k,t} = \left( EXP_{j,China,t}^P / EXP_{j,China,t} \right) \times \left( EXP_{China,k,t}^P / EXP_{China,t}^P \right) \quad (1)$$

On the right-hand-side of equation 1, the ratio in the first bracket is the share of exports from country j to China that were used as intermediate inputs for processing trade and exported to other economies ( $EXP_{j,China,t}$  stands for the total exports from country j to China.  $EXP_{j,China,t}^P$  is the exports from country j to China that were used as intermediate inputs for processing trade). The ratio in the second bracket measures the share of China's exports under processing trade went to country k ( $EXP_{China,t}^P$  refers to the total exports from China under processing trade,  $EXP_{China,k,t}^P$  denotes the exports from China to country k that is recorded under processing trade). Combining the two terms together, equation 1 shows the share of exports from country j to China that was used as intermediate inputs for China's exports to country k.

There are caveats associated with this approach. Suppose Thailand and Korea both export hard drives to China, and their hard drives are assembled into computers and sold to the US and Japan. The database can not tell us how many of the hard drives from Thailand are used for exports to the US and how much to Japan. The estimates from equation 1 are based on the assumption that the computers exported to the US and Japan are homogenous, and the hard drives from Thailand and Korea are also homogeneous. In that case, the hard drives from all East Asian economies to China are pooled and assembled into computers that are distributed to China's export markets in proportion to the relative size of these markets. Given the difficulty to track down the

exact flow of intermediate goods at the firm level, this is an assumption that has to be made. Further refinement to this approach should focus on the validity of this assumption.

### Estimates for Trade Linkage

The key findings in this paper are illustrated in Table 1. It compares the size of the direct export exposure and indirect export exposure between eight East Asian economies and their major trading partners in 2006. The direct export exposure is the share of, say, Japan's exports to each major trading partner. The estimates are based on the Direction of Trade database from the IMF. The indirect export exposure is based on the China trade database and calculated from equation 1. It shows the share of exports from each East Asian economy to its trading partners through the processing trade in China.

Three key findings stand out from Table 1. First, **the size of the indirect export exposure is large for all the countries except for Indonesia and Vietnam.** Chart 5 illustrates visually how much of some of these countries' exports to China were consumed in China and how much were re-exported to other countries. The exports to China that were re-exported to other countries account for 9.2 per cent of Japan's total exports. The same statistic is 13.5 per cent for Korea, 10.7 per cent for the Philippines, 9.9 per cent for Singapore, 7.7 per cent for Thailand, and 6.2 per cent for Malaysia. For these six economies, roughly half of their total exports to China were used as inputs for exports to other countries. Interestingly, Indonesia stands out as an outlier, as 9.2 per cent of its exports went to China in 2006, but only 2.8 per cent were used as inputs for processing trade in China. In the case of Vietnam, there is virtually no exports to China that were used as inputs for processing trade, so the indirect channel of export exposure is not relevant.<sup>4</sup>



<sup>4</sup> The data are based on exports from Vietnam from 2003 to 2005. Anecdotal evidence indicates that exports from Vietnam in recent years might have higher content for processing trade.

Second, **the role of demand from the developed economies is substantially under-estimated if the indirect trade channel is not fully accounted for.** Comparing columns 3 and 5 in Table 1, the difference is striking. In the case of Korea, if only the direct export exposure is considered, China is twice as important as the US, as China accounts for 27 per cent of the exports from Korea, while the US only accounts for 13 per cent. But once the indirect export exposure is controlled for, the picture is completely flipped. 16 per cent of the Korean exports eventually ended up in the US, while 13 per cent were consumed in China. This striking difference is visually illustrated in Charts 1 and 2 in Section 1. Similar drastic comparisons also apply to the other countries.

Third, **the demand from China for East Asian economies is surprisingly limited.** After controlling for the indirect export exposure, China only accounts for 6-7 per cent of exports from Indonesia, Malaysia, Philippines, and Thailand. For Japan, Korea, and Singapore, China plays a relatively more important role, accounting for 10.8 per cent, 13.7 per cent, and 10 per cent of their exports respectively. Nonetheless, the purchasing power of the Chinese consumers is not large enough to match those of the consumers in the US.

Has the demand from China become more important over the years? In other words, although Chinese consumers do not account for most of the export markets for East Asian economies, are they on track to play a larger role in the future? A close look at the trend of the export exposures of East Asian economies indicates that **the relative importance of the consumers in the developed economies and China has changed only moderately since 2000.** Table 2 illustrates the evolution of direct export exposures since 2000. The rise of exports to China seems striking, which probably led to the speculation that the demand from China is large enough to offset the slowdown in the developed economies. Table 3 shows the evolution of the export exposures including both the direct and the indirect channels. The exports to China as share of total exports only showed rather moderate rise in the period. The change is higher for Korea (5.4 per cent) and Japan (4.7 per cent), and relatively low for Indonesia (2 per cent), Malaysia (2.3 per cent), and Thailand (2.6 per cent). The comparison of Tables 2 and 3 indicates that the supply side of the global economy did change drastically, but the demand side did not. The demand from China is not likely to shield East Asian economies from the slowdown in developed economies.

#### IV. CONCLUSION

This paper provides a set of quantitative estimates for the trade linkage between East Asian economies on one side and their major trading partners on the other side. China has become the final assembly point of the global supply chains, taking

intermediate inputs from its neighbours and exporting the final products to the global market. Conventional measures for trade linkage based on bilateral trade data turn out to be quite misleading as vertical integration blends the final demand and processing trade. With the help of a unique trade database from China, this paper manages to disentangle the two forces and provides a much different picture of the trade linkage between the East Asian economies and their trading partners. As the estimates indicate, the size of this indirect trade exposure is large and should not be neglected. Moreover, the estimates are provided in a bilateral way, which helps policy makers to understand how economic development in each export market would affect each East Asian economy.

As countries' comparative advantages shift, the supply side of the global economy will continue to change. At the time of drafting this paper, the rising costs in China had led to a wave of reshuffling in China's processing trade sector. The post-war era witnessed the migration of production bases of many industries shifted from countries with high costs to those with low costs. The trend will most likely continue, and affect the global trade balance and current account dynamics. Further research on the trade linkage is certainly well warranted and promising.

The estimates for trade linkage should be interpreted carefully. They attempt to map the final destinations for the exports from East Asian economies by accounting for the processing trade in China. It does not fully account for the processing trade in Asia, which would require information on the processing trade business in other East Asian economies. It does not include the "spillover" effect, i.e., the impact of slowdown in the developed economies on the consumption in China and the consequent decline in East Asia's exports to China. Those are important questions but beyond the scope of this paper.

This paper focuses on one dimension of the linkage between China and the other emerging markets – processing trade. It is based on the historical data and is intended to be descriptive rather than predictive. The role of demand from China is evolving, and certainly has the potential to affect other emerging economies more profoundly in the long run when consumers in China have more purchasing power and less incentive to save. N'Diaye, Zhang, and Zhang (2008) utilised a calibrated multi-regional model to study the role of demand in developed economies and China in the global economic slowdown. Their model illustrated that reforms to rebalance the pattern of demand in Mainland China more towards domestic demand could entail non-negligible benefits for East Asian economies. These benefits could be even larger for those economies that more flexibly adjust to the shift in China's trade pattern.

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**Table 1: Bilateral Export Exposure For Selected East Asian Economies in 2006**

This table measures the direct and indirect bilateral export exposure for East Asian economies to their major trading partners in 2006. The direct exposure is based on the share of economy A's exports to five export markets relative to its total exports, *without* taking into account its exports to China that were processed and re-exported to other economies. The indirect exposure is A's exports to China that were processed and re-exported to other export markets, as a share of A's total exports. The two measures combined provide an accurate estimate for bilateral export exposure.

Exporter	Export Market	Direct Export Exposure 1	Indirect Export Exposure 2	Direct and Indirect Export Exposure
Japan	U.S.	22.8	1.9	24.7
Japan	Japan	0.0	1.1	1.1
Japan	Rest of OECD	18.0	1.6	19.6
Japan	China	20.0	-9.2	10.8
Japan	Rest of World	39.2	4.7	43.9
Australia	U.S.	6.2	0.3	6.5
Australia	Japan	19.6	0.3	19.9
Australia	Rest of OECD	19.1	0.6	19.7
Australia	China	14.2	-2.7	11.5
Australia	World	40.9	1.5	42.4
New Zealand	U.S.	13.1	0.5	13.6
New Zealand	Japan	10.3	0.4	10.7
New Zealand	Rest of OECD	37.5	0.4	37.9
New Zealand	China	7.1	-2.2	4.9
New Zealand	World	32.1	0.7	32.8
Indonesia	U.S.	11.5	0.5	12.0
Indonesia	Japan	19.4	0.3	19.7
Indonesia	Rest of OECD	15.8	0.5	16.3
Indonesia	China	9.2	-2.8	6.4
Indonesia	Rest of World	44.0	1.6	45.6
Korea	U.S.	13.3	2.8	16.1
Korea	Japan	8.1	1.5	9.6
Korea	Rest of OECD	16.1	2.2	18.3
Korea	China	27.2	-13.5	13.7
Korea	Rest of World	35.3	7.0	42.3
Malaysia	U.S.	18.8	1.5	20.3
Malaysia	Japan	8.9	0.6	9.5
Malaysia	Rest of OECD	16.3	1.2	17.5
Malaysia	China	12.2	-6.2	6.0
Malaysia	Rest of World	43.8	2.9	46.7
Philippines	U.S.	18.3	2.5	20.8
Philippines	Japan	16.5	1.0	17.5
Philippines	Rest of OECD	20.0	2.1	22.1
Philippines	China	17.7	-10.7	7.0
Philippines	Rest of World	27.6	5.0	32.6
Singapore	U.S.	10.2	2.3	12.5
Singapore	Japan	5.5	1.0	6.5
Singapore	Rest of OECD	15.5	1.9	17.4
Singapore	China	19.9	-9.9	10.0
Singapore	Rest of World	49.0	4.6	53.6
Thailand	U.S.	15.0	1.9	16.9
Thailand	Japan	12.6	0.8	13.4
Thailand	Rest of OECD	18.6	1.5	20.1
Thailand	China	14.6	-7.7	6.9
Thailand	Rest of World	39.2	3.5	42.7
Vietnam	U.S.	21.2	0.0	21.2
Vietnam	Japan	12.3	0.0	12.3
Vietnam	Rest of OECD	30.6	0.0	30.6
Vietnam	China	7.1	0.0	7.1
Vietnam	World	28.8	0.0	28.8

Notes:

1/ Direct export exposure for economy A for market B is defined as the exports from A to B as a share of A's total exports.

2/ Indirect export exposure for economy A to market B is defined as exports from A to China that were processed and re-exported to market B as a share of A's total exports.

**Table 2: Direct Bilateral Export Exposure For Selected East Asian Economies**

This table shows the share of economy A's to five export markets relative to its total exports, *without* taking into account its exports to China that were processed and re-exported to other economies.

Exporter	Export Market	2000	2001	2002	2003	2004	2005	2006	2006 - 2000
Japan	U.S.	30.1	30.4	28.8	24.9	22.7	22.9	22.8	-7.3
Japan	Japan	NA	NA	NA	NA	NA	NA	NA	NA
Japan	Rest of OECD	20.8	20.5	19.4	20.0	19.4	18.3	18.0	-2.8
Japan	China	12.0	13.4	15.7	18.5	19.3	19.5	20.0	8.0
Japan	Rest of World	37.1	35.7	36.1	36.6	38.5	39.3	39.2	2.1
Australia	U.S.	9.8	9.7	9.6	8.7	8.1	6.7	6.2	-3.6
Australia	Japan	19.8	19.3	18.5	18.1	18.7	20.3	19.6	-0.2
Australia	Rest of OECD	18.9	19.4	20.7	23.2	20.3	18.6	19.1	0.2
Australia	China	8.8	9.5	9.9	11.0	11.5	13.4	14.2	5.4
Australia	World	42.7	42.2	41.3	39.1	41.4	40.9	40.9	-1.8
New Zealand	U.S.	14.8	15.0	15.5	14.5	14.4	14.1	13.1	-1.7
New Zealand	Japan	13.7	12.5	11.5	11.0	11.2	10.6	10.3	-3.4
New Zealand	Rest of OECD	36.6	35.2	37.5	39.5	37.7	38.6	37.5	0.9
New Zealand	China	5.7	6.4	6.6	6.8	7.5	6.8	7.1	1.4
New Zealand	World	29.3	30.8	28.8	28.2	29.2	29.9	32.1	2.8
Indonesia	U.S.	13.7	13.8	13.2	12.1	12.3	11.5	11.5	-2.2
Indonesia	Japan	23.2	23.1	21.1	22.3	22.3	21.1	19.4	-3.8
Indonesia	Rest of OECD	17.5	18.3	18.4	17.2	16.0	15.3	15.8	-1.7
Indonesia	China	7.0	6.2	7.3	8.2	8.4	9.5	9.2	2.2
Indonesia	Rest of World	38.6	38.6	40.1	40.2	41.0	42.5	44.0	5.4
Korea	U.S.	21.9	20.8	20.3	17.7	17.0	14.6	13.3	-8.6
Korea	Japan	11.9	11.0	9.3	8.9	8.6	8.5	8.1	-3.8
Korea	Rest of OECD	17.4	16.6	17.0	16.8	16.6	16.9	16.1	-1.3
Korea	China	16.9	18.4	20.9	25.7	26.8	27.2	27.2	10.3
Korea	Rest of World	31.9	33.2	32.5	30.9	31.2	32.8	35.3	3.4
Malaysia	U.S.	20.5	20.2	20.2	19.6	18.8	19.7	18.8	-1.7
Malaysia	Japan	13.0	13.3	11.3	10.7	10.1	9.3	8.9	-4.1
Malaysia	Rest of OECD	17.6	17.1	15.8	15.7	16.2	15.6	16.3	-1.3
Malaysia	China	7.6	8.9	11.3	13.0	12.7	12.4	12.2	4.6
Malaysia	Rest of World	41.3	40.4	41.4	41.0	42.2	42.9	43.8	2.5
Philippines	U.S.	29.8	28.0	24.7	20.1	18.2	18.0	18.3	-11.5
Philippines	Japan	14.7	15.7	15.0	15.9	20.1	17.5	16.5	1.8
Philippines	Rest of OECD	19.8	21.1	20.4	18.5	18.5	18.4	20.0	0.2
Philippines	China	6.7	7.4	10.5	14.5	14.6	18.0	17.7	11.0
Philippines	Rest of World	29.0	27.8	29.4	31.1	28.6	28.1	27.6	-1.4
Singapore	U.S.	17.3	15.4	15.3	12.9	11.7	10.4	10.2	-7.1
Singapore	Japan	7.5	7.7	7.1	6.1	5.8	5.5	5.5	-2.0
Singapore	Rest of OECD	16.7	17.3	16.3	16.0	16.9	16.3	15.5	-1.2
Singapore	China	11.7	13.3	14.6	15.3	16.6	18.0	19.9	8.2
Singapore	Rest of World	46.7	46.4	46.7	49.7	48.9	49.8	49.0	2.3
Thailand	U.S.	21.3	20.3	19.6	17.0	16.1	15.4	15.0	-6.3
Thailand	Japan	14.7	15.3	14.5	14.2	14.0	13.6	12.6	-2.1
Thailand	Rest of OECD	20.4	20.8	19.6	20.1	19.2	17.9	18.6	-1.8
Thailand	China	9.1	9.5	10.5	12.5	12.5	13.8	14.6	5.5
Thailand	Rest of World	34.4	34.1	35.7	36.2	38.3	39.3	39.2	4.8
Vietnam	U.S.	5.1	7.1	14.7	19.6	19.0	18.3	21.2	16.1
Vietnam	Japan	17.8	16.7	14.6	14.4	13.4	13.6	12.3	-5.5
Vietnam	Rest of OECD	30.6	28.6	28.4	27.7	27.0	26.0	30.6	0.0
Vietnam	China	12.8	11.5	11.1	11.2	12.4	10.1	7.1	-5.7
Vietnam	World	33.8	36.1	31.2	27.2	28.3	32.1	28.8	-5.0

**Table 3: Bilateral Export Exposure Including Indirect Trade Channel Through China**

This table shows the share of economy A's to five export markets relative to its total exports, taking into account its exports to China that were processed and re-exported to other economies.

Exporter	Export Market	2000	2001	2002	2003	2004	2005	2006	2006-2000
Japan	U.S.	31.3	31.7	30.3	26.6	24.5	24.7	24.7	-6.6
Japan	Japan	0.8	0.9	1.0	1.2	1.1	1.0	1.1	0.3
Japan	Rest of OECD	21.8	21.6	20.6	21.5	20.9	19.9	19.6	-2.2
Japan	China	6.1	7.0	8.4	10.1	10.8	10.5	10.8	4.7
Japan	Rest of World	40.0	38.8	39.6	40.7	42.8	43.9	43.9	3.9
Australia	U.S.	10.2	10.1	10.0	9.1	8.4	7.0	6.5	-3.7
Australia	Japan	20.2	19.6	18.9	18.5	19.1	20.6	19.9	-0.3
Australia	Rest of OECD	19.3	19.9	21.3	23.7	20.8	19.2	19.7	0.4
Australia	China	6.1	6.5	6.9	8.0	8.6	10.8	11.5	5.4
Australia	World	44.1	43.8	42.9	40.7	43.0	42.3	42.4	-1.7
New Zealand	U.S.	15.1	15.4	16.0	15.0	14.8	14.6	13.6	-1.5
New Zealand	Japan	14.0	12.8	11.9	11.3	11.6	11.0	10.7	-3.3
New Zealand	Rest of OECD	36.9	35.6	37.9	39.8	38.1	39.1	37.9	1.0
New Zealand	China	3.9	4.4	4.4	4.7	5.4	4.6	4.9	1.0
New Zealand	World	30.1	31.8	29.9	29.2	30.2	30.7	32.8	2.7
Indonesia	U.S.	14.2	14.3	13.8	12.6	12.9	12.0	12.0	-2.2
Indonesia	Japan	23.6	23.5	21.5	22.7	22.7	21.4	19.7	-3.9
Indonesia	Rest of OECD	17.9	18.7	18.7	17.6	16.5	15.7	16.3	-1.6
Indonesia	China	4.4	3.8	4.7	5.5	5.6	6.7	6.4	2.0
Indonesia	Rest of World	39.9	39.8	41.3	41.6	42.4	44.1	45.6	5.7
Korea	U.S.	23.4	22.4	22.2	20.0	19.5	17.4	16.1	-7.3
Korea	Japan	12.8	12.0	10.5	10.3	9.9	10.0	9.6	-3.2
Korea	Rest of OECD	18.6	18.0	18.6	18.8	18.7	19.2	18.3	-0.3
Korea	China	8.3	9.3	10.7	13.8	14.3	13.4	13.7	5.4
Korea	Rest of World	36.9	38.4	38.0	37.1	37.6	40.0	42.3	5.4
Malaysia	U.S.	21.4	21.3	21.5	21.2	20.3	21.3	20.3	-1.1
Malaysia	Japan	13.5	13.9	12.0	11.6	10.8	10.0	9.5	-4.0
Malaysia	Rest of OECD	18.3	18.0	16.9	17.0	17.5	16.9	17.5	-0.8
Malaysia	China	3.7	4.4	5.4	6.0	6.3	6.0	6.0	2.3
Malaysia	Rest of World	43.0	42.4	44.1	44.2	45.2	45.9	46.7	3.7
Philippines	U.S.	30.7	28.9	26.1	22.0	20.2	20.6	20.8	-9.9
Philippines	Japan	15.2	16.3	15.9	17.0	21.1	18.5	17.5	2.3
Philippines	Rest of OECD	20.5	21.9	21.6	20.1	20.3	20.6	22.1	1.6
Philippines	China	2.8	3.1	4.2	5.8	6.0	7.2	7.0	4.2
Philippines	Rest of World	30.7	29.7	32.2	35.0	32.5	33.1	32.6	1.9
Singapore	U.S.	18.5	16.8	16.8	14.5	13.6	12.5	12.5	-6.0
Singapore	Japan	8.2	8.4	8.0	7.0	6.7	6.4	6.5	-1.7
Singapore	Rest of OECD	17.7	18.4	17.6	17.4	18.4	18.0	17.4	-0.3
Singapore	China	6.4	7.3	8.0	8.1	8.6	9.3	10.0	3.6
Singapore	Rest of World	49.2	49.1	49.7	53.0	52.6	53.9	53.6	4.4
Thailand	U.S.	22.4	21.5	21.0	18.6	17.7	17.2	16.9	-5.5
Thailand	Japan	15.3	15.9	15.2	15.0	14.7	14.3	13.4	-1.9
Thailand	Rest of OECD	21.3	21.7	20.6	21.3	20.4	19.3	20.1	-1.2
Thailand	China	4.3	4.4	4.8	5.8	5.8	6.4	6.9	2.6
Thailand	Rest of World	36.6	36.4	38.3	39.2	41.3	42.7	42.7	6.1
Vietnam	U.S.	5.1	7.7	15.2	20.1	19.4	18.7	21.2	16.1
Vietnam	Japan	17.8	17.3	15.1	14.9	13.8	13.9	12.3	-5.5
Vietnam	Rest of OECD	30.6	29.2	28.9	28.1	27.4	26.3	30.6	0.0
Vietnam	China	12.8	8.8	8.6	8.9	10.2	8.1	7.1	-5.7
Vietnam	World	33.8	36.9	32.0	28.1	29.2	32.9	28.8	-5.0