JAPAN

Rating Analysis - 9/26/10
Debt: JPY1,047,730B, Cash: JPY84.5B

EJR Sen Rating(Curr/Prj) BB+/ N/A
EJR CP Rating: A1
EJR's 1 yr. Default Probability: 2.7%

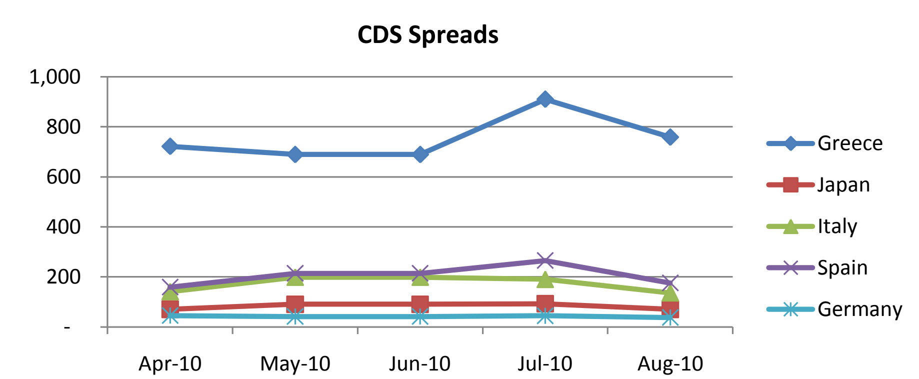
Japan's real GDP growth slowed during Q2 2010, growing at an annualized rate of merely 1.5% as compared to 5% in Q1 2010. The IMF forecasts GDP growth of 2.4% for 2010, but we are skeptical. We rate Japan significantly lower than our peers due not only to our doubts of GDP growth forecasts, but also due to the country's massive debt-to-GDP ratio which currently stands at 212.4%. Meanwhile, the number of people living on pensions currently exceeds 20% and continues to grow. Pension shortfalls are on the rise, with average ROI of -5.6% during Q2 2010. Japan's current account surplus, which rose 26.1% YoY in July after falling by an unexpected 18.2% YoY in June, remains at risk as the yen strengthens, lessening international competitiveness and depleting overall revenues. The U.S. dollar recently fell to 83.34 yen, the lowest value since July 1995 (USD/JPY 79.75). Ongoing deflation continues to erode the country's domestic demand. Unemployment rose to a seven month high of 5.3% in June before falling to 5.2% in July. The Bank of Japan's benchmark overnight lending rate remains at 0.1%, unchanged from 12.08. Consumer prices fell for the 16th month in June by 1%.

Japan's CDS spreads are currently on par with those of AAA rated sovereigns, with the spreads of BB rated sovereigns trading over 600bps higher. We believe that high levels of default risk associated with Japan's debt suggest Japanese CDS spreads are severely undervalued.

	Annual Ratios					
INDICATIVE CREDIT RATIOS	Dec-07	Dec-08	Dec-09	Dec-10	Dec-11	Dec-12
Debt/ GDP (%)	241.2	245.4	243.2	241.0	238.9	236.7
Govt. Sur/Def to GDP (%)	-2.7	-7.4	-12.1	-16.8	-21.5	-26.2
Adjusted Debt/GDP (%)	246.8	250.9	248.7	246.5	244.4	242.2
Interest/ Taxes %	13.6	14.6	14.7	14.9	14.8	14.7
GDP Growth (%)	2.0	1.9	-4.1	-1.0	1.0	1.0
Foreign Reserves/Debt	9.5	9.6	9.6	9.6	9.7	9.9
Implied Sen. Rating	BB+	BB	BBB-	BB+	BB+	BB+

INDICATIVE CREDIT RATIOS	B	BB	BBB	A	AA	AAA
Debt/ GDP (%)	120.0	80.0	60.0	50.0	40.0	30.0
Govt. Sur/Def to GDP (%)	17.0	13.0	8.0	5.0	-4.0	-9.0
Adjusted Debt/GDP (%)	125.0	85.0	65.0	55.0	45.0	35.0
Interest/ Taxes %	18.0	15.0	12.0	9.0	7.0	5.0
GDP Growth (%)	1.0	2.0	3.0	5.0	7.0	8.0
Foreign Reserves/Debt	30.0	50.0	70.0	90.0	110.0	130.0

PEER RATIOS	S&P Sen.	Debt as a % GDP	Govt. Surp. Def to GDP (%)	Adjusted Debt/ GDP	Interest/ Taxes %	GDP Growth (%)	Ratio-Implied Rating*
Greece	BB+	111.7	-13.6	114.9	25.8	1.0	BB-
Japan	AA	241.2	-2.7	246.8	14.6	-2.5	B
Italy	A+	112.4	-5.3	117.9	15.9	-4.1	CCC+
Spain	AA	51.7	-11.2	55.0	9.6	-2.8	BB
Germany	AAA	71.0	-3.3	77.6	10.7	-3.0	BB-



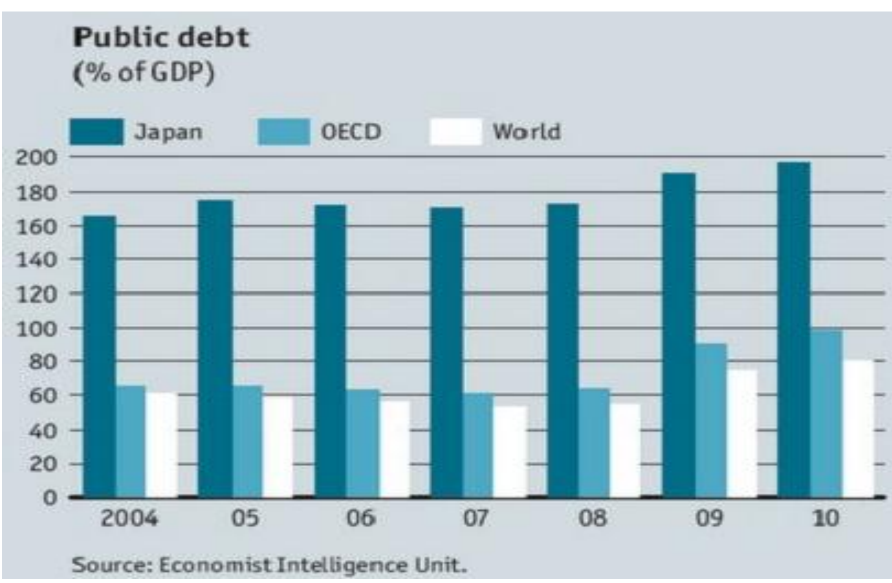
Country (EJR Rtg)	Current CDS	Targeted CDS
Greece (BB)	943	350
Japan (BB+)	69	300
Italy (BBB+)	230	158
Spain (A-)	244	117
Germany (A+)	44	60

Japan: Land of the Setting Sun

For nearly three decades, real economic growth in the world's second largest economy was spectacular. Japan's GDP grew at an average of 10% in the 1960's, followed by an average of 5% in the 1970's and 4% in the 1980's. However, following the asset price bubble of the late 1980's, the unprecedented growth of the prior three decades slowed significantly, averaging just 1.7% by the end of the 1990's.

Ten years later, Japan is in no better shape. The country has been one of the hardest hit by the recent global financial crisis. While the financial services sector largely avoided the initial effects of the crisis as a result of little exposure to sub-prime mortgages and their derivative instruments, a strong downturn in business investment and global demand for Japanese exports in late 2008 forced the economy to experience negative growth for the first time in nearly ten years. GDP growth rates fell to negative 1.2% in 2008 and negative 5.2% in 2009. While the recession hit bottom in Q1 2009, the economy managed to show positive signs of recovery by the second quarter with the help of strengthened exports and capital investment. Three subsequent quarters of economic growth, including the Q1 2010 GDP growth rate of 1.2%, have helped to alleviate fears of a "double-dip" recession while also averting a collapse of confidence in its ¥882.9 trillion ($9.6 trillion) debt. However, the IMF has forecast that Japan's GDP will grow by approximately 2% in both 2010 and 2011, a rate only slightly faster than those seen during the country's "lost decade".

Several other key economic indicators have raised concern over the fixture of a plausible economic recovery. The seasonally adjusted unemployment rate in June 2010 was 5.3% which, although lower than the 8.6% OECD average, remains 1.4% higher than the country's unemployment rate prior to the global financial crisis. Overall, job losses in Japan as a result of the recession have been relatively small by comparison to those in most other OECD countries, in part due to short-time work programs offered during the economic contraction which encouraged employers to adjust to lower demand by reducing workers hours ("work sharing"), rather than through layoffs. Meanwhile, Japan's consumer prices have fallen for 15 consecutive months while the core CPI has dropped 1.2% YoY, proving that deflation remains a deep-rooted problem in the economy. The BOJ predicted in its latest estimate that consumer prices would continue to fall until March 2012. As consumer prices fall, nominal GDP will decrease causing Japan's already massive debt-to-GDP ratio to continue to rise.



Can Japan Continue to Roll-over its Debt?

Japan's national debt of US$9.3 trillion is nearing 200% of GDP. It is the highest debt-to-GDP ratio in the industrialized world. The country is under increased pressure to strengthen its finances as investors fear another Greece-style debt crisis. Japan's debt-to- GDP ratio of 212.4% far surpasses that of Greece's 66.4%. Moreover, the country has a current excess debt level of nearly US$7 trillion, more than 35 times that of Greece's US$207.4 billion. That is, debt levels currently exceed the maneagable threshold of 65% of GDP by $6,877.5 billion. Japan risks losing the confidence of the bond markets and becoming the next global debt crisis if it fails to correct its increasing fiscal deficit and balance its currently unsustainable budget.

Sovereign Credit Underfunding

Country	**Debt (US$ Bil)***	**GDP (US$ Bil)**	**Budget Deficit (% of GDP)***	**65% of GDP (US$ Bil)**	**Debt in Excess of 65% of GDP**
EU Member States					
Italy	2,005.8	2,112.9	5.3	1,373.4	632.5
Greece	421.8	329.9	13.6	214.4	207.4
Belgium	417.6	468.8	6.0	304.7	112.8
Hungary	112.6	129.0	4.0	83.9	28.7
France	1,693.9	2,665.3	7.5	1,732.4	-38.5
Portugal	174.6	227.7	9.4	148.0	26.6
Germany	1,418.0	3,344.2	3.3	2,173.7	-755.7
United Kingdom	1,540.8	2,176.6	11.5	1,414.8	126.0
Austria	272.6	384.7	3.4	250.1	22.6
Spain	751.7	1,460.3	11.2	949.2	-197.5
EU-Total					164.8
Non-EU States					
Japan	10,176.6	5,075.5	7.4	3,299.1	6,877.5
Iceland	16.4	12.1	15.7	7.9	8.6
United States	8,469.7	14,256.3	9.1	9,266.6	-796.9
Canada	560.6	1,338.5	4.8	870.0	-309.5
Israel	167.1	194.8	3.5	126.6	40.5
Argentina	146.4	300.0	(+) 0.05	195.0	-48.6
China Mainland	908.2	4,910.0	0.4	3,191.5	-2,283.3
Non-EU Total					3,488.3
EU and Non-EU Total					**3,653.1**

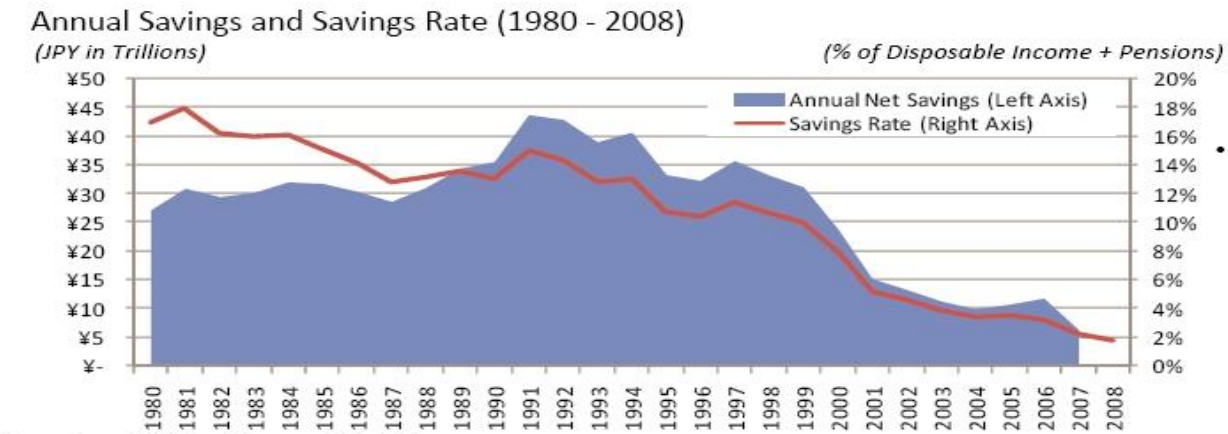
*Bloomberg, September 2010
Source: IMD (unless otherwise noted)

Who holds JGB's?

Overall, Japan's current government debt is held mainly by domestic institutional buyers. Approximately 93% of JGB's are owned by domestic investors who tend to hold them for long periods of time despite low yields. Public institutions such as Japan's Government Pension Investment Fund (GPIF) and Japan Post (the single largest holder of JGBs) continue to invest in Japanese sovereign debt. As of 2008, financial institutions held 62.6% of JGBs while the government and central bank held 13.2% and 8.7%, respectively. Households have held increasingly high percentages of JGBs throughout the past decade as well. Currently, households hold 5.2% of JGB's. Officials have warned that diversifying the bondholder base is key to creating a healthier government bond market.

Saving Rates As Attributed To Aging Population and Income Stagnation

Traditionally, Japan has coped with its massive debt thanks to large household savings. However, over the last two decades, Japan’s household savings ratio has fallen consistently from a rate of 15% in 1991 to a current rate of 2.6% (2009). Two leading reasons for this declining rate include years of income stagnation and a rapidly aging population.



Source: Japan Ministry of Finance. ESRI. BOJ.

Rapidly Aging Population: The Life Cycle Hypothesis

Japan's population was one of the youngest in the industrialized countries until recently. In 1975, individuals aged 65 and older made up 7.9% of the total population, the lowest among OECD member countries. As the life cycle hypothesis suggests, this young age structure contributed directly to higher savings.

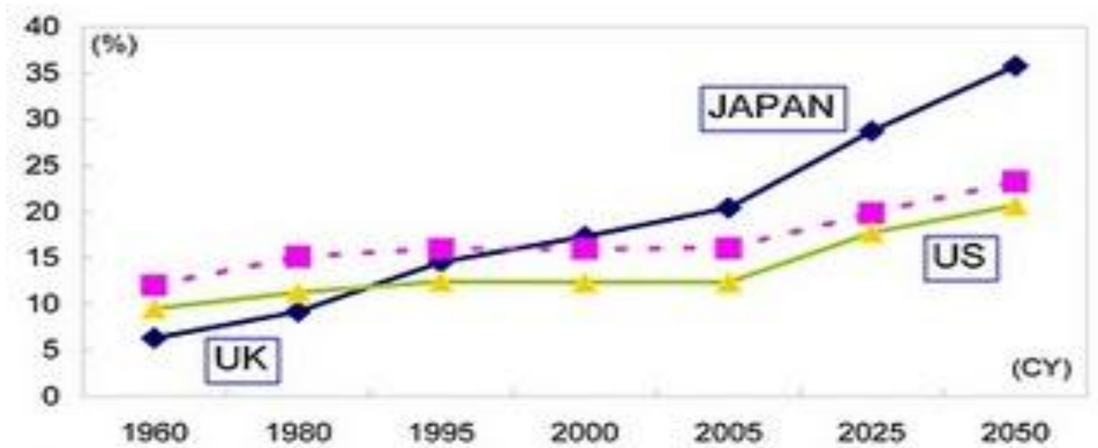
However, Japan's population has since aged and continues to do so at unprecedented rates. By year's end, Japan's 2009 dependency ratio[1] was the eighth highest in the world at 56.44%. Currently, those aged 65-99 years have risen from 7.9% (2009) to 22.6% of the total population. Such figures indicate that any increase in taxes to the population will not be sufficient to curb the massive debt levels as the majority of the population is retired and dependent on the younger working population. Costs to repay debt will therefore ultimately fall on the corporations.

Age Structure of Population by Country (%)

Country	2005			2030 (projections)		
	0-14 yrs	15-64 yrs	65 yrs +	0-14 yrs	15-64 yrs	65 yrs +
Japan	13.7	65.8	20.1	9.7	58.5	31.8
Germany	14.4	66.9	18.8	13.2	59.5	27.3
Italy	14.0	66.3	19.7	12.2	60.8	27.0
Switzerland	16.7	67.9	15.4	15.4	60.7	23.9
South Korea	18.6	71.9	9.4	11.8	64.7	23.4
France	18.4	65.3	16.3	16.4	60.4	23.2
Canada	17.6	69.2	13.1	15.3	61.4	23.2
Sweden	17.4	65.4	17.2	17.1	60.2	22.8
U.K.	18.0	66.0	16.1	16.9	61.5	21.6
Australia	19.5	67.4	13.1	17.3	61.4	21.3
U.S.A.	20.8	66.9	12.3	18.2	62.4	19.4
China	21.6	70.7	7.7	17.3	66.5	16.2
Brazil	27.8	66.0	6.1	20.9	66.6	12.5
India	33.0	62.0	5.0	22.9	68.3	8.8

Source: Statistics Bureau, MIC; United Nations; Ministry of Health, Labour and Welfare.

Along with smaller tax revenues, household savings (which continue to trend downward) will likely turn negative as a result of the aging population. The country's healthy surplus could in effect become a deficit, making government increasingly reliant on foreign investors to finance its massive debt. Rising social security payments are likely to put more pressure on public financing as well.



Source: "White book of aging"(Japanese Gorvernment)

FIGURE2 Movement of Old-Age Index (Japan, UK and US)

Three Factors to Drive Wealth: Population, Education, Urbanization

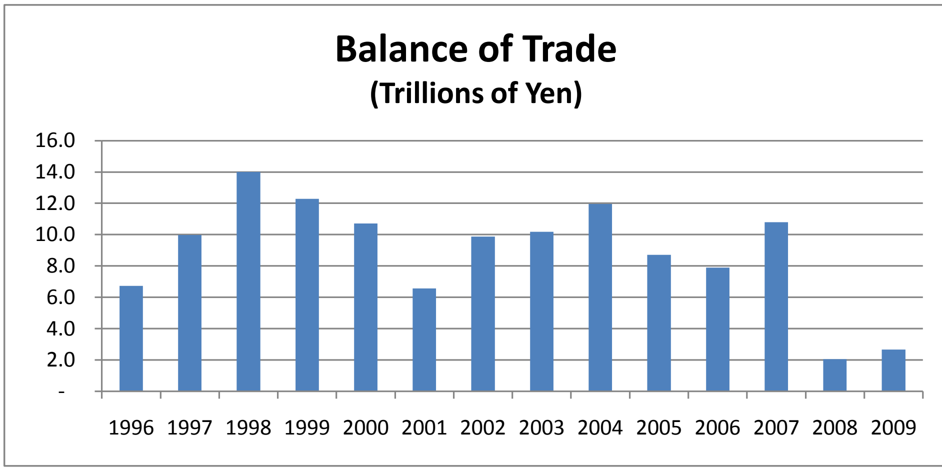
Japan is currently the tenth most populated nation in the world. However, a steady surplus of deaths over births in recent years has caused the overall population to decrease. In the most recent year, the country experienced 7.64 births per 1,000 population, versus 9.54 deaths per 1,000 population. The overall growth rate was 0.191% (2009).

On a positive note, Japan possesses very high levels of education due in large part to the strict education system instituted in postwar Japan. Mandatory education lasts nine years. Interestingly, the overall school life expectancy (primary to tertiary education) is 15 years for both males and females. More than 95% of students continue on to high school thereafter and nearly 50% then go on to college. These high levels of education underpin the country's high productivity. As a result, the government invests heavily in the educational sector. Government expenditure on education per capita totals US$1,342 (2008). Total government expenditure on education as a percentage of GDP totals 3.9% (2008). Japan's literacy rate[2] of 99% ranks among the highest in the world.

Of the total population, 66% is urbanized, the seventh highest percentage denomination in the world. However, the overall rate of urbanization from 2005-2010, which has averaged 0.2%, is one of the lowest rates in the world.

Potential Shift in Balance of Trade

Japan has long been an export-dependent economy. Historically, Japanese exports have exceeded imports in exchange volumes with the country's main trading partners. However, the country now risks a shift in its balance of trade. As the yen continues to rise to record highs and trading partners worldwide suffer continued economic slowdowns, Japan's trade surplus is likely to weaken.



Source: Bloomberg, Japan Ministry of Finance

Leading Trade Partners

Country	% of Total Trade (July 2010)
China	**18.97%**
U.S.A	**15.18%**
S. Korea	**8.26%**
Taiwan	**6.98%**
Hong Kong	**5.52%**
Thailand	**4.38%**
Singapore	**3.26%**
Germany	**2.59%**

Source: Japan Ministry of Finance

Moving Forward: Japan's Debt Financing Program

The Democratic Party of Japan plans to take a number of measures to decrease the country's heavy dependency on debt which Japan has been growing through substantial borrowing for over two decades. Japan's debt-to-GDP ratio of 240.8%, as seen on page 1, indicates that the government cannot afford to increase spending without raising taxes. However, plans cannot be too aggressive because the economy is still in a very fragile state. An increase in taxes could cause the economy to fall back into a recession. Nonetheless, Prime Minister Naoto Kan has suggested raising the consumption tax rate by as much as five percent over the next five years to take advantage of the cyclical recovery. The rate is already relatively high at 5% and any potential increase may take two or more years to implement. The plan is unpopular with voters.

In an effort to increase growth, investments, and employment, the government has also proposed cutting corporate tax rates by 10-15% as well. A strong economy is a must in order for Japan to avoid a debt crisis of Greek proportions. This means making it easier for companies to invest and grow. The current corporate tax rate of 40%, the highest in the developed world, makes it difficult to do so. Cutting the corporate tax rate may change this dynamic. The proposed tax cut could start as early as next year.

Most recently, the Japanese government unveiled a 915 billion yen ($10.92 billion) stimulus package aimed at boosting employment, consumer spending and corporate investment in the domestic economy. While the package accounts for about 0.2% of the country's GDP, the government expects it to lift GDP by about 0.3%.

Regardless of the plans set forth, Japan's proposals fail to suggest that its fiscal state is sustainable. The country's economy will inevitably rely more on foreigners as debt continues to grow. Even with the help of much needed macroeconomic and structural reforms, which Japan's central bank and finance ministry largely underestimate, Japan's nearly 200% debt-to-GDP ratio is unsustainable in the long term. While the order of events to unfold are still at large, one thing is for certain: If current debt levels sustain relative to GDP, default on Japanese government debt is hard to avoid.

[1] Population under 15 and over 64 years old, divided by active population (15 to 64 years).

[2] Age 15 and older can read and write.

Assumptions for Projections

	Peer	Issuer	Base Case	
Income Statement	**Median**	**Average**	**Yr 1&2**	**Yr 3,4,5**
Taxes Growth%	(4.6)	(8.4)	**(1.0)**	**0.5**
Social Contributions Growth %	(0.4)	0.7	**0.7**	**0.7**
Grant Revenue Growth %	0.0	3,500.0	**2.0**	**2.0**
Other Revenue Growth %	0.1	42.3	**2.0**	**2.0**
Other Operating Income Growth%	0.0	0.0		
Total Revenue Growth%	(2.4)	0.6	**(0)**	**(0.1)**
Compensation of Employees Growth%	4.5	(2.3)	**(2.3)**	**(2.3)**
Use of Goods & Services Growth%	7.5	(0.1)	**(0.1)**	**(0.1)**
Social Benefits Growth%	8.7	1.8	**1.8**	**1.8**
Subsidies Growth%	2.3	(1.8)		
Other Expenses Growth%	9.5	9.5	**9.5**	**9.5**
Special Items (billion JPY)	0.0	0.0		
Balance Sheet				
Currency & Deposits Growth%	17.5	(17.4)	**3.0**	**3.0**
Financial Derivatives Growth%	0.0			
Other Accounts Receivable Growth%	10.1	(12.2)	**2.0**	**2.0**
Securities other than Shares (% of Revs)	9.9	10.0	**2.0**	**2.0**
Loans Growth%	2.4	(6.8)	**2.0**	**2.0**
Shares and Other Equity Growth%	14.8	(13.9)	**1.0**	**1.0**
Insurance Technical Reserves Growth%	0.0	0.0		
			5.0	**5.0**
Nonfinancial Assets Growth%	0.0	2.0		
Other Accounts Payable Growth%	7.4	NMF		
Currency & Deposits Growth%	1.4	0.0		
Securities Other than Shares Growth%	16.3	4.1	**2.0**	**2.0**
Growth%	0.0	0.0		
Loans Growth%	1.7	(4.7)	**0.5**	**0.5**
Insurance Technical Reserves Growth(%)	2.8	0.0		
Shares and Other Equity Growth%	0.0	3.3	**2.0**	**2.0**
		0.0		
Addl debt. (1st Year) billion JPY	0.0	0.0		

Base Case
ANNUAL REVENUE AND EXPENSE STATEMENT (BILLIONS JPY)

	Dec-06	Dec-07	Dec-08	PDec-09	PDec-10	PDec-11
Taxes	92	95	87	86	85	85
Social Contributions	55	57	57	57	58	58
Grant Revenue	0	0	0	0	0	0
Other Revenue	31	20	29	29	30	30
Other Operating Income	0	0	0	0	0	0
Total Revenue	178	171	172	172	172	172
Compensation of Employees	31	31	31	30	29	29
Use of Goods & Services	17	17	17	17	17	17
Social Benefits	91	94	95	97	99	100
Subsidies	3	3	3	3	3	3
Other Expenses	10	11	12	9	10	10
Grant Expense	0	0	0	0	0	0
Depreciation	16	16	17	17	17	17
Total Expenses	168	173	175	175	175	175
Operating Surplus/Shortfall	10	-1	-3	-3	-3	-3
Interest Expense	13	13	13	13	13	13
Net Operating Balance	-3	-14	-16	-16	-16	-16

ANNUAL BALANCE SHEETS (BILLIONS JPY)

ASSETS	Dec-06	Dec-07	Dec-08	PDec-09	PDec-10	PDec-11
Currency & Deposits	119	102	84	87	90	92
Financial Derivatives						
Other Accounts Receivable	133	145	128	130	133	136
Securities other than Shares	122	125	138	138	138	138
Loans	68	58	54	56	57	58
Shares and Other Equity	101	116	100	101	102	103
Insurance Technical Reserves				0	0	0
Nonfinancial Assets	476	482	491	491	491	491
Additional Assets	0	(0)	(0)			
Total Assets	1,019	1,029	995	1,003	1,010	1,017
LIABILITIES						
Other Accounts Payable	29	27	22	22	22	22
Currency & Deposits				0	0	0
Securities Other than Shares	715	726	756	771	787	802
				0	0	0
Loans	202	187	179	191	199	206
Insurance Technical Reserves						
Shares and Other Equity	26	26	27	28	28	29
Other Liabilities	(0)	(0)	(0)	485	485	485
Liabilities	971	967	984	1,498	1,521	1,545
Net Financial Worth	(428)	(420)	(479)	(495)	(511)	(527)
Total Liabilities & Equity	543	547	504	1,003	1,010	1,017