Japan to Shrug off Deflation by FY 2008
—Medium-Term Economic Forecast

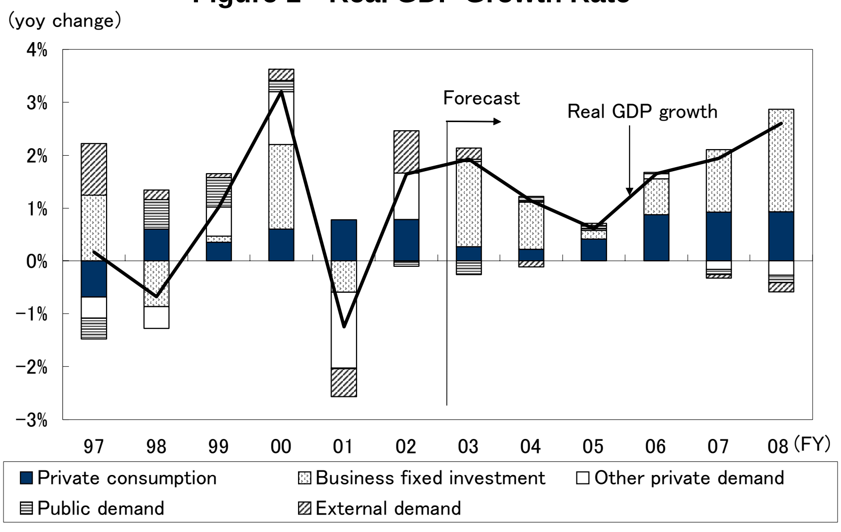
by the Economic Research Group

Forecast for 2008—2.6% Real GDP Growth, 0.6% CPI Inflation

Japan's economy will temporarily stall, but head toward recovery again as business fixed investment picks up in fiscal 2006. In fiscal 2008, the economy will achieve real economic growth of 2.6%, and finally shrug off deflation as the consumer price inflation turns positive at 0.6%.

On the supply side, capacity growth will be low as the population ages and the labor force declines. The GDP gap, which reached 7% of GDP in fiscal 2002, will decrease to 5% by fiscal 2008. We predict that improvement in the excess capacity problem, combined with wage growth as the balance of labor supply and demand improves, will also help bring an end to deflation.

Figure 1 Real GDP Growth Rate



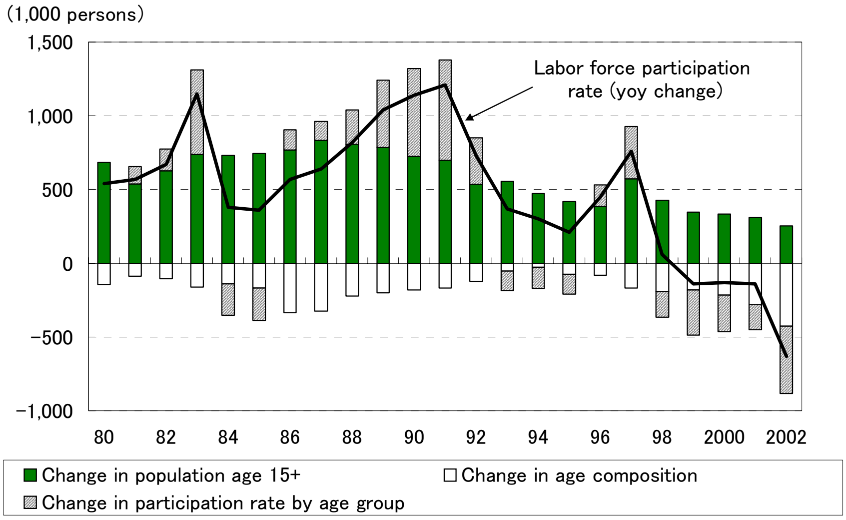
Source: Economic and Social Research Institute (ESRI), Cabinet Office, *Annual Report on National Accounts*.

1. Outlook for Deflation

1. Effect of the Aging Population

In the medium term, a major factor affecting Japan's economy will be the rapid aging of the population structure. The productive population (age 15-64) peaked in 1995 and has already begun declining. By the end of the forecast period, as the baby boom generation born from 1947 to 1949 begins to reach the retirement age of 60, the harsh effects of aging and shrinking labor force will come to light. As the total population declines, growth in aggregate demand will decelerate, but not by nearly as much as the labor force will shrink. For the economy as a whole, capacity growth will decelerate much faster than demand growth, which will gradually reduce the deflationary gap and alleviate downward pressure on prices.

Figure 2 Factors Causing Change in the Labor Force

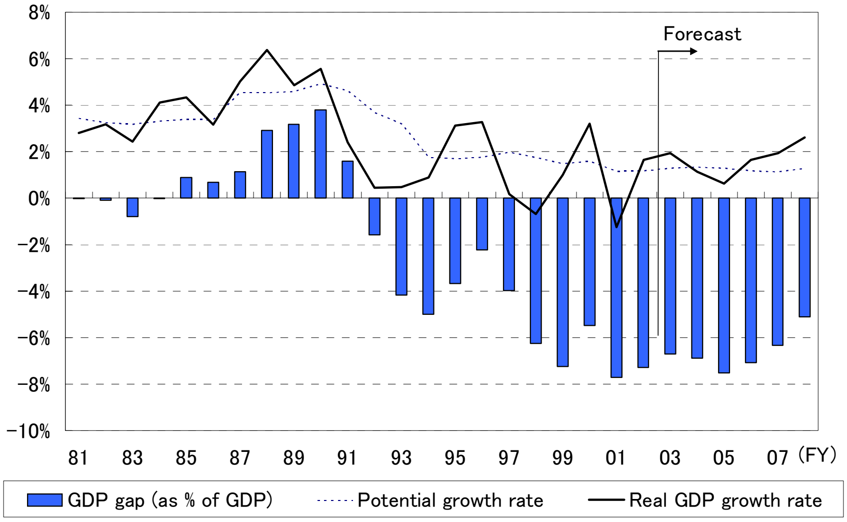


Source: MPMHAPT, *Labour Force Survey*.

The potential growth rate, which stood in the mid 3% range in the early 1980s, climbed to the mid 4% range from the late 1980s to early 1990s. But after the bubble economy's collapse, the potential growth rate plunged, and is estimated to have fallen to the mid 1% range by the late 1990s. The plunge is attributed to the decline in capital stock growth due to stagnant business fixed investment, decline in labor force growth, and sluggish labor input growth from the reduction in work hours.

At present, capital stock growth has declined to the low 2% range, but is predicted to increase to the mid 3% range by fiscal 2008 as business fixed investment surges in fiscal 2003 with an estimated double-digit growth rate, and continues with high growth in the second half of the forecast period. As for labor input, in addition to the labor force decline, an important trend is the rising proportion of women and elderly persons in the labor force, which increases the proportion of part-time workers, thus further reducing work hours per person. The resulting decline in labor input (labor force x work hours per person) will continue to accelerate, reaching approximately -1% per year by fiscal 2008. Thus assuming no significant change in the rate of technical progress, we predict the potential growth rate will remain in the low 1% range during the forecast period.

Figure 3 Potential Growth Rate and the GDP Gap



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

The GDP gap, which measures the difference between the economy's capacity and actual demand, has continued to grow following the bubble's collapse, and is estimated to be in the 7% range at present. Going forward, however, considering the 1% potential growth rate and that the actual growth rate will exceed this from fiscal 2006, we predict that the GDP gap will shrink to the 5% range by fiscal 2008.

2. Price Trends

Even if the GDP gap, which is thought to cause deflation, shrinks to 5% of GDP by the end of the forecast period, it will still be large by historical standards. However, considering the possible overestimation of capital stock built in the past—including economically obsolete plant and equipment, and unsuccessful resort facilities from the bubble era—the production capacity estimates may be upwardly biased. Moreover, despite the large GDP gap, deflation will gradually ease as employment conditions improve and wages stop declining, causing prices to rise for labor intensive services. Consumer prices will stop declining in fiscal 2007, and post a 0.6% increase in fiscal 2008. On the other hand, we predict that the GDP deflator will remain negative in fiscal 2008 due in part to the declining capital investment deflator of the corporate sector.

With proper policies to stabilize the exchange rate, and regulatory reforms to further accelerate growth of business fixed investment—which is already growing as the problem of excess capacity subsides—the economy could be able to reduce the GDP gap more rapidly. In that case, consumer price inflation could turn positive in fiscal 2006, further hastening the demise of deflation.

3. Timing of Shift Away From Quantitative Easing

We predict that although consumer price deflation will disappear in fiscal 2007, monetary policy will not change until late fiscal 2008, when inflation stabilizes at a positive rate from the year earlier. Ending the quantitative monetary easing policy means that the Bank of Japan will resume its policy of targeting interest rates. When the zero-interest rate policy was lifted in 2000, the call rate, which had dropped to around 0.02%, was increased to 0.25%. But we predict the BOJ will be more conservative the next time, and raise the call rate from the present range of 0.001～0.002% by setting a target of 0.1%.

Based on the relationship of the long-term interest rate to the short-term rate and economic variables until 1997, when the BOJ adopted an ultra-low interest rate policy, we predict that the long-term rate will reach the mid 2% range even if the short-term rate is near zero. Compared to this past relationship, the present long-term rate is significantly lower, but the deviation will quickly dissipate once deflation looks defeated and quantitative easing is abandoned. Thus the long-term rate will move significantly around fiscal 2007, as anticipation grows for the end of quantitative easing. If the policy shift actually occurs in fiscal 2008, the long-term rate will exceed 2%.

2. Global Economic Conditions

U.S. Faces Twin Deficits and Downside Risk for the Dollar

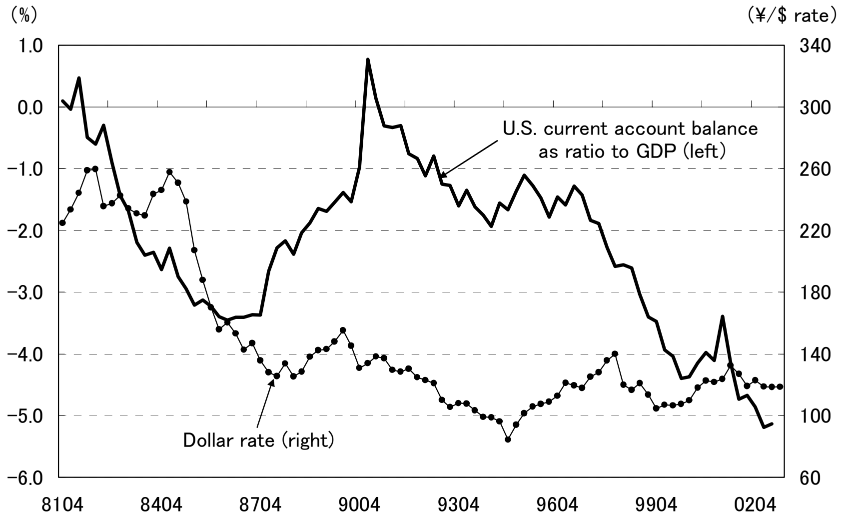
The threat of a twin deficit in the current account and fiscal budget is once again a concern for the U.S. economy. In 2002, the current account deficit increased to 4.6% as a ratio to nominal GDP. Meanwhile, the fiscal balance, which had turned to surplus in the Clinton administration, reverted to a deficit in the 2002 budget year, and is predicted to grow to $480 billion in 2004. The growth of the fiscal deficit is attributed on the revenue side to declining tax revenue from the recession, and on top of this, two large tax cut packages in 2001 and 2003 to stimulate the economy. On the expenditure side, despite restrained growth in general spending, expenditures have increased due to the sharp increase in defense-related outlays to combat terrorism and for ongoing military operations in Afghanistan and Iraq. However, the fiscal deficit could contract from 2005 if tax revenue grows due to the sustained economic expansion, and if expenditures related to Afghanistan and Iraq begin to decline. But since the recovery in tax revenue will be mitigated by declining tax rates, considerable time will be needed for the fiscal balance to be regained.

As was the case in the economic expansion of the late 1990s, the current account deficit has a tendency to grow when the economy recovers due to rising imports. In the future, since the

U.S. economic recovery is expected to lead the global economy, and since U.S. exports cannot be expected to grow significantly, the current account deficit is not likely to improve soon.

Due to the slow recovery of employment and ongoing capital stock adjustments, inflation is not a major concern. Since long-term interest rates are low, the growing fiscal deficit does not yet threaten to crowd out private investment. Nonetheless, the strong possibility remains that the twin deficits will eventually weigh on the economy. As the economic expansion continues, private demand for funds will grow, which would push up interest rates and impede further economic growth. This is an important risk in the medium term.

Figure 4 U.S. Current Account Balance as Ratio to Nominal GDP, and the Dollar Rate



Sources: Bureau of Economic Analysis, U.S. Dept. of Commerce; IMF

Our forecast assumes that the U.S. economy continues its stable growth, fund inflows from abroad remain strong, and the current account deficit remains at its present level. However, if the fund inflow destabilizes, the dollar could weaken, triggering an adjustment not only against major currencies as at the time of the Plaza Accord, but more likely, primarily against Asian currencies. The euro, which fell sharply after being introduced in 1999, has recovered to its starting level. On the other hand, until recently, many Asian currencies remained weak after plunging in the 1997 currency crisis, while the Chinese renminbi has been pegged to the dollar at 8.28 RMB since 1994. Thus compared to the major currencies, Asian currencies need to make larger adjustments against the dollar. While we assume that the yen will remain moderately strong against the dollar, the risk of a sharply weaker dollar is not small.

While a weaker dollar carries the risk of inflation for the U.S., this concern is minor at present. However, a potential risk factor is that with the upcoming elections in 2004 and delayed recovery in employment, political pressure could mount for exchange rate adjustment to improve cost competitiveness with abroad.

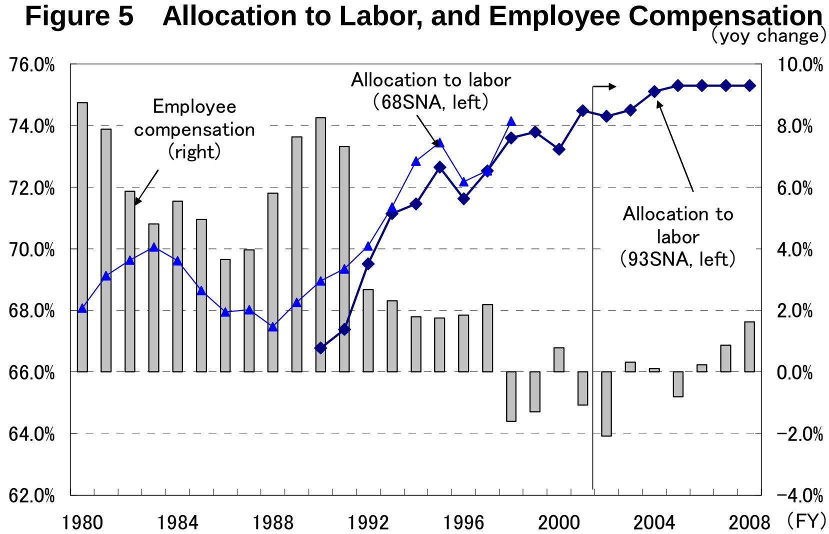
3. Medium-Term Forecast for Japan

1. Growth Rate and View of the Economy

In fiscal 2004, pension reforms will increase burdens and slow down consumption growth, while the strong yen will cause external demand to deteriorate, the economy will slow in the second half. In fiscal 2005, we predict a recession, with growth declining to 0.6%. However, the economy will recover in fiscal 2006 with the completion of capital stock adjustment and a cyclical recovery in capital investment, and achieve 2.6% growth in fiscal 2008.

No major improvements are expected in the near future for the employment and income environment, as companies will continue to trim labor costs amid the persistently high allocation to labor. However, in the second half of the forecast period, employee compensation is expected to turn upward even in nominal terms, and climb at an annual rate of 1.6% in fiscal 2008. The unemployment rate will remain above 5%until fiscal 2006, but improve to 4.5% in fiscal 2008.

Figure 5 Allocation to Labor, and Employee Compensation

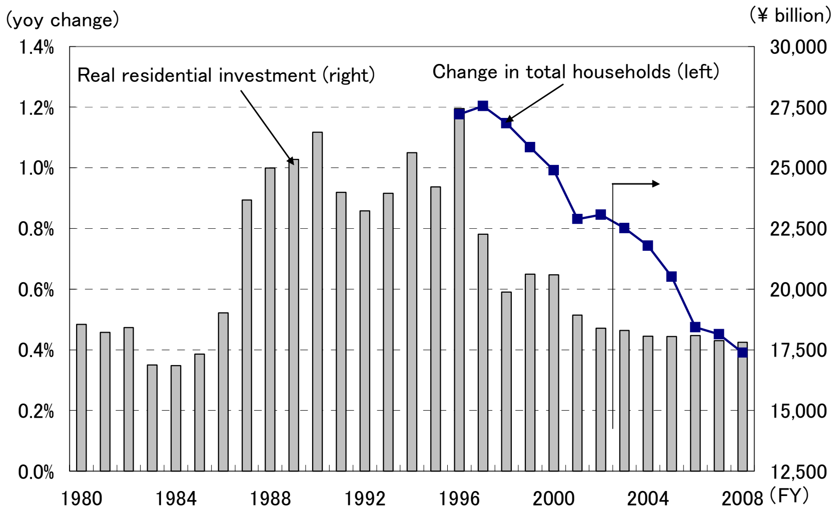


Note: Employee compensation prior to fiscal 1990 is available for 68SNA basis only.
Source: ESRI, *Annual Report on National Accounts*; MPMHAPT, *Labour Force Survey*.

However, with the growing fiscal deficit and deterioriating financial balances of social insurance programs, we expect to see small yet frequent revisions of the tax system and social insurance system that will increase the burden on households. During the forecast period, premium hikes are already scheduled for employment insurance and employees' pension insurance. Such revisions pose the risk of causing consumption to stagnate in the medium term.

With regard to residential investment, since significant improvement in the household income and employment environment is not expected, and since interest rates are predicted to rise in the second half of the forecast period, the home purchase intention of households is likely to remain weak. Since growth in number of households—an indicator of potential demand for residential investment—is projected to slow down over the medium to long term, we predict that the new housing starts will decline by less each year, and be flat over the forecast period. Despite positive factors such as expanding demand for maintenance and repair as housing stock grows, and qualitative improvements such as larger floor space as declining land prices enhance purchasing power, the decrease in new housing starts leads us to predict that real private residential investment will decrease -0.5% per year on average during the forecast period.

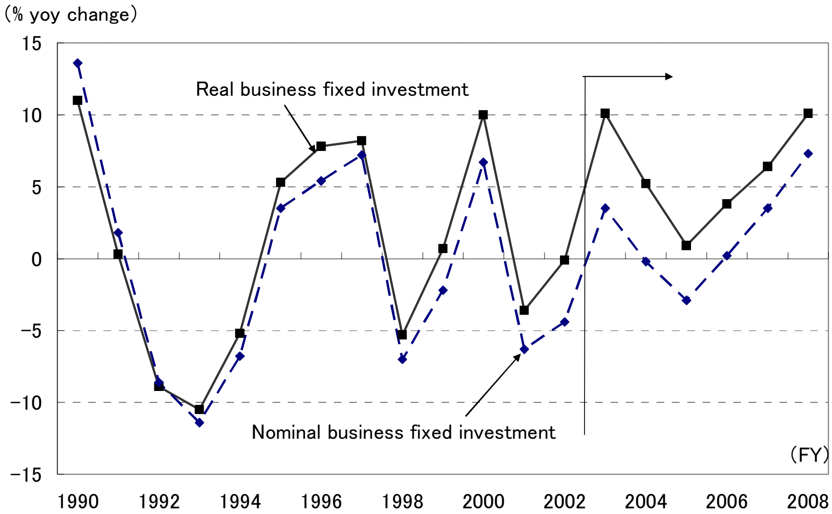
Figure 6 Growth of Households, and Real Residential Investment



Sources: ESRI, Annual Report on National Accounts; National Institute of Population and Social Security Research, *Overview of Households Projections for Japan [Published in October 1998*].

Business fixed investment will grow steadily in fiscal 2003 against the backdrop of improving corporate profits, but weaken again in fiscal 2004 as external demand deteriorates and consumption growth drops further. In fiscal 2006, with the completion of stock adjustment, we predict that business fixed investment will regain strength. The declining deflator will cause the real growth rate of business fixed investment to be higher than in past experience, reaching 10.1% in fiscal 2008. The average growth rate over the five-year forecast period will be 5.3%, compared to 3.1% for the past five years. On the other hand, the nominal growth rate will remain low by comparison at 1.5%. The share of business fixed investment in nominal GDP will also rise slightly, from 14.3% in fiscal 2002 to 15.8% in fiscal 2008.

Figure 7　Business Fixed Investment Growth Rate



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

Government expenditure growth will be restrained in order to reduce the fiscal deficit. Public works spending will become more difficult to reduce as its content increasingly shifts from new infrastructure construction to maintenance and repair. While public investment was reduced approximately 8% in fiscal 2002 and 2003, we predict a 4% nominal decrease in fiscal 2004, and a smaller decrease of 3% from fiscal 2005 onward. During the forecast period, nominal public investment will decrease an average of 3.2% per year, but since deflation will persist, the real decline will only be 1.8% per year. Government consumption will also be restrained, but due to rising expenditures for health care and long-term care associated with aging, and increasing depletion of social infrastructure, will average 0.4% real and nominal growth per year.

Since the global economy's growth will continue to be led by the U.S. economy, exports will continue to grow moderately. However, since the yen will continue to strengthen albeit moderately, and since the domestic recovery will cause imports to outpace exports, external demand will contribute on average -0.1% per year to economic growth during the forecast period.

Figure 8　Medium-Term Forecast for Japan

(% yoy change, unless otherwise noted)

	FY 2001 actual	FY 2002 actual	FY 2003 forecast	FY 2004 forecast	FY 2005 forecast	FY 2006 forecast	FY 2007 forecast	FY 2008 forecast	[Annual average rate] 93–98	98–03	03–08
Nominal GDP	−2.5	−0.7	−0.3	−0.6	−0.9	0.4	1.0	1.9	1.1	−0.7	0.4
(¥ tril.)	(502.6)	(499.2)	(497.7)	(494.5)	(490.1)	(492.2)	(497.2)	(506.6)			
Real GDP	−1.2	1.6	1.9	1.1	0.6	1.6	1.9	2.6	1.3	1.2	1.6
Domestic demand	−0.7	0.9	1.8	1.3	0.6	1.7	2.1	2.9	1.3	1.1	1.7
Private demand	−0.9	1.2	2.6	1.6	0.7	2.2	2.8	3.8	1.2	1.3	2.2
Final consumption expenditure	1.4	1.4	0.5	0.4	0.8	1.6	1.7	1.7	1.4	1.0	1.2
Residential investment	−8.0	−2.9	−0.5	−1.3	−0.1	0.3	−1.2	−0.4	−3.7	−1.6	−0.5
Business fixed investment	−3.6	−0.1	10.1	5.2	0.9	3.8	6.4	10.1	2.0	3.1	5.3
Public demand	−0.1	−0.3	−1.1	0.4	0.3	0.1	−0.4	−0.7	1.7	0.4	−0.1
Final consumption expenditure	2.2	1.9	1.0	0.9	0.7	0.6	0.1	−0.1	2.7	2.8	0.4
Public investment	−4.9	−6.3	−6.3	−1.8	−1.0	−1.5	−2.1	−2.5	−0.2	−5.3	−1.8
Net exports <as contrib. to real GDP>	<−0.5>	<0.8>	<0.2>	<−0.1>	<0.0>	<0.0>	<−0.1>	<−0.2>	<0.0>	<0.2>	<−0.1>
Exports of goods & services	−7.2	12.2	4.2	1.7	1.9	2.2	2.2	2.1	4.4	4.6	2.0
Imports of goods & services	−3.2	5.5	3.0	3.5	2.0	2.9	3.6	4.5	4.9	4.1	3.3
Industrial production	−9.1	2.8	1.2	1.4	0.1	2.2	2.5	3.0	0.5	0.2	1.8
Domestic corporate goods price index	−2.4	−1.6	−0.9	−0.7	−0.9	−0.5	−0.1	0.0	−1.0	−1.3	−0.4
Consumer price index	−1.0	−0.6	−0.3	−0.5	−0.6	−0.2	0.1	0.6	0.5	−0.6	−0.1
(excl. fresh foods)	−0.8	−0.8	−0.3	−0.5	−0.6	−0.2	0.1	0.6	0.5	−0.5	−0.1
Unemployment rate (%)	5.2	5.4	5.3	5.3	5.4	5.2	4.9	4.5	3.4	5.1	5.1
Current account balance (¥ tril.)	11.9	13.4	13.2	12.0	12.6	12.5	11.8	10.7	11.5	12.8	11.9
(ratio to nominal GDP)	(2.4)	(2.7)	(2.7)	(2.4)	(2.6)	(2.5)	(2.4)	(2.1)	(2.3)	(2.5)	(2.4)
Exchange rate (¥/$) average	125	122	114	108	107	106	105	104	112	117	106
Call rate (%) average	0.008	0.002	0.002	0.002	0.002	0.002	0.002	0.10	0.84	0.04	0.02
10-year JGB yield (%) average	1.4	1.2	1.0	1.2	1.3	1.4	1.8	2.2	2.7	1.4	1.6

Sources: ESRI, *Annual Report on National Accounts*; Statistics Bureau, Ministry of Public Management, Home Affairs, Posts and Telecommunications, *Consumer Price Index*, and *Labour Force Survey*; Bank of Japan, *Financial and Economic Statistics Monthly*

Figure 9　Medium-Term Forecast for the U.S.

	Unit	2001 actual	2002 actual	2003 forecast	2004 forecast	2005 forecast	2006 forecast	2007 forecast	2008 forecast	04–08 average
Real GDP	% yoy change	0.3	2.4	2.6	3.5	3.3	3.2	3.1	3.0	3.2
Domestic demand	% contrib.	0.4	3.1	3.1	3.9	3.5	3.4	3.3	3.2	3.5
Consumption expenditure	% yoy change	2.5	3.1	3.0	3.4	3.2	3.0	2.9	2.8	3.1
Business fixed investment	% yoy change	−5.2	−5.7	1.6	7.5	7.1	6.3	5.6	5.3	6.4
Residential investment	% yoy change	0.3	3.9	5.7	−0.5	0.5	0.8	1.0	1.6	0.7
Inventory investment	% contrib.	−1.3	0.7	−0.1	0.4	0.0	0.0	−0.1	0.0	0.1
External demand	% contrib.	−0.2	−0.7	−0.5	−0.4	−0.2	−0.2	−0.2	−0.2	−0.2

Consumer price index (CPI-U)	% yoy change	2.8	1.6	2.3	1.3	2.0	2.2	2.4	2.4	2.1
Current account balance	% of nom. GDP	−3.9	−4.6	−5.1	−5.1	−5.1	−5.1	−5.0	−5.0	−5.1
Federal funds rate target	%, at yearend	1.8	1.3	1.0	1.0	1.5	3.5	3.8	3.8	2.7
10-year Treasury yield	%, average	5.0	4.6	4.0	4.0	4.5	5.1	5.4	5.4	4.8

Figure 10　Medium-Term Forecast for the Euro Zone

	Unit	2001 actual	2002 actual	2003 forecast	2004 forecast	2005 forecast	2006 forecast	2007 forecast	2008 forecast	04-08 average
Real GDP	% yoy change	1.6	0.8	0.5	1.7	2.3	2.4	2.4	2.3	2.2
Domestic demand	% contrib.	1.0	0.2	1.0	1.5	2.3	2.2	2.2	2.1	2.1
Private final consumption expend	% yoy change	1.8	0.4	1.2	1.6	2.2	2.3	2.3	2.2	2.1
Fixed capital formation	% yoy change	-0.2	-2.7	-1.3	1.8	2.6	2.7	2.7	2.5	2.5
External demand	% contrib.	0.6	0.7	-0.6	0.2	0.0	0.2	0.2	0.2	0.2

Consumer price index (HICP)	% yoy change	2.4	2.3	2.1	1.9	1.8	1.9	1.9	1.9	1.9
Current account balance	% of GDP	-0.3	0.8	0.4	0.5	0.5	0.5	0.5	0.5	0.5
ECB policy rate	%, at yearend	3.3	2.8	2.0	2.0	2.5	3.3	3.5	3.5	3.0
10-year government bond yield	%	4.9	4.8	4.0	4.0	4.3	4.5	4.5	4.5	4.3
Exchange rate	$/euro	0.9	0.9	1.1	1.2	1.2	1.2	1.2	1.2	1.2