

Monthly Report of Prospects for Japan's Economy

May 2018

Macro Economic Research Centre
Economics Department



The Japan Research Institute, Limited

<http://www.jri.co.jp/english/periodical/>

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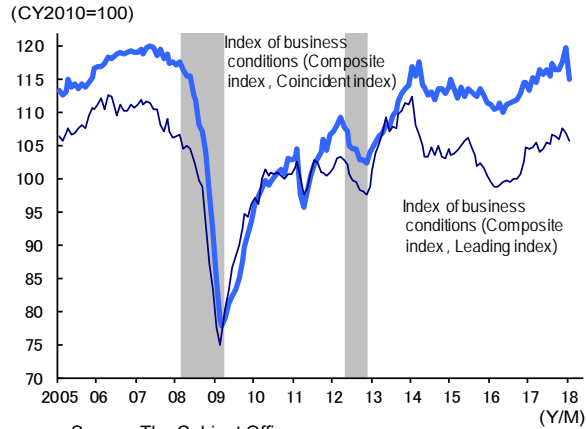
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The general situation of Japan's economy – Economic activity continues its recovery trend

Figure 1-1 Economic Activity

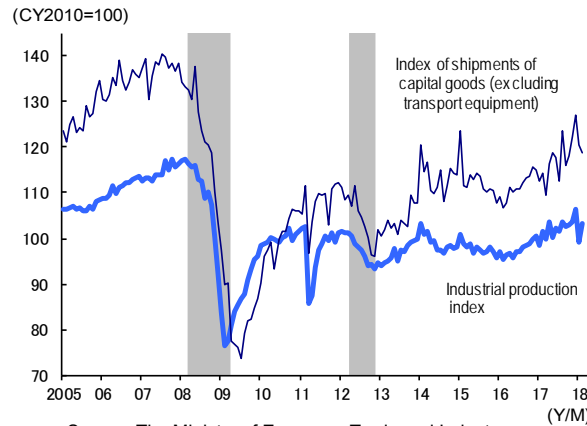
The coincident index fell for the first time in 4 months, reflecting a decrease in production and shipments of durable consumer goods.



Source: The Cabinet Office.

Figure 1-2 The Corporate Sector

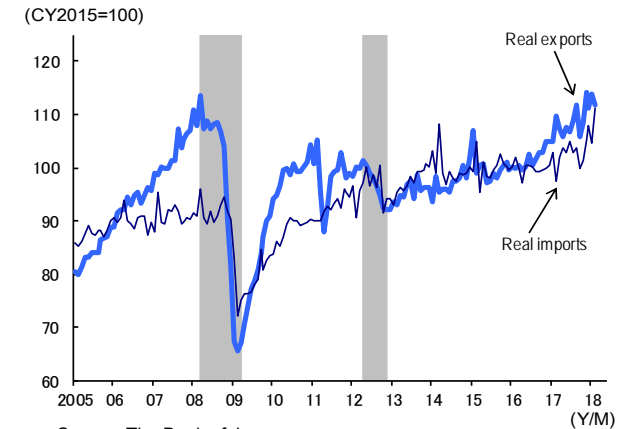
Both the production index and the index of shipments of capital goods have maintained the increasing trend on the whole, albeit with some ups and downs.



Source: The Ministry of Economy, Trade and Industry.

Figure 1-3 Overseas Demand

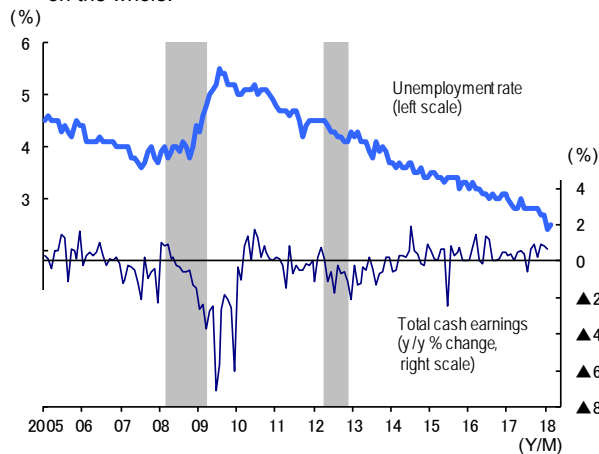
Real exports to China declined due to the effect of the Lunar New Year. Real imports increased for the first time in 2 months.



Source: The Bank of Japan.

Figure 1-4 Employment and Income

The unemployment rate stayed at a low level. Total cash earnings continued a slight rise year-on-year, on the whole.

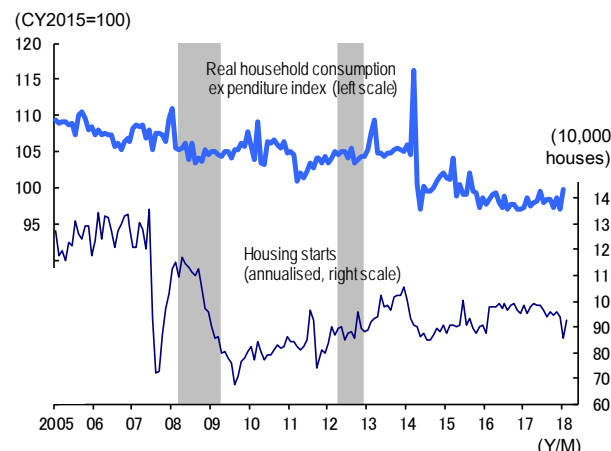


Source: The Ministry of Internal Affairs and Communications, The Ministry of Health, Labour and Welfare.

* The shaded area indicates the recession phase.

Figure 1-5 The Household Sector

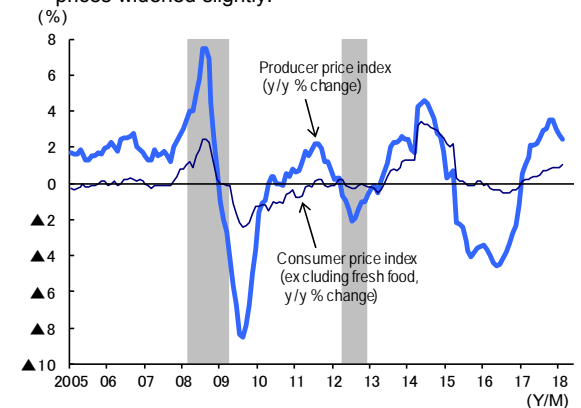
Household consumption expenditure seesawed. Regarding housing starts, those for condominiums rose.



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

Figure 1-6 Prices

The extent of year-on-year increases in producer prices narrowed. On the other hand, those in core consumer prices widened slightly.



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

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Production increases in the corporate sector, as the household sector also recovers mildly

◆ Production holds its rising track

As for corporate activity, the industrial production index in February saw a 2.0 per cent increase from the previous month (revised from preliminary figure 4.1). The indices of a wide range of industries rose such as automobiles, industrial machinery, and electronic parts and devices. The production forecast index also showed a climb in March and April by 0.5 and 5.2 per cent, respectively. It is predicted that industrial production will continue to increase against the background of a rise in exports, a pickup in business fixed investment for labour saving and rationalisation reflecting labour shortages, and so on.

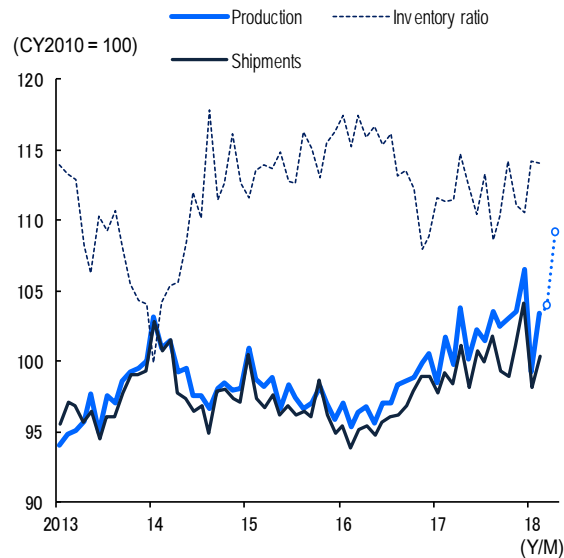
With respect to exports in February, while those of industrial machinery and electrical machinery to China decreased due to the Lunar New Year, exports of automobiles to the US and Europe increased. Thus, the picking-up trend in exports continues.

◆ The household sector also shows a pickup

Looking at employment environments, the unemployment rate in February stayed at a low level of 2.5 per cent, because the number of employees increased considerably for 2 months in a row. Also, the effective ratio of job offers to applicants maintained a high level of 1.58. Reflecting the improvement in the employment and income situation, private consumption expenditure has shown signs of picking up.

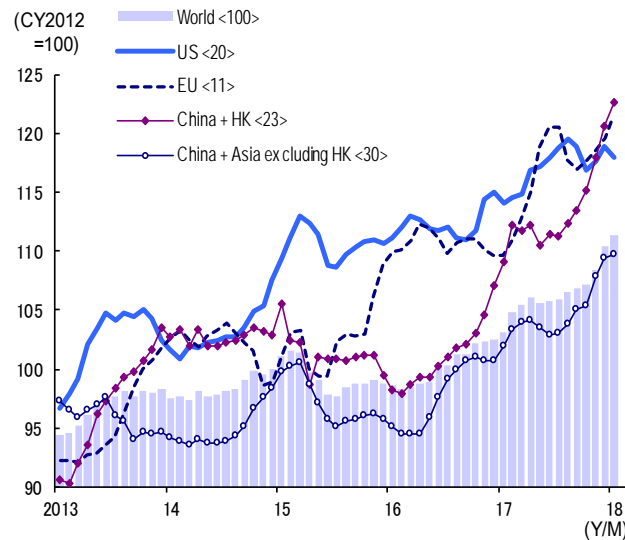
For instance, real household consumption expenditure in January increased by 2 per cent from a year earlier, to positive territory year-on-year for the first time in 2 months. This reflected an increase in expenditures on items such as travel at home and abroad and house remodelling. Further, sales value of department stores and supermarkets in February climbed by 0.6 per cent year-on-year, enlarging the extent of the rise slightly, having been positively affected by the cold weather and strong sales of food such as beef.

Figure 2-1 Indices of Industrial Production <seasonally adjusted>



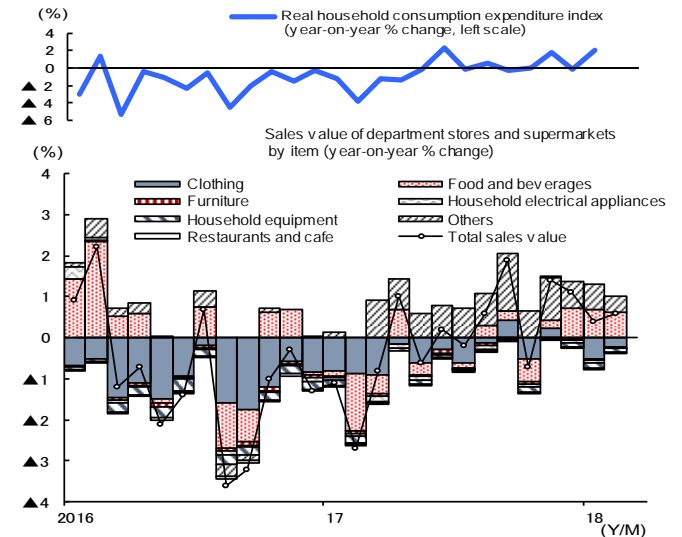
Source: The Japan Research Institute, Ltd. based on data of The Ministry of Economy, Trade and Industry.
Note: The latest two figures in production are based on the production forecast index.

Figure 2-2 Real Exports by Destination <seasonally adjusted, 3-month moving averages>



Source: The Japan Research Institute, Ltd. based on data of The Ministry of Finance, The Bank of Japan.
Note: Figures in the angle brackets show the shares in total nominal exports in FY2016.

Figure 2-3 Private Consumption Expenditure -related Indicators <year-on-year % change>



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

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BoJ's Tankan Survey - A cautious tone has been felt in business sentiment

◆ Business sentiment has sounded a cautious note

In the Tankan March 2018 Survey, the diffusion index (DI) for business conditions on the whole of large manufacturing fell by 2 to +24 percentage points, having sounded a cautious tone for the first time in 8 quarters. The DIs climbed in industries such as automobiles and industrial machinery which benefited buoyant exports. Yet, the DIs declined in basic materials industries where the passing of prime costs on to sales prices has not been sufficient.

The DI for the whole of large nonmanufacturing also fell by 2 to +23 percentage points, a decrease for the first time in 6 quarters. For nonmanufacturers, the DIs in construction-related industries stayed high. However, the DIs for logistics-related industries declined, in which the pickup in personnel expenses reflecting labour shortages and the rise in energy costs weighed on their profits.

As for small and medium-sized enterprises, their DIs stayed at a high level on the whole. The strong corporate profits amid solid domestic demand seems to have supported their business sentiment.

Further, the forecast DIs in 3 months' time also suggest a wary note, against the background of anxiety over the worsening of export environments, such as the appreciation of the yen and trade frictions stemming from US trade policies.

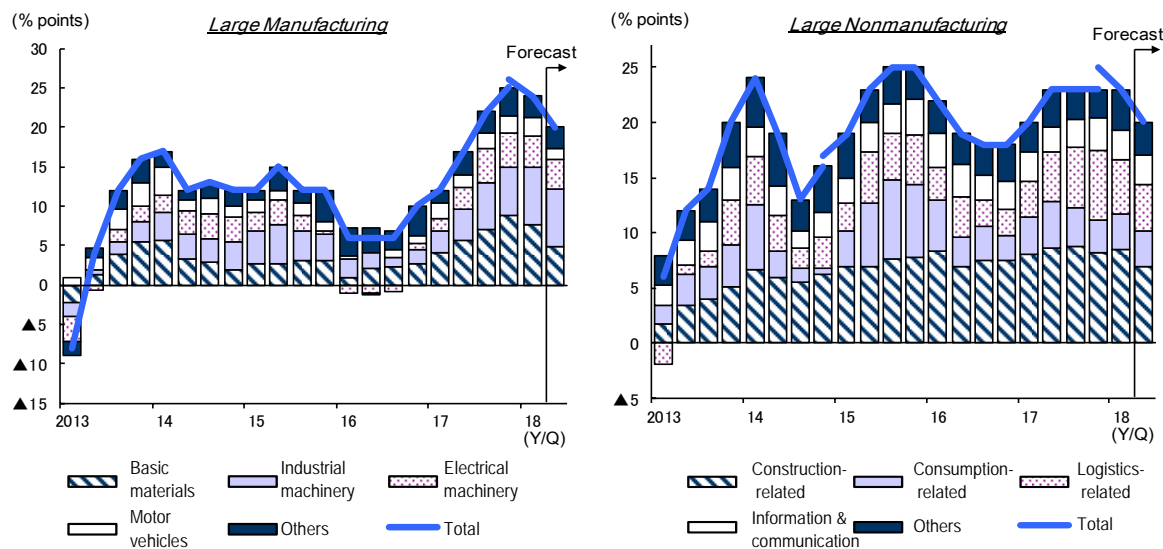
◆ Planned business fixed investment for FY2018 showed firmness

In the same Survey, the annual change rate in business fixed investment for FY2017 was a solid +4.0 per cent from the previous fiscal year in all types and sizes of enterprises. The revision trajectory over time in the fiscal year was nearly the same as those in past fiscal years.

The planned annual change rate in business fixed investment for FY2018 was -0.7 per cent. This figure is estimated to be rather aggressive, judging from the fact that the plan was made in very early in the fiscal year. Although some uncertainties at home and abroad persist, hopes for the expansion of business activity appear to have been strengthening. Thus, it is predicted that business fixed investment will continue to hold firm, mainly led by investments for maintenance and replacement as well as labour saving and rationalisation.

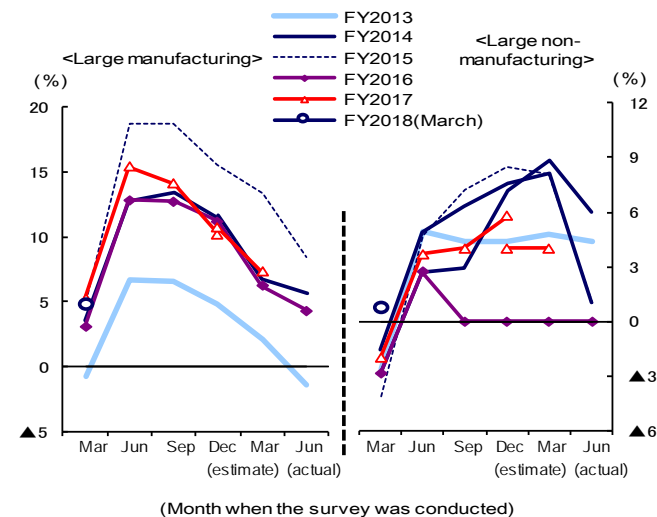
Figure 3-1 Contributions to the Business Conditions Diffusion Index by Industry

<diffusion index of "favourable" minus "unfavourable," and percentage point contribution to total DI points>



Source: The Japan Research Institute, Ltd. based on data of The Bank of Japan, "The Tankan March 2018 Survey".

Figure 3-2 Change over Time in Planned Business Fixed Investment for Each Fiscal Year <year-on-year, %>



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

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Exports will likely follow a mild rising path

◆ Exports will likely slow down and then follow a mild rising trend

Looking at exports, it is notable in February that exports of transport equipment to the US increased. Further, as worldwide demand for business fixed investment recovers, exports of capital goods such as construction machinery, industrial robots, and semiconductor manufacturing equipment continue to be firm.

Nonetheless, it is expected that the pace of the rise in exports will decelerate slightly. This is because 1) sales of automobiles will be very slow to increase, affected negatively by the appreciation of the yen in a form of, for instance, reduced sales promotion power, as the whole of automobile sales in the US weakens. Also, 2) the pace of increase in exports of electronic parts and devices will likely slow down, as the rapid tempo of the climb in demand for these goods has taken a breather.

◆ Protectionist trade policies of the Trump administration are worrisome

Of late, there is some anxiety surrounding overseas environments. One major

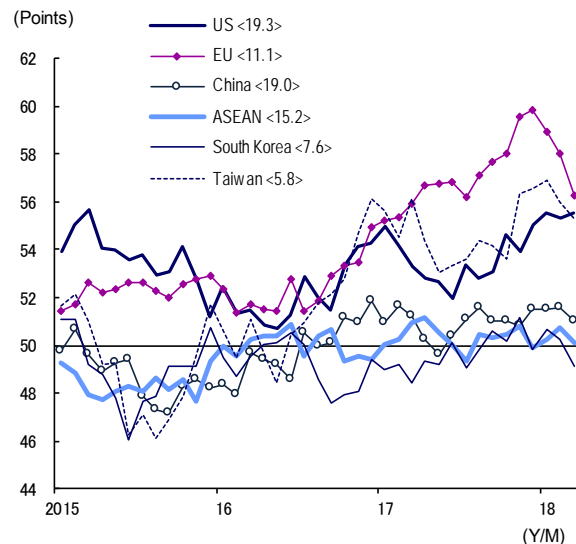
issue appears to be the fact that the Trump administration has strengthened the protectionist tone of its trade policies, having resulted in the stronger yen.

As for heightened import tariffs on steel and aluminium, their negative effects on Japan's exports are estimated to be limited in short and direct terms. This is because 1) exports to the US are only a small share of the total exports of steel and aluminium, and 2) Japanese steel and aluminium products are high value added, therefore, it is difficult for US users to simply replace them with other products.

With respect to the appreciation of the yen through March, negative influences are also considered to be slight. This is due to factors such as Japan's manufacturers have increasingly tended to make their product prices in the US steady.

However, if the trade frictions cause sluggish world trade and a subsequent decrease in business fixed investment, Japan's exports, mainly those of capital goods, could decline.

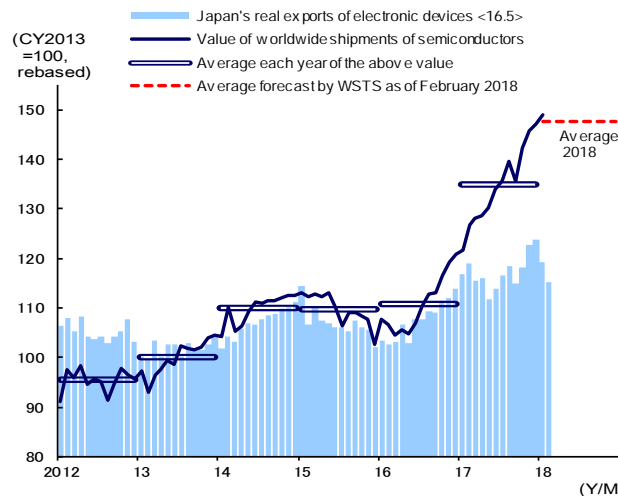
Figure 4-1 Manufacturing PMI in the Major Destinations of Japan's Exports



Source: The Japan Research Institute, Ltd. based on data of the Nikkei, Caixin, IHS Markit.

Note: The figures in the angle brackets show the share of total nominal exports in FY2017.

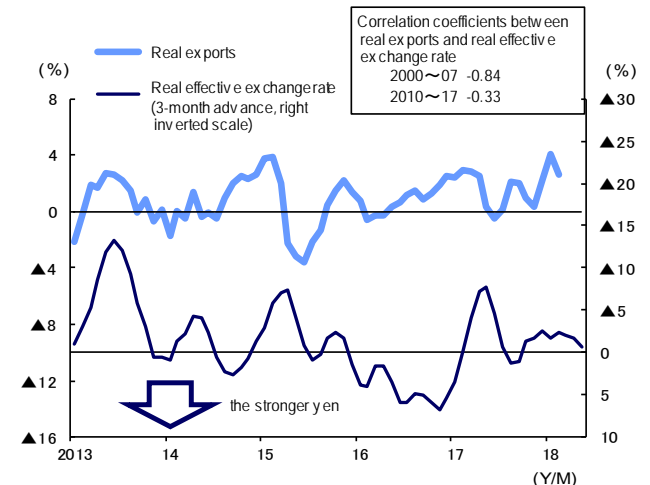
Figure 4-2 Value of Worldwide Shipments of Semiconductors and Japan's Real Exports of Electronic Devices



Source: The Japan Research Institute, Ltd. based on data of World Semiconductor Trade Statistics (WSTS), Semiconductor Industry Association (SIA), The Ministry of Finance of Japan, The Bank of Japan.

Note: The figure in the angle brackets shows the share of total nominal exports in FY2017.

Figure 4-3 Real Exports and Real Effective Exchange rate <3-month moving averages, changes from 3 months earlier>



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

Note: In the calculation of the correlation coefficients, real effective exchange rates are advanced by 6 months.

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The pace of recovery in income is likely to continue to be slow

◆ Employment conditions continue to improve

Employment environments are on an improving trend. The number of regular employees has increased steadily since the middle of 2015. In 2017, most of the increase in the number of persons holding jobs on a year earlier during each quarter stemmed from regular employees. Thus, the employment situation has improved not only in quantity but also in quality.

As for wages, favourably, pay for scheduled hours worked by full-time employees has steadily increased year-on-year. However, the situation where wage rises are hard to accelerate because enterprises persistently maintain their cautious attitude towards increasing in personnel expenses continues.

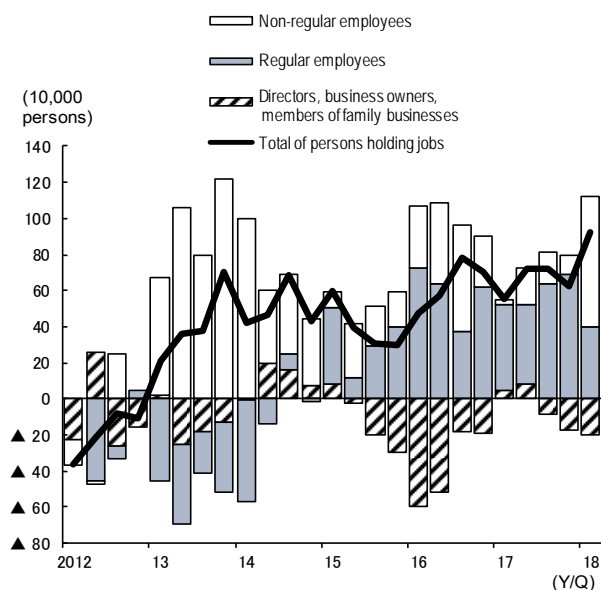
◆ The slow pace of recovery in real income will likely continue

Looking ahead, the improvement in employment environments will likely continue against the background of the recovery in economic activity. Also, the willingness for

enterprises to change non-regular employees to regular employees is expected to strengthen gradually, reflecting continued labour shortages and good corporate profits. Further, it is estimated that the rate of wage rises in wage negotiations in spring of this year (FY2018) will exceed the result last spring (FY2017). Subsequently, the pace of pay rise for scheduled hours worked by full-time employees will likely accelerate.

However, the rate of wage rises for most of the enterprises appears to have fallen short of 3 per cent, which is the government target for wage negotiations this spring, as economic growth expectations are very slow to rise amid a declining population. In addition, because the year-on-year rate of change in consumer prices will accelerate, albeit slightly, mainly due to the rise in energy prices, the pace of recovery in real income will likely continue to be moderate.

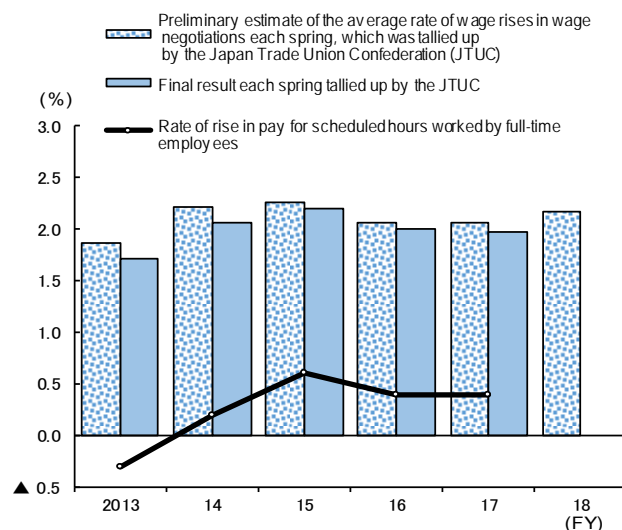
Figure 5-1 Number of Persons Holding Jobs <difference from a year earlier>



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

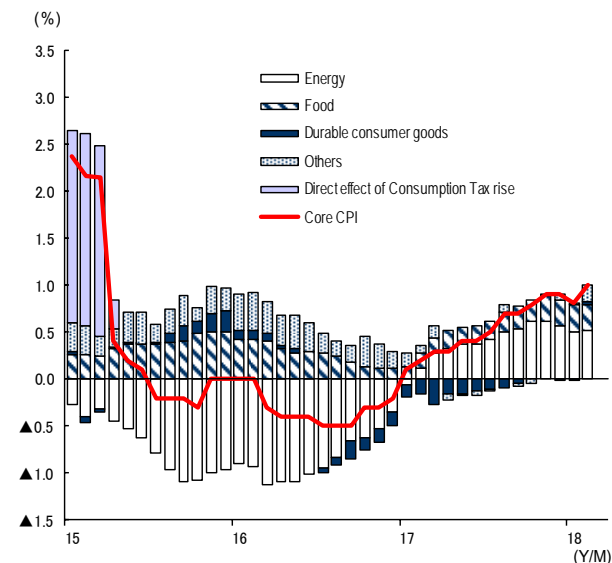
Note: Regular employees are persons employed for an indefinite period.

Figure 5-2 Rate of Wage Rises Resulting from Wage Negotiations Each Spring



Source: The Japan Research Institute, Ltd. based on data of The Ministry of Health, Labour and Welfare, Japan Trade Union Confederation (JTUC).

Figure 5-3 Contributions to Year-on-year Change Rates of Core CPI



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

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Private consumption expenditure is likely to recover mildly

◆ Private consumption is back to a mild rising trend again

Based on the Consumption Activity Index by the BoJ, expenditure on durable goods, which had weakened after last autumn, (mainly affected negatively by the improper pre-shipment inspection problem with automobiles), turned positive year-on-year again. Expenditures on services have been on the rise, led by services such as communications, health care and welfare, eating out, etc.

Further, for food and daily necessities, which are non-durable goods, an active trend where enterprises try to secure sales increases through marketing new products has come to gain momentum again and to support total consumption expenditure.

◆ The slow pace of recovery in private consumption will likely continue

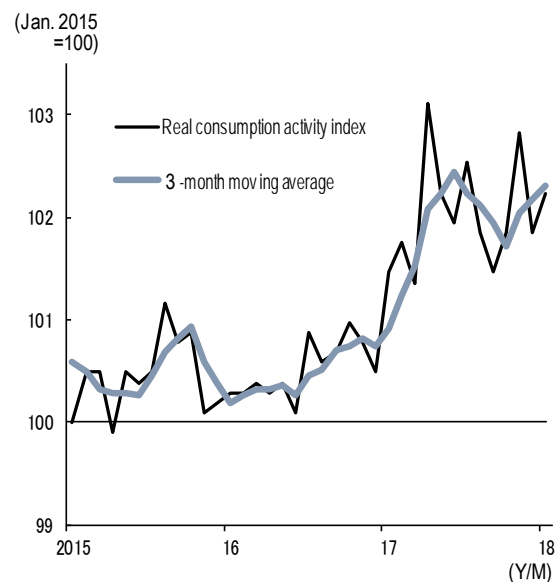
Looking ahead, the continued improvement in employment and income environments will likely go on bolstering the recovery in private consumption expenditure. With respect to consumer confidence, the stock market witnessed a

correction in early February. As a result, the boosting effect stemming the stock market on private consumption expenditure will likely peter out. However, unless stock prices experience a considerable downswing from the recent level, it is unlikely that private consumption will falter due to the worsening of consumer confidence.

Concerning housing investment, it is predicted to see a weakening trend for the time being. It is notable that the value of new home loans has turned negative year-on-year. It is true that the situation regarding low interest rates continues as a supporting factor for housing investment. However, some daunting problems in housing investment for rental houses exist.

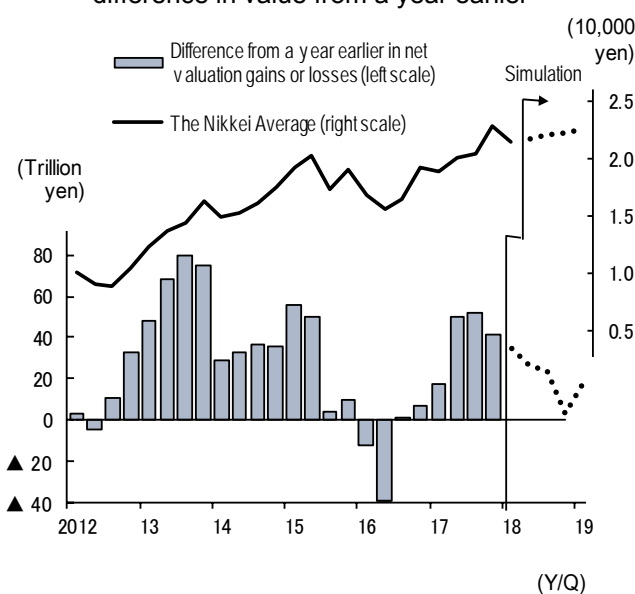
These include the issue that 1) sub-lease problems have risen, where some owners of rental houses put their rental houses for sub-lease to intermediate real estate agents and then become involved in quarrels over collecting rent, and 2) rental houses have been oversupplied, which has led to a surge in the rate of vacant apartments.

Figure 6-1 The Consumption Activity Index by the Bank of Japan



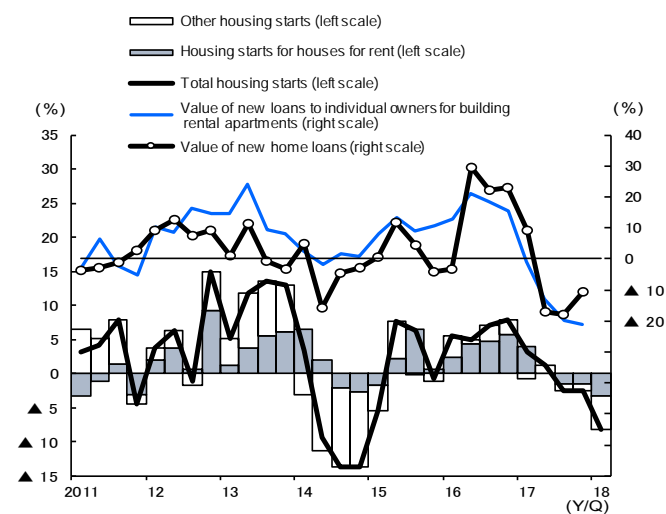
Source: The Japan Research Institute, Ltd. based on data of The Bank of Japan.

Figure 6-2 Stock Prices and Change in Net Unrealised Gains or Losses <difference in value from a year earlier>



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

Figure 6-3 Value of New Loans for the Building of Rental Apartments <year-on-year % change>



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

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Topics : Homecoming of overseas production facilities can not be counted on

◆ The weaker yen and FA have promoted a return of facilities to Japan to some extent

After the start of the Abenomics, the environment surrounding Japan's manufacturers has improved. As a result, certain manufacturers have returned their overseas production facilities to Japan to some extent, mainly for following reasons.

First, the improvement in competitiveness due to the weaker yen. The difference in production costs between Japan and emerging economies has narrowed, because of the increasing trend in wages among emerging countries and the depreciation of the yen brought by the qualitative and quantitative easing in monetary policy of the BoJ. Subsequently, domestic production has increased in industries such as transport equipment and electrical machinery.

Second, expansion of inbound (foreign tourists to Japan) demand for products such as cosmetics, food and daily necessities.

Third, FA (factory automation) and rationalisation of production. Investments in

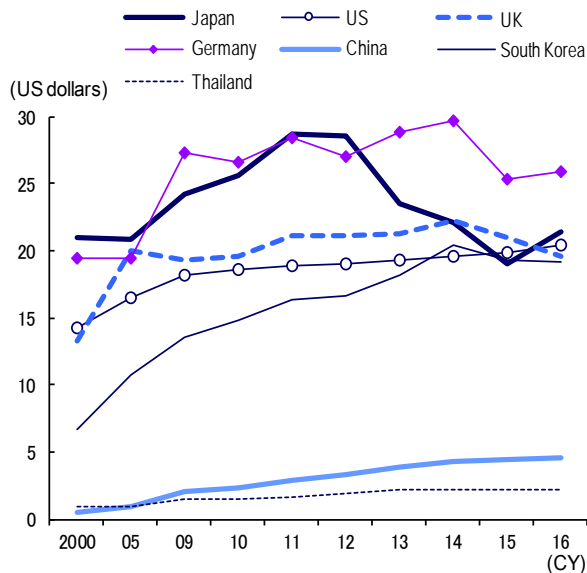
robots have climbed in industries such as industrial machinery, electrical machinery, pharmaceuticals and cosmetics. Advances in automation technology have allowed Japan's manufacturers to build effective mass production systems with global price competitiveness in Japan, overcoming labour shortages.

◆ Acceleration of a return to Japan can not be counted on

The return of overseas facilities to Japan has had positive effects on Japan's GDP through routes such as a decrease in imports, an increase in exports and a rise in domestic business fixed investment. This effect is shown in a recent pause in the trend in ratios which had been promoted by the shift of production facilities of Japan's manufacturers to overseas sites.

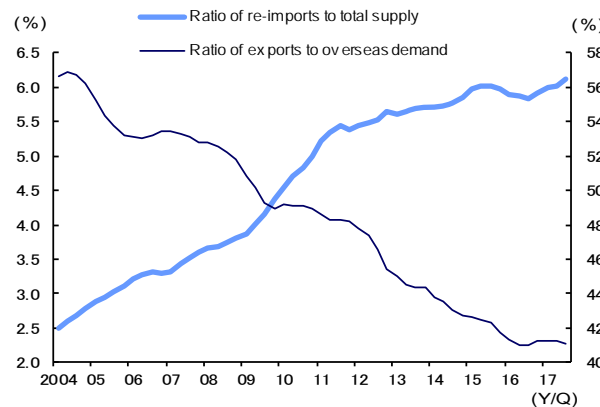
However, it is the scale of final demand and its high growth expectations that CEOs employ in deciding the locations of their production facilities. Therefore, unless the growth expectations of domestic markets rise, acceleration in the homecoming of overseas production facilities can not be counted on.

Figure 7-1 Hourly Wages by Country



Source: The Japan Research Institute, Ltd. based on data of The Japan Institute for Labour Policy and Training, Statistical Office of each country, Thomson Reuters.

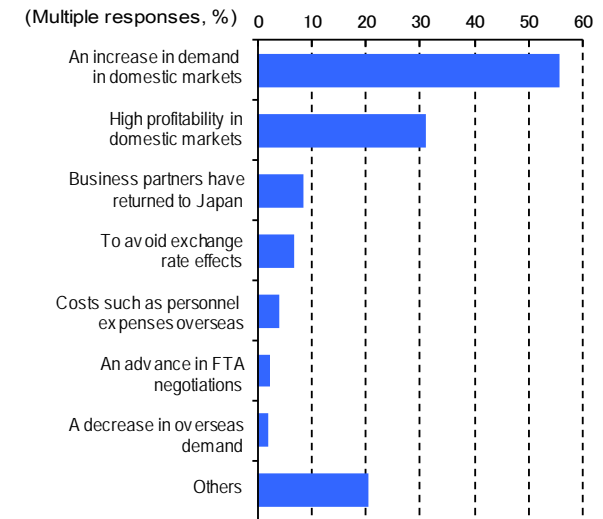
Figure 7-2 Trade-related Ratios <4-quarter moving averages>



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

Note: 1. Re-imports are defined here as the imported goods from overseas facilities of Japanese enterprises.
 2. Total supply = domestic production - exports + imports
 3. Overseas demand = exports + goods produced by overseas facilities of Japanese enterprises (exports to Japan are excluded)

Figure 7-3 Reasons Why Japan's Manufacturers would expand Domestic Facilities



Source: The Japan Research Institute, Ltd. based on data of the survey conducted by JETRO..

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Prospects for Japan's economy - Projected real GDP change; 1.8% in FY2017 and 1.2% in FY2018

◆ Japan's economic activity will likely continue its recovery trend, against the background of firm demand at home and abroad

(1) Looking ahead, it is projected that the pace of economic recovery will slow down slightly due to the appreciation of the yen and a fall in stock prices after February.

However, Japan's exports will likely maintain their rising trend against the backdrop of solid economic growth of overseas economies. Further, it is predicted that business fixed investment will be affected positively by the following factors. 1) An increase in construction investment driven by redevelopment projects in metropolitan areas as well as by new building of accommodations and business logistics facilities, and 2) improvement in willingness for business fixed investment in manufacturers encouraged by a rise in exports. Thus, economic activity will continue to pick up, mainly led by the corporate sector.

(2) In the household sector, a corrective tone has been felt in the stock market since early February. Therefore, a further push to private consumption expenditure through the wealth effect cannot be relied on.

On the other hand, as a favourable aspect, income environments in the middle to lower income brackets have improved, reflecting factors such as a pause in the rise in the ratio of non-regular employees to the total, and wage increases in medium and small-sized enterprises. Taking these elements into consideration, it is highly unlikely that private consumption expenditure will falter.

(3) As a result, it is projected that real GDP in FY2017 and FY 2018 will grow at a pace over Japan's potential output growth rate, which is currently estimated to be about 1.0 per cent, as demand at home and abroad stays solid. Specifically, it is forecast that the annual real GDP growth rate will be 1.8 per cent in FY2017 and 1.2 per cent in FY2018.

(4) With respect to economic activity in FY2019, it is predicted that the pace of real GDP growth will decelerate, since private consumption expenditure will likely be pushed down in total by lowering purchasing power due to the rise in the consumption tax rate from 8 to 10 per cent scheduled for October 2019.

However, it is unlikely that private consumption expenditure will falter. This is because 1) the extent of the rise in the consumption tax rate in 2019 will be less than that in April 2014 (from 5 to 8 per cent), and 2) the degree of burden such as an increase in income tax and social insurance premiums is estimated to be less than that in 2014. As a result, real GDP will likely grow by almost 1 per cent in FY2019.

◆ The year-on-year change rate in the core CPI will likely stay at about 1 per cent

(5) The core CPI, which excludes fresh food, has expanded the extent of its year-on-year increase gradually, albeit slightly, since having turned into positive territory in January 2017. A rise in food prices (excluding fresh food) has pushed up the total rate of year-on-year increase. Further, other items such as accommodation charges and smartphone charges have also contributed positively.

Looking ahead, it is predicted that the year-on-year increase rate in the core CPI will stay at about 1 per cent, against the backdrop of an improvement in supply-demand conditions on an aggregate basis, with the pace of the rise in energy prices slowing down.

Figure 9 Projections for GDP Growth and Main Indicators of Japan (as of April 4, 2018)

	(seasonally adjusted, annualised % changes from the previous quarter)											(% changes from the previous fiscal year)			
	CY2017		CY2018				CY2019				CY2020	FY2016	FY2017	FY2018	FY2019
	7~9	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)	(Projection)	(Projection)	(Projection)	(Projection)	(Projection)	(Projection)	(Actual)	(Projection)	(Projection)	(Projection)
Real GDP	2.4	1.6	0.7	1.2	1.2	1.0	1.3	1.4	2.5	▲ 3.6	1.3	1.2	1.8	1.2	0.9
Private Consumption Expenditure	▲ 2.6	2.1	0.5	0.9	1.0	1.0	1.1	1.6	5.2	▲ 9.1	1.3	0.3	1.1	0.8	0.6
Housing Investment	▲ 6.6	▲ 10.1	▲ 7.2	▲ 2.4	0.7	3.2	6.5	1.9	▲ 3.1	▲ 9.8	▲ 7.2	6.2	▲ 0.3	▲ 2.8	▲ 0.2
Business Fixed Investment	4.2	4.2	1.7	2.4	2.7	2.7	2.6	2.4	2.4	2.3	2.3	1.2	3.5	2.7	2.5
Private Inventories (percentage points contribution)	(1.7)	(0.3)	(▲ 0.4)	(▲ 0.2)	(0.0)	(0.0)	(0.0)	(▲ 0.1)	(▲ 0.5)	(0.3)	(0.3)	(▲ 0.3)	(0.1)	(0.0)	(▲ 0.1)
Government Consumption Expenditure	0.2	▲ 0.0	0.8	0.8	0.7	0.7	0.8	0.8	0.8	0.8	0.8	0.5	0.4	0.6	0.8
Public Investment	▲ 9.8	▲ 0.8	▲ 4.1	6.0	2.0	▲ 6.9	▲ 3.1	0.0	1.2	0.5	0.3	0.9	1.3	▲ 0.7	▲ 0.9
Net Exports (percentage points contribution)	(2.2)	(▲ 0.1)	(0.9)	(0.2)	(0.0)	(0.2)	(0.1)	(0.0)	(▲ 0.4)	(1.1)	(0.0)	(0.8)	(0.4)	(0.4)	(0.1)
Exports of Goods and Services	8.8	10.1	1.4	3.1	3.3	3.5	3.5	3.3	3.2	2.8	2.8	3.4	6.4	4.0	3.2
Imports of Goods and Services	▲ 4.7	12.0	▲ 3.5	2.2	3.3	2.7	3.0	3.2	5.4	▲ 3.3	2.9	▲ 1.0	3.9	2.1	2.6
(Ref.) Domestic Private Demand (percentage points contribution)	(0.7)	(1.8)	(▲ 0.0)	(0.6)	(1.0)	(1.1)	(1.2)	(1.2)	(2.7)	(▲ 4.7)	(1.1)	(0.3)	(1.2)	(0.8)	(0.7)
(Ref.) Public Demand (percentage points contribution)	(▲ 0.5)	(▲ 0.0)	(▲ 0.0)	(0.4)	(0.2)	(▲ 0.2)	(0.0)	(0.2)	(0.2)	(0.2)	(0.2)	(0.1)	(0.2)	(0.1)	(0.1)

	(% changes from the same quarter of the previous year)											(% changes from the previous fiscal year)			
	7~9	10~12	1~3	4~6	7~9	10~12	1~3	4~6	7~9	10~12	1~3	FY2016	FY2017	FY2018	FY2019
Nominal GDP	2.1	2.1	1.9	1.5	1.4	1.5	2.2	2.0	2.4	1.6	1.7	1.0	1.8	1.7	1.9
GDP deflator	0.2	0.1	0.1	▲ 0.0	0.2	0.5	1.0	0.7	0.8	1.3	1.3	▲ 0.2	0.0	0.4	1.0
Consumer Price Index (excluding fresh food)	0.6	0.9	0.8	0.9	0.9	0.8	0.7	0.7	0.9	2.0	2.1	▲ 0.2	0.7	0.8	1.5
(excluding fresh food, consumption tax)	0.6	0.9	0.8	0.9	0.9	0.8	0.7	0.7	0.9	1.1	1.1	▲ 0.2	0.7	0.8	1.0
Unemployment Rate (%)	2.8	2.8	2.5	2.5	2.5	2.5	2.4	2.4	2.4	2.4	2.4	3.0	2.7	2.5	2.4
Exchange Rates (JY/US\$)	111	113	108	106	106	107	108	108	107	107	106	108	111	107	107
Import Price of Crude Oil (US\$/barrel)	50	58	67	65	63	62	62	63	63	63	63	47	57	63	63

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 : "▲" indicates minus.