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Japan's Economy: Monthly Review

Outlook for Japan's Economy in 2017

Moderate recovery expected for Japan's economy, but downside risk due to external factors remains

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Summary

- **Economic outlook revised:** In light of the 2nd preliminary Jul-Sep 2016 GDP release (Cabinet Office) we have revised our economic growth outlook. We now forecast real GDP growth of +1.3% in comparison with the previous year for FY16 (+1.1% in the previous forecast), and +0.9% in comparison with the previous year for FY17 (+0.9% in the previous forecast). Japan's economy is expected to recover gradually due to underlying support from the following domestic factors: (1) growth in real wages, (2) low price of crude oil and improvement in terms of trade, and (3) implementation of an economic stimulus package. However, there is downside risk for Japan's economy, which could arise from the ripple effects of Donald Trump's winning of the recent US presidential election. These are mainly (1) yen appreciation, (2) stock price lows, and (3) world economic slowdown. (For details see *Japan's Economic Outlook No. 191*, *Update (Summary)*, December 14, 2016, by Mitsumaru Kumagai.)

- **Overseas investment behaviors of Japanese corporations, and domestic ripple effect:** With both Japan's potential growth rate and expected growth rate at a low level, corporations are beginning to look for growth opportunities in overseas markets. An analysis of the investment behaviors of domestic corporations and their overseas subsidiaries reveals the tendency to take the practical approach and decrease the amount of domestic capex while rerouting resources to Asia and North America. Meanwhile, the divergence between real GDP and real GNI has been widening of late. In addition to improving terms of trade, this is due to backflow of earnings from overseas subsidiaries to domestic parent companies accompanying increased overseas investments. Based on actual value in FY2015, the positive effect of backflow of overseas profits is estimated to have brought a 3.2 trillion yen improvement in employee compensation and an approximately 2.4 trillion yen increase in nominal personal consumption.

- **Risk factors facing Japan's economy:** Risk factors for the Japanese economy are: (1) The policies of President Elect Donald Trump, (2) The downward swing of China's economy, (3) Tumult in the economies of emerging nations in response to the US exit strategy, (4) A strong yen / weak stock market situation brought on by risk-off behavior of investors due to geopolitical risk, and (5) Negotiations regarding the UK's withdrawal from the EU (*Brexit*), and deleveraging at EU financial institutions.

1. Economic outlook revised

Moderate recovery expected for Japan's economy

In light of the 2nd preliminary Jul-Sep 2016 GDP release (Cabinet Office) we have revised our economic growth outlook. We now forecast real GDP growth of +1.3% in comparison with the previous year for FY16 (+1.1% in the previous forecast), and +0.9% in comparison with the previous year for FY17 (+0.9% in the previous forecast). Japan's economy is expected to recover gradually due to underlying support from the following domestic factors: (1) growth in real wages, (2) low price of crude oil and improvement in terms of trade, and (3) implementation of an economic stimulus package. However, there is downside risk for Japan's economy, which could arise from the ripple effects of Donald Trump's winning of the recent US presidential election. These are mainly (1) yen appreciation, (2) stock price lows, and (3) world economic slowdown. If nothing else, there is expected to be increasing uncertainty in the world economy in the mid to long-term, coupled with risk-off behavior in the global financial markets, which could cause worldwide stock price lows and a rapid depreciation of the dollar. (For details see *Japan's Economic Outlook No. 191, Update (Summary)*, December 14, 2016, by Mitsumaru Kumagai.)

GDP revised downwards from 1st preliminary report

The real GDP growth rate for Jul-Sep 2016 (2nd preliminary est) grew by +1.3% q/q annualized (+0.3% q/q), revised downwards from the 1st preliminary report (+2.2% q/q annualized, +0.5% q/q). Results also fell below market consensus (+2.3% q/q annualized, +0.6% q/q). Although the revised results are somewhat on the negative side, the main causes are thought to be fluctuations in inventory and a short-term downturn due to major revisions in international statistics standards. Hence there is no need for excessive pessimism. Results reconfirmed our opinion that the GDP trend indicates Japan's economy has pulled itself out of the temporary lull and is headed toward a comeback.

The Jul-Sep 2016 2nd preliminary GDP report reflects three changes brought on by major revisions in international statistics standards. These are (1) First annual estimate (previously referred to as *Kakuhō*), (2) Revision of standards (switch from 2005 standard to 2011 standard), and (3) Change in international standard – System of National Accounts (SNA). (Switch from 1993 SNA to 2008 SNA.) Effects on our economic outlook from these changes have been limited.

Moderate recovery expected for Japan's economy, but risk of possible downturn remains

We expect Japan's economy to continue in a moderate expansion phase. However, caution is required as domestic demand continues to lack strength. Overseas demand is expected to continue its gradual expansion. However, if the world economy becomes more uncertain in the future, this could cause domestic demand to stagnate, and to become a negative factor bringing downward pressure on Japan's overall economy. A further risk is that the US Fed increased interest rates on December 14. Doing so could cause a slowdown in the US economy, or capital outflow from the emerging nations associated with interest hikes. Meanwhile, caution is required regarding worldwide stock price lows and a rapid depreciation of the dollar due to risk-off behaviors, which could occur depending on future policy decisions of President elect Donald Trump.

Personal consumption is expected to continue in a moderate expansion phase. The supply of labor continues to be tight, and this should provide underlying support for personal consumption through growth in employee compensation. Meanwhile, the growth rate in the consumer price index has turned in the negative direction, and this promises to continue pushing up real wages. This should provide a boost to personal consumption. On the other hand, since the election of Donald Trump to the US presidency, the possibility has appeared that the yen may become progressively weaker and materials prices may increase. The price of crude oil has already gone up in response to OPEC's recent decision to cut production. Just recently the price of fresh foods has gone up, and the CPI risen especially on

imports. Households may become more budget-minded in the future because of these developments, hence caution is required.

Meanwhile, housing investment is expected to gradually slow down. Interest on housing loans remains low, and therefore should provide continued underlying support. However, housing starts, which had rapidly expanded with the expectation that there would be a rush to purchase homes before the additional increase in consumption tax originally planned for April 2017, are expected to decrease in the future, especially for urban area condominiums, and housing investment is also expected to begin declining after that point.

Capex is expected to continue marking time. The balance of supply and demand for labor continues to be tight, and this should provide underlying support for replacement and renovation investment in the non-manufacturing industries. On the other hand, the stagnant world economy and the strong yen/weak dollar situation, especially in manufacturing, bring an increasing sense that corporate earnings are about to peak out. Corporations are therefore likely to become more cautious as regards capex spending in the future.

Public investment is expected to move toward a comeback as we approach fiscal year-end. The government's second supplementary budget, which includes economic policy measures, has taken shape, and this should gradually provide more upward pressure for public investment as we move closer to the end of the fiscal year.

As for exports, with overseas economies continuing moderate growth, we can expect exports to maintain a firm undertone, centering on consumer goods. Looking at exports of goods by region, consumer goods are expected to maintain a strong undertone in the US, EU, and Asia backed by improvements in employment environment, the effects of monetary easing, and favorable personal consumption in all regions. On the other hand, growth in corporate earnings in the US is at a low level, and overcapacity in Asia, especially in the steel industry, requires adjustment. There is a good possibility that exports of capital goods and materials will continue to be slow.

Risk factors facing Japan's economy: focus on trends in China's economy

Risk factors for the Japanese economy are: (1) The policies of President Elect Donald Trump, (2) The downward swing of China's economy, (3) Tumult in the economies of emerging nations in response to the US exit strategy, (4) A strong yen / weak stock market situation brought on by risk-off behavior of investors due to geopolitical risk, and (5) Negotiations regarding the UK's withdrawal from the EU (*Brexit*), and deleveraging at EU financial institutions. Our outlook for China's economy is optimistic in the short-term and pessimistic in the mid to long-term. Looking at China's economic situation in a somewhat reductive way, the fact is that China's government holds treasury funds totaling between 600 to 800 tril yen with which it is standing up to under 1,000 tril yen in excessive lending and over 550 tril yen in excess capital stock. China is expected to be able to avoid the bottom falling out of its economy for a little while, but in the mid to long-term, there is risk of a massive capital stock adjustment.

BOJ's monetary policy

We expect the BOJ to maintain current monetary policy for the time being. Considering the policy introduced in September to permanently battle deflation, the issue is expected to be creating a more flexible inflation target.

2. Japan's Main Economic Scenario: Moderate Recovery Expected in 2017

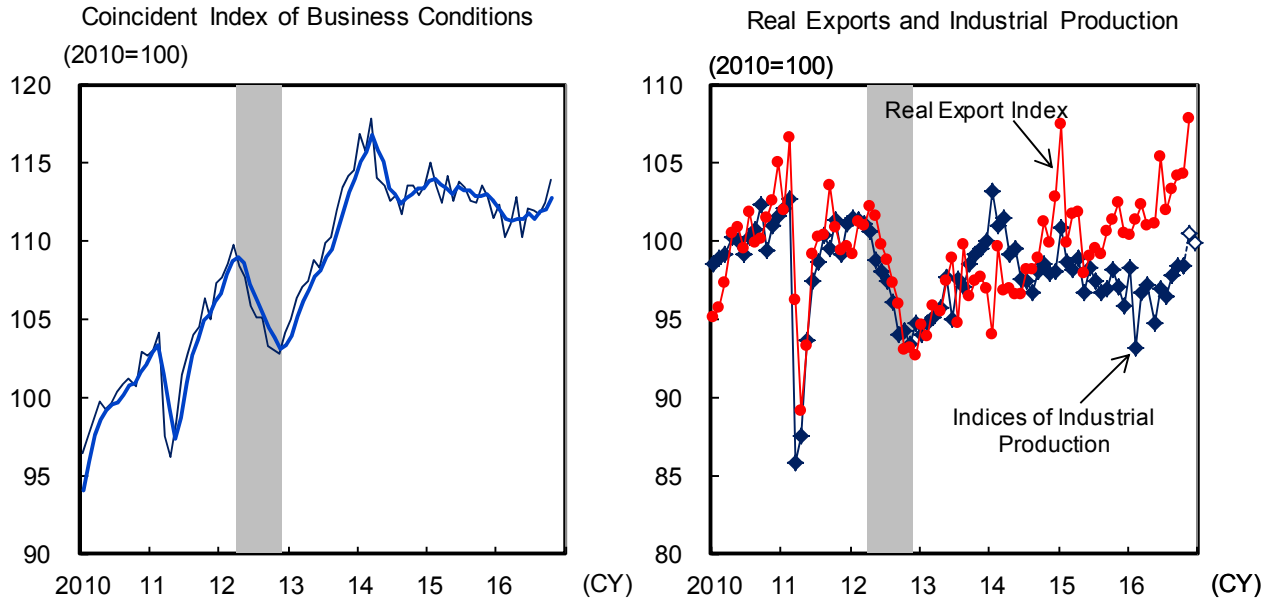
2.1 Signs of Overseas Economies Bottoming Out

Japan's economy has still been unable to pull out of the lull in which it has remained in recent months. Chart 1 illustrates trends in Japan's composite index (a coincident indicator), real exports, and industrial production. As for the composite index, though it has not completely deteriorated, it has continued weak performance since the middle of 2015. Meanwhile, industrial production continues in a gradual declining trend. However, real exports have recently shown signs of bottoming out, and there are signs of a comeback in future production plans.

There are three major factors behind exports bottoming out. These are (1) demand for consumer goods in the US is favorable due to improvements in the employment environment, (2) domestic demand in the EU is recovering due to the effects of bold monetary easing measures, and (3) the overseas economy, which had been strengthening its downward trend, now shows signs of bottoming out. This trend is most noticeable in China. Meanwhile, of important note is the recent US presidential election in which Republican Donald Trump emerged triumphant despite having been viewed as the underdog until that point. During his campaign, Trump accused Japan and other countries of currency manipulation, while suggesting policies considered isolationist. The future of the world economy is expected to be increasingly uncertain for the mid to long-term due to Trump's election, while global financial markets may see stock price lows and a sharp depreciation of the dollar due to growing risk-off behavior.

Our outlook for the future of Japan's economy is that it will continue its current lull for a while longer, and then recover gradually. As for overseas demand, there is underlying risk in the overseas economy, especially that of the US and China, which require caution, but there are some positive factors on the domestic side, including the following: (1) growth in real wages, (2) low price of crude oil and improvement in terms of trade, and (3) the implementation of an economic stimulus package. These factors are expected to provide underlying support. There are both positive and negative factors, but once through the ups and downs, we expect Japan's economy to gradually recover.

Coincident Indicator, Real Exports, and Industrial Production **Chart 1**



Source: Cabinet Office, Bank of Japan, Ministry of Economy, Trade and Industry; compiled by DIR.
Note: Shaded areas represent periods of recession. The thick line which represents the composite index is the 3-month moving average.
The most recent two months of industrial production is from METI's production forecast survey.

2.2 Domestic Demand Moves toward Modest Recovery

Growth in wages in the macro sense provides underlying support for personal consumption

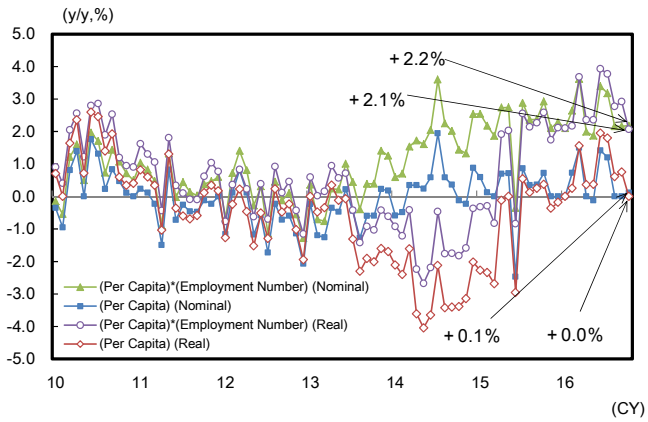
In this section we discuss the future of domestic demand. First, real wages have shifted into a growth trend, and are expected to provide underlying support for the Japanese economy in the form of encouraging moderate growth in personal consumption.

Chart 2 indicates that real per capita wages have recently exceeded levels of the same period of the previous year with regularity, and that the trend is becoming well-established. Wages continued to suffer major declines during FY2014 due to the increase in consumption tax, but during FY2015, the effect of tax hikes pushing up prices fell away and the price of crude oil, which collapsed after 2014, further encouraged prices to fall. This also had the effect of pushing up real wages. Along with the positive factor of prices, supply and demand for labor is tight and the salary scale of workers has increased, working toward pushing nominal wages upwards. This is serving to further growth in real wages per capita.

Looking at macro wages (per capita wages x employment), an even more important index for the Japanese economy, year-to-year growth of +2% or more is continuing and appears to have become well-established. Employment also continues to grow, creating a situation in which upward pressure continues on macro wages. Moreover, the absolute level of macro wages has also been in a growth trend since the second half of 2014. Its current level exceeds that seen in December 2012 at the time the Second Abe Cabinet was formed (Chart 3).

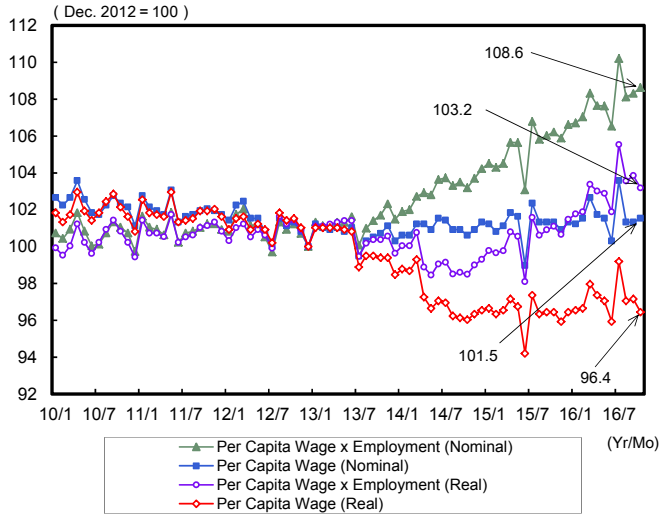
As for the future outlook for employment and the income environment, corporations continue to show brisk demand for labor; hence it is highly possible that employment will continue the current growth pattern. In addition, upward pressure on wages is also expected to continue due mainly to the fact that supply and demand for labor is tight. Moreover, prices are expected to be pushed downwards further due to the price of crude oil dropping further and a progressively stronger yen. As a result, real wages are expected to experience more upward pressure. This improvement in the income environment in macro terms is expected to give a certain degree of underlying support to personal consumption. (For a more detailed analysis of personal consumption, see *Japan's Economic Outlook No. 191, (Revised)*, December 16, 2016, by Mitsumaru Kumagai.)

Per capita wages and Macro Wages (y/y) **Chart 2**



Source: Ministry of Health, Labour and Welfare; compiled by DIR.

Per capita wages and Macro Wages (Level) **Chart 3**



Source: Ministry of Health, Labour and Welfare; compiled by DIR.

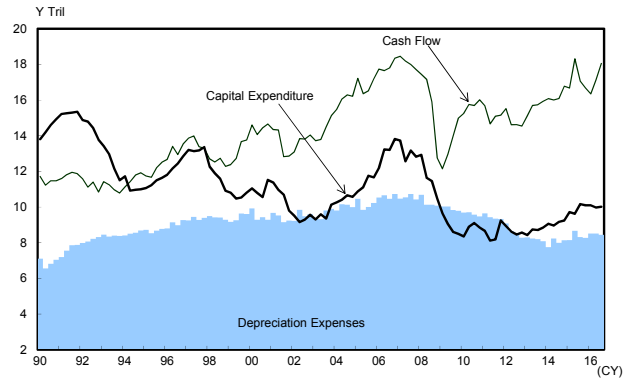
The future of capex and issues regarding earnings structure

As for the future of capex, we expect movement toward a gradual comeback, with underlying support from replacement and renovation investment backed by a high level of corporate earnings. First we look at Chart 4, which indicates changes in capital expenditure according to corporate statistics, cash flow, and depreciation expenses. Capital expenditure suffered a steep decline falling below depreciation expenses due to the rapid economic downturn which occurred after the global financial crisis of 2008, but has been in a moderate growth trend since the middle of 2012. Behind this development is the improvement in corporate earnings which has brought growth in cash flow, creating an environment which makes it easier for corporations to carry out capital investment. Corporate earnings are expected to maintain a steady undertone, especially in the non-manufacturing industries, and this is a factor which will provide underlying support for capex.

Next we consider corporate investment motive based on a survey carried out by the Development Bank of Japan (Chart 5). Especially noticeable in this chart are the categories of New Products & Product Upgrades and Maintenance & Repair during FY2016. This is interpreted to mean that investment is being encouraged in these categories by the existence of abundant cash flow, backed by a high level of corporate earnings. During the economic downturn which occurred after the global financial crisis of 2008, corporations drastically cut back on capital investment. Hence another factor contributing to replacement and renovation investment was the progression of aging and obsolescence of production facilities. In addition, investment in labor saving and energy saving due to the manpower shortage, as well as rationalization and upgrading are also expected.

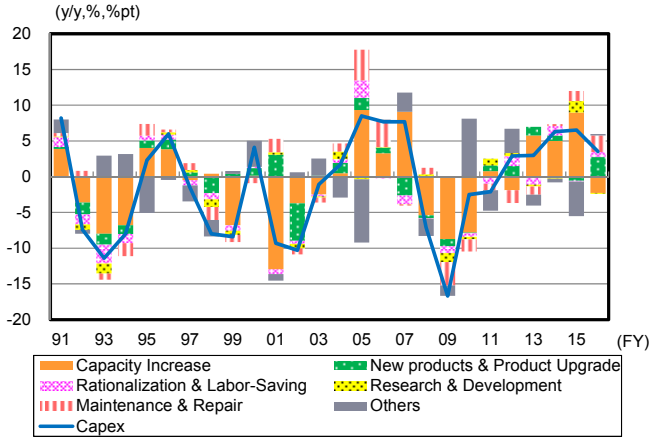
On the other hand, one problem which is often pointed out regarding recent trends in capex is that considering how favorable corporate earnings are, capital spending does not seem to grow as much as one would expect. Looking at the correlation between corporate earnings components and capital investment, we see that correlation is strongest with domestic sales volume and export sales volume. On the other hand, the correlation between variable expenses and export output price is not very strong. In other words, earnings growth attributed to volume has a greater effect on growth in capital spending than do other factors. Earnings growth attributed to price is more difficult to associate with growth in capital spending. Based on these relationships we can conclude that growth in domestic sales volume and export sales volume is key to capital investment's becoming full-scale.

Capital Expenditure and Cash Flow **Chart 4**



Source: Ministry of Finance; compiled by DIR.
Notes: 1) Seasonally adjusted figures for Depreciation Expenses calculated by DIR.
2) Cash Flow = Recurring Profits / 2 +Depreciation Expenses.

Factor Analysis of Capital Expenditure Based on Investment Motive **Chart 5**



Source: Development Bank of Japan; compiled by DIR.

3. Overseas Investment Behaviors of Japanese Corporations and Domestic Ripple Effect

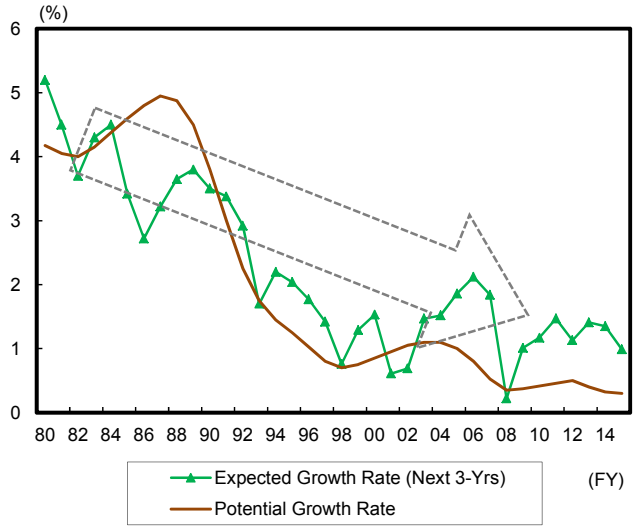
3.1 Corporations Seek Way to Growth in Overseas Markets

The history of Japanese corporations' entry into overseas markets

Japanese corporations began seeking new opportunities for growth in overseas markets during the 1990s when Japan's growth rate remained at a low (Chart 6). Chart 7 is a breakdown of manufacturing industry sales by domestic sales, overseas sales (including third country sales), and Japan's overall trade (the total of exports and imports from overseas subsidiaries). The chart indicates that Japan's domestic sales have been in a gradual decline, but that at the same time, local sales of overseas subsidiaries have entered an expansion phase. Share of total domestic and overseas sales in FY2014 was 65% for domestic sales and 22% for local overseas sales, while 14% of the total was trade transactions with Japan. The development of overseas markets by Japanese corporations has been more oriented toward selling goods manufactured overseas to the local market and other countries in the same region rather than toward using the overseas subsidiary as a production base for sale of products in the Japanese market. In other words, Japanese corporations have tended to carry out local production for local consumption.

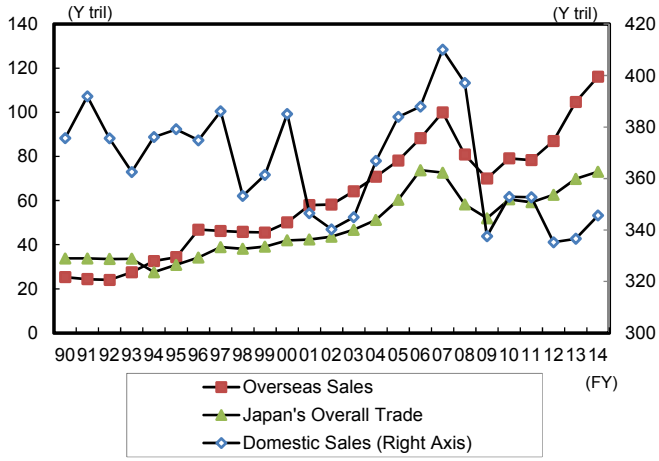
The main reason behind this tendency is of course that the growth rates of overseas economies are higher than that of the Japanese economy. Chart 8 shows the ratio of overseas GDP to Japan's GDP (overseas GDP ÷ Japan's GDP) on a nominal basis and in terms of purchasing power parity. This ratio has been in a growth trend since the 1990s due to Japan's slow growth rate as compared to overseas economies with higher growth rates, and the tendency is expected to continue in the future. Japanese corporations will very likely continue to increase the weight of their overseas business in the future.

Expected growth rate and Potential Growth Rate **Chart 6**



Source: Cabinet Office; compiled by DIR.
Note: Potential growth rate is expressed as an annual average.

Breakdown of Manufacturing Industry Sales by Domestic and Overseas Sales **Chart 7**



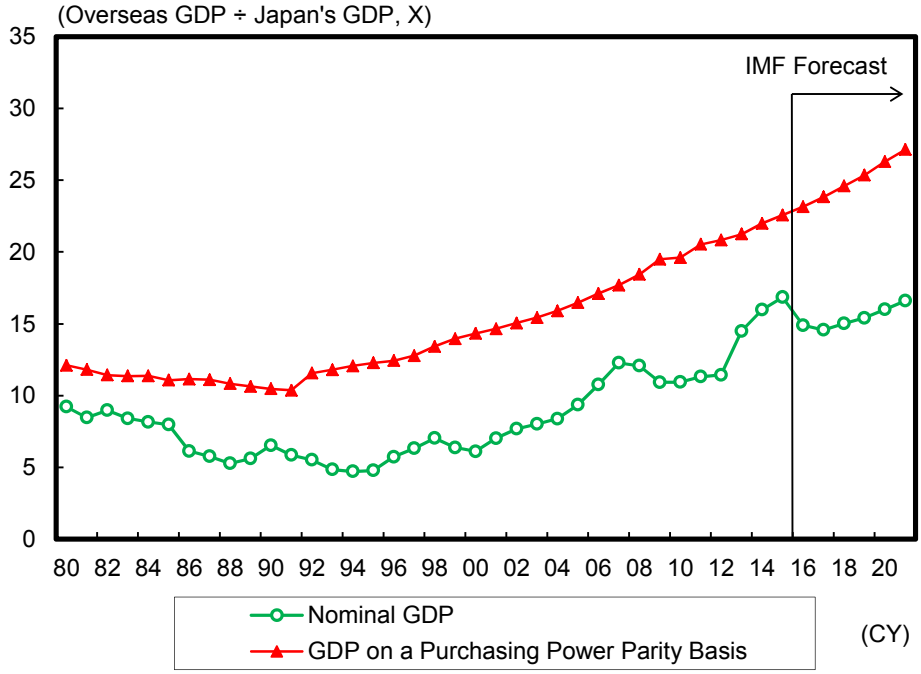
Source: Ministry of Finance, Ministry of Economy, Trade and Industry; compiled by DIR.

Note: Domestic Sales = Domestic Corporate Sales - Export Sales of Domestic Corporations.

Overseas Sales = Sales of Overseas Subsidiaries - Overseas Subsidiaries Export Sales to Japan.

Japan's Overall Trade = Export Sales of Domestic Corporations + Overseas Subsidiaries Export Sales to Japan.

Ratio of Overseas GDP to Japan's GDP **Chart 8**



Source: IMF; compiled by DIR.
Note: Overseas GDP is world GDP minus Japan's GDP.

Where do corporations make the most money?

Chart 9 shows growth rate of sales and profit ratios of domestic corporations and their overseas subsidiaries. The growth rate of sales is shown on the horizontal axis, while the vertical axis shows the ratio of recurring profits. Domestic corporations experienced a major slowdown in the growth of sales after Japan's economic bubble collapsed. Growth has never completely recovered since that time, but on the other hand, profit ratios are up and profitability is growing. Meanwhile, overseas subsidiaries have topped their Japanese parent companies both in growth rate of sales and in ratio of recurring profits since the 2000s, thereby firmly establishing businesses with high growth and high profitability overseas.

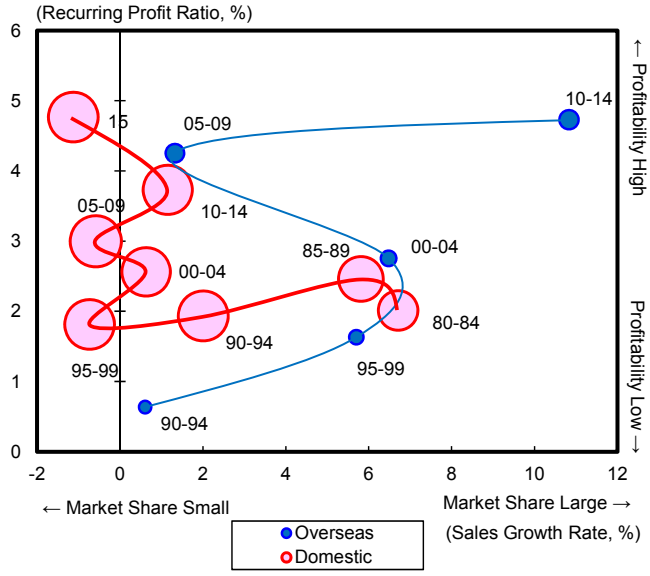
Looking at corporate planning as well, we can see that there are numerous corporations positioning their overseas subsidiaries as drivers of growth, while at the same time increasing the profitability of their domestic business even as it shrinks as a result of Japan's declining birthrate and aging population. This trend also becomes evident in viewing the above chart.

Chart 10 indicates sales growth rates and recurring profit ratios of overseas subsidiaries by region. Here we see that both growth potential and profitability are higher in Asia than in Europe and North America. Sales share is also larger in Asia. The major factors behind Japan's successful entry are the rapid expansion of the Asian market in a wide variety of industries, as well as the cultural affinity between Japan and the Asian countries, not to mention relative closeness geographically. However, while profitability has been on the way up, the level of profitability in Europe and North America has not necessarily been better than in Japan's domestic market.

There are also risks involved in doing business overseas. One of the major risk factors as shown in Chart 9 is sales volatility. We can see here that sales growth rate in overseas markets has undergone violent fluctuations over time. Moreover, sales converted into yen can also vary widely due to fluctuation in foreign exchange rates, while growing uncertainty in the world economy can bring yen appreciation. When major events such as the global financial crisis of 2008 occur, leading to a

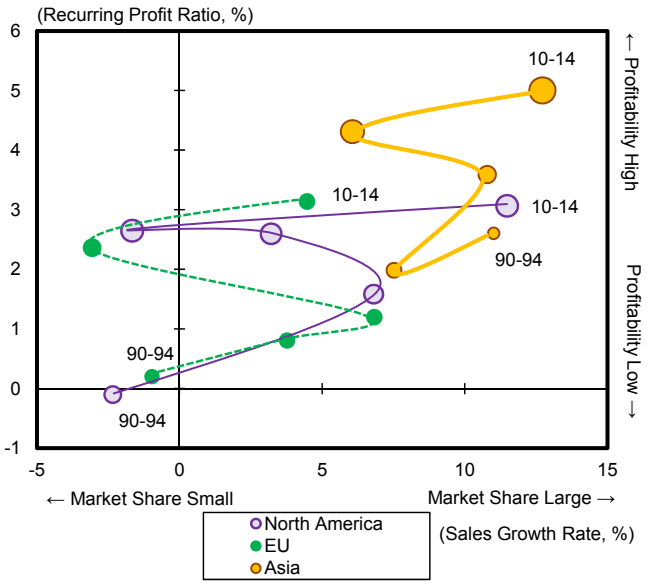
worldwide economic slowdown, the sales growth rate can plunge into a steep decline. And since market share is not necessarily large overseas, the uncertainty factor can loom quite large for a business.

Sales Growth Rate and Recurring Profit Ratio in Domestic and Overseas Markets
Chart 9



Source: Ministry of Finance, Ministry of Economy, Trade and Industry; compiled by DIR.
Notes: 1) Figures for recurring profit ratio and sales growth rate are period averages.
2) Size of circles indicates extent of sales.

Sales Growth Rate and Recurring Profit Ratio in Europe, North America, and Asia
Chart 10



Source: Ministry of Finance, Ministry of Economy, Trade and Industry; compiled by DIR.
Notes: 1) Figures for recurring profit ratio and sales growth rate are period averages.
2) Size of circles indicates extent of sales.

Investment portfolios of Japanese corporations

Up until this point we have focused on the growth potential and profitability of overseas subsidiaries, but what do the investment activities of Japanese corporations look like from the viewpoint of consolidated business?

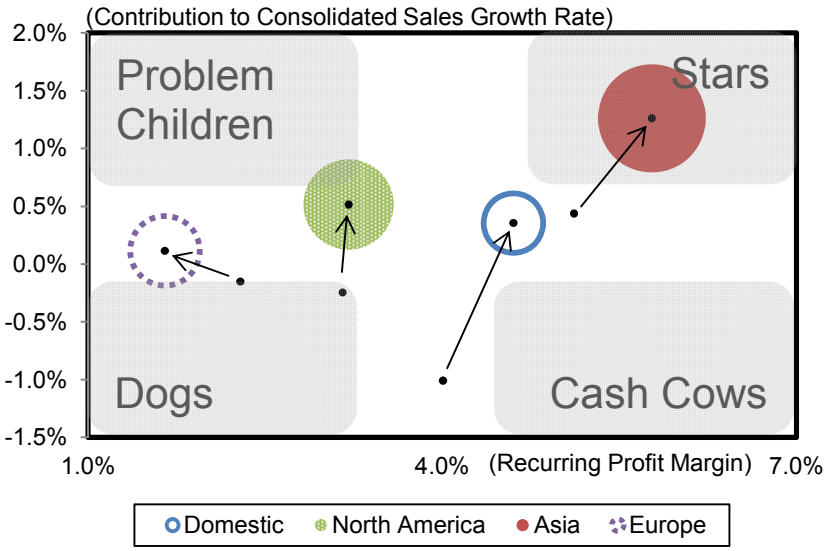
Chart 11 shows extent of contribution to recurring profit margins and consolidated sales growth rates in terms of average values during the periods FY2005-2009 and FY2010-2014. This is based on the Boston Consulting Group's BCG Matrix business analysis framework. The categories in this matrix are "Stars" – highly profitable businesses in a market with promising growth, "Cash Cows" – profitable businesses, but in markets which cannot promise much growth, "Problem Children" – businesses with low profitability, but in markets which promise growth, and "Dogs" – businesses with low profitability in markets which cannot promise growth. Meanwhile, the sizes of the colored circles represent investment growth rates between the periods FY2005-2009 and FY2010-2014. The regions with larger circles are those in which corporations have been highly selective in the distribution of their resources.

First of all, corporations have clearly been highly selective in how they have gone about investing in Asia, which is represented here as the Star with high growth and high profitability. On the other hand, this has meant reducing investments in the domestic Japanese market. During the period lasting FY2010-2014, the domestic sales growth rate was on the positive side, but it is still an unavoidable fact that in the long-term, the domestic market will continue to shrink. We can therefore conclude that it would be most rational for corporations to direct profits made in the domestic market to investments in Asia. If, on the other hand, we consider the fact that though sales may be in a decline, profitability will improve simultaneously with improvements in the corporate governance code, then we might see a strengthening of the Cash Cow characteristics of the domestic market in the future. With capital

expenditure's production function strongly lacking, while at the same time corporations increase investments in research and development and M&A, there seems to be a fair amount of consistency regarding this point.

Following Japanese corporate activity in Asia, investment in North America is also expanding. In addition to fears that China's economy may slow down in the future, all eyes are now on what the future may bring to the US economy under the new president elect, Donald Trump. Japanese corporations are hoping that they will be able to increase their profitability in North America and bring their businesses closer to Star power level. Meanwhile, it appears that corporations are reducing their investments in Europe where they have been struggling. Europe's economic growth has remained low ever since the global economic crisis of 2008, followed by the more recent debt crisis.

Manufacturing Industry Profitability, Sales Growth Rate, and Investment Growth Rate by Region Between the Periods FY2005-2009 and FY2010-2014 **Chart 11**



Source: Ministry of Finance, Ministry of Economy, Trade and Industry; compiled by DIR.
Notes: 1) Size of circles = (Cumulative Amounts in Investments in FY2010-2014) / (Cumulative Amounts in Investments in FY2005-2010)
(Domestic investments = capex minus software, overseas = direct foreign investment. Both domestic and European investments have decreased since last period.)
2) Consolidated Sales = Domestic Sales + Overseas Sales.

3.2 Verifying Effects of Backflow of Corporate Earnings

Real GNI exhibits more favorable performance than real GDP

Up to this point we have considered the effect of overseas investments of Japanese corporations from the macro viewpoint. Next, we make a comparison between trends in gross domestic product (GDP) and real GNI (gross national income), which includes other elements such as overseas transactions (Chart 12). In this comparison we notice the following relationship: Real GNI = Real GDP + Trading Gains & Losses + Real Net Income from Abroad. The category of Trading Gains & Losses is made up of increase or decrease of real income associated with changes in terms of trade, which indicates the relative price of exports and imports.

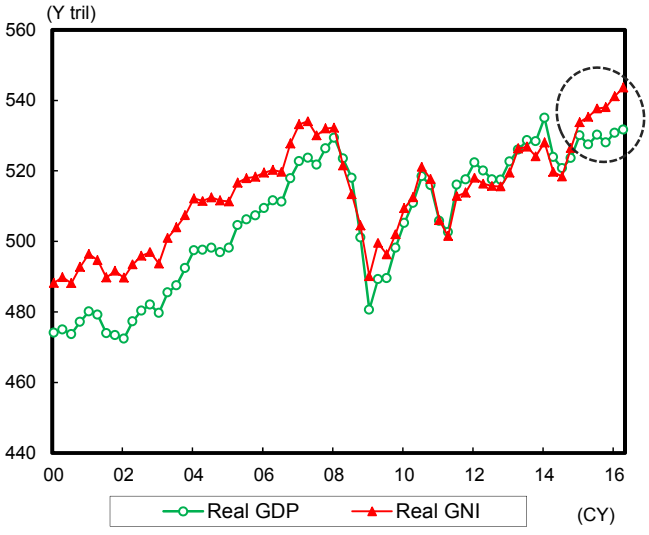
In verifying changes in real GDP, we find that since the middle of 2015 when the Japanese economy entered a temporary lull, performance has continued to be dissatisfying overall, but especially in domestic demand. This is due to the weak recovery for consumption and investment as households continue to be more budget-minded and corporations remain cautious. On the other hand, real GNI continues to be robust. This has resulted in a widening gap between GDP and GNI of late.

In Chart 13 we examine the causes of divergence between GDP and GNI more closely by performing a factor analysis on contributions to cumulative change in real GNI since 2012. First we identify trends in the real GDP factor. Ever since the beginning of Abenomics brought a recovery to Japan's economy, GDP has contributed to growth in GNI. However, this factor has remained flat since 2015 as a result of Japan's economy entering a temporary lull.

Next we find that until the first half of 2014, the factor of trading gains & losses was suffering increasingly greater declines. Then in the summer of that year the price of natural resources fell steeply, due especially to the collapse in the price of crude oil. This brought a major improvement in Japan's terms of trade, which moved gradually in the positive direction. Just recently it has contributed considerably to growth in GNI, and this has resulted in the growing divergence between real GDP and real GNI.

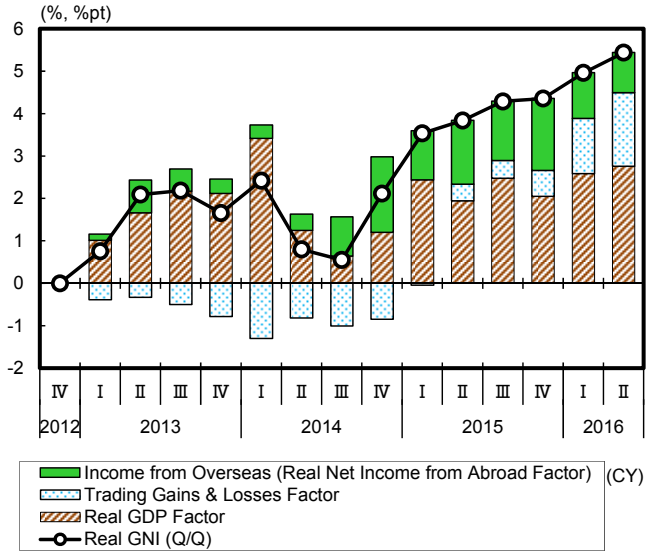
Meanwhile, we can see that the factor of overseas income (real net income from abroad) has been moving steadily in the positive direction despite ups and downs. Behind this progress is backflow of overseas profits from the subsidiaries of Japanese corporations due to progress in overseas investment. However, it should be noted that since the end of 2015, the yen has steadily appreciated, bringing a decline in the amount of yen-based income received from overseas subsidiaries, while also reducing the extent of positive contribution to GNI.

Real GDP and Real GNI **Chart 12**



Source: Cabinet Office; compiled by DIR.

Cumulative Contribution to Rate of Change in Real GNI **Chart 13**



Source: Cabinet Office; compiled by DIR.

Income on corporate direct investment overseas helps push up real GNI

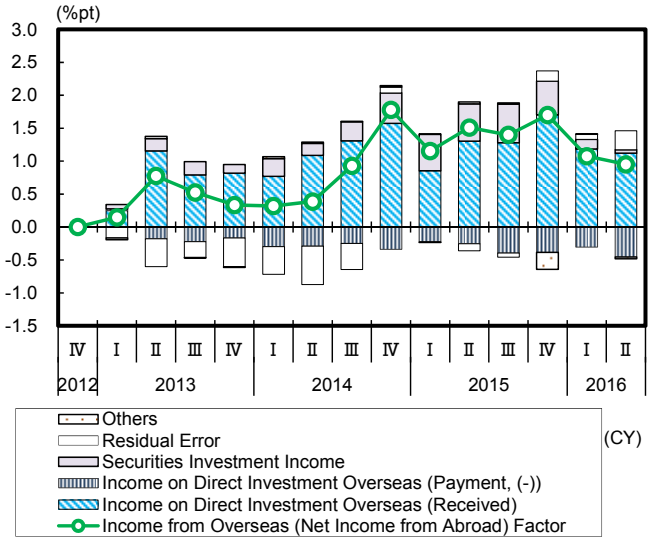
Next we perform an analysis of earnings structure associated with the overseas investments of Japanese corporations. Looking at the breakdown of the Income from Overseas (Real Net Income from Abroad) Factor, we can see that income on direct investment overseas has contributed considerably to pushing up real GDP (Chart 14). This is due to growth in overseas profits and profit ratios of Japanese corporations associated with the establishment of overseas subsidiaries and the acquisition of local overseas companies, as well as the effects of yen depreciation.

Looking at the breakdown of income on direct investment, we see that the progressively weak yen after the autumn of 2012 was a major contributor to pushing up the balance of direct investment (including fluctuation in foreign exchange rates) (Chart 15). As of this point we should note that this factor's positive contribution has been gradually shrinking since the yen began appreciating at the end of 2015. However, its weight in comparison to other factors is still large. Meanwhile, the profitability

factor is also contributing to the positive side. This suggests that the earnings power of Japanese corporations overseas is improving.

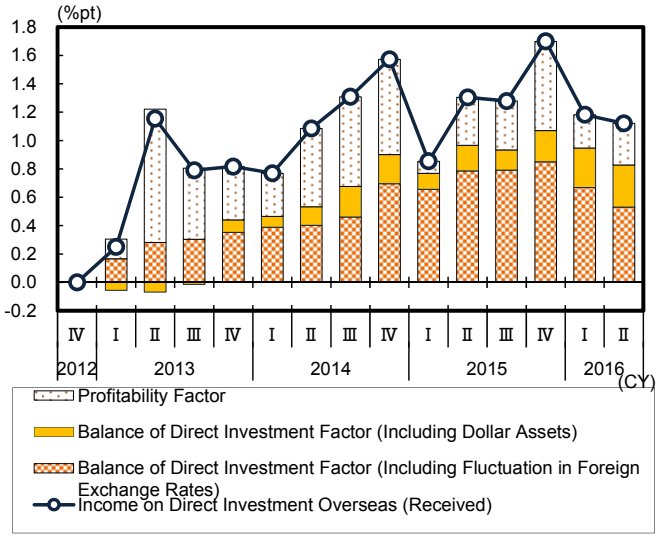
Moreover, it should be noted that the positive contribution of the balance of direct investment factor (including dollar assets) is growing steadily due to developments in overseas investment on the part of Japanese corporations. As has been mentioned previously, Japanese corporations are maintaining a cautious stance in regard to domestic capex due to Japan's stagnant anticipated and potential growth rates, with nominal capital investment as a proportion of GDP marking time (Chart 16). However, direct investment as a proportion of GDP is growing as more Japanese corporations develop business overseas, and this fact is encouraging growth in income on direct investment.

Breakdown of Income from Overseas (Net Income from Abroad) Factor **Chart 14**



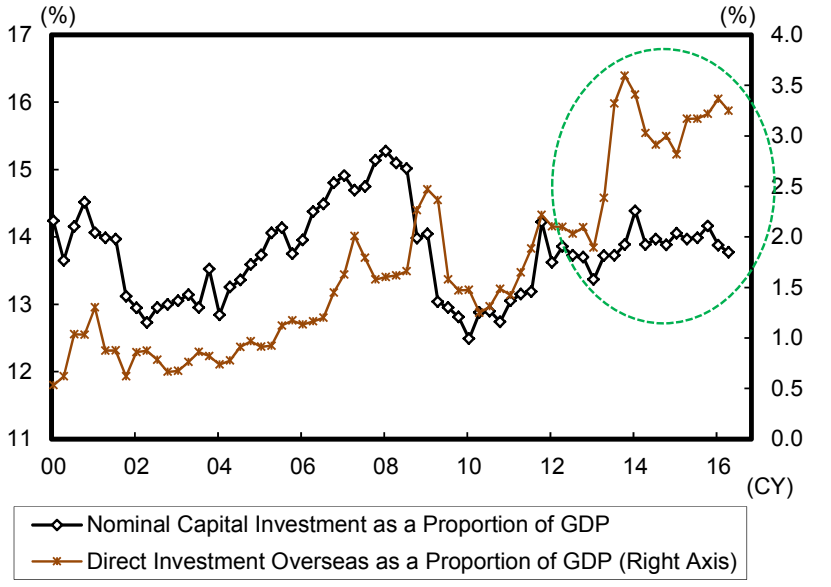
Source: Cabinet Office, Ministry of Finance; compiled by DIR.

Breakdown of Income on Direct Investment Overseas (Received) Factor **Chart 15**



Source: Cabinet Office, Ministry of Finance, Bank of Japan; compiled by DIR
Note: Approximation error distributed proportionally based on ratio of each factor.

Nominal Capital Investment as a Proportion of GDP and Direct Investment Overseas as a Proportion of GDP **Chart 16**



Source: Cabinet Office, Ministry of Finance, Bank of Japan; compiled by DIR.
Note: Direct investment overseas seasonally adjusted by DIR and 3MA.

3.3 Backflow of Overseas Profits into Domestic Economy Improves Personal Consumption by 2.4 Trillion Yen

Real GNI and real GDP are interdependent. Real GNI grows when corporate earnings associated with overseas investments expand, and the backflow of these profits into the domestic economy has the effect of pushing up GDP. The actual economic transmission mechanism occurs in two phases as follows: (1) Employee compensation grows when overseas profits return to Japan's domestic economy via the phenomenon of backflow, and are then distributed to workers, then (2) Growth in employee compensation brings upward pressure on personal consumption.

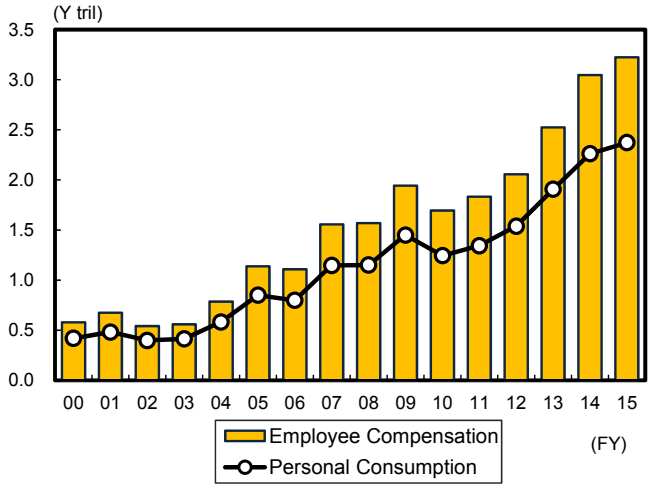
Next we estimate the effect of increasing employee compensation and personal consumption through backflow of overseas profits into the domestic economy. Our concrete method is to multiply branch earnings from dividends & dividend allotments (received), which indicates backflow of overseas profits, by labor's relative share, which represents profit sharing and distribution to workers. This gives us an estimate of how much employee compensation is increased. Then we multiply this value with average propensity to consume. This latter figure represents the percentage of household income going toward consumption. This brings us the amount by which consumption is increased.

Chart 17 shows changes in employee compensation and the effect of pushing up personal consumption. Both of these factors have been on the rise ever since the mid-2000s, accompanying the growth being experienced at that time in overseas investment on the part of Japanese corporations. There was a temporary slowdown in growth after the global financial crisis of 2008, but then since 2013, growth has again accelerated. Based on the FY2015 performance values, backflow of overseas profits into the domestic economy are estimated to have pushed up employee compensation by around 3.2 trillion yen and nominal personal consumption by around 2.4 trillion yen. These results of course must be viewed with a certain grain of salt, but there is no doubt that growth in overseas investment on the part of Japanese corporations is benefitting Japan's domestic economy as well.

At the same time we must remain aware that the effect of this phenomenon depends largely on corporate policy regarding distribution of profits, as well as the consumer behavior of Japanese households. For instance, if wage increases for workers do not progress as hoped due to the cautious stance of corporations regarding the future of the economy, or if personal consumption declines due to households becoming more budget-minded, this could take a big bite out of the positive effects of overseas profits. A variety of possible scenarios for FY2015 are presented in Chart 18. This data suggests that we can expect personal consumption to be pushed up a certain amount even if labor's relative share and the average propensity to consume are lower than the basic scenario.

Beneficial Effects of Backflow of Overseas Profits into Domestic Economy

Chart 17



Source: Cabinet Office, Ministry of Finance, Bank of Japan; compiled by DIR.

Notes: 1) The effect of pushing up employee compensation is estimated by multiplying branch earnings from dividends & dividend allotments (received) by over 100 million yen in labor's relative share as paid out by corporations. However, this figure is adjusted by adding non-operating income as denominator. Labor's Relative Share (Adjusted) = Personnel Expenses ÷ (Added Value + Non-Operating Income).

2) The effect of pushing up personal consumption is estimated by multiplying the amount that employee compensation is pushed up by average propensity to consume (includes worker households and households engaged in farming, forestry, and fishing).

Multiple Scenarios in which Consumption is Pushed Up due to Backflow of Overseas Profits (FY2015, Y tril)

Chart 18

		Labor's Relative Share (Adjusted) (%)								
		44	46	48	50	52	54	56	58	60
Average Propensity to Consume (%)	66	1.81	1.89	1.97	2.06	2.14	2.22	2.30	2.38	2.47
	68	1.86	1.95	2.03	2.12	2.20	2.29	2.37	2.46	2.54
	70	1.92	2.01	2.09	2.18	2.27	2.35	2.44	2.53	2.62
	72	1.97	2.06	2.15	2.24	2.33	2.42	2.51	2.60	2.69
	74	2.03	2.12	2.21	2.30	2.40	2.49	2.58	2.67	2.77
	76	2.08	2.18	2.27	2.37	2.46	2.56	2.65	2.75	2.84
	78	2.14	2.23	2.33	2.43	2.53	2.62	2.72	2.82	2.91
	80	2.19	2.29	2.39	2.49	2.59	2.69	2.79	2.89	2.99
	82	2.25	2.35	2.45	2.55	2.66	2.76	2.86	2.96	3.06

Source: Ministry of Finance, Ministry of Internal Affairs and Communications, Bank of Japan; compiled by DIR.

Note: Figures framed in red are the basic scenario estimated from FY2015 performance values.

Economic Indicators and Interest Rates — Chart 19

Indicator	2015	2016				2017	FY14	FY15	FY16	FY17
	Oct-Dec	Jan-Mar	Apr-Jun	Jul-Sep	Oct-Dec	Jan-Mar				
	Actual				DIR estimates		Actual		DIR estimates	
Real GDP										
Q/q %, annualized	-1.8	2.8	1.8	1.3	1.2	1.5				
Y/y %	1.1	0.4	0.9	1.1	1.8	1.4	-0.4	1.3	1.3	0.9
Current account balance SAAR (Y tril)	19.2	19.9	18.5	19.6	20.4	20.8	8.7	18.0	20.1	22.5
Unemployment rate (%)	3.3	3.2	3.2	3.0	3.1	3.0	3.5	3.3	3.1	3.0
CPI (excl. fresh foods; 2015 prices; y/y %)	-0.1	-0.1	-0.4	-0.5	-0.2	0.5	2.8	-0.0	-0.2	0.5
10-year JGB yield (period average; %)	0.29	-0.01	-0.15	-0.12	0.04	0.10	0.46	0.26	-0.03	0.10

Source: Compiled by DIR.

Note: Estimates taken from DIR's *Japan's Economic Outlook No.191 Update (Summary)*.