

# Monthly Report of Prospects for Japan's Economy

August 2009

Macro Economic Research Centre  
Economics Department



The Japan Research Institute, Limited

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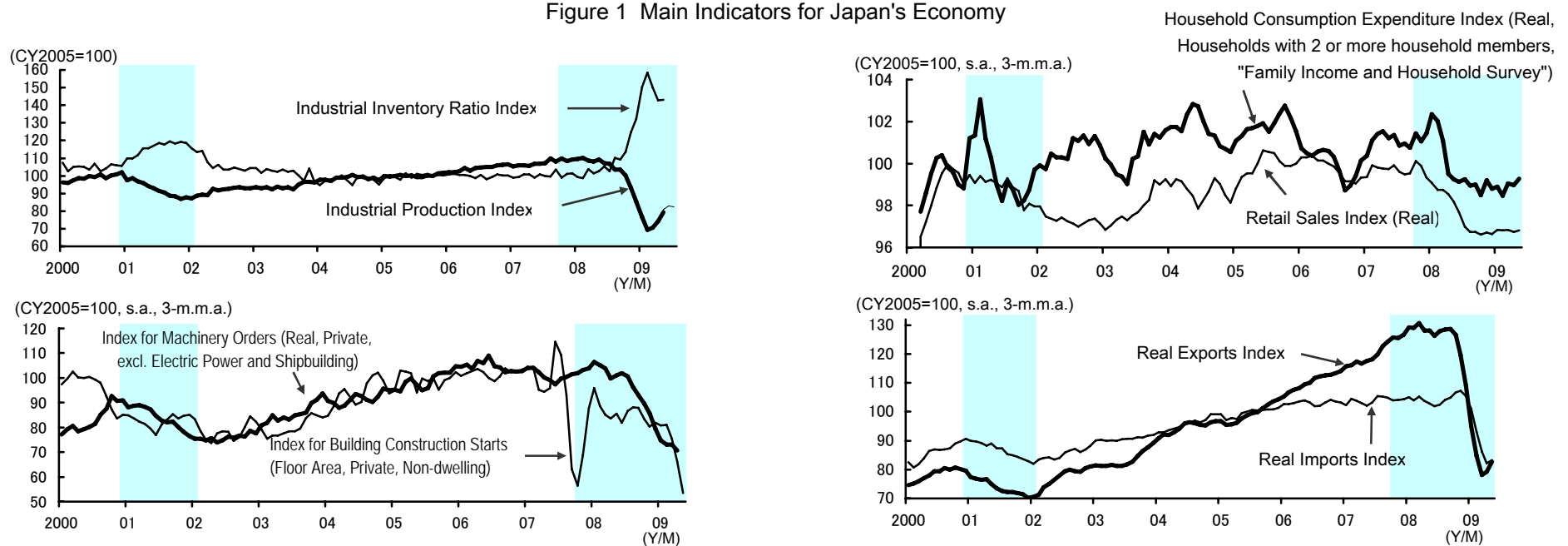
This report is the English version of the July 2009 issue of the original Japanese version.

## Current situation of Japan's economy – Picking-up moves seen mainly in manufacturing

Picking-up moves have been visibly seen in Japan's economy, mainly in manufacturing, although they are still at a low level. Industrial production increased in May, the third consecutive monthly rise. The forecast of industrial production for June and July also indicated an increase. With the forecast materialising, it is estimated that industrial production in the April-June period will have increased by a considerable 8.7 per cent over the previous quarter. In addition, exports have been recovering mildly, mainly led by those to Asia. The diffusion index for current conditions in the Economy Watchers Survey also continues an improving trend. Reflecting these favourable trends, it is likely that Japan's real GDP in the April-June quarter will grow at a slightly faster pace.

However, downward pressures on the economy still persist. Private consumption expenditure on a "Family Income and Household Survey" basis continues to stagnate, reflecting worsening employment and income environments. Also, machinery orders and building construction starts have been declining considerably, mainly in manufacturing, which implies a prolonged adjustment in business fixed investment.

Figure 1 Main Indicators for Japan's Economy



Source: The Ministry of Economy, Trade and Industry, The Ministry of Internal Affairs and Communications, The Cabinet Office, The Ministry of Land, Infrastructure and Transport, The Bank of Japan.

Note 1: Indices of industrial production and industrial inventory ratio are seasonally adjusted on a monthly basis. Others are calculated as seasonally adjusted and 3-month moving averages.

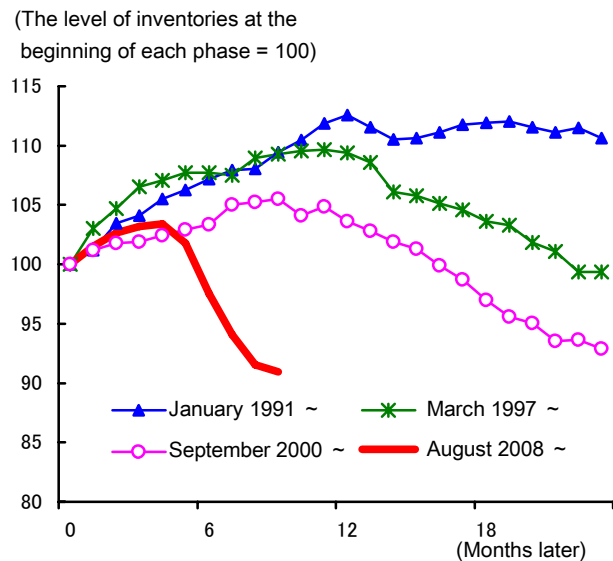
2: The industrial production index in June and July 2009 is based on METI forecasts. 3: Shaded areas indicate periods of recession according to the Cabinet Office.

## Recent recovery – Appears to be due to temporary factors

The recent economic recovery appears to be due to the following temporary boosting factors: (1) The effect of nearing the end of inventory adjustment. The declining phase of production since last autumn is characterised by the rapid pace of inventory adjustment. As a result, the level of inventory had fallen sharply. Then, enterprises obviously started to increase production, from the excessively low level to that in proportion with their shipments. (2) The effect of the economic stimulus measures by the government. The impact of private consumption stimulus measures, such as a total two trillion yen of flat-sum cash benefits, tax cuts for environmentally-friendly cars and the "eco-points" programme for household appliances, has been materialising. Also, public works have increased considerably, reflecting an expansion of public investment and a front-loading execution of the budget for this fiscal year.

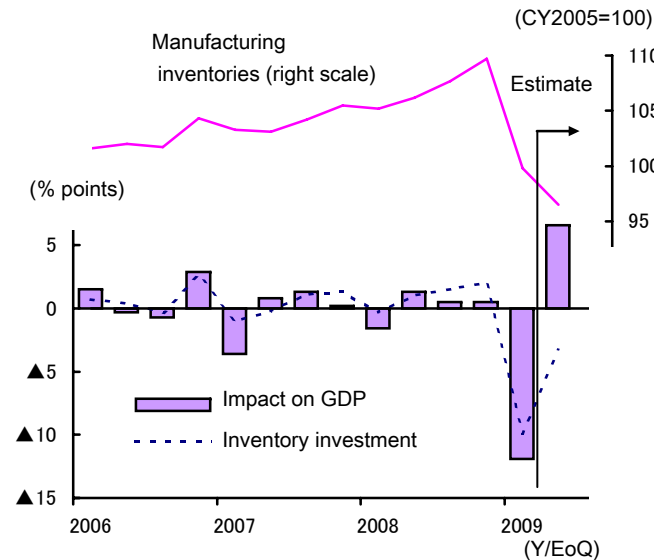
However, it should be noted that final demand of the economy has yet to have the power of autonomous recovery. In addition, there are a lot of uncertainties surrounding the prospects for the economy at home and abroad.

Figure 2-1 Comparison of the Pace of Inventory Adjustment in the Past Production-declining Phases



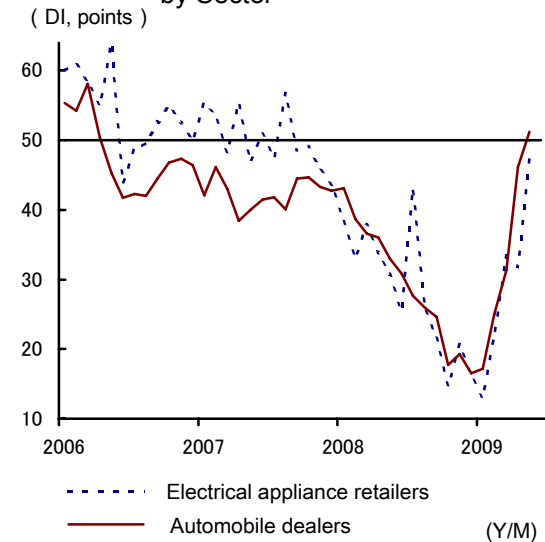
Source: The Japan Research Institute, Ltd. based on the data of The Ministry of Economy, Trade and Industry.

Figure 2-2 Estimate of the Impact of Inventory Adjustment on GDP



Source: The Japan Research Institute, Ltd. based on the data of The Ministry of Economy, Trade and Industry.

Figure 2-3 The Diffusion Index for Current Economic Conditions in the Economy Watchers Survey by Sector



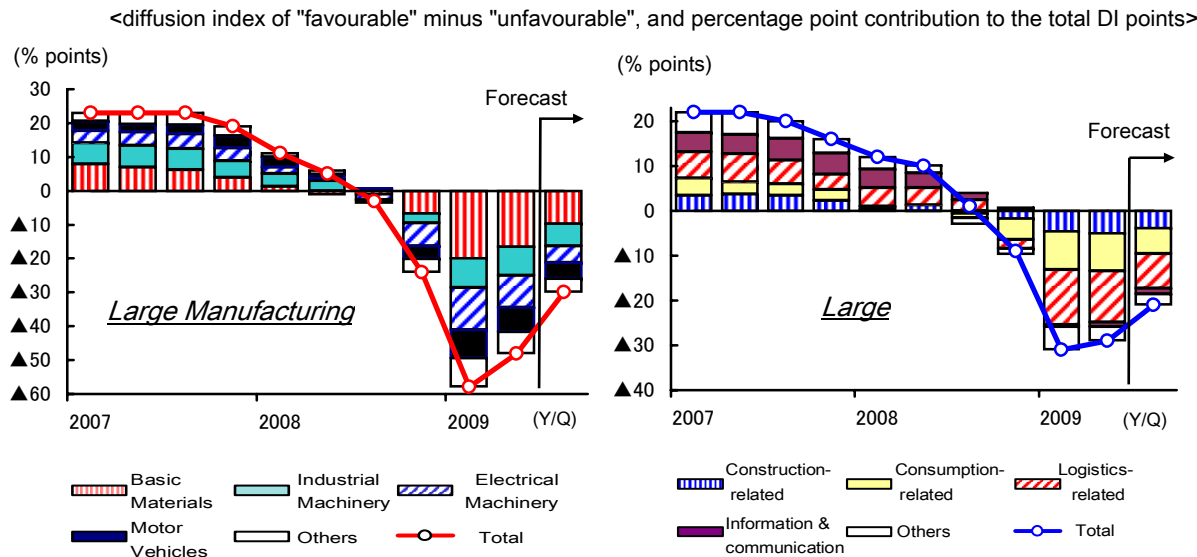
Source: The Cabinet Office.

## Business conditions in Tankan – Limited improvement, implying future anxieties

The Tankan June 2009 survey indicated that the economy had been bottoming out. However, survey results on business conditions did not improve as much as expected, and rather, implied intensifying uncertainties surrounding the prospects for the economy, especially for domestic demand. The diffusion index (DI) for business conditions (shown as "favourable" minus "unfavourable") in large manufacturing improved by 10 percentage points from the March survey result. However, the improvement was not seen in a wide range. The DIs in large nonmanufacturing and small and medium-sized enterprises hardly improved, and the DI in small and medium-sized nonmanufacturing deteriorated by 2 percentage points. This seems to reflect the situation where the declining trend in domestic demand has not yet been stemmed, while industrial production has been picking up due to a recovery of exports and the approaching end of inventory adjustment.

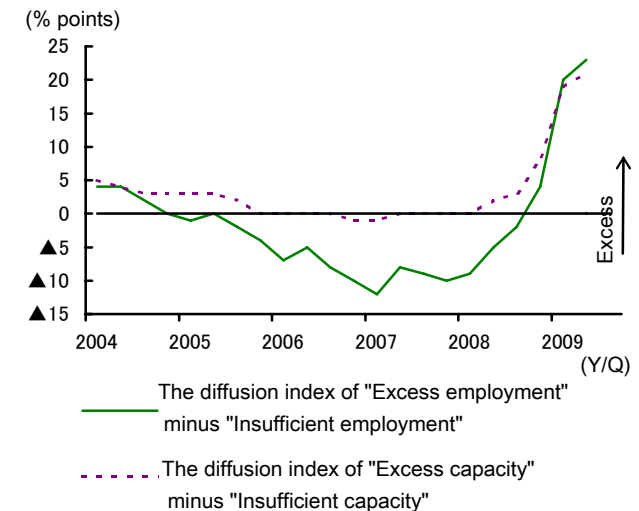
The survey results also showed that a sense of both excess production capacity and excess employment was at a high level. Therefore, a downside risk to domestic demand is expected, due to a downswing in business fixed investment and a cut in personnel expenses. In addition, a downside risk to corporate profits is also expected because of a worsening in the output / input price ratio, reflecting a lowering of selling prices due to decreased domestic demand and a rise in purchase prices due to re-rising resource prices.

Figure 3-1 Contributions to Business Conditions Diffusion Index by Industry



Source: The Japan Research Institute, Ltd. based on the data of The Bank of Japan, "The Tankan June 2009 Survey".

Figure 3-2 A Sense of Excess Production Capacity and Excess Employment



Source: The Bank of Japan, "The Tankan Surveys".

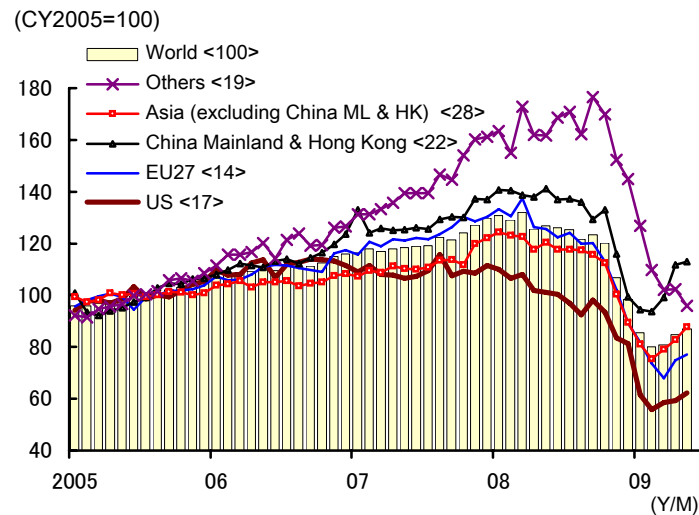
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## Exports - Have been bottoming out, yet could be stagnating again

Japan's exports, which had declined rapidly, have been bottoming out. This is mainly due to a recovery in exports to Asia, largely to China. However, even if exports see a slight recovery for the time being, they could face a downside risk of stagnating in the second half of this year. It can hardly be expected that exports would turn to a visibly increasing trend, taking into consideration the following three factors.

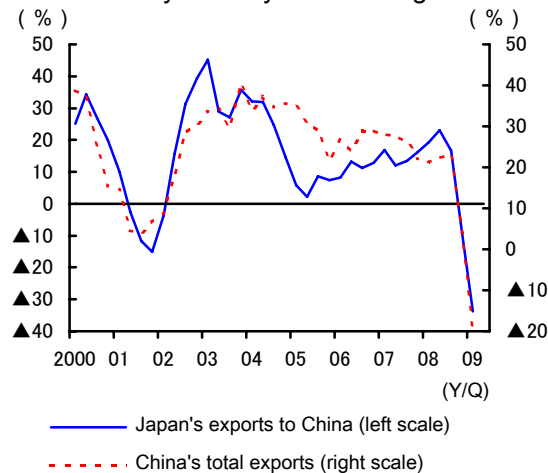
- (1) Exports to the US and European countries seem to be flattening out, yet could decline again, reflecting the economic downturn in these countries. In addition to exports of motor vehicles, shipments of industrial machinery could also be falling.
- (2) It can hardly be expected that exports to China, which have been recovering recently, would maintain the current momentum. Japan's main commodities exported to China are producers' goods (parts) and capital goods. Therefore, if China's exports of manufactured goods to the US and European countries do not recover, Japan's exports to China will not recover in earnest.
- (3) It is expected that negative influences of the yen appreciation since last autumn would be materialising during this year.

Figure 4-1 Japan's Real Exports by Region  
<seasonally adjusted>



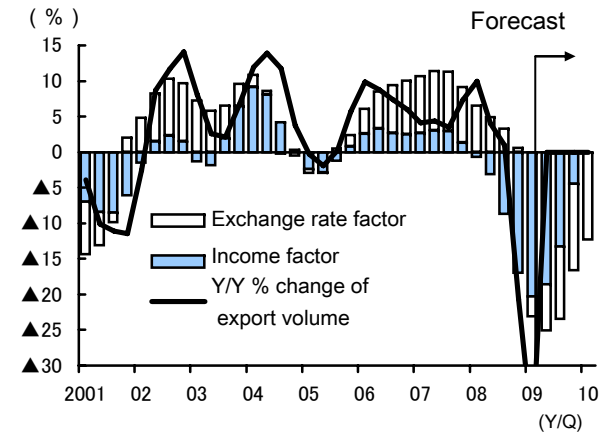
Note 1: The figures in angle brackets in the legend indicate the share of each region in total nominal exports of Japan in FY2008.  
2: Others: Middle Eastern countries, South American countries, Russia and so on.

Figure 4-2 China's Total Exports and Japan's Exports to China  
<denominated in US dollars, year-on-year % change>



Source: The National Bureau of Statistics of China, The Ministry of Finance of The People's Republic of China

Figure 4-3 Estimate of Export Volume Function  
<on a year-on-year % change basis>



Note: The exchange rate factor; the real effective exchange rate of the yen, the income factor; the OECD economic indicator. The assumptions of forecast are by JRI projections

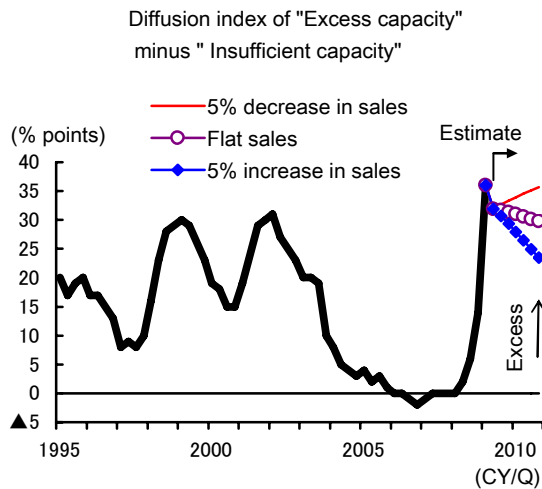
# Adjustment pressure (1) - Business fixed investment to decline by heightened sense of excess

The sense of excess capacity in manufacturing is at the highest level ever. Especially, the level of capacity utilisation in transport equipment and general machinery is as low as half of its peak. Although it is expected that new investment will be curbed and the disposal of existing equipment will proceed, it would take a long period of time for the sense of excess to reduce to nearly zero. As long as the sense of excess capacity persists, it is highly likely that the stagnation of business fixed investment will be protracted.

An estimate based on a capital stock cycle also indicates the prolonged sluggish situation of business fixed investment. As the expected GDP growth rate has declined sharply, a reduction of excessive capital stock is now needed. For example, given the current level of capital stock, an expected growth rate of zero per cent in GDP in manufacturing implies a decline of 36 per cent year-on-year in business fixed investment.

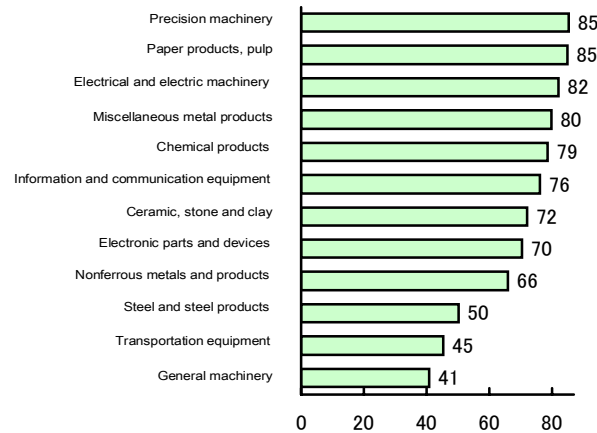
A downside risk is also predicted in business fixed investment in nonmanufacturing. It is expected that the attitude of nonmanufacturing towards business fixed investment will remain cautious, mainly in the retailing and services industries, against the background of stagnant domestic demand.

Figure 5-1 Estimate of A Sense of Excess Capacity <manufacturing>



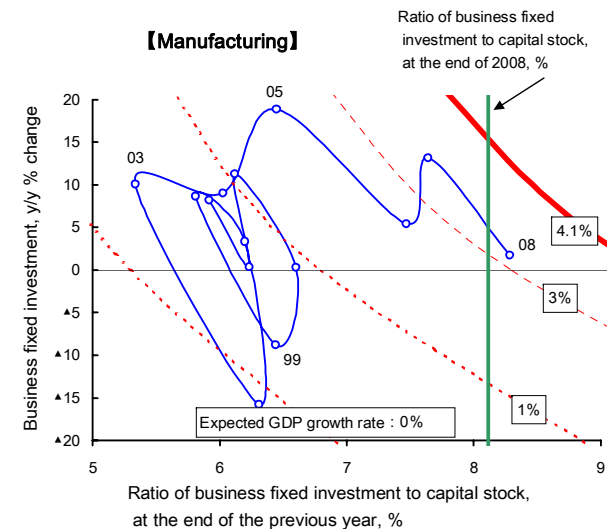
Source: The Japan Research Institute, Ltd. based on the data of The Bank of Japan, The Ministry of Finance

Figure 5-2 The Level of Capacity Utilisation in April 2009 <manufacturing, the peak in past 3 years = 100>



Source: The Japan Research Institute, Ltd. based on the data of The Ministry of Economy, Trade and Industry.

Figure 5-3 Business Fixed Investment and Capital Stock



Source: The Japan Research Institute, Ltd. based on the data of The Cabinet Office.

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## Adjustment pressure (2) - The pace of decline in employment and wages to accelerate

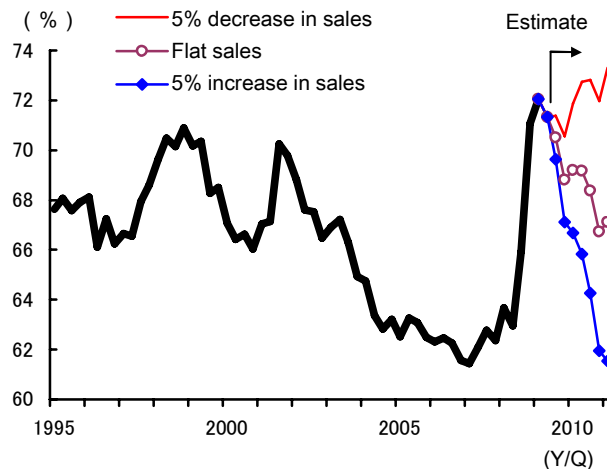
A sense of excess employment has intensified rapidly, against the background of a sharp rise in labour's share. It is, accordingly, expected that a cut-down in personnel expenses in enterprises will take place in earnest hereafter:

(1) Employment. It is estimated that the excess personnel will reach around two million persons in one year from now, reflecting a recession. The move to reduce employment will be spreading from the firing of temporary workers to a cut in regular employees.

(2) Wages. The amount of bonuses will decrease considerably by two years from now. The regular salary payments would also be under considerable downward pressure.

It is predicted that the pace of decline in the total cash earnings of employees will accelerate rapidly hereafter, mainly due to a significant decrease in wages per employee. Therefore, private consumption expenditure will stagnate again from the second half of fiscal year 2009, as the boosting effects of the economic stimulus measures by the government peter out.

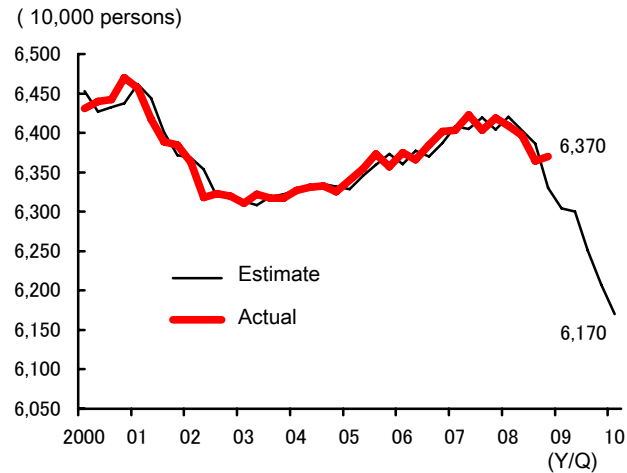
Figure 6-1 Estimate of Labour's Share



Source: The Japan Research Institute, Ltd. based on the data of The Ministry of Finance.

Note: The estimate is based on the assumption that personnel expenses would decrease by 3 per cent annually.

Figure 6-2 Estimate of Working Population



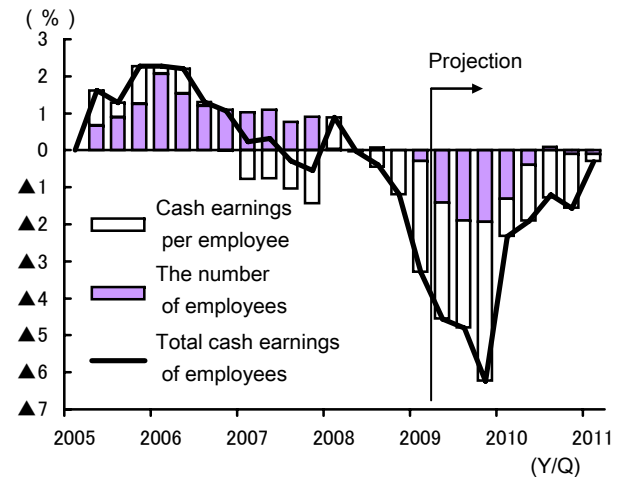
Source: The Japan Research Institute, Ltd. based on the data of The Ministry of Internal Affairs and Communications, The Cabinet Office.

Note: The equation for the estimate is as follows:

$$\ln(L) = 0.17 + 0.82 * \ln(L(-1)) + 0.11 * \ln(GDP) - 0.0004 * \text{Trend}$$

Period 1994/Q2~2008/Q3, Adjusted R\*R=0.9476

Figure 6-3 Total Cash Earnings of Employees  
<year-on-year % change>



Source: The Japan Research Institute, Ltd. based on the data of The Ministry of Internal Affairs and Communications, The Ministry of Health, Labour and Welfare.

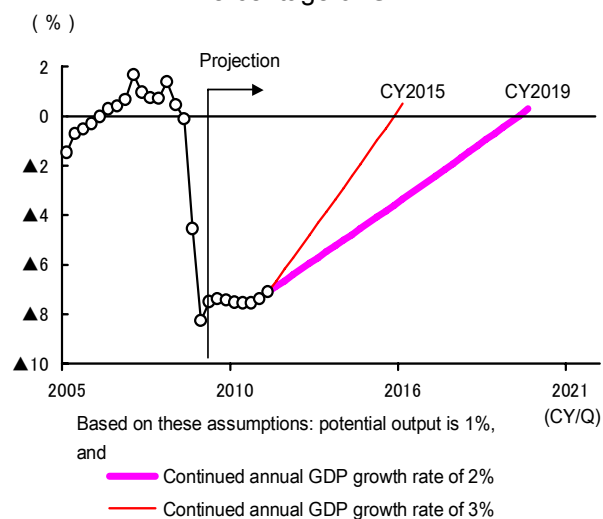
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## Adjustment pressure (3) - The CPI change rate in negative territory; deflationary trend prolonging

The estimated supply-demand gap shown as a percentage of GDP has expanded to over minus 8 per cent recently. Reflecting considerably insufficient demand, it is projected that the year-on-year change rate of the Consumer Price Index excluding fresh food (the core CPI) will continue to stay in negative territory. Further, it is highly likely that the deflationary pressure will persist for a long period of time. The long-range estimate shows that the time when the supply-demand gap narrows to zero would be 2015 at the earliest. As long as the gap exists, the downward pressure on prices is also expected to remain.

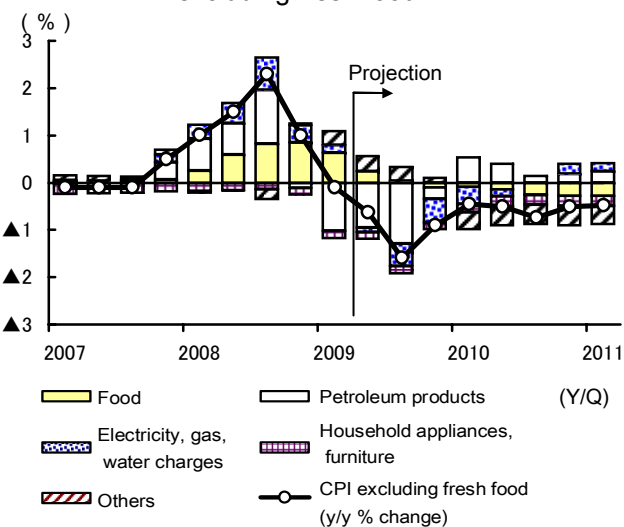
The trend of deflation appears to have a net negative influence on the economy in the aggregate. It is estimated that the positive effect of the deflationary trend to boost real private consumption expenditure is exceeded by the negative effect to weigh down domestic demand as a whole. In the corporate sector, a fall in selling prices reduces corporate profits, which leads to a decrease in compensation of employees and a decline of business fixed investment. In the household sector, the trend of deflation increases the amount of outstanding debt in real terms, which could lead to the tendency of households to put off their purchases.

Figure 7-1 Long-range Estimate of Supply-Demand Gap Shown as A Percentage of GDP



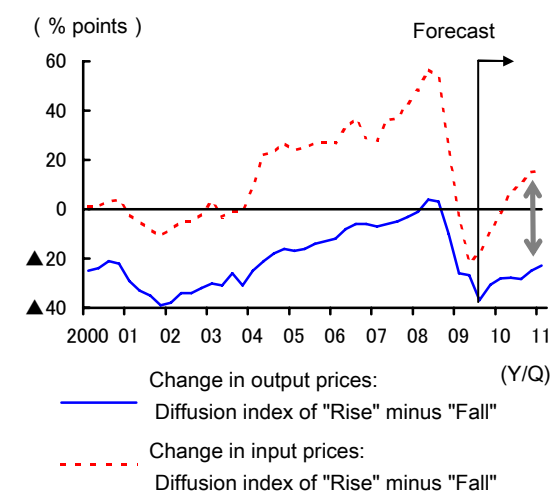
Source: The Japan Research Institute, Ltd. based on the data of The Cabinet Office.

Figure 7-2 Change in Consumer Price Index on CY2005-base <year-on-year, excluding fresh food>



Source: The Japan Research Institute, Ltd. based on the data of The Ministry of Internal Affairs and Communications.

Figure 7-3 Change in the Diffusion Index for Input and Output Prices of Enterprises



Source: The Japan Research Institute, Ltd. based on the data of The Bank of Japan, 'Tankan Surveys.'

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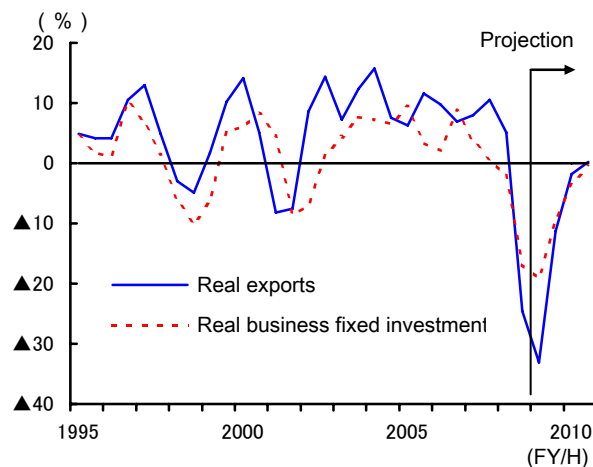
# Japan's economic recovery - To depend largely on that of US and European economies

It is basically said that Japan's economy is highly dependent on overseas demand. Business fixed investment and compensation of employees tend to be correlated with exports. Accordingly, the recovery of exports in earnest is the necessary condition for Japan's economy to pick up. In order to see the recovery of exports, an improvement in the US economy especially is needed. The completion of adjustments in the US economy is, namely, being keenly awaited.

As for the economic measures by the government, these measures should not be expected to have too much effect, taking the following into account: (1) although they have been boosting the economy, their effects are temporary and are expected to peter out before long, and (2) they are insufficient to make up for a recent supply-demand gap of a considerable 8 percentage points of GDP.

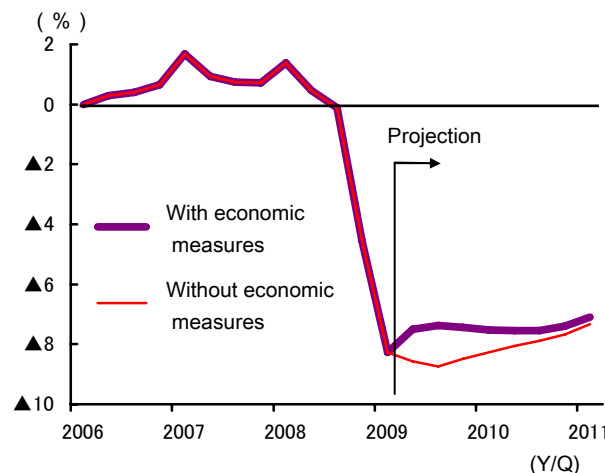
However, it should be noted that the main cause of this sharp downturn of Japan's economy lies in a rapid and significant decline of final demand. The corporate sector has still been maintaining an historically high level of strength in its financial conditions. Therefore, once the US and European economies recover, it is possible that the Japanese economic situation will be improving rapidly.

Figure 8-1 Correlation between Japan's Exports and Business Fixed Investment <in real terms, year-on-year % change>



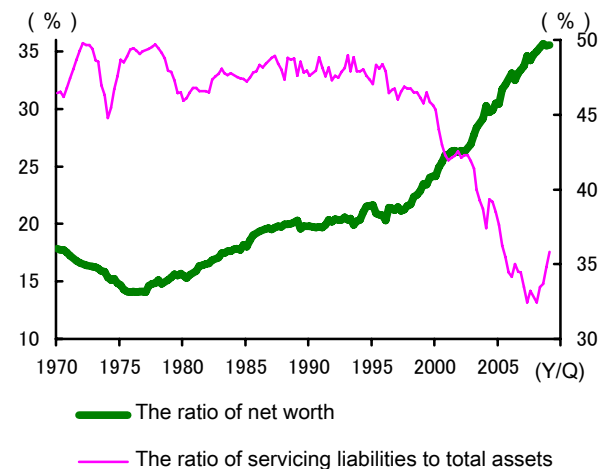
Source: The Cabinet Office,

Figure 8-2 Change Brought About by Economic Measures <supply-demand gap shown as a percentage of GDP>



Source: The Japan Research Institute, Ltd. based on the data of The Cabinet Office,

Figure 8-3 Financial Conditions of Japanese Enterprises



Source: The Ministry of Finance, "Financial Statements Statistics of Corporations by Industry: Quarterly".

## Japan's economic recovery - A possible risk of undergoing a double dip

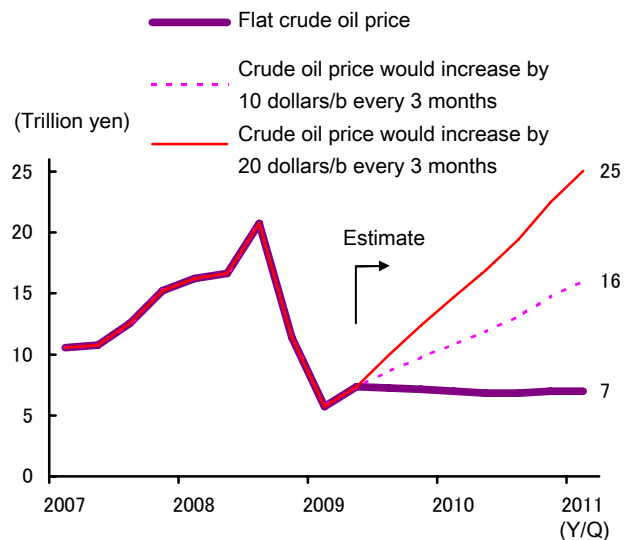
There would be a risk of Japan's economy undergoing a double dip due to the following factors:

(1) A re-rise of the crude oil price. A continued rise of the crude oil price could increase an income shift from Japan to oil-producing countries by a rise in the payment amount for imports. Reflecting weak domestic demand, it appears to be difficult for enterprises to pass the increased costs onto the final product prices. As a result, it is likely that almost all of the increased costs due to the oil price rise would be borne by the corporate sector and, accordingly, would lead to a decrease in corporate profits. Although a certain part of the increased costs would be passed onto the consumer prices of products such as petrol, the shift could lower the real purchasing power of households.

(2) Influences of swine flu. It is possible that a spread of swine flu could impose a significant constraint on movements of people and lead to a sharp decrease in private consumption expenditure. This is implied by the fact that business conditions in the Economy Watchers Survey in the Kinki area, including Kobe and Osaka, declined considerably this May, when the swine flue spread there.

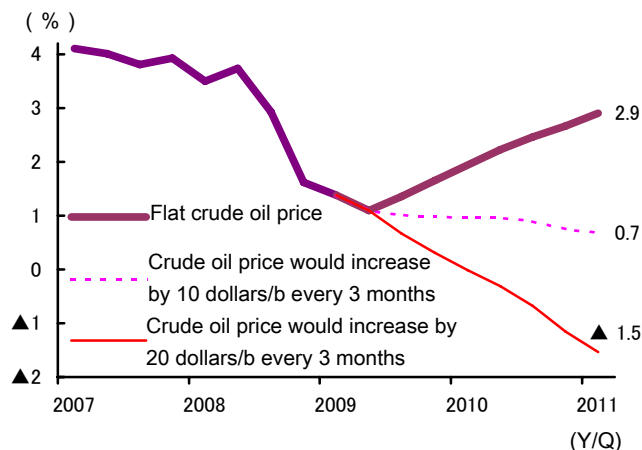
(3) A further sharp deterioration of the US economy. Also, (4) A further appreciation of the Japanese yen.

Figure 9-1 Estimate of the Total Value of Imported Crude Oil <annualised amount>



Source: The Japan Research Institute, Ltd. based on the data of The Ministry of Finance.

Figure 9-2 Estimate of the Impact of Crude Oil Price on the Ratio of Current Profits to Sales Amount



Source: The Japan Research Institute, Ltd. based on the data of The Ministry of Finance.

Note: The assumptions for the estimate: The 80% in the total increased costs due to the oil price rise would be borne by enterprises.

Figure 9-3 Estimate of the Impact of the 10 % Yen Appreciation on Real GDP, Profits and Price

	The first year	The second year
Real GDP	-0.4	-0.6
Exports	-1.9	-1.6
Imports	0.9	1.4
Business fixed investment	-0.5	-1.4
Current profits	-4.4	-2.6
Consumer prices	-0.1	0.0

Source: Simulation by The Japan Research Institute, Ltd.

## Prospects for Japan's economy - Projected real GDP change; -3.5% in FY2009 and +0.3% in FY2010

(1) It is expected that the recessionary phase of Japan's economy will be prolonged, against the background of a stagnation in economic activity at home and abroad. The quarterly real GDP change rate is estimated to have turned positive in this April-June period. However, it should be noted that final demand still appears to be fragile, because the recent recovery moves are only a reflection of the boosting effects of economic measures by the government and of the effects brought about by the coming end of inventory adjustment. It is, accordingly, projected that the quarterly real GDP growth rate from the July-September period onwards will follow a quarterly trajectory at a pace considerably below its potential output growth rate, without any strong driving force for the economy. This will lead to minus 3.5 per cent in the real GDP change rate in FY2009, a significant shrinking for two consecutive fiscal years.

(2) A main cause of the recession appears to be the economic stagnation in the corporate sector. It is expected that Japan's exports will continue to be mildly declining after a temporary bottoming out. This is against the background of a re-decline in exports to the US and European economies amid persisting uncertainties in the financial markets, and a gradual materialising of the negative effect of the Japanese yen appreciation.

The unfavourable move in exports is expected to continue having a negative impact on domestic demand. Reflecting a decline in capacity utilisation, a decreasing trend in business fixed investment would be more intensified, especially in the export industries.

(3) It is expected that the household sector will also feel the pressure of adjustment more strongly, due to sluggish income environments and worsened consumer sentiment. Nominal private consumption expenditure would see a noticeable decline because of factors such as a decrease in wages, especially in bonuses, growing anxieties about the future employment situation reflecting a sharp increase in unemployment, and so on. However, the degree of decline in real private consumption expenditure would be slight, owing to the advanced real purchasing power of households reflecting the fall of consumer prices.

(4) The deflationary trend would be seen more visibly. It is projected that the Consumer Price Index excluding fresh food (the core CPI) will see a further year-on-year decline, reflecting a fall in import prices and a widening supply-demand gap.

Figure 10 Projections for GDP Growth and Main Indicators of Japan ( as of July 2, 2009 )

(seasonally adjusted, annualised % changes from the previous quarter)

	CY2008	CY2009					CY2010					CY2011	FY2008	FY2009	FY2010
	10~12	1~3	4~6	7~9	10~12	1~3	4~6	7~9	10~12	1~3					
	(Actual)	(Actual)	(Projection)			(Projection)				(Projection)	(Actual)	(Projection)			
Real GDP	▲ 13.5	▲ 14.2	5.0	1.2	0.0	▲ 0.1	0.1	0.2	0.9	1.5	▲ 3.3	▲ 3.5	0.3		
Private Consumption Expenditure	▲ 3.1	▲ 4.2	1.8	1.1	0.4	0.2	0.3	0.3	0.4	0.6	▲ 0.5	▲ 0.5	0.4		
Housing Investment	23.0	▲ 20.3	▲ 17.1	▲ 5.5	▲ 1.8	0.8	1.2	2.7	3.5	3.0	▲ 3.1	▲ 6.7	1.0		
Business Fixed Investment	▲ 23.4	▲ 31.0	▲ 8.6	▲ 7.5	▲ 4.2	▲ 3.3	▲ 2.1	▲ 1.0	0.9	2.5	▲ 9.8	▲ 14.5	▲ 2.0		
Private Inventories (percentage points contribution)	( 2.4)	(▲ 0.6)	( 0.9)	( 1.0)	( 0.1)	( 0.0)	( 0.0)	( 0.0)	( 0.2)	( 0.4)	( 0.0)	( 0.6)	( 0.2)		
Government Consumption Expenditure	6.5	0.1	0.9	0.6	0.8	0.4	0.5	0.4	0.3	0.3	0.3	1.2	0.5		
Public Investment	▲ 0.3	0.3	12.9	7.9	1.8	0.9	▲ 1.8	▲ 2.0	▲ 1.8	▲ 0.5	▲ 4.4	5.3	▲ 0.5		
Net Exports (percentage points contribution)	(▲ 10.7)	(▲ 8.0)	( 4.2)	( 0.3)	( 0.1)	( 0.1)	( 0.1)	( 0.1)	( 0.3)	( 0.3)	(▲ 1.3)	(▲ 1.9)	( 0.1)		
Exports of Goods and Services	▲ 47.1	▲ 70.0	25.4	▲ 1.4	▲ 2.5	▲ 2.2	▲ 1.4	▲ 0.5	1.8	3.9	▲ 10.2	▲ 23.6	▲ 0.8		
Imports of Goods and Services	13.1	▲ 47.8	▲ 13.6	▲ 5.1	▲ 4.2	▲ 3.3	▲ 2.8	▲ 1.7	▲ 0.6	1.3	▲ 3.5	▲ 14.7	▲ 2.5		

(% changes from the same quarter of the previous year)

Real GDP	▲ 4.3	▲ 8.8	▲ 6.7	▲ 6.0	▲ 2.4	1.5	0.3	0.1	0.3	0.7	▲ 3.3	▲ 3.5	0.3
Nominal GDP	▲ 3.6	▲ 8.0	▲ 4.7	▲ 4.9	▲ 3.4	▲ 1.5	▲ 2.2	▲ 1.7	▲ 1.2	▲ 0.8	▲ 3.6	▲ 3.7	▲ 1.5
GDP deflator	0.7	0.9	2.2	1.1	▲ 1.0	▲ 3.0	▲ 2.5	▲ 1.8	▲ 1.5	▲ 1.5	▲ 0.3	▲ 0.2	▲ 1.8
Consumer Price Index (excluding fresh food)	1.0	▲ 0.1	▲ 0.8	▲ 1.7	▲ 0.7	▲ 0.2	▲ 0.3	▲ 0.6	▲ 0.7	▲ 0.7	1.2	▲ 0.9	▲ 0.6
Industrial Production Index	▲ 14.8	▲ 34.6	▲ 28.6	▲ 22.4	▲ 13.1	11.6	3.6	1.7	1.8	1.9	▲ 12.6	▲ 15.3	2.3
Unemployment Rate (%)	4.0	4.5	5.1	5.3	5.4	5.4	5.4	5.4	5.4	5.4	4.1	5.3	5.4
Current Account Balances (trillion JY)	1.77	2.54	2.93	3.72	3.13	4.18	2.31	4.04	3.50	4.54	12.34	13.97	14.39
Share of Nominal GDP (%)	1.4	2.2	2.4	3.2	2.5	3.7	1.9	3.5	2.8	4.0	2.5	2.9	3.0
Exchange Rates (JY/US\$)	96.1	93.6	97.3	95.0	94.0	92.0	90.0	90.0	92.0	94.0	100.6	94.6	91.5
Import Price of Crude Oil (US\$/barrel)	79	44	54	71	74	77	80	83	85	88	90	69	84

Source: The Cabinet Office, The Ministry of Internal Affairs and Communications, The Ministry of Economy, Trade and Industry, The Ministry of Finance.

The projection figures are based on those of The Japan Research Institute, Ltd.

Note: The assumptions on overseas economies: the real GDP growth rate during CY2009 would be -2.8% in the US, -4.4% in the euro area and +7.5% in China.