

Medium-Term Economic Forecast (Fiscal 2004-2014) —A Look at Japan's Post-Deflation Economy*

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1. Overcoming Deflation

1. Progress in Post-Bubble Problems

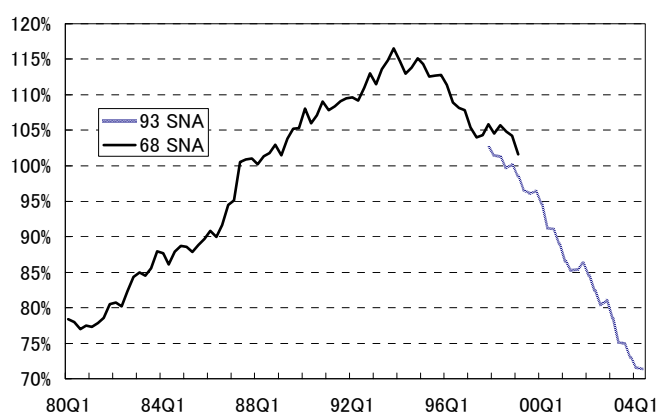
Supported by growth in external demand, Japan's real economic growth reached 3.2% in fiscal 2003, and is expected to exceed 3% for the second consecutive year in fiscal 2004 (3.3%). According to the Bank of Japan's *Tankan* survey in September, the diffusion index for large manufacturing enterprises hit a new post-bubble high, while the DI for all companies and industries turned positive as well. The economic recovery thus appears to be broadening its base.

The three excesses that have plagued the post-bubble economy—debt, employment and capacity—are gradually improving. The ratio of loans to nominal GDP in the nonfinancial corporate sector, which had surged well above 100% right after the bubble's collapse, has declined significantly in recent years. Unemployment, which persistently rose from a 2.1% rate in fiscal 1991 to 5.4% in fiscal 2002, fell for the first time in the post-bubble era to 5.1% in fiscal 2003. Moreover, DI numbers for employment conditions and fixed investment showed less pronounced excesses, indicating that the problems of excess employment and capacity are abating.

Looking ahead, we expect external demand to soften as the U.S. and China economies slow down, while higher social insurance premiums will curb household consumption. As a result, domestic demand will fail to offset the slowing external demand, posing a large risk of recession in fiscal 2005. While consumer price inflation has been almost zero year-on-year, the likelihood of recession leads us to predict that inflation will not be positive enough in fiscal 2005 to declare an end to deflation. However, in view of ongoing progress on the nagging structural problems from the 1990s, we predict that deflation will end in the next recovery from fiscal 2006. This requires that deflation exit strategies be implemented including the dismantling of quantitative easing.

* This forecast was released on October 15, 2004. Beginning with the 2nd preliminary quarterly estimates of GDP for July-September 2004, released on December 8, 2004, a new chain-linking method was applied to the compilation of SNA data. This change is reflection in the Forecast for Japan data at the end of the report. However, the data in the text of this report has not been revised from the former fixed-base year method.

Figure 1 Excess Liabilities Continue to Shrink



Note: 93SNA flow of funds data shows loans as a ratio to nominal GDP (seasonally adjusted) for private nonfinancial corporations; 68SNA flow of funds data shows same for corporate business.
Source: BOJ, *Flow of Funds Account*; Economic and Social Research Institute (Cabinet Office), *Annual Report on National Accounts*.

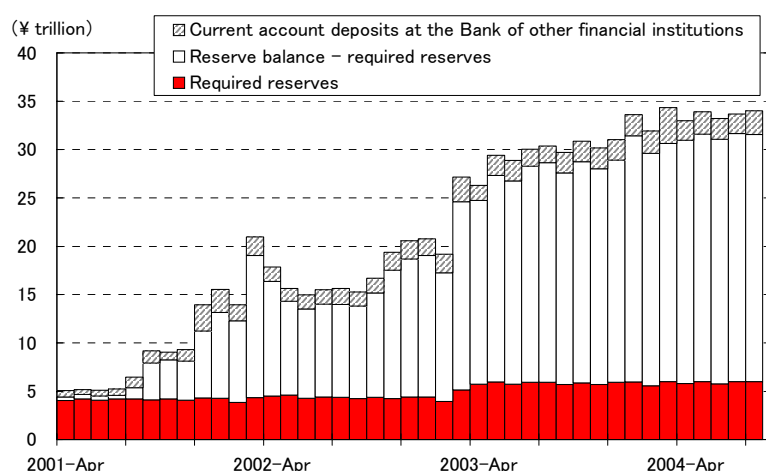
2. Deflation Exit Strategies

For a long period after the bubble economy collapsed, Japan has struggled to overcome deflation. In the process, policymakers have resorted to measures otherwise shunned for their potentially serious side effects. These conditions must be normalized again once deflation is overcome. But we predict several difficulties here.

Monetary policy authorities drove the policy interest rate down to near zero, and then adopted a quantitative easing policy. The simplest way to dismantle the quantitative easing policy would be to reverse the implementation process. However, with some banks now holding huge excess reserves, funds are unevenly distributed. Thus if the Bank of Japan reduces overall current account balances, banks with inadequate reserves would need to borrow money, driving up short-term interest rates despite the large overall excess reserves. As this situation indicates, some complicated monetary adjustments will need to accompany the end phase of quantitative easing.

Moreover, since increases in the monetary base have not significantly expanded the money supply, required reserves stand at approximately six trillion yen, against BOJ current account balances that exceed 30 trillion yen. Another risk is that when deflation ends, the relationship between the monetary base and money supply will normalize, causing the money supply to surge or inflation to become rampant. To absorb the excess reserves, the BOJ would need to consider measures such as raising the reserve ratio to quickly absorb massive funds.

Figure 2 Current Account Balances at the Bank of Japan



Source: BOJ, *Figures on Reserves*.

In fiscal policy, the fiscal 2003 budget deficit (for general government including social security funds) is estimated at 7.5% of nominal GDP, while the combined outstanding debt of local and national governments was 700 trillion yen at fiscal yearend. However, since a large tax increase or spending cut would threaten the recovery and aggravate deflation, policymakers have made little progress on a deficit-reducing course of action. Another concern is that if interest rates rise from the present ultra-low levels, swelling interest payments will worsen the fiscal balance.

The two main policies for normalization—ending quantitative easing and raising the policy interest rate, and reducing the fiscal deficit with tax increases or spending cuts—would both check economic growth. At the time deflation ends, these policies could destabilize the precarious economic recovery and rekindle deflation. Thus the speed at which to normalize fiscal and monetary policies will be a crucial problem.

The fiscal 2004 fiscal budget abolishes the special exemption for spouses and raises the premium for employees' pension insurance. We predict that such incremental increases in the public's burden will occur continually even before deflation is overcome. While there is the possibility of a supplementary budget or intra-year tax cut, the budget process consumes considerable time from the initial budget proposal to Diet deliberation and final approval, and tax reform is also cumbersome and inflexible to economic conditions—a consumption tax hike, for example, must allow businesses an adjustment period to reset cash registers and so forth. Thus we predict that fiscal and monetary policy will unfold as follows: policymakers will first devise a timeline to implement measures such as a consumption tax hike, while relying on monetary policy to fine-tune the economy.

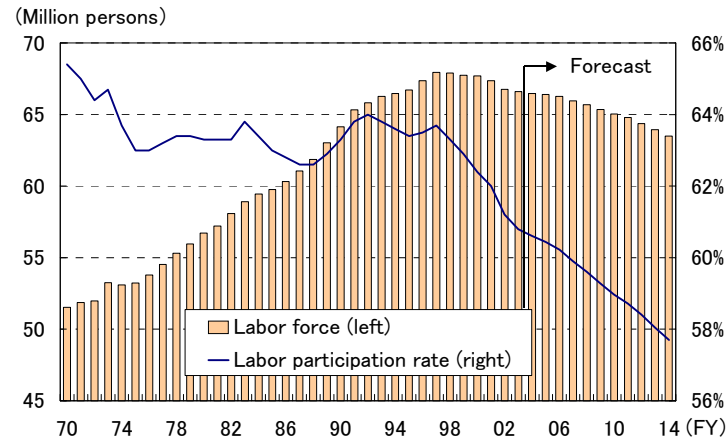
2. Japan's Economy in the Next Decade

1. Effect of the Aging Population

Over the next decade, the largest impact on the economy will come from the rapid aging of the population. According to the median population projection of the National Institute of Population and Social Security Research, while the total population will peak out in 2006 and start decreasing, the productive population segment (age 15 to 64) peaked out in 1995 and is already shrinking.

Moreover, the labor force decline will accelerate over the next decade as baby boomers born from 1947 to 1949 start to reach retirement age at 60 in 2007, and then leave the productive population at age 65 in 2012. Thus in the next decade, total population will decrease by one million, while the labor force will decrease by three million, from 66.62 million in fiscal 2003 to 63.49 million in fiscal 2014. Two measures could slow down the pace of labor force decline—pushing back the eligibility age for public pension benefits to keep more people working after “retirement age,” and enhancing childcare services to boost the women’s labor participation rate. However, these measures will not be enough to slow down the labor force decline.

Figure 3 Labor Force Size and Labor Participation Rate



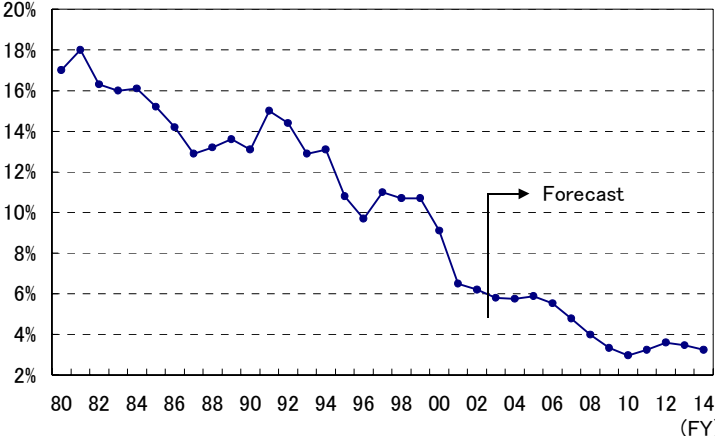
Source: Statistics Bureau, Ministry of Internal Affairs and Communications, *Labour Force Survey*.

2. Impact of the Declining Savings Rate

Japan’s household savings rate used to be high by international standards. However, it has plummeted over the years, reaching 6.2% in fiscal 2002. The biggest cause of the savings rate’s secular decline has been aging, or the growing proportion of elderly persons who are dissaving. But the sharp drop in savings rate since fiscal 2000 can also be attributed to two other factors—a decrease in interest income due to ultra-low interest rates, and statistical conventions that count plan terminations and the return of the managed portion of pension funds as decreases in

household savings. The savings rate could get a boost from higher asset income, which would increase disposable income—for instance, if interest rates return to more normal levels so that interest income grows, and corporate balance sheets improve enough for companies to pay out dividends. As a result, as aging progresses, we predict that the savings rate will continue to fall albeit at a slower pace, reaching 3.2% in fiscal 2014. We also predict that the household sector will maintain a financial surplus equivalent to 2.2% of nominal GDP.

Figure 4 Sharp Decline in Household Savings Rate



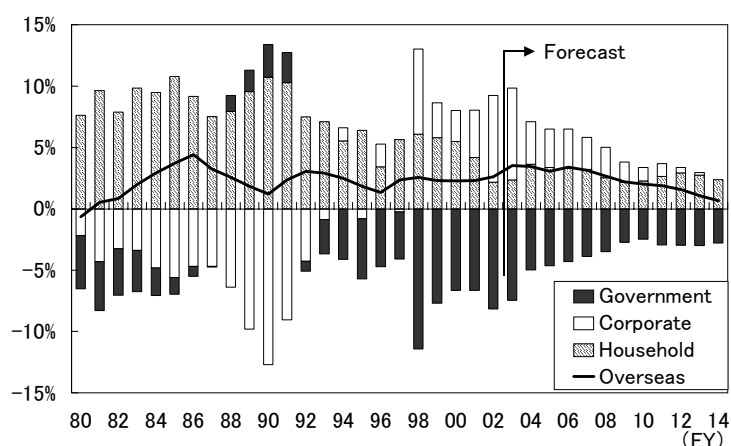
Source: ESRI, *Annual Report on National Accounts*.

Surprisingly, the fiscal 2002 flow of funds data shows that the largest financial surplus no longer belongs to the household sector, but to the corporate sector, which typically runs a deficit. This can be attributed to the fact that financial corporations have accumulated large excess savings amounting to 3.6% of nominal GDP to dispose of nonperforming loans, while nonfinancial corporations reduced excess debt and posted a surplus of 3.5% of nominal GDP. We predict that the corporate sector’s surplus will disappear once deflation ends and the economy normalizes, and that its financial surplus will decrease to approximately zero (-0.1%) by fiscal 2014.

3. Structural Changes in the Current Account

As the decline in household savings rate gradually reduces the domestic financial surplus, we predict it will turn to deficit in the middle of the 21st century as aging progresses. Households will maintain a financial surplus during the forecast period. In addition, the corporate sector, confronted with a shrinking labor force, is unlikely to develop a rosy business outlook and seek higher levels of borrowing and capital investment. Even if the corporate sector’s financial balance does turn to deficit, we do not expect the deficits to equal those of the rapid growth era or bubble era. If the government can trim the fiscal deficit with a consumption tax hike and other measures, we predict that the domestic savings-investment surplus will be sustained, and that the current account balance will continue to post a surplus of 0.8% of nominal GDP in fiscal 2014.

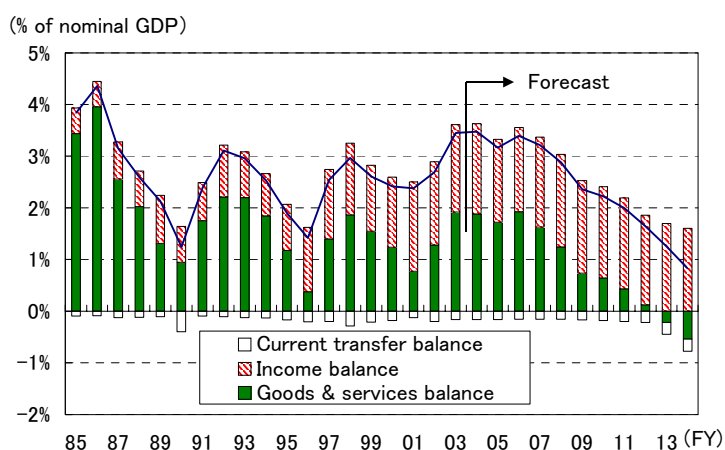
Figure 5 Financial Balance by Sector (as % of nominal GDP)



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

However, the structure of the current account balance will change significantly. Since a current account surplus increases Japan's net foreign assets held abroad, investment income from these assets will grow in the long term regardless of fluctuations in interest and exchange rates. As a result of Japan's consistent current account surpluses since the 1980s, in fiscal 2003 the income account surplus grew to approximately one-half of the current account surplus. As long as Japan keeps posting a current account surplus in the future, the share of the income surplus will continue to grow. By fiscal 2014, we predict that while the trade balance will turn to deficit, the income surplus will be large enough to sustain a current account surplus. This is because the declining household savings rate will spur consumption and hence import growth, while the current account surplus will keep the yen strong and dampen export growth.

Figure 6 Current Account Balance



Source: BOJ *Balance of Payments*

As import growth outpaces export growth, imported goods will replace domestically produced goods in an increasing range of areas. Japan's shrinking trade surplus signals a shift from an economy led by external demand, to one led by domestic demand. We predict that external

demand will start to contribute negatively to economic growth from fiscal 2007 forward.

4. On the End of Deflation

While deflation in the consumer price index has been abating, we predict another -0.2% price decline in fiscal 2005 as the economy heads toward recession. The next chance for the economy to shake off deflation will come in fiscal 2007 or later when the economy recovers.

Japan's potential growth rate, estimated at around 3% in the early 1980s, rose to approximately 4% from the late 1980s to early 1990s. But after the bubble economy collapsed, the potential growth rate plummeted as capital investment and capital stock growth slumped, population growth slowed, labor input growth slumped as work hours decreased, and technological progress slowed. By the late 1990s, it was in the 1% range.

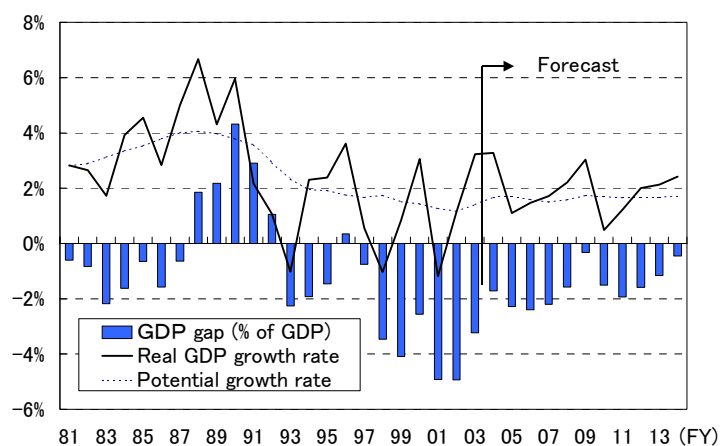
During the forecast period, the labor force will continue to shrink as aging advances and as the total population starts to decline from fiscal 2007. Since work hours will continue to decrease, growth in labor input (measured as total man-hours) will decrease at a rate of almost -1% per year.

Although capital stock growth is currently in the low 2% range, real capital investment grew at a double-digit pace in fiscal 2003, and is expected to grow robustly in fiscal 2004 as well. For the forecast period, we predict that overall investment growth will remain strong, pushing capital stock growth up to the 3% range.

Looking ahead, while labor input will continue to decrease, the contribution of capital accumulation will edge upward. Thus assuming no significant change in the rate of technological progress (approximately 1%), we predict that the potential growth rate will be in the mid to high 1% range.

Although the GDP gap widened to approximately 5% in fiscal 2001, we estimate that it has shrunk to the 1% range after two consecutive years of economic growth in the 3% range in fiscal 2003 and 2004. Despite the likelihood of a recession in fiscal 2005, we expect the adjustment will be minor and that the GDP gap will edge up only slightly. In the recovery phase from fiscal 2006 onward, the GDP gap is likely to disappear, significantly reducing deflationary pressure. We predict that while consumer price inflation will be near zero in fiscal 2007, a shift in monetary policy will not occur until late fiscal 2008, when year-on-year inflation has stabilized.

Figure 7 Potential GDP Growth Rate and the GDP Gap



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

The persistence of deflation can be attributed not only to the economy's long slump, but to the fact that companies and consumers have developed deflationary expectations. However, this also means that the opposite effect can occur—as deflation abates, companies and consumers will gradually alter their deflationary expectations, reducing the resistance to price increases. Thus even if a consumption tax hike in fiscal 2010 should widen the GDP gap, consumer prices will not succumb to deflationary pressure.

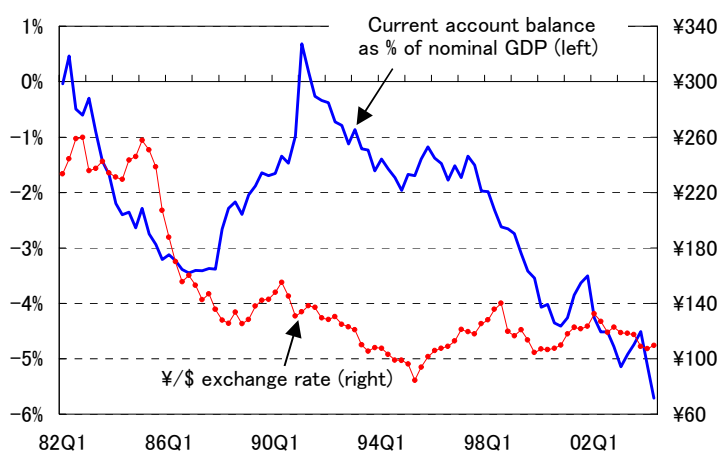
3. International Economy

1. United States

Although the U.S. economy is in a recovery phase, worrisome signs have emerged that could threaten the sustainability of consumption spending.

Under the Bush administration, the federal budget deficit and current account deficit have both widened. The twin deficits would have been a major economic issue regardless of whether Bush or Kerry had won the election. In the medium term, we expect to see fiscal spending reductions and tax increases, while upward pressure on interest rates will stubbornly persist. From 2010, when the baby boomers start to retire, the labor force growth will begin to slow. As a result, the real economic growth rate will not be able to sustain the high levels seen from the late 1990s to early 2000s, and gradually decline to 2.7% by 2014. The current account deficit will decrease gradually as a ratio to nominal GDP, reaching 3.6% by 2014. While we predict the yen will remain moderately strong during the forecast period, should confidence in the U.S. economy start to erode, we see a significant risk that the cumulative debt will become a problem, causing the dollar to plunge.

Figure 8 U.S. Current Account Balance and the Yen/Dollar Exchange Rate



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

2. Europe

In the euro area, a recovery led by external demand has continued since mid 2003. Corporate earnings have improved due to export growth and a low interest rate policy, but capital investment has failed to improve. Personal consumption growth varies by country, but has not picked up because employment remains stagnant primarily in Germany. In the July–September quarter, external uncertainties such as monetary tightening in the U.S. and high oil prices have clouded the business outlook in Germany and Italy, who rely heavily on external demand. The cautious stance on capital investment and employment is expected to persist for the time being. In France, domestic demand has been firm, but the recovery in domestic demand has not picked up speed because of the fading effect of tax cuts and lowered expectations for employment and income improvement. Thus we predict that growth in the euro area will be limited to approximately 1.9% in 2004. For 2005, although capital investment and employment will improve, economic growth will settle at a moderate 2% annual pace.

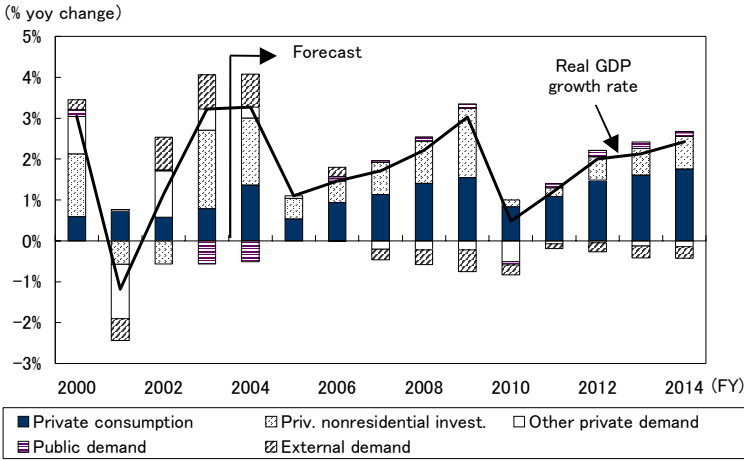
In the next decade, the productive population in the euro area will decrease as the population ages. Meanwhile, competition will intensify both globally and within the EU as new member states join and adopt the euro, expanding the single market and currency area. In addition, policy options will become more limited, necessitating reform of the labor market, public finance, and social security system. As a result, the impact of the demographic changes on the potential growth rate will be partially abated. For the decade from 2004 to 2014, we predict that the economy will grow an average 2.0% per year, while inflation will average 1.8%, both within the target range of the ECB.

4. Shift in Emphasis from Investment to Consumption Activity

Japan's economic recovery, which began in early 2002, has sustained with 3.2% growth in fiscal 2003 and an expected 3.3% growth rate in fiscal 2004. In fiscal 2005, however, the slowdown in overseas economies will dampen external demand, which domestic demand will be unable to offset, and the economy will enter a recession with 1.1% growth. In fiscal 2006, companies will complete their capital stock adjustments and begin the recovery phase of the investment cycle, pulling the economy into recovery. The economy will shrug off deflation and grow 2.2% in fiscal 2008 and 3.0% in fiscal 2009, gaining enough momentum to tolerate a consumption tax increase from the present 5% to 7%, which we predict will occur in fiscal 2010. While this will drag down real economic growth in fiscal 2010 to 0.5%, as the impact of the tax hike fades, growth will pick up again to 2.4% in fiscal 2014.

For the decade from fiscal 2004 to 2014, we predict that real economic growth will average 1.8% per year, which is not much higher than the 1.6% average for the previous decade from fiscal 1994 to 2004. However, the average nominal growth rate will increase from 0.3% for the previous decade to 1.6% for fiscal 2004 to 2014; for the deflation-free five-year period from fiscal 2009 to 2014, average nominal growth will average 2.1% per year.

Figure 9 Real GDP Growth Rate



Source: ESRI, Annual Report on National Accounts.

Private nonresidential fixed investment will average 3.5% real growth per year over the next decade, significantly outpacing the economy's 1.8% real growth rate. However, due to sharp price decreases in IT and other capital goods, nominal investment will grow at a more moderate 2.7% pace per year. Public investment will continue to decrease, dropping from 6.7% of nominal GDP in fiscal 2000 to 2.7% in fiscal 2014. Moreover, as the population decrease reduces demand for new residential construction, residential investment will decrease from 4.0% of nominal GDP to 3.1% over the same period. As a result, total investment will decrease from 26.4% of nominal GDP in

fiscal 2000 to 23.7% in fiscal 2014.

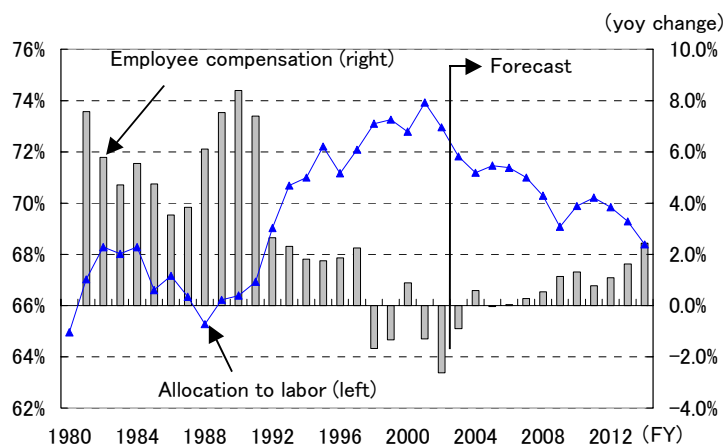
Private final consumption expenditure will grow from 55.7% of nominal GDP in fiscal 2000 to 58.3% in fiscal 2014. As aging progresses, government spending on health care and long-term care will also grow from 16.5% of nominal GDP to 18.1% for the same period. Thus total consumption of the private and public sectors will grow from 72.3% of nominal GDP to 76.3%, indicating that the economy will shift to a consumption-centered economy.

In the past, the household sector's ample savings were channeled into investment in the corporate and public sectors, as well as into residential investment by the household sector. Investment had fueled the economy's growth. But at the same time, ample savings and low interest rates also led to poor efficiency of investment. Ten years from now, considering that household savings will be lower and interest rates higher, both the corporate and public sectors will need to boost their investment efficiency.

In particular, by around fiscal 2014, public investment will consist almost entirely of replacement and maintenance investment simply to maintain the existing infrastructure of roads, bridges and so forth. To build new infrastructure, existing infrastructure will need to be demolished to free up funds meant for replacement investment. Public investment plans need to consider how the projected decline in population will affect future infrastructure needs, and focus on constructing only those facilities that can be maintained in the future.

With regard to the income environment of households, we predict that employee compensation will grow sluggishly at 0.4% per year in the first five years as companies continue cutting labor costs amid the persistently high allocation to labor. However, in the second half of the forecast period, asset income will recover from the abnormally low post-bubble levels, with dividends returning to normal levels corporate balance sheets, and higher interest rates boosting interest income. In addition, labor market conditions will improve as the labor force shrinks and unemployment falls to 3.8%, causing wages to rise. While the number of employed persons will not grow, total employee compensation will start to grow even in nominal terms, so that household income growth will support consumption growth.

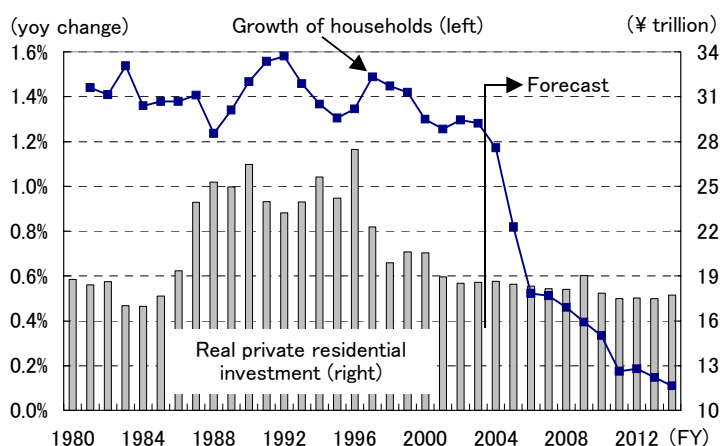
Figure 10 Allocation to Labor and Employee Compensation



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

As for residential investment, one indicator of potential demand—growth in number of households—is projected to slow down in the medium to long term, according to the National Institute of Population and Social Security Research (October 2003). In addition, in 2005 the expanded tax exemption on housing loans of 1999 will be reduced, weakening the stimulative effect of tax incentives. Despite some positive factors for residential investment—maintenance and repair demand will expand as the housing stock grows, and housing quality including floor space will improve as falling land prices boost the purchasing power of home buyers—the decline in new housing starts will depress the average real growth in residential investment to -0.5% per year over the next decade.

Figure 11 Number of Households and Residential Investment

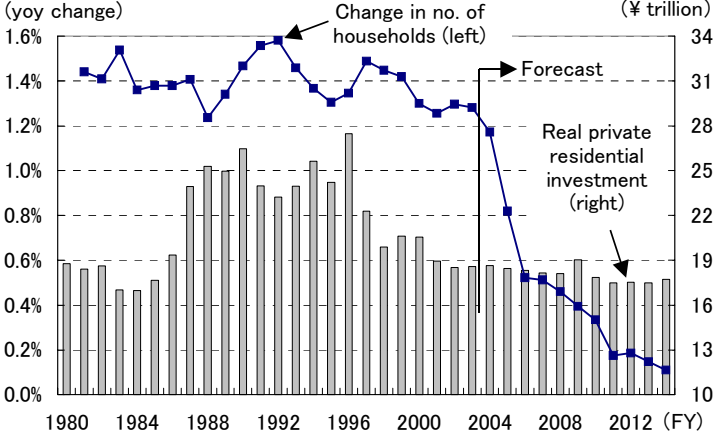


Note: Projection for number of households from 2005 is from National Institute for Population and Social Security Research, *Household Projections for Japan* (October 2003).
Sources: Cabinet Office; Ministry of Internal Affairs and Communications; National Institute for Population and Social Security Research.

In fiscal 2005, we predict that nonresidential fixed investment growth will decrease to 2.8% as external demand softens and the economy enters recession. But it will pick up again in fiscal 2006

as capital stock adjustments are completed. Over the forecast period, real investment growth will average 3.5% per year.

Figure 12 Growth of Private Nonresidential Fixed Investment



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

Efforts to reduce the fiscal budget will keep fiscal spending growth restrained. Nominal public investment was reduced -13.3% in fiscal 2003, and will be reduced an estimated -14.0% in fiscal 2004. However, we assume that future public investment cuts will be limited to 3% per year. Government consumption will also be curbed through measures such as payroll cuts and higher deductibles for health care, but aging will nonetheless cause health care and long-term care expenditures to increase. We predict that real growth in government consumption will average 1.2% per year over the decade.

We predict that with the U.S. economy’s growth continuing to drive the global economy, export growth will remain moderate. However, due to the moderate strengthening of the yen and the economy’s shift to domestic demand, growth in imports will outpace exports. Thus external demand will contribute an average -0.2% per year to real economic growth during the forecast period.

5. Reducing the Fiscal Deficit

1. Troublesome Recovery of the Primary Balance

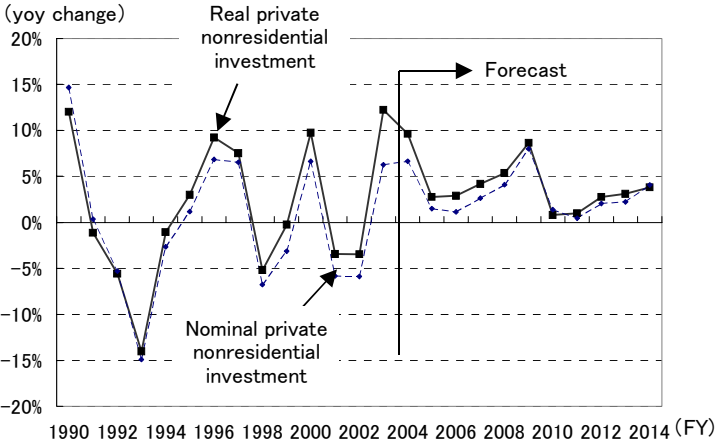
In fiscal 2002, the combined primary balance of national and local governments (basic fiscal balance, excluding interest payments) posted a deficit equivalent to 5.6% of nominal GDP. According to the *Fiscal 2003 Revised Outlook for Structural Reform, the Economy and Public Finance*, the government has established a goal to bring the primary balance into surplus by the

beginning of 2010. While a fiscal deficit reduction might produce a stimulative “non-Keynesian effect,” past experience—the fiscal 1997 consumption tax hike and abolition of special tax cuts—suggests that a large tax increase or spending cut will at least temporarily trigger an even larger downside effect. Based on our prediction for the demise of deflation in fiscal 2008, a consumption tax hike can be entertained for the first time in fiscal 2010, but eliminating the primary balance deficit will be difficult during the forecast period.

One possible anti-deflationary policy is to create inflationary expectations by boosting the consumption tax rate every year. However, the problem with successively increasing the consumption tax rate by 1% per year is that it could produce excessive inflationary expectations once the deflation ends. A one-time consumption tax hike would avert this problem, but this too is untenable because it would have a severe downside impact on the economy. A large consumption tax rate hike that would regain the primary balance

The fiscal 2004 pension reform increased premiums for employees’ pension plans while reducing benefits. The reform also increased the government’s burden from one-third of basic pension benefits to one-half to reduce the shortfall in pension finances. This measure, however, will expand the deficit in the general account. We assume that the government will attempt a consumption tax hike as soon as possible after the economy pulls out of deflation, and increase the consumption tax rate by 2% in fiscal 2010. Even so, the primary deficit in the general account will shrink to -2.2% of nominal GDP in fiscal 2014, falling short of the goal of a surplus.

Figure 13 The Primary Balance (General Account)



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

Considering the 2.4% real growth rate of the economy in fiscal 2014, as long as exogenous factors such as foreign demand do not hurt the economy, we predict that an additional 2% consumption tax hike will be feasible.

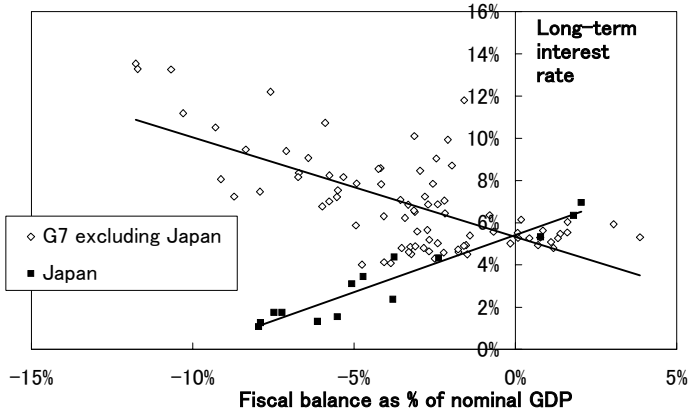
2. The Fiscal Deficit and Long-Term Interest Rate

The government has run a fiscal deficit since fiscal 1992, which reached 8.2% of nominal GDP in fiscal 2002. While ongoing public investment cuts and tax revenue growth from the economic recovery have helped contain the fiscal deficit, it has nonetheless grown due to increased social insurance expenditures for the aging society in health care, long-term care and pensions. We predict that with a recovery in tax revenue when deflation ends, and a consumption tax hike, the fiscal deficit will decrease compared to fiscal 2002, to 2.7% of nominal GDP in 2014.

Since 1997, the long-term interest rate (yield on 10-year JGBs) has declined significantly more than would be predicted by its previous relationship with the policy rate and economic conditions. Once deflation ends and monetary policy normalizes, these relationships will revert to their pre-1997 status, raising the long-term rate to the mid-2% to 3% range even if the short-term rate stays at zero. From fiscal 2007, speculation about a monetary policy shift will move the long-term rate significantly. If the policy shift actually occurs in fiscal 2008, the long-term rate will climb above 3% and approach 4.5% in fiscal 2014, at which time CPI inflation will reach 2%.

In general, a relationship has been observed between large fiscal deficits and high long-term rates among leading industrialized economies. In Japan, however, fiscal deficits have not added a risk premium to the long-term rate. This is because Japan's fiscal deficits have been fully financed domestically out of ample household savings. However, this situation could change as the household savings rate decreases, leading us to predict that the size of fiscal deficits will matter to the long-term rate.

Figure 14 Correlation of Long-Term Interest Rate and Fiscal Balance



Source: OECD

In predicting a 4.5% long-term rate in fiscal 2014, we assume that the domestic saving-investment balance stays in surplus so that fiscal deficits impact the long-term rate minimally, and that the fiscal deficit shrinks. However, if aging reduces the household savings rate, and fiscal deficits start to affect the long-term rate as in other industrialized economies, we

predict that for each 1% that the fiscal deficit comprises of nominal GDP, the long-term rate will increase 0.2%. Under these conditions, unless the present fiscal deficit shrinks, the risk premium could push up the long-term rate by 2%, putting it in the range 6% or 7%. Indeed, the risk premium could cause the long-term rate to rise faster than the corporate profit growth rate, threatening to depress the stock market and land prices.

Forecast for Japan

(% yoy change, otherwise otherwise noted)

Fiscal year	2003 actual	2004 forecast	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	Annual average 94~04	Annual average 04~14
Nominal GDP (expenditures) (¥ trillion)	0.8 (501.3)	0.8 (505.4)	-0.3 (504.1)	0.4 (506.3)	0.8 (510.5)	1.5 (518.1)	2.7 (531.9)	1.8 (541.7)	0.9 (546.4)	1.9 (556.7)	2.5 (570.5)	3.6 (591.0)	0.3	1.6
Real GDP (expenditures)	1.9	2.0	0.5	1.0	1.1	1.5	2.4	0.1	0.8	1.6	1.8	2.1	1.2	1.3
Domestic demand	1.2	1.5	0.6	0.8	1.4	2.0	3.1	0.4	1.0	1.9	2.1	2.5	1.0	1.6
Private demand	2.0	2.5	0.7	0.9	1.7	2.4	3.8	0.6	1.1	2.1	2.5	2.9	1.1	1.9
Consumption	0.5	1.6	0.4	0.7	1.2	1.7	2.0	0.9	1.3	2.0	2.4	2.7	0.9	1.5
Residential investment	-0.5	1.9	-0.6	-0.6	-1.0	-0.3	5.2	-6.2	-2.0	0.3	-0.3	1.4	-3.1	-0.4
Nonresidential investment	8.2	6.7	1.1	2.5	3.8	5.0	8.7	0.8	1.0	2.8	3.1	3.9	2.9	3.3
Public demand	-1.5	-1.9	0.3	0.6	0.3	0.6	0.6	-0.4	0.6	0.9	0.9	0.7	0.8	0.5
Government consumption	1.1	2.3	1.7	1.3	1.0	1.4	1.4	0.4	1.3	1.7	1.7	1.7	2.9	1.3
Public investment	-9.2	-15.9	-5.0	-2.5	-2.7	-3.0	-3.4	-4.2	-3.2	-3.3	-3.6	-4.3	-4.5	-3.5
Net exports < contrib. to growth >	<0.8>	<0.6>	<-0.1>	<0.2>	<-0.3>	<-0.4>	<-0.6>	<-0.3>	<-0.2>	<-0.3>	<-0.4>	<-0.4>	<0.2>	<-0.3>
Exports of goods & services	9.9	12.0	2.8	3.2	2.6	2.5	2.4	2.0	2.2	2.5	2.5	2.3	5.6	2.5
Imports of goods & services	3.4	8.6	4.3	2.3	6.1	6.8	7.9	4.5	3.8	4.7	5.2	4.9	4.3	5.0
Industrial production	3.5	5.0	-0.6	1.5	2.7	3.5	3.1	0.3	1.7	2.3	2.3	2.5	0.8	1.9
Domestic corporate goods prices	-0.5	1.7	0.2	-0.6	0.0	0.3	0.8	1.6	0.1	0.2	0.7	1.0	-0.8	0.4
Consumer price index	-0.2	0.0	-0.3	-0.0	0.2	0.3	0.7	2.1	0.5	0.9	1.3	1.9	-0.1	0.8
CPI (excluding perishables)	-0.2	-0.1	-0.2	-0.0	0.2	0.3	0.7	2.1	0.5	0.9	1.3	1.9	-0.0	0.8
Unemployment rate (%)	5.1	4.7	4.8	4.6	4.5	4.4	4.1	4.2	4.1	4.0	3.9	3.8	4.4	4.2
Current account bal. (¥ trillion) (as % of GDP)	17.3 (3.5)	17.5 (3.5)	15.0 (3.0)	17.2 (3.4)	16.4 (3.2)	14.9 (2.9)	12.6 (2.4)	12.0 (2.2)	10.9 (2.0)	9.2 (1.6)	7.1 (1.3)	4.9 (0.8)	13.1 (2.6)	12.0 (2.3)
Exchange rate (¥/\$) average	113	107	102	102	101	101	100	100	100	100	100	100	115	101
Call rate (%) average	0.00	0.00	0.00	0.00	0.00	0.10	0.50	1.25	2.00	2.75	3.00	3.00	0.22	1.26
Yield on 10-year JGB (%) average	1.1	1.6	1.6	1.7	2.0	2.6	3.2	3.6	3.9	4.2	4.5	4.5	1.8	3.2

Note: Our real GDP growth forecast released on October 15, 2004 has been revised here using the chain-linking method. However, the data that appears in the body of the report has not been revised, and may differ from the data shown here.

Sources: ESRI, *Annual Report on National Accounts*; MIC Statistics Bureau, *Monthly Consumer Price Index*, and *Labour Force Survey*; BOJ, *Financial and Economic Statistics Monthly*.

Nominal Domestic Expenditures of Japan

(Unit: ¥ trillion, % of nominal GDP in parentheses)

Fiscal year	1980	1985	1990	1995	2000	2005	2010	2014
Nominal GDP (expenditures)	246.3 (100.0%)	327.4 (100.0%)	450.0 (100.0%)	500.0 (100.0%)	513.2 (100.0%)	505.1 (100.0%)	542.2 (100.0%)	591.5 (100.0%)
Domestic demand	247.4 (100.5%)	315.8 (96.5%)	445.4 (99.0%)	494.1 (98.8%)	507.0 (98.8%)	496.5 (98.3%)	538.2 (99.3%)	593.3 (100.3%)
Private demand	190.9 (77.5%)	249.3 (76.1%)	358.1 (79.6%)	378.3 (75.7%)	387.6 (75.5%)	386.9 (76.6%)	424.2 (78.2%)	470.2 (79.5%)
Private consumption	134.2 (54.5%)	178.7 (54.6%)	237.9 (52.9%)	278.8 (55.8%)	286.0 (55.7%)	285.3 (56.5%)	308.1 (56.8%)	344.7 (58.3%)
Private residential investment	15.1 (6.2%)	14.7 (4.5%)	25.1 (5.6%)	24.2 (4.8%)	20.3 (4.0%)	18.0 (3.6%)	17.8 (3.3%)	18.5 (3.1%)
Private nonresidential investment	39.7 (16.1%)	54.1 (16.5%)	92.3 (20.5%)	73.5 (14.7%)	80.6 (15.7%)	82.2 (16.3%)	97.3 (17.9%)	106.1 (17.9%)
Public demand	56.5 (22.9%)	66.5 (20.3%)	87.3 (19.4%)	115.8 (23.2%)	119.4 (23.3%)	109.6 (21.7%)	114.0 (21.0%)	123.0 (20.8%)
Government consumption	33.3 (13.5%)	44.2 (13.5%)	58.0 (12.9%)	73.3 (14.7%)	84.9 (16.5%)	88.3 (17.5%)	95.7 (17.6%)	106.8 (18.1%)
Public investment	23.4 (9.5%)	22.0 (6.7%)	29.2 (6.5%)	42.2 (8.4%)	34.4 (6.7%)	21.3 (4.2%)	18.3 (3.4%)	16.2 (2.7%)
Net exports of goods & services	-1.1 (-0.5%)	11.6 (3.5%)	4.6 (1.0%)	5.9 (1.2%)	6.2 (1.2%)	8.6 (1.7%)	4.0 (0.7%)	-1.8 (-0.3%)
Exports	33.5 (13.6%)	44.4 (13.6%)	46.1 (10.3%)	46.2 (9.2%)	55.6 (10.8%)	68.6 (13.6%)	80.3 (14.8%)	91.5 (15.5%)
Imports	34.6 (14.1%)	32.8 (10.0%)	41.6 (9.2%)	40.3 (8.1%)	49.4 (9.6%)	60.1 (11.9%)	76.3 (14.1%)	93.3 (15.8%)

Note: Domestic private demand includes change in private inventory; domestic public demand includes change in public inventory.
Source: Actual data is from ESRI, *Annual Report on National Accounts*.

Forecast for the U.S.

(% yoy change, unless otherwise indicated)

Fiscal year	2003 actual	2004 forecast	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	Annual average 94~04	04~14
Real GDP	3.0	4.3	3.2	3.2	3.1	3.0	3.0	3.0	2.9	2.8	2.7	2.7	3.4	3.1
Domestic demand (contrib. to growth)	3.5	4.9	3.4	3.4	3.2	3.1	3.1	3.1	2.9	2.8	2.7	2.7	3.9	3.2
Personal consumption	3.3	3.3	2.5	2.9	2.9	2.8	2.8	2.8	2.7	2.6	2.6	2.6	3.7	2.8
Fixed capital formation	4.9	10.2	5.6	4.7	4.3	4.3	4.0	4.3	4.6	4.9	5.0	4.9	6.0	5.2
External demand (contrib. to growth)	-0.4	-0.6	-0.2	-0.2	-0.1	-0.1	-0.1	-0.1	-0.0	-0.0	-0.0	-0.0	-0.5	-0.1
Consumer price index	2.3	2.6	2.1	2.3	2.4	2.4	2.5	2.6	2.6	2.7	2.7	2.8	2.5	2.5
Current account balance (% of GDP)	-4.8%	-5.5%	-5.5%	-4.9%	-4.8%	-4.7%	-4.5%	-4.4%	-4.2%	-4.0%	-3.8%	-3.6%	-3.1%	-4.5%
10-year Treasury note avg. yield (%)	4.0%	4.3%	4.5%	4.6%	4.9%	5.1%	5.3%	5.3%	5.3%	5.3%	5.3%	5.3%	5.4%	5.0%
Federal funds rate (yearend)	1.0%	2.3%	2.5%	2.8%	3.5%	3.8%	3.8%	3.8%	3.8%	3.8%	3.8%	3.8%	3.9%	3.5%

Forecast for the Euro Area

(% yoy change, unless otherwise indicated)

Fiscal year	2003 actual	2004 forecast	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	Annual average 94~04	04~14
Real GDP (% yoy change)	0.5	1.9	2.0	2.2	2.0	2.1	2.1	2.0	1.9	1.9	1.8	1.8	2.0	2.0
Domestic demand (% contrib.)	1.2	1.3	1.7	2.0	1.8	1.9	1.9	1.8	1.7	1.7	1.6	1.7	1.9	1.8
Private consumption (% yoy chg)	1.0	1.3	1.8	2.1	1.9	2.0	2.0	1.9	1.8	1.8	1.7	1.8	1.9	1.8
Fixed capital formation (% yoy chg)	-0.6	0.8	2.0	2.3	2.1	2.2	2.2	2.1	2.0	2.0	1.9	1.9	2.0	2.0
External demand (% contrib.)	-0.7	0.5	0.3	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
Consumer price index (% yoy chg)	2.1%	2.1%	2.0%	2.0%	1.7%	1.8%	1.8%	1.7%	1.8%	1.8%	1.7%	1.8%	2.1%	1.8%
Current account bal. (% nominal GDP)	0.3%	0.6%	0.5%	0.5%	0.6%	0.6%	0.5%	0.5%	0.5%	0.5%	0.5%	0.5%	0.1%	0.5%
Exchange rate (\$/euro)	1.13%	1.22%	1.23%	1.24%	1.24%	1.25%	1.26%	1.26%	1.27%	1.27%	1.27%	1.27%	1.03%	1.25%
ECB policy rate (end of period)	2.00%	2.00%	2.25%	2.50%	3.25%	3.50%	3.50%	3.50%	3.50%	3.50%	3.50%	3.50%	2.96%	3.14%
10-year German Federal bond avg. yield (%)	4.1%	4.2%	4.3%	4.5%	4.7%	4.9%	5.0%	5.0%	5.0%	5.0%	5.0%	5.0%	5.3%	4.8%