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JAPAN

Selected Issues

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Approved by the Asia and Pacific Department

July 13, 2004

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I. Key Features of the Japanese Business Cycle: Is the Current Cycle Different?[1]

A. Introduction

1. **Economic activity in Japan has been gradually expanding since the end of 2001**. Prior to this expansion, Japan suffered from two transient recoveries during the period that followed the massive collapse of the asset-price bubble in 1991, which eventually led to deflation. At present, many commentators are arguing that the structural adjustments implemented thus far may be paving the way for Japan to return to a more sustainable economic growth path. The current recovery has gained pace since late 2003 and broadened, and the consensus near-term outlook is for continued expansion. Nevertheless, in light of the experience of the two previous recoveries, the durability of the current expansion is an open question.

2. **The research presented in this paper documents the key features of the Japanese business cycle and investigates whether the current recovery differs from past recoveries**. In particular, this paper poses the following questions: First, what are the main characteristics of Japanese business cycles since 1980? And, what happens to output, expenditure components, and prices over the cycle? Second, have the characteristics of these cycles changed over the years? Third, how does the current cycle differ from previous cycles? Fourth, is this recovery likely to be more durable than past recoveries?

B. Key Features of Japanese Business Cycles

What do Japanese business cycles look like?

3. **Since 1980 Japan has experienced four complete business cycles and is currently in the recovery phase of a fifth cycle**.[2] A business cycle is defined as recurrent sequences of contractions and expansions in the level of economic activity. A complete business cycle is defined as running from the peak of economic activity to the next peak. Each cycle is split into two phases: recession and expansion. The recession phase starts at the peak and ends at the trough while the expansion phase begins at the end of the trough and ends at the next peak. The table

Description of the Japanese Business Cycle

Cycle	Dates		Numbers of Quarters		
	Peak	Trough	Total	Recession	Expansion
Cycle 1	1980Q1	1983Q1	22	13	9
Cycle 2	1985Q2	1986Q4	24	7	17
Cycle 3	1991Q1	1993Q4	26	12	14
Cycle 4	1997Q2	1999Q1	15	8	7
Cycle 5	2000Q4	2002Q1	...	6	...
Average			21.8	9.2	11.8
Standard Dev.			4.8	3.1	4.6

Source: Cabinet Office and Staff estimates.

[1] Prepared by Hali Edison (ext. 36946).

[2] The source for the dating of Japanese business cycle comes from the Working Group of Indexes of Business Conditions within the Cabinet Office (CAO) and is reported at the following website: http://www.esri.cao.go.jp/en/stat/di/011221rdates.html.

provides dates for the five Japanese business cycles that have been identified since 1980, three of which have occurred since the asset-price bubble burst in 1991.

4. **A typical business cycle in Japan lasts approximately 5½ years, beginning with a recession of about 2½ years and followed by an expansion of 3 years** (see table above). However, the overall duration of the Japanese business cycle seems to be shortening.[3] In the last two cycles the recession phase became shorter, lasting 2 and 1½ years, respectively. Furthermore, in the last complete cycle the expansion was also shorter. Typically, clusters of short business cycles occur in the context of relatively high labor and product market rigidity (IMF 2002). Against this background, it is not surprising that Japan, with its problems of structural rigidities, has experienced three cycles since 1993.

5. **In contrast to the Japanese experience, the typical or average business cycle for industrialized countries lasts about six years**.[4] These cycles begin with a recession of about one year, during which output falls, and is followed by an expansion of 5 years, during which output grows.[5] To illustrate, in the United States—based on the National Bureau of Economic Research business cycle dating committee—over the period 1980–2003 the average recession phase is only 3 quarters and the average expansion phase is around 24 quarters. Furthermore, business cycles in most industrialized countries have become longer, reflecting longer expansions. The average length of business cycles increased from about four years during the 1970s to about six years during the 1980s and 1990s (IMF 2002).

What happens to output over the cycle?

6. **An important characteristic of a business cycle is what happens to economic activity** (in particular, output and prices). For output behavior a number of different methods can be used to describe the key features including: the overall trend in real GDP, the differences in growth profiles especially over the two phases of the cycle, and the extent of output loss (the amplitude of the cycle).

7. **Figure I.1 shows that the trend in real GDP differs across cycles**. The general upward trend in real GDP slowed after the asset-price bubble burst in the 1990s. During the first two complete business cycles, the trend in real GDP continued upward over both phases of the cycle. The fact that growth was positive, even in recessions, indicates that these

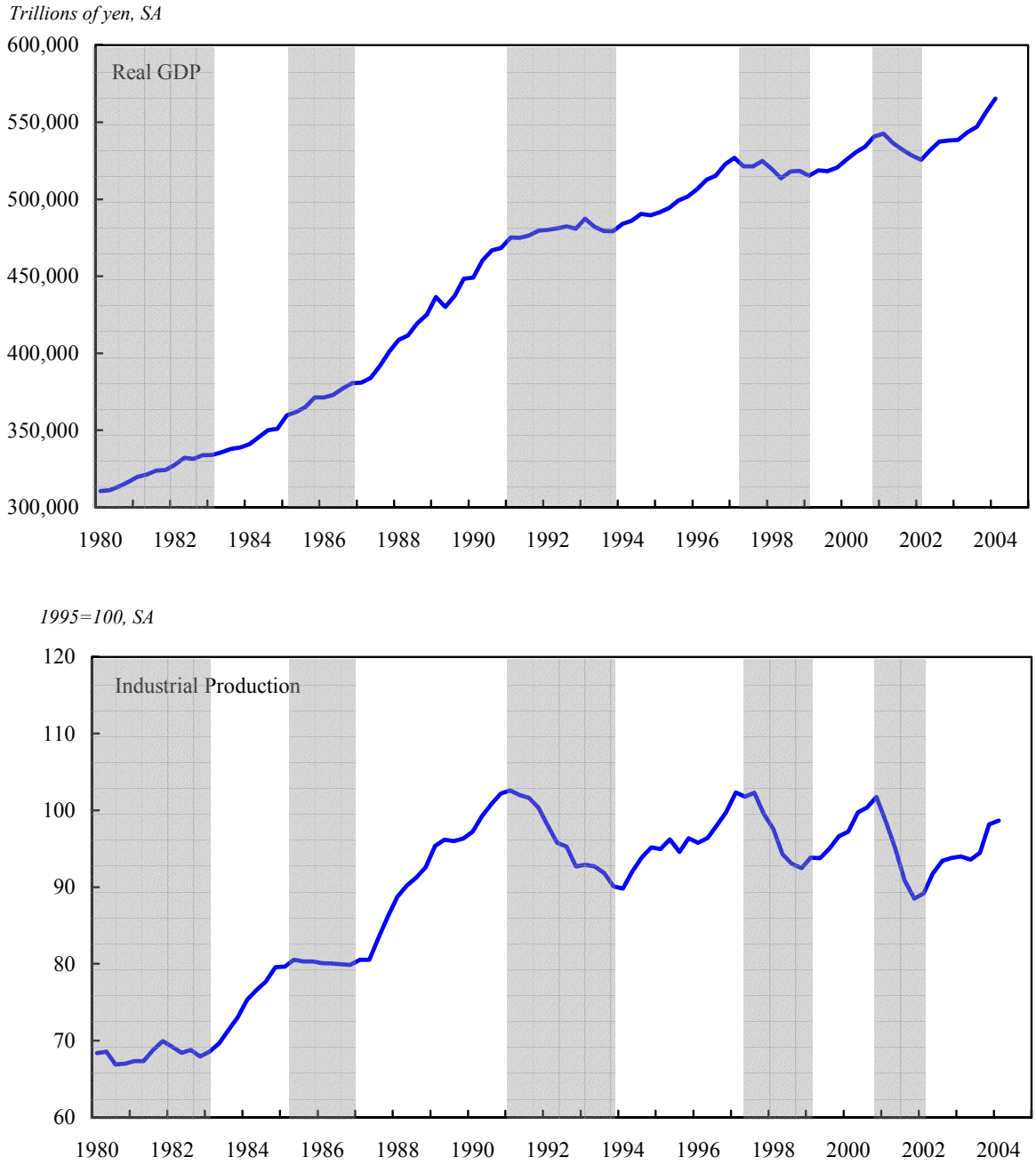
---

[3] Historically (from 1950 to 1980), the average length of a cycle was only four years as opposed to 5½ years and these cycles were asymmetric, with short recessions and longer recoveries—a characteristic that is currently observed in most industrialized economies, but not Japan.

[4] See IMF (2002) for a more detailed discussion of business cycles characteristics in industrialized economies.

[5] Artis, Kontolemis, and Osborn (1997) first noted the result that the duration of recession and expansions are asymmetric in industrialized countries.

Figure I.1. Economic Activity



Source: Cabinet Office.

episodes were "growth recessions."[6] For the last three cycles, the general trend in real GDP slowed and, in particular, was mostly negative during the recessions.

8. **The comparison of the profile of real GDP growth, divided by the two phases, indicates that differences in real GDP growth across cycles are more pronounced in recessions** (Figure I.2). During the first two recessions growth continued, during the third recession real GDP was broadly flat, whereas in the current and previous recessions real GDP declined. In fact, the recession of the current cycle appears to have been the shortest with the most severe decline in output. In contrast, the lower panel of Figure I.2 shows that GDP growth profile for all expansions tends to be similar, with the main notable difference being the length (duration) of the expansion.

9. **A further means to characterize the phase (cycle) is a measure of its deepness (amplitude), which is captured by the change in GDP**. This is equivalent to measuring the extent of output loss (gain) in recession (expansion). The table shows that recessions have become more severe over time. In particular, during the last recession real GDP declined 2.7 percent, while in the first recession output rose 7.6 percent. Differences in output movement have occurred during expansions, owing in particular to the differences in the length of those expansions.[7] Output gains have fluctuated widely during expansions, ranging from 5 percent in the fourth expansion to nearly 25 percent in the second expansion. The increase in output in the current expansion is 7.6 percent; after eight quarters it is somewhat below the 5-cycle average of nearly 11 percent.

Output Loss in Terms of GDP[1]

Cycle	Year of Peak	Recession			Expansion		
		Duration	Amplitude	Quarterly Amplitude	Duration	Amplitude	Quarterly Amplitude
Cycle 1	1980Q1	13	7.6	0.6	9	8.3	0.9
Cycle 2	1985Q2	7	5.2	0.7	17	24.8	1.5
Cycle 3	1991Q1	12	0.9	0.1	14	8.8	0.6
Cycle 4	1997Q2	8	-1.2	-0.2	7	5.0	0.7
Cycle 5	2000Q4	6	-2.8	-0.5	8 [2]	7.6	1.1
Average		9.2	1.9	0.2	11.8	10.9	1.0

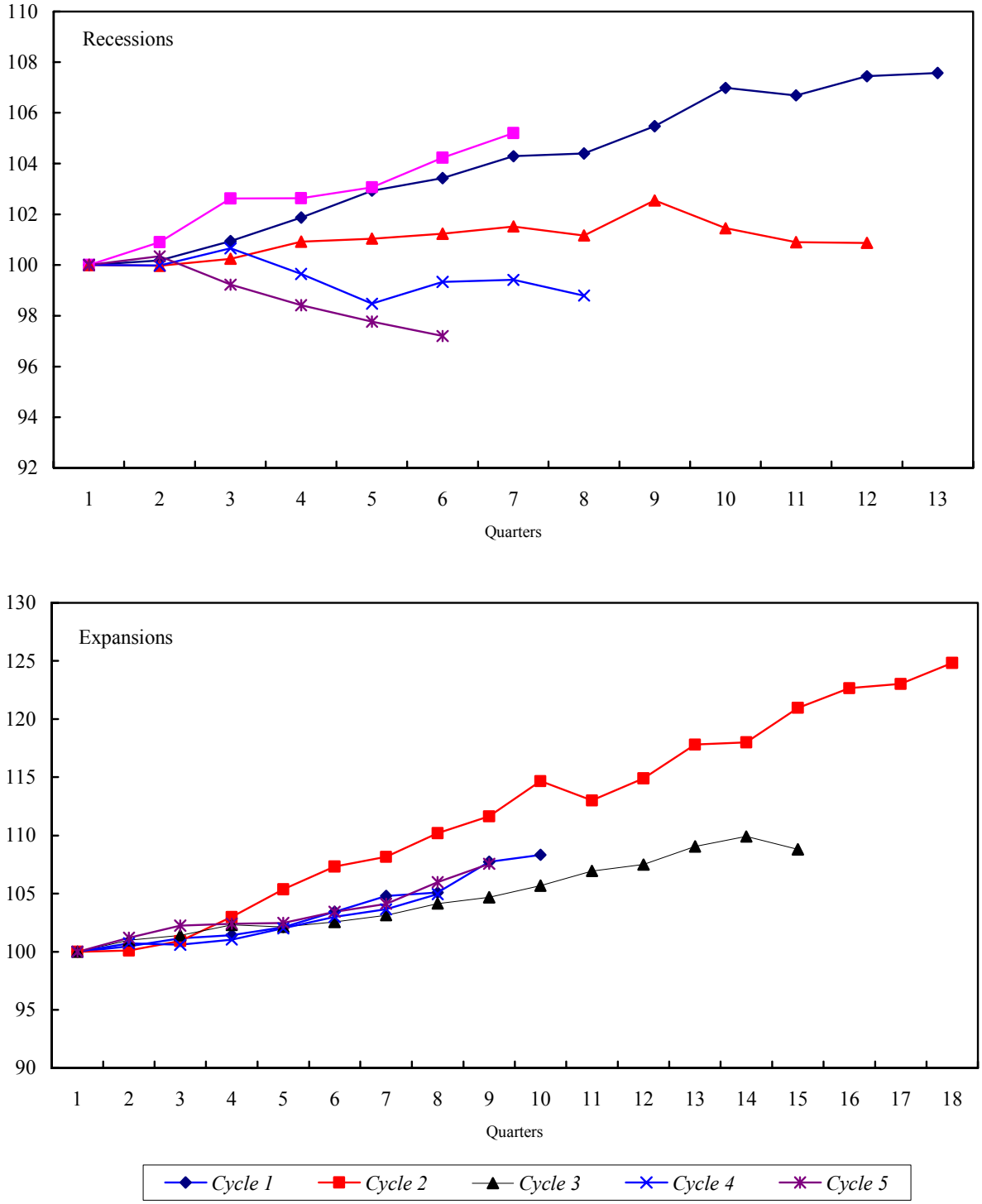
Source: Staff estimates.
[1] Measured as movement in output in percent change.
[2] Current duration is eight quarters.

10. **Another way to calculate output loss is from the perspective of the percentage shortfall of industrial production (IP), measured from the starting peak**. While the

[6] Saito (1997) describes these episodes as growth recessions. Such recessions have also occurred in the United Kingdom and in the United States.

[7] Such differences are reduced if one examines the average quarterly amplitude, as it scales the change in output by the duration of the phase.

Figure I.2. GDP Path During Recessions and Expansions



Source: Cabinet Office and staff calculations.

behavior of IP is similar to GDP, it does not mirror its movement completely (lower panel Figure I.1). The average output loss for the recession phase of the five cycles was 33 percentage points.[8] There are, however, considerable differences among the cycles. For instance, for the first two business cycles industrial production hardly fell over the recession, declining only 3 percentage points below the initial level of IP by the end of the recession. For the last three recessions, output fell by more than 50 percentage points. Not surprisingly, output loss also varied widely for the complete cycle, with production increasing in the first two cycles and declining in the last three.

Output Loss in Terms of Industrial Production[1]

Cycle	Year of Peak	Output Loss	
		Total	Recession
Cycle 1	1980Q1	96.2	-2.9
Cycle 2	1985Q2	258.1	-3.3
Cycle 3	1991Q1	-160.4	-73.4
Cycle 4	1997Q2	-66.3	-38.8
Cycle 5	2000Q4	-97.9	-45.9
Average		5.9	-32.9

Source: Staff estimates.
Note: Output loss (measured in percentage points) is the sum of the percentage shortfall of industrial production from its peak level in each quarter between the peak and the return to peak.

11. **The analysis of output behavior suggests the following key features of Japanese business cycles**:

- Recessions have become more severe over time. The two recessions in the 1980s were growth recessions, where output did not decline. The last recession was the shortest with the largest decline in output;

- Expansions tend to display similar profiles, with the main difference in overall growth stemming from the duration of the expansion.

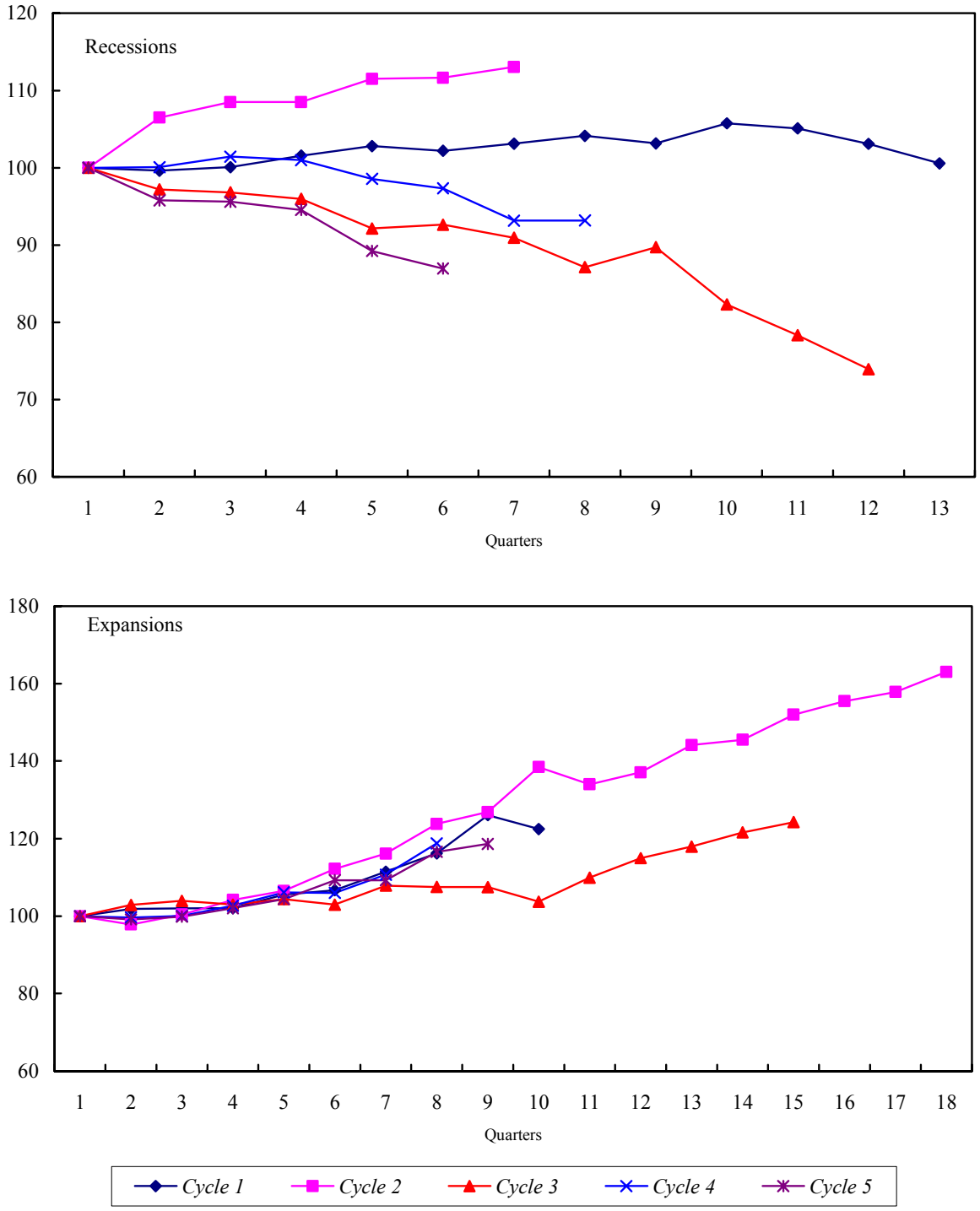
How do expenditure components move over the cycle?

12. **Another key feature of the business cycle is the behavior of expenditure components over the cycle**. As in the case of output, the behavior of the components of aggregate demand can be examined by looking at differences in their profile over the two phases and by considering each components contribution to growth.

13. **The profile of investment differs among recessions as well as between recessions and expansions**. For instance, investment declined sharply in the last two recessions, as it does in virtually all recessions in industrialized countries (see IMF 2002), while it was either stagnant or continued to grow at a more moderate pace in the first three recessions (Figure I.3). This robustness in investment even during recessions possibly foreshadows some of the

[8] This method follows from Romer (1999). Output loss is defined as the sum of the quarterly percentage shortfall of industrial production (IP) from its peak level over the prescribed period (trough or next peak). For example, a recession in which IP is 5 percent below its peak for six quarters would lead to an output loss of 30 percentage points.

Figure I.3. Investment Path During Recessions and Expansions



Source: Cabinet Office and staff calculations.

subsequent problems of over-investment that were experienced in Japan. During expansions, investment behaved similarly across the cycles; it tended to be relatively flat at first and then increase steadily. Figure I.4 (left panels) shows that the behavior of consumption has been similar across both phases of the cycle and more or less mirrored the behavior of output. The only exceptions are stronger than "normal" consumption in the expansion phase of the second cycle and the large drop in consumption in the last quarter of the third cycle. Public demand has tended to move countercyclically, by increasing more rapidly during recessions and rising modestly in expansion (right panels). A notable exception has been the drag of public demand in the last expansion (see further details below).

14. **The contribution to growth of each expenditure component—divided according to the two phases of the business cycle—also reveals the differences these components have played over the business cycle**. During recessions, the major sources of the decline in output were from private investment—fixed and residential—and inventories. During the expansionary phase, private consumption and private investment are important contributors to growth in output. Over the last two cycles, however, the contribution of consumption has become slightly weaker perhaps owing to increased uncertainty and higher unemployment.

Contribution to Growth							
	Cycle 1	Cycle 2	Cycle 3	Cycle 4	Cycle 5	Average	Spread
Recession							
Consumption	4.8	2.6	3.6	0.7	0.7	2.5	4.1
Private investment	0.1	1.8	-5.1	-1.1	-2.3	-1.3	7.0
Residential investment	-0.2	0.5	-0.3	-0.9	-0.4	-0.3	1.5
Public demand	2.0	1.5	3.1	1.6	0.5	1.7	2.6
Inventories	-0.4	-0.2	-0.6	-1.4	-1.2	-0.8	1.2
Net exports	1.2	-1.1	0.2	0.0	-0.2	0.1	2.3
Expansions							
Consumption	3.9	11.1	2.9	1.0	2.1	4.2	4.3
Private investment	2.8	9.5	3.5	2.9	2.9	4.3	4.6
Residential investment	-0.3	1.7	-0.2	0.3	0.0	0.3	0.4
Public demand	0.0	3.0	1.0	-0.2	-0.8	0.6	0.7
Inventories	0.5	0.5	1.3	0.6	1.6	0.9	1.0
Net exports	1.4	-0.9	0.2	0.4	1.8	0.6	0.4

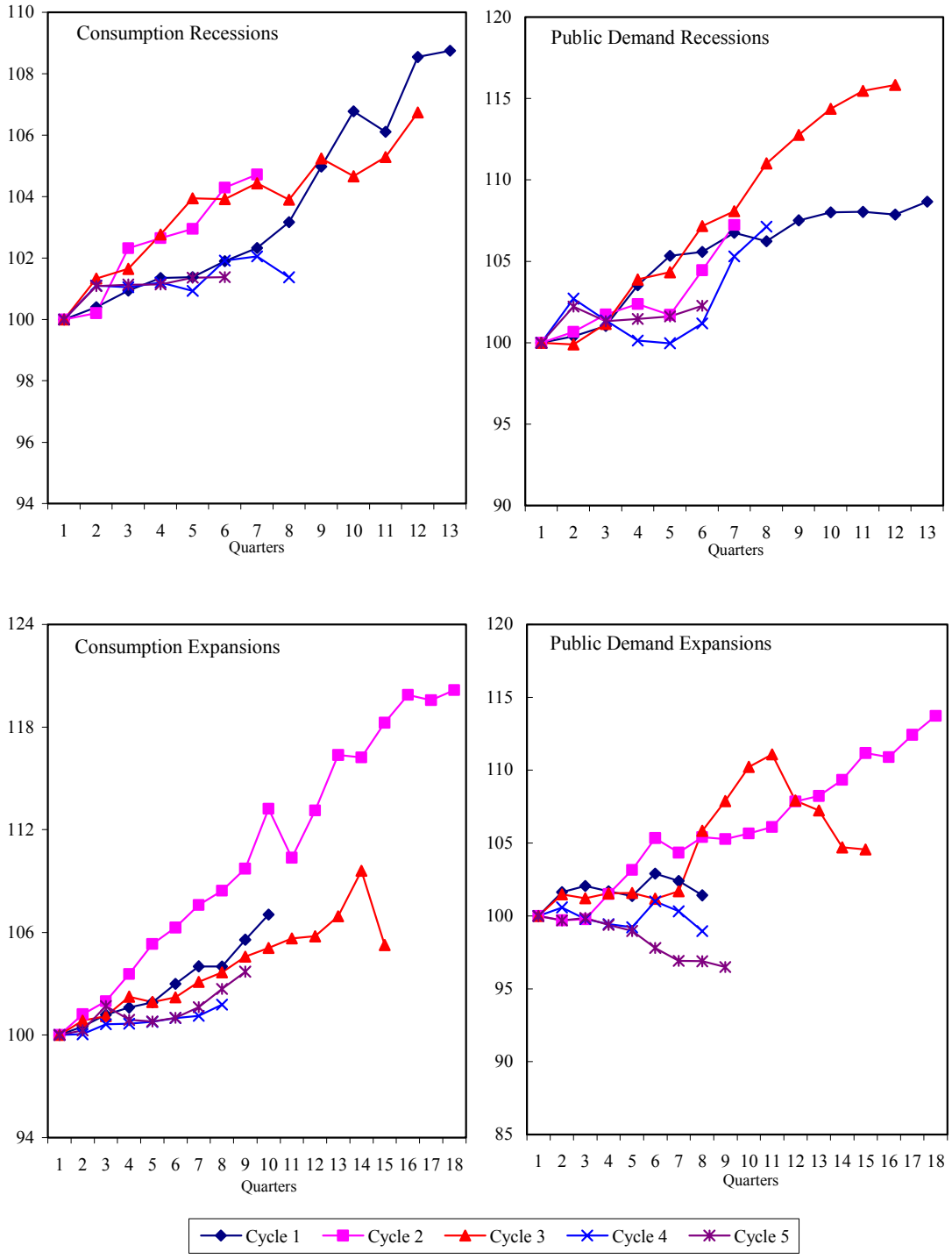
Source: Staff estimates.

How do prices behave over the cycle?

15. **Another important feature of the business cycle is the movement of prices over the cycle**. However, the relationship between prices (goods and asset prices) and business cycles is quite complex and has been extensively debated in the literature.[9] Theory predicts that movements in prices over the business cycle depend on the relative importance of

[9] See for example Kydland and Prescott (1990), Cooley and Ohanian (1991), and Chadha and Prasad (1994).

Figure I.4. Consumption and Public Demand During Recessions and Expansions



Source: Cabinet Office and staff calculations.

different shocks that drive the cycle.[10] For instance, a recession induced by monetary tightening may be associated with an appreciation of the exchange rate and/or a decline in prices, while an exogenous contraction in aggregate demand may be associated with an exchange rate depreciation and/or decline in prices.

16. **Despite these difficulties, several empirical regularities relating to movement of asset prices over the phases of the cycle emerge**. These include:

- The exchange rate tends to appreciate during the recession phase of the cycle—except for the current cycle—and there is no particular tendency during expansions.
- Stock prices tend to decline during recessions and increase during expansions, except for the current expansion.
- Interest rates (short- and long-term) tend to decrease during recessions and there is no particular tendency during expansions.
- Land prices declined during both phases of the cycle, after the bubble burst.
- Inflation (based on CPIs) rose modestly in both phases until deflation set in the late 1990s, and have fallen since then.

The movement in prices is mixed; they tend to behave similarly during recessions and less consistently during expansions.

Changes in Prices Over the Cycle[1]

Cycle	Year of Peak	Exchange Rate	Stock Prices	Short-term Interest Rate	Long-Term Interest Rate	Land Prices	Inflation
Recession							
Cycle 1	1980Q1	-3.2	20.9	-2.9	-1.5	21.2	12.1
Cycle 2	1985Q2	-36.1	40.3	-1.7	-1.2	32.4	0.5
Cycle 3	1991Q1	-19.2	-26.2	-5.8	-2.4	-36.9	3.9
Cycle 4	1997Q2	-2.5	-26.1	-0.1	-0.5	-20.0	0.4
Cycle 5	2000Q4	20.6	-28.6	-0.3	-0.3	-10.2	-1.2
Average		-8.1	-3.9	-2.2	-1.2	-2.7	3.1
Expansions							
Cycle 1	1980Q1	6.4	55.6	-0.5	-1.0	15.6	4.9
Cycle 2	1985Q2	-16.5	41.6	3.3	0.9	126.8	9.3
Cycle 3	1991Q1	10.6	6.1	-1.7	-2.3	-31.9	2.5
Cycle 4	1997Q2	-5.8	2.4	0.1	-0.1	-18.7	-1.4
Cycle 5	2000Q4	-14.2	-8.3	0.0	0.0	-10.3	-0.3
Average		-3.9	19.5	0.3	-0.5	16.3	3.0

Source: Staff estimates.
[1] Measured as cumulative change of variable in percent. Interest rates are in percentage points.

[10] For Japan, see for example, Chadha and Prasad (1994, 1997).

C. Are All Business Cycles Alike?[11]

17. **Another way of assessing whether business cycles are similar is to look at the co-movement among economic indicators and output**. Business cycles may be similar across cycles if economic fluctuations stem from an accumulation of small economic shocks where each shock is unimportant when viewed in isolation, but together can generate fluctuations that look similar. Alternatively, cycles may differ considerably if large infrequent shocks trigger the fluctuations. Such a view is implicit in the description of specific periods such as the bursting of the asset bubble in 1991, the Asian financial crisis in 1997, or the IT bubble collapse in 2000.

18. **Following in the Burns and Mitchell tradition, we study the co-movement of a reference variable**, such as output (measured by real GDP), with various macroeconomic variables. To conduct these tests, we follow the common practice in the business cycle literature and decompose the time series into secular and cyclical components, using an econometric filtering technique.[12] Once the data are filtered, the sample is divided into the five cycles, using the official reference dates. For each of these samples, and the sample as a whole, we compute the cross-correlations between the reference variable and the variable under consideration. A positive (negative) correlation between output and a macroeconomic variable indicates that the variable is procyclical (countercyclical). If the correlation is close to one, then the variable is highly correlated with the cycle, and if it is close to zero, the variable is largely uncorrelated with the cycle or acyclical.

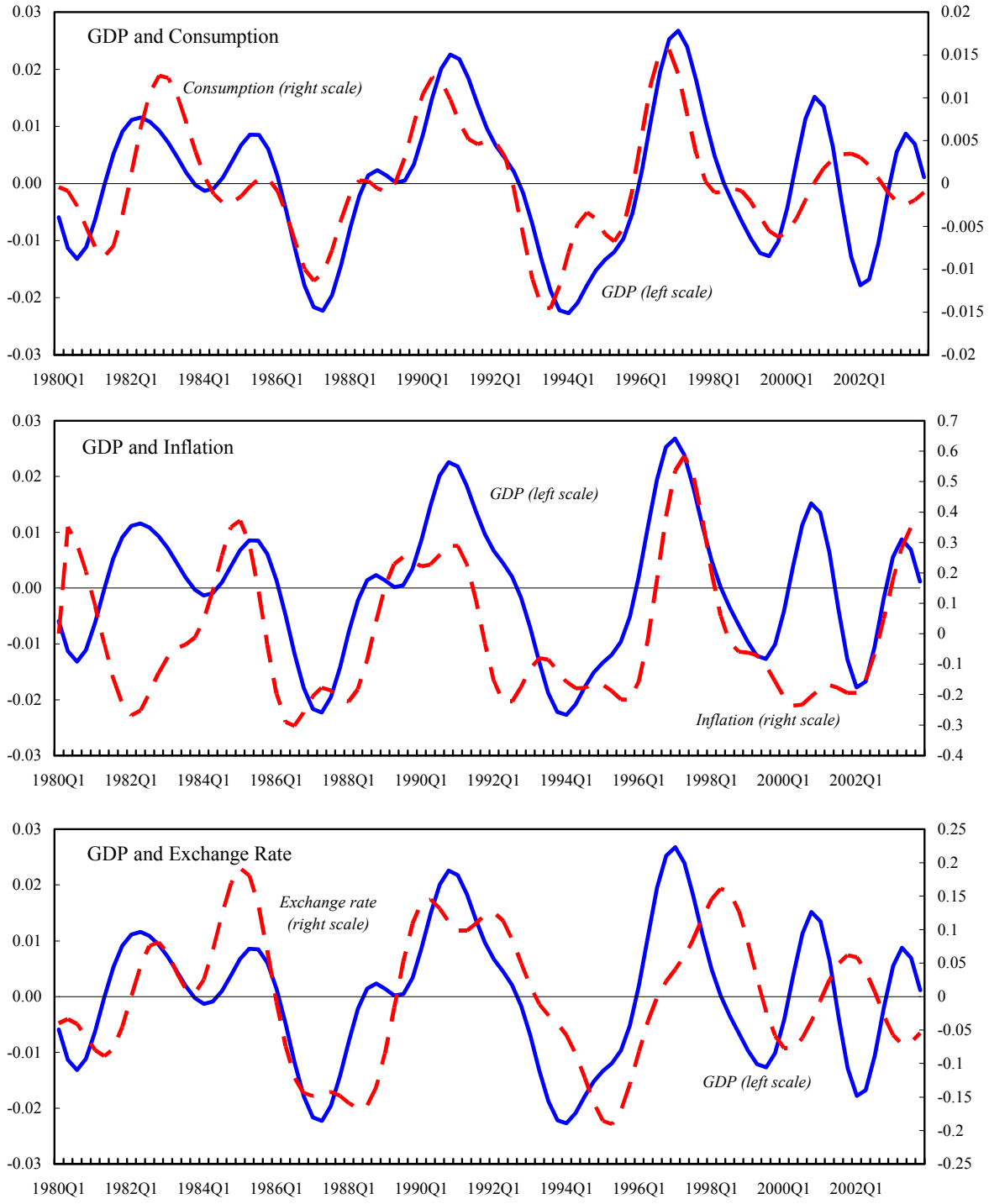
19. **Figure I.5 shows the co-movement of output relative to consumption, inflation, and the exchange rate**. The upper panel shows that there is clearly a highly positive correlation between output and consumption over much of the sample. The bottom panels indicate that inflation and the exchange rate are also positively correlated, but this co-movement is clearly not as strong as consumption. The table below further documents these correlations. For instance, the contemporaneous correlation of expenditure components (consumption and investment) with output is usually highly positive. In contrast, the correlation of stock prices and interest rates tend to be quite low, indicating little co-movement over the cycle. The co-movements of the exchange rate, real wages, and inflation with output have been somewhere in-between these two other sets of variables.

---

[11] The methods employed here are similar to Blanchard and Watson (1986), Cashin and Ouliaris (2003), and Kim, Kose and Plummer (2003).

[12] Specifically, the problem is to decompose a time series y_t into a trend component (g_t) and a cyclical component (c_t) such that $y_t = g_t + c_t$. There are many ways of performing this decomposition: (i) a Hodrick-Prescott (HP) filter; (ii) a band-pass filter (see Baxter and King (1999)); (iii) an optimal band-pass filter using information about the business cycle (Corbae and Ouliaris (2003)). In the exercise above, each time series was filtered by all methods, but only the results for the Corbae/Ouliaris filter method are reported.

Figure I.5. Cyclical Movements



Source: Staff estimates.

Co-Movement of Variable with Output[1]						
	Whole Sample	Cycle 1	Cycle 2	Cycle 3	Cycle 4	Cycle 5
Consumption	0.7	0.5	0.9	0.9	0.8	-0.5
Business investment	0.9	0.8	0.9	0.9	0.9	1.0
Real wages	0.5	0.2	-0.1	0.8	0.9	0.3
Yen-dollar exchange rate	0.5	0.5	0.8	0.6	0.1	-0.7
CPI inflation	0.5	-0.6	0.8	0.8	0.7	0.3
Stock prices	0.2	0.4	0.1	0.1	0.3	0.8
Long-term interest rates	0.1	0.4	0.8	0.7	-0.1	0.2

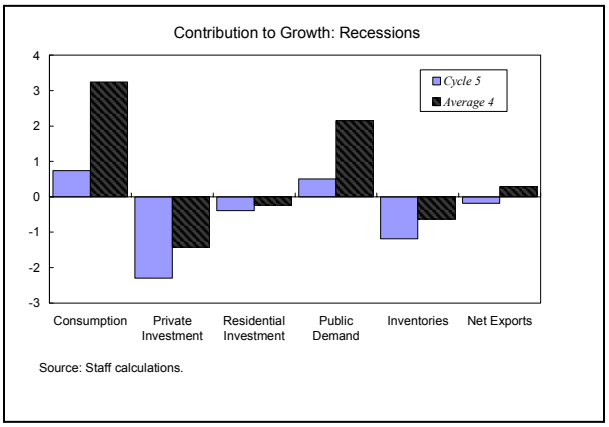
Source: Staff estimates.
[1]All data in the table are in logarithms (except interest rates) and detrended using Corbae-Ouliaris filter.

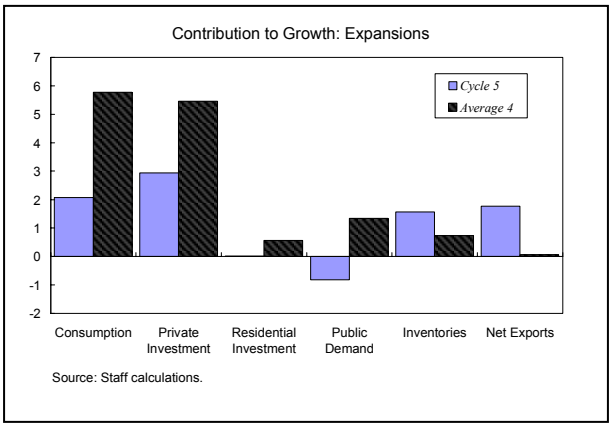
20. **These co-movements also differ widely across cycles**. For instance, the co-movement of consumption with output in the first four cycles is high (0.8) and positive, but for the current cycle the co-movement is negative (-0.5). This result may be reflecting the weak labor markets and sluggish household income growth that has led to lackluster consumption growth. Another striking difference is the unusually high correlation of real wages in the third and fourth business cycles. This increased association may be linked to the declines in real wages and output after the bubble burst. In general, these differences suggest that all business cycles are indeed not alike.

D. Is the Current Cycle Different?

21. **While business cycles are persistent features of market-oriented economies and share many common elements**, they also have distinguishing features that make each cycle unique. There are two notable differences in the current business cycle. First, the recession phase of the current business cycle differs from the previous cycles as it was shorter than previous cycles and the decline in output was particularly pronounced. Second, the behavior of expenditure components has differed:

- Business fixed investment has played a larger role, relative to other expenditure components, in both the recession and expansion phase than in the past;
- Private consumption has contributed only modestly to growth in the early stages of this expansion rather than being the driving force of the expansion;





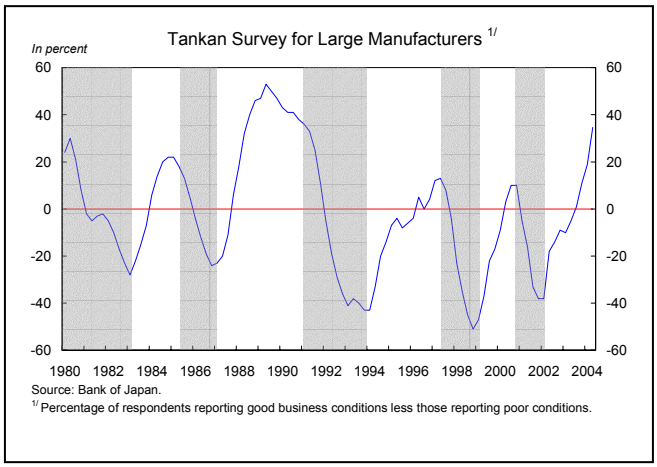
- Public demand has contributed less to growth in this recession than in the past. Furthermore, it has been a drag on the economy in the current expansion;

- Net exports contributed to the slowdown in output in the recession, but have provided early and continuous stimulus to the economy during the expansion phase.

E. Is the Current Recovery Sustainable?

22. **The current recovery has continued to exceed growth expectations**. A key question remains as to whether this recovery can be sustained for a long period or whether as with earlier recoveries after the bursting of the bubble it too will falter. All indicators suggest that the current recovery is likely to be more durable than the previous recoveries in the 1990s for the following reasons:

- First, the current expansion is more broadly based than previous expansions, with a firmer basis in private domestic demand. Furthermore, investment is apt to be sustained going forward by strong corporate profits and improving business sentiment. In addition, consumption has begun to strengthen against the backdrop of rising consumer confidence and firming labor market conditions;



- Second, corporate restructuring has fostered structural gains in profitability, which should also support investment going forward. In this expansion firms have progressed in cutting excess leverage and labor cost, improving their position to reap profits as demand grows. (See Chapter III for further discussion);

- Third, the corporate and financial sectors have become more resilient to economic shocks. Firms have deleveraged and banks have shed nonperforming loans and equity holdings. As a result, these sectors are less vulnerable to shocks such as a drop in stock market prices.

23. **While the economy is well positioned for a continuing recovery**, additional progress in policy reforms would further help to promote a self-sustaining recovery that will enable the economy to withstand being buffeted by most economic shocks. As noted earlier, one striking difference between business cycles in the United States and Japan is that U.S. recessions are short-lived partly because of a highly flexible and mobile economy that enables a rapid response to negative economic shocks as exhibited in 2001. In contrast, in the post-bubble environment imbalances in Japan were allowed to linger rather than being resolved quickly.

F. Conclusions

24. **This paper documents the key features of the Japanese business cycle during the period 1980–2003**. Since the empirical methodology does not impose any strong theoretical priors on the data, it allows us to focus on the simple regularities observed in the data.

25. **The key characteristic of the Japanese business cycle is that it lasts about 5½ years, slightly shorter than other industrialized countries**. However, the duration of recessions and expansions is quite different from other industrialized countries. In Japan, recessions and expansions are roughly of equal length, whereas in most industrialized countries there is greater asymmetry, with recessions lasting one year and expansions extending five years.

26. **The results also suggest that there are considerable differences in the behavior of output and prices across the five business cycles**. This difference appears to be even more pronounced in the last cycle. For instance, the largest decline in output occurred in the recession of the current cycle. Also, the behavior of the expenditure components over the current cycle has been somewhat different from previous expansions. For instance, public demand has been a drag on the economy in the current expansion.

27. **Finally, the pace of the current recovery has quickened and it appears to be broadening and becoming more durable**. Furthermore, most economic indicators point to continuing signs of improvement. It seems that the recent progress in addressing Japan's underlying structural problems has led to a more favorable growth picture for the period ahead.

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II. Recent Financial Sector Developments and Policies[1]

A. Introduction

1. **This paper reviews recent financial system developments and policies**. The starting point is the Financial System Stability Assessment (FSSA) report of August 2003, which provided a broad assessment of the financial sector. The FSSA concluded that the bank-dominated Japanese financial sector remained fragile notwithstanding a series of policy measures and that financial sector weaknesses had held back prospects for a sustained recovery. The recommendations of the FSSA and their current status are summarized in Box II.1.

2. **Recent financial sector developments indicate that the economic recovery and steady regulatory pressure have improved the health of the financial system**. Stronger economic growth and an increase in equity prices have improved the quality of bank assets and capital, and steady regulatory pressure has facilitated deleveraging and restructuring. Financial stability is improving in line with the economic recovery and the government safety net has proven to be effective, although some signs of vulnerability remain.

3. **The structure of paper is as follows**. Section B describes the recent performance and policy issues with respect to the banking sector, insurance sector, and public financial sector. Section C assesses the stability of the financial sector and Section D summarizes the broad policy implications.

B. Recent Performance and Policy Issues

Banks

Recent performance

4. **The banking system is becoming healthier in the context of the recovery and financial policies**. Balance sheet stresses are easing as the quality of assets and capital improves. However, there is increasing divergence among banks and aggregate operating profits of the sector have not picked up.

5. **Bank net income improved during FY2003 (ended March 2004)**. For the first time in three years five of the seven large bank groups posted positive net income, mainly due to a large turnaround in the value of equity holdings as well as lower credit costs (losses stemming from loan provisioning, write-offs and sales) brought on by the recovery and ongoing restructuring efforts of the banks.[2] Net income of the 89 listed regional banks (which

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[1] Prepared by Mark Stone (ext. 36532) and Peter Hayward.

[2] These comprise seven major banking groups: Mizuho Financial Group (Mizuho Bank, Mizuho Corporate Bank, Mizuho Trust Bank); Mitsubishi Tokyo Financial-Group (The Bank of Tokyo-Mitsubishi, Mitsubishi Trust and Banking); UFJ Holdings (UFJ Bank, UFJ Trust Bank); Sumitomo Mitsui Financial Group (Sumitomo Mitsui Banking Corporation); Resona Bank; Mitsui Trust Holding (The Chuo Mitsui Trust and Banking); and, Sumitomo Trust.

Box II.1. FSSA Key Policy Recommendations

The FSSA recommended a number of policy measures to strengthen the banking system and improve financial supervision. During the past year, steps consistent with these recommendations have been taken:

- *Improve recognition of and provisioning for problem loans*

Recommendation: make more extensive use of forward-looking expected loss estimates, rather than relying on historical loss experience for provisioning; allow provisions required by the supervisors to be recognized as a cost for tax purposes, thus making it easier for banks to provision against bad loans;
Steps thus far: the FSA made changes to its inspection manual, encouraging large banks to use the forward-looking discounted cash flow (DCF) method in provisioning on loans to large borrowers (greater than ¥10 billion) classified as "need special attention" or below. In addition, either the DCF or the expected loss amount method can be used for large bank provisioning against classified loans for other borrowers. The tax treatment of losses has been eased somewhat with the extension of the loss carry forward period from 5 to 7 years.

- *Strengthen bank capital*

Recommendation: to improve the quality of bank capital, limit the use of deferred tax assets (DTAs) in regulatory capital; and to hold all banks to a rigorous capital standard, raise the capital requirement for all domestic banks to at least 8 percent (it is 4 percent for banks that are not internationally active);
Steps thus far: the FSA asked major banks to enhance the disclosure of information about DTAs and continues to encourage external auditors to strictly assess DTAs. Also, the Japan Institute of Certified Public Accountants (JICPA) requested audit firms to conduct stricter audits with respect to the confirmation of DTAs.

- *Recapitalize banks subject to strict conditionality*

Recommendation: adopt a broad restructuring strategy under which systemically important, undercapitalized banks that are unable to raise sufficient capital in the market would be taken over, recapitalized, brought under new management, and reprivatized;
Steps thus far: the Diet passed a law in June aimed at regional financial institutions providing for preemptive recapitalization on a voluntary basis.

- *Bolster bank governance*

Recommendation: require banks to adopt corporate governance reforms consistent with Basel Committee guidelines, including outside directors and a board audit committee;
Steps thus far: following government intervention one banking group has changed its governance structure to the audit committee system option provided by the April 2003 revisions of the Commercial Code.

- *Strengthen supervision*

Recommendation: in order to improve the FSA's effectiveness, give the FSA full operational autonomy, confine its responsibilities to supervision, provide it with additional resources, and continue to enhance its human capital;
Steps thus far: the FSA has enhanced the expertise of its staff by developing specialists in banking, securities, and insurance and is hiring private sector experts such as CPAs, lawyers, actuaries and reinsurance specialists.

- *Government involvement in the financial sector*

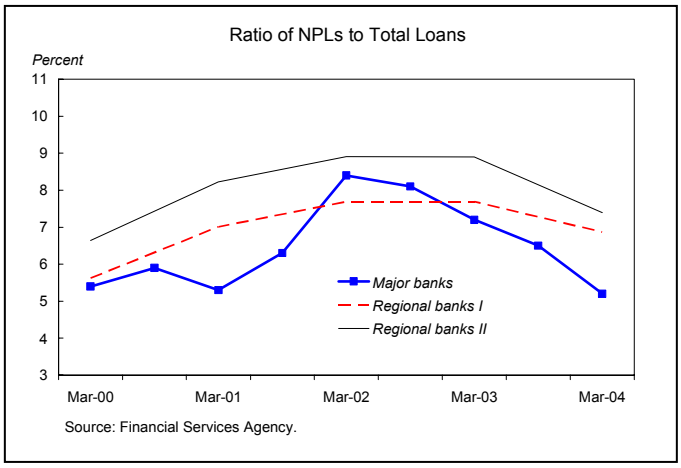
Recommendation: limit the preferential treatment accorded to public financial institutions and restrict the activities of Japan Post, Kampo and the government lending agencies;
Steps thus far: in April 2004 the Council on Economic and Fiscal Policy issued a paper listing issues to be discussed for the privatization of Japan Post. In addition, the lending of government financial institutions is expected to be reduced by half (as a ratio to GDP) in the future.

account for about 40 percent of bank credit) also improved with only five reporting net losses in FY2003 compared with 24 the previous year.

Net Income and Operating Profits, Seven Major Banking Groups, Fiscal Years 2002 and 2003 (Yen trillions)		
	FY2002	FY2003
Net operating profit	4.56	4.44
- Loan loss charges	5.43	4.04
+ Equities, net	-3.14	0.63
+ Other	-0.49	-0.22
- Taxes, minority interests	0.12	1.45
= Net income	-4.62	-0.64
Memorandum item:		
Net income (excl Resona)	-3.78	1.03
Net income (excl Resona and UFJ)	-3.17	1.43
Source: Fitch Ratings.		

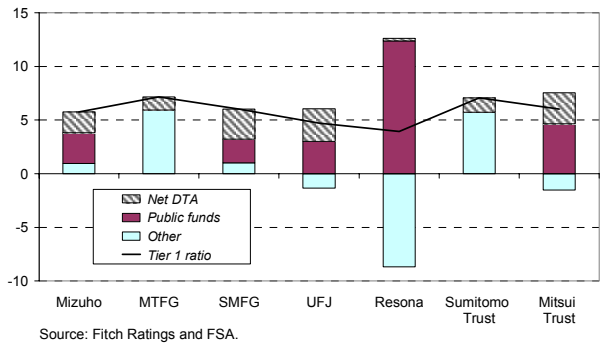
6. **Higher equity values, in turn, led to improvements in the adequacy and quality of bank capital in FY2003**. Furthermore, the ratio of deferred tax assets (assets recognized as possible tax refunds based on future positive earnings projections and counted as regulatory capital) to tier 1 capital of the major banks (excluding the Resona Bank) was reduced from 58 percent in March 2003 to 39 percent in March 2004. Capital adequacy for the 89 listed regional banks improved in FY2003, although 17 regional banks still had capital-to-asset ratios of below 8 percent.

7. **The major banks are on course to meet the government's target of halving the aggregate nonperforming loan (NPL) ratio to about 4 percent by April 2005**. The recent reduction in NPLs is accounted for by sales of written down loans, foreclosure and other court action, and corporate restructuring, as evidenced by declining corporate leverage. The reduction reflects several years of steady regulatory pressure. Regional banks reduced their average NPL ratio during FY2003 although it remains above that of the major banks.



8. **Notwithstanding these favorable trends there are several areas of remaining concern**. First, operating profits have not improved. While banks managed to reduce operating costs in FY2003, net interest income also declined as overall bank lending continued its trend decline. Also, the loan-deposit interest rate spread remained broadly unchanged year over year. On a more positive note fee income of the large banks increased, suggesting that banks are beginning to tap new and less risky revenue sources.

9. **In addition, two large banks experienced difficulties**. Resona bank was found to be undercapitalized last year and is undertaking substantial restructuring. UFJ, based on the inspection results by the FSA and discussions with auditors, significantly increased provisions and marked down earnings. Reflecting the troubled status of these two banks the level and quality of capital varies sharply across the seven major banks.



10. **Finally, the lack of improvement in bank operating profits argues for a further strengthening in bank governance**. Historically bank boards included few or no outside directors. The insular governance structure goes hand in hand with the slow pace of adoption of sophisticated risk management systems (the FSA is working with the banks to improve these systems as described in the next section) and new product development. Revisions to the Commercial Code in April 2003 gave companies a new governance structure option that includes board of director committees with majority outside directors and outside auditors. However, this new option has been adopted only by Resona bank following government intervention. In addition, four banks have taken on a small number of outside directors.

Policy issues

11. **The government has continued to implement new policies in support of financial sector restructuring**. These were reflected in the Program for Financial Revival (PFR)—announced in October 2002—which is intended to reduce major banks' NPL ratio to about half by FY2004 and create a stronger financial system to support structural reform and higher economic growth. The main elements are as follows:

- *Use of the discounted cash flow (DCF) method for large bank provisioning*—The FSA made changes to its inspection manual encouraging large banks to use the DCF method in provisioning on loans to large borrowers (greater than ¥10 billion). In addition, either the DCF or the expected loss amount (based on default rates or the probability of bankruptcy) method can be used for large bank provisioning against classified loans for other borrowers. Other banks can use DCF on a voluntary basis, although there is limited information on the extent to which they have done so;

- *Recognition of provisions as a cost for tax purposes*—The tax authorities only recognize provisions against the worst categories of loans as an allowable expense for the calculation of taxable income. In response to an FSA proposal, the tax authorities have extended the carry over period for provisioning from 5 to 7 years applied to deficits incurred beginning on FY2001. In addition, the FSA considers that further tax

reform is needed and may request tax reform measures to facilitate the reduction of DTAs by the end of August 2004;

- *Reduction in DTAs*—In addition to proposals regarding the taxation of loan provisions in October 2003, the FSA requested major banks to enhance the disclosure of information on future taxable income, which forms the basis for DTAs;

- *Special inspections of large borrowers of large banks*—The FSA conducts several types of special inspections to foster bank restructuring. The results of the most recent round of special inspections announced in April indicated that the amount large banks needed to set aside for the nonperforming loans of inspected borrowers decreased by one-third during FY2003. In addition, the number of borrower downgrades and upgrades was about the same, whereas in the previous inspections downgrades had been greater. Also, the FSA has begun a new type of inspection focused on banks' credit risk management for large borrowers;

Results of Special FSA Inspections

	March 2003		September 2003		March 2004	
	Number of debtors	Credit (Yen trillions)	Number of debtors	Credit (Yen trillions)	Number of debtors	Credit (Yen trillions)
Total	167	14.4	161	13.1	133	10.5
Upgraded	17	1.9	6	0.3	23	1.3
Unchanged	119	9.9	131	10.9	82	6.9
Downgraded	27	2.4	24	1.9	26	2.2
Removed from balance sheet	4	0.2	--	--	2	0.1
NPL disposal losses		1.3		0.9		0.4
Write-offs		0.8		0.3		0.4
Higher provisions		0.5		0.6		0.0

Source: FSA.

- *Disclosure of the gap between major banks' self-assessments and the results of FSA's regular inspections*—Three rounds of inspections concluded that the gaps between the assessments of the banks and those of the FSA have narrowed considerably.

12. **The authorities are also devoting more attention to the regional financial institutions**:

- *Plan to improve the operation of regional financial institutions*—In March 2003 the FSA formulated an "Action Program concerning Enhancement of Relationship Banking Functions" to "solve the NPL problem by enhancing functions of relationship banking and taking steps to revitalize SMEs and activate regional economies." As of October 2003 some 626 financial institutions had submitted detailed plans;

- *New framework for public fund injection*—This is aimed at regional financial institutions with a view to encouraging management reform, and revitalizing local economies. Institutions would submit applications to the Deposit Insurance Corporation including a plan with numerical profit targets and measures to revitalize the local economy. The plan would be assessed against a publicly reported list of standards. Bank capital would be essentially in the form of preferred stock while capital for cooperatives would be preferred stocks or subordinated loans. The framework is supported by ¥ 2 trillion in the government budget and is available until March 2008.

13. **Finally, several steps have been taken ahead of the further partial withdrawal of deposit insurance in April 2005**. At that time, protection will be limited to the first ¥10 million of the interest and principal of interest-paying demand deposits.[3] Financial institutions are expected to offer fully-protected zero-interest deposit accounts for settlement purposes (withdrawal is allowed any time on demand) with a view to minimizing possible disruptions.

Insurance sector

14. **The financial conditions of the six major life insurance companies improved in FY2003 as the sharp rise in stock prices more than offset a smaller fall in bond prices**. The rise in equity prices helped boost the solvency margin at six insurers to 791 percent, compared to 555 percent a year earlier.[4] Also, operating performance was improved by cost cutting and better fund management. However, all of the major six life insurers continued to report that the decrease in the amount of policies due to surrender, lapse and termination of policies exceeded the amount of new policies they sold. Moreover, investment returns continue to lag behind the guaranteed yields the insurers promised to pay holders of policies in the past resulting in a "negative spread".

15. **The performance of the nonlife insurance companies is also improving**. Higher equity prices reduced capital losses and valuation losses on stockholdings of the ten major nonlife insurers all of whom posted a net profit for FY2003 compared to four insurers that incurred a net loss in FY2002. The solvency margin ratio also improved for all ten, although premium revenue declined for seven of the large insurers.

16. **The major policy change for the life insurance industry is an amendment to the Insurance Business Law aimed at providing an incentive for insurers to shore up their balance sheets**. The amendment allows companies, under restrictive conditions, to reduce the guaranteed yields for existing policies with the support of representative shareholders.

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[3] Withdrawal of the full guarantee for time deposits was completed in April 2002.

[4] Insurance companies in Japan must satisfy a minimum solvency margin which is the ratio of available capital and surplus to a measure of insurance risk, assumed interest rate risk, asset management risk and operational risk.

Lower guaranteed yields would reduce losses and lead to healthier balance sheets. That said, market analysts suggest that companies may well not reduce their guaranteed yields since this would be tantamount to admitting that the company is not viable in the longer run.

Public financial sector

17. **The public financial sector, consisting of Japan Post and the nine government financial institutions (GFIs), plays a key role in Japan's financial system**. Japan Post—the largest deposit-taker in the world—offers payment services and life insurance products and is exempted from the deposit insurance premium and corporate taxes. The nine GFIs are state-owned and specialize in lending (with one exception). The Government Housing Loan Corporation (GHLC) has 30 percent of total mortgage loans and the public sector accounts for about 20 percent of all loans to SMEs.

18. **Japan Post is contracting but still accounts for a large share of total deposits and life insurance**. Deposits amounted to ¥227 trillion at end-March 2004 (about one-quarter of total financial system deposits), down from the peak of ¥260 trillion in March 2000. Funds deposited with Japan Post's insurance company, Kampo, amounted to ¥119 trillion at end-March 2004.

19. **In April 2004 the Council on Economic and Fiscal Policy issued a paper listing issues to be discussed with regard to the privatization of Japan Post**. The key issues include the maintenance of the post office network, and the need for due consideration of employment levels (staff now totals about 280,000). Privatization is expected to start in 2007 and be completed 5–10 years from then. The long transition is seen as appropriate by the government and similar to the experience of other countries. The government guarantee would likely remain in force for deposits and insurance policies in place prior to privatization, while post-privatization deposits and policies would be covered under the same system as applies to the private sector. For instance, Japan Post would be expected to make premium payments to the Deposit Insurance Corporation and pay tax on any profits. A final report with specific recommendations is expected to be issued by the Council around the fall of this year.

20. **GFI reforms are also underway**. The ministries overseeing GFIs delegated the inspection of their risk management to the FSA from April 2003 to help bring GFI practices more in line with those of private financial institutions. This and other reforms are aimed at imposing greater market discipline and improving information disclosure.[5] The GHLC is shifting its main focus to securitizing housing loans originated by private lenders and will be reorganized by FY2006 into an independent administrative agency.

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[5] Japan Post was used to finance the GFIs, special public corporations, and local governments via the Fiscal Investment and Loan Program (FILP). The compulsory transfer of funds from Japan Post to FILP was abolished in April 2001.

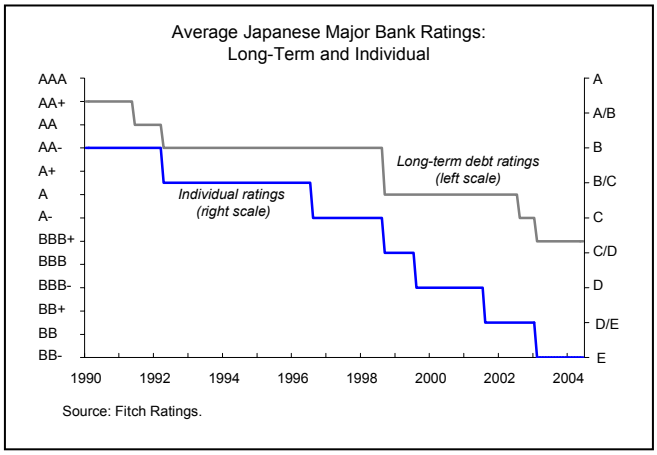
C. Updated Assessment of the Financial Sector

21. **The systemic stability of the financial system has improved during the past year**. Large exposures to major problem borrowers are slowly being reduced as growth picks up. There are as yet no signs of banking strains ahead of the April 2005 cutback in deposit insurance coverage. Cross-shareholdings between banks and insurers have declined significantly, thus reducing the potential systemic implications of the insurance industry (although insurance companies remain the major investor in bank preference shares and banks are the major investors in insurance company capital instruments). Further, Japan's strong external position means that the banking system is not vulnerable to external shocks. Systemic risk continues to be mitigated by an effective government safety net and the government's willingness to recapitalize troubled banks.

22. **Banks' aggregate market risk exposures are also likely to have improved**. An increase in interest rates would impose larger capital losses on the major banks owing to their increase in JGB holdings from 10 percent of assets in FY2003 to 15 percent in FY2004 (the FSA says that banks actively hedge interest rate risk). At the same time, higher rates would likely be accompanied by higher growth and a resumption of inflation which should widen credit spreads, lower credit costs, and lift stock prices and loan growth. Although bank equity portfolios have shrunk in relation to capital they remain large and thus banks remain vulnerable to a fall in equity prices.

23. **Notwithstanding these improvements, signs of vulnerability remain**:

- Many individual banks are still weak. The intervention of two large banks during 2003 and the higher loan write-downs by UFJ in the spring of 2004 suggest that adjustment may not be complete for the industry as a whole;
- A number of regional banks, which in many regions are dominant lenders, have significant weaknesses which have not yet been resolved;
- Although capital ratios appear satisfactory, weak core earnings means any loss has an impact on capital rather than simply on that year's net income;
- A large share of capital, especially for the major banks, still consists of DTAs and government-owned preference shares;
- The inherent financial strength of banks as indicated by ratings remains quite low. In recent months most of the major banks have been upgraded by the major rating agencies. However, the gap between their individual ratings (which abstract from government support) and bank long-term debt ratings remains quite wide, and the individual ratings of Japanese banks remain much lower than those of large international banks which are in the AA- to AA+ range.



D. Broad Policy Implications

24. **A strengthening of financial policies could further enhance the stability of the financial system**. Recent financial developments indicate that the stability of the financial sector has improved with the economic recovery and with steady regulatory pressure. Stability could be further improved by policies aimed at boosting the quality of bank capital, improving bank governance, reducing competition from the public financial sector, and rationalizing the regional banks.

25. **Looking ahead, the focus of financial policy may gradually shift from entrenching stability to ensuring that the financial sector fully contributes to economic growth**. The long period of adjustment of the financial sector following the bursting of the bubble in the early 1990s has helped hold back economic growth. The contribution of the financial sector to growth could be enhanced by intensifying competition in the financial sector with a view to improving the performance of the banks and developing nonbank sources of private sector financing.

III. Recovery of Japanese Firms[1]

A. Introduction

1. **The financial health of Japanese firms has improved significantly over the last several years, following a long period of sluggishness during the 1990s**. Reflecting the economic expansion and the fruits of past restructuring, nominal profits of listed firms set an all-time record in FY2003, business sentiment as reflected in the BoJ's June 2004 *Tankan* survey rose to the highest level since the late 1980s, and bankruptcies have steadily declined.

2. **This chapter reviews trends in key corporate sector indicators since 1990**, focusing mainly on corporate profitability and debt. It sets these developments in a longer-term context by making comparisons with data since 1980. This chapter also describes various characteristics of the recent corporate sector recovery, the strongest recovery since 1990, to facilitate a better understanding of the underlying forces driving it.

3. **In doing so, the following questions are posed**:

- What progress has been made since 1990 in restoring the corporate sector to health?
- What are the main remaining problems?

4. **The main findings are as follows**:

- Overall, firms have made good progress in reducing the problem of the "three excesses" in debt, production capacity, and employment, although there is clearly still room for further improvement;
- Profitability in relation to sales has improved due to extensive cost reductions. However, many firms still have unproductive assets. Therefore, additional downsizing of these assets as well as increases in sales are key to further improving profitability.

5. **The rest of the chapter is organized as follows**. Section B chronologically describes how firms ameliorated the three excesses and low profitability. Developments are discussed in terms of three phases: 1990–1995, the immediate aftermath of the asset price bubble; 1996–2000, the decline in sales and prices; and 2000–2004, the marked profit recovery. Following that discussion, developments of debt, capacity, employment, and profitability are examined more closely in Section C, with a focus on differences across sectors and remaining problems.[2] Section D concludes by pointing to other remaining problems affecting the Japanese corporate sector, particularly weak industries and regions.

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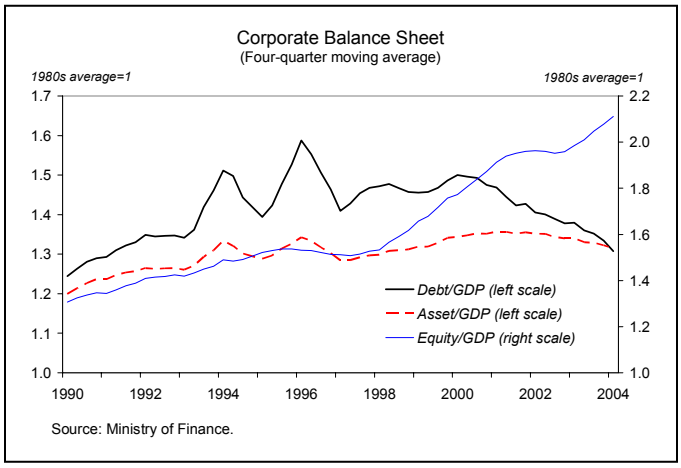
[1] Prepared by Takuo Komori (ext.37613).

[2] This discussion also uses data for the United States as comparative benchmarks although simple cross-country comparisons are not always appropriate.

B. Corporate Problems and Recovery

Corporate Malaise (1990–1995)

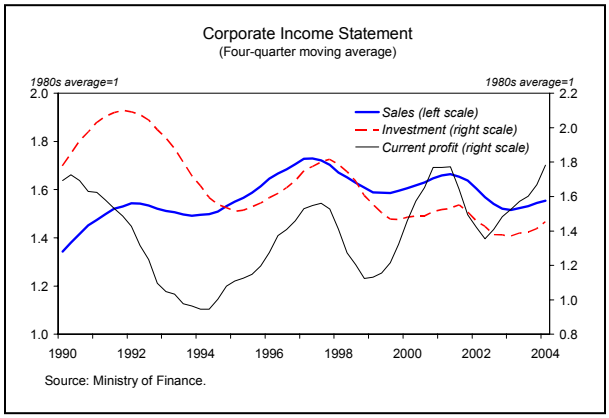
6. **Following a period of high investment and employment in the late 1980s and early 1990s, the Japanese corporate sector entered a prolonged slump in the 1990s**. During the late 1980s and early 1990s, overly optimistic business plans amid an asset-price bubble encouraged excessive investment and employment. The bursting of the late 1980s asset price bubble then triggered a deterioration in the health of the corporate sector. Most importantly, the capital loss from the decline in real estate prices, which reached over ¥1,100 trillion (over 230 percent of GDP), hurt the financial capacity of firms, particularly because most corporations relied on real estate as key collateral for borrowing. After the collapse of the asset-price bubble and subsequent economic downturn, firms regarded their debts as excessive compared with sales; manufacturing firms experienced sharp drops in capacity utilization rates; and firms also had more workers than desired although they failed to curb payments to workers.



Historical Development of Selected Indicators			
	1980s Average	1993–1999 Average	Recent Data
Debt			
Debt/sales[1]	2.3	2.9	2.7 [2]
Debt/equity (percent)[1]	454	365	231 [2]
Production capacity (manufacturing firms)			
Corporate judgment (diffusion index)[3]	6	20	5 [4]
Capacity utilization ratio	107	99	102 [5]
Employment			
Labor compensation/national income (percent)	67	72	73 [6]
Labor cost/value-added	0.71 [7]	0.74	0.74 [6]
Corporate judgment (diffusion index)[3]	-1	12	4 [4]
Profitability			
Profit/sales (percent)[1]	1.7	2.1	3.2 [2]
Profit/assets (ROA) (percent)[1]	3.9	2.3	3.3 [2]

Source: MoF, BoJ, CAO and METI and staff calculations.
[1] Four quarter moving average.
[2] Quarterly data (2004 1Q).
[3] "Excessive" minus "insufficient".
[4] Quarterly data (June 2004 Survey).
[5] Monthly data (April 2004).
[6] Annual data (2002).
[7] Data for 1983–89 are used due to data problems in 1980–82.

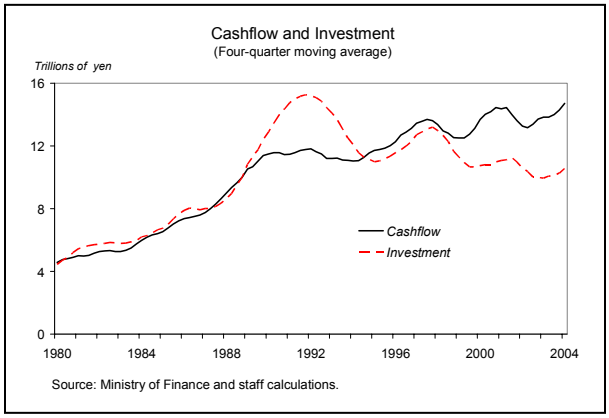
7. **At the same time, firms suffered from declining profitability**. Profit/sales ratios declined steeply in the first half of the 1990s amid the drop in asset prices and economic weakness. Also, firms owned relatively high levels of unproductive assets that did not generate sufficient sales and thus profits, which depressed corporate returns on assets (ROAs).



8. **In addition, firms were generally slow to adjust to the period of lower growth**. Firms stuck with their old business models, which prolonged the period of adjustment. Particularly during the early 1990s, firms delayed cutting employment and investment relative to their cashflow even though economic conditions and profits had slumped severely.

Initial Efforts (1995–2000)

9. **Beginning in the mid-1990s, firms started to cut investment to deal with their excesses**. The failures of major banks in 1997 changed the financial relationship between banks and firms: banks sought to unwind lending to firms—particularly to SMEs—while these firms tried to pay off their debts to banks in order to minimize risks associated with possible financial turbulence in the future. Also faced with a long-term slump in sales and in expected growth, firms cut investment spending—and in particular after 1998—containing it to within their cash flow both to repay debt and to eliminate idle production capacity. As a result, the average age of production facilities of Japanese firms increased from 9.7 years in 1993 to 11.4 years in 1999.[3]

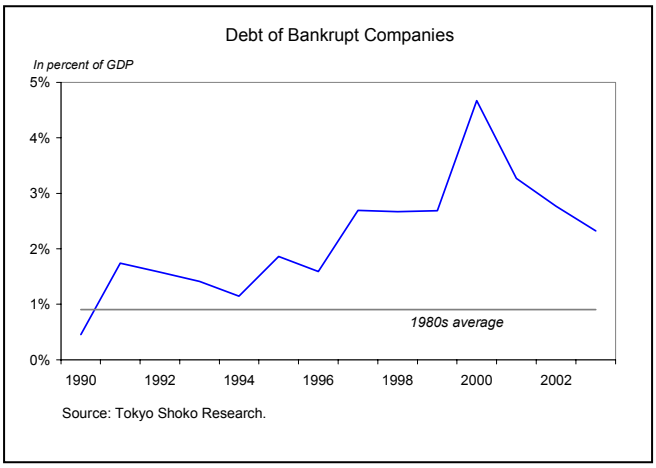


10. **In addition, firms tried to contain increases in labor costs**. Firms at first relied mostly on conventional but moderate measures such as cutting back on new employment and overtime work hours, but then began to replace long-time or full-time workers with short-time workers (those who work less than 35 hours per week). Between 1995 and 1999, the

[3] METI's calculations. Low investment continued after 2000, and the average age of production facilities increased further to 12 years in 2002. This increase in vintage risked eroding Japanese firms' competitive edge in a number of sectors.

number of short-time workers increased by about 2.4 million, and the number of long-time workers decreased by about 1.8 million.[4]

11. **During this period, despite limited progress on the surface, the Japanese economy did experience a degree of structural adjustment that set the stage for the consequent corporate recovery**. Corporate bankruptcies and labor migration reveal the extent of important adjustments that took place. Bankruptcies rose to historical highs in the 1990s, with nonviable firms thereby exiting more quickly than in the past. Bankruptcies as measured by total debt involved in relation to GDP soared in 2000 to more than five times the 1980s average.[5] Also, amid increased bankruptcies and cost-cutting at distressed firms, the unemployment rate rose to historical highs, and labor migrated from traditional sectors to newer and more viable sectors, partly helped by reforms in labor and other regulations.[6] During 1998–2004, 4.5 million jobs were lost in agriculture, construction, manufacturing, and the wholesale and retail sectors, and 2 million jobs were created in industries such as medicare, social welfare, and other service sectors.



Labor Force by Sector
(In millions)

	April 1998	April 2004	Percent Change
Agriculture	3.5	2.8	-20
Construction	6.6	5.8	-12
Manufacturing	13.4	11.2	-17
Wholesale	11.9	11.2	-6
Social welfare	4.4	5.1	16
Services	7.8	9.2	16
All industry	65.3	63.5	-3

Source: MPHPT.

12. **Corporate efforts to address their problems, however, were undercut by sales declines and price deflation in the late 1990s**. Falling nominal sales due both to weak demand and price deflation squeezed corporate profits and made it difficult for firms to service existing debt. In addition, declines in prices inflated already high corporate leverage

[4] Source: MPHPT "Labour Force Survey."

[5] Thereafter, bankruptcies rapidly declined due to the cyclical recovery, but the level in 2003 remained significantly higher than the historical average.

[6] The growth of the IT and service sectors contributed to job creation. Also, the greater involvement of foreign investors in management of firms, which facilitated early responses to problems, also contributed to the revival of the corporate sector.

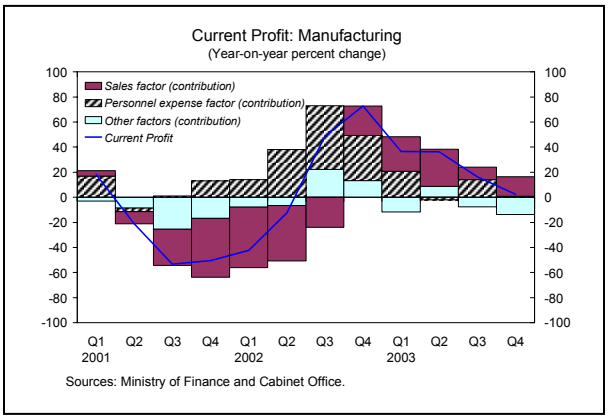
by boosting the real value of debt. Moreover, particularly at the early stage of price deflation, firms were not able to adjust some expenditure items such as pension liabilities and nominal wages, which was reflected in slow progress in containing labor costs.

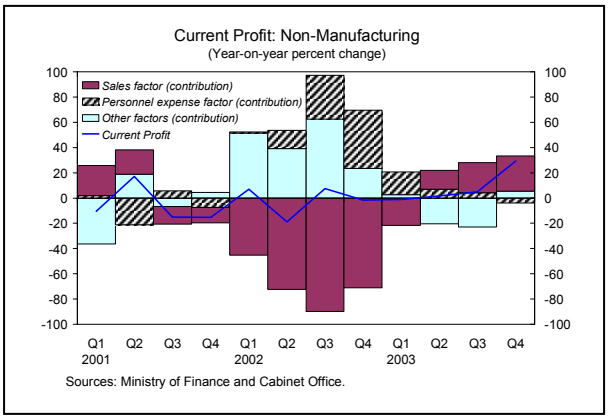
13. **Due to sales declines and continued adverse effects of the asset-price decline, firms' efforts to improve their financial health bore very limited fruit in this period**. For instance, total labor costs increased through 1999 even in the face of declining sales. As a result, although the profits/sales ratio bottomed out in 1994 and was on an gradual upward trend thereafter, it remained low by historical standards for an extended period. Indicators of debt levels and production capacity also showed little improvement.

Corporate Revival (2000–2004)

14. **As the new decade began, firms began scaling up their efforts to reduce costs**. Firms not only continued to contain investment expenditures and to replace full-time workers with short-time workers, but also abandoned customary annual wage increases that prevented labor costs from declining.[7] Thanks to this greater effort, labor costs declined markedly after 2000.

15. **Against this background, firms' profitability improved markedly even in the face of a continued decline in sales**. Owing mainly to labor cost reductions, firms lowered their break-even points. The accompanying profit rebound while sales continued to decline characterized the initial stage of the current corporate recovery during 2002. Of course, the sustainability of the recovery in corporate health, however, remained in doubt in the absence of a revival in sales.





16. **The decline in sales was finally reversed in late 2002**. First, manufacturing firms recorded sales increases, helped by strong overseas demand, particularly from China. Then, with a lag of a few quarters, sales of nonmanufacturing firms also began to rise, as domestic

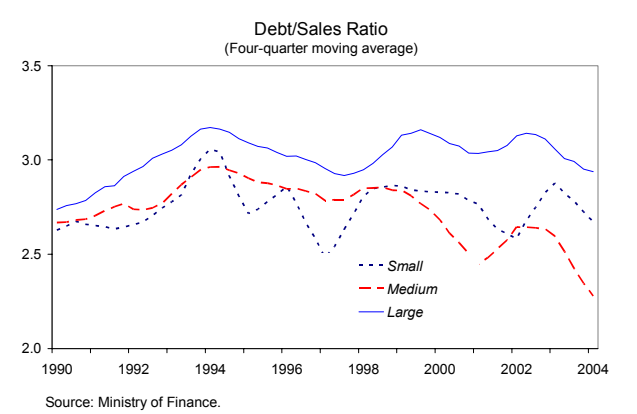
[7] Between 1999 and 2002 the number of short-time workers increased by about 0.8 million, and the number of full-time workers declined further by about 0.8 million. As a result, between 1995 and 2002 the share of short-time workers in the labor force rose from 17 percent to 23 percent.

demand recovered. The sales increase was also supported by a gradual easing of deflationary pressures.

17. **With the increase in sales, the corporate recovery strengthened, feeding into indicators of profitability, debt, production capacity, and employment**. In particular, the profits of small nonmanufacturing firms, which were hit most severely by the sales decline and lagged the most, finally turned positive. (Since these firms account for a third of all sales, their recovery is critical to the health of the overall economy.) In addition, the debt/sales ratio began to decline. Moreover, fewer firms regarded their production capacity as excessive; and the percentage of firms that adjusted employment through measures such as suspending new hiring decreased from 31 percent in the first quarter of 2002 to 17 percent in the first quarter of 2004. Accordingly, the unemployment rate peaked at 5.5 percent in early 2003 and gradually declined to 4.6 percent by May 2004.

C. Development of Selected Indicators

18. **This section takes stock of corporate restructuring by examining selected indicators of corporate health**—those on debt, production capacity, employment, and profitability—in somewhat more detail.



Debt

19. **The debt levels of Japanese firms have come down sharply from the peaks recorded in the mid-1990s**. Firms across all sectors and sizes (particularly medium-sized firms and non-manufacturing firms) have reduced their debt levels, even during 1997–2002 when nominal sales were declining significantly. In this connection, the average debt/sales ratio for Japanese manufacturing firms is now equivalent to that for U.S. manufacturing firms.[8]

Selected Indicators: Comparison of Manufacturing Firms

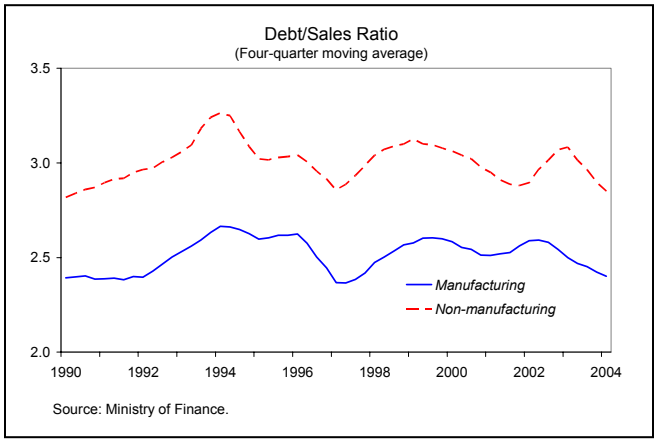
	Japan	U.S.
Debt sales[1]	2.4	2.8
Debt equity (percent)[1]	142	153
Profit/sales[2]	3.6	5.6
Annual profit/equity [2]	8.9	11.2
Annual profit/debt [1]	6.9	10.6
Equity/assets (percent)[1]	41	39

Source: MoF and U.S. Census Bureau.
[1] Data for 2003 Q2–2004Q1 (covered by the most recent publication for the U.S. data).
[2] Data for 2000Q4–2004Q1.

20. **Despite the progress in debt reduction, corporate debt remains high by historical standards, and a further reduction of**

[8] U.S. data from "Quarterly Financial Report for Manufacturing, Mining, and Trade Corporations" by U.S. Census Bureau covers mainly manufacturing firms, while Japanese data from MoF's quarterly "Financial Statements Statistics of Corporations by Industry," cover both manufacturing and non-manufacturing firms.

corporate debt is desirable. Manufacturing firms have reduced their debt/sales ratios close to the levels that prevailed in the first half of the 1980s, but nonmanufacturing firms' debt ratios remain higher. In that connection, it may be noted that with nominal sales growing strongly (2.5 percent annual growth in FY2003), and firms reporting ample cash flow (¥17 trillion in the first quarter of 2004, an all-time high), debt levels may be expected to come down further in the period ahead, while also leaving room for a continued recovery in investment.[9] At present, firms are spending about 75 percent of cashflow for investment, while the historical average is 100 percent.



Capacity

21. **Firms have slashed investment spending since the mid-1990s to repay debt and reduce excess capacity**. In the *Tankan* survey of corporate sentiment, the balance of firms that perceive that they have "excessive capacity" versus "insufficient capacity" (June 2004 survey) has declined to below its historical average, although a larger fraction of firms still perceive that they have excess capacity (Figure III.1). Since the current drop might be partly attributed to cyclical factors, it remains to be seen whether firms will continue to reduce capacity levels.

22. **The low level of investment compared with cashflow for many years may now imply significant pent-up demand for new investment**. Although in the 1980s investment spending was almost equivalent to cashflow, at present more than a fourth of cashflow is not used for investment. With a prolonged period of low investment after 1994, the cumulative difference between investment and cash flow since 1980 turned negative in 2001 and is still rapidly dropping. Against this background, there could be substantial room for new investment to replace aging facilities in the period ahead.

Employment

23. **Labor costs and excess employment have declined since the early part of the current decade, but costs remain high by historical standards** (Figures III.1 and III.2). In contrast to the debt/sales ratio, which started to decline around 1994, the labor cost/sales ratio and the labor cost/value-added ratio continued rising until 1999. As already noted, Japanese

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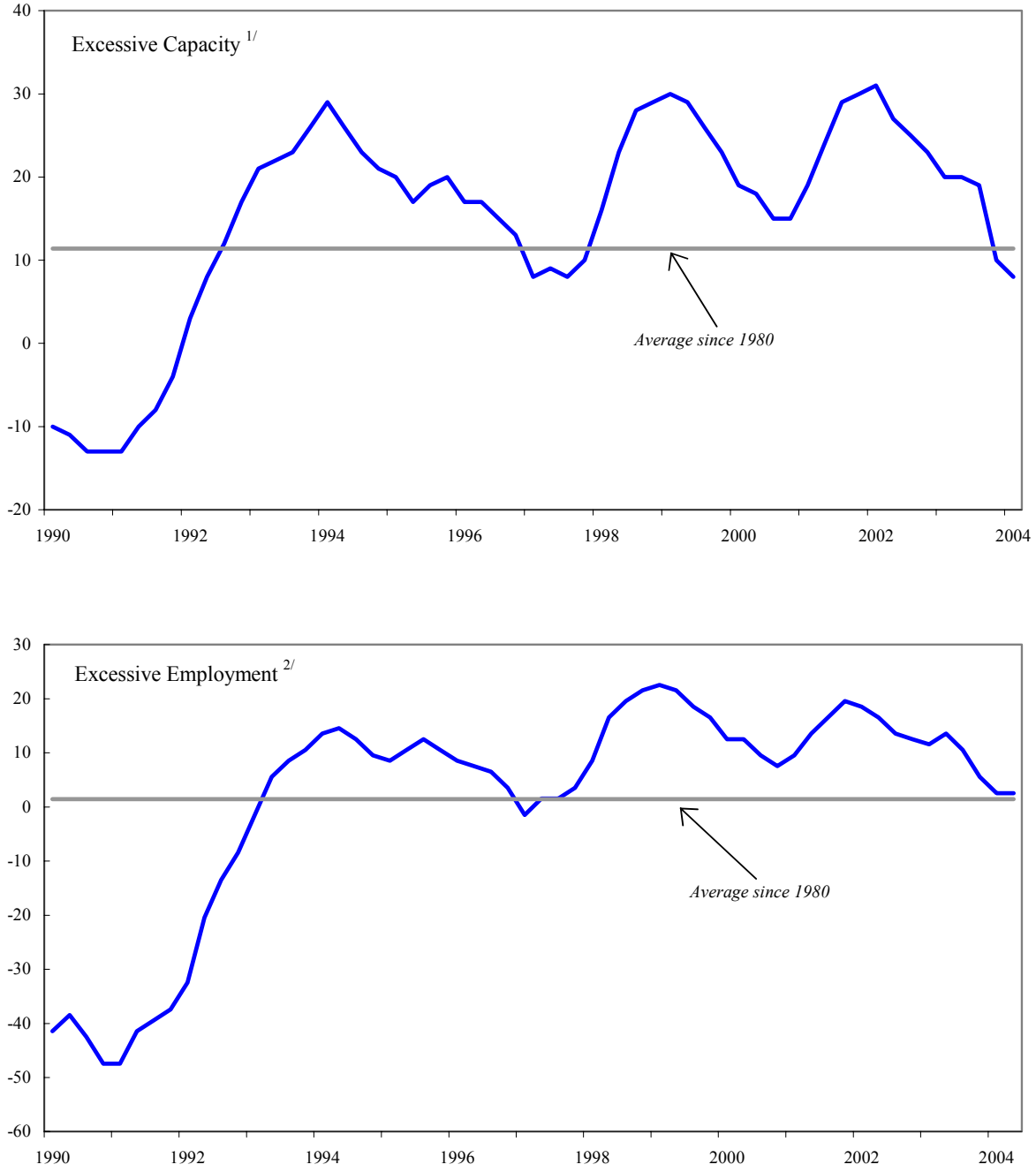
[9] If corporations keep reducing debt and increasing sales at current paces, the debt/sales ratio of manufacturing firms will return to its 1980s level in the third quarter of 2004, and that of nonmanufacturing firms will do so by the end of 2005.

Figure III.1. Corporate Judgment on Excessive Capacity and Employment

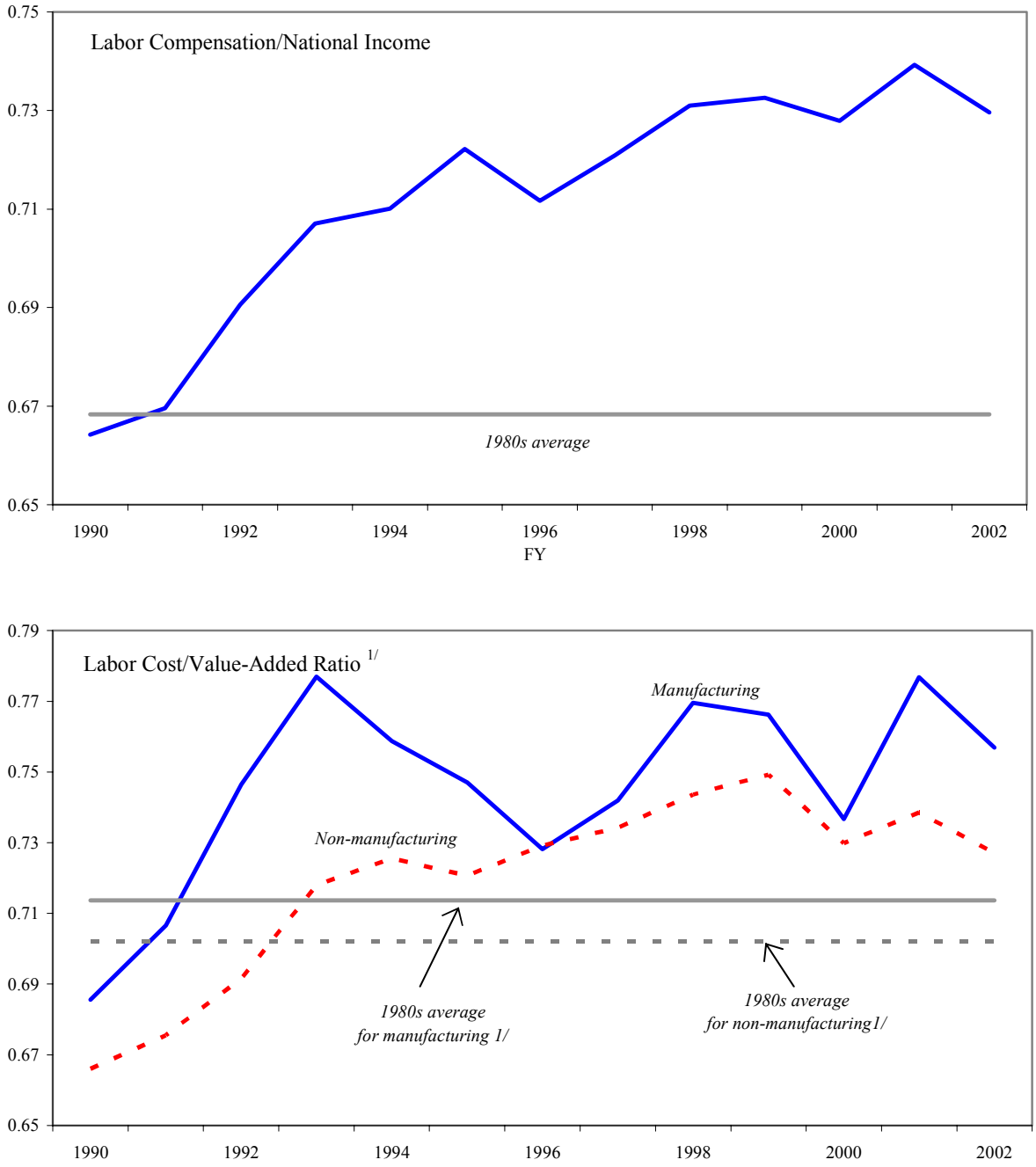


Source: Bank of Japan.

1/ Diffusion index of "Excessive capacity" minus "Insufficient capacity".

2/ Diffusion index of "Excessive employment" minus "Insufficient employment".

Figure III.2. Labor Compensation and Costs



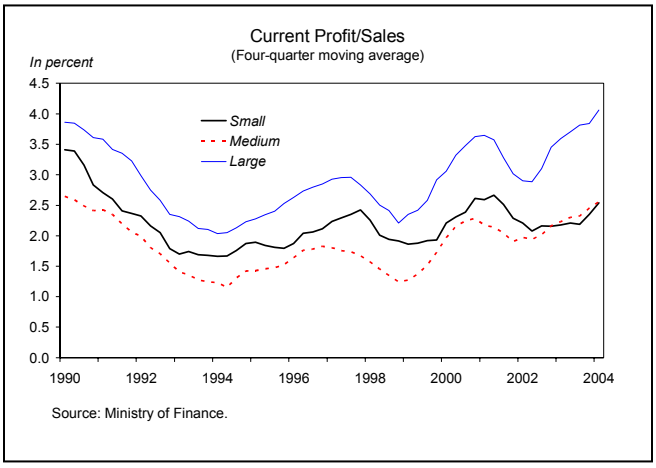
Source: Ministry of Finance.

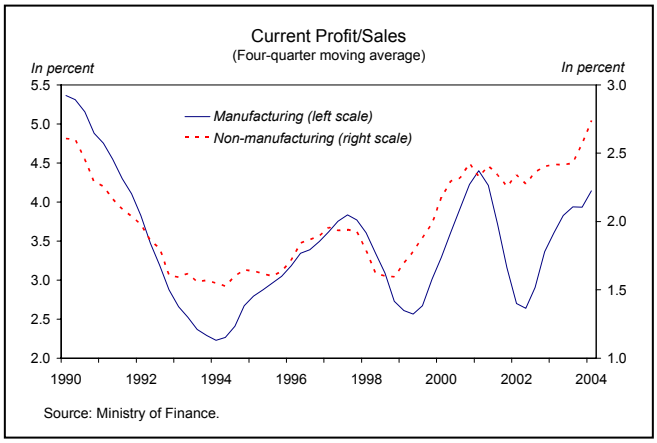
1/ Data from 1983-1989 were used due to data problems in 1980-1982.

corporate efforts to reduce wage burdens finally started to bear fruit early in this decade. However, the labor cost/value-added ratio in 2002 remained above its historical average for both manufacturing and nonmanufacturing firms, and labor compensation remains high as a percentage of national income. Accordingly, looking ahead, it is likely that firms will seek to continue to hold down wage increases.

Profitability

24. **Profitability as measured by the profits/sales ratio has almost reached the peak recorded in the bubble period**, **although the return on assets remains below the 1980s average**. The profit recovery has occurred not only for large manufacturing firms but also for nonmanufacturing firms and SMEs. However, ROA has recovered slowly because of both low growth of sales and unproductive assets that do not generate sales and thus profits. Thus, a further increase in sales and further asset unwinding would be desirable for continued corporate recovery.





D. Remaining Problems

25. **Some weaknesses of Japanese firms still deserve close attention**, despite the improvement in their financial health. The weaknesses, as well as remaining problems in debt, capacity, employment, and profitability mentioned above, include corporate vulnerability to an interest rate hike and weak sectors and regions. This section sheds light on these weaknesses, which suggest that further policy advancements such as on special zones for structural reform might be needed to boost regions and sectors that have not benefited fully from the current economic revival (see Chapter VI).

26. **The health of Japan's corporate sector remains vulnerable to rising real interest rates**. In particular, the improvements in the financial condition of firms have occurred in an environment of very low long-term interest rates. In the event that these rates were to rise to more normal levels, albeit together with an end to deflation, this could reduce firms' profits. Further progress in reducing debt would help in dealing with the risk of rising interest rates.

27. **Moreover, some industries are still weak despite the broad improvement across the corporate sector**. The *Tankan* survey shows that the construction, textile, retail, and

hotel industries are still in a weak financial condition. In addition, due to the reduction in public investment, some small-sized firms, which depend more on such investment than larger firms, have lagged behind in revitalization.

28. **In addition to the differences among sectors, there are also significant differences among regions in the degree of recovery**. Although some regional differences were observed in earlier recoveries, the difference between the strongest region (Chubu) and the weakest (Hokkaido) in this recovery is much larger than in the past.[10]

29. **The large regional differences in economic performance reflect differences in economic structure across regions and a key characteristic of this business recovery—declining public demand**:

- On the one hand, the Chubu region, which is located at the center of Japan and produces digital electronic devices and automobiles, has performed strongly;

- On the other hand, the Hokkaido region relies more on public investment, which is declining. The Hokkaido region's dependence ratio on public investment in 2001 was 10.3 percent, while the national average was 5.2 percent.[11] In addition, agriculture and construction are more important and manufacturing is less so in the region when compared with the nation as a whole. In FY2002, agriculture accounted for 3.3 percent of production in Hokkaido versus 1.3 percent in the nation as a whole; construction for 11.8 percent of production versus 7.3 percent nationally; and manufacturing 10.4 percent of production versus 21.5 percent nationally.

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[10] The CAO has examined the current production recovery of each region based on METI's industrial production data and compared it with that in the past two business cycles. Other data, such as on employment and business sentiment, broadly support the conclusion based on the industrial production data.

[11] The ratio is measured by dividing capital formation of the general government spent in the region by regional gross expenditure.

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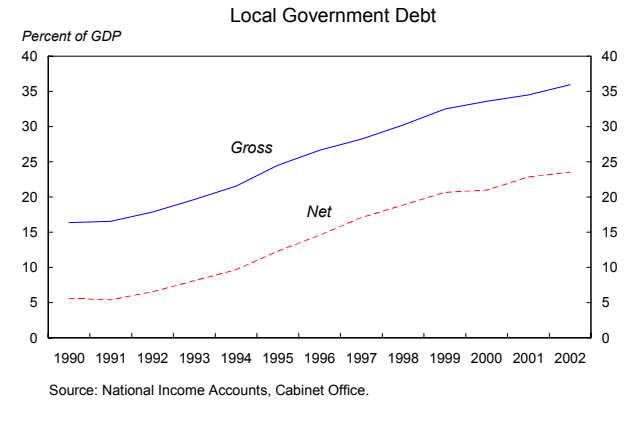
IV. Reform of Local Government Finances in Japan[1]

A. Introduction

1. **The local governments' fiscal position has deteriorated significantly over the last decade**. Net local government debt increased from 5 percent of GDP in 1990 to 24 percent of GDP in 2002, while gross debt more than doubled to reach 36 percent of GDP. Moreover, transfers from the central to local governments have grown much faster than overall tax revenues, which has contributed to the rise in central government debt.



2. **The framework of inter-governmental fiscal relations in Japan is characterized by strong transfer dependence and limited local autonomy**. These institutional features appear to have contributed to the weakening of government finances. Local governments have limited control over their revenues and a significant portion of their expenditure is legally mandated. Transfers from the central government constitute a large share of revenues for most local governments. Nonearmarked transfers (the local allocation tax or LAT) are effectively used to cover any gap between expenditure and other revenues, creating little incentive to improve expenditure efficiency at the local level.

3. **This paper describes the nature and incentive effects of inter-governmental relations in Japan and discusses recent reform efforts**. A reform of local finances initiated by the Koizumi government in 2003 seeks to limit the growth of expenditure at the local level and to encourage a more efficient allocation of resources.

B. Local Government Finances and Intergovernmental Fiscal Relations

4. **Local governments account for a substantial share of public spending, although they have limited discretion in the allocation of expenditure**. The local governments' share of total public expenditure is about 63 percent (19 percent of GDP), while their share of tax revenue is about 43 percent (7 percent of GDP). The local share of total public expenditure is very high compared to other countries; however, the local governments' spending autonomy is limited (see table). The main categories of local expenditure are public investment, education, and

Local Expenditure Composition, FY2001

	Share of Expenditure	Share of GDP
Public investment	19.1	3.7
Education	18.5	3.6
Health and welfare	14.5	2.8
Other	34.7	6.8
Debt service[1]	13.2	2.6

Source: White Paper on Local Public Finance, 2003, MPHPT.
[1] Includes both interest and principal payments.

[1] Prepared by Dora Iakova (ext. 35365) and Takuo Komori (ext. 37613).

health and welfare. There are centrally determined minimum standards for most public services provided at the local level (including education, child care, and health care). The amount and type of public investment spending is also broadly determined at the central government level as part of the general direction of fiscal policy. Local public investment expanded in the first half of 1990s as part of government policy to stimulate the economy, but it has been contracting both in absolute terms and as a share of total expenditure since 1996.

5. **Local taxes account for less than half of total local revenue**. The main sources of local revenues are local taxes, LAT (non-targeted transfers from the central government), and earmarked central government subsidies. The share of local taxes in total revenue has declined over the last decade, while the shares of LAT and bond financing have increased. Most of the important local tax sources, tax bases, and standard tax rates are set by a national law and local governments have somewhat limited flexibility to impose new taxes or change the tax rates.[2]

Local Revenue Composition, FY2001

	Share of Expenditure	Share of GDP
Local taxes	35.5	7.1
Local allocation tax	20.3	4.0
Earmarked subsidies	14.5	2.9
Other	17.9	3.6
Local bonds[1]	11.8	2.4

Source: White Paper on Local Public Finance, 2003, MPHPT.
[1] Proceeds from bond issuance are registered as revenue in the cash-based Japanese fiscal accounts.

6. **The gap between local taxes and expenditures is filled largely by various transfers from the central government**. In addition to providing nontargeted transfers (LAT), the central government subsidizes a fixed share of certain expenditure items—for example, medical and nursing care insurance, education, and some public investment projects. The sum of LAT and subsidies exceeded ¥34 trillion (about 7 percent of GDP) in FY2001. Any remaining deficits are financed by local debt issuance.

Budget process

7. **Total local expenditure and the amount of transfers are set through an annual negotiation process**. In the first step, the overall local government expenditure plan for the coming fiscal year is discussed jointly by the Ministry of Public Management, Home Affairs, Posts and Telecommunications (MPHPT)[3] and the Ministry of Finance. Once the expenditure side has been agreed upon, the amounts of local taxes, ear-marked subsidies, and construction bonds issuance are projected. "Construction" bonds can be issued by local

[2] Local governments have discretion to vary the tax rates on their main tax sources within certain limits. For example, prefectures are allowed to raise the tax rate for corporate income tax up to 1.1 times the standard rate and for property tax up to 1.5 times the standard tax rate. There is no upper limit for the personal income tax rate. Local governments are also allowed to impose some minor taxes, subject to approval by the central government.

[3] This Ministry oversees the operations of local governments.

governments to finance a certain share of local public investment expenditure. Finally, the amounts of LAT and deficit-financing bonds are determined. The resulting budget is referred to as "the local finance program."

8. **The main goal of the LAT is to equalize the capacity of local governments to provide a standard level of services**, assuming that all governments raise local tax revenues using the same tax bases and the same rates. The LAT transfers compensate for the uneven distribution of per capita tax resources among local governments. The standard amount of LAT is equal to a certain percentage of five national taxes.[4] However, in practice, the actual allocation of LAT often significantly exceeds the standard formula-based amount since LAT transfers are used as a de-facto financing item in the budget (together with special deficit-financing bonds).[5] Estimation of the deficit that needs to be financed by LAT allocations entails an assessment of both the revenue-raising capacity and standard expenditure needs for local governments.[6] LAT has increased rapidly relative to overall tax revenues in recent years (from 14 percent of consolidated general government revenue in 1990 to 20 percent in 2002).

9. **Local governments can issue bonds mainly to finance public works projects** ("construction" bonds). In addition, the issuance of special deficit-financing bonds has been allowed since 1999. These bonds are used in addition to LAT to finance the gap between local expenditures and revenues as explained above. Bonds can also be issued occasionally for other special purposes. The amount of bond issuance is subject to approval by the central government (through the system of "local bond permits"). The upper limit on local bond issuance is determined by a complex formula that takes into account the repayment capacity of each government.

10. **The central government has powers to enforce fiscal discipline at the local government level in certain cases**. The main channel is by directly controlling the amount of local bond issuance. In addition, if the annual deficit of a local government exceeds a certain threshold, the respective government has to revise its budget under the oversight of

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[4] Based on the formula, LAT should be equal to the sum of 32 percent of the individual income and liquor taxes, 35.8 percent of the corporate income tax, 29.5 percent of the consumption tax, and 25 percent of the tobacco tax.

[5] Since 2001, half of the fiscal deficit that remains after the standard LAT amount has been allocated is financed by additional LAT allocation. The other half is financed through local deficit bond issues. Prior to 2001, the gap was filled entirely by additional LAT allocations and special account borrowing. In FY2004, for example, the standard LAT amount based on the formula was ¥11.2 trillion, while the actual allocation was ¥16.9 trillion.

[6] The standard expenditure need is estimated separately for each expenditure item, taking into account its average cost and the cost differentials among different regions (based on factors such as population density, area and geography, and industrial diversification). The local governments' revenue raising capacity is estimated as the local tax revenue that would be obtained under the standard tax rates determined by the central government.

the central government (under the so-called "financial reconstruction system"). The revisions include streamlining of expenditure and a review of the scope for increasing local revenues. In exchange, the central government provides funds to cover the deficit and guarantees continued debt repayment for the respective local government.

C. Policy Issues

11. **There are wide differences in the design of intergovernmental relations across the world,** reflecting both idiosyncratic historic developments and different preferences with respect to the provision of public services and redistribution. Federal systems, like that in the United States, are characterized by high level of financial independence at the state government level, lack of uniformity in the provision of public services, and a low level of central government transfers. Unitary systems, like those in Australia, Germany, and Japan, are characterized by preference for equal access to public services, greater centralization of decision making, and high transfer dependence.

12. **However, well-functioning systems of intergovernmental fiscal relations all have in common an incentive structure that promotes fiscal discipline and efficient resource allocation**.[7] Subnational governments would behave in a fiscally responsible manner if they have to bear the cost of their actions. Typically, that would require a certain degree of autonomy in deciding expenditure priorities and the authority to own-finance locally provided services at the margin. To promote adequate voter and market discipline, local borrowing should not have any explicit or implicit central government guarantees. Transfers from the central government have to be allocated in an objective manner that does not discourage efficient resource allocation nor create soft-budget constraints at the local level. Finally, data on fiscal outcomes at the local level should be collected and made available on a timely basis to improve accountability and facilitate planning. These conditions are not fully satisfied in the case of Japan:

- Expenditure priorities for a significant share of local spending are decided at the central government level and financing at the margin relies largely on transfers (the LAT), instead of local revenue;
- Local debt is perceived as effectively guaranteed by the central government;
- The allocation of public works subsidies is not based on explicit objective criteria;
- Data on local government finances is released with a delay of about one year after the end of the fiscal year, which makes it difficult to monitor trends in expenditure and revenue on an ongoing basis.

13. **The gap-filling function of the LAT creates little incentives for local governments in Japan to improve the efficiency of expenditure**. With large share of

[7] See Ter-Minassian (1997).

expenditure mandated by the central government and financing ensured through the LAT, there are limited incentives to reduce the cost of different services or eliminate wasteful spending. Indeed, studies have shown that the costs of public services at the local level are generally higher than the costs of comparable services provided by the private sector.[8]

14. **Local debt is effectively guaranteed by the central government and is not subject to market discipline**. The main channel of limiting local debt issuance in Japan is through direct administrative oversight by the central government (the system of local bond permits). In other countries, market discipline has proven effective in controlling local government finances and has complemented any quantitative restrictions imposed by the central government. This channel of control is largely nonexistent in Japan. Since the amount of local bond issuance is subject to approval by the MPHPT, the bonds are perceived as effectively guaranteed by the central government.[9] A large share of local debt is placed with regional banks and with the Fiscal Investment and Loan Program (FILP).[10] The local bonds traded on the market have almost no premium over JGBs, even though they are much less liquid; and with few exceptions, local bond prices are the same across all prefectures.

15. **The allocation of earmarked subsidies is only partially based on objective criteria**. While subsidies for standard mandated services are largely determined by cost-sharing formulas, public works subsidies are allocated in a discretionary manner by the central government. This has the potential to create a classic "common pool" problem and encourage rent-seeking behavior. Some studies suggest that there are strong political influences in the distribution of public work funds.[11] That may result in an inefficient allocation of resources and could account for the observed decline in returns to public investment in rural areas.[12] Having more transparent rules for allocation of public works subsidies, based on cost-benefit analysis, could improve the efficiency of public expenditure.

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[8] See the analysis in Society of Local Government Management (2000).

[9] There is a complex formula that determines the shares that need to be repaid by the central and local governments respectively, but since the LAT covers interest and principal payment for most local debt, full repayment is practically guaranteed by the central government.

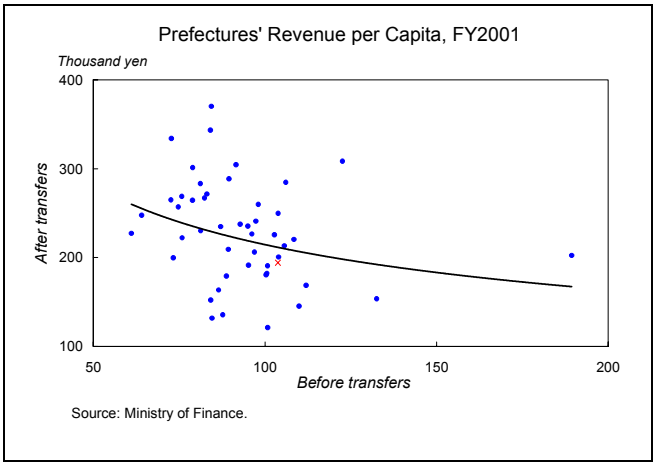
[10] The FILP is a government program that provides financing for public policy purposes. Doi (2002) argues that the central government implicitly supports financially weaker local governments with limited market access by allocating a larger share of FILP financing to them (according to his analysis, FILP borrowing is at interest rates slightly lower than that of privately placed funds for the same maturities).

[11] See Wada (1985) and Kobayashi (1997).

[12] A number of studies have shown that returns on public investment have declined over time (see Doi (1998) and Yoshino and Nakano (1996)). Kondo (2002) finds that rates of return differ significantly for different types of public capital and are relatively low in road

(continued)

16. **High per capita public works subsidies to certain provinces do not appear to stimulate private sector activity and may not be justified from an allocative efficiency standpoint**. Some provinces have benefited disproportionally from central government transfers and subsidies—per capita fiscal revenue *after transfers* is generally higher for the provinces with the lowest own per capita tax revenues. The correlation between per capita local tax revenue and total revenue (after transfers) was -0.26 in FY2001. This is rather unusual and could be a sign of inefficient allocation. In other countries, per capita fiscal revenue differentials among local governments narrow after transfers, but are typically not reversed. Temporarily higher capital transfers to less developed areas could be justified for development purposes. However, analysis suggests that higher government transfers to poorer areas have not stimulated self-sustaining growth; instead, the areas have become heavily dependent on public construction. Braun and Kubota (2000) find that although there has been significant convergence in capital per worker among provinces over the last 30 years (including public capital), there is no evidence of convergence either in per capita income or in GDP per worker, so the accumulation of public capital has not translated into higher income or higher labor productivity.



17. **A number of experts argue that a review of both current and capital expenditure could help reverse the deterioration in local government finances**:[13]

- The scale and scope of guaranteed public services could be reviewed with an eye to attuning them better to local needs and realizing expenditure savings where possible. The needs for certain services (child care and elderly care, for example) vary across regions and local governments could be given more discretion in setting expenditure priorities. Costs also differ significantly across localities and the provision of uniform levels of services may not be desirable from an efficiency standpoint. Privatization of select services could result in higher quality and lower costs for taxpayers;

- A careful cost-benefit analysis of public work projects, based on conservative assumptions, could be used as the main criterion for allocating public investment funds. In recent years, the government has acknowledged that the level of public investment is too high and that some investment projects are inefficient (especially in

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construction and agriculture. EPA(1997) estimates that the return to social capital in cities is roughly twice the rate of return in rural areas.

[13] See, for example, Konishi (2002) and Yoshida (1998).

agriculture and rural infrastructure) and has made efforts to reduce public investment in these areas and redirect funds to urban infrastructure.

18. **Reduction in transfer dependence and removal of implicit central government guarantees on local debt could strengthen the accountability of local governments**. The gap-filling role of the LAT should be reduced to align the incentives of local governments with those of the local taxpayers. Under the current system, the local electorate has little incentive to enforce fiscal discipline on its government, since the accumulation of deficits does not translate into higher tax rates (some local tax rates are fixed by law and a large share of local expenditure is subsidized).[14] Reduction in the gap-filling role of the LAT would involve a review of the scope of expenditures covered by LAT in the local governments' budgets and financing expenditure at the margin with local tax revenue. However, increasing the share of own revenue and allowing greater discretion in expenditure allocation would only work if a hard budget constraint is imposed through the removal of any implicit central government guarantees on local debt.

D. Recent Reform Initiatives

19. **A reform of local government finances, initiated in 2003, aims to achieve fiscal consolidation and increase the efficiency of local government expenditure**, by allowing local authorities greater discretion in allocating funds, while limiting their overall resources. The so-called "trinity" reform of local government finances entails reductions in subsidies for specific local projects and in nonearmarked transfers (LAT), partially compensated for by transfer of tax resources from the central to local governments. In FY2004, the reduction in subsidies would be ¥1 trillion; the LAT would decrease by ¥1.2 trillion; and the local tax resources would increase by ¥0.4 trillion. The overall decline in subsidies by 2006 would be ¥4 trillion (about 5 percent of total local revenues), compensated for by the transfer of about ¥3 trillion in additional tax resources to local governments. No target has been announced for the overall reduction in LAT.

20. **The ongoing reforms of the pension system and government financial institutions could strengthen market discipline on local government financing**. Since 2001, the requirement that the assets of the pension system and postal saving system should be automatically deposited with the FILP has been abolished and an increasing share of these assets have been invested in the market. The resulting reduction of FILP liabilities has been mirrored by a reduction in its assets, including holdings of local government bonds. Therefore, the share of local bonds placed on the market would gradually increase, which could strengthen market discipline on local government finances.

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[14] Even the limited freedom to set higher local tax rates has been rarely used. In part, this has reflected policy preferences as fiscal policy has been stimulative for most of the last decade. However, the incentives to reduce local deficits through raising additional revenue are relatively weak, since debt repayment is effectively guaranteed by the central government.

21. **The system of central government permits for local bond issuance will be relaxed starting in 2006, which could reduce the perception that local debt is guaranteed by the central government**. There will still be formal limits on how much bonds each local government can issue based on its repayment capability, but explicit permission from the MPHPT will not be required. The repayment of local bonds issued without central government approval will not be covered by the local finance program and therefore will not be financed by the LAT. To the extent that these changes reduce the perception that all local debt is implicitly guaranteed by the central government, they could be effective in imposing greater market discipline on local governments.[15] However, if the perception of implicit guarantees remains in place and spreads over JGBs stay the same for all prefectures, debt could actually accumulate at a faster pace.

E. Conclusions

22. **The system of local finances in Japan is characterized by a low degree of tax and expenditure autonomy, high transfer dependence, and implicit central government guarantees on local debt**. A large share of local expenditure is either mandated or encouraged by the central government. In combination with the gap-filling function of the local allocation tax, this creates little incentive for local governments to increase the efficiency of public expenditure. Due to the low degree of subnational autonomy, market discipline and voter influence on local finances are relatively weak. The main mechanism for disciplining subnational finances is strong central government influence over the overall local budget and the amount of local debt issuance.

23. **The trinity reform seeks to increase the autonomy of local governments and thus encourage a more efficient allocation of public resources, while limiting the growth of expenditure**. The reduction in central government transfers and subsidies and the increase in independent local tax revenues would increase the flexibility of local governments to determine expenditure priorities. However, the scale of the reform is modest relative to the total amount of transfers and further efforts may be needed to achieve a steady improvement of subnational finances.

24. **Further reforms recommended by a number of academics specializing in local government finances include the following**:[16]

- *Review of expenditure commitments.* The necessity and affordability of standard public services could be reviewed. Public investment could be downscaled further and its efficiency improved through greater use of cost-benefit analysis;

[15] Some credit rating agencies have already started rating local government bonds.

[16] See Konishi (2002) and Yoshida (1998) and references therein. See also the "Proposal for FY2005 Budget Formulation" by the Fiscal System Council of the government (May 2004).

- *Reduction of the gap-filling role of the LAT.* The scope of expenditures whose financing is ensured by the LAT could be reduced. That, combined with increased discretion in imposing taxes at the local level, would allow spending to be financed by local revenue at the margin;

- *Reforming the framework regulating subnational borrowing* to reduce the perception of implicit central government guarantees and increase market discipline;

- *Improving the quality and timeliness of local government financial data and strengthening budget planning and implementation.* Better and more timely statistics would improve transparency and accountability, facilitate fiscal planning, and allow informed credit risk assessment by lenders.

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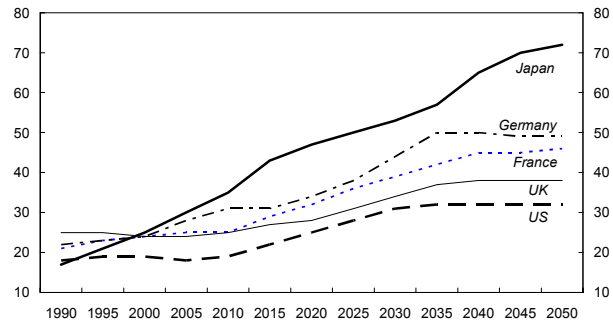
V. Pension Reform Issues in Japan[1]

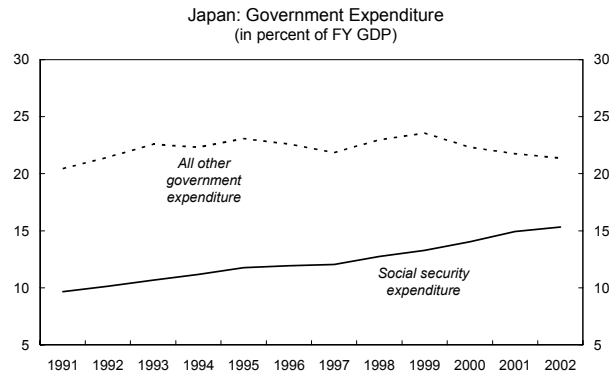
A. Introduction

1. **Japan has the most rapidly aging population among developed countries**. A number of factors contribute to this trend. The Japanese population has the longest life expectancy and one of the lowest birth rates in the world, and immigrants constitute a very small proportion of the population. Japan's National Institute of Population and Social Security Research (NIPSSR) projects that the nation's population will decline by half between 2006 and 2100. Over this period the elderly dependency ratio will increase rapidly—based on the NIPSSR projections, for every person above 65 there will be only 1.5 people of working age in 2050.



Source: United Nations 2002 Population Projections, medium projection.
1/ Defined as the number of people 65 years or older per 100 people aged 15-64 years.

2. **These demographic developments present a serious challenge to long-term fiscal sustainability**. A combination of an aging population and relatively generous pension and medical benefits for the elderly have put a strain on social security finances. Social security expenditure has been the fastest growing component of government expenditure over the last decade and will continue outpacing GDP growth in the future. Estimates of the Ministry of Health, Labor, and Welfare suggest that expenditure on social security will increase from 17 percent of GDP in 2004 to about 21 percent of GDP in 2025 (assuming an implementation of the pension reform recently adopted by the Diet).



Source: National Income Accounts, Cabinet Office.

3. **This chapter assesses the financial situation of the public pension system and the effects of the 2004 pension reform**. Section II reviews the structure of the pension system and projects its finances over the next 50 years under unchanged policies. Sections III and IV

[1] Prepared by Dora Iakova (ext. 35365). Robert Gillingham constructed the long-term pension finances forecasting model for this paper.

assess the recent pension reform. The final section discusses policy issues to consider in choosing reform options.

B. The Current Pension System

4. **Japan has a pay-as-you-go, defined-benefit, public pension system with comprehensive coverage, supplemented by various private pension plans**. The public pension system comprises the Employee Pension Insurance and the National Pension—the two major public pension programs—and a number of small mutual pension plans for public employees. Corporate and personal private pension plans supplement the public pension programs. The public pension system has substantial assets (about 35 percent of GDP), but is run essentially on a pay-as-you-go basis:

- The Employee Pension Insurance (EPI) system covers all private sector employees. The contribution rate is 13.58 percent of annual wages, shared equally by the employee and the employer. The retirement benefit consists of two parts—a wage-related portion and a flat rate benefit. The wage-related benefit at retirement is a function of the number of months the employee has made contributions and his average monthly wage over his working life. The current combined benefit for a one-earner family at retirement (the replacement rate) is on average 59.3 percent of income. After retirement, the pension increases in line with the CPI;

- The National Pension (NP) is a flat-rate benefit system. Participation is compulsory for everybody between 20 and 60 years of age, and benefits are payable from age 65. The full benefit for a person who has contributed for 40 years is now ¥66,208/month (the benefit is indexed to CPI). There are three categories of insured people. Non-employed and self-employed ("type 1" insured) pay a flat-rate contribution (¥13,300/month in 2004). Those covered under the EPI program ("type 2" insured) receive the National Pension flat rate benefit in addition to the wage-related benefit. Nonworking spouses of EPI participants ("type 3" insured) receive full National Pension benefits in their name, without having to make contributions. The contributions to the NP system for "type 2" and "type 3" insured are paid for by employers of EPI participants;[2]

- Public sector employees are covered by different mutual pension schemes, which are similar in structure to the EPI, and are also run by the government;

- Most large companies offer private corporate pension plans (Employees' Pension Funds)—until recently these were mainly defined benefit (DB) plans. The combined assets of such plans were estimated at US$0.6 trillion in 2001 (Clark and Mitchell,

[2] Since the EPI contribution is a fixed percent of salary independent of family status, the system effectively results in higher benefits for those with dependent spouses and those with low salaries.

2002). Following a major legislative reform of private pensions in 2001, companies have been allowed to offer defined contribution (DC) plans and new types of DB plans. The funds in DC plans are portable if the worker changes companies. There are two types of DC plans—either fully financed by the employer or fully financed by the employee through pre-tax contributions (employees can join the latter plan if their employer does not provide any corporate pension plan). The annual contribution limits for these plans are very low—only ¥432,000 (about US$4,000) for employer-financed DC plans and ¥180,000 for employee-financed DC plans. Despite an initial positive reaction by the market, the adoption of DC plans has been slow so far.

5. **The limited available data for private corporate pension plans suggest that many of them are seriously underfunded**. Underfunding is defined as the gap between the market value of assets and accrued liabilities. Chunhong (2000) and Goldman Sachs (1999) estimated that the total unfunded liabilities of private corporate pension plans were between ¥40 trillion and ¥60 trillion (about 10 percent of GDP) as of 1999. Official data provided by the MHLW suggests that the unfunded liabilities of private corporate pension plans have been reduced to ¥11 trillion as of end-March 2003. Significant underfunding affects the financial health of companies (since they have to provision for the excess liabilities) and can make the transition to new DB or DC plans more difficult.

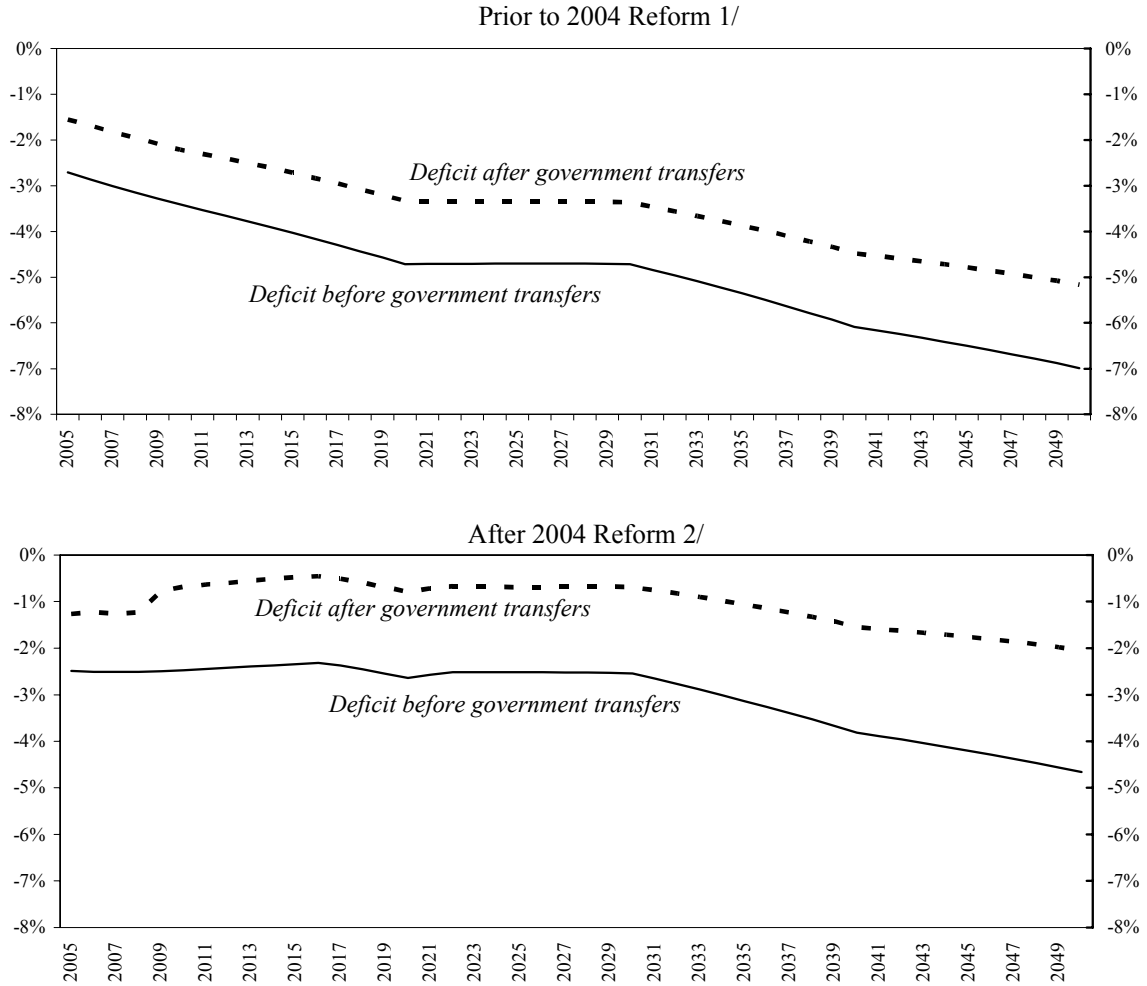
6. **Japan has already made a number of parametric reforms to its public pension system in the past (see Annex 1)**. In the first decades after public pensions were introduced, rapid economic growth allowed steady increase of the generosity of the system. However, in the last two decades, slowing population growth necessitated gradual cut backs in benefits. Since 1986, the regular 5-year reviews of the pension system have sought to reduce benefits and raise contributions by increasing the number of years of required contributions, reducing the accrual rate for benefits, changing the indexation method for annual benefits increases, and raising the pension eligibility age.

7. **Despite these reforms, the financial condition of the public pension systems has deteriorated over time**. Operating surpluses have narrowed in the last decade and have given way to operating deficits starting in 2001.[3] In its most recent Actuarial Report (1999), the MHLW estimated the present discounted value of all future unfunded liabilities of the EPI system alone at about 90 percent of GDP.

8. **Figure V.1 presents staff projections of the pension system primary deficits until 2050 under a baseline scenario**. The primary deficit is estimated to widen rapidly to reach 5 percent of GDP by the end of the forecast period. The scenario is based on the median 2002 NIPSSR population projections, which assume a gradual increase of the birth rate from 1.32 in 2003 to 1.39 in 2050. Further assumptions include: the EPI benefits replacement rate remains at its current level; the flat rate pension benefit increases at the rate of inflation; the EPI contribution rate remains at 13.58 percent of salary; and the flat contribution amount grows at the same rate as wages. Government transfers are assumed to cover 1/3 of the flat-

[3] See Figure 3-3-12 in Cabinet Office (2003).

Figure V.1. Japan: Projected Primary Deficits of the Public Pension System, 2005-2050



Source: Data from the Ministry of Health, Labor, and Welfare and staff projections.
Note: These projections reflect the combined deficits of the EPI and the NP systems. Main assumptions: median version of the NIPSSR population projections; nominal wage growth rate of 2 percent; inflation rate of 1 percent; GDP growth is equal to the total wage bill growth.
1/ The scenario prior to reform assumes that benefits remain at their 2003 level, the EPI contribution rate stays at 13.58 percent, the NP contribution rate grows at the rate of wage increases, and government transfers cover 1/3 of the flat-rate pension and all administrative expenses.
2/ The after-reform scenario assumes that average EPI benefits decline to 50.2 percent of salary by 2023, the EPI contribution rate increases to 18.3 percent and the NP contribution rate increases by 27 percent in real terms by 2017, government transfers cover 1/2 of the flat-rate pension plus administrative expenses after 2009.

rate pension benefits and all administrative expenses. The macroeconomic assumptions are similar to those used by the MHLW in its forecast (one exception is that the MHLW projects a rise in the labor force participation rate, while this projection assumes unchanged participation rates). GDP is assumed to grow at the same rate as the total wage bill.

C. Evaluation of the 2004 Pension Reform

9. **The government-sponsored reform plan introduces the following changes to the system**:

- Contribution rates to the EPI will increase from the current level of 13.58 percent to 18.3 percent of salary by 2017. The flat-rate contributions to the National Pension would increase by 27 percent in real terms over the same period;

- The EPI benefits would be gradually reduced until the benefits for a typical one-earner family reach 50.2 percent of income (compared to 59.3 percent at present);[4]

- The government contribution to the National Pension will increase gradually from one-third to one-half of total benefits by 2009;

- The reserves of the pension system will be run down gradually until they reach the level of annual benefits expenditure (the EPI reserves are currently five times the annual benefits expenditure). Based on the MHLW projections, the desired level would be reached by 2100, assuming a nominal return of 3.2 percent.

10. **The reform will help improve the financial soundness of the pension system**. Staff estimates suggest that the reform will reduce the primary deficit of the pension system to near balance over the next two decades (Figure V.1, second panel). Deficits will increase again once the reduction in benefits stops, and could reach 2 percent of GDP by 2050 (compared to 5 percent of GDP prior to the reform). Under the pension reform, the accumulated assets of the social security system will be used to cover the deficits until 2100.

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[4] The reduction will be achieved through a so-called "macroeconomic indexation." A macroeconomic index will be defined every year, reflecting the decline in the number of pension system contributors and the increase of life expectancy. MHLW estimates that the average annual change of that index will be about 0.9 percent. The initial level of benefits for new retirees will be a function of their average lifetime wages adjusted for the index, and benefits for existing retirees will increase by CPI inflation minus the change in the macroeconomic index (if that is negative, benefits will remain flat). The indexation will be discontinued in 2025—by that time the replacement rate is expected to be down to 50.2 percent. On a technical note, any temporary increases in the CPI due to upward adjustment in the consumption tax rate ought to be excluded from the index for pension benefit adjustment, although the current law does not specify this.

11. **However, the projections are especially sensitive to the assumed population growth rate**. Population forecasts prior to 2002 always assumed a rapid pick-up in the birth rate, while ex-post the birth rate kept declining. That was the main reason for the failure of past reforms to stabilize the finances of the pension system. The 2002 medium population forecast assumes that the birth rate will increase only marginally to 1.39 by 2050, but this may also prove to be optimistic ex post.[5] Using the low population growth variant (projected by the NIPSSR), which assumes that the birth rate declines to 1.1 and then remains stationary, the primary deficit of the pension system would reach 2.5 percent of GDP by 2050 (compared to 2 percent in the baseline scenario). An additional source of uncertainty is the population projection beyond 2050. The official population forecast is very optimistic as it assumes a gradual return to the replacement birth rate of 2.1 percent between 2050 and 2150.

12. **Also, if the investment return on assets is lower than in the baseline forecast, the pension assets could be run down much faster than projected**. Based on staff projections, the pension assets will decline to 12 percent of GDP by 2050 in the baseline scenario with an assumed rate of return of 3.2 percent. However, if the rate of return is only 2.5 percent (close to the current yield on 20-year government bonds), assets will be run down completely by 2050 in the absence of further reforms.

13. **The improvement in pension system finances would be achieved at the cost of significant increases in contribution rates and government transfers, which may have negative consequences for economic growth**. The increase in contributions and taxes (to finance the transfers) could hurt the labor market and affect economic growth. Faruqee and Mühleisen (2001) simulate the effect of different reform options using a general equilibrium model of Japan's economy. Their results suggest that in terms of maximizing growth and economic welfare, benefit reductions are preferable to contribution rate increases. Alesina, Perotti, and Tavares (1998) find that fiscal consolidations relying mostly on cuts in transfers and other current public expenditure have typically been expansionary for OECD economies, while those relying mostly on tax increases have been contractionary.

14. **The increase in government transfers to the National Pension will improve the finances of the social security system, but will not affect the deficit of the general government as a whole**. The increase in transfers would cost the government budget about ½ percent of GDP in the near term and more than 1½ percent of GDP in the longer term. Given the government's stated objective to reduce the budget deficit and stem the accumulation of public debt over the medium term, and with the fiscal situation already set to be affected by higher age-related medical expenditure, this would represent an additional adjustment burden.[6] In addition, the increase in government transfers to a universal,

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[5] In fact, the 2002 projection is already proving to be too optimistic—the actual birth rate in 2003 was 1.29, while the projected rate was 1.32.

[6] In addition to rising pension costs, the aging of the population will lead in a sharp rise in age-related medical and elderly care expenditure as well. The projected increase in medical and elderly care related expenditure over the next 20 years alone is 4 percent of GDP. The

(continued)

nonmeans-tested pension program may be difficult to justify on either efficiency or equity grounds.

15. **If the assumptions underlying the current projections turn out to be too optimistic, further upward adjustment in the contribution rates or government transfers may be necessary**. Alternatively, the benefits floor at 50 percent of average income currently built in the reform will need to be revised. It may not be feasible to guarantee fixed levels both for contribution rates and benefit levels.

16. **The reform has been criticized by some observers as deepening the inter-generational inequality in the rate of return on pension contributions**. Nishizawa (2003) estimates that, prior to the reform, the ratio of lifetime benefits to contributions changes from 2.68 for those born in 1940 to 0.61 for those born in 2000 (for a typical one-earner couple). The reform would reduce further returns to contributions, especially for younger generations, since the decline in benefits and increase in contribution rates would take place gradually over time. Therefore, younger generations would have increasing incentives to drop out of the pension system. Indeed, the drop-out rate from the National Pension system has risen rapidly over the last few years and is now at a high level.[7] To some extent, intergenerational inequality is unavoidable in a partially funded system with a faster than expected population decline. However, the inequality could be mitigated by having the elder generations share the burden of pension reform, for example through greater cuts in benefits or higher taxation for current retirees.[8]

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portion of medical costs financed by general taxes revenue will rise significantly as the population ages, since the government finances a large share of the medical care provided to the elderly. Estimates by the MHLW suggest that public subsidies as a share of medical expenditure will rise from about 27 percent in 2002 to 36 percent by year 2025.

[7] Currently more than 37 percent of "type 1" insured do not make the required NP contributions. Although participation is compulsory, enforcement is rather weak. In addition, part-time workers frequently limit their working hours to stay below the EPI participation threshold (currently 30 hours/week).

[8] Takayama (1998) finds that the average disposable per-capita income of retirees after redistribution is higher than the average income of middle-aged workers. This is at least partly due to unequal tax treatment of retirees and active workers. Pension recipients enjoy large pension tax exemptions, in addition to age-related deductions. The tax-free income for pension recipients is almost twice as large as the tax-free income for employees. The 2004 tax reform has partially addressed this problem: the age-related deduction has been abolished and the pension deduction has been reduced.

D. Policy Issues in Selecting Reform Options

17. **The optimal design of a pension system to a large extent depends on social preferences**. The basic role of a public pay-as-you-go pension system is to facilitate intergenerational transfers. The size of the transfers, the extent of redistribution involved, and the weight placed on efficiency versus equity considerations are a matter of public choice. Some countries have opted for large intergenerational transfers, with high replacement rates and significant redistribution (mainly European Union countries). Others have emphasized self-reliance and economic efficiency, with private savings being the main source of retirement income (UK, Australia, Chile). With replacement rates of 50 to 60 percent, Japan's public pension system is more generous than the systems in Anglo-Saxon countries, but less generous than those in many European Union countries.

18. **Nevertheless, there are a number of common principles that guide the design of pension systems and reform options**:

- The system must be financially sustainable and, ideally, should respect intergenerational fairness. Any deviations from sustainability due to changing demographics should be corrected as soon as possible, since delaying reforms increases the size of needed adjustments and the burden on future generations.[9] Pension systems which maintain a fixed replacement rate and a fixed retirement age at a time of rapid population aging do not satisfy the principle of intergenerational fairness since each new cohort would receive a lower return to its contributions than the previous cohort (with a constant replacement rate and rising dependency ratio, the contribution rates need to be increased to balance the system);

- The design of the system should be guided by efficiency considerations in addition to equity principles. Ideally, the pension system should not discourage labor force participation or in other ways affect economic choices. A strong link between contributions and benefits (an actuarially fair system) is desirable since it minimizes economic distortions.

Sustainability

19. **Some countries have introduced automatic adjustment mechanisms in the pension system to address the uncertainty about future demographic developments**. Sweden, for example has adopted a Notional Defined Contribution (NDC) system with automatic balancing rules. Under such systems, the contribution rates are fixed and benefits are indexed to changes in demographic variables that affect the pension system (for example the elderly dependency ratio or the labor force). Italy, Germany, and Latvia have either adopted or are considering adopting similar systems. Some academics have advocated the

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[9] See Chand and Jaeger (1999) for an overview of different reform options and discussion of the benefits and drawbacks of each option.

introduction of a NDC system in Japan (Takayama, 2003).[10] Its main advantages are that it is rule-based and allows a fast response to changing demographic conditions. The structure of the system allows for a relatively transparent relationship between contributions and benefits, making it incentive-compatible; any redistributive goals are typically addressed outside the system. A potential disadvantage is that the risk of adverse developments is entirely born by the retirees. With a fixed contribution rate, it is possible that the benefits could eventually decline to a very low level, necessitating a change in the system.

20. **The reduction in benefits from the public pension system could be compensated by increased private retirement savings**. The reform experiences of other countries suggest that as the role of public pensions in ensuring retirement income declines, the role of private savings plans or corporate pension plans becomes more important.[11] Clark and Mitchell (2002) review the U.S. experience and find that changes in the regulatory environment and tax policy have precipitated a rapid growth of private defined contribution plans. Under current regulations, limits on contributions to DC plans are much more restrictive in Japan than in the U.S., and employers and employees cannot both contribute to the same DC plan. Relaxation of such restrictions and greater emphasis on increased accountability and transparency of private pension plans are likely to increase the acceptance of DC plans. The 2004 reform will raise the contribution limits for DC plans by 20 percent.

Labor force participation

21. **The effects of demographic developments on the pension system could be mitigated through an increase in the labor force participation rate or through changes in immigration policies**. A number of countries have increased the worker retirement age as part of their pension reforms. The retirement age in the U.S., for example, will be gradually raised to 67 years. Policies that encourage greater labor force participation by the elderly and by women could also be effective—in that respect, it is especially important that the structure of the tax system, pensions, and various social programs do not discourage labor force participation. High immigration flows have helped mitigate problems associated with aging populations in some countries, although the desirable rate of immigration depends on social preferences. Dekle (2003) analyses how increased immigration could affect the labor force, economic growth, and social security spending in Japan. He finds that an annual inflow of 400,000 immigrants between 2005 and 2040 could would give a significant boost to growth—by 2040, GDP could be 50 percent higher than in a no immigration scenario; and social security spending could be lower than otherwise by up to 5 percent of GDP.

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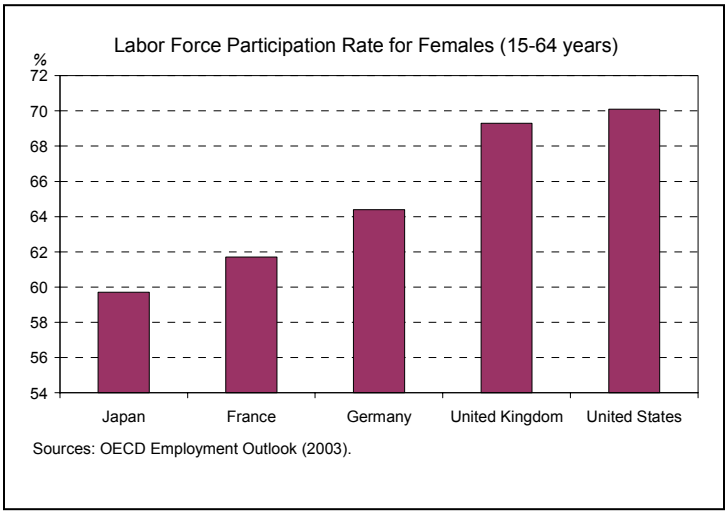
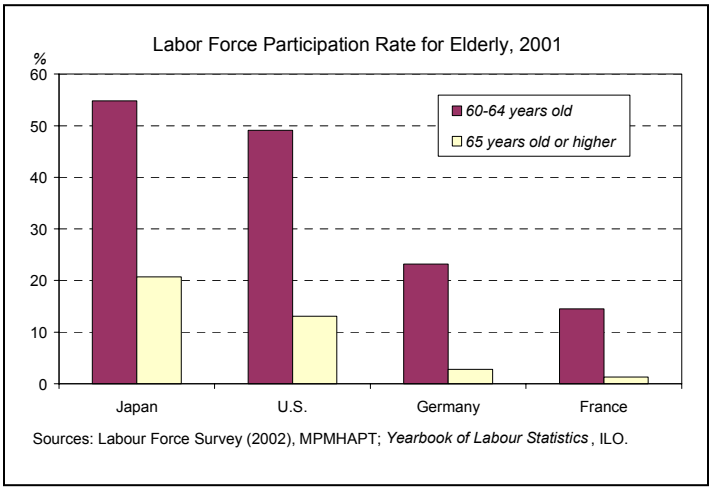
[10] The present reform will use an indexation mechanism similar to that used in NDC systems to gradually reduce benefits, but it will stop once the desired benefits floor has been reached.

[11] Proponents of pension privatization point to the fact that historically, market returns have been on the average much above the implicit return of PAYG systems. However, the risks of a private pension system and the administrative costs are also much higher. Nonetheless, private retirement savings are a useful complement to a less generous public pension system.

22. **The EPI pension system favors one-earner couples, thus discouraging labor force participation of married women**. People with different family and employment status are entitled to different levels of benefits, given the same contribution rate. One-earner couples participating in the EPI have an advantage over single people and two-earner families, since the dependent spouse is eligible to receive the flat-rate benefit without making contributions. The survivor benefits system also favors one-earner families. The surviving spouse is eligible to receive 3/4 of the earning benefits of the deceased, but if she chooses that option, she should forgo her own pension. Comparing two couples with the same combined lifetime family income, the survivor's benefits are typically lower for wives in the dual-income couple. These rules decrease the incentives for a non-working spouse to enter the labor market. Given the projected sharp decline in Japan's labor force, it may be desirable to reform the pension system, so that it does not discourage labor force participation.



23. **While Japan already has a relatively high elderly labor participation rate**, **efforts should be made to increase it further, given the projected rapid decline of the labor force in the coming decades**. In contrast to many European countries, eligibility for disability and other social programs is rather strict and can not be used as a way of early retirement. However, under the current system earning-related benefits are cut by 20 percent for everybody that continues to earn salary between age 60 and 65, and if the salary earned is above average, pension benefits are gradually reduced, creating some disincentives for continued labor participation. The earnings test is less strict for those aged 65–70. The reform will improve incentives for continued work by abolishing the 20 percent uniform cut in benefits. However, the earnings test will be extended to those above 70, so all elderly with above average employment income will be foregoing at least some of their pension benefit.



24. **Elderly labor force participation is likely to be facilitated by a recently adopted increase in the minimum retirement age**. There is no centrally-determined retirement age

in Japan, but most individual companies set their own mandatory retirement age, which according to the current labor laws should be at least 60. Under the 2000 pension reform, the eligibility age for EPI benefits will gradually increase to 65. That will leave retired people aged 60–65 with no employment or pension income, at a time when it may be difficult for them to find new employment. To address this issue, the Diet enacted a change in the labor legislation in June 2004, which would gradually raise the minimum retirement age to 65 by 2013. Private companies would still be able to choose whether to retain older workers or rehire them under a new contract. The seniority wage system makes elderly workers relatively expensive, so giving companies some flexibility in offering options for continued employment of aged workers would allow them to control labor costs better.

E. Summary and Conclusions

25. **The government reform will improve the finances of the pension system; however, further adjustments may be necessary if the assumptions underlying the forecast turn out to be too optimistic**. Frequent partial adjustments in the past have increased uncertainty and reduced public confidence in the pension system. It could be desirable to introduce an automatic benefits adjustment mechanism that would ensure the sustainability of the system and reduce the magnitude of intergenerational redistribution.

26. **The discussion of social security reforms should be made in the context of a broader discussion of fiscal sustainability**. Increasing the share of pension benefits financed by general government revenue will improve the social security deficit, but not the deficit of the general government as a whole. The overall tax burden is already expected to rise sharply to cover the steady increase in age-related medical and elderly care expenditure and to reverse the deterioration of the fiscal position. The proposed increase in government transfers and pension contributions would add further to the taxpayers' burden and may have negative effects on economic growth and welfare.

27. **Declining public pension benefits could be supplemented by higher private retirement savings**. Further legislative initiatives to increase the range and flexibility, and improve the oversight of private pension plans in Japan would facilitate the transition to a greater self-reliance in securing retirement income.

28. **Efforts to increase the labor force participation rate could complement other reform options**. The intragenerational redistribution built in the current pension system discourages married women labor force participation. Given the projected sharp decline in the labor force, it would be important to address this issue in future reforms. Although the elderly labor force participation rate is relatively high, efforts to increase it further would help ensure the financial sustainability of the social security system. Higher immigration is another possible option to mitigate the decline in the labor force.

History of Japan's Main Public Pension Systems

1. The first pension system with wide coverage, the Employee Pension Insurance (EPI) system, was introduced in 1942. It was mandatory for all private sector employees and initially the contribution rates and benefits in percent of salary were relatively low. Benefits were increased significantly in 1965 and again in 1973. In 1961, the pension system coverage was broadened to include all people of working age. A flat rate contribution, flat rate benefit system—the National Pension—was introduced for everybody who was not covered under the EPI. The generosity of benefits increased over time for this system as well. Indexation of benefits to gross wages was introduced for both the EPI and the NP in 1973. Since 1986, the two systems were integrated financially—the beneficiaries of the EPI started receiving a flat portion benefit (under the National Pension) in addition to the wage-related component. Eligibility to receive the flat-rate NP benefit was also extended to nonworking spouses of EPI participants (although they do not make contributions to the system).

2. As a result of the increasing generosity of benefits, public pension income became the main source of income for many retirees (replacing in importance the traditional lump-sum retirement benefits given by employers). The replacement rate for a "typical" pension recipient (married with nonworking wife) was above 60 percent of salary in the 1980s.

3. In the 1980s, population growth rates slowed down and economic growth rates also slowed starting in the early 1990s. The last three reforms focused on restoring the long-term financial stability of the pension system through a combination of raising contribution rates and reducing the generosity of benefits:

- The 1986 pension reform reduced the accrual rate for the earnings-related component from 1 percent per year to 0.75 percent per year. The number of contribution years required to receive a full NP benefit increased from 25 to 40;

- The 1994 pension legislation increased the eligibility age for the flat-rate portion of the EPI benefits from 60 to 65, to be gradually phased in between 2001 and 2013 for men and 2006 and 2018 for women. In addition, benefits indexation was changed from gross to net wages;

- The 1999/2000 pension reform introduced a number of significant changes. The accrual rate for the wage-related portion of the EPI was reduced from 0.75 percent to 0.71 percent. The indexation of both the flat-rate and the earnings-related benefit increases were changed to CPI from wages. A new earnings test was introduced that reduced the pension benefits of those still employed in their late 60s. The age at which people start receiving the wage-related portion of the EPI benefit was increased to 65, to be phased in between 2013 and 2025 for men and between 2018 and 2030 for women.

However, these reforms failed to restore financial sustainability of the system, since with each subsequent update of the population projections, it became clear that the demographic shock would be much worse than previously expected.

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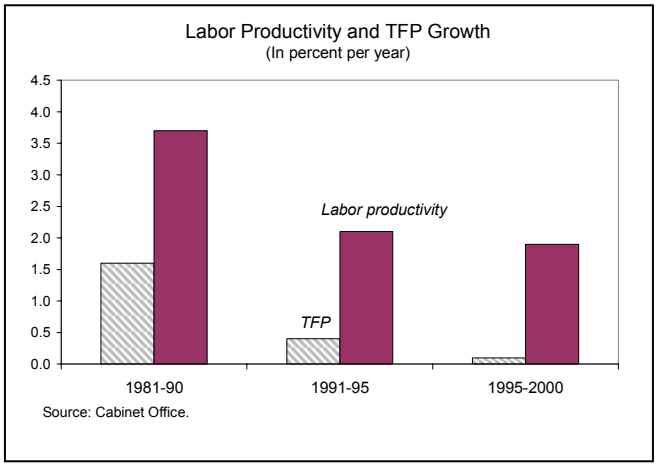
VI. Structural Reforms and Productivity Growth[1]

A. Introduction

1. **Structural reform of the Japanese economy has been a central focus of the Koizumi administration**. Against the background of a steady decline in growth and productivity during the 1990s (see figure), a program of structural reforms launched in 2001 aimed to rationalize and privatize inefficient public sector enterprises, reduce excessive business regulation, facilitate corporate restructuring and the creation of new businesses, and enhance labor market flexibility. This paper summarizes structural reform developments in these areas. Fiscal, trade, and financial sector reforms—also central to the administration's structural reform agenda—are covered in the staff report and other chapters of this paper.



B. Recent Developments in Structural Reform Policy

Public Enterprise Reforms

2. **Proposals for public enterprise reforms have mainly focused on the postal corporation (Japan Post) and the public highway corporations**. Japan Post is a government-financed corporation that plays a large role in Japan's banking and insurance markets and is exempt from deposit insurance premiums. Discussions are under way on possible modalities for leveling the playing field with private financial institutions and privatizing the corporation over the medium term (see Chapter II for further details on Japan Post and government financial institutions).

3. **Reforms of the four highway corporations have sought to address inefficiencies in the construction and management of Japan's road network**. The highway corporations—nonprofit firms owned by the government—construct, maintain and operate motorways and facilities such as car parks, financing this activity by collecting tolls and other fees and by borrowing.[2] Construction costs have often been high, and high toll fees on highways have sometimes been used to pay for the construction of infrequently used roads. (Japan possesses a fairly dense road network, including about 7,300 kilometers of high-speed

[1] Prepared by Christopher Walker (OAP).

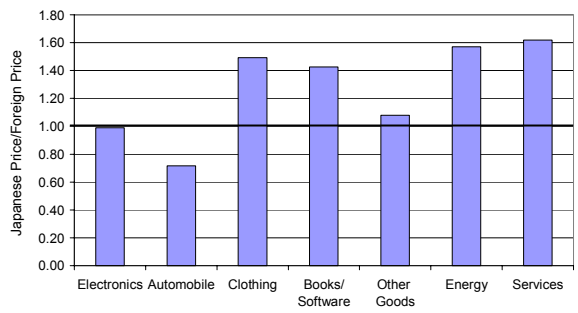
[2] For example, in FY2003 the largest highway corporation (the Japan Highway Public Corporation) had about ¥28 trillion in fixed liabilities and about ¥2 trillion in toll collections (its primary revenue source).

national motorways.) More generally, highway construction reforms have been seen as necessary to halt unfettered road construction, including in the context of longstanding plans for a completed highway system of more than 10,000 kilometers.

4. **However, planned reforms of the highway corporations will have a limited effect on road construction**. In December 2002, a council on highway reform presented a blueprint that proposed to privatize the four corporations, and repay their debts (estimated at about ¥40 trillion, or 8 percent of GDP). In June 2004, the Diet approved a bill with less ambitious aims, establishing a structure in which an administrative agency leases the publicly owned highways to six privatized corporations over a 45-year period. At the end of that period, the highways will revert back to public ownership and toll charges will be eliminated. The plan envisions construction of 9,342 kilometers of roads, little changed from the pre-reform target.

Deregulation and Competition

5. **High levels of regulation and limited competition have been reflected in weak innovation, low productivity growth, and high prices in a number of sectors**. For example, average prices in Japan are about 40 percent higher than for an average country at a comparable income level.[3] Prices are particularly high in the clothing, software, energy, and services sectors.



Source: METI Survey on Domestic/Foreign Price Differences July 2003.
Note: Average ratios are computed by staff as the simple average of price ratios to New York, Europe, and Singapore.

6. **Steady efforts to promote competition and advance product market deregulation are beginning to bear fruit**. Reforms to reduce regulation and enhance competition have focused on the following areas:

- *Special Zones for Structural Reform*. These zones, in which specific regulations are relaxed on a localized basis, showcase the advantages of deregulation and pave the way for reforms at a national level. In FY2003, the first year of the program, over 300 special zones were established. For example, agricultural special reform zones have relaxed restrictions that limited the potential ownership of farmland. In education, structural reform zone exemptions have been used to establish privately owned universities offering vocational courses of study. In medicine, joint stock companies have received permission to establish health care facilities in structural reform zones (which is otherwise prohibited);

[3] OECD (2004), p.112.

- *Energy sector liberalization*. A measure passed in 2003 mandated the separation of services provided by vertically integrated utilities effective in 2005, thereby making fees more transparent. Following this and other liberalization measures taken in past years, electricity prices have been on a steady decline (although they remain well above the OECD average).[4] In the natural gas market, reforms are planned through 2007 to enhance businesses' choice of supplier and ensure that all market participants have equal access;

- *Telecommunications reform*. Regulatory changes in 2003 were aimed at unbundling telecommunications services and opening the field to new entrants. As a consequence of these and other changes over past years, prices for internet access services in Japan are somewhat lower than in other countries (those for mobile phone and fixed line services are roughly similar or slightly higher).[5]

- *Competition policy*. The Fair Trade Commission (FTC), which is charged with enforcing the Antimonopoly Act (Japan's basic competition law), has been steadily strengthened in recent years. Steps have been taken to enhance the independence of the FTC and increase its resources. Going forward, the administration aims to strengthen the FTC further and increase its sanctions (in the past, fines for anticompetitive practices have been infrequent and small).

Entry and Exit Policy

7. **The absence of an efficient mechanism for handling the creation and destruction of firms has been a key weakness of the Japanese economy**. During the 1990s, a cumbersome framework for corporate restructuring hampered the reallocation of resources to more productive uses, as evidenced by the persistence of large numbers of distressed firms. Also, Japan's corporate startup rate was low compared with other countries, perhaps reflecting the legal requirement of ¥10 million in capital to start a new firm.

Annual Average New Company Start-up Rate, 1990–99[1]

Japan	4.6
Germany	11.7
United Kingdom	13.2
United States	11.4

Source: Imai and Kawagoe, 2002.
[1] In percent of existing firms.

8. **Over the last several years, enhancements to the framework for corporate restructuring have been introduced, which have been reflected in a pickup in corporate restructuring**.[6] By 2001, a number of improvements to the legal framework had already been made to facilitate corporate reorganization, notably the April 2000 adoption of the Civil Rehabilitation Law that included features of U.S. "Chapter 11" procedures. Subsequently,

[4] Ibid. Note that the price discrepancies indicated by the OECD are generally greater than price differences shown in METI's surveys.

[5] Ministry of Public Management, Home Affairs, Posts and Telecommunications (2002).

[6] See Chapter III for a discussion of developments in corporate restructuring.

revisions to relevant laws have introduced new options for reorganization, facilitated mergers and acquisitions activity, and allowed rehabilitation procedures to be launched more quickly.

9. **Also, efforts to raise the rate of business startups are beginning to bear fruit**. In February 2003, a temporary exemption was introduced allowing businesses to be formed with capital of ¥1, provided that the ¥10 million standard is met within five years. To date, this measure has been credited with creating over 10,000 firms.

Labor Market Flexibility

10. **Japan's labor market is relatively rigid**. Observers have pointed to a number of features that inhibit a rapid and efficient reallocation of labor market resources, including limited availability of portable pensions, restrictions on the use of temporary workers, and poor information about job opportunities. In addition, the Labor Standard Law has made it difficult for firms to dismiss regular workers.

11. **Recent government initiatives have attempted to address some of these concerns**. Defined contribution pension plans were introduced in October 2001, although the monthly contribution limit of ¥36,000 (about $330) is relatively low. In addition, restrictions on the operations of temporary labor supply agencies have been relaxed. Also, with unemployment among the 20-24 year-old cohort running above 9 percent, the government has instituted special programs to bring young people into the workforce, including through job brokering services and the arrangement of internships. In addition, a 2003 revision to the Labor Standard Law helped to clarify the conditions under which dismissal is allowed (although firms are still required to demonstrate the economic necessity of layoffs).

C. The Potential Impact of Structural Reform on Welfare and Output

12. **A number of recent studies have attempted to estimate the potential impact of structural reforms**. Some models calculate static benefits—generally one-time increases in productivity arising from a more efficient use of resources—whereas others compute dynamic gains, in the form of increased total factor productivity growth. The general approach is to estimate the welfare and efficiency gains from aligning domestic prices with world prices or developed country averages.

13. **Most quantitative estimates imply substantial potential benefits from structural reforms** (Table VI.1). Estimated static gains range from 2.2 percent of GDP for trade reforms to 8 percent of GDP for deregulation, whereas estimated dynamic gains range from 0.3 percent to 2.4 percent in additional GDP growth (depending on the breadth of reforms). These estimates support the view that further structural reforms would be instrumental in helping to sustain the economic expansion in the medium term.

Table: VI.1. Estimates of Gains from Structural Reform in GDP Terms			
	Bradford	Economic Planning Agency	OECD
Year published	2002	1994	2004
		(In percent)	
Static gain	2.2	8.0	5.2
1-year gain (5-year horizon)	0.4	1.6	1.0
Overall gain (5-year horizon)	2.2	8.0	5.2
Main reform measure(s) or assumption:	→ Eliminate tariffs and non-tariff barriers	→ General deregulation	→ Regulatory reform
	TFP Growth Reversion (Prescott-Hayashi)	Japan Center for Economic Research	METI/Sanwa
Year published	2002	2003	2000
		(In percent)	
Dynamic gain	2.2	0.3	2.4
1-year gain (5-year horizon)	2.2	0.3	2.4
Overall gain (5-year horizon)	12.4	1.6	12.6
Main reform measure(s) or assumption:	→ Reversion of TFP growth to 1980's rate	→ Regulatory reform mainly in public services	→ Deregulation and rapid diffusion of IT

Sources: METI, Sanwa Research Institute (2000); Japan Center for Economic Research (2003); Shimpo and Nishizaki (1997); Bradford (2003); OECD (2004); and Hayashi and Prescott (2002).

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