As the world’s largest trading block, the Eurozone and the sovereign-debt crisis remains a global economic concern, as well as in East Asia – a region that is strongly reliant on an export-oriented growth model. How does the Euro-crisis affect East Asian economies?

Direct exposure appears limited, with exports to the Eurozone ranging from 6-11 percent

At first sight, direct exposure to countries using the Euro seems to be limited. Measured against total exports, the percentage of developing East Asian countries’ exports to the Eurozone in 2011 ranged from 6 percent in Thailand to 11 percent in Vietnam. China exported 14 percent of total exports to the Eurozone. Yet given the size of the Chinese economy, this means that in absolute US dollar terms China’s goods exports to the Eurozone in 2011 were 14 times those of Malaysia, 18 times those of Thailand, 24 times those of Vietnam, and 60 times those of the Philippines. China thus remains the main exporter to Europe in developing East Asia.

Dependence on trade with the Eurozone only increased moderately in the region. Compared to the early 2000s, the sensitivity of East Asian exports to European global demand has increased most in Vietnam which reflects its increasing role in the international trading system-followed by South Korea and Indonesia. For some East Asian countries, including Japan, the Philippines, and Hong Kong, this sensitivity even fell. On the other hand, with the exception of Hong Kong, sensitivity of trade with China rose considerably across the region bolstering China’s increasingly central position in world trade.

China and “Factory Asia” contribute to important indirect effects

On the surface, dependence on trade with the Eurozone for East Asian countries is about half the magnitude of trade with China – and lower than China’s direct exposure to demand from the Eurozone (Figure 1). This, however, conceals important indirect effects: East Asian countries still largely depend on demand from the advanced economies and thus a considerable degree of intra-regional trade is part of a closely-knit supply network (“Factory Asia”) catering to demand from the rest of the world (much of which is effectively demand from the G-7). The Asian Development Bank (ADB) estimated for 2006 that 51.8 percent of Asia’s exports were traded within the region and 48.2 percent with the rest of the world.1 Yet 20.2 percent of intra-Asian

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trade constituted intermediate goods destined for final consumption outside the region. Accounting for this, total final demand from within Asia constitutes 32.5 percent of Asia’s export, while the rest of the world constituted 67.5 percent.

**Figure 1:** Trade between East Asian countries and China intensified – more than trade with Europe (difference in elasticities between 2000-2007 and 2010-2011)

China holds a central role within the regional supply chain and functions as a form of advanced reloading site, where intermediate parts are assembled for export and for final consumption largely in Europe and the US. The elasticity (measuring sensitivity) of East Asian countries’ exports to China to Chinese exports to Europe is even higher than the elasticity of trade with China. This suggests that the advanced economies, proxied by Euro countries in this case, are a considerably larger source of demand for East Asian exports through indirect effects, in addition to the direct trade channels.

**Exposure is higher in high-tech Northeast Asia**

While direct dependence on trade with Europe is relatively constant across the region, there is a noticeable degree of variation in indirect dependence (Figure 2). The Northeast Asian countries, South Korea and Japan, have particularly high indirect exposure, significantly more so than Southeast Asian countries like Vietnam. According to Yukon Huang, a former World Bank director for China, the reason for this is that ‘these countries export technology-intensive components to China, which possesses the scale required for assembling them into finished products finally sold to the West.’2 Southeast Asian countries, on the other hand, compete with China’s comparative advantage, making China a less favorable reloading site for them. Indeed, plotting elasticities of electrical and electronics (E&E) exports to the Eurozone through China against an index of export sophistication3 confirms this relationship: the more sophisticated exports are, the more trade with Europe is channeled through China (Figure 3).4 Less sophisticated goods may indeed remain in China for domestic consumption.

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4 An interesting additional insight is that, accounting for the value-add across the regional supply chain, China’s trade surplus with Europe and the U.S. is to a considerable degree, accounted for by production in the more advanced economies in the region, such as Japan and South Korea.
Prospects for the European economy remain uncertain. The Eurozone’s sovereign risk woes seem contained for now, especially since the clearance of the European Stability Mechanism (ESM) and the European Central Bank’s commitment to ensuring liquidity.

Yet the Eurozone is not out the woods yet, and the crisis may intensify again: global demand, especially from other advanced economies, remains suppressed; fiscal constraints in larger member states may exceed the firepower of the ESM; reforms to improve competitiveness and accelerate the recovery may stall; and political will to preserve the Euro may fade. The trade-related effects of a resurging Euro-crisis on East Asia will be considerable, both through direct trade channels but especially indirectly, through the regional supply chain.

What are the policy implications for East Asian economies?

Against the backdrop of suppressed demand from the advanced economies – an end of which remains uncertain – it is crucial for countries in the region to maintain external competitiveness. This requires firms to move up the value chain, keeping unit labor costs at bay by producing more sophisticated goods. Investments in human and physical capital as well as reforms to improve the investment climate can spur innovation and efficiency.

On the demand side, stimulating consumption and investment, as appropriate, within the East Asia region will be important. In addition, deepening economic integration will stimulate trade and final demand within the region. To some extent, these developments – rising consumption, domestic demand and changes in direction of trade to countries in the region – are already taking place. But policies to sustain such trends, such as the planned formation of the ASEAN Economic Community in 2015 and other regional integration initiatives will help to reduce dependency on demand from the advanced economies will help to sustain East Asia’s dynamism.

### Methodology

Data on exports to Europe were obtained through CEIC from individual East Asian countries in US dollar terms. Where this information was not available (Indonesia, Malaysia, Thailand), data were obtained for imports from Europe from Eurostat in euros and converted into US dollars. The difference between imports (cif) and exports (fob) should not matter for the analysis as the interest lies with relative changes. Data for exports to China were obtained through CEIC as Chinese imports from the individual countries.

All variables are deflated. Eurozone imports were deflated using the CPI. Although China has increasingly been exporting capital goods, the majority is still consumer goods, making the CPI a relatively sensible deflator. As for Chinese imports, it is not entirely clear how much is used as an input for production and how much for consumption. To account for both, Chinese imports are deflated by a simple average of Chinese CPI and PPI. Finally, elasticities were estimated by restricting the sample to the periods 2000-2007, 2008-2009, and 2010-2011, using Ordinary Least Squares regression and logged variables. Since no other variables are controlled for the results should be understood as rough estimates.

### About this series

The Eye on East Asia and Pacific Notes are prepared by economists from the East Asia and Pacific Region of the World Bank drawing on completed or ongoing research and economic work. The notes, however, are not peer reviewed. They do not represent the official position of the World Bank Group.