



Trade and the East Asian crisis

Trade shocks appear to have played a role in the East Asian crisis. A key part of the recovery will be growth in net exports from the region, which will require supportive trade, structural, and macroeconomic policies both in the region and in its major export markets.

The recent financial crisis in East Asia was preceded by a sharp global slowdown in exports and substantial realignments in the region's trade patterns. One important question is whether trade shocks played a major role in the crisis. A second is whether the crisis has revealed long-run structural problems. A third relates to policy choices.

High-growth East Asian economies have become important players in world trade, making their trade adjustment more important than was previously the case. The region's nine main industrializing economies increased their share in global exports of manufactures, and in total exports, from 12 percent in 1990 to 17 percent in 1996 (table 1). Within the region, export shares of some high-growth economies grew substantially faster. Malaysia and the Philippines, for example, more than doubled their shares in global exports of manufactures between 1990 and 1996.

Recent shocks

East Asian exports slowed significantly in 1996, following a period in which exports boomed. The region was not unique in this regard—world export growth fell by the same proportion as in East Asia (table 2). But the pattern of regional trade flows compounded the negative impact on many East Asian economies. Causing particular damage were the depreciation of the yen relative to the dollar and a sharp drop in

intraregional trade. Japan is both a major export market for other East Asian producers and a competitor in many export markets. Japan's imports from the Republic of Korea and Hong Kong fell in 1996 (by 8.5 percent and 6.6 percent), its imports from China rose by more than 10 percent, and from the Philippines by 23 percent. Overall, East Asia's imports dropped almost 4 percent, and imports from Japan dropped 18 percent.

In recent years there appears to have been an inverse relationship between the evolution of the yen-dollar exchange rate and the growth in exports from ASEAN countries and Korea (figure 1). Korea's exports are more similar to Japan's than are those of other East Asian countries,

Changes in trade flows were both a cause and a consequence of the East Asian crisis

Table 1 Shares in global exports of manufactures, 1990–96
(percent)

Economy	1990	1992	1994	1996
Developing East Asia	11.9	13.6	16.2	17.2
China	1.9	2.5	3.3	3.5
Hong Kong	1.2	1.1	0.9	0.7
Indonesia	0.4	0.6	0.7	0.7
Korea, Rep. of	2.6	2.7	2.9	3.1
Malaysia	0.7	1.0	1.4	1.6
Philippines	0.2	0.3	0.3	0.5
Singapore	1.6	1.9	2.7	2.9
Taiwan, China	2.6	2.8	2.8	2.9
Thailand	0.6	0.8	1.1	1.1
Japan	11.9	12.4	12.7	10.9
United States	12.3	12.7	12.9	12.9
World	100.0	100.0	100.0	100.0

Source: UN COMTRADE.

Trade patterns within the region have changed significantly. Overall, East Asia's imports dropped almost 4 percent, and imports from Japan dropped 18 percent

Table 2 Export growth in developing East Asia, Japan, and the world, 1995–97
(percentage change, in dollar terms)

	1995	1996	1997Q2 ^a
Developing East Asia ^b	21.6	4.5	8.2
Japan	12.1	-7.2	6.3
World	20.0	4.0	4.0

a. Changes relative to the second quarter of 1996.
b. China, Hong Kong, Indonesia, Republic of Korea, Malaysia, Philippines, Singapore, Taiwan (China), and Thailand.
Source: IMF Direction of Trade.

making the country more vulnerable to changes in the yen-dollar rate (see table 4).

Structural factors

These trade shocks appear to have been largely cyclical in nature, although structural changes also may have played a role. One “structural” argument is that the terms of trade of some Asian economies deteriorated sharply in 1996, driven by excess capacity and overinvestment in certain sectors. For example, prices of semiconductors and computer components fell dramatically in 1996. Other potential sources of difficulties include the rise of new competitors (such as China), the revival of major Latin American countries, and trade diversion resulting from the North American Free Trade Agreement (NAFTA) and from the European Union’s preferential trade

arrangements with Central and Eastern European countries. Combined with policies pegging nominal exchange rates to an appreciating U.S. dollar and the possible emergence of domestic supply constraints, these may have caused serious competitiveness problems.

Some analysts also believe that China’s 1994 devaluation of the yuan contributed to East Asia’s woes. But that devaluation simply unified official and secondary market rates at the secondary market rate. Because most trade was based on market exchange rates, the devaluation raised effective export prices by just 10 percent. Import prices were unchanged. Indeed, since unification China’s real exchange rate has appreciated against the (strengthening) dollar by more than 20 percent. Although China’s trade policy reforms during the 1990s have resulted in dramatic export growth, import growth was also quite high until 1997 (when exports grew much faster than imports, leading to a large expansion of the trade surplus).

Shifting terms of trade

Available (but incomplete) data suggest widely varying changes in the region’s terms of trade. Only Korea has suffered a substantial decline in terms of trade—a 27 percent drop in the three years ending in the third quarter of 1997. In 1995–96 the income effect of this decline was about -4.3 percent of GDP. This significant shock clearly contributed to Korea’s recent crisis, particularly when compounded by continuing declines in 1997.

Still, growth in export volumes remained high in Korea and Indonesia—aided by a slight real exchange rate depreciation in Korea and despite a larger real appreciation in Indonesia (table 3). Since early 1994 export volumes from Korea have more than doubled. Export growth fell in Hong Kong, perhaps because of a substantial real appreciation in its exchange rate. The modest real appreciation in Malaysia may have contributed to the decline in its export volume, but it does not explain it completely. Export growth in Taiwan

Figure 1 As dollar prices fall, East Asia's exports slowed



Note: Calculated as 12-month moving average in current dollars.
Source: World Bank and IMF data.

(China) and Thailand fell to low levels despite only modest real appreciations.

New competition

Has East Asia become less competitive? One way to find out is to determine whether the region's economies have been losing market share in major markets. They have not. Except for Thailand, East Asian developing economies expanded their shares of world markets in 1995 and 1996, with the five major exporters increasing their share of world exports from 7.3 percent in 1994 to 7.8 percent in 1996—a significant increase, but about half the rise in 1990–92. Greater competition from new suppliers may have been a factor in the declining rate of growth.

For example, since 1990 Central and Eastern Europe has doubled or tripled its share of the EU market for products (such as electrical equipment) traditionally supplied by East Asia. Export structures of these countries are similar to those of higher-income East Asian economies (correlation coefficients in the 0.8 range). However, Central and Eastern Europe's market share increased only from 1–2 percent to 6–7 percent. And, except for Korea, East Asia's share in this market continued to rise in 1995–96.

In general, there has been a strong pattern of shifting specialization among East Asian economies, with lower-income economies expanding exports of labor-intensive goods (such as clothing and

footwear) and higher-income economies expanding exports of machinery and electronic products. This has required continuing investments in physical capital and in skills upgrading.

Prospects for export growth

Given fiscal constraints and the recent downturn in private consumption and investment, export growth will be a major vehicle for short-term economic expansion in East Asia. If not offset by inflation, the sharp currency devaluations that have occurred will lead to substantial real depreciations. This will cause a shift in the internal terms of trade from nontraded to traded goods. Accompanied by reductions in domestic absorption, this shift will facilitate the improvements in the trade balance that are needed to service foreign debt. Demand for imported consumer goods will decline, while demand for intermediate inputs used in the production of traded goods will increase.

Intraregional export similarities

East Asia's ability to expand trade will depend partly on the composition and pattern of trade flows. Economies in the region trade heavily with one another and often have similar export structures. Concern has been expressed that as these economies seek to expand their net exports to the world, they will create "excessive" competition in export markets.

Although some East Asian economies have very similar export structures, correlations for many country pairs are relatively low (table 4). Low correlations reflect different endowments of natural resources and patterns of specialization. Correlations tend to be higher in major export markets, such as the European Union, which suggests that some East Asian economies are competing in similar product lines. For electrical equipment, for example, correlations of East Asian export shares in the European Union are often 0.9 or higher, reflecting exports of computing equipment. But such narrow product lines account for a major share of exports only for Singapore and Taiwan (China).

Given fiscal constraints and the recent downturn in private consumption and investment, export growth will be a major vehicle for short-term economic expansion in East Asia

Table 3 Annual change in export volumes and real exchange rates

(percent)

<i>Economy</i>	<i>Data for year ending</i>	<i>Export volume</i>	<i>Real exchange rate^a</i>
Hong Kong	1997Q3	4.4	10.6
Indonesia	1996Q4	16.0	5.8
Korea, Rep. of	1996Q4	26.8	-1.0
Malaysia	1996Q2	-5.5	6.1
Taiwan (China)	1997Q1	6.4	5.5
Thailand	1996Q1	3.9	6.1

a. A positive number indicates that the exchange rate appreciated.

Source: IMF International Financial Statistics.

Table 4. Export share correlations in world and EU markets, 1996
Above the diagonal: correlations in world market; below diagonal: correlations in EU market

	JPN	CHN	HKG	IDN	KOR	MYS	PHL	SGP	TWN	THAI
JPN	1	0.11	0.17	0.02	0.68	0.52	0.18	0.53	0.57	0.40
CHN	0.59	1	0.91	0.43	0.43	0.31	0.21	0.21	0.41	0.69
HKG	0.48	0.79	1	0.50	0.46	0.39	0.26	0.31	0.44	0.71
IDN	0.14	0.43	0.42	1	0.23	0.32	0.32	0.08	0.18	0.33
KOR	0.92	0.72	0.59	0.23	1	0.75	0.69	0.61	0.71	0.60
MYS	0.76	0.74	0.62	0.33	0.92	1	0.27	0.77	0.72	0.61
PHL	0.68	0.77	0.69	0.39	0.87	0.70	1	0.20	0.18	0.27
SGP	0.81	0.62	0.53	0.15	0.82	0.80	0.70	1	0.83	0.64
TWN	0.85	0.64	0.52	0.17	0.83	0.77	0.66	0.98	1	0.72
THAI	0.75	0.71	0.64	0.30	0.81	0.81	0.76	0.88	0.88	1

Note: The two data sets are not strictly comparable because of different levels of product disaggregation.

Source: UN, 3-digit SITC (174 product categories); EUROSTAT, 2-digit CN (100 product categories).

The boost to tradable goods industries provided by recent devaluations greatly increases these industries' competitiveness and may provide opportunities to reduce protection further

Conventional indexes of effective exchange rates ignore developments in competing suppliers that can be particularly important. The Development Research Group is developing customized procedures for assessing the impacts of devaluations in competing countries.

Intraregional trade

Intraregional exports accounted for almost 40 percent of East Asia's exports in 1996, up from 32 percent in 1990. If Japan is included, the figure rises to 51 percent. High levels of intraregional trade reflect specialization between economies in the region. About half the intraregional trade is in raw materials and intermediates, which suggests that a significant portion of the trade is complementary. Thus intraregional trade is probably more resilient to domestic demand shocks than if it were oriented mostly toward final goods. However, the composition and importance of intraregional trade make these countries susceptible to adverse output shocks in the region.

Policy implications

Although most East Asian economies are relatively open, some of their trade regimes harbor severe distortions. These include

high tariffs—Thailand has more than 650 tariffs above 60 percent—and nontariff barriers. Simple average tariffs in the region are high: more than 22 percent in Thailand and about 15 percent in Indonesia, Korea, and the Philippines. Temporary entry and other exemption schemes imply that collected tariffs are only 3–7 percent of the value of imports in most economies, but all economies have hundreds of tariffs above 30 percent. High tariffs are often applied to goods such as automobiles and components, where inward-oriented production is a recipe for falling behind the rest of the world. The recent devaluations increase the competitiveness of traded goods industries, providing scope for trade liberalization.

To continue the process of product upgrading and diversification that is central to maintaining high growth rates will require heavy investments in education and in skills upgrading.

Disciplined macroeconomic policies will, of course, be needed to capitalize on the initial boost to competitiveness provided by the recent devaluations in the region. Unless policies are suitably supportive, these devaluations will be dissipated in higher inflation.

Rising net exports to the rest of the world from East Asia may give rise to adjustment pressures in OECD markets and, especially if gross exports increase strongly, to pressures for protection. OECD governments must understand the inevitability of such adjustments and avoid raising barriers. Doing so would harm their export industries and hinder East Asia's recovery.

This note was written by Bernard Hoekman and Will Martin. It draws on analysis of trade-related dimensions of the East Asian crisis prepared by Francis Ng, Maurice Schiff, L. Alan Winters, and Alexander Yeats of the Development Research Group's trade team, as well as contributions from Dipak Dasgupta and Ying Lin.



This note series is intended to summarize good practice and key policy findings in PREM-related topics. PREMnotes are distributed widely to Bank staff and will also be available on the PREM website (<http://prem>). If you are interested in writing a PREMnote, send your idea by email to Kim Murrell. For additional copies of this PREMnote please contact the PREM Advisory Service at extension 87736.

Prepared for World Bank staff