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Japan's Economy: Monthly Review

Downside Risk Remains for Japanese Economy Due to Global Economic Factors

Gradual recovery due to domestic factors

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Summary

- **Downside risk remains for the Japanese economy due to global economic factors:** In light of the 1st preliminary Jan-Mar 2016 GDP release (Cabinet Office) we have revised our economic growth outlook. We now forecast real GDP growth of +0.8% in comparison with the previous year for FY16 (+0.9% in the previous forecast), and -0.1% in comparison with the previous year for FY17 (-0.1% in the previous forecast). Japan's economy remains in a lull, but we expect it to recover gradually due to the following domestic factors: (1) growth in real wages, (2) low price of crude oil and improvement in terms of trade, and (3) the supplementary budget. However, caution is needed regarding downside risk in the global economy, especially that of China. (More detail on this subject can be found in *Japan's Economic Outlook No. 189*, June 15, 2016, by Mitsumaru Kumagai.)
- **Risk factors facing Japan's economy:** Risk factors for the Japanese economy are: (1) The downward swing of China's economy, (2) Tumult in the economies of emerging nations in response to the US exit strategy, (3) A strong yen / weak stock market situation brought on by risk-off behavior of investors due to geopolitical risk, and (4) The threat of UK exiting the EU (*Brexit*), and uncertainty regarding Greece. 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 over 1,000 tril yen in excessive lending and over 400 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.

1. Downside Risk Continues for the Global Economy

Japan's economy remains in a lull

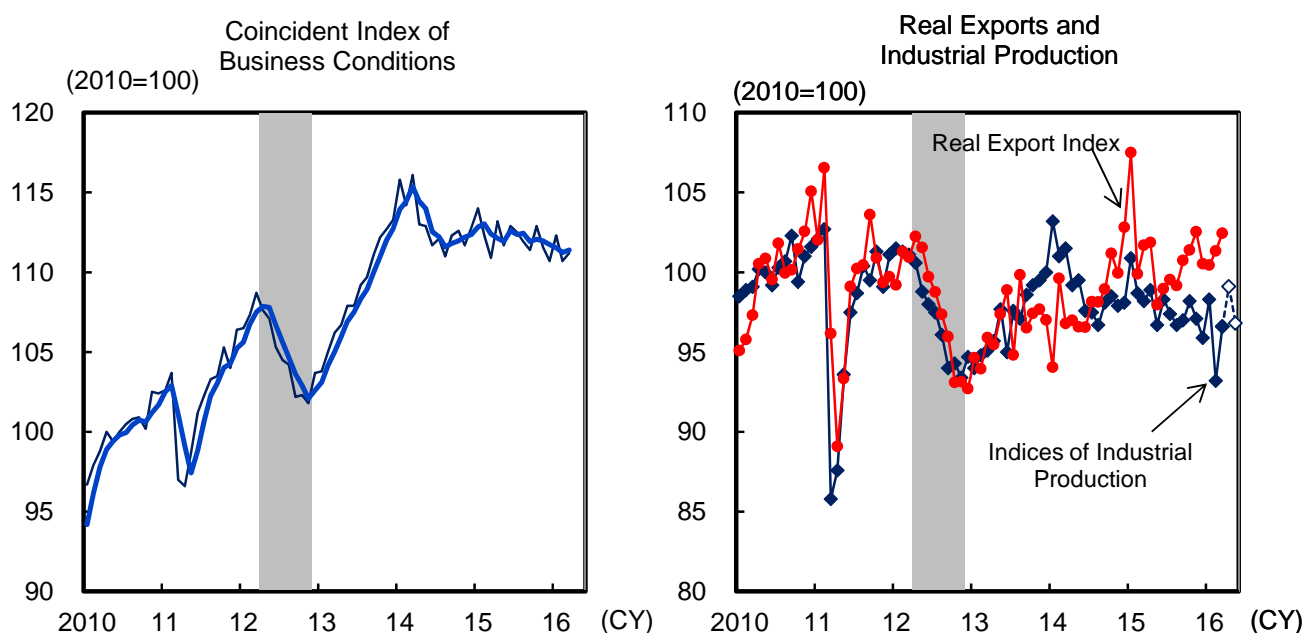
Japan's economy has still been unable to pull out of the lull in which it has remained in recent months. Chart 1 illustrates trends in Japan's composite index (a coincident indicator), real exports, and industrial production. As for the composite index, though it has not completely deteriorated, it has continued weak performance since the middle of 2015. Meanwhile, industrial production continues to fluctuate, suffering a steep decline after a major automobile manufacturer temporarily shut down factory operation in February of 2016. However, if we remove special factors such as this one from the equation, industrial production has been marking time. The one bright spot is that real exports have been edging toward a comeback.

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 due to the following domestic factors: (1) growth in real wages, (2) low price of crude oil and improvement in terms of trade, and (3) the supplementary budget. However, caution is needed regarding downside risk in the global economy, especially that of China, as well as the effects of the Kumamoto earthquake. There are both positive and negative factors, but once through the ups and downs, we expect Japan's economy to gradually recover.

In this chapter we discuss three positive factors supporting the domestic economy based on an overview of global economic conditions which affect Japan's economy.

Coincident Indicator, Real Exports, and Industrial Production

Chart 1



Source: Cabinet Office, Bank of Japan, Ministry of Economy, Trade and Industry; compiled by DIR.

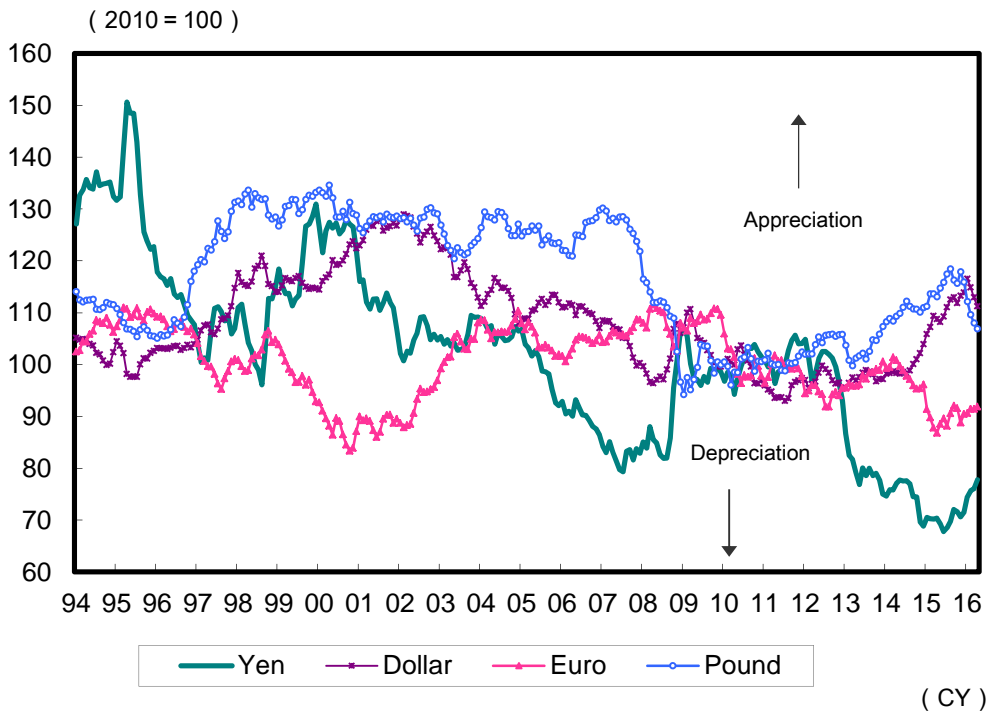
Note: Shaded areas represent periods of recession. The thick line which represents the composite index is the 3-month moving average. The most recent two months of industrial production is from METI's production forecast survey.

Weak dollar to provide underlying support for world economy

One of the major changes in the global economic environment which can be pointed out as affecting Japan's economy is the shift from a strong dollar to a weak dollar as a result of the predicted slowdown in the pace of the Fed's raising the interest rate. Taking a look at trends in the real effective exchange rate, we see that toward the end of 2015 the dollar appreciated in the face of the Fed's exit strategy (Chart 2). But once into 2016 the Fed began to pull back on the pace of its interest rate hikes due to turmoil in the global financial markets and fears that the world economy was facing a slowdown. This shift caused the real effective dollar rate to decline.

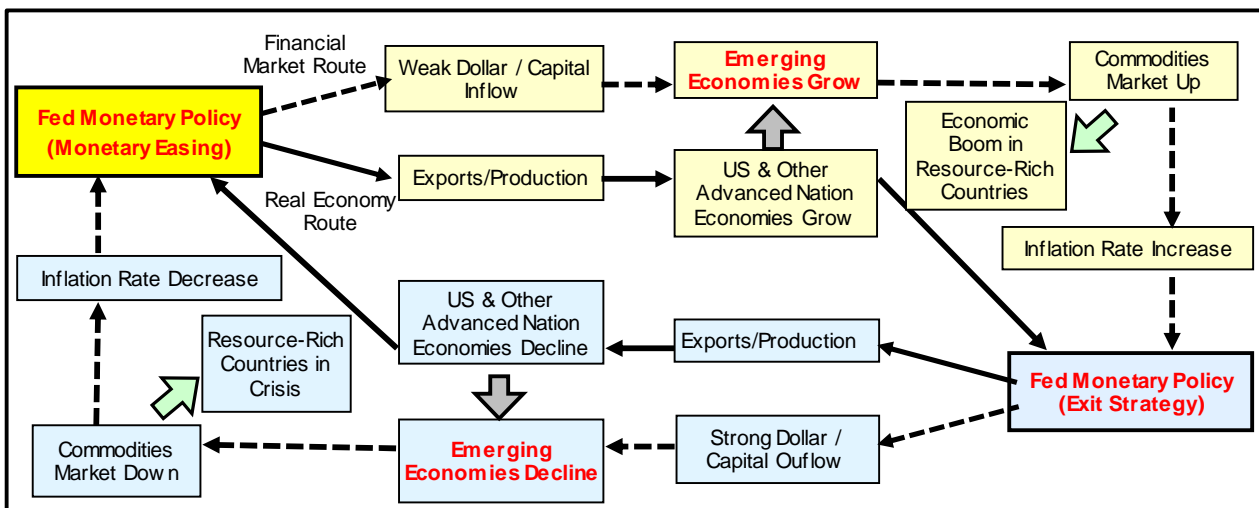
Chart 3 illustrates the worldwide economic cycle with a special focus on Fed decisions regarding interest rates. Based on this cycle, the progressive depreciation of the dollar is actually expected to provide underlying support for the world economy through recovery of the economies of emerging nations. Since the dollar began to decline, stock prices in emerging nations have surged, and hopes have grown stronger that those economies will soon head toward a comeback.

Real Effective Exchange Rates (Broad, Monthly) **Chart 2**



Source: BIS; compiled by DIR.

Worldwide Economic Cycle Focusing on Fed Monetary Policy **Chart 3**



Source: Compiled by DIR.

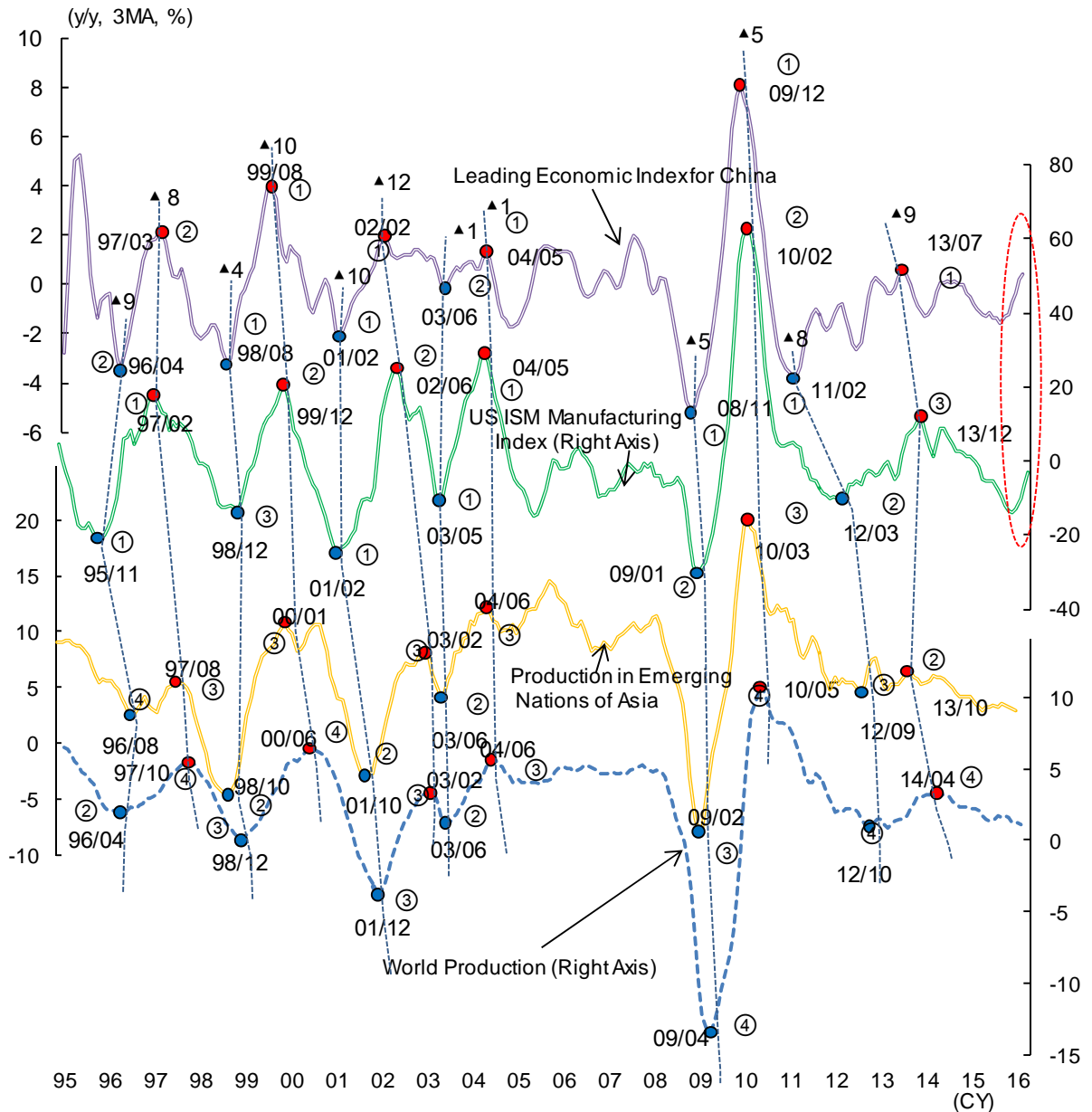
Leading indicators of worldwide production improving

In considering the future of the world economy, we compared and assessed a wide variety of leading indicators and financial data associated with worldwide production. Here we focus in particular on two of these – China’s leading economic index and the US ISM manufacturing index. Chart 4 shows the business cycle based on worldwide production and the various leading indicators. Stages in the cycle

are numbered (1)-(4) starting with the earliest stage. Looking at the chart we can observe that China's leading economic index and the US ISM manufacturing index can act as leading indicators for worldwide production. The number of months by which China's leading economic index preceded worldwide production are marked in the chart with a bold triangle next to the number (example: ▲9).

Recently, improvements have been seen in the two leading indicators for worldwide production. From the viewpoint of the business cycle we can then say that the possibility has arisen that worldwide production may be headed toward gradual improvement in the future.

Leading Indicators of World Production: China's Leading Economic Index & US ISM Mfg Index Chart 4



Source: Haver Analytics; compiled by DIR.

2. Three Factors Supporting the Domestic Economy

Positive Factor (1): Real wages are on the increase, providing underlying support for personal consumption

In this chapter we discuss three factors which should bring underlying support to the domestic economy in the future. First, real wages are now in a growth trend, and are expected to provide underlying support for the Japanese economy in the form of encouraging the revitalization of personal consumption.

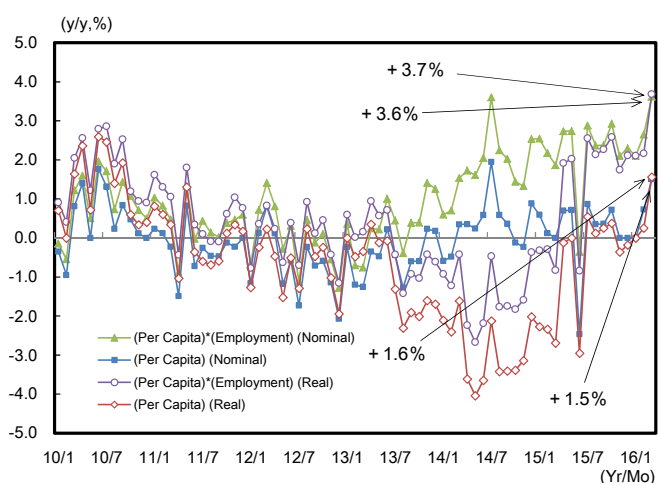
Chart 5 indicates that real per capita wages have recently exceeded levels of the same period of the previous year with regularity, and that the trend is becoming well-established. Wages continued to suffer major declines during FY2014 due to the increase in consumption tax, but once the effect of tax hikes pushing up prices fell away and the price of crude oil collapsed, prices began 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. The positive income environment continues.

Looking at macro wages (per capita wages x employment), year-to-year growth of +3% 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 2015. Its current level exceeds that seen in December 2012 at the time the Abe cabinet was formed (Chart 6).

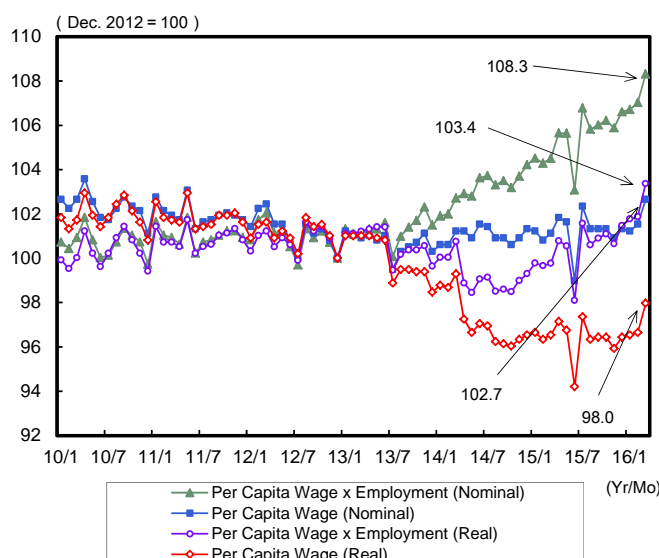
As for the future outlook for employment and the income environment, corporations continue to show brisk demand for labor; hence it is highly possible that employment will continue the current growth pattern. In addition, upward pressure on wages is also expected to continue due mainly to the fact that 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 to a new low 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.

Per Capita Wages and Macro Wages (y/y) Chart 5



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

Per Capita Wages and Macro Wages (Level) Chart 6



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

Positive Factor (2): Low price of crude oil has pushed up Japan's real GDP in FY2016 by +0.85%.

The low price of crude oil is expected to have additional positive effects on the real economy. Chart 7 shows a calculation of the effects of the low price of crude oil on Japan's economy using the DIR macroeconomic model. Results of this simulation suggest that the collapse of the price of crude oil and subsequent decline from its former level of \$105/bbl as of June 2014 pushed up Japan's real GDP between fiscal years 2015 and 2017, with an increase of +0.69% in FY2015, +0.85% in FY2016, and an expected +0.90% in FY2017. The effect on the real GDP growth rate was +0.49%pt in FY2015, +0.16%pt in FY2016, and an expected +0.05%pt in FY2017.

Looking at performance by demand component, personal consumption should improve due to the increase in wages, while an increase in housing investment is also seen. In addition, corporate earnings are increasing and this will likely become a factor in pushing up capex spending. The increase in corporate earnings should also lead to an improvement in wages, which will also help households, ultimately contributing to an increase in household demand. At the same time, the collapse in the price of crude oil is also expected to be a factor in pushing down prices, increasing real interest rates, and holding down housing investment and capex. However, these negative effects are expected to be less influential than the increase in income and its related positive effects.

As for prices, the collapse in import prices will bring downward pressure on the CGPI and CPI figures, with the domestic demand deflator experiencing a major decline. A major decline in the import deflator, an item not included in GDP figures, will lead to an increase in the GDP deflator. As a result, nominal GDP is expected to get even more upward pressure than real GDP.

As is made obvious by the above, the low price of crude oil is highly beneficial to Japan's economy.

Effects of the Collapse in the Price of Crude Oil on Japan's Economy **Chart 7**

		Real GDP %	Personal Consumption %	Housing Investment %	Capital Expenditure %	Exports %	Imports %	Nominal GDP %	GDP Deflator %	GDP Growth Rate %
Difference from \$105 Scenario	FY2015	0.69	1.11	2.64	2.88	0.47	3.51	3.16	2.45	0.49
	FY2016	0.85	1.28	2.98	4.04	0.66	4.43	4.23	3.35	0.16
	FY2017	0.90	1.32	3.35	4.66	0.73	4.78	4.77	3.84	0.05
Difference from \$70 Scenario	FY2015	0.34	0.59	1.32	1.15	0.24	1.72	1.22	0.88	0.27
	FY2016	0.51	0.84	1.72	2.07	0.42	2.66	2.09	1.57	0.18
	FY2017	0.56	0.88	1.96	2.57	0.49	2.97	2.50	1.93	0.05

		Current Account Balance / Nominal GDP %pt	Import Price %	Export Price %	CGPI %	Core CPI %	Industrial Production %	Tertiary Industry Activity Index %	All Industry Activity Index %
Difference from \$105 Scenario	FY2015	2.87	-19.21	-2.27	-3.18	-1.30	1.37	0.71	0.79
	FY2016	3.90	-24.17	-3.11	-4.39	-1.65	1.75	0.93	1.01
	FY2017	4.38	-25.81	-3.45	-4.95	-1.70	1.91	1.04	1.13
Difference from \$70 Scenario	FY2015	1.13	-9.07	-1.14	-1.57	-0.72	0.65	0.32	0.37
	FY2016	1.97	-14.55	-1.99	-2.76	-1.11	1.02	0.52	0.58
	FY2017	2.35	-16.41	-2.34	-3.29	-1.20	1.15	0.61	0.67

Source: Compiled by DIR.

Notes: 1) Simulation using the DIR short-term macro model. Values shown in the chart represent the rate of deviation from the standard solution.

2) In the WTI = \$105 scenario, the assumption is that after the most recent peak for WTI in June 2014, the price remains flat at \$105/bbl. In the WTI = \$70 scenario, the assumption is that after the FY2015 Jan-Mar period, the price remains flat at \$70/bbl.

Improvement in terms of trade provides underlying support for real employee compensation

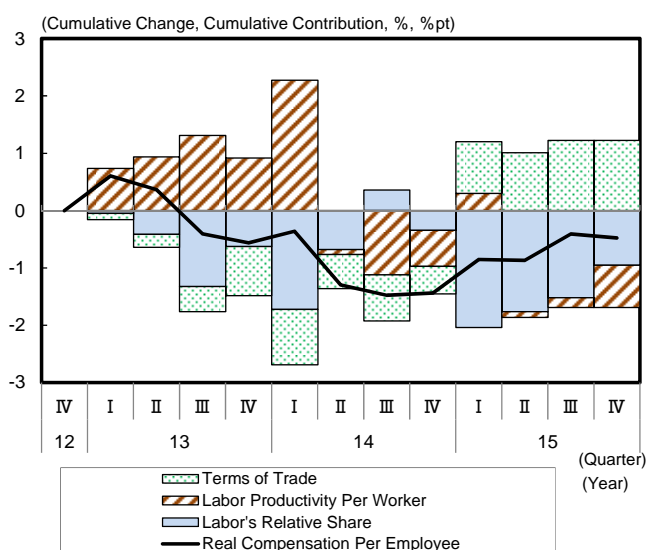
The low price of crude oil also brings an improvement in terms of trade, which in turn contributes to the increase in real compensation per employee. In order to confirm this claim we examine real compensation per employee by performing a factor analysis on the following three items: (1) labor's relative share (= employee compensation ÷ nominal GDP), (2) labor productivity (= real GDP ÷ employment), and (3) terms of trade (= GDP deflator ÷ private consumption deflator) (Chart 8). According to this analysis, growth in labor's relative share, which is the worker's share of added value

produced by the country, improvement in labor productivity, which is added value produced by the individual worker, and improvement in terms of trade, which means inflow of earnings from overseas, contributes positively to real compensation per employee.

When we look at the cumulative change which has occurred since the Oct-Dec 2012 period when the Abe cabinet was formed, we see that on the whole, the factor of labor's relative share has been in the negative range. Hence, in order to stimulate growth in real compensation per employee, it is necessary for Abenomics to move on to the next stage in which some attention is paid to redistribution of income. On the other hand, the terms of trade factor, which was making a negative contribution until the end of 2014, has been making a positive contribution since early in 2015, and now provides underlying support for real compensation per employee.

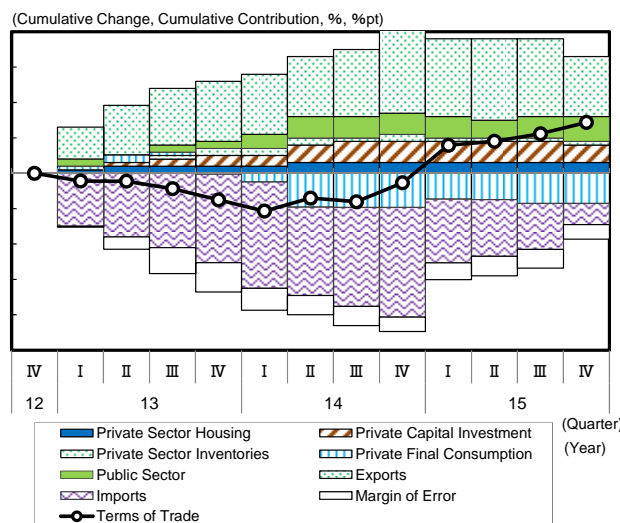
In order to confirm the above, we performed a factor analysis on terms of trade, breaking this factor down based on the deflators for each demand component of GDP. According to this analysis we can see that the main reason terms of trade began making a positive contribution in 2015 was that the import deflator's contribution to GDP was less negative (Chart 9). In other words, the collapse in the price of crude oil and other energy resources since the summer of 2014 caused the import deflator to decline (this has a positive effect on terms of trade), thereby contributing to upward pressure on real compensation per employee.

Factor Analysis of Real Compensation Per Employee
Chart 8



Source: Cabinet Office, Ministry of Internal Affairs and Communications; compiled by DIR.
 Note: Real compensation per employee = employee compensation / nominal GDP (labor's relative share) x real GDP / employment (labor productivity per worker) x GDP deflator / private final consumption expenditure deflator (terms of trade).

Factor Analysis of Terms of Trade
Chart 9



Source: Cabinet Office; compiled by DIR.
 Notes: 1) Terms of trade = GDP deflator / private final consumption expenditure deflator
 2) Factor analysis performed by breaking factor down into the deflators for each demand component of GDP.

Positive Factor (3): The government's FY2015 supplementary budget will increase real GDP by +0.28%

Implementing a supplementary budget is expected to provide underlying support for Japan's economy in FY2016. We estimate that the supplementary budget will increase real GDP in FY2016 by +0.28%.

The FY2015 supplementary budget was devoted mostly to projects related to the Abe administration's new social policy "Promoting Dynamic Engagement of All Citizens." Payment of benefits to the elderly appears to have attracted the most attention in the mass media, and has been criticized as being

merely an attempt to buy votes. But more realistically speaking, its major role has actually been to provide support for consumption expenditures on the part of the elderly whose financial positions became more tenuous after the increase in consumption tax. The effect of holding down pension payments has led to a notably worsening income environment for the elderly in comparison to worker households after the increase in the consumption tax. This development also led to a deterioration of consumer confidence amongst the elderly. This situation continues today, with weak consumption amongst elderly households contributing to the sluggishness of personal consumption overall. It seems that taking a practical approach to supporting personal consumption by paying benefits to the elderly in order to prevent the bottom from falling out of the economy is at least to a certain extent acceptable.

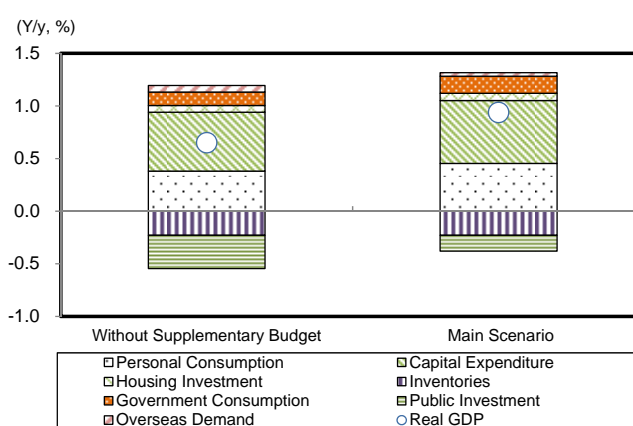
The supplementary budget will place more focus on public investment going to projects related to disaster recovery and restoration. It is hoped that this will contribute to preventing an economic downturn. Not only will public investment carry its usual role as an important demand component contributing to raising the GDP, but is expected to have a ripple effect which can encourage wage hikes and an increase in employment centering on the construction industry. Increasing public investment was actually the original second arrow of Abenomics though it has only now become more prominent. A rapidly tightening supply and demand situation for labor has been observed in the construction industry as well as developments leading to growth in wages. It is thought that the supplementary budget will provide further support for these developments.

Having implemented the supplementary budget expeditiously and in a sound manner may very well have quickened the pace of progress on projects, focusing especially on public works projects with an immediate effect, more than had originally been thought. Public investment became an unexpected plus for growth on the Jan-Mar 2016 1st Preliminary GDP report. Recently amount of contracts and orders received, leading indicators of public investment, have been moving toward a comeback, which gives the impression that the budget has been front-loaded. As a result, public investment is expected to continue moving toward a comeback beyond the Apr-Jun period. In addition, the acceptance of applications for benefits to the elderly began in April, and this is expected to have the effect of increasing consumption.

Economic Benefits of the FY2015 Supplementary Budget

Chart 10

	Govt. Expenditure	Effect on GDP (%)
1 Urgent Policies for Implementation of <i>Dynamic Engagement of All Citizens</i>	1.2 Tril Yen	0.10
(1) Urgent policies associated with Target birthrate of 1.8 and Zero Attrition Rate in Nursing Care		
(2) Boosting Consumption and social security that supports peace of mind to ensure that the fruits of Abenomics are shared equally amongst all citizens.		
(3) Promoting investment and a revolution in productivity		
(4) Full-scale development of regional revitalization		
2 Measures toward broad outline of T P P related policies	0.3 Tril Yen	0.03
(1) Converting to more aggressive agriculture, forestry, and fisheries (strengthening policy)		
(2) Promoting ways of putting T P P to work, realizing a strong economy through T P P		
3 Disaster recovery and restoration projects	0.5 Tril Yen	0.08
• Disaster recovery		
• Restoration projects		
4 Speeding up restoration	0.8 Tril Yen	0.00
5 Other urgent issues	0.3 Tril Yen	0.05
(1) Ensuring the safety and security of people's lives		
(2) Support for small business and agriculture, forestry, and fisheries		
6 Others	0.4 Tril Yen	0.02
	3.5 Tril Yen	0.28



Source: Cabinet Office; compiled by DIR.
Note: Real GDP figures are for FY2016.

Source: Ministry of Finance; compiled by DIR.

3. Issues Regarding Future of Capex and Earnings Structure

Chances are good for increase in capex focusing on replacement and renovation investment

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. In addition, restoration and reconstruction of production facilities lost or damaged in the recent Kumamoto earthquake may also contribute to growth in capital expenditure.

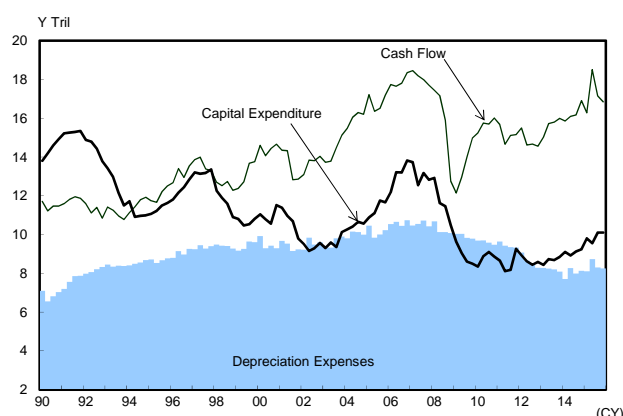
First we look at Chart 11, which indicates trends in capital expenditure according to corporate statistics, cash flow, and depreciation expenses. Capital expenditure suffered a steep decline falling below depreciation expenses due to the rapid economic downturn which occurred after the global financial 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 12). This chart indicates that maintenance and repair made an especially large contribution to investment motive in FY2015. This is interpreted as being due to the utilization of abundant cash flow backed by the 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.

Finally, investment in labor saving and energy saving due to the manpower shortage, as well as rationalization and upgrading are also expected. Chart 12 indicates that investment in new products and upgrades, as well as rationalization and energy saving made positive contributions in FY2015. Corporations appear to be taking a positive view in the mid to long-term, and are seriously considering capital investment.

Capital Expenditure and Cash Flow

Chart 11



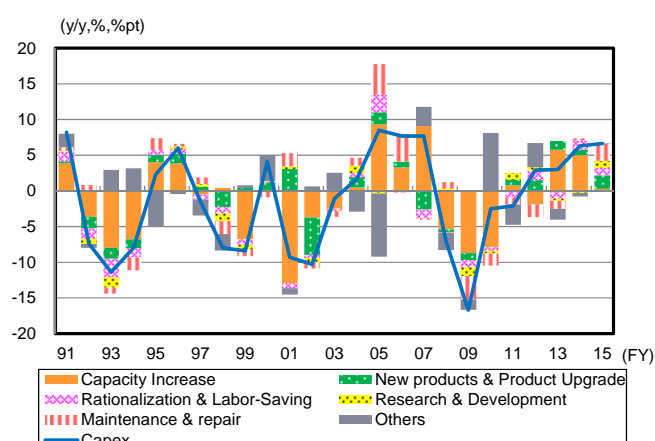
Source: Ministry of Finance; compiled by DIR.

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(All Industries)

Chart 12



Source: Development Bank of Japan; compiled by DIR.

Growth in sales volume holds key to full-scale capital investment

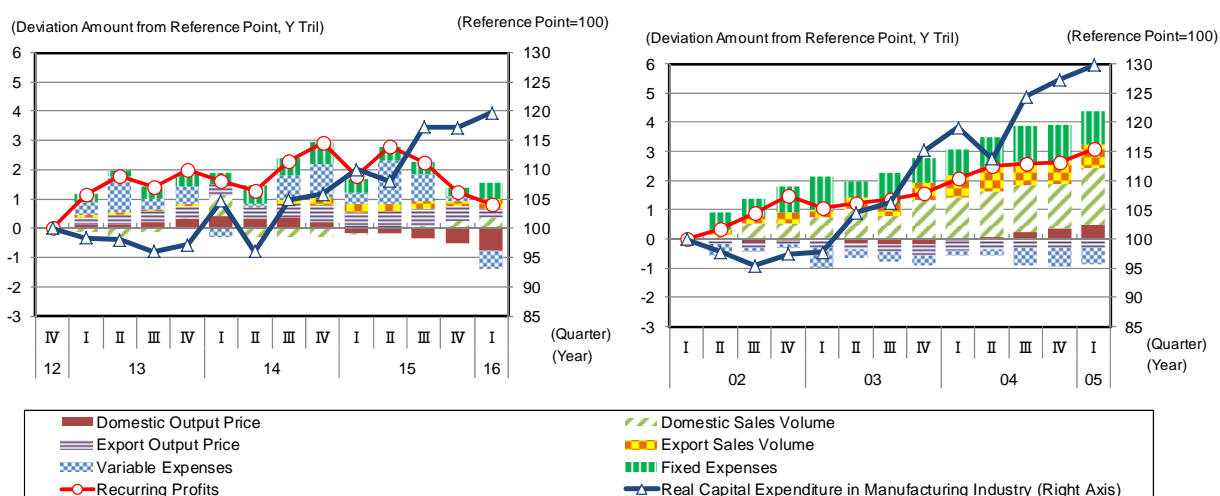
On the other hand, one problem which is often pointed out regarding recent trends in capex is that considering how favorable corporate earnings are, capital spending does not seem to grow as much as one would expect. In this section we examine the factors involved in the sluggish pace of growth in capital investment through an analysis of the relationship of corporate earnings structure to capex.

Chart 13 is a breakdown of corporate earnings by output price, sales volume and other factors. During the profit growth phase after the Oct-Dec period of 2012, variable expenses and export output prices stand out as factors contributing greatly to growth in comparison to the profit growth phase in the Jan-Mar period of 2002. In contrast, the influence of export sales volume was extremely limited.

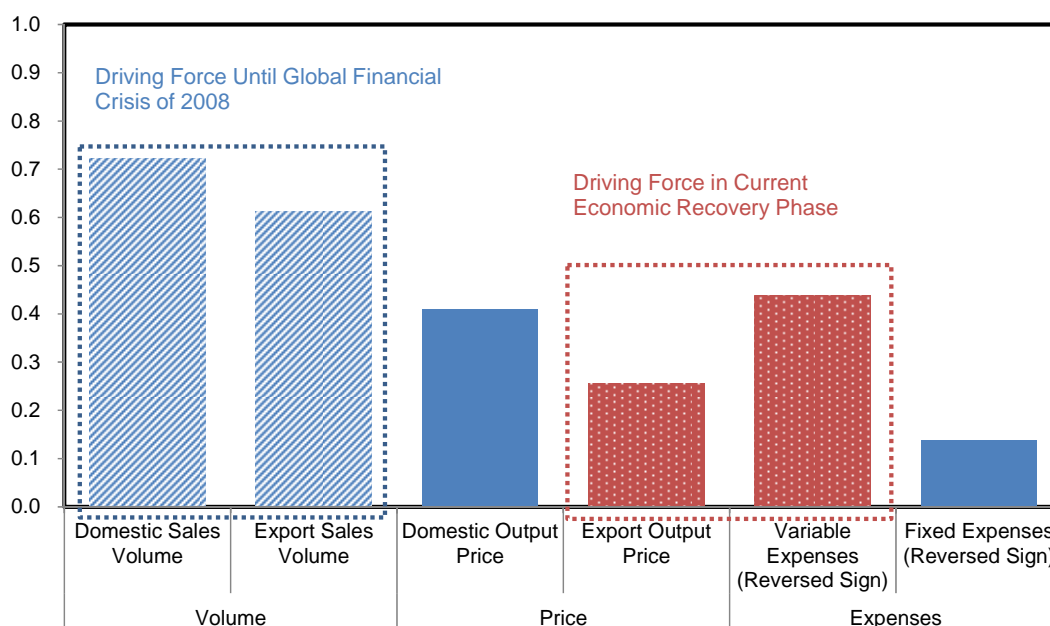
Looking at the correlation between corporate earnings components and capital investment, we see that correlation is strongest with domestic sales volume and export sales volume (Chart14). On the other hand, the correlation between variable expenses and export output price is not very strong. In other 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.

Factor Analysis of Corporate Earnings **Chart 13**



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



Source: Cabinet Office, Ministry of Finance, Ministry of Economy, Trade and Industry; compiled by DIR.
 Note: Coefficient with the greatest absolute value out of 4-quarter time-difference correlation is displayed.

4. Kumamoto Earthquake: Restoration and Reconstruction

The greatest challenge is efforts toward restoration and reconstruction

In considering the future of the Japanese economy, we must keep in mind the possible fluctuations in which could occur due to the effects of the recent earthquake in Kumamoto. The first priority is of course efforts towards restoration and reconstruction, including providing full support to victims of the disaster so that their lives can return to normal as soon as possible. The supplementary budget for FY2016 was formulated on May 17 with an aggregate amount of 778 billion yen. It is now of the utmost importance to formulate a plan for restoration and reconstruction, and to make sure progress on its implementation. Meanwhile, the process of reconstruction must take into consideration the necessity of not only replacing damaged or destroyed structures, but to build a stronger and safer city for the future, which can better withstand a natural disaster.

The amount of damage in the Kumamoto Earthquake may not be nearly as much as in past natural disasters such as that experienced in the Pacific coast of Tohoku Earthquake, which was in effect a complex disaster involving not only an earthquake, but tsunami and nuclear accident as well (Chart 15). On the other hand, unlike other disasters in recent times, aftershocks continued to hit Kumamoto and Oita Prefectures for quite some time after the initial shock, causing major problems. This additional damage due to aftershocks could cause problems for restoration and reconstruction activities.

Taking a look at the industrial structure of Kumamoto and Oita Prefectures, we see that agriculture, forestry and fisheries, as well as mining, account for an especially large share of the national total for these markets (Charts 16 & 17). The recovery of these industries from losses suffered in the earthquake must be carried out as quickly as possible along with the recovery of social infrastructure. Meanwhile, the manufacturing industry suffered damages as well. Supply lines in the automobile manufacturing industry were cut, bringing major downward pressure on production activities throughout the country. Recovery has been taking place gradually since the beginning of May, and excessive worry is not thought to be necessary here.

Scale of Past Natural Disasters

Chart 15

		Amount of Damages	As a Portion of GDP	2005 Equivalent
Great Kanto Earthquake	1923	5.6 Bil Yen	37.50%	-
Ise Bay Typhoon	1959	303.5 Bil Yen	2.30%	991.6 Bil Yen
Niigata Earthquake	1964	267.4 Bil Yen	0.90%	699 Bil Yen
Southern Hyogo Prefecture Earthquake	1995	9 Tril 926.8 Bil Yen	1.98%	8 Tril 485.5 Bil Yen
The Pacific coast of Tohoku Earthquake	2011	16 Tril 915.8 Bil Yen	3.59%	17 Tril 245.3 Bil Yen

Source: Compiled by DIR.

Note: The amount of damages in Southern Hyogo Prefecture Earthquake was estimated by Hayashi et al, while others are by DIR.

Industrial Structure of Kumamoto Prefecture

Chart 16

	Amount (Bil Yen)	Component Ratio (%)	Share of Nationwide Total (%)
Industrial Production Value	4,743	100.0	1.1
Agriculture, Forestry & Fishing	188	4.0	3.5
Mining	4	0.1	1.0
Manufacturing	980	20.7	1.1
Transport Equip Related	501	10.6	1.4
Construction	297	6.3	1.2
Electricity, Gas & Water	72	1.5	0.7
Wholesaling & Retailing	623	13.1	0.9
Finance & Insurance	190	4.0	0.8
Real Estate	758	16.0	1.1
Transportation & Telecommunications	432	9.1	0.9
Services	1,199	25.3	1.2

Source: Cabinet Office; compiled by DIR.

Note: Transport related industries include general machinery, electrical machinery, transport related machinery, and precision equipment.

Industrial Structure of Kumamoto and Oita Prefectures

Chart 17

	Amount (Bil Yen)	Component Ratio (%)	Share of Nationwide Total (%)
Industrial Production Value	8,320	100.0	1.9
Agriculture, Forestry & Fishing	280	3.4	5.2
Mining	16	0.2	3.8
Manufacturing	1,949	23.4	2.1
Transport Equip Related	911	10.9	2.5
Construction	533	6.4	2.1
Electricity, Gas & Water	206	2.5	2.0
Wholesaling & Retailing	1,025	12.3	1.5
Finance & Insurance	328	3.9	1.4
Real Estate	1,250	15.0	1.8
Transportation & Telecommunications	742	8.9	1.5
Services	1,991	23.9	2.0

Source: Cabinet Office; compiled by DIR.

Note: Transport related industries include general machinery, electrical machinery, transport related machinery, and precision equipment.

5. Risk Factors Facing Japan's Economy

Four risks facing Japan's economy

Risk factors for the Japanese economy are: (1) The downward swing of China's economy, (2) Tumult in the economies of emerging nations in response to the US exit strategy, (3) A weak stock market situation brought on by risk-off behavior of investors due to geopolitical risk, and (4) The threat of UK exiting the EU (*Brexit*), and uncertainty regarding Greece.

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 over 1,000 tril yen in excessive lending and over 400 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.

Economic Indicators and Interest Rates

Chart 18

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	-1.7	1.7	-0.2	1.1	1.7	4.0				
Y/y %	0.7	-0.0	0.3	0.2	1.1	1.6	-0.9	0.8	0.8	-0.1
Current account balance										
SAAR (Y tril)	19.2	19.8	20.2	20.4	20.7	19.6	8.7	17.7	20.2	24.4
Unemployment rate (%)										
	3.3	3.2	3.2	3.2	3.2	3.1	3.5	3.3	3.2	3.1
CPI (excl. fresh foods; 2010 prices; y/y %)										
	0.0	-0.1	-0.3	-0.0	0.3	0.7	2.8	-0.0	0.2	1.9
10-year JGB yield										
(period average; %)	0.29	-0.01	-0.10	-0.10	-0.15	-0.15	0.46	0.26	-0.13	-0.20

Source: compiled by DIR.

Note: Estimates taken from DIR's *Japan's Economic Outlook No.189*.