

Medium-term Economic Forecast

— *Overcoming the Deflationary Economy* —

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Economic & Industrial Research Group

Introduction

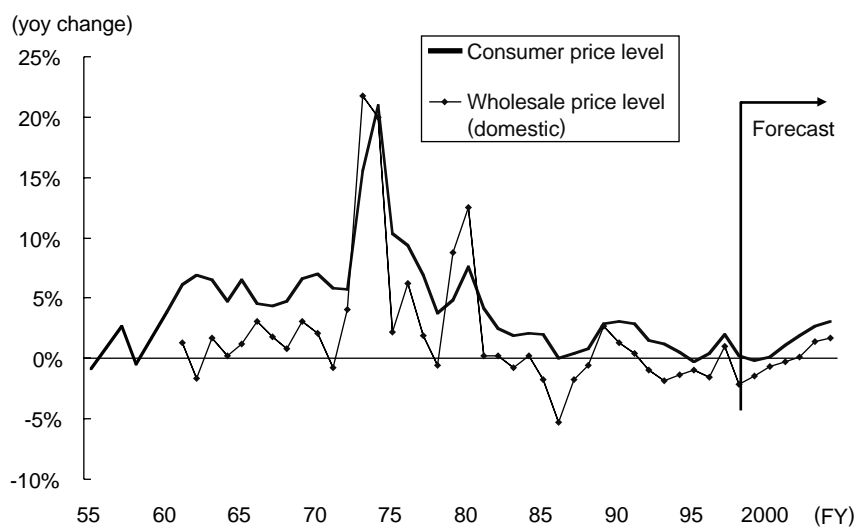
Following the collapse of the asset bubble of the 1980s, a persistent deflationary trend has plagued the economy and aggravated the bad loan problem. While the economy is expected to overcome deflation in the medium term, growth will be subdued due to problems created by the aging population.

1. Overcoming Deflation

Despite a nascent recovery from the spring of 1999, the economy has remained in a profound slump since the collapse of the bubble economy. Propped up by fiscal measures and continued monetary easing, the economy should overcome deflation at the start of the 21st century. However, a more worrisome problem is that as the population ages, households are saving more to prepare for retirement, and the excess savings are weakening demand. Thus even if the economy recovers from its worst period, the recovery will remain weak as domestic demand continues to struggle.

A major feature of the post-bubble economy has been its underlying price stability. In fact, the recession's persistence and price softness (due partly to the strong yen's impact on import prices) have even prompted some people to argue that a deflationary spiral is underway. However, in the medium term, we predict that the economy will overcome the deflationary undertone with the sustained support of fiscal and monetary policies. As inflation then causes nominal incomes to rise, asset prices will appreciate, easing the bad loan problem and promoting recovery in the corporate sector. On the other hand, as inflation causes financial assets to depreciate, there is a risk that households will restrain consumption to build up their savings. Consumption will also be restrained from the income side as corporate restructuring pushes up the unemployment rate and impedes wage growth. For the economy to grow under these conditions, the only chance lies in reducing excess savings, a difficult problem that has lurked at the heart of the persistent recession.

Figure 1 Price Trends



Note: Consumer prices prior to fiscal 1970 have been adjusted to the 1980 base year.
Sources: MACA, BOJ

2. Determinants of Economic Trends

(1) The Zero Interest-Rate Policy and Nascent Inflation

Fiscal and monetary measures have been constantly pursued since the collapse of the bubble economy. Monetary policy has eased significantly, with the official discount rate kept at an unprecedented low of 0.5% since September 1995, while the zero interest-rate policy in effect since February 1999 has guided short-term market interest rates close to zero. In addition, the BOJ further eased its stance on October 13 by agreeing to buy short-term debt directly from the government. Continued deficit spending and monetary easing policies will keep money supply growth significantly above the nominal GDP growth rate.

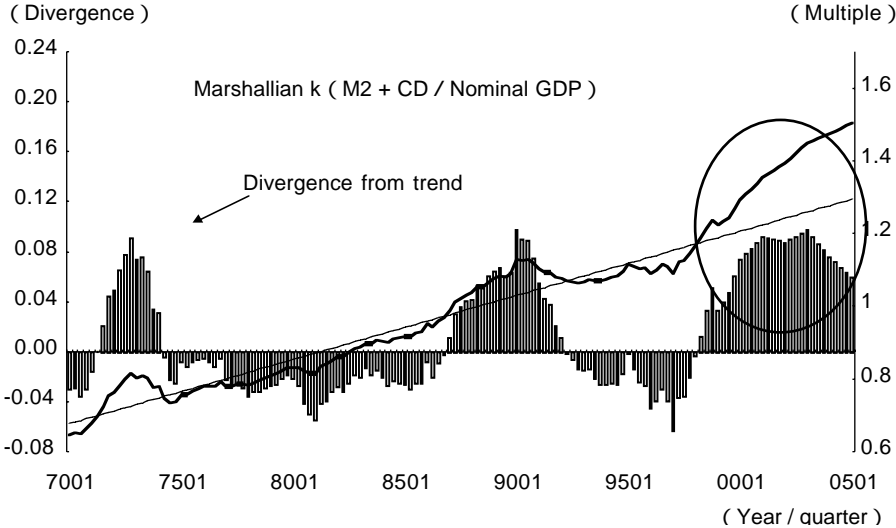
Over the long term, the money supply's sustained growth eventually affects economic variables such as GDP and inflation. Immediately after the bubble collapsed, the money supply was small in proportion to the size of the economy. Today the situation is much improved even after the bad loan problem is taken into account, and continued monetary easing will keep the money supply expanding rapidly relative to the economy. Ideally, this would lead to real GDP growth. But as companies shift to a profit emphasis, they are more likely to raise prices than to expand investment. Thus adjustments between money supply and nominal GDP are likely to occur through inflation.

The economy's deflationary tendency, caused partly by the strong yen, has been reined in by

the zero interest-rate policy. Consumer price inflation, we predict, will rise to approximately 3% by fiscal 2004. The credit multiplier, which is the ratio of the monetary base to money supply, has declined due to weak corporate financing demand and an unstable financial system. But as the credit multiplier improves in the process of economic recovery, the money supply could expand faster than expected. To curb such surges in the money supply, now is the time to consider altering the reserve deposit system in a way that enhances the effect of monetary policy.

The essence of the bad loan problem is that corporate debt is out of balance with return on assets. Although the value of debt is fixed, the balance between debt and returns will improve as nominal returns increase with inflation, easing the bad debt problem and contributing to economic recovery. Inflation will enable the entire country to regain balance between debt and asset value. While corporate losses are ultimately borne by households in the form of reduced wealth, there is no guarantee that asset depreciation caused by inflation will be distributed across society in a desirable way. As was the case in the first oil shock, there is a risk that inflation will depress consumption more among lower income households because their asset composition contains relatively few real assets. In addition, unresolved anxieties concerning aging issues will accentuate the tendency of households to suppress consumption if inflation depreciates savings assets.

Figure 2 The Growing Cash Economy

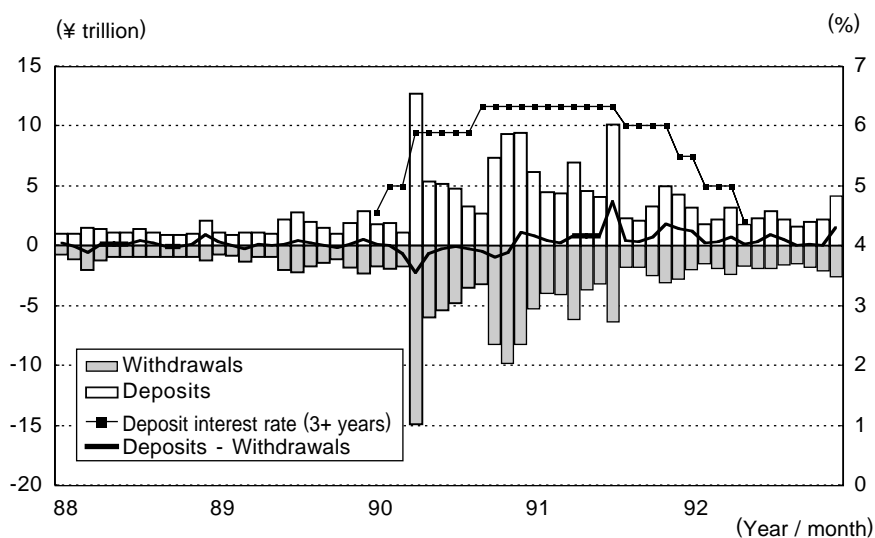


(2) The Y2K Problem of Postal Savings

In the spring of 2000, a large amount of postal savings time deposits created between April 1990 and December 1991 will reach maturity. This, combined with reforms that halt the flow of postal savings deposits to the Fiscal Investment and Loan Program, have raised concerns regarding the impact on market interest rates. However, since the maturing time deposit funds are not likely to flow out en masse, and since FILP reforms will be implemented step by step, the risk of a significant impact on financial markets is low.

The huge amount of maturing time deposits may stimulate household consumption. Since time deposits pay out interest and principal upon maturity, households tend to consume and save without really knowing the amount of interest payment accumulating in their accounts. The time deposits maturing in fiscal 2000 and 2001 are estimated to pay out ¥60 trillion in principal and ¥40 trillion in interest. Since these accounts were created back when interest rates were substantially higher, the size of the lump sum payout should surprise households. While most of the ¥100 trillion is expected to be re-deposited, the fraction that flows into consumption will significantly benefit the economy. Considering the time lag for this asset income to lead to consumption, the contribution of this extraordinary factor will peak in fiscal 2001, boosting GDP growth in an otherwise weak recovery.

Figure 3 Postal Savings Funds on Deposit (Time Deposits)

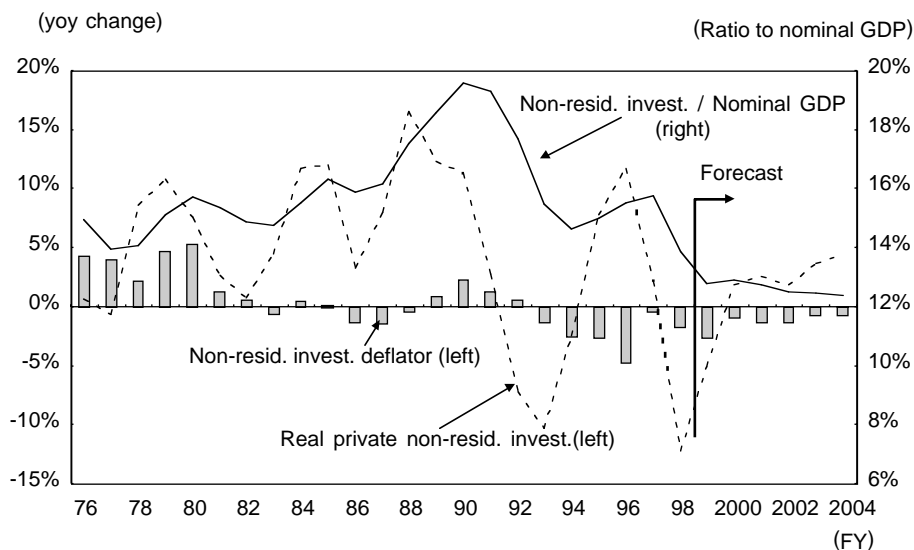


Source: MPT

(3) The Excess Capacity Problem

The GDP gap, which measures the difference between production capacity and the actual level of economic activity, stands at 7% in fiscal 1999. In addition to the recession, the sizable gap can be attributed to excessive investment. Private capital investment was already high when it surged in the late 1980s bubble economy to almost 20% of nominal GDP, comparable to the economic miracle years. To regain competitiveness, companies must abandon their bandwagon type investment stance of the past and devise individual investment strategies. The aggregate effect from doing so will reduce the investment ratio of the overall economy. Since much time is needed for existing capacity to return to appropriate levels based on average depreciation rates of the past, the excess capacity will act to curb investment in the medium term.

Figure 4 Private Non-Residential Investment



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

3. The Medium-term Outlook for the Economy

(1) World Economy: U.S. Stock Market Correction is the Biggest Risk

The Asian economy appears to be recovering from its financial crisis. While unlikely to resume the high growth rates of the 1980s, it will manage to regain stable growth. Europe also appears to be recovering from the slump following the introduction of the euro in 1999. Although the U.K.'s participation will be apparently delayed until 2004, the European economy will continue to expand. The U.S. has been enjoying a virtuous cycle in which the booming stock market attracts foreign money and strengthens the dollar, the strong dollar suppress-

es inflation and interest rates, which in turn propels the stock market and expands consumption. On the down side, the household savings rate is declining and the current account deficit is growing. Compared to the 1980s, economic policy makers enjoy favorable conditions, including a much improved fiscal situation, and will be able to avoid a severe recession but not a slowdown. The biggest risk factor is the stock market's substantial correction due to a foreign capital flight or other cause, leading not only to negative growth but sending repercussions to Japan as well.

Figure 5 Japan's Main External Risk: Impact of a 30% U.S. Stock Market Decline on the U.S. Economy

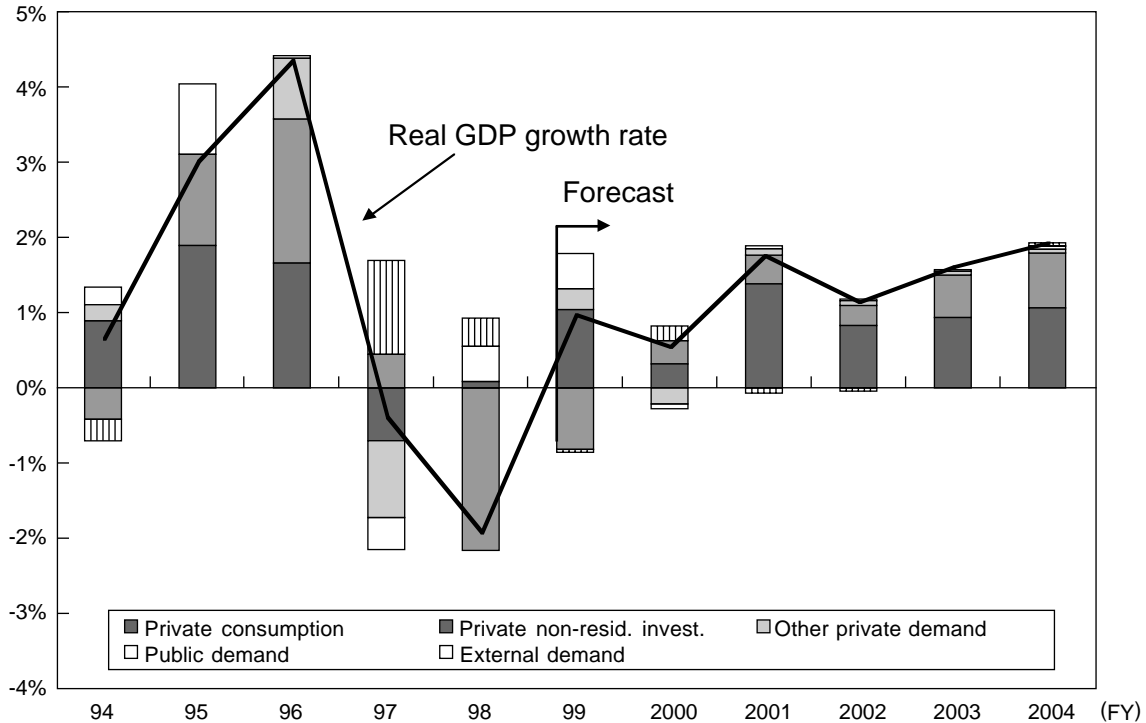
	Stock market assumption:		Difference
	No decline	30% decline	
Private consumption	1.9	-1.4	-3.3
Domestic demand	2.2	-2.1	-4.3
Imports	4.9	-4.7	-9.6
Real GDP	2.3	-0.6	-2.9
Unemployment rate	4.4	5.0	0.6
Household savings rate	2.5	4.2	1.8
Current account bal. (% nominal GDP)	-3.2	-1.5	1.7
Consumer price level	2.3	1.8	-0.6

Notes: All numbers are in percent. Unemployment rate, household savings rate, and ratio of current account balance to GDP are actual levels; other numbers express year-on-year change.

(2) Japan: Fiscal Deficit and Current Account Surplus Will Remain Large

Fiscal and monetary policies will enable the Japanese economy to shrug off its post-bubble crisis and move toward recovery. However, a number of thorny problems remain unresolved, including the bad loan problem and excess capacity. In addition, as the population ages, the problem of excess savings will emerge prominently from 2010, the economy will basically start the next century with insufficient demand and a sustained current account surplus exceeding 2% of nominal GDP. The economy's supply-side based potential growth rate will remain at approximately 2%, but sluggish demand growth in the medium term will leave the economy vulnerable to extraordinary factors, and the actual growth rate will be unsteady. In fiscal 1999, fiscal and monetary policies will kick in and the economy will bottom out. However, in fiscal 2000, a U.S. downturn and lower fiscal stimuli domestically will slow the economy again. In fiscal 2001, postal savings time deposits will mature, prompting consumption-led growth. Toward the end of our forecast period, prices will begin edging upward, the bad loan problem will gradually abate as earnings improve, and non-residential investment will begin growing.

Figure 6 Contribution of Demand Components to Real GDP



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

In the process of corporate restructuring, unemployment will rise while labor costs will be reined in. These factors will dampen household income growth, preventing any substantial growth in consumption. Since alleviating excess capacity and improving corporate earnings will require that the economy as a whole reduce the ratio of capital investment to nominal GDP, capital investment will be restrained in the medium term. However, vigorous investment will occur in growth areas. In particular, since prices are expected to drop significantly in information technology related investment, business investment is actually expected to grow reasonably well.

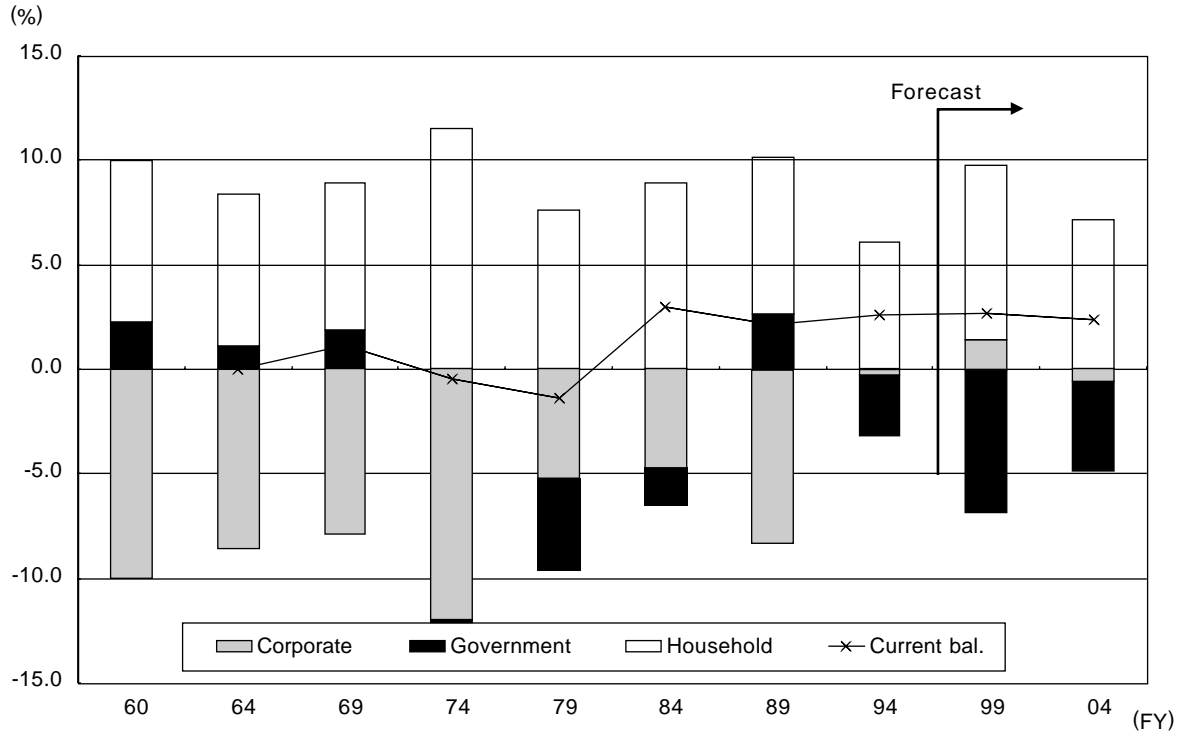
Japan's fiscal deficit will remain a major problem at the start of the 21st century. As higher inflation and improved corporate earnings cause tax revenues to increase, the deficit to nominal GDP ratio will decline gradually from its fiscal 1999 peak. However, bold action in the form of tax hikes and spending cuts will be needed to rein in the expanding national debt. A policy dilemma arises here in that reducing the fiscal deficit too quickly poses the risk of expanding the external surplus and returning to a deflationary trend. We assume that monetary policy will remain easy, and that money supply growth remains on the high side, possibly exceeding expectations if the economy and financial system recover. However, since the recovery's weakness will preclude severe monetary tightening, the economy could take a full swing from the deflationary tendency of the 1990s to inflation by the end of our forecast period.

4. Issues After Overcoming Deflation

Overcoming deflation, while important, is not equivalent to returning the economy to a stable growth path. As the economy confronts the onset of an aging population, the household sector is cutting back on consumption and saving assiduously for retirement. In the economy's miracle growth years, household savings were channeled into private investment. But as the economy shifted to stable growth, dwindling investment opportunities led to excess savings, forcing the government to run fiscal deficits to keep the economy in balance. Economic policy in the late 1980s can be understood as an attempt to maintain the economy's balance by stimulating private sector investment through concepts such as *minkatsu* (literally "private sector vitality"), and reducing the fiscal deficit while curbing the external surplus growth. Business investment drove economic growth by absorbing household savings, reducing the BOP surplus, and expanding demand. But ultimately, unable to generate sufficient returns, much of the investment turned into nonperforming debt that further aggravated the problem of inadequate demand.

In the post-bubble 1990s, the government once again resorted to deficit spending to deal with the economy's problems. A clear economic strategy is needed to remedy these past excesses. In learning from past policy mistakes, effecting long-term structural changes in the economy to accommodate the aging society, and developing an integrated approach to problems, all indications point to an underlying theme to reduce the savings rate. Over the long term, stable economic growth will depend on whether households can be convinced to save less and consume more, and this will occur by creating a conducive environment by providing jobs for older workers, guaranteeing social security for those unable to work, and ensuring the success of the long-term care insurance program.

Figure 7 Investment-Savings Balance by Sector (ratio to nominal GDP)



Source: EPA, *Annual Report on National Accounts*. Forecasts for 1999 and 2004 are by NLI Research Institute.

Medium-term Economic Forecast for Japan

(% change yoy; <> indicates contrib. to real GDP growth)

	FY 98 act.	FY 99 est.	FY 00 for.	FY 01 for.	FY 02 for.	FY 03 for.	FY 04 for.	95-99	99 - 2004
Nominal GDP (expenditure side)	-2.1 (494.5)	0.2 (495.7)	0.0 (495.9)	2.3 (507.3)	2.3 (518.9)	3.4 (536.5)	4.0 (558.1)	0.3	2.4
Real GDP (expenditure side) (¥ trillion)	-1.9 (478.4)	1.0 (482.9)	0.5 (485.5)	1.8 (494.1)	1.1 (499.6)	1.6 (507.7)	1.9 (517.4)	0.7	1.4
Domestic demand	-2.3	1.0	0.3	1.9	1.2	1.6	1.9	0.3	1.4
Private sector demand	-3.5	0.6	0.5	2.3	1.5	2.0	2.3	0.2	1.7
Final consumption exp.	0.1	1.8	0.5	2.3	1.4	1.6	1.8	0.9	1.5
Residential investment	-10.7	6.2	-3.7	1.3	0.9	1.2	1.3	-4.1	0.2
Non-residential invest.	-12.3	-5.1	1.8	2.5	1.8	3.6	4.4	-1.3	2.8
Public sector demand	2.8	2.7	-0.4	0.1	0.1	0.2	0.2	0.8	0.0
Final consumption exp.	0.4	0.3	0.5	0.7	0.7	0.8	0.8	1.0	0.7
Fixed capital formation	6.1	4.9	-1.4	-0.5	-0.5	-0.5	-0.5	0.6	-0.7
Net trade of goods & services	<0.3>	<-0.0>	<0.2>	<-0.1>	<-0.0>	<0.0>	<0.1>	<0.4>	<0.0>
Exports	-3.6	3.5	5.0	2.1	2.0	2.7	3.0	4.2	3.0
Imports	-7.3	4.6	4.0	3.4	2.9	3.1	3.2	0.9	3.3
Domestic wholesale price level	-2.2	-1.4	-0.6	-0.3	0.1	1.4	1.7	-1.0	0.4
Consumer price level	0.2	-0.1	0.1	1.1	1.9	2.7	3.1	0.6	1.8
Unemployment rate	4.3	4.9	5.3	5.1	4.7	4.5	4.3	4.0	4.8
Current account balance (¥ tril.)	15.2	13.2	13.4	13.2	13.1	12.7	13.3	12.1	13.1
(Ratio to nominal GDP)	3.1	2.7	2.7	2.6	2.5	2.4	2.4	2.4	2.5

Sources: Actual figures are from EPA, *Annual Report on National Accounts*; MACA, *Monthly Report of Retail Prices, and Labor Force Survey*; BOJ, *Financial & Economic Statistics Monthly*, and *Balance of Payments Monthly*; others.

Forecast for Overseas Economies

	U.S.								U.K.								Euro region (11 EMU members)							
	(a) 98	(f) 99	(f) 00	(f) 01	(f) 02	(f) 03	(f) 04	(a) 98	(f) 99	(f) 00	(f) 01	(f) 02	(f) 03	(f) 04	(a) 98	(f) 99	(f) 00	(f) 01	(f) 02	(f) 03	(f) 04			
Nominal GDP	5.5	4.9	4.4	3.4	4.3	4.6	4.8	5.0	3.7	4.0	4.0	3.9	3.9	3.9	3.9	3.7	4.1	4.4	4.4	4.7	4.8			
Real GDP	4.3	3.5	2.3	1.3	2.1	2.3	2.4	2.2	1.6	2.1	2.2	2.0	1.9	1.9	2.7	1.8	2.2	2.3	2.2	2.4	2.4			
Household consump.	4.9	5.0	1.9	1.7	2.1	2.3	2.4	3.3	3.4	2.3	1.7	1.4	1.3	1.2	2.9	2.1	1.4	1.7	1.8	1.9	2.0			
Residential invest.	9.2	6.7	-4.2	-9.6	-0.1	2.8	3.8	9.9	5.4	2.2	3.0	2.9	2.7	2.6	4.3	4.6	2.8	2.7	2.7	3.1	3.2			
Non-resid. invest.	12.7	9.1	3.4	0.4	2.3	3.2	3.7																	
Government expend.	1.7	1.3	1.3	1.3	1.3	1.3	1.3	1.0	3.0	2.6	2.6	2.6	2.6	2.6	1.3	1.6	1.9	2.0	2.0	2.0	2.0			
Inventory invest.	0.1	-0.2	0.4	0.0	0.3	0.2	0.3	0.0	-0.6	0.4	0.1	0.0	0	0.0	0.4	0.0	0.3	0.2	0.0	0.1	0.1			
Exports	2.2	2.7	6.9	5.5	5.6	5.6	5.6	2.0	0.4	2.1	4.7	4.6	4.5	4.5	6.3	2.2	7.4	7.8	7.4	8.0	8.1			
Imports	11.6	11.8	4.9	2.8	5.2	6.0	6.4	8.4	5.3	4.2	4.6	4.1	4.0	4.0	8.5	4.5	7.4	7.6	7.2	8.0	8.1			
Wholesale price level	-0.9	1.6	1.7	2.8	1.5	1.5	1.6	0.5	1.3	2.4	2.7	2.8	2.9	-	-	-	-	-	-	-	-			
Consumer price level	1.6	2.2	2.3	2.2	2.3	2.3	2.4	2.7	2.3	2.5	2.5	2.5	2.6	2.7	1.1	1.1	1.4	1.6	1.8	1.9	2.0			
Current account bal.	-2.5	-3.4	-3.2	-2.6	-2.4	-2.4	-2.3	0.0	-0.6	-1.3	-1.5	-1.5	-1.6	-1.7	1.1	0.8	0.9	1.1	1.2	1.3	1.5			

Notes: All numbers are %; inventory investment is contribution; current account balance is ratio to nominal GDP; other numbers are yoy change. For the U.K. and euro region, residential and non-residential investment are expressed as aggregate fixed capital formation.

Sources: U.S. Department of Commerce, U.K. Office for National Statistics, and European Central Bank. Forecasts are by NLI Research Institute.