The impact of a renminbi appreciation on global imbalances and intra-regional trade[1]

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Following the September 2003 Meeting of the G7 Finance Ministers and Central Bank Governors, there were calls, especially from the US, for the renminbi to appreciate. The main argument was that an appreciation of the renminbi would help correct global trade imbalances.

However, an HKMA study shows that NAFTA and the EU are the biggest beneficiaries from the widening US trade deficit. In addition, China's[2] growing trade surplus with the US reflects a reorganisation of the production network in Asia, where China specialises in final processing and assembly for Asian exports.

The analysis also finds that a renminbi appreciation would contribute little to correcting the US trade deficit. Moreover, simulations of the effects of a one-off appreciation of the renminbi on non-China Asian exports suggest that the net gain in non-China Asian exports, if any, from a renminibi appreciation would be small.

I. THE G7's CALL FOR A REVALUATION OF RENMINBI

The G7 has set the tone for the downward adjustment of the US dollar, particularly against Asian currencies. In its communiqué on 20 September 2003, the G7 emphasised that more flexibility in exchange rates was desirable for major countries or economic areas to provide a smooth and market-based adjustment in the international financial system.[3] The message was that Asian economies had been maintaining current account surpluses and building up foreign reserves by resisting an appreciation of their currencies. The communiqué suggested that adjustment of the Asian currencies was necessary to reduce global imbalances. These imbalances, the danger for the world to rely on the US as a main driver of growth and the rapid build-up of reserves by Asian central banks, were also flagged as major concerns in the IMF's latest *World Economic Outlook*.[4]

Since reaching a peak in early 2002, the US dollar has been declining against the euro, the Australian dollar, the New Zealand dollar and, to a lesser extent, the Canadian dollar and the yen.[5] The appreciation

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[1] This article was based on a presentation made at the 17th Four Markets Meeting, held in Singapore on 10 December 2003. Participants of the Four Markets Meeting included representatives from the ministries of finance, and central banking institutions of Australia, Japan, Hong Kong and Singapore.

[2] In this article, China refers to the mainland of China.

[3] The communiqué of the 8 February 2004 Meeting of the G7 Finance Ministers and Central Bank Governors emphasised that more flexibility in exchange rates was desirable for major countries or economic areas that lack such flexibility. This seems to suggest that the issue of "more flexible exchange rates" is directed at non-Japan Asia, as Japan has allowed the yen to rise against the dollar since the September G7 Meeting.

[4] "Are Foreign Exchange Reserves in Asia Too High?", *World Economic Outlook*, IMF, September 2003.

[5] Since the US dollar peaked in early 2002, the euro has strengthened by 45.2% against the US dollar, the Australian dollar by 47.2%, and the New Zealand dollar by 62.0%. The Canadian dollar and the yen have risen much less, by 21.8% and 27.4% respectively.

of Asian currencies, especially for the currencies of the East Asian economies, has been much smaller.[6] While Asian currencies, led by the yen, rose following the G7 communiqué, the appreciation was short-lived; by mid-October 2003, they had depreciated to their pre-G7 meeting levels (Chart 1). As for the renminbi, the Chinese authorities have kept the level steady, at around 8.28 to the US dollar. However, the one-year non-deliverable forward points have been hovering around a discount of 4,000 pips, suggesting that the market is pricing-in a renminbi appreciation of more than 5% in the next 12 months. Analysts have argued that the reluctance of the Asian

governments to revalue their currencies is intended to preserve the competitiveness against each other in the OECD and Asian markets.

II. IS THE RENMINBI UNDERVALUED?

Most commentaries from the G7 have been directed at the need for China to allow more currency flexibility. They argue that since China has a large and growing trade surplus with the US and is rapidly accumulating foreign reserves, its currency must be undervalued. This perception is also linked to the loss in manufacturing jobs in the US and the build-up in protectionist pressures.

The argument that the renminbi is undervalued is debatable. First, the increase in China's foreign reserves is due to capital inflows rather than a trade surplus. Of the US$116.8 billion increase in foreign reserves in 2003, only US$25.4 billion came from the trade surplus (Table 1). The increase in foreign reserves was mainly from foreign direct investment inflows, which amounted to US$53.5 billion. Much of the remaining US$37.9 billion was believed to be hot money flowing into China on expectations of a renminbi appreciation. The current account surplus, at 3.6% of GDP in the 12 months to June 2003, was small by Asian standards.[7] Secondly, the overall trade surplus was small, at 1.8% of GDP in 2003,

CHART 1

Exchange rate movements
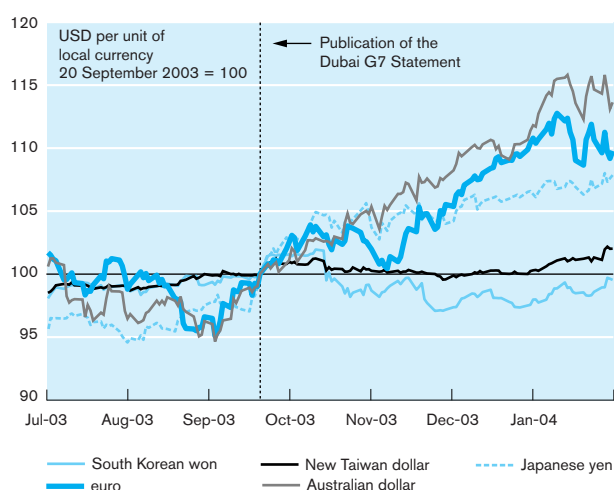
Source: Bloomberg.

TABLE 1

China's external balances

							US$ bn
	1997	**1998**	**1999**	**2000**	**2001**	**2002**	**2003**
Foreign reserves	139.9	145.0	154.7	165.6	212.2	286.4	403.3
Change in foreign reserves	34.9	5.1	9.7	10.9	46.6	74.2	116.8
Trade surplus	40.4	43.5	29.2	24.1	23.1	30.3	25.4
(% of GDP)	*4.5*	*4.6*	*2.9*	*2.2*	*1.9*	*2.3*	*1.8*
Utilised foreign direct investment	45.3	45.5	40.3	40.7	46.9	52.7	53.5

Source: CEIC

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[6] Since the peak of the US dollar in 2002, the Korean won has appreciated by 13.5% against the US dollar, the Singapore dollar, by 9.4%, and the New Taiwan dollar, by 5.4%.

[7] Current account surpluses for other Asian economies in the four quarters to 2003 Q3 were: Hong Kong (10.5%); Indonesia (4.3%); Japan (3.0%); Korea (1.3%); Malaysia (11.8%); the Philippines (4.3%); Singapore (28.4%); Taiwan (10.2%); and Thailand (6.2%).

and is falling. It dropped by US$4.9 billion, or 16.2%, in the whole of 2003. Strong import growth could well cause a trade deficit in 2004.

In response to the call for a renminbi appreciation, the Chinese authorities have made it clear that they will continue to keep the renminbi stable, adding that this decision is in the interests of not only China, but the regional and global economies as well. The aim of the authorities is to liberalise controls on capital *outflows* of which currency flexibility is part of that objective. The authorities have introduced more flexible rules for overseas investment and relaxed some controls on outward capital flows by domestic residents. Under current conditions, a modest and gradual appreciation of the renminbi would not help slow down inflows, since this could invite renewed speculative flows on expectation of further strengthening of the currency. Job creation and financial stability are key priorities of the Government at the moment and currency revaluation may jeopardise these.

III. CAN AN APPRECIATION OF THE RENMINBI CORRECT GLOBAL IMBALANCES?

The notion that Asian economies should share the burden of correcting the global imbalance warrants further examination. In dollar terms, the US trade deficit with China was large, at US$114.1 billion in the first 11 months of 2003. However, China only accounted for 23.3% of the overall US trade deficit.

CHART 2

Shares of US trade deficit by economic areas (Percentage of overall trade deficit)
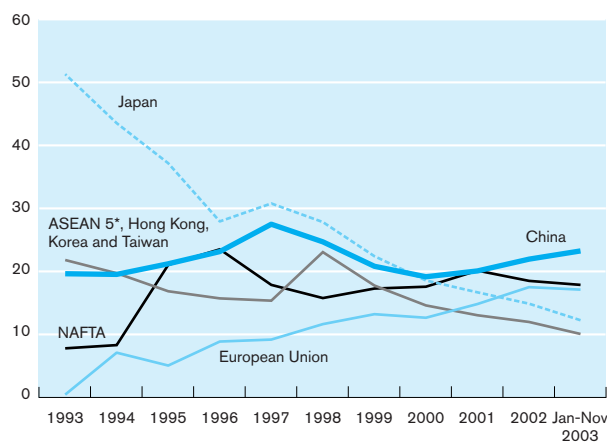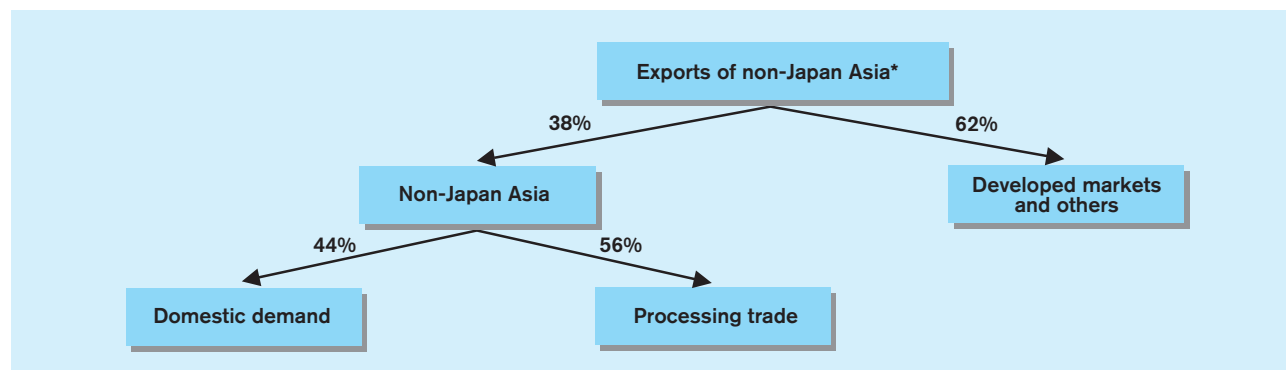

* ASEAN 5 includes Indonesia, Malaysia, the Philippines, Singapore and Thailand.

This ratio has been fairly stable throughout the 1990s, a period when the renminbi experienced relative strengths and weaknesses against other currencies (Chart 2). This suggests that China has not gained market share in US imports at the expense of others, and the increase in US imports from China in dollar terms is due to a growing US appetite for imports. At the same time, the share of the US trade deficit by non-China Asia (including Japan) had fallen sharply from 73.2% in 1993 to 22.5% in January-November 2003. In fact, the regions that gained the most from the widening trade deficit were NAFTA and the EU. Over the same period, NAFTA accounted for 17.9% of the total US trade deficit, growing from 7.9% in 1993, while the share of the EU also rose to 17.2% from 0.5%.

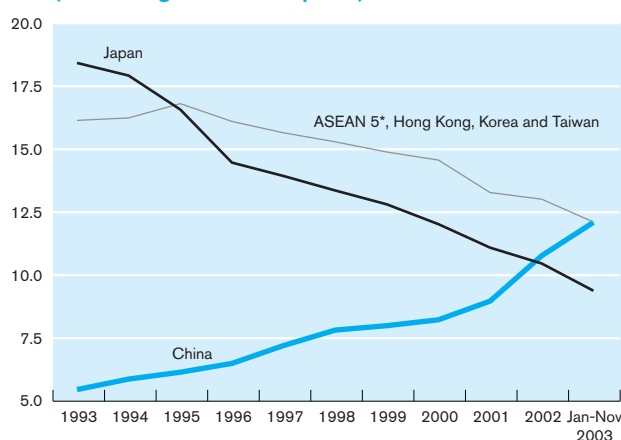**CHART 3**

Pattern of intra-regional trade

* Including China, Hong Kong, Indonesia, Korea, Malaysia, the Philippines, Singapore, Taiwan and Thailand.

An analysis of the trade flows in Asia suggests that the growing US-China trade deficit partly reflects the vertical integration of production across the region. China has emerged as the base for final processing and assembly of goods of other Asian economies. These economies, at the same time, have also acted as suppliers of raw materials, components and machinery for China. According to an internal study by the HKMA[8], about 56% of intra-regional trade within non-Japan Asia is related to processing trade (Chart 3). For China, around 48% of its imports from non-Japan Asia is for meeting the input demand of its exporting industries.

As the final production base for Asia's exports, China runs a surplus with the US, but a trade deficit with all Asian economies except Hong Kong. This shift in bilateral trade balances reduces the shares of other Asian economies in the US trade deficit, and their market shares in US imports have also been partly taken up by China (Chart 4). However, it should be noted that Asia as a whole (including China) still lost some of its market share in US imports to NAFTA in the past decade (Chart 5). Since 1993, the share of NAFTA in US imports has risen by three percentage points (from 26.0% to 28.9%), but that of Asia has declined by seven percentage points (from 40.1% to 33.6%).

It remains doubtful whether a renminbi appreciation would narrow the US external imbalances. According to the Federal Reserve, the renminbi only carries a weight of 9.8% in the trade-weighted real effective exchange rate (REER) index of the US dollar.[9] In other words, the US dollar will weaken by 0.98% in REER terms in response to a 10% appreciation of the renminbi. The IMF has estimated that US import and export elasticities with respect to its REER are 0.26% and -0.85% respectively in the long run.[10] With US imports amounting to US$1,249.4 billion and exports of US$716.2 billion,

CHART 4
US imports from Asia by origin
(Percentage of total imports)

* ASEAN 5 includes Indonesia, Malaysia, the Philippines, Singapore and Thailand.

CHART 5
US imports by origin
(Percentage of total imports)
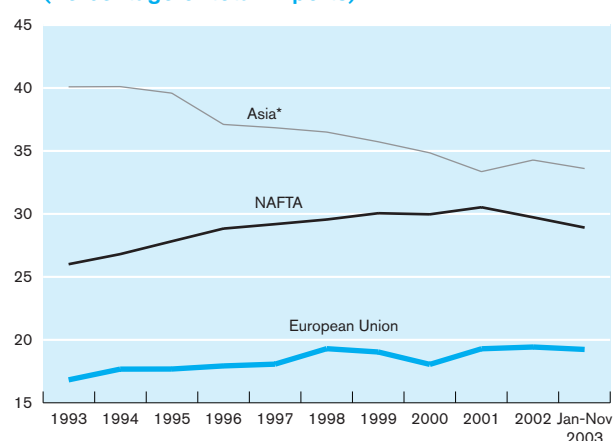
* Including China, Hong Kong, Indonesia, Japan, Korea, Malaysia, the Philippines, Singapore, Taiwan and Thailand.

in the 12 months ending November 2003, a 10% appreciation of the renminbi would reduce the US trade deficit by only US$9.2 billion — a US$6 billion increase in exports to China and a US$3.2 billion decline in imports from China. This is small (1.7%) compared to the overall trade deficit of US$533.2 billion.[11]

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[8] "What is driving Asian exports?", HKMA, August 2003.

[9] Please refer to the Federal Reserve website: http://www.federalreserve.gov/release/h10/Weights/ for the figures.

[10] Takatoshi Ito, Peter Isard, Steven Symansky and Tamin Bayoumi, "Exchange Rate Movements and Their Impact on Trade and Investment in the APEC Region", *IMF Occasional Paper 145*, December 1996, page 39.

[11] In fact, the reduction in the trade deficit could be even smaller, as US imports may shift from China to other economies.

IV. IMPACT OF A RENMINBI APPRECIATION ON NON-CHINA ASIAN EXPORTS

It is sometimes argued that a renminbi appreciation would enable other Asian economies to increase exports, as their competitiveness vis-à-vis China would improve. We assessed the argument by considering the elasticities of China's imports and exports in response to a renminbi appreciation. We ran regressions to estimate these elasticities. Based on the results, we conducted a simulation exercise to assess the impact of a 10% appreciation of the renminbi on non-China Asian exports. The estimation of China's import and export elasticities is detailed in Appendix 1. The simulation exercise is detailed in Appendix 2.

We believe that an appreciation of the renminbi would affect non-China Asian exports in the following ways:

(a) An increase in non-China Asian exports to G3 markets[12] — An appreciation of the renminbi would hurt China's exports by making them more expensive in foreign currency terms. According to our estimation, a 10% appreciation of the renminbi would reduce China's exports to G3 markets by 14.7%, or around US$24.5 billion.

(b) A decrease in Asian exports to China for processing — A slowdown in China's exports due to an appreciation of the renminbi would reduce the country's imports of raw materials and semi-finished goods from the rest of Asia. We estimate that a 10% appreciation of the renminbi would reduce China's processing-related imports from the rest of Asia by 12.8%, or around US$9.7 billion.

(c) An increase in Asian exports to China for domestic use — China's booming domestic demand has resulted in a sharp rise in imports of minerals[13] and high-end consumer goods (e.g. video cameras and cellular phones). A renminbi appreciation would make imports cheaper in local currency terms, further boosting exports of non-China Asia into the China market. However, the estimates suggest that the exchange rate is insignificant in the determination of China's imports for domestic use. In other words, China's imports do not respond as expected to a change in the exchange rate.

Assuming that non-China Asia can fully capture China's loss in exports to G3 economies arising from a 10% appreciation of the renminbi, there would be a net gain of US$14.8 billion to non-China Asia, equivalent to only 1.1% of total non-China Asia's exports in 2002.

Nevertheless, we believe that in reality non-China Asia would not be able to reap the benefits in full. First, other low-cost economies such as India and Mexico are also keen to increase their share of exports to developed countries and would likely take up some of the exports given up by China. Secondly, Chinese exporters may mitigate the effect of a stronger currency by cutting profit margins, thereby making prices of Chinese goods in dollar terms slightly higher than, or equal to, the prices before the appreciation. This would effectively offset partly, or fully, the negative effect of a renminbi appreciation on China's exports. Thirdly, a renminbi appreciation may prompt the US in asking other Asian economies to realign their currencies, thereby eroding the external competitiveness of these economies.

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[12] The G3 markets are markets of Japan, EU and the US.

[13] China is now the world's largest importer of copper and steel, and amongst the largest importers of iron ore and aluminium. Imports of oil and other energy-related products are also rising rapidly. Industry analysts have cited Chinese demand as a positive factor supporting international commodity prices since the slowdown in advanced country growth began in 2000.

Assuming that non-China Asia can only capture half of China's loss in exports to G3 economies, the net gain would be small at US$2.6 billion, or 0.2% of total non-China Asia's exports. But, if non-China Asia fails to capture any of China's export loss, then non-China Asia would incur a net loss of US$9.7 billion, or 0.8% of its total exports.

V. CONCLUSION

With China's trade surplus declining because of strong imports, there is insufficient evidence to suggest that the renminbi is undervalued. Recent upward pressure on the renminbi comes mainly from capital inflows. Moreover, China's growing trade surplus with the US largely reflects its role as the final processing base of Asia's production network. For Asia as a whole, the share of US imports and the trade deficit have actually declined over the past 10 years. The biggest gainers from the widening US trade deficit appear to be NAFTA and the EU.

More importantly, the large US current account deficit stems from the low savings rate in the US and could not be fully corrected through exchange rate adjustments. Also, since the renminbi carries less than a 10% weight in the US REER, any appreciation of the renminbi would only have a small impact in the correction of the US current account deficit. Furthermore, our estimates show that the exchange rate is not a significant determinant of China's imports for domestic use. Therefore, an appreciation of the renminbi may not result in any increase in Chinese imports from the US. For the region, the potential gain of non-China Asia's exports to the developed markets arising from renminbi appreciation would also be very small.

APPENDIX 1

ESTIMATION OF IMPORT AND EXPORT ELASTICITIES FOR CHINA

We ran regressions to estimate the import and export elasticities of China with respect to a demand factor and the renminbi exchange rate. As mentioned in the text, nearly half of China's imports is processing-related inputs, of which demand depends on China's exports to G3 markets. To reflect this trade pattern, the long-run equations of China's import and export elasticities were specified as follows:

$$\ln X^{G3}_t = \beta_0 + \beta_1 \ln Y^{G3}_t + \beta_2 \ln REER_t + u_t \qquad (1)$$

$$\ln M^{P}_t = \lambda_0 + \lambda_1 \ln X^{G3}_t + \lambda_2 \ln REER_t + v_t \qquad (2)$$

$$\ln M^{D}_t = \delta_0 + \delta_1 \ln Y^{D}_t + \delta_2 \ln REER_t + e_t \qquad (3)$$

of which:

X^{G3} denotes China's real exports to G3 economies
M^{P} denotes China's real imports for processing
M^{D} denotes China's real imports for domestic use
Y^{G3} denotes real domestic demand of G3 economies
Y^{D} denotes real domestic demand of China
REER denotes real effective exchange rate of the renminbi

Using Ordinary Least Squares, we estimated a set of dynamic equations by involving the first differences of the dependent variables against the first differences of the explanatory variables plus the lags of the dependent and explanatory variables. Quarterly data from 1995 Q1 to 2003 Q2 were used in the estimations and dummies were added to capture any seasonal effects.

There is a concern that China's import and export statistics may contain structural breaks, as

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[1] China raised VAT rebates twice in 1999, in Q1 and Q3 of that year.

[2] We repeated the estimations using China's nominal GDP numbers, but the results were even worse.

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policies involving changes in value-added tax (VAT) rebates and liberalisation measures have been implemented over time to facilitate trade. Over the sample period, the most notable policy change was increases in VAT rebates for exports in 1999[1], intended to maintain China's competitiveness following the depreciation of Asian currencies in 1997-98. A dummy variable was added to equation (1) to reflect this policy change. Specifically, the following regressions were estimated:

$$\Delta \ln X^{G3}_t = \beta_0 + \beta_1 \Delta \ln Y^{G3}_t + \beta_2 \Delta \ln REER_t + \beta_3 \ln X^{G3}_{t-1}$$
$$+ \beta_4 \ln Y^{G3}_{t-1} + \beta_5 \ln REER_{t-1} + D2_t + D3_t$$
$$+ D4_t + VAT_t + u_t \qquad (4)$$

$$\Delta \ln M^{P}_t = \lambda_0 + \lambda_1 \Delta \ln X^{G3}_t + \lambda_2 \Delta \ln REER_t + \lambda_3 \ln M^{P}_{t-1}$$
$$+ \lambda_4 \ln X^{G3}_{t-1} + \lambda_2 \ln REER_{t-1} + D2_t + D3_t$$
$$+ D4_t + v_t \qquad (5)$$

$$\Delta \ln M^{D}_t = \delta_0 + \delta_1 \Delta \ln Y^{D}_t + \delta_2 \Delta \ln REER_t + \delta_3 \ln M^{D}_{t-1}$$
$$+ \delta_4 \ln Y^{D}_{t-1} + \delta_5 \ln REER_{t-1} + D2_t + D3_t$$
$$+ D4_t + e_t \qquad (6)$$

of which:

D2, D3 and D4 are seasonal dummies for Q2, Q3 and Q4, respectively
VAT is the dummy variable that represents the increase in VAT rebates for exports in 1999

China's import and export statistics were collected from official sources while G3 demand data were from the OECD. REER data were based on HKMA estimates calculated using consumer price indices of China and its major trading partners. However, as China does not publish quarterly GDP data by expenditure components, utilised foreign direct investment (which is highly correlated with fixed asset investment) was used to proxy domestic demand.[2] Augmented Dickey-Fuller tests were

TABLE 1

Results of Dickey-Fuller tests

Variables	Level	First differences
X^{G3}	-0.8145	-6.5359**
M^P	-0.5896	-5.7273**
M^D	0.1424	-5.0262**
REER	-3.4232*	-3.1132*
Y^{G3}	-1.5116	-2.8538*
FDI	-2.2490	-6.0375**

Note: One and two asterisks denote significance at the 5%
and 1% levels, respectively.

employed to check whether the data series were
stationary. As Table 1 shows, the first differences
were stationary.

Regression results

The equations below report the estimated results
for short- and long-run import and export
elasticities for China:

$$\Delta \ln X^{G3}_t = -82.08 + 6.14 \Delta \ln Y^{G3}_t - 0.74 \Delta \ln REER_t \quad (4)$$
$$(3.33) \quad (1.66) \quad\quad (1.53)$$

$$- 0.62 \ln X^{G3}_{t-1} + 5.42 \ln Y^{G3}_{t-1}$$
$$(2.96) \quad\quad (3.31)$$

$$- 0.91 \ln REER_{t-1} + 0.23 D2_t + 0.24 D3_t$$
$$(2.71) \quad\quad (3.72) \quad (6.17)$$

$$+ 0.22 D4_t - 0.17 VAT_t$$
$$(6.85) \quad (2.43)$$

Adjusted $R^2 = 0.87$ Durbin-Watson Statistics = 2.03

$$\Delta \ln M^P_t = 0.85 + 0.94 \Delta \ln X^{G3}_t - 0.02 \Delta \ln REER_t \quad (5)$$
$$(1.76) \quad (15.11) \quad\quad (0.06)$$

$$- 0.60 \ln M^P_{t-1} + 0.52 \ln X^{G3}_{t-1}$$
$$(3.42) \quad\quad (3.27)$$

$$- 0.07 \ln REER_{t-1}$$
$$(0.54)$$

Adjusted $R^2 = 0.90$ Durbin-Watson Statistics = 1.83

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[3] Seasonal patterns exist in China's exports to G3 markets,
   but not in imports for processing trade and for domestic
   use. Furthermore, lagged changes of up to four quarters of
   the explanatory variables were included in the estimations
   and they were all statistically insignificant.

$$\Delta \ln M^D_t = -0.83 + 0.47 \Delta \ln FDI_t - 1.80 \Delta \ln REER_t \quad (6)$$
$$(0.45) \quad (3.55) \quad\quad (1.49)$$

$$- 0.05 \ln M^D_{t-1} + 0.12 \ln FDI_{t-1}$$
$$(0.92) \quad\quad (0.54)$$

$$+ 0.08 \ln REER_{t-1}$$
$$(0.20)$$

Adjusted $R^2 = 0.61$ Durbin-Watson Statistics = 2.15

Note: Figures in parenthesis are t-statistics.

The results indicate that the coefficient of G3
demand for China's exports has the expected
positive sign and is statistically significant in the
long run. By contrast, the REER of the renminbi
has played a lesser role in the determination of
China's imports and exports. Regarding exports
to G3 markets, REER is significant in the long
term. For processing-related imports, REER is
insignificant. However, China's processing-
related import demand is highly dependent on its
exports. As evidenced by equation (5), real
exchange rates thus have a strong, indirect, effect
on imports for processing. In the case of imports
for domestic use, REER is insignificant.

Elsewhere, VAT is statistically significant,
confirming a structural break in China's export
data from 1999 onwards. However, its coefficient
is negative, in contrast to the general perception
that increases in VAT rebates in 1999 have
enhanced China's exports in the aftermath of the
Asian financial crisis. A plausible explanation is
that the boost to Chinese exports from increases
in tax rebates is not sufficient to offset the
negative effect due to the depreciation of Asian
currencies on China's exports to third markets.
Since REER cannot capture competition between
China and other Asian economies in third
markets, such effect is possibly reflected in the
VAT variable.[3]

The following tables summarise the findings:

(a)   Export elasticities (Table 2) — Chinese exports are more sensitive to G3 demand than to REER of the renminbi. In the long run, a 1% increase in G3 demand will lead to an 8.74% increase in China's exports while a 1% appreciation of the renminbi will reduce them by 1.47%;

(b)   Import elasticities for processing trade (Table 3) — Chinese imports for processing trade are determined by G3 demand for Chinese exports and the REER of renminbi. Since a 1% appreciation of the renminbi will lead to a 1.47% drop in exports to G3 markets, and a 1% decline in exports to G3 markets will lead to a 0.87% drop in China's imports for processing trade, the two effects combined would translate into a 1.28% decline (1.47 x 0.87) in China's imports for processing trade in the long run; and

(c)   Import elasticities for domestic use (Table 4) — Chinese imports for domestic use are not sensitive to changes in REER of the renminbi. This is probably because policy changes, during the trade liberalisation process, have a greater impact than exchange rate movements on imports.

TABLE 2
Export elasticities

	G3 demand	Real effective exchange rate
Short-run	6.14	-0.74
Long-run	8.74	-1.47

TABLE 3
Import elasticities for processing trade

	Exports to G3 economies	Real effective exchange rate	
		Direct effect	Indirect effect
Short-run	0.94	-0.02	-0.70
Long-run	0.87	-0.07	-1.28

TABLE 4
Import elasticities for domestic use

	Utilised foreign direct investment	Real effective exchange rate
Short-run	0.47	-1.80
Long-run	2.21	1.40

APPENDIX 2

SIMULATION RESULTS FOR NON-CHINA ASIAN EXPORTS UNDER A 10% APPRECIATION OF THE RENMINBI

We established three scenarios to illustrate the impact of a one-off, 10% appreciation of the renminbi on non-China Asian exports. Table 5 outlines the conditions when appreciation of the renminbi has its largest and smallest impact on the rest of Asia. Non-China Asia would gain the most when all of China's export loss to G3 markets is taken up by other Asian economies. Conversely, non-China Asia would incur a loss when they fail to capture any gains arising from China's export loss to G3 markets. An intermediate scenario is when half of China's loss in exports to G3 markets is taken up by other Asian economies.

Table 6 presents the findings. The "full absorption" scenario suggests a US$14.8 billion (1.1%) increase in non-China Asian exports. In the "no absorption" scenario, non-China Asian exports would decline by US$9.7 billion (0.8%).

TABLE 5
Conditions for alternative scenarios

Conditions	Full absorption	50% absorption	No absorption
(a) Gains in Asian exports to G3 markets (assuming export elasticity of China = 1.47)	Absorption rate = 100%	Absorption rate = 50%	Absorption rate = 0%
(b) Loss in Asian exports to China for processing (assuming elasticity of Asian exports to China = 1.28)	100%	100%	100%
(c) Gains in Asian exports to China for domestic use (assuming import elasticity of China is insignificant)	Nil	Nil	Nil

TABLE 6
Impact of renminbi appreciation by factors

US$ bn

Conditions	Full absorption	50% absorption	No absorption
(a) Gains in Asian exports to G3 markets	24.5	12.3	0.0
(b) Loss in Asian exports to China for processing	-9.7	-9.7	-9.7
(c) Gains in Asian exports to China for domestic use	0.0	0.0	0.0
(d) Total gains:			
- in dollar amount	14.8	2.6	-9.7
- as % of non-China Asian exports	1.1	0.2	-0.8

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