World Economic Trends

: A New Report by the Cabinet Office

<u>What is it?</u>

"World Economic Trends" is a biannual report in Japanese issued by the Cabinet Office that was first published in May 2002. It aims to examine implications for economic and fiscal policy in Japan through studying recent policy developments around the globe.

The first report attempted to abstract lessons from 1) tax reforms in Sweden, the U.K. and the U.S.; and 2) work-sharing in France, Germany, and the Netherlands. These are hot policy issues under discussion in Japan.

<u>The Autumn Report in 2002</u>

The second report was published in November 2002, and covered three topics: the Chinese economy, pension reforms in Europe, and the world economic outlook for 2003.

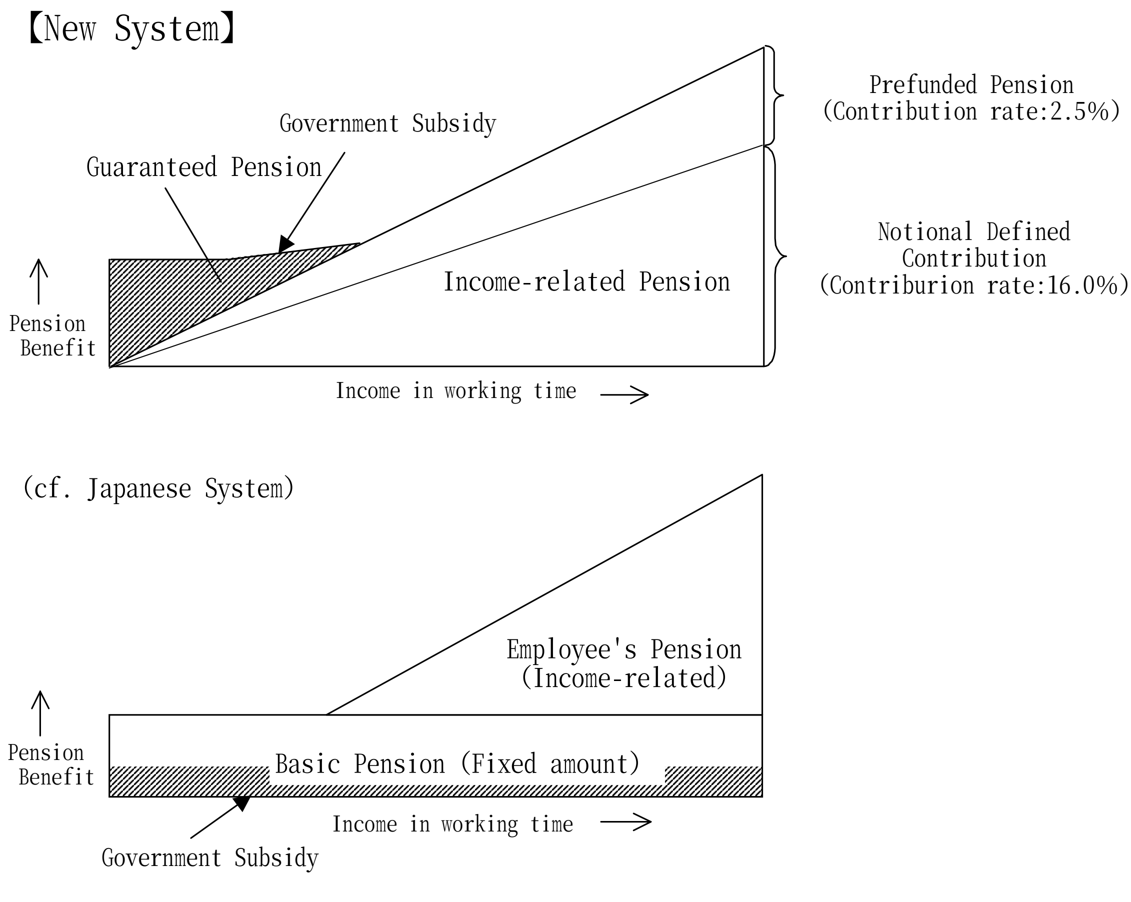
--The Chinese Economy

Chapter 1 investigated some of the mechanisms of China's high-speed economic growth since the start of economic reform in the late 1970s. In particular, the massive inflows of foreign direct investment played the most important role in the 1990s. If investments in both domestic and foreign capital accelerate in the current decade, the Chinese economy may grow at an annual rate of 8 to 9 percent up to 2010. For further details, see the attached summary for Chapter 1.

--Pension Reforms

Chapter 2 examined the implications of Swedish pension reform in 1999 for Japan. As is well-known in the pension literature, Sweden implemented major reform for pensions instead of parametric reform. One of the most important elements that has been introduced is the notional defined-contribution system that employs a pay-as-you-go (PAYG) financing scheme. (Figure 2-1)

Figure 2-1 Swedish New Pension System



The current Japanese pension system is managed with the defined-benefit PAYG principle. It is expected to undergo reform in 2004 to strengthen the sustainability of the system as the population rapidly ages and as the birth rate declines even further. (Table 2-2)

Table 2-2 Swedish and Japanese Pension System

	Sweden (New System; after 1999)	Japan (After 2000 reform)
Structure	2 tiers	2 tiers
(2nd tier)	Prefunded	Income-related (for employees only)
(1st tier)	Notional Defined Contribution (Income-related)	Basic Pension (Fixed Amount)
Principle for benefit	Defined Contribution	Defined Benefit
Financing	Pay-as-you-go	Pay-as-you-go
Contribution rate (%)	18.5%	17.35% (monthly)
Employee	9.25%	8.675%
Employer	9.25%	8.675%
Pensionable Age	Flexible after 61	Basic Pension: 61 Income-related Pension: 65
Replacement rate (%)	60% of income before retirement (case of retirement age 65)	62% of net income of working generation
Price Indexation	Yes	Yes
Real Wage Indexation	Yes	No
Government Subsidy	No subsidy. All of Guaranteed Pension benefit is financed by subsidy.	1/3 of basic pension

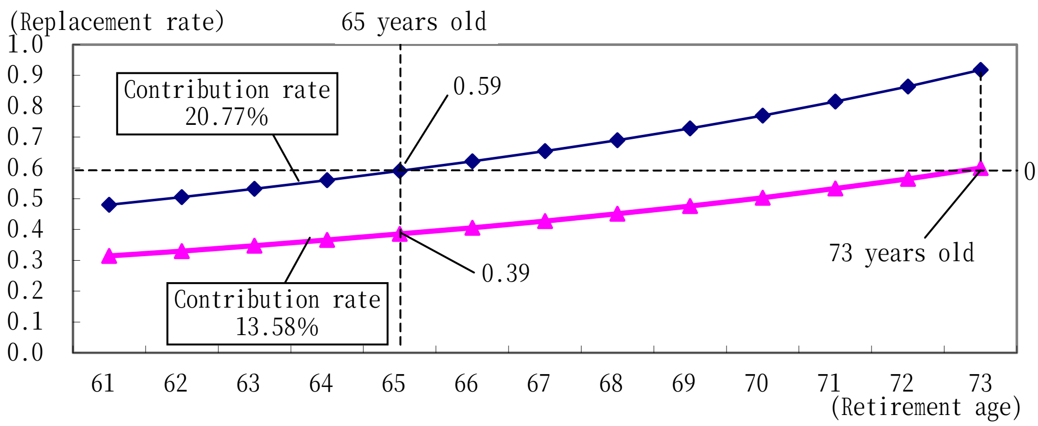
The new Swedish system is suggestive to Japan's reforms in the sense that 1) it improves credibility by making the relation between contributions and benefits transparent; and 2) it will stabilize pension financing by capping the contribution rate and by introducing an automatic balance mechanism.

If the notional defined-contribution PAYG system is introduced for average salaried persons in Japan, the pension calculation indicates the following relationship among contribution rate, retirement age, and replacement ratio: 1) if the contribution rate remains at the current level (13.58 percent of annual income), maintaining the replacement ratio of 59 percent necessitates older retirement at age 73; and 2) if the retirement age is held at 65, then the contribution rate will be raised to 21 percent with the same replacement ratio. (Figure 2-3)

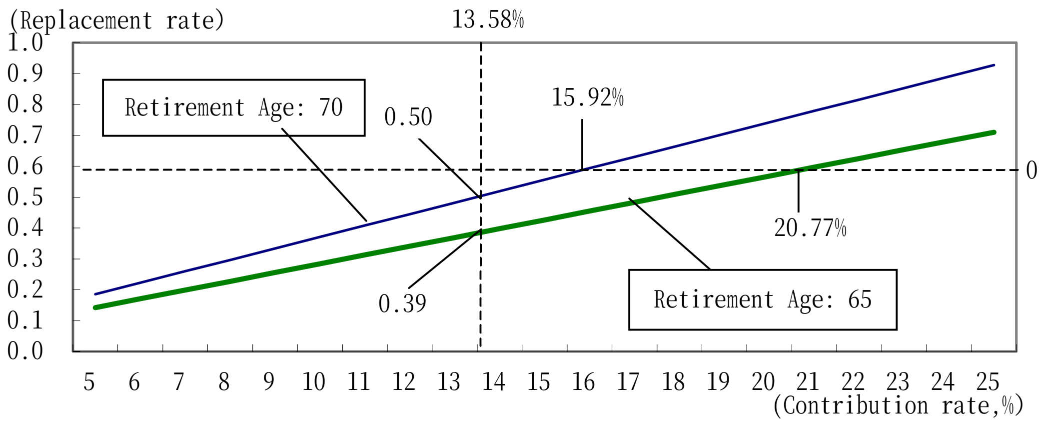
Figure 2-3 Pension Calculation for Japanese under Notional Defined Contribution System

Assumptions: real wage increase 1.0% per annum, inflation rate 1.5%,
nominal wage increase 2.5%, interest rate 4.0%
(the same assumption as Japan's Actuarial Revaluation in 1999)
based on individual unit, with no government subsidy

1. Retirement Age and Replacement Rate



2. Contribution and Replacement Rate



--World Economic Outlook

The central scenario for the United States calls for economic slowing in the latter half of 2002 and a gradually rising growth momentum toward the second half of 2003. In Northeast Asia, economic expansion is likely to continue over the next year, while the ASEAN countries, where investment recovery is currently lagging behind, will grow at higher rates in 2003. The European countries may improve their recovery prospects in the second half of 2003 after overcoming the stagnant conditions of 2002. (Table 3-1)

Table 3-1 Economic Outlook by Major Region

(Percentage changes)

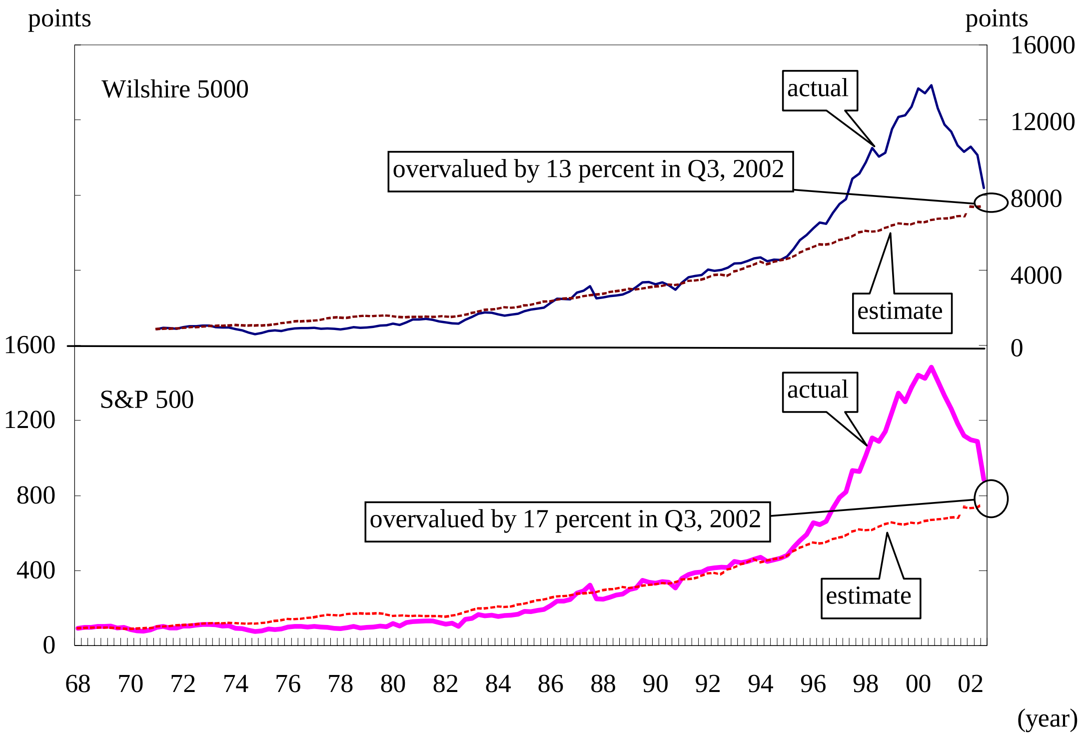
real GDP	2000	2001	2002		2003
			Forecast	Compared with 6 months ago	Forecast
the U.S.	3.8	0.3	2.4	↘	3.0
Asia					
Northeast Asia	8.1	4.6	6.1	↗	6.2
ASEAN	6.4	1.5	3.9	↗	4.4
Europe	3.2	1.4	0.9	↘	2.2
Euro Area	3.5	1.5	0.9	↘	2.2

Note 1. Figures are an average of forecasts by private institutions published between September and October 2002.
2. Northeast Asia includes China, South Korea, Taiwan Province of China and Hong Kong. ASEAN includes Singapore, Indonesia, Thailand, Malaysia and Philippines. Europe consists of Germany, France,Italy and U.K.

In analyzing the above scenario, the following evidence is found.

1) The U.S. equity hikes in the late 1990s may have been boosted by economic bubbles; their subsequent burst brought down equity prices to the levels of 10 to 20 percent above the theoretical estimates in the third quarter of 2002. (Figure 3-2)

Figure 3-2 Equity Bubbles in the U.S.



( ): t-value

Wilshire 5000

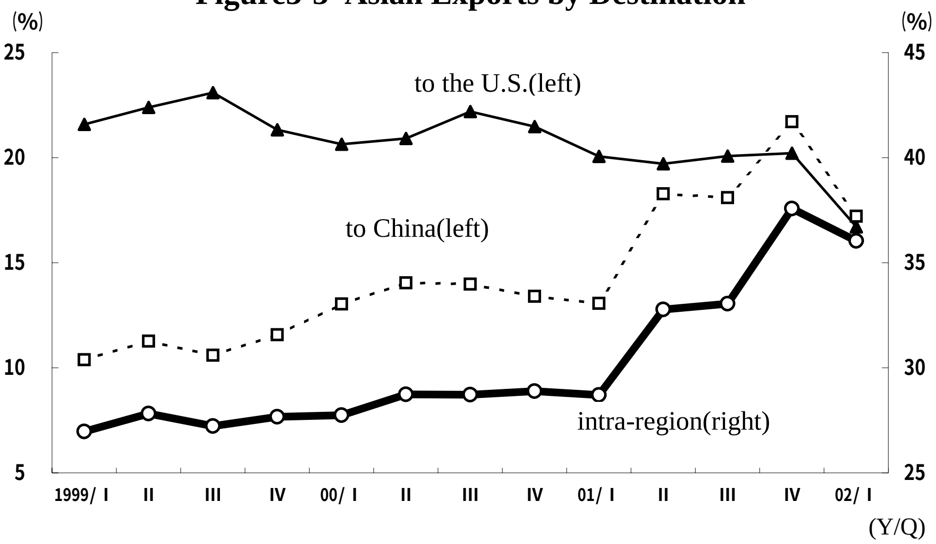
$\triangle$ ln equity prices=0.011+0.331$\triangle$ln corporate earnings-0.024$\triangle$long-term interest rates
(1.662) (2.939) (-2.206)
R^2=0.082 D.W.=1.676 Q2,1970-Q4,1994

S&P 500

$\triangle$ ln equity prices=0.010+0.345$\triangle$ln corporate earnings-0.0324$\triangle$long-term interest rates
(1.333) (2.892) (-2.677)
R^2=0.089 D.W.=2.401 Q2,1968-Q4,1994

2) Asian exports to China have been growing rapidly, especially since 2001, surpassing those to the United States recently. Furthermore, Asian trade linkages have been strengthening through rising intra-regional trade. These are main reasons for continuing economic strength in Asia as the U.S. economy slows. (Figure 3-3)

Figure3-3 Asian Exports by Destination



Note 1. Exports are sum of Hong Kong, Indonesia, Malaysia, Philippines, Singapore, South Korea, Taiwan Province of China and Thailand.

2. Figures are a ratio to total exports.