

The growing dependence of East Asian¹ economies on exports

East Asian economies have become more integrated with the world economy through increased trade and expanded exports of electronic goods.² Many of these economies are being severely affected by the current global downturn.

Introduction

This article briefly documents the growing dependence of East Asian economies on trade — particularly on exports to the US market for electronic goods — with a view to better understanding the current downturn in these economies.³

East Asia's increasing reliance on exports for growth

Table 1 shows that East Asia's trade linkages with the rest of the world have increased substantially, reflecting both the growing export-orientation of these economies and the general trend of trade liberalisation in the world. Most countries in the region now have trade levels (when measured as a per cent of GDP) well above global averages.

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- 1 In this paper, East Asia includes the economies of China, Hong Kong, Indonesia, Republic of Korea, Malaysia, the Philippines, Singapore, Taipei and Thailand, but excludes Japan. Hong Kong refers to Hong Kong (China) and Taipei to Taipei (China).
 - 2 In this article, 'electronics' refers to office machines and parts, automated data processing machines, telecommunications and sound recording and reproducing equipment, electrical machinery and apparatus and appliances.
 - 3 Data limitations mean that some 'proxy' measures must be used to highlight aspects of discussion.

Table 1: Exports and imports of goods and services as a per cent of GDP

	1991		1995		2000	
	Exports	Imports	Exports	Imports	Exports	Imports
China	18	16	21	19	23	21
Hong Kong	139	132	149	154	150	145
Indonesia	27	27	26	28	39	31
Republic of Korea	27	30	30	32	45	42
Malaysia	78	81	94	98	125	105
Philippines	30	33	36	44	56	50
Singapore	138	154	142	149	150	146
Taipei	47	43	48	46	54	52
Thailand	36	43	42	48	66	58

Source: CEIC database. Export data for Hong Kong and Singapore include both domestic exports and re-exports. Re-exports are goods that have been imported and are then exported without having undergone any material change while in the exporting country.

In particular, East Asia's exports have increasingly been in high technology industries (see Table 2, which shows the value of exports of electronic goods of East Asian economies as a per cent of total exports, and measured against GDP). As such, East Asia's exports have increasingly depended on the markets of the US and Japan (see Table 3, which shows the value of total exports from East Asian economies that went to the US and Japanese markets, as a share of GDP).

Table 2: Electronic exports as a per cent of total exports and GDP

	% of Total Exports			% of GDP		
	1991	1995	2000	1991	1995	2000
China	n.a	15	25	n.a.	3	6
Hong Kong	n.a	26	34	n.a.	39	51
Indonesia	1	6	15	0	2	6
Republic of Korea	26	34	38	7	10	17
Malaysia	35	48	59	27	45	74
Philippines	26	43	59	8	16	33
Singapore ^(a)	n.a.	34	31	n.a.	48	46
Taipei	n.a	35	45	n.a.	17	24
Thailand	n.a	18	26	n.a.	8	17

(a) Domestic electronic exports only and 1995 figures are 1996 data.

Source: CEIC database.

Table 3: Exports to Japan and US as a per cent of GDP

	Exports to US			Exports to Japan		
	1991	1995	2000	1991	1995	2000
China	2	4	5	3	4	4
Hong Kong	31	32	35	7	12	13
Indonesia	3	4	5	10	7	6
Republic of Korea	7	4	10	4	4	6
Malaysia	13	19	26	12	13	15
Philippines	10	13	17	7	7	7
Singapore	27	26	26	12	11	12
Taipei	14	11	13	6	6	6
Thailand	8	7	14	6	8	10

Source: CEIC database.

Effects of increasing exports on the economies of East Asia

The strong export-orientation in East Asian economies over the past decade has contributed significantly to their rapid recovery from the downturn associated with the 1997-98 crisis. There was relatively little recovery in domestic demand, notwithstanding accommodative fiscal and monetary conditions. As noted above, East Asia's exports have increasingly been IT-related. Morgan Stanley estimates that as much as two-fifths of Asia's total GDP growth last year came from exports of IT to America ('Falling (again)', *The Economist*, 7 July 2001, p 11).

By the same token, this strong export-orientation has increased their vulnerability to the current slowdown in the US and Japan.

Table 4 shows that the value of exports of electronic goods from East Asian economies has turned down sharply since late last year. This is also reflected in the downturn of exports to the US market (Table 5). The use of through-the-year figures may not fully capture the extent of the drop in exports. However, seasonally adjusted quarterly data are not available.

Table 4: Electronic exports, nominal (per cent change, through the year)^(a)

	2000				2001
	Q1	Q2	Q3	Q4	Q1
China	49	43	43	30	28
Hong Kong	32	36	35	22	10
Indonesia	126	144	128	107	n.a.
Republic of Korea	43	43	49	13	-5
Malaysia	21	19	25	10	1
Philippines	7	8	1	3	-4
Singapore ^(b)	10	3	17	2	-0.1
Taipei	13	28	40	3	5
Thailand	28	19	36	35	16

(a) Constant price data are not available and data on a seasonally adjusted basis are not available quarterly.

(b) Domestic electronics exports only.

Source: CEIC database.

Table 5: Exports to the US, nominal (per cent change, through the year)^(a)

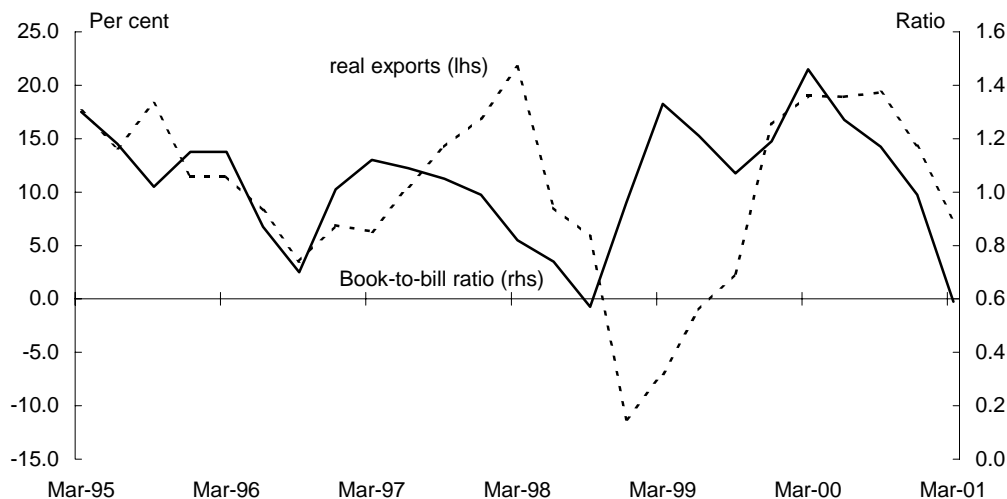
	2000				2001
	Q1	Q2	Q3	Q4	Q1
China	32	29	24	15	11
Hong Kong	19	14	14	11	-1
Indonesia	36	25	21	12	n.a.
Korea	39	25	36	16	-1
Malaysia	11	7	12	6	3
Philippines	8	0	6	23	-8
Singapore	12	-1	13	19	6
Taipei	3	7	16	9	-5
Thailand	26	15	30	22	13

(a) Constant price data are not available and data on a seasonally adjusted basis are not available quarterly.

Source: CEIC database.

The linkage of electronic exports of East Asia to US demand is illustrated in Chart 1 which compares the US semi-conductor book-to-bill ratio (namely, the ratio of new orders to shipments) with real East Asian export growth. Chart 1 shows that East Asian exports recovered strongly following the Asian crisis as a result of buoyant US demand for electronic goods, but that they slowed sharply from late 2000, as the demand for electronic goods faltered in the US.

**Chart 1: East Asia (ex China) real export growth
(per cent, through the year) and
US semiconductor book to bill ratio**



Source: CEIC database, IMF PPP weights (2001) and website economy.com.

While trade between East Asian economies has increased over the past decade (see Table 6), it appears the bulk of intra-regional exports have comprised shipments of components among linked production sites. This trade ultimately reflects a derived demand for final products from more developed countries, particularly the US. The downturn in the US seems to have reduced East Asia's direct exports to that market and is likely to have reduced its intra-regional trade.

Table 6: Intra-regional trade of the five crisis-affected economies^(a)

	Total (\$ billion)		% of Total			
	Exports	Imports	Japan		East and Southeast Asia ^(b)	
			Exports	Imports	Exports	Imports
1990	151.4	167.4	22	26	23	22
1995	318.6	355.5	16	26	34	21
1996	334.9	376.9	16	23	36	23
1997	351.1	367.2	14	22	36	27
1998	338.5	253.4	12	20	31	31
1999	370.8	295.2	13	22	32	32

(a) Indonesia, Republic of Korea, Malaysia, the Philippines, and Thailand.

(b) China, Hong Kong, Indonesia, Republic of Korea, the Philippines, Singapore, Taipei, Thailand, and Vietnam.

Source: Asian Development Bank, Asia Recovery Report October 2000.

Growth in the volume of world trade has slowed to around 4 per cent this year from 13 per cent last year, the sharpest downturn since 1975 ('Falling (again)'),

Economist, 7 July 2001, p 11). Table 7 shows that total exports from East Asian economies, measured in real terms, have slowed significantly. As exports have slowed, industrial production has begun to slow, investment has begun to slacken, and consumption has also weakened (see Charts 2, 3 and 4), although, as noted above, fiscal and monetary conditions in East Asia have been accommodative. Real GDP has begun to slow markedly (see Chart 5 and Table 8). Singapore is now in a recession, while Thailand, Taipei and the Philippines suffered quarter-on-quarter negative growth in the first quarter of 2001. By contrast, China seems the only economy in East Asia that continues to grow strongly, on the back of very strong growth in domestic investment, especially public works. China has also increased its market share in the US and EU markets (Asian Economic and Strategy Perspectives, UBS Warburg, June 2001).

Table 7: Real Export Growth (per cent, through the year)^(a)

	2000				2001
	Q1	Q2	Q3	Q4	Q1
China ^(b)	39	38	25	15	15
Hong Kong	20	18	17	13	4
Indonesia	15	21	14	14	12
Republic of Korea	27	21	22	16	8
Malaysia	21	17	20	8	7
Philippines	12	16	17	25	19
Singapore	17	13	22	15	8
Taipei	13	19	24	14	2
Thailand	22	16	19	7	-2

(a) Seasonally adjusted quarterly data are not available for most East Asian countries.

(b) In nominal terms.

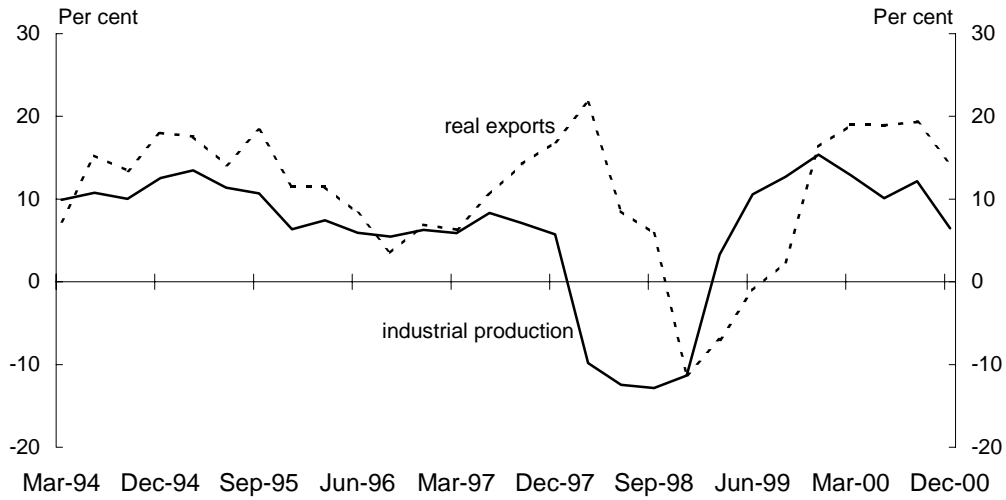
Source: CEIC database.

Table 8: Real GDP Growth (per cent)

	Through the year				Quarter-on-quarter, sa	
	2000				2001	2001
	Q1	Q2	Q3	Q4	Q1	Q1
China	8.1	8.3	8.2	7.4	8.1	n.a.
Hong Kong	14.1	10.7	10.8	6.9	2.5	0.3
Indonesia	4.2	5.2	4.4	5.3	4.0	2.6
Republic of Korea	11.1	9.4	9.1	5.2	3.8	0.3
Malaysia	11.7	8.0	7.6	6.3	3.2	1.6
Philippines	3.4	4.2	4.6	3.9	2.6	-0.5
Singapore	9.8	8.3	10.4	11.0	4.4	-3.0
Taipei	7.9	5.4	6.6	4.1	1.1	-0.4
Thailand	5.2	6.3	3.1	3.2	1.8	-0.2

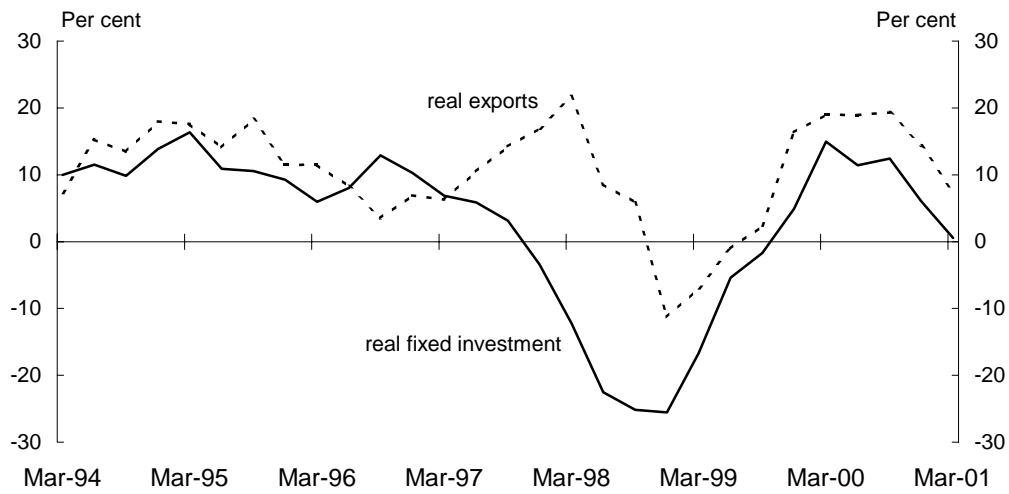
Source: CEIC database. Quarter-on-quarter figures for Indonesia, Taipei and Malaysia are seasonally adjusted by Treasury.

Chart 2: East Asia (ex China) real export growth and industrial production (per cent, through the year)



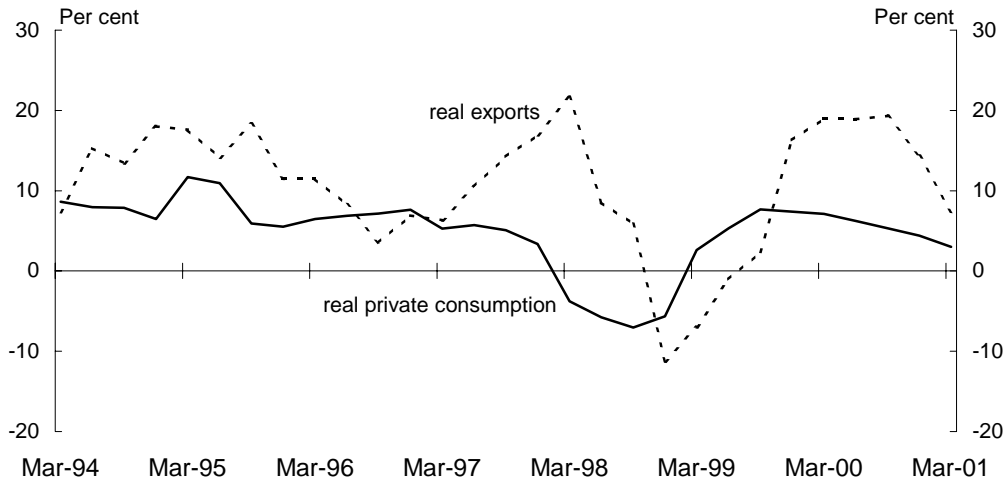
Source: CEIC database and IMF PPP weights (2001).

Chart 3: East Asia (ex China) real export growth and investment growth (per cent, through the year)



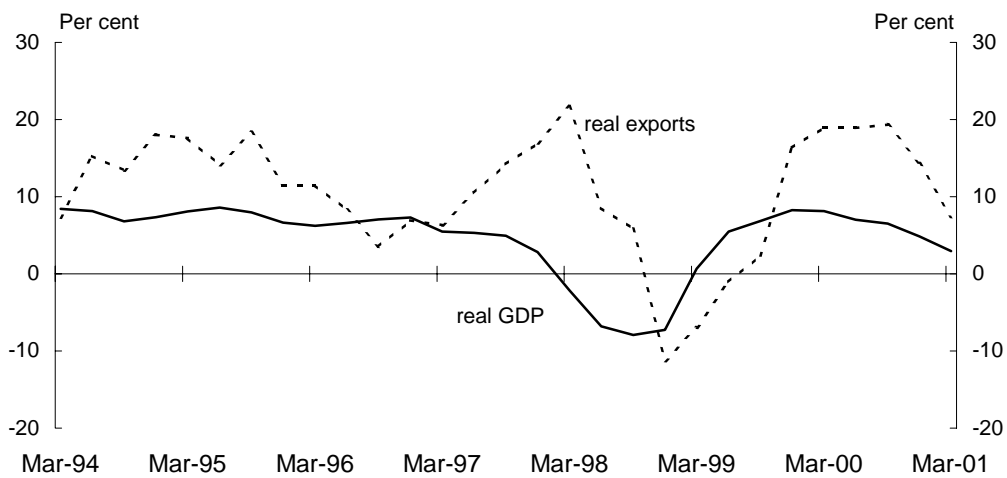
Source: CEIC database and IMF PPP weights (2001).

Chart 4: East Asia (ex China) real export growth and private consumption growth (per cent, through the year)



Source: CEIC database and IMF PPP weights (2001).

Chart 5: East Asia (ex China) real export growth and GDP growth (per cent, through the year)



Source: CEIC database and IMF PPP weights (2001).

Conclusion

East Asia's increasing reliance on exports, and particularly high technology exports, helped most of the region to recover from the 1997-98 crisis. It now exposes the region to greater risk, as world demand for such exports, and for exports more generally, is slowing sharply.

Growth in the US is expected to recover later this year. However, given the apparent heavy over-investment of US firms in information and communication technology in recent years, this recovery may not be accompanied by a revival in spending on such products, thereby resulting in a slower recovery in demand for East Asian electronic exports.

