

# Monthly Report of Prospects for Japan's Economy

December 2011

Macro Economic Research Centre  
Economics Department



The Japan Research Institute, Limited

<http://www.jri.co.jp/thinktank/research/>

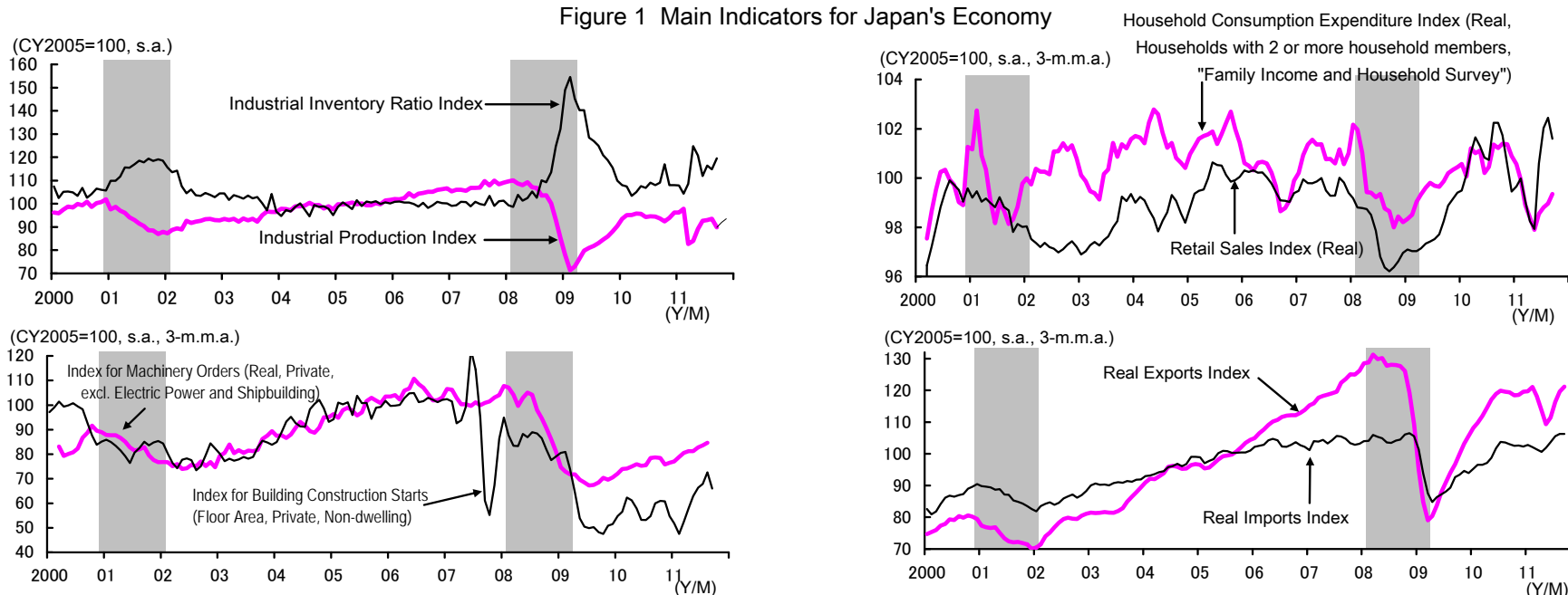
This report is the English version of the November 2011 issue of the original Japanese version.

## Current situation of Japan's economy – Continued recovery both in the corporate and household sector

Japan's economy has been, generally speaking, continuing its recovery trend. Reflecting the recovery in production, which had fallen sharply due to the Great East Japan Earthquake and tsunami disaster, exports have been on an increasing trend. The level of real private consumption expenditure, shown in the Family Income and Household Survey, has continued a moderate recovery trajectory, although its year-on-year change rate is still in negative territory. Consumer sentiment has also continued its improvement. Housing starts, machinery orders and building construction starts have been firm, and little effect of the earthquake and tsunami disaster has been seen in their statistical figures.

However, the pace of recovery in industrial production is slower than previously anticipated, reflecting a deceleration in overseas economies and the further appreciation of the yen, with the diffusion index of demand conditions for products worsening in the overseas market. In addition, fragility still remains in consumer sentiment. Accordingly, the situation is continuing where the level of economic activity is still below that before the disaster.

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.

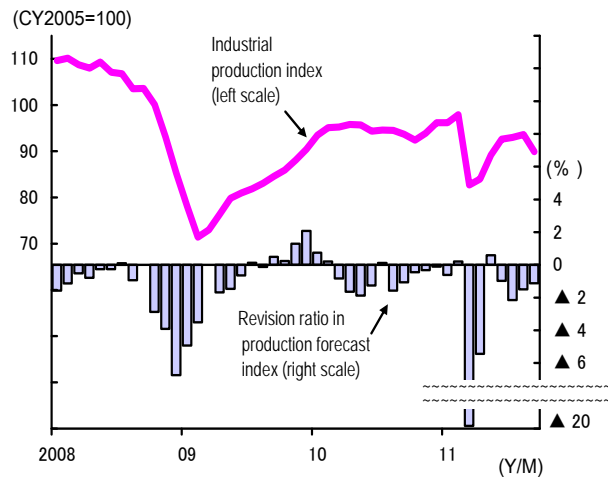
Note 2: The industrial production index in October and November 2011 is based on METI forecasts. 3: Shaded areas indicate periods of recession, the first according to the Cabinet Office, and the latter to JRI.

## Industrial production – Estimated to have been levelling off

Industrial production decreased by 3.3 per cent over the previous month in September, a monthly decline for the first time in six months. The revision ratio in production forecast also fell in September, the fourth consecutive monthly decline. Judging from these moves, industrial production is estimated to have been levelling off. It can be pointed out that this trend is against the background of a slowdown of overseas economies, the further appreciation of the yen, the inventory adjustment in the basic materials industry due to the lag of reconstruction demand materialising in earnest, and so on. Viewed by industry, the production of electronic devices has been stagnating since the earthquake and tsunami disaster. In addition, the production of general machinery, which had expanded so far, has been flattening out due to a weakening in overseas demand as the driving force.

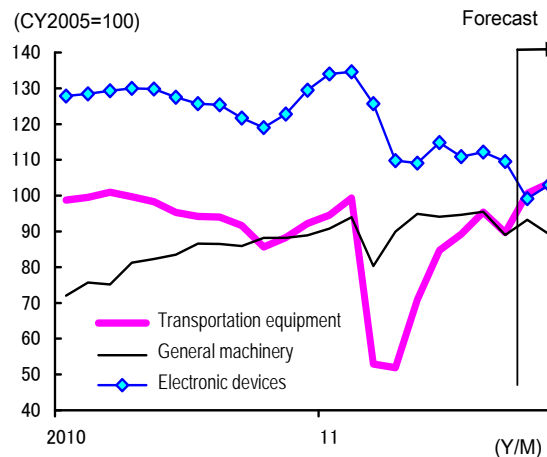
Based on the production forecast index, industrial production is predicted to increase again over the previous month in October. The automobile industry, the supply chains of which have been recovering rapidly, will play a bolstering role for industrial production as a whole. However, if the negative effect of the flood in Thailand, which started in October, is factored into the forecast, industrial production could have a downswing during that period.

Figure 2-1 Industrial Production Index and Its Revision Ratio  
<seasonally adjusted>



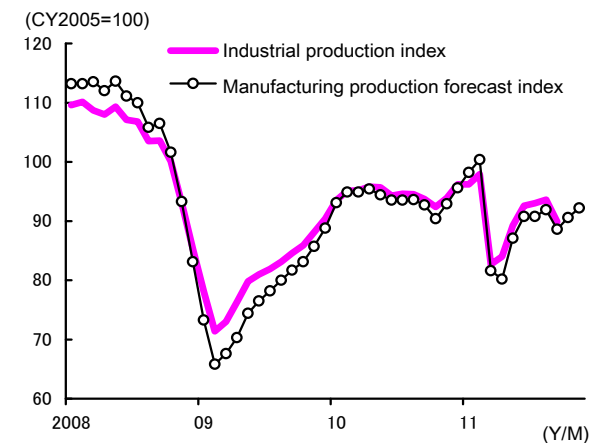
Source: The Ministry of Economy, Trade and Industry.

Figure 2-2 Indices of Production Forecast by Industry  
<seasonally adjusted>



Source: The Ministry of Economy, Trade and Industry.  
Note: The forecast is based on the production forecast index.

Figure 2-3 Industrial Production Index and Production Forecast Index  
<seasonally adjusted>



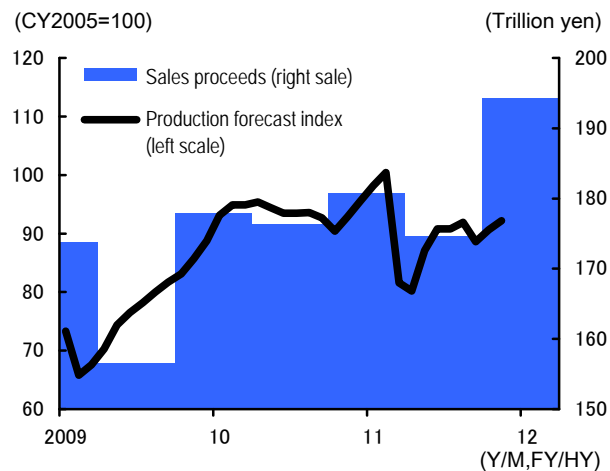
Source: The Ministry of Economy, Trade and Industry.

## A scenario for economic recovery (1) – Manufacturing production

The resumption of operations in factories hit by the earthquake and tsunami disaster has been advancing steadily. Judging from the fact that the Tankan September Survey shows that sales proceeds in manufacturing are forecast to increase considerably in the second half of FY2011, the recent levelling off in production seems to be temporary. Therefore, it is expected that industrial production will expand again moderately from now on. Along with the recovery in production, exports also will pick up.

However, it is possible that the damage caused by the flood in Thailand could lower Japan's industrial production. It is estimated that around 450 Japanese-owned enterprises there have been suffering damage from the food. Especially, there is anxiety that domestic sales and exports of automobiles could have a considerable downswing, if the stoppage of production due to the shortage of parts spreads and drags on. In addition, the momentum of the recovery in production is likely to be curbed, as the bouncing effect from the sharp fall just after the earthquake and tsunami disaster comes to an end. Furthermore, there are, worryingly, other downswing factors for industrial production, which include a decrease in demand for automobiles reflecting the end of tax cuts for eco-cars, and a decline in export competitiveness due to the highly appreciated yen.

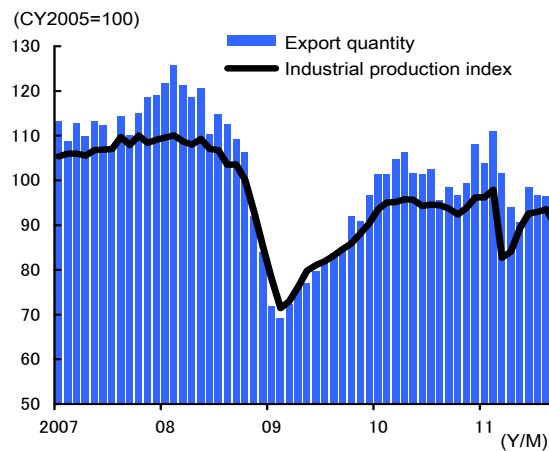
Figure 3-1 Production Forecast Index and Sales Proceeds in Manufacturing



Source: The Ministry of Economy, Trade and Industry, The Bank of Japan.

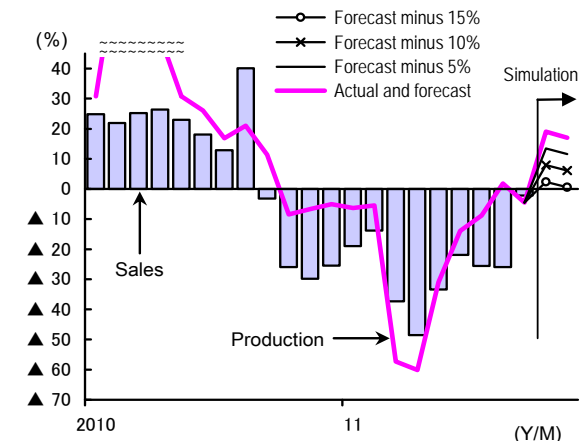
Note: Sales proceeds in the second half of FY2011 are forecast as of September 2011.

Figure 3-2 Industrial Production Index and Export Quantity <seasonally adjusted>



Source: The Ministry of Economy, Trade and Industry, The Ministry of Finance.

Figure 3-3 Domestic Automobile Sales and Production <year-on-year % change>



Source: The Ministry of Economy, Trade and Industry, Japan Automobile Dealers Association, Japan Mini Vehicles Association.

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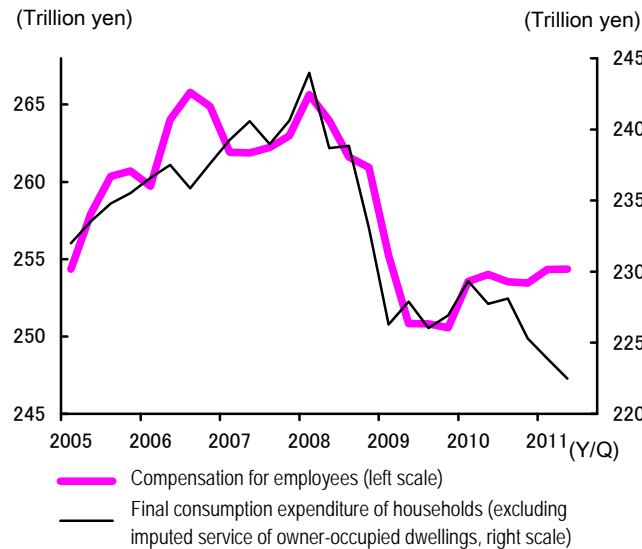
## A scenario for economic recovery (2) – Private consumption expenditure

It should be noted that the decline in private consumption expenditure after the Great East Japan Earthquake and tsunami disaster has been due to a decline in consumer sentiment, while the drop after the Lehman shock was caused by the decrease in compensation for employees. Accordingly, it is very likely that private consumption expenditure will recover to a level in proportion to that of income, as consumer sentiment improves. It can be said that consumer sentiment is already on a recovery trend, as shown in the fact that the consumer confidence index has picked up sharply.

Income environments also seem to be firm as a whole. It is expected that total cash earnings will pick up, along with the recovery of industrial production, although total cash earnings have been flattening out recently due to the decrease in overtime working hours.

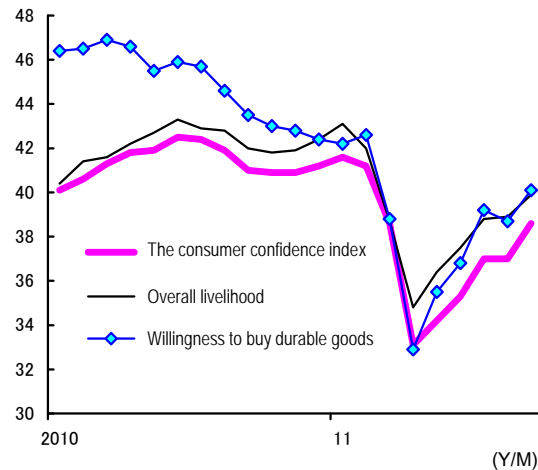
Judging from the above mentioned situation, it is predicted that private consumption expenditure will recover noticeably from the July-September period onwards. Moreover, it is possible that private consumption expenditure will have an even further upswing, if pent-up demand for goods such as automobiles materialises.

Figure 4-1 Compensation for Employees and Private Consumption Expenditure



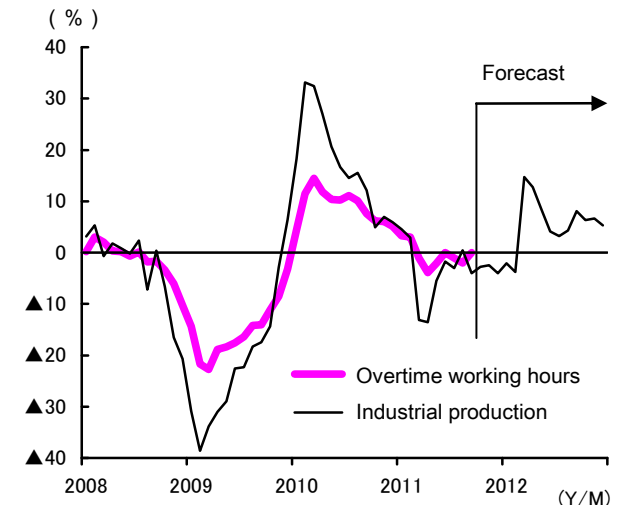
Source: The Japan Research Institute, Ltd. based on the data of The Cabinet Office.

Figure 4-2 Consumer Sentiment <seasonally adjusted>



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

Figure 4-3 Overtime Working Hours <year-on-year % change>



Source: The Ministry of Health, Labour and Welfare, The Ministry of Economy, Trade and Industry, the forecast by JRI.

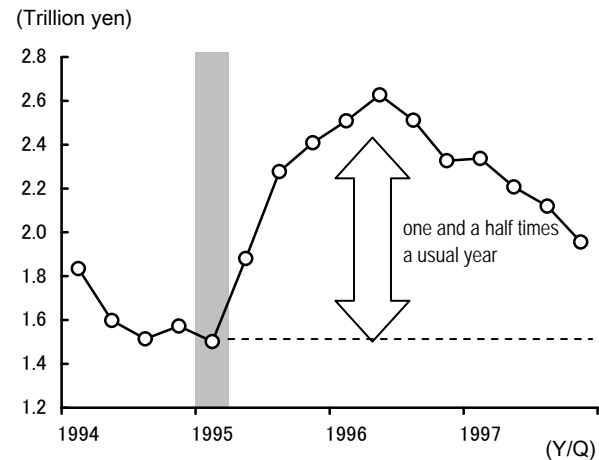
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## A scenario for economic recovery (3) – Government expenditure and housing starts

Hyogo Prefecture, after the Great Hanshin Awaji Earthquake disaster in 1995, added public investment at the rate of one and a half times a usual year during the following three years. On the assumption that the size of damage to social capital stock in the Great East Japan Earthquake disaster is one and a half times that in the Hanshin Awaji quake disaster, it is calculated that 5 trillion yen of public investment would be needed in the coming three years just for three prefectures (Iwate, Miyagi, and Fukushima), not counting other affected prefectures. Accordingly, it is expected that public investment and government consumption expenditure will increase significantly as the reconstruction takes place in earnest. On the other hand, there are still considerable uncertainties surrounding the measures taken by the government, although the third supplementary budget in FY2011 exceeding 12 trillion yen was approved in the Diet. Therefore, there is considerable anxiety that the time when public investment and government consumption expenditure increase in earnest could be later than previously thought.

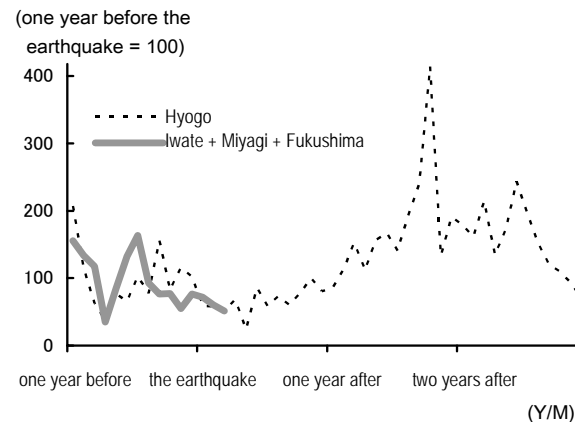
Meanwhile, the rebuilding of houses this time will lag, compared with that in the Hanshin Awaji quake disaster. The removal of debris will take a longer time, as will drawing up new city planning partly due to the limitations by law on rebuilding. While these challenges are being dealt with, it will actually be difficult to start to build new houses.

Figure 5-1 Public Investment in Hyogo Prefecture  
<real, seasonally adjusted>



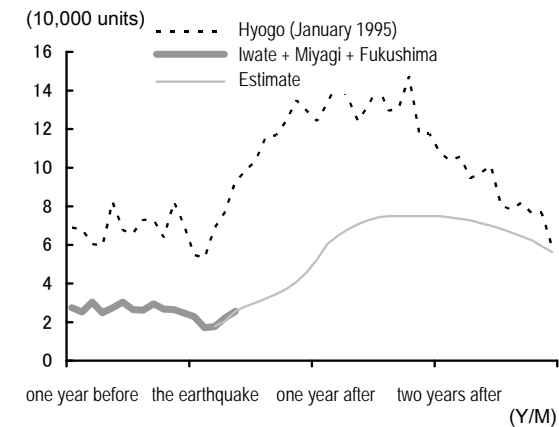
Source: Hyogo Prefecture.

Figure 5-2 Building Construction Starts  
<floor area, public, seasonally adjusted>



Source: The Japan Research Institute, Ltd. based on the data of The Ministry of Land, Infrastructure and Transport.

Figure 5-3 The Number of Housing Starts after the Earthquake  
<seasonally adjusted, annualised>



Source: The Japan Research Institute, Ltd. based on the data of The Ministry of Land, Infrastructure and Transport.

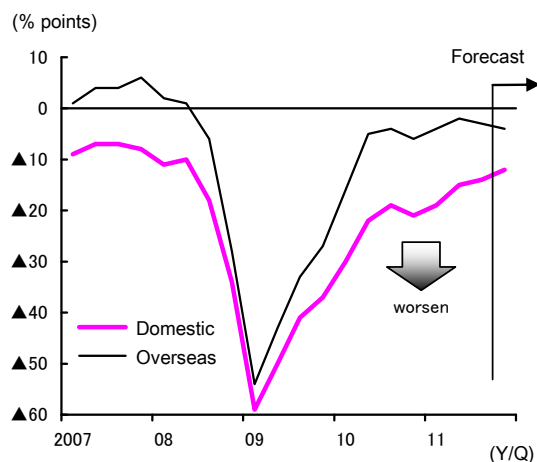
## A downside risk (1) – The downswing of overseas demand

Based on the Tankan Survey, Japan's enterprises seem to forecast differently about demand conditions in the domestic market compared to demand conditions in the overseas market. While a sense of insufficiency of domestic demand is on a reducing trend, more enterprises forecast that uncertainty about overseas demand will increase.

Although exports have been following a recovery path since the earthquake and tsunami disaster, the pace of recovery in exports to Asia has tended to be slow. Machine tool orders from Asia, which are considered to be a driving force normally, also have been stagnating, which implies that the sentiment about business fixed investment could have begun cooling in Asian countries.

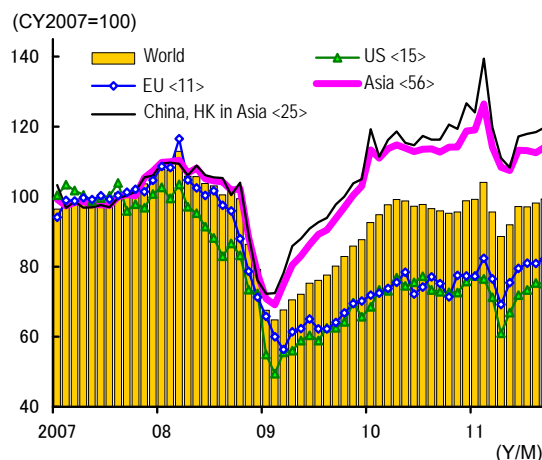
The PMI (Purchasing Managers' Index), which exhibits business conditions in manufacturing, has been weakening in the US, the eurozone and China. There is anxiety that overseas demand could have a considerable downswing, if the world economy falters again.

Figure 6-1 The Diffusion Index of Demand Conditions for Products <large manufacturing>



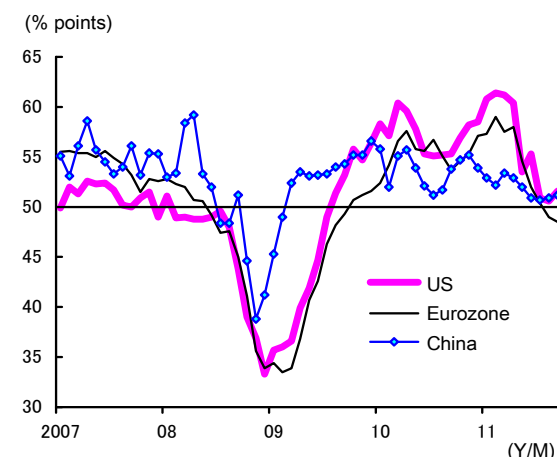
Source: The Bank of Japan, "Tankan Surveys".

Figure 6-2 Real Exports by Destination <seasonally adjusted>



Source: The Japan Research Institute, Ltd. based on the data of The Ministry of Finance, The Bank of Japan.  
Note: The figure in the angle bracket shows the share in FY2010.

Figure 6-3 The PMI in Manufacturing <seasonally adjusted>



Source: Institute for Supply Management, Markit, China Federation of Logistics and Purchasing.

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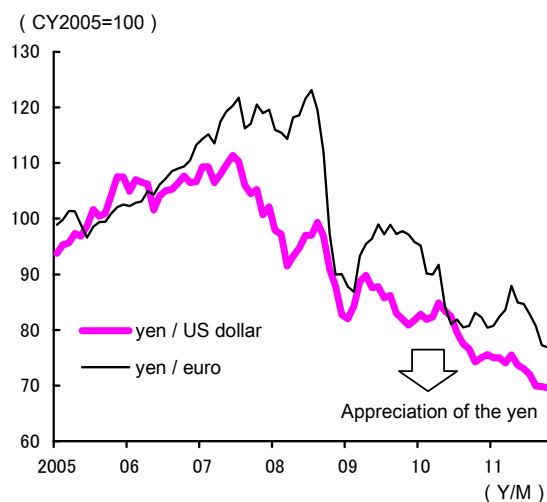
## A downside risk (2) – The downswing of manufacturing profits due to the strong yen

The recent exchange rates of the yen against the US dollar and the euro, which have appreciated further, are well beyond the rates assumed by Japanese enterprises. It is expected that the continued strong yen will have a significant negative effect on corporate profits.

Especially, the highly appreciated yen is likely to reduce considerably the corporate profits of the machinery sector, which is one of Japan's main industrial sectors, through exchange rate losses. The JRI estimates based on the Tankan September Survey show that corporate profits in the machinery sector, which includes automobiles and general machinery, will be reduced by 440 billion yen in the second half of FY2011, if the exchange rate of the yen against the US dollar remains 75 / dollar and that against euro 105 / euro.

Looking at Japan's trade value which is settled in US dollars, the value of imports is more than that of exports, which suggests net exchange rate gains in the total. The basic materials sector, for example, which imports materials denominated in dollars, enjoys the advantage of the strong yen. However, the highly appreciated yen is predicted to lower the quantity of exports. Further, the downswing in corporate profits in the machinery sector will have a negative ripple effect on profits in other sectors. Taking these unfavourable factors into consideration, it is very likely that corporate profits in manufacturing as a whole will have a downswing.

Figure 7-1 Indices for the Exchange Rates of the Yen  
<rebased, CY2005=100>



Source: Bloomberg L.P.

Figure 7-2 Estimates of the Effect of Appreciation of the Yen on Profits of the Machinery Sector in the Second Half of FY2011

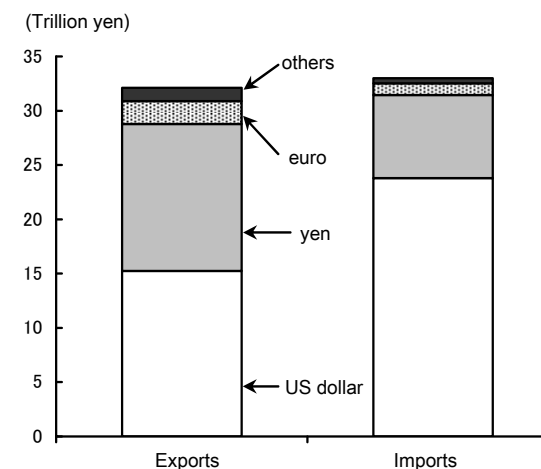
(100 billion yen)

		yen / US dollar				
		80	75	70	65	60
yen / euro	110	- 0.8	- 3.9	- 7.0	- 10.1	- 13.3
	105	- 1.3	- 4.4	- 7.5	- 10.6	- 13.8
	100	- 1.8	- 4.9	- 8.0	- 11.1	- 14.3
	95	- 2.3	- 5.4	- 8.5	- 11.6	- 14.8
	90	- 2.8	- 5.9	- 9.0	- 12.2	- 15.3

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

Note: The machinery sector includes general machinery, electrical machinery, transport equipment, and so on.

Figure 7-3 Trade Value by the Currency for Settlement <the first half of CY2011>



Source: The Ministry of Finance.

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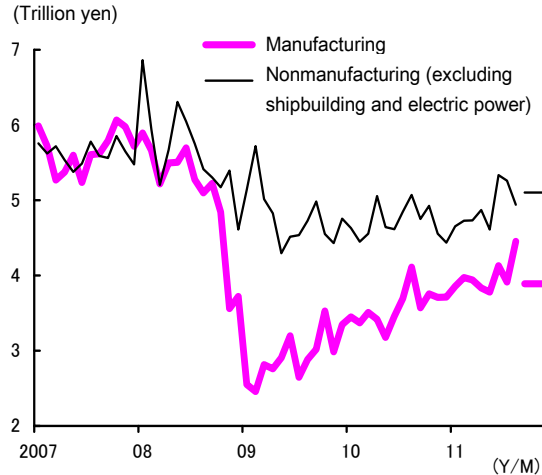


## A downside risk (3) – The shift of production strongholds to overseas sites

It is expected that business fixed investment will recover moderately. Machinery orders, which are considered to be a leading indicator for business fixed investment, have been on an increasing trend. The forecast of business fixed investment for FY2011 by enterprises shown in the Tankan September 2011 Survey also exhibits an annual increase over FY2010. It can be said that these favourable moves are against the background that manufacturing production is on a recovery trajectory, and that environments surrounding demand are maintaining their firm trend.

However, if exports decline considerably, it is very likely that business fixed investment will have a downswing. In addition, if the trend intensifies among enterprises to shift their production strongholds to the sites in overseas areas with high economic growth rates, led by Asia, business fixed investment in domestic sites could continue to stagnate in the medium and long term. Especially, it would become more difficult for enterprises to expand their businesses in domestic sites, as the current exchange rate of the yen is, unfavourably, well below the break-even point.

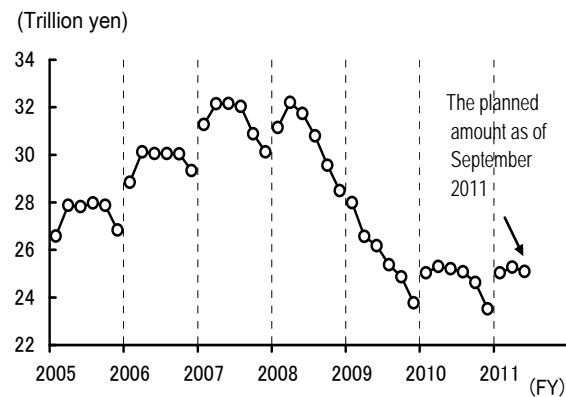
Figure 8-1 Machinery Orders  
<seasonally adjusted, annualised>



Source: The Cabinet Office.

Note: The short horizontal lines in the latest period indicate the forecast in Q3 2011.

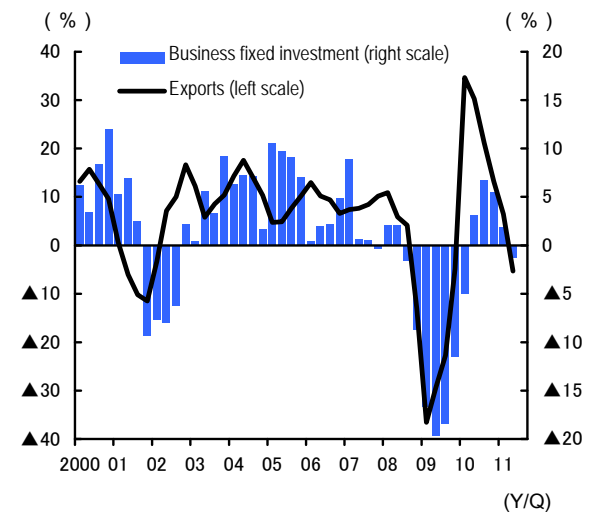
Figure 8-2 Revisions to the Planned Amount of Business Fixed Investment  
<large enterprises>



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

Note: Including software investment, and excluding land purchase expenses.

Figure 8-3 Exports and Business Fixed Investment  
<year-on-year % change>



Source: The Cabinet Office.

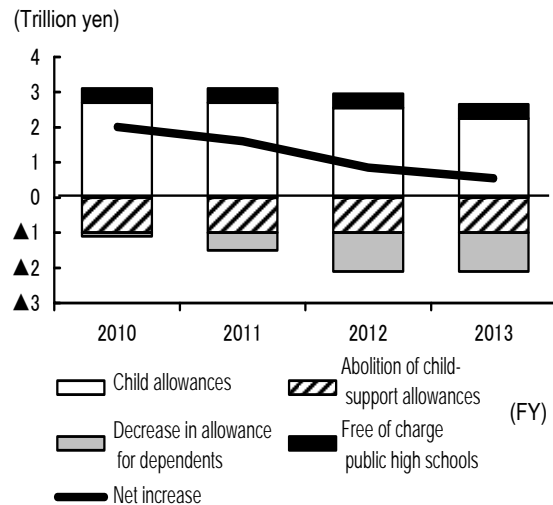
## A downside risk (4) - The increase in the financial burden on households

It is highly likely that the financial burden on households will rise because the government is expected to have to increase revenues for reconstruction. There is considerable uncertainty as to how much the financial burden will increase at this stage. However, if the measures such as a reduction in child allowances, an increase in income tax, and a rise in consumption tax are implemented, there could be a risk that private consumption expenditure will have a downswing through a decrease in disposable income and a decline in purchasing power.

The JRI macro economic model simulation shows that a decrease in disposable income by one trillion yen in FY2011 will reduce the real GDP growth rate in FY2012 by 0.1 of a percentage point, and that a rise in consumption tax by one per cent in FY2012 will reduce the real GDP growth rate in FY2012 by 0.3 of a percentage point.

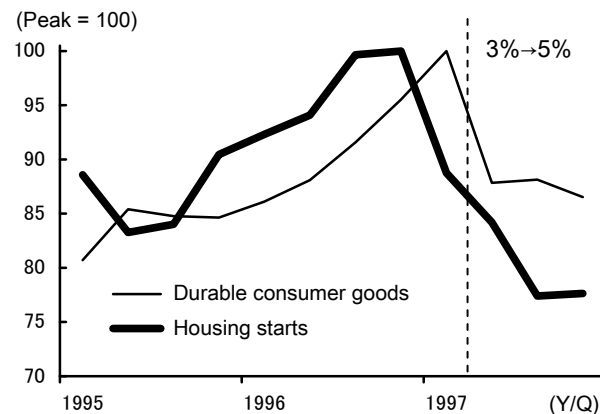
Furthermore, if salaries of persons in public service are cut, it will have a negative effect on private consumption expenditure through a decline in compensation for employees.

Figure 9-1 Expected Increase in Disposable Income due to Child Allowances



Source: The Japan Research Institute, Ltd.

Figure 9-2 Household Expenditure Before and After the Rise in Consumption Tax <1995-1997>



Source: The Cabinet Office, The Ministry of Land, Infrastructure and Transport.

Figure 9-3 Negative Effect of Decrease in Income and Rise in Consumption Tax on Real GDP Growth Rate in FY2012 <macro economic model simulation>

(% points)

		Assumed rise in consumption tax rate (FY2012)			
		0%	1%	2%	3%
Assumed decrease in disposable income (FY2011)	Trillion yen				
	0	0.0	-0.3	-0.7	-1.0
	1	-0.1	-0.4	-0.8	-1.1
	2	-0.2	-0.5	-0.9	-1.2
	3	-0.3	-0.7	-1.0	-1.3
	4	-0.4	-0.8	-1.1	-1.4
5	-0.5	-0.9	-1.2	-1.5	

Source: The Japan Research Institute, Ltd.

## Prospects for Japan's economy - Projected real GDP change; 0.6% in FY2011 and 1.9% in FY2012

(1) Japan's real GDP in the July-September quarter this year grew by 6.0 per cent on a seasonally adjusted, annualised percentage change from the previous quarter basis (the first preliminary estimates). In this issue of the Monthly Report, the estimated growth rate of real GDP in FY2011 was revised upwards from 0.4 per cent to 0.6 per cent, reflecting the high growth rate in the July-September period and the upward revision of the actual figure in the April-June quarter.

On the other hand, the forecast growth rate of real GDP in FY2012 starting April 2012 was revised downwards from 2.4 per cent to 1.9 per cent. This reflects an expected pause in rapid recovery from the Great East Japan Earthquake and tsunami disaster and the negative effect of the further appreciated yen since summer 2011, although the main scenario of continued recovery during the forecast period is unchanged.

(2) Looking at the prospects for the economy from this September-December quarter onwards, as the bouncing effect in industrial production and private consumption expenditure from the sharp fall caused by the disaster is nearing the end, a sense of deceleration is expected to intensify because of the following downward pressures at home and abroad:

- 1) a deceleration in overseas economies and a slowdown in overseas demand due to the strong yen.
- 2) a stagnation in domestic business fixed investment caused by the shift of production strongholds to overseas sites due to the highly appreciated yen.
- 3) a curbing of private consumption expenditure through the increase in the financial burden on households because of the government having to increase revenues for reconstruction.

(3) However, the situation where the economy falters will be able to be avoided, because demand stemming from recovery and reconstruction from the disaster will continue to push up economic activities, and emerging economies are predicted to maintain their firm economic trend.

(4) Meanwhile, the year-on-year change rate of the Consumer Price Index excluding fresh food (the core CPI) is expected to stay in negative territory, because the deflationary pressure is difficult to wipe out as shown in the declining trend in prices of household appliances.

Figure 11 Projections for GDP Growth and Main Indicators of Japan ( as of November 14, 2011 )

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

	CY2011				CY2012				CY2013	FY2010	FY2011	FY2012
	1~3	4~6	7~9	10~12	1~3	4~6	7~9	10~12	1~3			
	(Actual)		(Projection)		(Projection)				(Projection)	(Actual)	(Projection)	
Real GDP	▲ 2.7	▲ 1.3	6.0	1.3	2.7	1.9	1.7	1.1	0.6	2.4	0.6	1.9
Private Consumption Expenditure	▲ 1.8	0.7	3.9	0.5	1.3	0.8	0.7	0.7	0.6	1.0	0.5	1.0
Housing Investment	5.6	▲ 4.2	21.7	4.2	7.0	5.1	7.1	1.2	▲ 3.9	▲ 0.2	6.1	5.5
Business Fixed Investment	▲ 4.5	▲ 1.9	4.4	1.9	2.4	3.2	4.0	3.0	2.6	4.2	0.0	3.0
Private Inventories (percentage points contribution)	(▲ 0.8)	( 0.7)	( 0.8)	(▲ 0.3)	( 0.2)	( 0.2)	( 0.2)	( 0.1)	( 0.1)	( 0.5)	( 0.2)	( 0.1)
Government Consumption Expenditure	3.6	2.7	1.6	1.9	1.5	1.1	0.4	1.2	1.2	2.3	2.3	1.2
Public Investment	▲ 4.5	15.7	▲ 10.8	5.1	5.5	10.1	3.5	▲ 4.4	▲ 7.3	▲ 9.8	▲ 1.3	2.9
Net Exports (percentage points contribution)	(▲ 0.8)	(▲ 2.9)	( 1.7)	(▲ 0.0)	(▲ 0.1)	(▲ 0.0)	( 0.0)	(▲ 0.0)	(▲ 0.1)	( 0.9)	(▲ 0.7)	( 0.1)
Exports of Goods and Services	1.0	▲ 18.4	27.4	2.2	4.7	4.1	4.1	3.2	2.5	17.1	0.1	5.0
Imports of Goods and Services	6.8	0.4	14.5	2.3	4.9	3.9	3.8	3.3	3.2	10.9	4.9	4.4

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

Real GDP	▲ 1.0	▲ 1.1	▲ 0.0	1.1	2.4	2.9	2.2	1.4	1.4	2.4	0.6	1.9
Nominal GDP	▲ 2.9	▲ 3.2	▲ 1.9	▲ 0.9	0.6	2.4	1.4	1.1	0.8	0.4	▲ 1.4	1.4
GDP deflator	▲ 1.9	▲ 2.2	▲ 1.9	▲ 2.0	▲ 1.7	▲ 0.5	▲ 0.8	▲ 0.3	▲ 0.5	▲ 2.0	▲ 2.0	▲ 0.5
Consumer Price Index (excluding fresh food)	▲ 0.8	▲ 0.2	0.2	▲ 0.1	▲ 0.2	▲ 0.4	▲ 0.4	▲ 0.3	▲ 0.2	▲ 0.9	▲ 0.1	▲ 0.3
Industrial Production Index	▲ 2.6	▲ 6.8	▲ 2.3	▲ 3.1	2.9	8.1	5.3	6.1	3.9	9.0	▲ 2.4	5.8
Unemployment Rate (%)	4.7	4.6	4.4	4.2	4.2	4.2	4.1	4.1	4.0	5.0	4.4	4.1
Current Account Balances (trillion JY)	3.99	1.54	3.44	2.63	3.20	2.73	4.27	3.05	3.69	16.13	10.81	13.74
Share of Nominal GDP (%)	3.5	1.3	3.0	2.1	2.8	2.3	3.7	2.4	3.2	3.4	2.3	2.9
Exchange Rates (JY/US\$)	82	82	77	77	78	79	80	80	80	86	79	80
Import Price of Crude Oil (US\$/barrel)	97	115	114	110	110	110	110	110	110	84	112	110

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 CY2011 would be 1.7% in the US, 1.9% in the euro area and 9.4% in China.