Monthly Report of Prospects for Japan's Economy November 2018

Macro Economic Research Center Economics Department



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The Japan Research Institute, Limited

The General Situation of Japan's Economy – Economic Recovery Trend Will Likely Continue

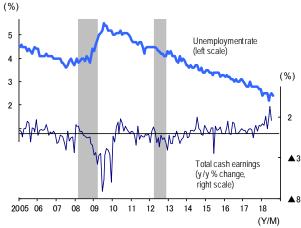
Figure 1-1 Economic Activity

The CI coincident index fell for 3 months running, reflecting a decrease in shipments of durable consumer goods.



Figure 1-4 Employment and Income

The unemployment rate was around the lowest level in 25 years. Nominal wages maintained the rising trend, albeit with some ups and downs.



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

* The shaded area indicates the recession phase.

Figure 1-2 The Corporate Sector Industrial production increased. It rose mainly for automobiles and capital goods, including recovery production after the heavy rainfall in Western Japan.

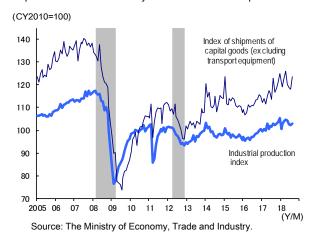
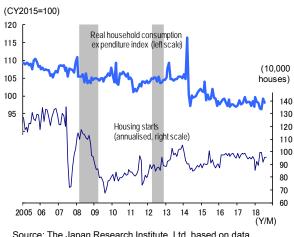


Figure 1-5 The Household Sector

Real household consumption expenditure seesawed. Housing starts were almost flat.



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

Figure 1-3 Overseas Demand

Real exports climbed for 2 months in a row. Real imports, especially those of mineral fuels, increased.

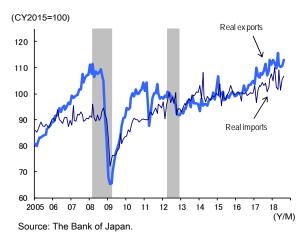
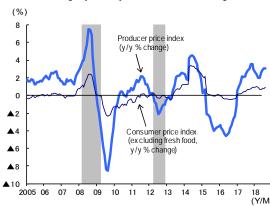


Figure 1-6 Prices

The extent of year-on-year increases in producer prices was flat. Those in core consumer prices widened slightly, led by the rise in hotel charges, etc.



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

Industrial Production Showed Signs of Recovery, the Household Sector Continued to Improve

◆ Industrial Production Showed Signs of Recovery

The Industrial Production Index for August rose for the first time in four months, up 0.2% from the previous month. Although production decreased for electronic parts and devices and chemical products, it increased for automobiles and capital goods, due in part to recovery production plans following the heavy rainfall in Western Japan. Production will likely continue to pick up as industrial production is anticipated to increase 2.7% month over month in September (0.2% forecast by METI's flash estimates) and increase 1.7% month over month in October.

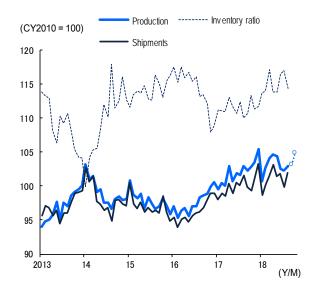
Exports continued to remain flat. Exports to ASEAN and NIEs countries provided support, while a trend toward leveling off was observed in exports to the United States, EU and China.

◆ Employment and Income Conditions Remained Positive

The improving trend in the employment and income climate has continued. The active opening rate in August was unchanged from the previous month at 1.63. Labor demand supply remained tight. The unemployment rate dropped by 0.1 percentage points month over month to 2.4%, the lowest level in almost 25 years. Although total cash earnings in July failed to reach the previous month's growth with a 1.5% increase year-on-year, scheduled pay maintained growth of around 1%.

Economic sentiment in the household sector also picked up, driven by strong employment and income conditions. The DIs for judgement of future economic conditions in industries related to households by the Economy Watchers Survey rose for the first time in two months to over 50. This was led by anticipation for the autumn shopping season and increased housing orders.

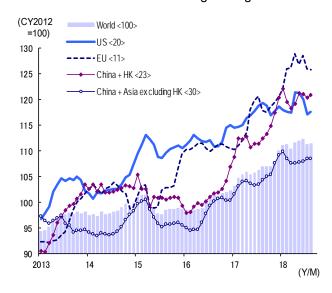
Figure 2-1 Indices of Industrial Production <seasonally adjusted>



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 METI's flash estimates and the production forecast index.

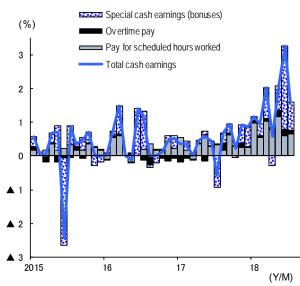
Figure 2-2 Real Exports by Destination <seasonally adjusted, 3-month moving averages>



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

Note: Figures in the angled brackets show the shares in total nominal exports in FY2017.

Figure 2-3 Total Cash Earnings <year-on-year % change>



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

BoJ's Tankan Survey - Business Sentiment Deteriorated Due to the Impact of Natural Disasters

Deterioration Was Demonstrated in Business Sentiment

In the Tankan September 2018 Survey, large manufacturers' diffusion index (DI) for business conditions fell by two percentage points from the previous survey, continuing to deteriorate for the third consecutive quarter. Business sentiment has sounded a cautious note mainly in the basic materials industry, as the rise in crude oil prices and the hike in tariffs on steel and aluminum by the United States added downward pressure on sentiment, despite support from improved corporate profits.

The DI for large non-manufacturers overall also dropped by two percentage points from the previous survey, the first deterioration in two quarters. While the DIs for construction-related industries remained high, those for personal services and accommodation, food and beverages services indicated cautious views following a drop in the volume of customer traffic due to the heat wave and natural disasters.

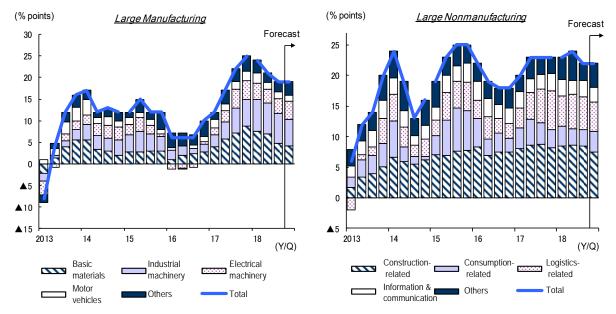
Meanwhile, business sentiment of small and medium-sized enterprises remained strong, driven by improved profits following a pickup in domestic demand.

In terms of future outlook, the DI deteriorated by three percentage points for all sizes and industries. While anticipation toward a pickup in domestic demand—driven by strong corporate profits and employment and income conditions—offered support, cautious views remained due to uncertainties in the overseas situation owing to the heightened protectionist attitude of the Trump administration.

Business Fixed Investment Is Strong

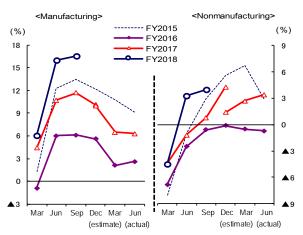
The capital investment plan for FY2018 by all sizes and all industries was +8.5% year on year, an upward revision of 0.6 percentage points from the previous survey. Sentiment toward capital investment continued to improve under strong corporate profits. While uncertainties in the overseas situation will weigh on the outlook, we expect business fixed investment to be in line with those of the past years, driven by robust demand for maintenance and replacement as well as for rationalization and labor saving.

Figure 3-1 Contributions to the Business Conditions Diffusion Index by Industry <diffusion index of "favorable" minus "unfavorable," and percentage point contribution to total DI points>



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

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



(Month when the survey was conducted)

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

Note: Including land purchasing expenses, excluding software and R&D investment.

Exports Will Likely Follow a Mild Rising Path

◆ Inbound Demand Has Slowed

Inbound demand was weak due to a drop in the number of overseas tourists visiting Japan following natural disasters such as the northern Osaka earthquake in June and the heavy rainfall in Western Japan in July.

As for the near-term outlook, the number of overseas tourists visiting Japan is expected to see a further fall due to the shutdown of the Kansai International Airport caused by the large typhoon and the impact of the earthquake that hit Hokkaido in September. In the medium- to long-term, however, it is expected to pick up amid continued expansion of income in Asian countries and development of an environment for receiving overseas tourists, and as recovery from the disasters progresses.

◆ Exports of Goods Will Likely Increase Moderately

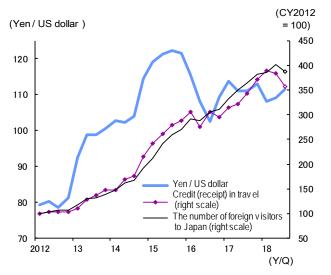
Japan's exports of goods have remained at a standstill since the beginning of the year. The increase in exports of electronic parts and devices slowed as global

smartphone demand saw a temporary drop. Meanwhile, exports of capital goods remained strong, driven by a recovery in global capital investment demand.

In terms of outlook, exports will likely increase moderately, mainly in capital goods. While exports of electronic parts and devices, a large percentage of which is exported from Kansai International Airport, will temporarily fall, exports of capital goods are expected to remain robust against the backdrop of the sophistication of production equipment and the expansion of demand for infrastructure-related investment in emerging Asian countries, the main destination of exports.

Nevertheless, trade friction with the United States will remain a risk. The hike in tariffs on automobiles has been put on hold for the time being due to the start of negotiations of the United States-Japan Trade Agreement on Goods (TAG). However, if the U.S. administration enacts the hike in automobile-related tariffs, it will have a significant impact on Japan's exports

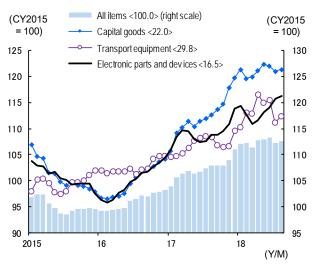
Figure 4-1 Receipt in Travel in Balance of Payments <seasonally adjusted>



Source: The Japan Research Institute, Ltd. based on data of The Ministry of Finance, The Bank of Japan, Japan National Tourism Organization (JNTO).

Note: The latest figure of credit (receipt) is for July 2018.

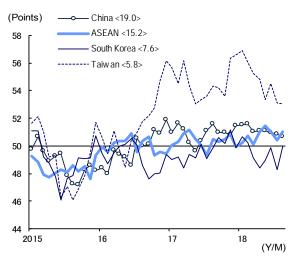
Figure 4-2 Real Exports by Item <seasonally adjusted, 3-month moving averages>



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

Note: Figures in the angled brackets show the shares in total nominal exports in FY2017.

Figure 4-3 Manufacturing PMIs in Major Export Destinations in Asia



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

Note: Figures in the angled brackets show the shares in total nominal exports in FY2017.

With Profits Continuing to Be Firm, Business Fixed Investment Is on a Rising Trend

◆ Corporate Profits Continue to Be Firm

Corporate earnings have remained strong. Based on BoJ's Tankan September Survey, the ratio of current profits to sales for FY2018 was forecast to remain at a high level, although the ratio slowed from its highest on record in FY2017.

In addition to the rebound in consumer spending and capital investment, a rise in sales prices of goods and services contributed to an increase in sales. While a rise in personnel expenses against the backdrop of worsening labor shortages continued to exert downward pressure on corporate earnings, labor's share declined as the growth in sales more than offset such negative effects.

Looking at the future outlook, corporate earnings continue to follow a mild recovery path. As a result of reinforcement of financial position through the reduction of variable expenses among others, the break-even point ratio in sales value has

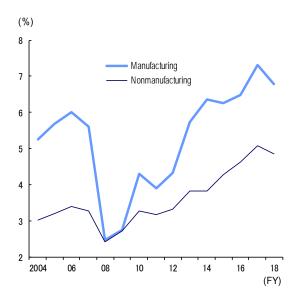
significantly decreased, thus realizing a structure where an increase in sales can directly lead to expansion of bottom line profits.

Business Fixed Investment Is on a Moderate Rising Trend

Reflecting abundant cash flow, capital investment has remained on an upward trend mainly in the fields of rationalization and labor saving against the backdrop of labor shortages.

However, since it is hard to estimate Japan's future growth outlook due to its declining population, the momentum of capital investment has been rather sluggish compared to the pace of improvement in corporate earnings. Furthermore, there is a risk that the appetite for capital investment may wane if concerns over the outlook for corporate earnings increase due to intensification of trade friction between the United States and China, and subsequent acceleration of the appreciation of the yen.

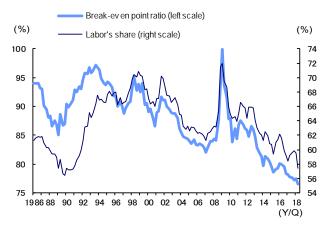
Figure 5-1 Ratio of Current Profits to Sales in BoJ's Tankan Survey <all sizes of industries>



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

Note: The figures for FY2018 are forecasts as of September.

Figure 5-2 Labor's Share and Break-even Point Ratio in Sales Value



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

Note: The break-even point ratio =

break-even point sales value / sales value

Break-even point sales value =

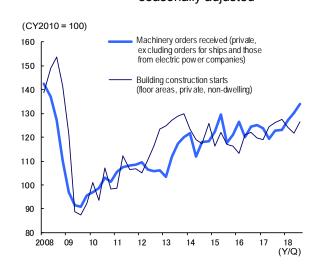
fixed costs / (1 - (variable costs / sales value))

Fixed costs = personnel expenses + depreciation expenses

+ interest payment

Variable costs = cost of goods sold + selling and administration expenses - personnel expenses - depreciation expenses

Figure 5-3 Leading Indicators for Business Fixed Investment <seasonally adjusted>



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

Note: The latest figure in machinery orders is for July and that in building starts is July-August 2018.

Income Is Likely to Recover Steadily

◆ Employment and Income Conditions Continue to Improve

The employment situation continued to improve. Since mid-2015, an increasing trend of hiring workers as regular employees has taken root, and the pace of increase has recently been accelerating slightly. As the number of male non-regular employees has decreased from the previous year since July, it is assumed that the shift to regular employment has progressed, indicating that the employment situation has been improving in terms of both the number and quality of jobs.

Nominal wage growth has also accelerated recently, attributable to a rapid increase in scheduled salaries for full-time workers as well as a rise in special salaries (bonuses) on the back of strong corporate earnings.

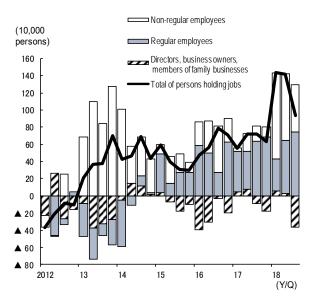
◆ Real Income Is Likely to Increase Firmly

As for the future outlook, both the employment situation and nominal wages are

expected to continue to improve on the back of the economic recovery. As companies are increasingly suffering from labor shortages across all industries, the situation of which is the severest since the bubble economy, labor demand and supply conditions are likely to remain tight. Since the rate of wage increases as a result of the unions' "shunto" spring wage offensive was relatively high this year, nominal wages will also likely continue to grow at 1 percent or higher on a year-on-year basis.

Furthermore, the upward pressure on prices that pushed down real income for the January-March 2018 period has peaked out. We predict that real compensation for employees will continue to grow by around the high 2 percent to 3 percent range on a year-on-year basis through the end of the year. However, this increasing trend will likely slow down due to a rise in prices after 2019.

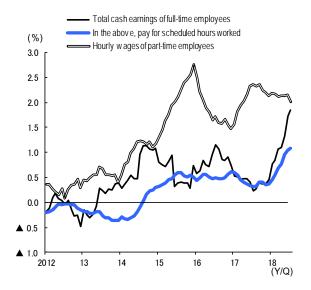
Figure 6-1 Number of Persons Holding Jobs <difference from a year earlier>



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

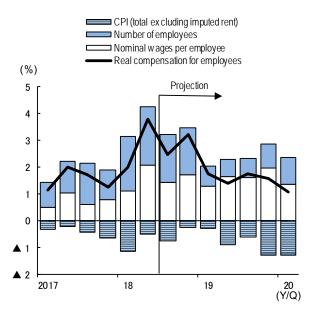
2. The figures in Q3 2018 are for July-August 2018.

Figure 6-2 Year-on-year Change Rates of Wages by Type of Employees <6-month moving averages>



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

Note: Full-time employees are persons who are regular employees, but are not part-time employees.



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

Note: 1. Regular employees are persons employed for an indefinite period.

Private Consumption Expenditure Has Picked up

◆ Private Consumption is Showing Improvement

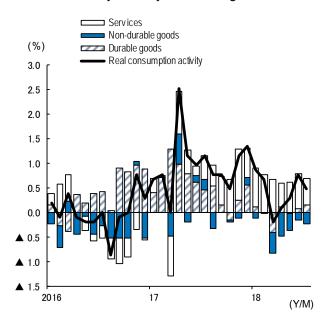
Consumer spending has been on a recovery trend. Driven by an improvement in the employment and income situation, private consumption expenditure continued to recover in services and durable goods. In the service industry, a year-on-year increase in sales continued for food services. Sales were also strong in the durable goods industry, mainly in automobiles and consumer electronics. The BoJ's Consumption Activity Index also indicated that the contribution of durable goods expanded for two consecutive months.

The impact of this summer's heat wave varied between items, and JRI has determined it was neutral for consumption as a whole. While the surge in the price of leafy vegetables such as lettuce had a negative impact on consumption, consumption of air conditioners, beverages and sunscreen products expanded.

◆ The Impact of Natural Disasters Will Be Temporary

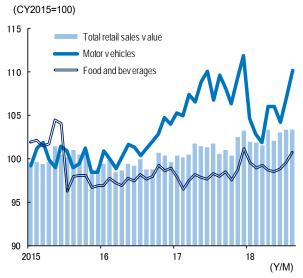
Natural disasters such as the typhoons that struck Western Japan and the earthquake that hit Hokkaido exerted a downward pressure on consumption. Nevertheless, the consumption trend has not collapsed, thanks to continued improvement of the employment and income conditions. Consumer spending is expected to pick up as natural disaster factors start to fade.

Consumer sentiment, which had been weak since the beginning of the year, has recently been showing signs of improvement. Consumer sentiment in September rose for the first time in four months, driven by improvements in "willingness to buy durable goods" and "income growth." It will likely pick up against the backdrop of the wealth effect amid the rise in stock prices since mid-September (as of the first of October).



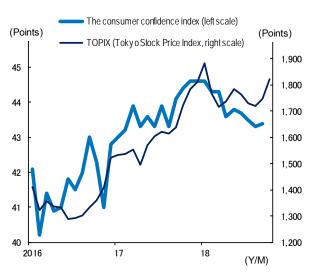
Source: The Japan Research Institute, Ltd. based on data of The Bank of Japan.

Figure 7-2 Retail Sales Value by Item <seasonally adjusted>



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

Figure 7-3 Consumer Sentiment and Stock Prices



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

Note: The figure of TOPIX in October 2018 is for the average of those in the 1st and the 2nd of October.

Topics: How to View the Rush in Demand for Housing

◆ Last-Minute Demand Will Likely Become Evident

A rush in housing starts will likely become evident prior to the consumption tax hike in October 2019 (from 8 to 10%). A study of past trends shows that housing starts for owner-occupied detached houses and houses for rent increased from about a year and a half prior to the tax hike, peaking at around six months prior and then starting to drop. Meanwhile, subdivision housing, which requires the acquisition of large plots of land, showed almost no demand rush since they are developed and sold by developers based on long-term plans.

Looking at detached houses (owner-occupied and subdivision) and rental houses in detail indicates that both owner-occupied detached houses and rental houses experienced a rush in demand by more than 20% compared to normal times (two years prior to the tax hike). Meanwhile, subdivision housing showed an increase of up to only a little more than 10%. This is because flexible construction is difficult since the constructor and owner are different. Based on such past experiences, a

demand rush is expected to become evident soon, mainly in owner-occupied detached houses and rental houses.

◆ The Rush in Demand Will Likely Be Small This Time

That said, the demand rush is expected to be hardly evident in rental houses. This is since construction for tax-saving purposes has grown rapidly, already eating up future demand.

The rush in demand for owner-occupied houses is also expected to be smaller than in the past for the following three reasons: 1) the extent of the rise in the consumption tax rate being less than that in April 2014 (from 5 to 8%); 2) the government taking measures to level the demand rush; and 3) the decrease in potential demand. In particular, the declining trend of the number of households consisting of husband and wife and child, which are the main purchasing households, has been accelerating of late.

Based on the above, a large-scale rush in demand will likely not happen this time.

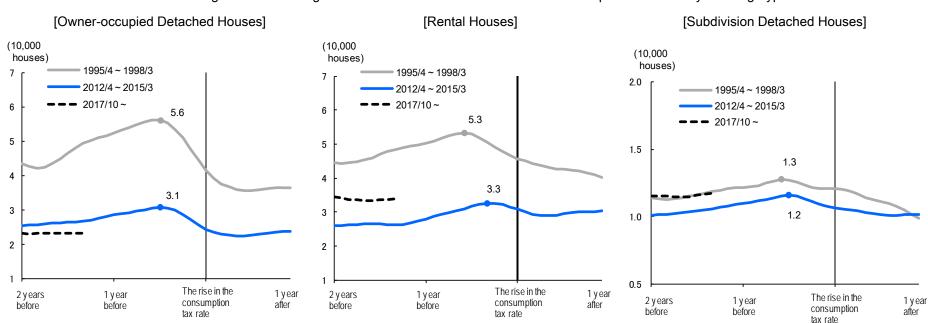


Figure 8-1 Housing Starts Before and After the Rise in the Consumption Tax Rate by Housing Type

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

Note: Trend-cycle estimates based on X-12-ARIMA.

Prospects for Japan's Economy - Projected Real GDP Change; 1.4% in FY2018 and 1.0% in FY2019

◆ Japan's Economic Activity Will Likely Continue Its Recovery Trend, Driven by Firm Domestic Demand

(1) The real GDP growth rate in the July-September quarter will likely see a temporary slowdown due to: 1) the temporary and reactionary decline expected in business fixed investment from the relatively high growth rate in the April-June quarter; and 2) the negative effects of typhoons that struck Western Japan and the earthquake that hit Hokkaido.

However, there is no change in JRI's view that the Japanese economy will continue its recovery path, driven by robust domestic demand. For the time being, an increase in public investment will support the total growth rate, as the supplementary budget in FY2017 is implemented. Also, business fixed investment is expected to return to its increasing trend, driven by firm demand in the areas of labor saving and replacement.

(2) In the household sector, the pace of wage increases is predicted to slightly accelerate, as the attitude of enterprises toward wage rises seems to have become positive. Promising signs in consumer spending will likely emerge gradually, not only as household income is boosted by an increase in the number of employees as in the past, but also as the increase in cash earnings shift to a more substantial rise.

As a result, it is projected that real GDP in FY2018 will continue to grow at a pace over Japan's potential output growth rate, which is currently estimated to be about 1%.

(3) 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 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; and 2) the degree of burden such as an increase in income tax and social insurance premiums is estimated to be small. As a result, real GDP will likely grow by around 1% in FY2019.

◆ The Year-on-year Change Rate in the Core CPI Will Likely Continue to Be around 1 Percent

(4) The pace of increase in the core CPI, which excludes fresh food, has accelerated slightly of late, mainly led by the rise in hotel charges and food prices. Looking ahead, it is predicted that the year-on-year increase rate in the core CPI will be around 1 percent. This is because, while the upward pressure will likely strengthen from the supply-demand perspective due to improvement in employment and income conditions, the pace of the rise in energy prices will likely gradually slow down.

Figure 10 Projections for GDP Growth and Main Indicators of Japan (as of October 3, 2018)

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

(% changes from the previous fiscal year)

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		CY2018				CY2019				CY2020	FY2016	FY2017	FY2018	FY2019
		1~3	4~6	7~9	10~12	1~3	4~6	7~9	10~12	1~3	1 12010	1 12017	1 12010	1 12019
		(Actual)	(Actual)	(Projection)		(Projection)				(Projection)	(Actual)	(Actual)	(Projection)	(Projection)
Rea	Real G D P		3.0	1.0	1.8	1.6	1.4	2.3	▲ 3.7	1.3	1.2	1.6	1.4	1.0
	Private Consumption Expenditure	▲ 0.8	2.9	1.8	1.2	1.5	1.8	5.2	▲ 9.1	1.3	0.3	0.8	1.1	0.8
	Housing Investment	▲ 9.6	▲ 9.3	1.0	3.3	8.1	0.0	▲ 2.4	▲ 9.9	▲ 7.2	6.2	▲ 0.4	▲ 5.0	▲ 0.3
	Business Fixed Investment	2.7	12.8	▲ 3.1	3.3	3.8	2.9	2.8	2.6	2.6	1.2	3.1	4.4	2.7
Private Inventories (percentage points contribution)		(▲ 0.8)	(0.0)	(4 0.1)	(0.2)	(0.0)	(4 0.1)	(▲ 0.5)	(0.3)	(0.3)	(▲ 0.3)	(0.1)	(0.0)	(4 0.1)
	Government Consumption Expenditure	0.0	0.8	1.0	1.0	1.0	0.6	0.6	0.6	0.6	0.5	0.7	0.6	0.7
Public Investment		▲ 1.6	0.1	8.0	0.5	▲ 6.2	0.0	1.0	0.5	0.3	0.9	1.4	0.1	▲ 0.4
	Net Exports (percentage points contribution)		(* 0.5)	(0.3)	(0.2)	(0.1)	(4 0.1)	(▲ 0.7)	(1.0)	(4 0.0)	(8.0)	(0.4)	(0.1)	(0.0)
	Exports of Goods and Services	2.6	0.9	2.6	3.5	3.4	3.0	3.0	2.6	2.6	3.6	6.3	3.4	3.0
	Imports of Goods and Services	0.7	3.8	1.1	2.7	3.0	3.4	6.8	▲ 3.0	2.7	▲ 0.8	4.1	3.1	2.8
(Ref	Ref.) Domestic Private Demand (percentage points contribution)		(3.3)	(0.4)	(1.5)	(1.7)	(1.3)	(2.8)	(* 4.6)	(1.2)	(0.3)	(1.0)	(1.2)	(0.8
(Ref	(Ref.) Public Demand (percentage points contribution)		(0.2)	(0.6)	(0.2)	(4 0.1)	(0.1)	(0.2)	(0.1)	(0.1)	(0.1)	(0.2)	(0.1)	(0.1
						(% cha	nges from th	ie same quai	rter of the pr	evious year)			,	ges from the s fiscal year
Nor	Nominal G D P		1.4	1.1	1.4	2.6	2.3	2.6	1.6	1.5	1.0	1.7	1.6	2.0
GDI	GDP deflator		0.1	0.1	0.1	0.7	0.7	0.8	1.3	1.2	▲ 0.2	0.1	0.2	1.0
Cor	Consumer Price Index (excluding fresh food)		0.8	1.1	1.0	1.1	1.0	1.0	2.0	2.0	▲ 0.2	0.7	1.0	1.5
	(excluding fresh food, consumption tax)	0.8	0.8	1.1	1.0	1.1	1.0	1.0	1.0	1.0	▲ 0.2	0.7	1.0	1.0
Une	Unemployment Rate (%)		2.4	2.4	2.4	2.4	2.3	2.3	2.3	2.3	3.0	2.7	2.4	2.3

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.

Import Price of Crude Oil (US\$/barrel)

Exchange Rates (JY/US\$)