## Chapter 2 Japan growing with Asia's development – Asia –Pacific framework toward sustainable growth

Section 2 East Asia: Development from production networks into production/sales network

#### 4. Changes of East Asia production networks across the global financial crisis

To verify how the trade structure of East Asia changed across the global financial market, this section summarized and confirmed the trend of trade among East Asia, the U.S. and Europe and the trend of trade within East Asia in three groups; raw material, intermediate goods and final goods<sup>1</sup>.

## (1) Changes in the trend of regional trade (East Asia, the U.S. and Europe) across the global financial crisis

Due to the declined demand from the U.S. and Europe affected by the global financial crisis, the exports from East Asia to Europe and the U.S. substantially shrank after the crisis (see Figure 2-2-4-1 and Figure 2-2-4-2). The exports from East Asia to the U.S. substantially declined from \$701.2 billion to \$582.6 billion from 2007 to 2009 and the export to EU also greatly reduced from \$678.7 billion to \$582.0 billion during the same period. However, the exports from the U.S. and Europe to East Asia to the U.S. and Europe to East Asia to the U.S. and Europe. Exports from the U.S. to East Asia decreased from 271.6 billion to 269.9 billion from 2007 to 2009. Exports from Europe to East Asia even increased from \$317.8 billion to \$343.4 billion from 2007 to 2009. Moreover, trade within East Asia grew from \$122.4 billion to \$170.1 billion from 2007 to 2009.

Furthermore, as for the share of raw material, intermediate goods and final goods, the share of final goods export from East Asia to the U.S. was 66.3% in 2007 and 67.9% in 2009 which is about 70% of total. As for exports from the U.S. to East Asia, intermediate goods ratio and raw material ratio in 2007 were 53.8% and 13.1%, respectively. The number remained high in 2009 and intermediate goods ratio and raw material ratio in 2009 marked 53.5% and 14.5%, respectively. Exports from East Asia to Europe also indicate a high ratio of final goods export from East Asia to Europe, which is about 60% registering 58.0% in 2007 and 60.3% in 2009. The ratio of intermediate goods exports from Europe to East Asia is high hovering around 50% recording 52.4% in 2007 and 51.6% in 2009.

In light of the above, since there are no remarkable changes in the trend of share of each goods component across the crisis, it is considered that the positioning of East Asia as "the world's factor" remains the same. However, the exports from the U.S. and Europe to East Asia are increasing across the crisis. This shows that the positioning of East Asia as a consumer market is enhancing in the world economy.

<sup>&</sup>lt;sup>1</sup> For the analysis, 6 digits HS code trade data (data on World Trade Atlas 2007 and 2009) was converted into BEC classified data using the comparison list on the U.N. Comtrade website (HS2007-BEC) first. Then, the BEC classified data was divided into three categories following RIETI-TID. (Raw material: BEC code 111, 21, 31, intermediate goods: BEC code 121, 22, 32, 42, 53, final goods: BEC code 112, 122, 41, 51, 521, 522, 61, 62, 63)

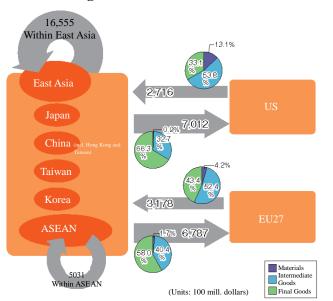
There is a possibility for errors associated with the code conversion and there are cases that the sum of imports for each item does not match with the total imports after the conversion. Therefore, the share against the sum of each item was used. Sources: World Trade Atlas, the U.N. Comtrade, RIETI-TID issued by Research Institute of Economy, Trade and Industry, IAA (RIETI)

#### (2) Changes in the trend of trade within East Asia across the global financial crisis

This section will confirm the changes in the trend of trade within East Asia across the global financial crisis (see Figure 2-2-4-3 and Figure 2-2-4-4).

#### (A) Increase of exports to ASEAN

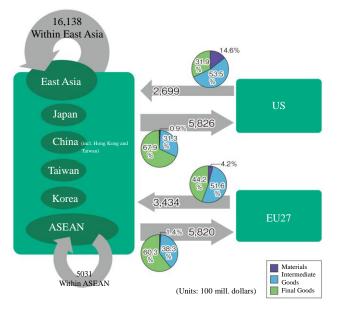
Stable trade within East Asia after the crisis was confirmed as previously mentioned. This is mainly due to increased imports from ASEAN. ASEAN-bound exports from Japan, China and Korea all increased after the crisis. From 2007 to 2009, ASEAN-bound exports increased from \$77.6 billion to \$92.7 billion in Japan, from \$97.6 billion to \$139.3 billion in China, and from \$20.8 billion to \$39.4 billion in Korea. Thus, ASEAN-bound exports from Japan, China and Korea are drastically increasing. Moreover, trade values in ASEAN also rose from \$122.4 to \$170.1 from 2007 to 2009.



2-2-4-1 Changes in Production Network around the Crisis (East Asia, US and EU, 2007)

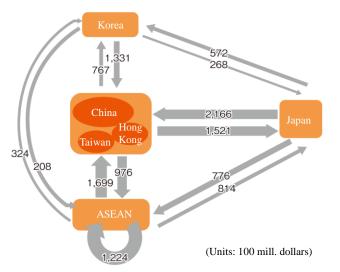
Source: World Trade Atlas, UN Comtrade, RIETI-TID 2007

#### 2-2-4-2 Changes in Production Network around the Crisis (East Asia, US and EU, 2009)

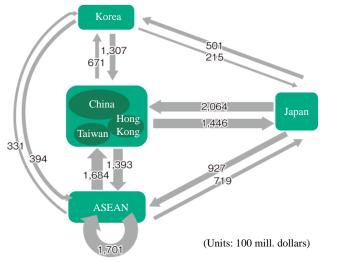


Source: World Trade Atlas, UN Comtrade, RIETI-TID 2009

#### 2-2-4-3 Changes in Trade Trends in East Asia around the Crisis (2007)



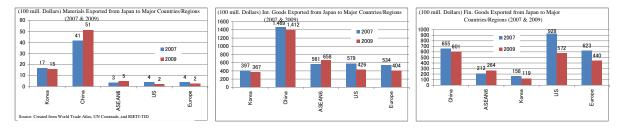
Source: World Trade Atlas, UN Comtrade, RIETI-TID 2007



#### 2-2-4-4 Changes in Trade Trends in East Asia around the Crisis (2009)

Source: World Trade Atlas, UN Comtrade, RIETI-TID 2009

# 2-2-4-5 Export of Raw Materials, Intermediate Goods and Finished Goods from Japan to Major Countries/Regions



The data of ASEAN countries with large imports shows an outstanding increase of the imports of intermediate goods of Singapore and Indonesia. For example, the exports of intermediate goods from

Korea to Singapore increased 5-fold from \$2.9 billion to \$14.1 billion from 2007 to 2009. The exports of intermediate goods from China to Singapore doubled from \$17.8 billion to \$35.6 billion from 2007 to 2009. The increase of exports of intermediate goods from China to Indonesia almost tripled increasing from \$378.4 billion to \$1,077.8 billion from 2007 to 2009. As its background, while the Free Trade Agreement (FTA) network scheme<sup>2</sup> progresses having ASEAN as a hub, it is considered that the positioning of ASEAN is becoming more important for companies to achieve the best diversification of labor in East Asia region.

#### (B) Trend of exports from Japan to East Asia

Japan's exports to East Asia are declining except for that to ASEAN. Japan's exports to China were \$216.6 billion in 2007 and \$206.4 billion in 2009. Its exports to Korea recorded \$57.2 billion in 2007 and \$50.1 billion in 2009. The trend of declined exports to East Asia except ASEAN is observed with China and Korea as well. Exports and imports among Japan, China and Korea shrank across the crisis.

As for the trend of Japan's export to East Asia, the exports of raw materials to China and ASEAN are increasing although the sizes are small (see Figure 2-2-4-5). Japan's exports to China increased from \$4.1 billion to \$5.1 billion from 2007 to 2009 and its export to ASEAN rose from \$300 million to \$500 million during the same period. This is assumed to be the effect from the economic stimulus plans such as infrastructure development of each country in Asia.

Japan's exports of intermediate goods demonstrated the lower reduction of the exports to East Asia compared to that to the U.S. and Europe. Japan's exports of intermediate goods to the U.S. and Europe substantially declined; its exports to the U.S. reduced from \$57.9 billion to \$42.6 billion from 2007 to 2009 and its export to Europe sank from \$53.4 billion to \$40.4 billion during the same period. The decline of exports to China and Korea were small; China-bound exports decreased from \$146.9 billion to \$142.2 billion from 2007 to 2009 and Korea-bound exports dipped from \$39.7 billion to \$36.7 billion during the same period. Japan's ASEAN6-bound export increased from \$56.1 billion to \$65.8 billion from 2007 to 2009. Trend of Japan's final goods export was similar having a drastic decline in the exports to the U.S. and Europe and a comparably moderate decrease in the exports to China and Korea. The exports to ASEAN6 grew.

<sup>&</sup>lt;sup>2</sup> In East Asia, the facilitation of EPA/FTA network is progressing mainly by ASEAN countries such as EPA between ASEAN and Japan in 2008, FTA with China for commodities in 2005 and for services in 2007, FTA with Korea for commodities in 2007 and for services in 2009.