

# **An 18-Month Economic Forecast with the STP (Short-term Turning-Point) Method**

by the Economic Research Dept.

Damage from the recession has penetrated all corners of Japan's economy. Small and mid-sized businesses, once the reliable leaders of autonomous recovery, now suffer from poor earnings and cash flow. Moreover, personal spending continues to flag not only from low consumer confidence but falling incomes.

Should policy makers continue to spend the public's hard-earned tax money and strive for a soft landing? If so, they need to be held accountable for their decisions. Or should we reconsider the fiscal structural reforms implemented last year, which inevitably constrain long-term growth? However, any fundamental reforms will meet with strong bureaucratic resistance.

By all logic, the government must first disclose more information before any public debate can transpire. In an era where the Internet and satellite broadcasting disseminate information around the world, all Japan seems to be disseminating to the world is a lack of direction.

To participate in today's global age, the government needs to articulate a long-term vision and improve its disclosure practices at home and abroad.

## **1. The Global Economic Climate**

### **(1) Asia**

Asian economies, including South Korea and Thailand, are falling deeper into recession. Due to a deteriorating export environment and much needed structural reforms – particularly for financial systems buried under corporate debt and bad loans – sustainable recovery is unlikely to occur soon. The region's growth rate will drop to -1.0 percent in 1998, then bottom out and head toward a moderate recovery in the second half of 1999, posting 2.4 percent growth at best for 1999.

Recovery may be further delayed by factors such as economic conditions in Japan and the U.S., the situation in Russia, the Chinese yuan, and Indonesia's political crisis. Most important will be Japan's success in lifting its own economy, and the stability of the foreign exchange market.

**Table 1 Real GDP Growth Rates in Asia (% change yoy)**

	1997 act.	1998 fore.	1999 fore.
China	8.8	6.0	6.5
Korea	5.5	-6.5	-1.5
Taiwan	6.8	4.0	5.0
Hong Kong	5.3	-5.0	0.0
Singapore	7.8	0.5	1.5
Thailand	-0.4	-7.0	-1.5
Indonesia	4.6	-15.0	-5.0
Malaysia	7.8	-6.0	-2.0
Philippines	5.1	0.0	2.0
East Asia avg.	6.5	-1.0	2.4

Note: Thailand's 1997 growth rate is an official prediction.

(2) U.S.

The U.S. economy will undergo a modest adjustment between late 1998 and early 1999.

- In personal spending, a strong stock market helped propel the propensity to consume to 99.9 percent (June 1998). Slower growth is expected as the stock market makes adjustments.
- Due to lower capacity operating rates and sluggish capital goods orders, the strength of capital investment is expected to decline.
- Since Asia is not likely to recover soon, net exports will not contribute to growth.
- Inventory adjustments are in progress.
- Residential investment will grow substantially due to lower interest rates. This will boost related consumption, but not enough to drive the economy.

**Table 2 Economic Forecast for the U.S.**

	1997 act.	1998 fore.	1999 fore.
Real GDP growth	3.90%	3.40%	1.90%
Industrial production (yoy)	5.00%	3.60%	2.90%
PPI (yoy)	0.40%	-1.00%	0.90%
CPI (yoy)	2.30%	1.70%	2.60%
Current account (\$ bil.)	-155.2	-204	-215
(as % of nominal GDP)	-1.90%	-2.40%	-2.40%
Unemployment rate	4.90%	4.50%	4.80%

Stock market adjustments will cool personal spending and the economy.

- The rising propensity to consume since 1995 can be attributed more to the strong stock market than to unemployment rates and disposable income.
- Since September, New York stock prices have entered a correction due to the Asian crisis, Russian financial crisis, and an uncertain corporate earnings outlook.

### (3) Europe

#### Germany

Real GDP growth in the April-June 1998 quarter fell to 0.4 percent (from 5.9 percent in Q1) in response to April's VAT rate hike. Moreover, export growth has declined due to the financial and economic crises in emerging markets.

In the second half of 1998, sluggish export growth will cause capital investment and personal consumption to edge down while remaining firm, resulting in a 2.7 percent economic growth rate for 1998 overall. In 1999, continued weakness in exports will push down the growth rate to 2.0 percent despite stronger personal consumption as employment improves and support for capital investment from domestic demand.

#### U.K.

Real GDP growth in the second quarter of 1998 dropped to 1.9 percent on an annualized sequential basis (from 3.1 percent in Q1). With the strong sterling continuing to depress exports, the economy will slow from 2.3 percent growth in 1998 to 1.5 percent in 1999.

**Table 3 Real GDP Growth Rates of Germany and the U.K.**

(% sequential growth)

	1997 a	1998 f	1999 f	1H 98	2H 98	1H 99	2H 99
<b>Germany</b>							
Real GDP	2.3	2.7	2.0	3.3	1.5	2.1	2.4
Domestic demand	1.5	2.6	2.1	4.2	1.2		2.8
External demand	0.8	0.1	-0.1	-0.9	0.3	-0.1	-0.5
<b>U.K.</b>							
Real GDP	3.4	2.3	1.5	2.6	0.7	1.6	2.1
Domestic demand	3.8	3.6	1.9	4.5	1.2		2.4
External demand	-0.4	-1.3	-0.4	-1.9	-0.5	-0.4	-0.3

Note: Values for 2H 1998 and later are forecasts.

## 2. Issues in Japan's Recovery

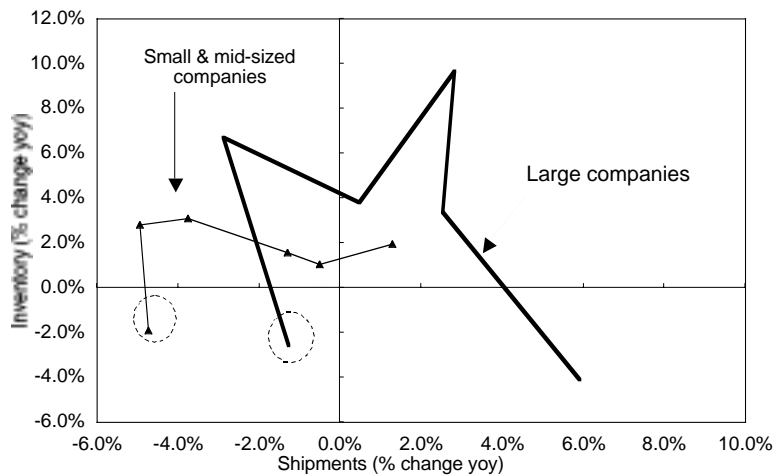
### (1) Impediments to Sustained Recovery – Small and Mid-Sized Companies

A sustained recovery will be led by big business, with inventory adjustment entering the final phase for final demand goods.

However, small and mid-sized firms, who lag behind in structural reforms and suffer from deteriorating earnings, may be too weak to lead the economy through a sustained recovery.

We predict the economy will bottom out around June 1999, when inventory adjustment enters its final phase. But the slow recovery of small and mid-sized companies will delay the restoration of business sentiment.

**Figure 1 Small and Mid-Sized Firms Lag in Inventory Adjustment of Final Goods**



## (2) Earnings Deterioration at Small and Mid-Sized Companies – Part A

As apparent by a harsh business climate surpassing the Heisei recession, small and mid-sized businesses are suffering from dismal earnings. Adjustment pressures are stronger than among large companies.

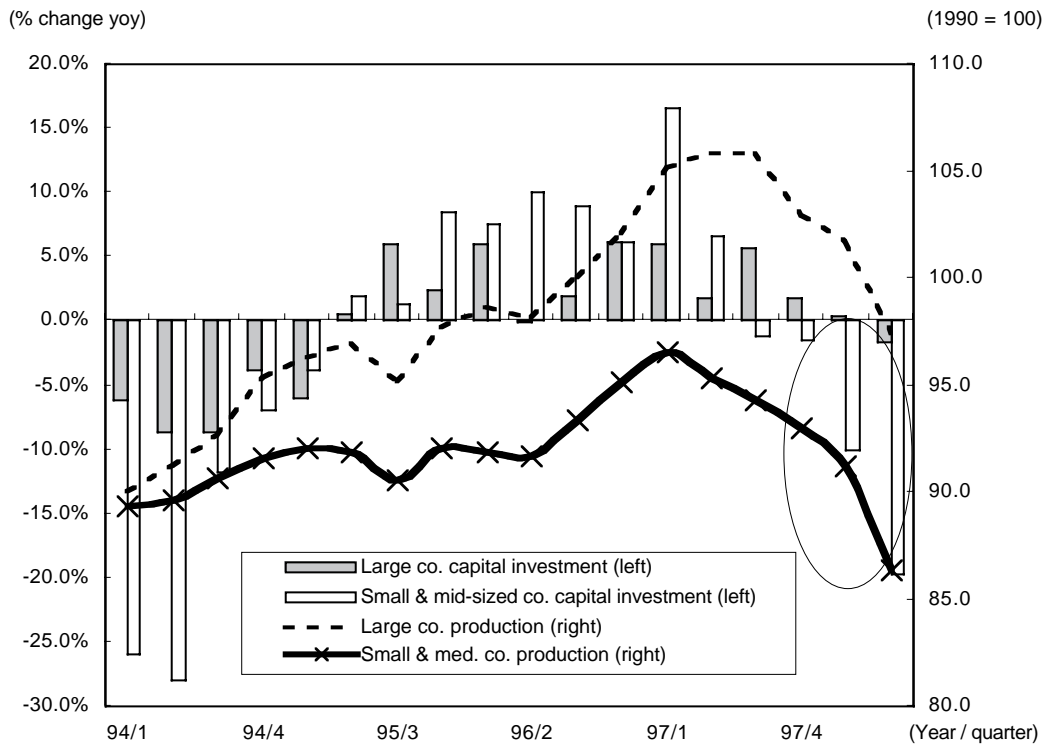
- Slowness of restructuring (capital investment, employment, and debt) has impeded improvement of return on equity, while sluggish domestic demand further depresses earnings.
- Global competition is squeezing exports, particularly to Asia (large companies are expanding exports).
- Moreover, the credit crunch is constraining capital investment even among financially healthy companies.

Small and mid-sized firms lag behind in restructuring because they have had to absorb the excess capital investment and employment shed by restructured large companies.

- In capital investment, the large weight (which has grown since 1990) of the construction industry, with its long vintage of capital, creates a condition in which earnings deterioration leads more readily to severe stock adjustments.
- Since fiscal 1995, small and mid-sized businesses have had to absorb employees released by the continuous restructuring at large companies.

Since these adjustments will further widen the disparities with large companies, business sentiment at small and mid-sized companies will not improve until well after the economy bottoms out.

**Figure 2 Decline in Capital Investment Among Small & Mid-Sized Businesses**



Note: Sampling adjustments have been made for capital investment.

Sources: MITI, *Industrial Production*; MOF, *Quarterly Statistics of Financial Statements of Incorporated Enterprises*.

### (3) Earnings Deterioration at Small and Mid-Sized Companies – Part B

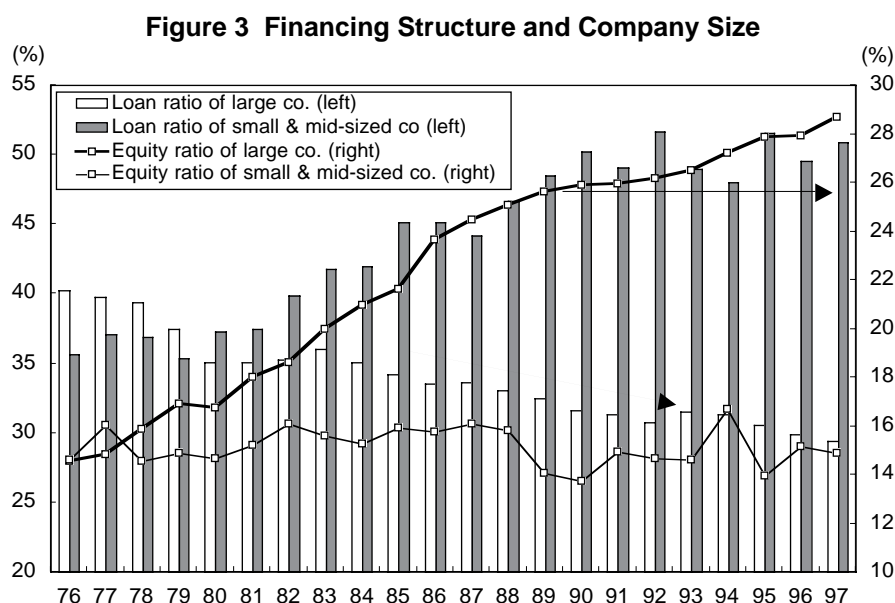
Cash management at small and mid-sized businesses is becoming increasingly stringent.

Small and mid-sized businesses rely heavily on loan financing. While large companies have shifted from bank financing to equity financing, equity ratios at small and mid-sized companies have not changed significantly for the past 20 years, while their dependence on bank loans has risen.

- Small and mid-sized companies have limited access to alternative financing channels such as equity and bond financing.

Given this financing structure and the slow adoption of credit risk management by financial institutions, financing difficulties impose a heavy constraint on the activities of small and mid-sized companies.

- If capital investment functions are calculated separately for large businesses and small and mid-sized businesses, cash flow emerges as a far more important determinant of capital investment than interest rates for small and mid-sized businesses.
- The corporate activities of small and mid-sized businesses appear to be highly susceptible to financing constraints.



Note: "Loan ratio" is [bank loans / total assets], and "equity ratio" is [shareholders' equity / total assets].  
Source: MOF, *Quarterly Statistics of Financial Statements of Incorporated Enterprises*.

#### (4) Earnings Deterioration at Small and Mid-Sized Companies – Part C

In addition to mounting global competition and an uncertain outlook, capital investment among small and mid-sized businesses is also constrained by poor cash flow.

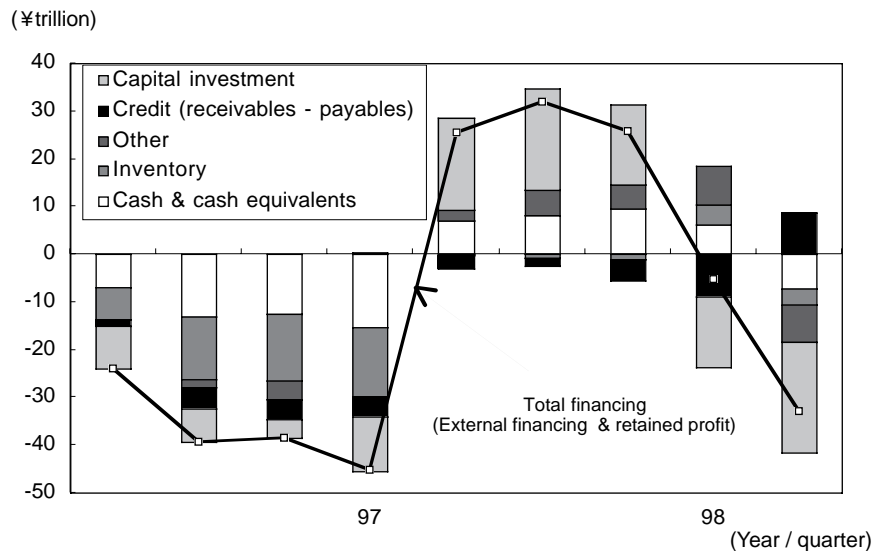
Disparities in lending by domestic banks are growing. Despite a continued downtrend in overall loans from year-ago levels, in 1997 loans to large companies bottomed out, while loans to small and mid-sized companies decreased at an accelerating rate.

- From the second half of last year, loans for working capital at small and mid-sized companies

have fallen sharply. While declining revenues have been a major factor, another factor has been the difficulty of obtaining such financing.

In response to this situation, small and mid-sized businesses may have reduced their capital investment outlays. From the second half of 1997, small and mid-sized businesses have constrained their capital investment to finance inventory costs and maintain liquidity in hand.

**Figure 4 Allocation of Funds at Small and Mid-Sized Companies (yoy change)**



Source: MOF, *Quarterly Statistics of Financial Statements of Incorporated Enterprises*.

#### (5) Causes of Weak Consumption

Personal spending remains in a slump. While the large decline from autumn 1997 was largely attributed to sagging consumer confidence, the recent slump derives from lower incomes. Real income growth of employed workers turned negative (year-on-year) in the October-December 1997 quarter, while nominal incomes did so in the April-June 1998 quarter. Thus for fiscal 1998 overall, employed worker income is likely to post negative growth for the first time to date.

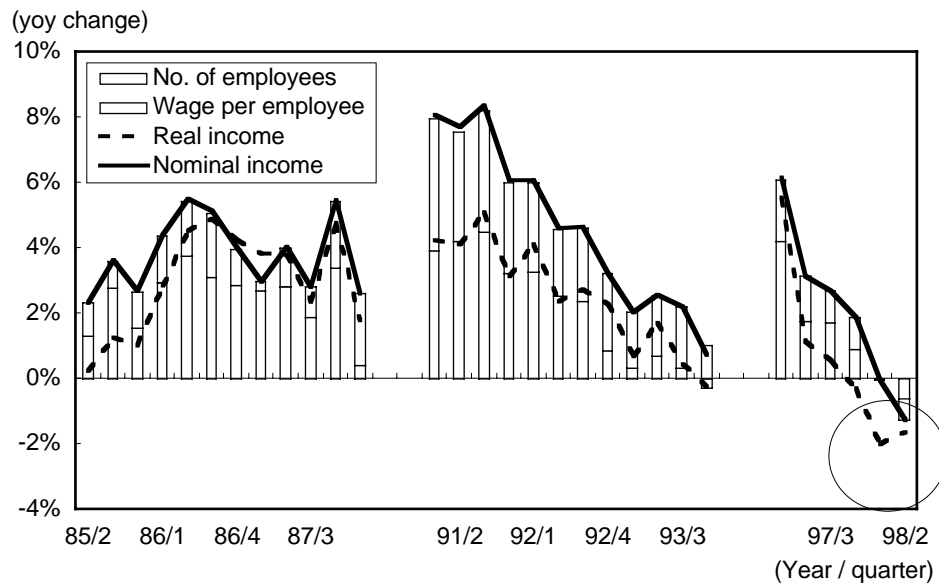
Due to practices such as the spring labor offensive, Japan's wages have traditionally been more flexible than in the West. However, the current recession is characterized not only by wage squeezes but full-fledged employment reductions on an unprecedented scale.

Moreover, employment adjustments are primarily affecting regular employees (general employees), while the number of part-time workers, supposedly easier to adjust, has actually increased.



This has led to lower wage levels and squeezed household budgets.

**Figure 5 Comparison of Employee Income in Present and Past Recessions**



Source: MACA, Labor Force Survey; MOL, *Monthly Labor Statistics*.

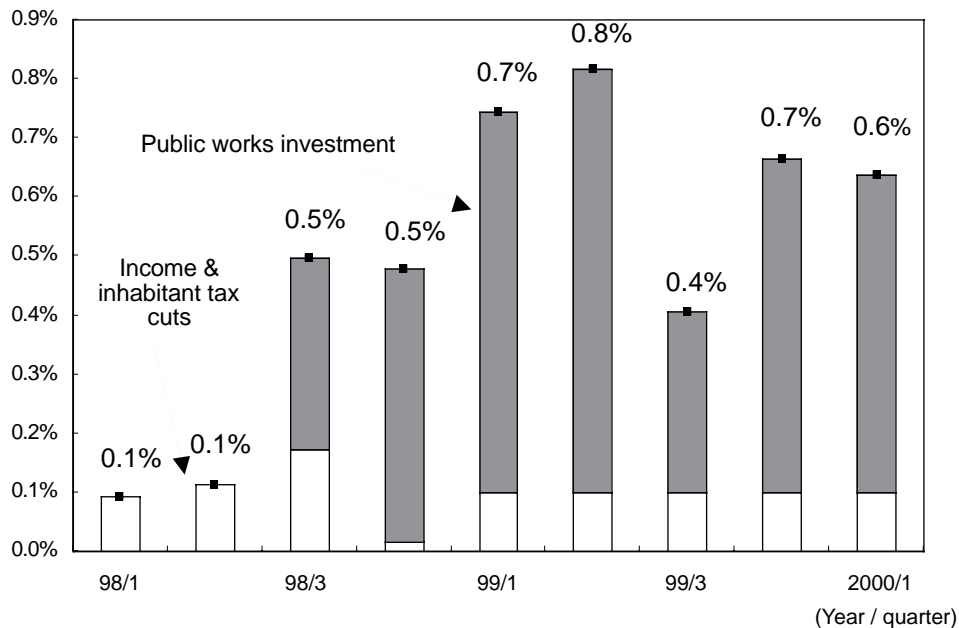
#### (6) Economic Impact of the 15-Month Budget

The 15-month budget (which treats the supplementary budget of the last quarter of fiscal 1998 as part of the fiscal 1999 budget) will boost GDP growth by 1.8 percent points in fiscal 1998 and 2.6 percent points in fiscal 1999. However, since its economic impact will be dampened by the slump in private demand, the budget will manage to prop up the economy but stop short of leading to a sustained recovery.

The impact of the 15-month budget will fade in the July-September 1999 quarter (with negative growth on a sequential basis). Since the economy will not pick up quickly after bottoming out, additional measures will probably be needed in fiscal 1999.

Effects will primarily be seen in the construction industry due to public works spending, and in the service industry due to tax cuts. The budget is expected to directly impact small and mid-sized businesses, who have been hit particularly hard in these industries.

**Figure 6 Contribution of Economic Packages to GDP**



- Notes: 1. Corporate tax cuts will boost GDP growth by 0.1% in FY 1998 and 0.2% in FY 1999.  
 2. A sequential decline in the contribution level indicates a decline in the sequential growth rate (for example, from 2Q to 3Q 1999 sequential growth decreases by 0.4%)  
 3. Public works investment includes the predicted 1999 supplementary budget (¥3 trillion fresh water spending, of which ¥1.3 trillion will be implemented during the fiscal year).

### 3. The 18-Month Forecast Under the STP Scenario

#### (1) Japan

Adjustments in capital investment and other areas will grow in the corporate sector, leading to continued near-zero growth in real GDP. A sequential growth rate of -0.1 percent is forecast in the July-September quarter of 1998, and 0.3 percent in the October-December quarter.

The turning point will occur in the April-June 1999 quarter. The NBI (Nissay Business Index) fell to -40 in February 1998, its lowest level in the present recession. It then recovered to -13 in April, indicating an end to the sharp decline in economic activity since last autumn, but has not improved further since then. We expect the NBI to continue fluctuating back and forth during fiscal 1998. The trough will come in June 1999, when inventory and capital stock adjustments enter their final phase.

### *The forecast scenario*

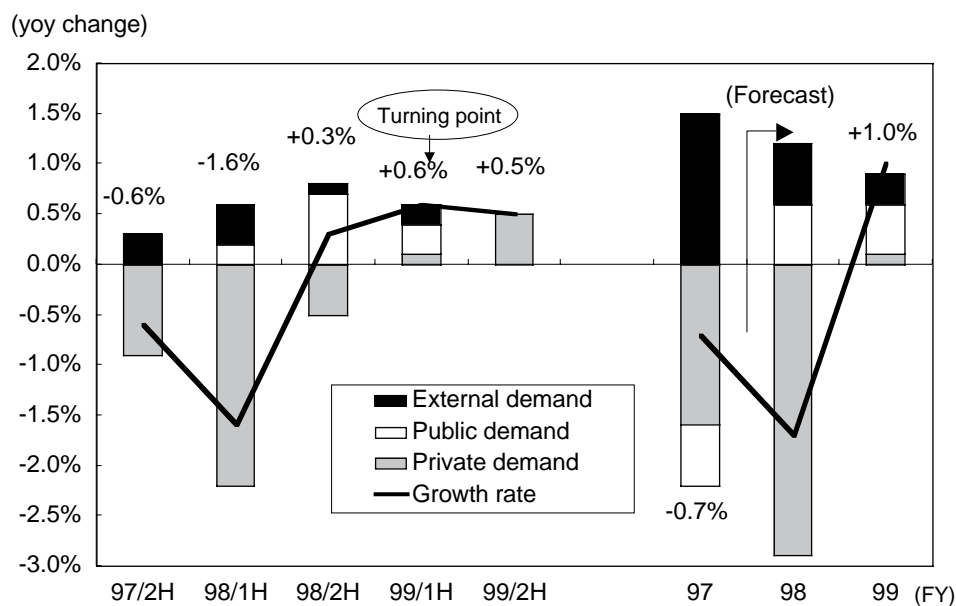
Fiscal 1998 will see adjustments in preparation for a sustained recovery, with a real growth rate of -1.7 percent marking the second consecutive year of negative growth.

As companies make adjustments to increase competitiveness, unemployment will rise to 4.7 percent in 1999.

Despite Asia's economic problems, exports will avoid a major decline due to the underlying strength of Europe and the U.S. However, the slump in private demand will cause imports to plunge, expanding the current account surplus to nearly 4 percent of nominal GDP.

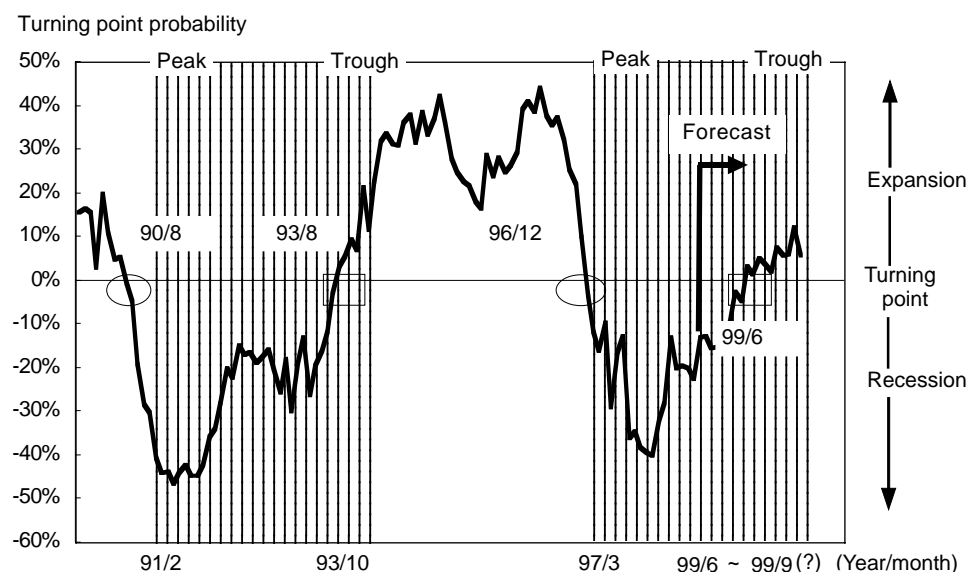
While the economy will trough in the April-June 1999 quarter, a strong recovery led by private demand will not occur immediately due to the delay in adjustments among small and mid-sized businesses. Following the 15-month budget, the government will have to compile a 4-trillion yen supplementary budget in the second half of the year. The real growth rate for fiscal 1999 will be 1.0 percent.

**Figure 7 The 18-Month STP Forecast**



Source: EPA, *Annual Report on National Accounts*.

**Figure 8 NBI Predicts Turning Point in June 1999**



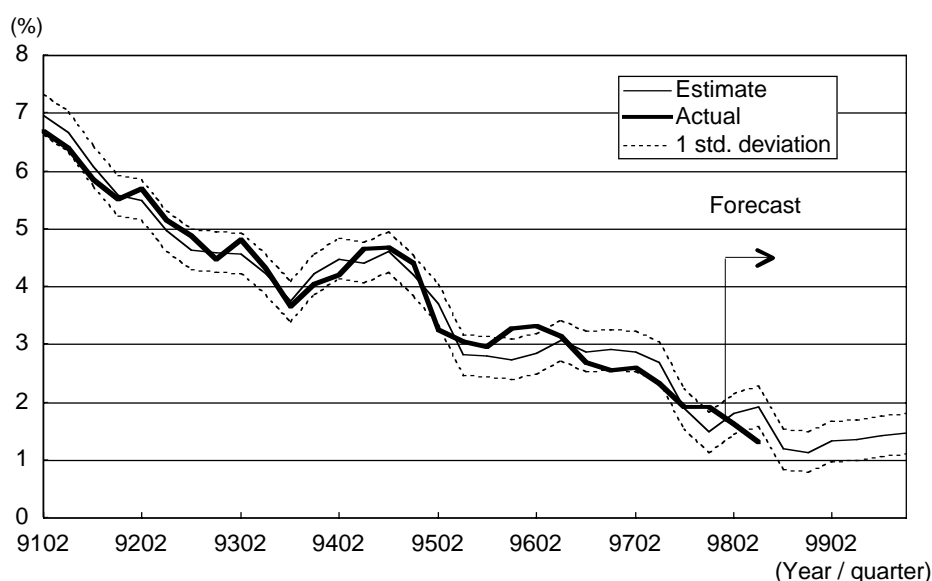
Notes: 1. Circle indicates start of recession; square indicates start of expansion.  
2. Old data series are used for NBI until March 1997.

## (2) Financial Markets

### Long-term interest rate

The long-term interest rate will remain low in fiscal 1998 due to the recession, the flight to quality, and monetary easing by the BOJ. It should drop to about 1 percent in the January-March 1999 quarter. In fiscal 1999, inventory and capital stock adjustments will continue, and while the economy will bottom out, recovery will be weak due to ongoing structural adjustments. Thus upward pressure on the interest rate will be limited.

**Figure 9 Long-term Interest Rate Forecast**



Note: This recreates the BOJ estimation method, wherein the long-term interest rate is a function of: CPI (change from 3 years ago), industrial production (sequential rate annualized), exchange rate (yoy change), unsecured call rate, U.S. long-term real interest rate, and CD - TD.

#### Exchange rate

The U.S. economy's slowdown over the end of the fiscal year will narrow the gap in growth rates with Japan. In addition, Japan's steadily rising current account surplus and the growing inflation gap with the U.S. will work to correct the weak yen. In the long-term, however, the persistently large interest rate spread and Japan's worsening economic fundamentals will tend to weaken the yen. Amid these offsetting factors, the yen will tend to remain level.

## 4. Policy Proposals

### (1) Promotion of Small and Mid-Sized Businesses and Home Purchases

While the present recession can be attributed to insufficient demand, the underlying causes are structural problems rooted in the financial system, employment, and the small and mid-sized business sector. Since 1992, demand stimulation measures totaling 80 trillion yen have failed to stimulate private sector demand and activity. Clearly, this calls for an objective assessment of these policies.

Policy makers need to adopt a perspective that: (1) regards fiscal policy as a means to ease the pain of structural adjustments; (2) approaches these structural issues from the context of a vision for Japan's future; and (3) considers economic policies and medium-term structural policies within the context of a medium-term fiscal vision.

In the 15-month fiscal 1999 budget and the supplementary budget we predict will be implemented, two areas will be targeted due to their large impact on the economy: (1) small and mid-sized business, and (2) home purchases.

*Small and mid-sized business policy:* Despite a series of measures since last autumn to ease the credit crunch and stimulate business activity, small and mid-sized companies still harsh business climate. Policies must aim to: (1) expand credit lines for working capital (cash flow) and capital investment; (2) foster new industries by expanding credit for venture companies (improving the credit guarantee system, etc.); and (3) provide more diverse financing alternatives.

*Promotion of home purchases:* Amid declining income levels, the financial burden of buying homes can be reduced by: (1) considering tax exemptions for interest payments on home loans; (2) revising tax measures to mobilize available housing stock (encourage purchase of existing homes, remodeling, and reduction of home buying costs such as consumption tax, home acquisition tax, and property tax)

*Medium-term structural policy for employment:* Build a framework centered not around existing companies but new companies (venture companies) to create new business areas and employment. This involves: (1) establishing a supply of risk capital; (2) building a framework to assure lifetime education (developing personal skills and encouraging diversity of values); and (3) protecting intellectual property rights.

## (2) Articulation of a Fiscal Vision

Because the present fiscal system threatens to impede future economic growth, the government needs to reveal its vision for restoring the fiscal system.

Amid calls for an activist fiscal policy to revive the economy, little attention is given to sources of funding, in part because the government withholds critical information on fiscal matters. Given the severity of the recession and the massive scale of fiscal policies, the need for a long-term vision is all the greater. In addition, disclosure is necessary to prevent illusory

fiscal practices and gain public acceptance for policies.

The 80 trillion yen in stimulative measures since 1992, combined with declining tax revenues due to the recession, have severely damaged the government's long-term fiscal condition.

Assuming a natural growth rate in social security spending (3.8 percent) and zero growth in other ordinary expenditures, the government's ordinary account can achieve a primary balance (where revenues excluding bond income are equal to expenditures excluding bond expenses) through the natural growth in tax revenue if nominal GDP grows at a rate of 4 percent.

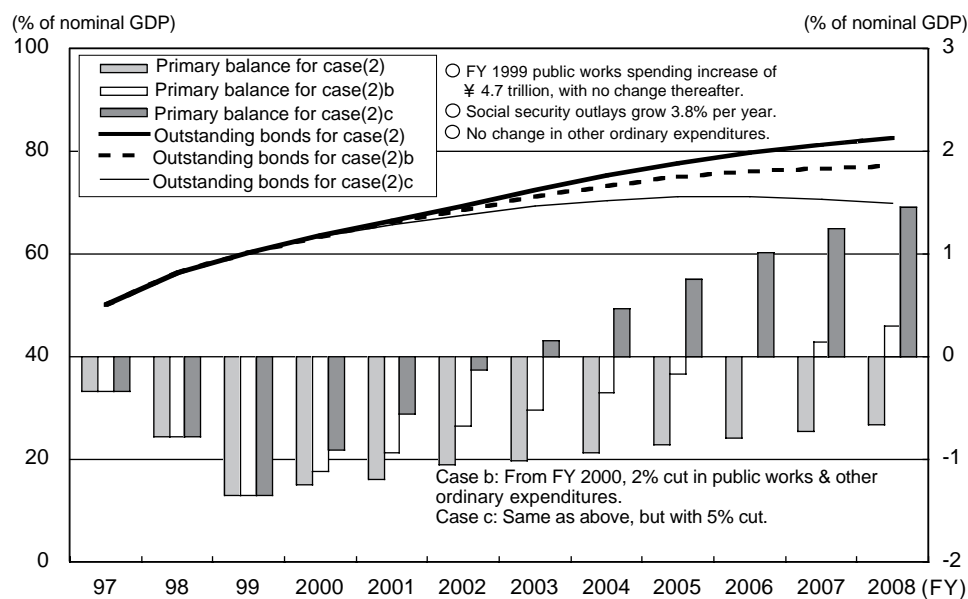
Or, assuming zero growth of the economy, achieving a single-year primary balance will require annual spending cuts of 6 percent (in ordinary expenditures excluding entitlements).

On the other hand, a balanced budget approach may be unwarranted if fiscal spending can alleviate conditions of weak demand and excess savings. Under optimal growth theory, in the medium term the allowable fiscal deficit level is determined by the population growth rate and savings rate. The fiscal deficit is now within the tolerance limit given the population growth rate and savings rate. However, the acceleration of aging and associated decline in savings rates will require a fiscal surplus in the future. Since the restoration of fiscal health following structural reforms will take time, the time for action is now.

Fiscal restructuring proposals: We propose aggressive fiscal spending in fiscal years 1998 and 1999 to break the recession, with the aim of achieving a primary balance by fiscal 2007 (we predict a 4.7 trillion yen supplementary budget in fiscal 1999, with the economy growing at its 2-percent potential growth rate from fiscal 2000).

Assuming a 2-percent nominal growth rate from fiscal 2000, ordinary expenditures excluding entitlements will need to be cut 2 percent annually. However, if the economy fails to achieve sustained growth, one of the following will be necessary: social security cuts of 1.5 percent annually, or conversion of the national pension program to a pay-as-you-go system funded by a 3-percentage point consumption tax hike.

**Figure 10 Fiscal Restructuring Scenarios Assuming 2% Nominal GDP Growth**





## 18-Month Economic Forecast for Japan

				6-month GDP forecast		Turning point (% sequential change)					Previous forecast
	FY97 actual	FY98 forecast	FY99 forecast	98/7-9	10-12	98/1-3	4-6	7-9	10-12	2000/1-3	FY98
Real GDP	-0.7	-1.7	1.0	-1.0	0.3	0.2	0.4	0.2	0.2	0.3	-0.3
				-0.5	1.1	0.8	1.5	0.8	0.9	1.1	
				-2.7	-1.8	-0.5	0.6	1.1	1.0	1.1	
Contribution of:											
Domestic demand	(-2.2)	(-2.3)	(0.7)	(0.0)	(0.2)	(0.0)	(0.3)	(0.2)	(0.2)	(0.3)	(-0.9)
from Private sector	(-1.6)	(-2.9)	(0.1)	(-0.6)	(-0.1)	(-0.1)	(-0.0)	(0.2)	(0.2)	(0.3)	(-1.1)
from Public sector	(-0.6)	(0.6)	(0.5)	(0.7)	(0.3)	(0.1)	(0.3)	(-0.0)	(-0.0)	(-0.0)	(0.2)
Contribution of:											
External demand	-1.5	(0.6)	(0.3)	(-0.2)	(0.1)	(0.2)	(0.1)	(0.0)	(-0.0)	(-0.1)	(0.6)
Private final consumption	-1.1	-0.4	0.9	0.1	0.3	0.2	0.1	0.3	0.2	0.3	0.9
Private residential investment	-21.1	-7.9	-0.4	-4.5	0.7	-0.5	-0.0	0.6	0.4	0.7	-8.3
Private capital investment	0.7	-12.6	-3.1	-3.2	-2.3	-1.3	-0.5	-0.2	0.4	0.8	-7.2
Public fixed capital formation	-7.2	6.8	4.8	8.2	2.9	0.4	2.0	-0.3	0.0	-0.3	1.0
Exports	9.0	-2.0	2.9	-0.2	1.5	0.8	0.9	0.6	0.5	0.2	-3.8
Imports	-2.9	-7.8	1.0	1.1	0.8	-0.8	-0.0	0.6	0.7	0.8	-9.6
Nominal GDP	0.3	-1.7	0.5	-0.0	-0.0	0.3	0.1	0.2	0.1	0.2	-0.3

Notes: 1. For real GDP, the three numbers are sequential change, sequential change annualized, and yoy change, respectively.

2. Forecast assumptions: For FY 1998, U.S.\$ =136, crude oil \$13.60/barrel. For FY 1999, U.S.\$ = ¥133, crude oil \$14.30/barrel.

### Economic indicators

						(%)					Previous forecast
	FY97	FY98	FY99	98/7-9	10-12	98/1-3	4-6	7-9	10-12	2000/1-3	FY98
Industrial production (seq.change)	1.2	-7.6	-0.5	-0.3	-0.2	-0.6	-0.2	0.2	0.2	0.4	-5.5
Overall wholesale prices (yoy change)	1.2	-0.4	-0.7	-0.3	-0.3	0.5	-0.3	-0.9	-0.8	-0.7	-0.6
Consumer prices (yoy change)	2.0	-0.3	-0.1	-0.3	-0.7	-0.7	-0.4	-0.1	-0.0	0.0	-0.3
Current account bal. (¥trillion)	12.9	17.3	19.0	17.9	17.6	18.7	19.0	19.5	19.0	18.7	18.6
(% of nominal GDP)	(2.6)	(3.5)	(3.8)	(3.6)	(3.5)	(3.8)	(3.8)	(3.9)	(3.8)	(3.7)	(3.7)
Unemployment rate	3.5	4.4	4.7	4.4	4.5	4.7	4.7	4.7	4.7	4.7	4.4
Housing starts (1,000)	1,340	1,200	1,210	1,150	1,210	1,200	1,210	1,210	1,220	1,220	1,280