"Yen and Yuan"
RIETI, Tokyo
November 2, 2001

In the first half of his talk, Dr. Kwan, senior fellow at RIETI, argued that Asian currencies should be pegged to a currency basket, with the Japanese yen comprising of a bigger proportion of the basket for those countries that compete more with Japan (newly industrializing countries, such as South Korea) and a smaller proportion for those countries that have trade structures complementary to that of Japan (less developed countries, such as China).

In the second half of his presentation, Dr. Kwan suggests that China will complement, rather than threaten, Japan's economy. First of all, people overestimate China's economic power. One should not confuse the growth rate of China's economy with its size. China's is still only one-fourth the size of Japan's economy, yet its population is ten times that of Japan. So China's per capita GDP is one-fortieth Japan's. If you take into account purchasing power parity (PPP), China's per capital GDP increases to one-eighth of Japan's, but its global rank falls from 128th to 140th.

Second, only 20% of the value added in Chinese high tech exports actually comes from Chinese sources. In other words, China is highly dependent on foreign capital and technology.

Third, China is not just Shanghai and Beijing. The countryside is very poor. China's economic indicators now look like Japan's in the 1960s. This is to say that China is forty years behind Japan in economic development.

Fourth, how much does China and Japan really compete with each other? China and Japan only compete with each other on about 20% of their products. This share of products has grown rapidly over the past ten years, but the level of quality is vastly different. For example, China and Japan compete in selling television sets, but Japan sells high-end flat screen TVs, while China's are very basic.

Fifth, the "flying geese" pattern of economic growth is still in place. METI says this pattern has collapsed because of China. This is not true. Japan still maintains the most advanced trade structure; China is still in back of the flying geese line.

Sixth, will China leapfrog in its economic development to challenge Japan? No. China is still on the regression line, corresponding to its level of development. There is no leapfrog so far.

Seventh, there is deflation in Japan, but here is good deflation and there is bad deflation. The good sort comes from a shift in the supply curve, from cheaper exports, which is good for Japanese consumers. Bad deflation, meanwhile, comes from a shift in Japan's demand curve.

Finally, would a stronger yuan be good for Japan? No. The two countries do not compete much, so all a stronger currency would do is slow the Chinese economy, thereby slowing Japan with it. Good Japanese companies, such as Uniqlo, would be hurt for the sake of helping a few farmers. Plus, the cost of production would increase inside Japan.

Over the long run, he sees the yuan appreciating in real term because, among other things, the growing economy will finally soak up excess labor, driving wages and domestic prices, while industrial upgrading should improve the country's terms of trade and strengthen the currency.

The question and answer sessions from this brown bag lunch lecture appear at the end of this document. The following charts are taken from C.H. Kwan's presentation at RIETI on November 2, 2001.

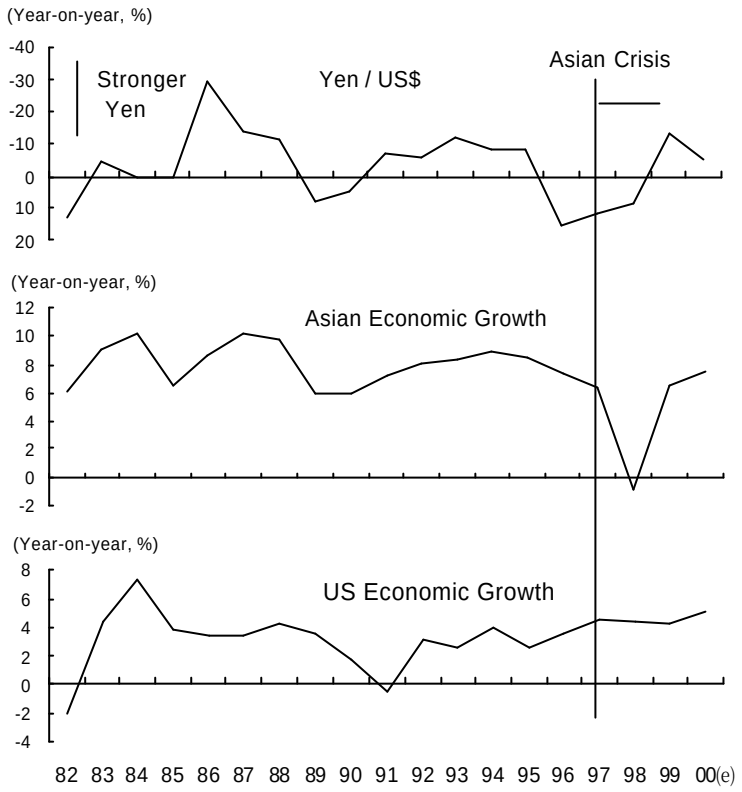
Yen and Yuan

The Impact of Exchange Rate Fluctuations on the Asian Economies

C. H. Kwan
RIETI

November 2001

The Yen-dollar Rate as the Major Determinant of Asian Economic Growth



Note: Asia = NIEs + ASEAN + China
Source: Compiled by RIETI based on official statistics.

External Factors Affecting Asia's Economic Growth

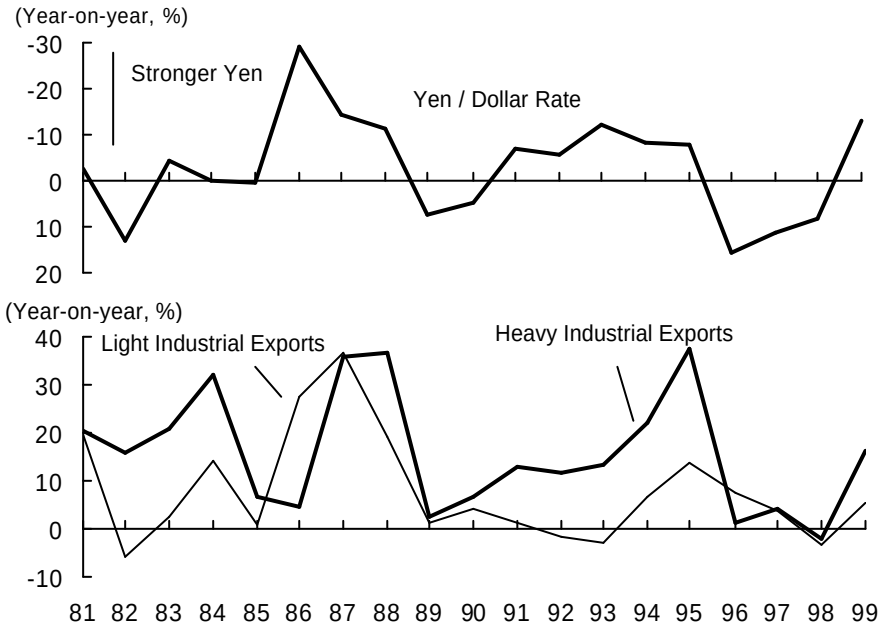
	Effect on Asia's Growth
1% Increase in Japan's Growth	0.1% ⇧
1% Yen Appreciation	0.1% ⇧
1% Increase in US Growth	0.3% ⇧

The Impact of a Stronger Yen on Asian Economic Growth

Positive Effects	Negative Effects
❍Increase in direct investment from Japan	❍Higher prices of imports from Japan
❍Improvement in export competitiveness against Japanese products	❍Higher burden of Yen-denominated debt

Countries with trade structures competitive with Japan (e.g., South Korea) should benefit more than ones with trade structures complementary to that of Japan (e.g., China) .

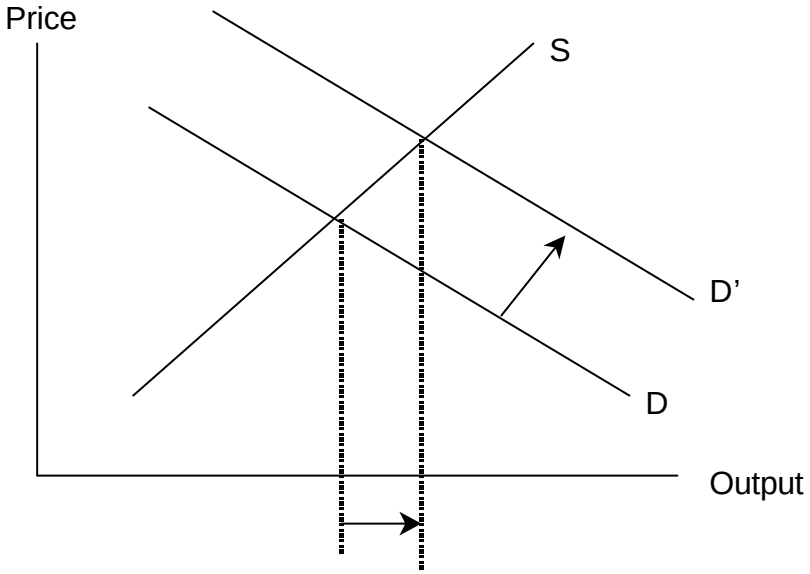
Korean Export Performance Hinges on the Yen-Dollar Rate



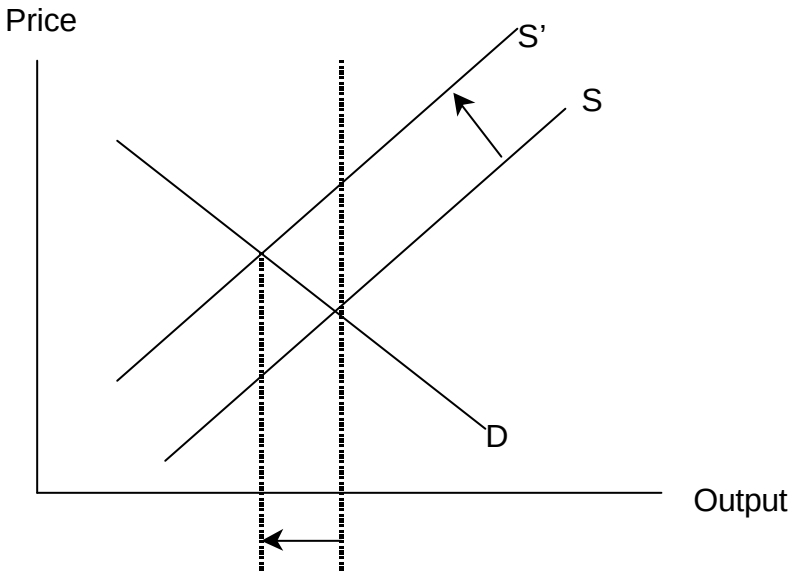
Source: Compiled by RIETI based on Korean trade statistics.

The Impact of a Stronger Yen on Asia

a) Gain in Export Competitiveness



b) Higher Import Prices



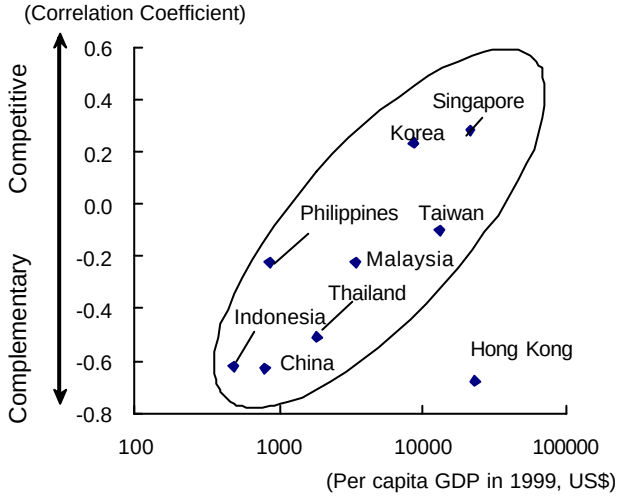
Source: RIETI

Specialization Indexes for Major Categories of Manufactured Goods (1999)

	Chemicals and Related Products	Manufactured Goods Chiefly Classified by Material	Machinery and Transportation Equipment	Miscellaneous Manufactured Articles
China	-0.40	-0.02	-0.08	0.76
Korea	-0.03	0.30	0.28	0.23
Taiwan	-0.28	0.31	0.11	0.22
Hong Kong	-0.11	-0.10	-0.07	0.17
Singapore	0.15	-0.28	0.06	-0.09
Indonesia	-0.31	0.52	-0.04	0.84
Thailand	-0.36	-0.08	0.05	0.69
Malaysia	-0.29	-0.09	0.13	0.34
Philippines	-0.80	-0.54	-0.06	0.33
Japan	0.15	0.19	0.54	-0.13

Source: Compiled by RIETI based on ADB,
Key Indicators of Developing Asian and Pacific Countries, 2000.

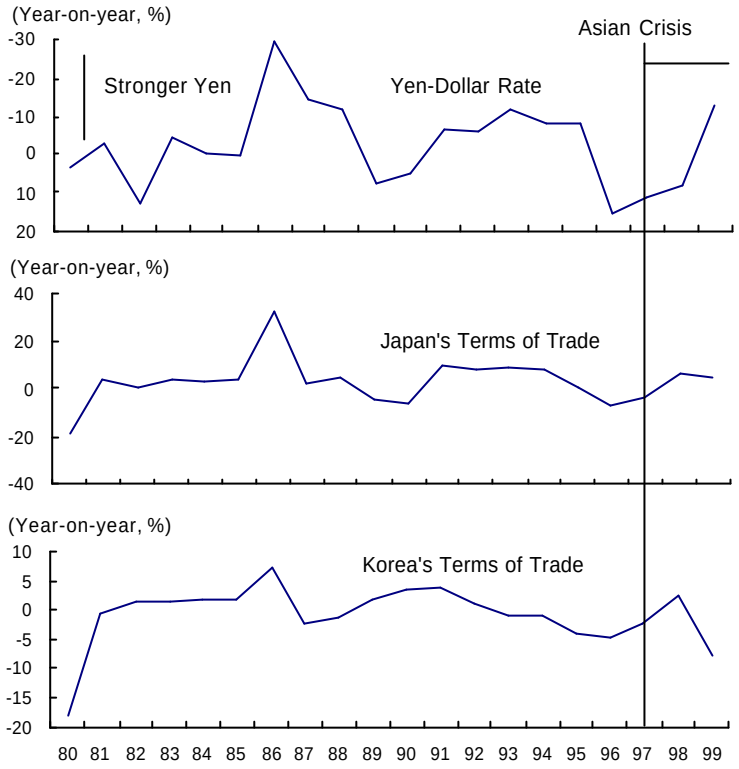
Comparison of the Trade Structures of Japan and Asian Countries (1999)



Notes
1) The degree of competition between an Asian country and Japan is calculated as the correlation coefficient between their respective vectors showing the specialization indexes ([exports - imports]/[exports + imports]) of major categories of manufactured goods. To focus on competition in the manufacturing sector, a four-category classification comprising chemicals and related products (SITC Section 5), manufactured goods classified chiefly by material (SITC Section 6), machinery and transport equipment (SITC Section 7), and miscellaneous manufactured articles (SITC Section 8) is used.
2) The specialization indexes for Hong Kong, and thus its degree of competition with Japan, have been distorted by the presence of re-export trade.

Sources: Compiled by RIETI based on ADB, *Key Indicators of Developing Asia and Pacific Countries*, supplemented by trade statistics of individual countries.

Synchronization between the Yen-dollar Rate and Korea's Terms of Trade



Note: Terms of trade $= \frac{\text{Export prices}}{\text{Import prices}} \fallingdotseq \frac{\text{Output prices}}{\text{Input prices}}$

Sources: Compiled by RIETI based on official statistics.

Pegging Closer to the Yen

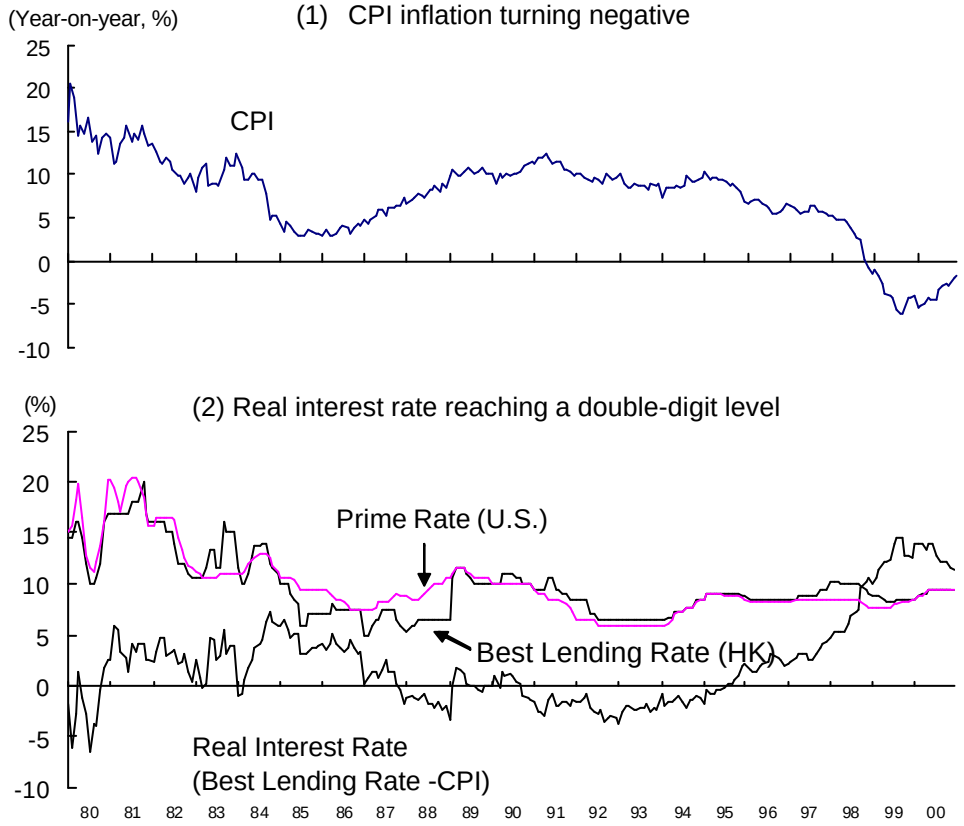
- Stabilizing yen-dollar rate.
- Pegging to a currency basket in which the yen carries substantial weight.
- Assuming that the Korean won is pegged to a basket of currencies in which the yen carries a weight of 70%, The Korean won is allowed to appreciate (depreciate) by 0.7% when the yen appreciates (depreciate) by 1%, both against the U.S. dollar.
- “Optimal weight” of the yen reflects extent of competition with Japan.

Correlation between Asian and U.S. Economic Growth Rates

	1971-84	1985-98	(1985-96)
Asia	0.731	-0.193	0.175
China	0.139	0.161	0.262
Korea	0.584	-0.298	-0.087
Taiwan	0.857	-0.013	0.090
Hong Kong	0.705	-0.102	0.097
Singapore	0.461	-0.156	-0.074
Indonesia	0.436	-0.321	-0.282
Thailand	0.545	-0.334	-0.068
Malaysia	0.537	-0.343	-0.281
Philippines	-0.189	0.204	0.243
Japan	0.616	-0.163	0.066

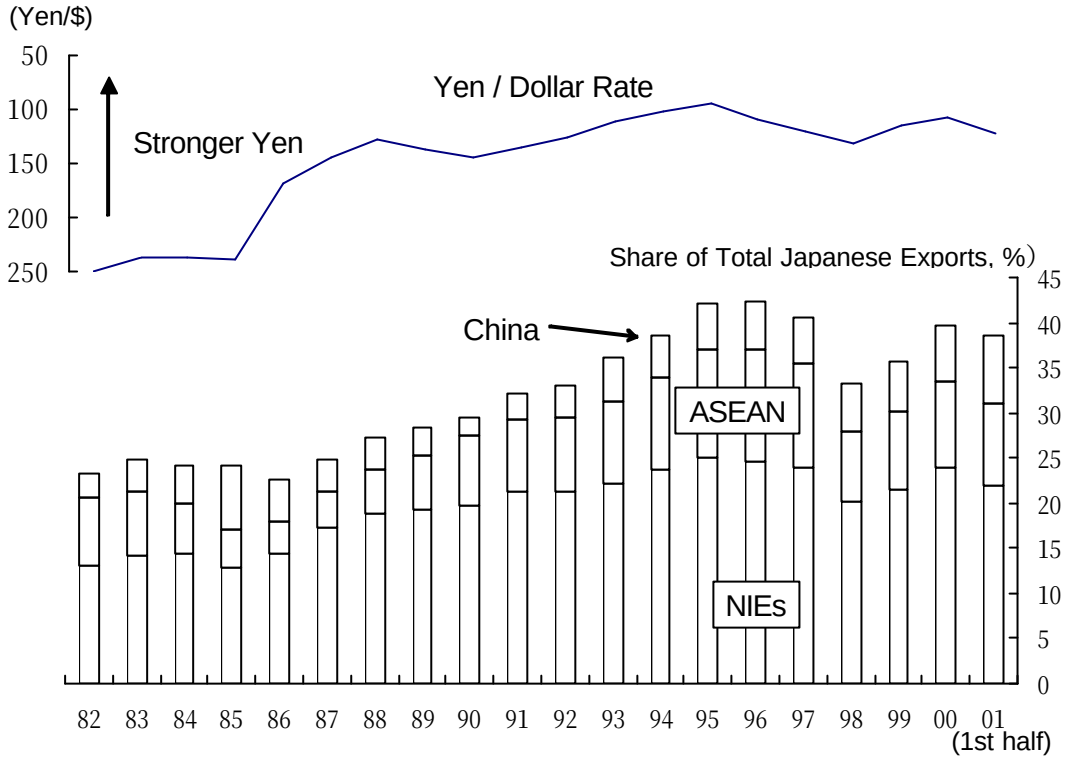
Note: Asia = NIEs + ASEAN + China
Sources: Compiled by RIETI based on official statistics of countries concerned.

Counter-cyclical Movement of Real Interest Rates in Hong Kong



Sources: Compiled by RIETI based on official statistics.

The Yen/Dollar Rate and Japanese Exports to Asia



Source: IMF, *International Financial Statistics* and Japanese trade statistics.

The Yen-Dollar Rate as a Major Determinant of the BIS Ratio of Japanese Banks

BIS Capital Adequacy Ratio

$$\frac{\text{Capital}}{\text{Risk Assets}} > 8\%$$

For Japanese Banks :

Capital (\)

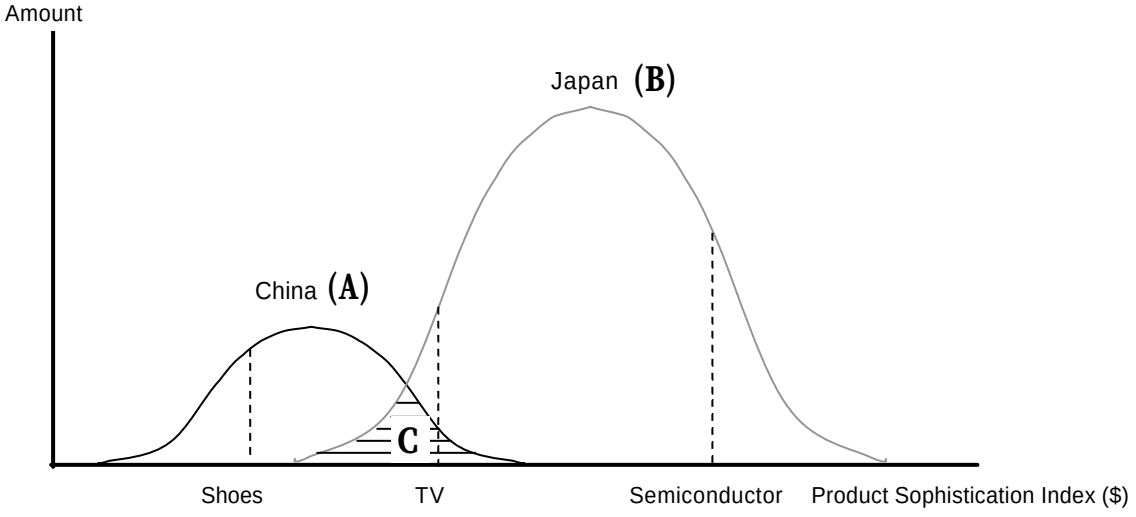
Risk Assets = Domestic Lending (\) + Overseas Lending ($)

Comparison between Major Development Indicators of China and Japan

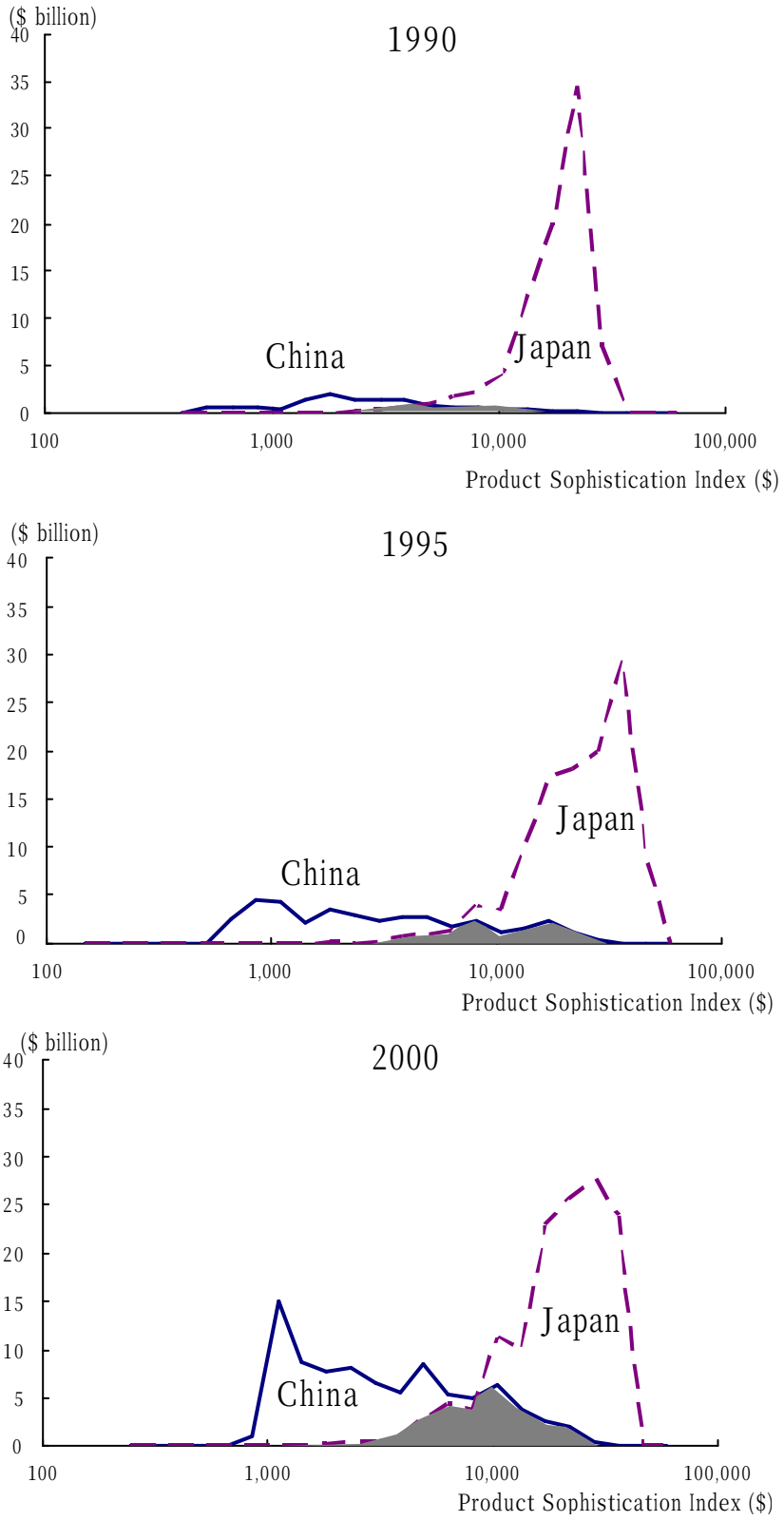
	China (Latest)	Japan (Around 1960)
Life Expectancy (years)	Female 72 Male 68 (1998)	Female 72.92 Male 67.74 (1965)
Infant Mortality Rate (per thousand)	31 (1999)	30.7 (1960)
Primary Sector as a Share of GDP(%)	15.9 (2000)	16.7 (1959)
Engel's Coefficient (%)	39.2 (2000)	38.8 (1960)
Per Capita Electricity Consumption (kwh)	1,071 (2000)	1,236 (1960)

Sources: *China Statistics Abstract 2001, Japan's 100 Years* (Kokuseisha).

Competition between China and Japan



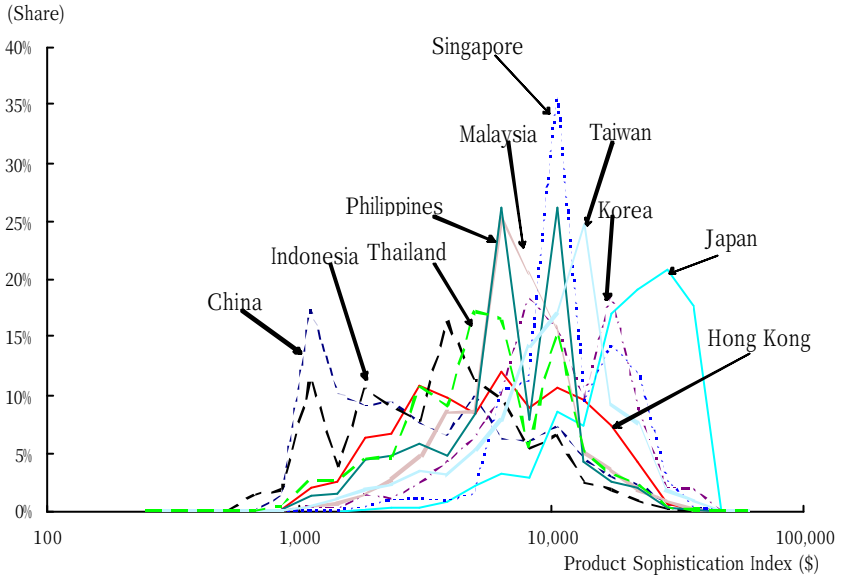
Competition between China and Japan in the U.S. Market



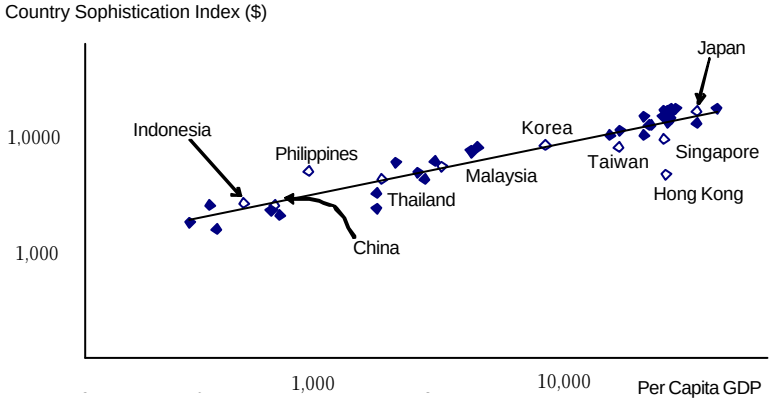
Competition between Chinese and Japanese Products in the U.S. Market

		1990	1995	2000
(A)	China's Manufactured Exports to U.S. ($, billion)	12.0	38.2	86.5
(B)	Japan's Manufactured Exports to U.S. ($, billion)	84.0	114.1	134.3
(C)	Overlapped Amount ($, billion)	3.8	11.9	27.9
(C/B)	China as a Competitor of Japan	4.6%	10.5%	20.7%
(C/A)	Japan as a Competitor of China	32.1%	31.3%	32.2%

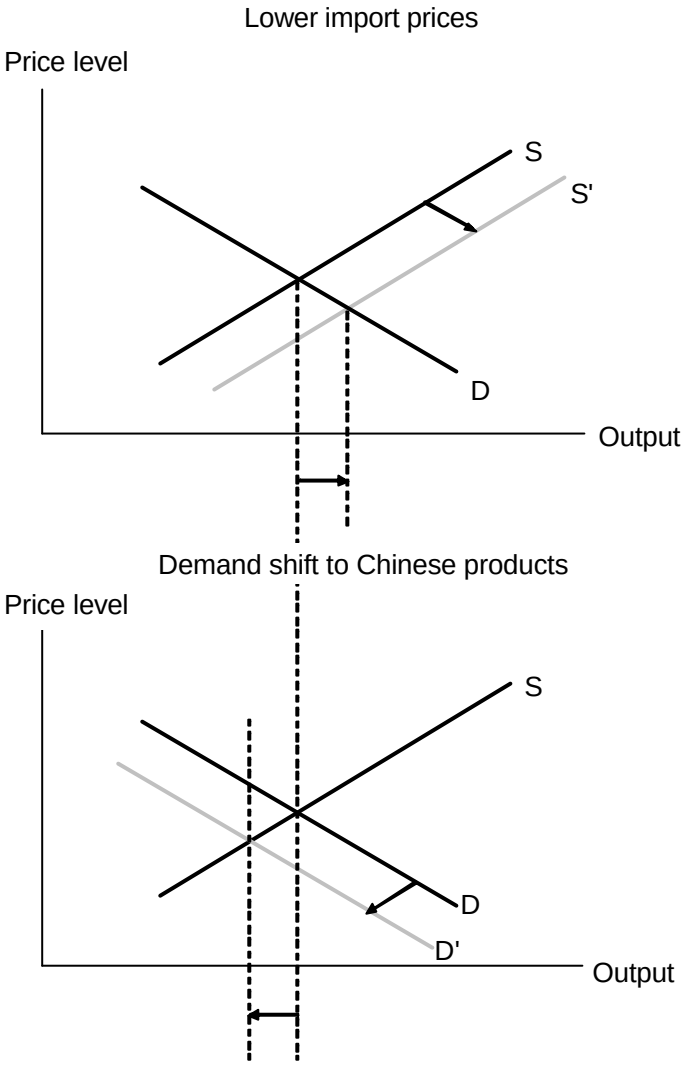
The Flying Geese Pattern of Asian Countries Exports (In Terms of Exports to the United States)



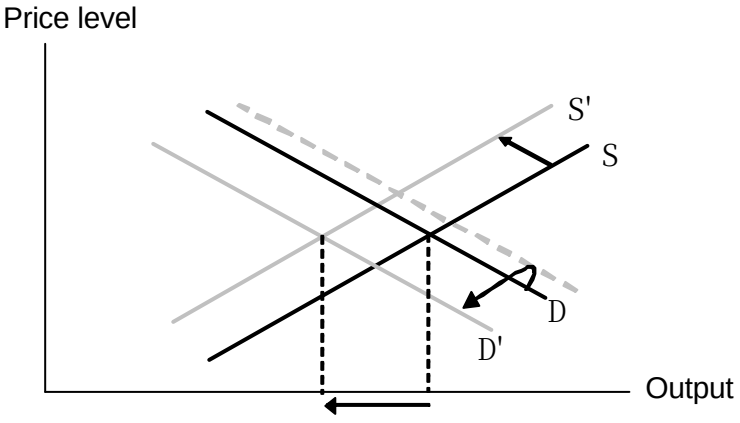
Per Capita GDP and Country Sophistication Index (2000)



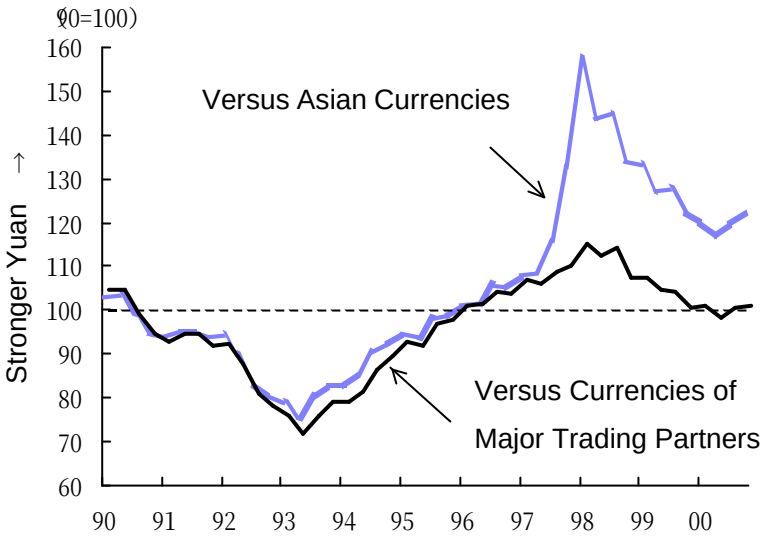
The China Factor in Japan's Deflation



The Impact of Yuan Appreciation on Japan



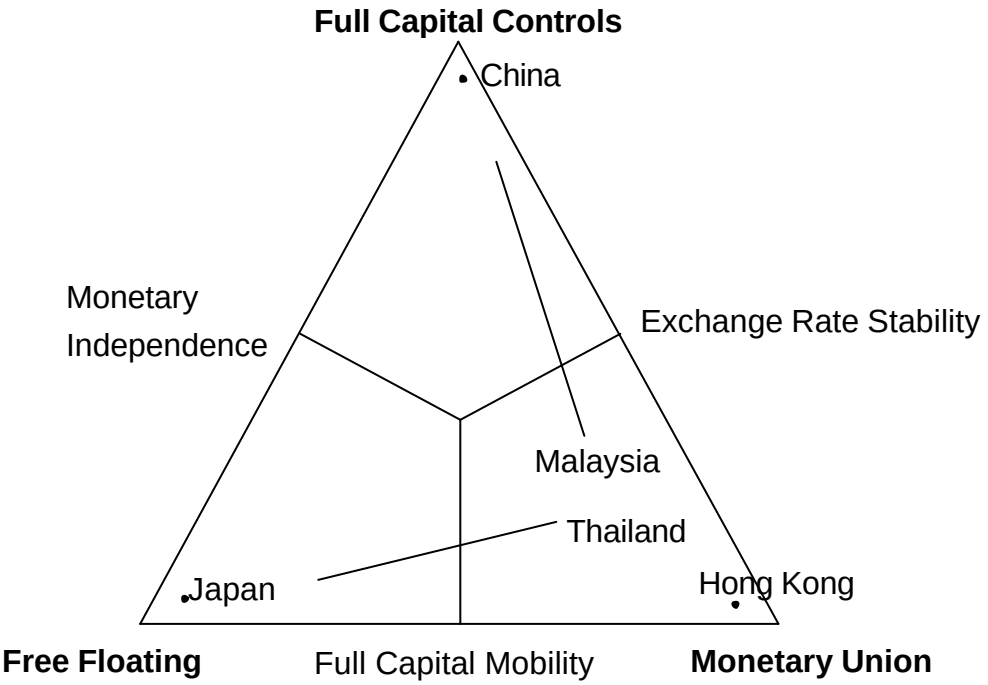
Real Effective Rate of the Yuan



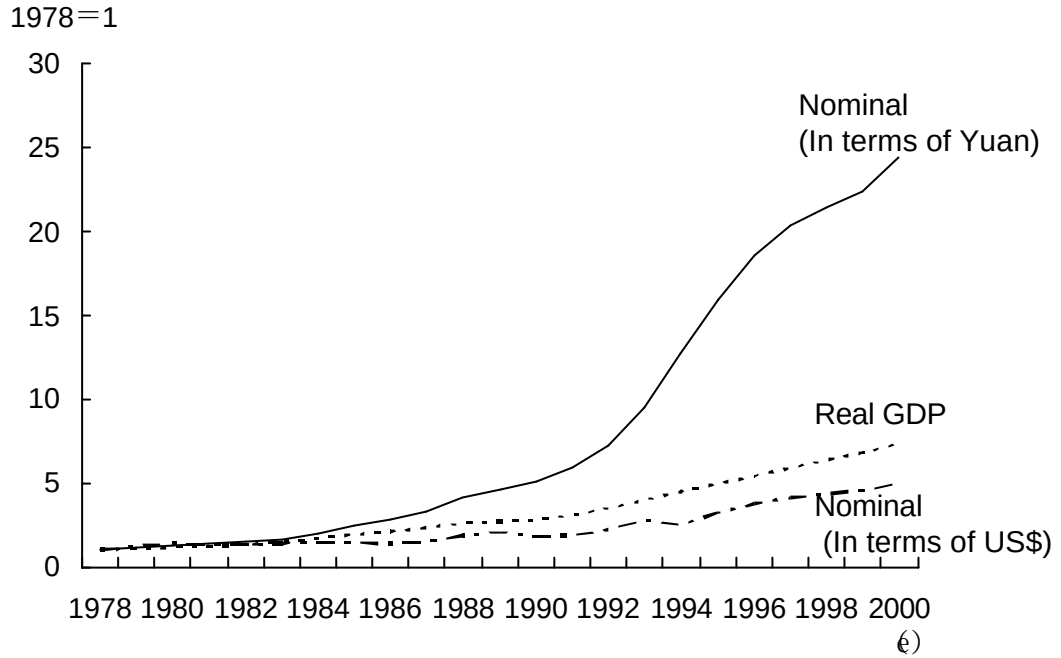
Note: Export-weighted and based on WPI

Source: Nomura Research Institute

The Impossible Trinity

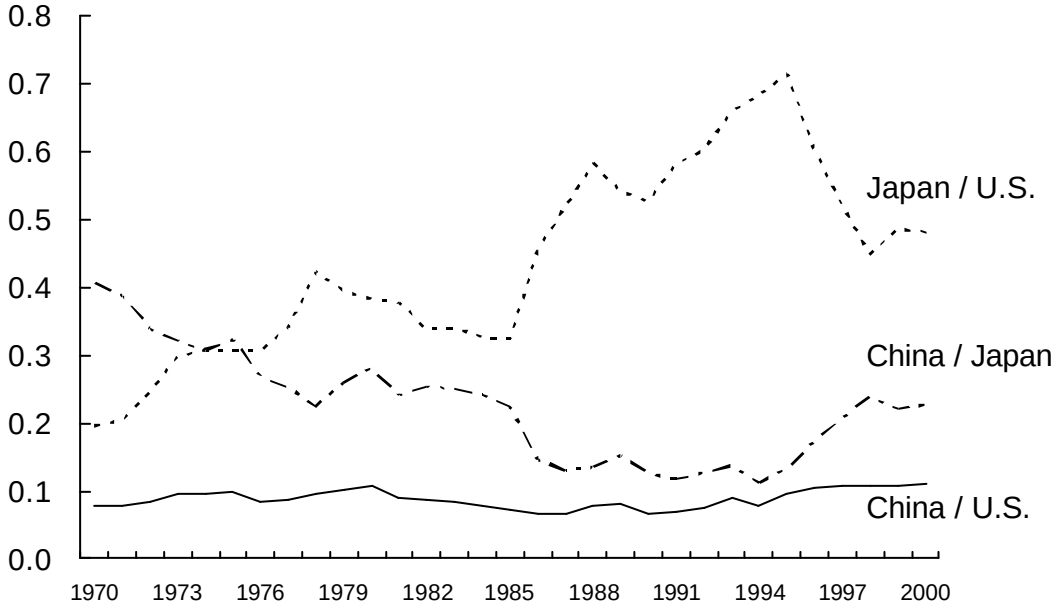


China's GDP since Opening Up



Source: IMF, *World Economic Outlook*

Relative Nominal GDP among China, the U.S. and Japan



Source: IMF, *World Economic Outlook*

Question & Answer

Q: I have never heard of a trade-weighted currency basket based on competitiveness with Japan. It is dynamic. How would it be administered?

C.H. Kwan

The basket could be adjusted every five years to reflect changes in the region's economies.

Q: What would be the objective of this exchange rate policy?

C.H. Kwan

Asia does not fulfill the requirements for a yen bloc yet. But the objective of the exchange rate policy would be to stabilize regional economic growth and trade, based on complementary relations. This would sometimes require a sacrifice at the microeconomic level. But marcoeconomic policy should focus on the macro level.

Q: Japan is afraid of China because of the Chinese products that compete with Japanese domestic products, not those that compete with Japan's internationally traded products.

C.H. Kwan

I believe the US experience would be illustrative here.

Q: You say that developing economies are more complimentary to developed economies. But actually developed economies seem more complimentary to developed economies, while the rapidly growing developing economies are perceived as a threat.

C.H. Kwan

We have to distinguish between national interests and the local interests (of, say, the farmers). China bashing will ultimately hurt Japan.

Q: Isn't China different, though, given its population of 1.2 billion people and the large market it offers. Countries just want to get into that market.

C.H. Kwan

China's accession to the WTO will reduce the need for foreign companies to rely on foreign direct investment (FDI) to enter the Chinese market. Conceptually, going back to the "flying geese" story, maybe China should be represented by three lumps (coastal, middle, and western China) rather than just one big lump.

Q: Japan must focus on adding value to its exports. Is it possible for Japan to add value to its manufacturing products?

C.H. Kwan

The difference between manufacturing and services has been blurred. But why is Japan wasting its time trying to catch up with the US again? If Japan insists on specializing in exporting cars, it will become a developing country itself.

Q: Will China adopt a floating exchange rate regime?

C.H. Kwan

Not in the near future. China has had a long-term plan to open its capital account, but this has been slowed by the Asian financial crisis.