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Japan's Economy: Monthly Review

Japan's Economic Outlook for 2014

Will a virtuous circle actually take hold in Japan's economy?

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Summary

- **Economic outlook revised:** In light of the second preliminary Jul-Sep GDP release (Cabinet Office), we have revised our economic growth outlook. We now forecast real GDP growth of +2.5% y/y for FY13 (previous forecast: +2.6%) and +1.0% for FY14 (+1.0%). We have revised our economic outlook downward in view of the economic growth rate for Jul-Sep 2013 coming in lower than anticipated and factoring in the annual revision of FY11 and FY12 GDP, released along with the second preliminary 3Q 2013 GDP report.
- **Japan's Economic Outlook for 2014:** After hitting bottom in November 2012, Japan's economy has entered a recovery phase. We believe it will continue to expand steadily supported by (1) increases in exports based on the backs of the US economic recovery, (2) ongoing depreciation of the yen and the rise in stock prices supported by the BOJ's monetary easing, and (3) economic stimulus measures to offset the effects of the consumption tax hike. Risks that will need to be kept in mind regarding the Japanese economy are: (1) turbulence in emerging economies, (2) China's shadow banking problem, (3) a reigniting of the European sovereign debt crisis, and (4) a surge in crude oil prices stemming from geopolitical risk.
- **Will a virtuous circle actually take hold in Japan's economy as intended by the government?:** In this report, we analyze whether or not the virtuous circle that the government targets will actually occur. First, from a wage perspective, an increase in wages will have a positive impact on non-manufacturing sector. In particular, higher contractual cash earnings will invigorate personal consumption, centering on durable goods. However for the virtuous circle to be sustained, a key issue will be whether or not the increase in wages can be passed through to output prices. Second, from a capex perspective, a tax cut for capital investments could invoke more such investments in the future. However, given Japan's sluggish capacity utilization rate, the ability of capex to recover will likely to be weak. The moderate downtrend of capex's production inducement coefficient in recent years is also a matter of concern. The capex trend is greatly influenced by growth expectations. Hence, increasing the growth expectations of companies through measures such as cutting the corporation tax and drastic deregulation is the true path towards the recovery of capex. Finally, we examine the effects of corporation tax cut and present a quantitative simulation of economic trends.

1. Japan's Economic Outlook for 2014

Economic outlook revised

In light of the second preliminary Jul-Sep GDP release (Cabinet Office), we have revised our economic growth outlook. We now forecast real GDP growth of +2.5% y/y for FY13 (previous forecast: +2.6%) and +1.0% for FY14 (+1.0%). We have revised our economic outlook downward in view of the economic growth rate for Jul-Sep 2013 coming in lower than anticipated and factoring in the annual revision of FY11 and FY12 GDP, released along with the second preliminary 3Q 2013 GDP report.

Jul-Sep 2013 real GDP increased an annualized 1.1% q/q in the second preliminary estimate

In the second preliminary estimate of Jul-Sep (3Q) 2013 GDP (Cabinet Office), real GDP was +0.3% q/q, annualized at +1.1%, a downgrade from the first preliminary estimate (up 0.5%; up 1.9%). The result was short of the market consensus (up 0.4%; up 1.6%) but does not show any particular negative surprise. We thus maintain our view on the economy.

By demand source, domestic demand made a contribution of +0.7 percentage points (first preliminary: +0.9 points) to Jul-Sep GDP q/q growth, while foreign demand made a contribution of -0.5 points (-0.5 points), meaning the gain in domestic demand cancelled out the decline in foreign demand, pushing up GDP growth. Personal consumption saw the fourth quarterly gain in a row, although it lost some momentum in Jul-Sep, while housing investment saw the sixth quarterly gain in a row. Both confirm steadiness in housing sector demand. At the same time, public investment posted the fourth quarterly gain in a row, reflecting stimulus measures. Thus, among domestic demand, that of the housing and public sectors has driven the economy. Meanwhile, capex grew for the second consecutive quarter but only at a very limited pace.

Main scenario: Japan's economy to continue growing

After hitting bottom in November 2012, Japan's economy has entered a recovery phase. Economic policies of the Abe administration (so-called "Abenomics") represent an appropriate set of policies with the potential of jump-starting the revival of the Japanese economy and monetary policy measures in particular are yielding marked results. We believe it will continue to expand steadily supported by (1) increases in exports based on the backs of the US economic recovery, (2) ongoing depreciation of the yen and the rise in stock prices supported by the BOJ's monetary easing, and (3) economic stimulus measures to offset the effects of the consumption tax hike.

In terms of GDP demand components, personal consumption has been the driving force behind the economic recovery. It is also highly likely that personal consumption will gain momentum toward end-FY13 and boost the economic growth rate as demand escalates in advance of the consumption tax hike scheduled in April 2014. Although exports turned downward in Jul-Sep 2013, we believe they will return to a growth path in view of the improvement in competitiveness ensuing from yen's depreciation to date and the expansion of foreign economies, mainly the US. Corporate earnings are also likely to improve further reflecting higher exports and firm domestic demand and we anticipate that capex will continue to grow.

Why are wages stagnant in Japan?

The need to increase wages has become a leading political issue in Japan. In *Japan's Economy: Monthly Review, Why Are Wages Stagnant in Japan*, 3 December 2013, we provide a multifaceted examination of the reasons for the stagnation of wages in Japan and present our outlook for their future direction.

First, an international comparison of real wages demonstrates that wages are stagnating in Japan not because labor's share is low, but because there are issues involving labor productivity and corporate competitiveness. Thus the key is to increase labor productivity and improve corporate competitiveness by strengthening the third arrow of Abenomics (growth strategy) in order to raise real wages in Japan.

Second, a simulation of the future direction of wages reveals that wages are likely to gradually trend upward as the economy undergoes a cyclical recovery. It is also highly likely that regular payments will continue to grow at the macro level given an improvement in the supply-demand balance for labor. However, the increase in per-employee wages will be limited if it is based solely on a cyclical economic recovery. For wages to exceed their former peak, it will be crucial for the government to (1) strengthen the third arrow of Abenomics (structural reform of non-manufacturing and medical and nursing care sectors) and to (2) address the problems associated with non-regular employment. Companies will also need to accelerate the pace of wage increases as much as possible to avoid the "fallacy of composition".

Four risk factors: Examination of the world economic cycle

Risks that will need to be kept in mind regarding the Japanese economy are: (1) turbulence in emerging economies, (2) China's shadow banking problem, (3) a reigniting of the European sovereign debt crisis, and (4) a surge in crude oil prices stemming from geopolitical risk. Of these four risks, it is worth underscoring that the first is closely related to the second and third.

Examining the world economic cycle, advanced economies led by the US drove emerging economies in the past. However, a decoupling has currently taken place—advanced economies are performing well but emerging economies are stagnating. We believe that this decoupling is occurring for three reasons: (1) the dwindling in the amount of loans from European financial institutions to emerging economies in light of the European debt crisis, (2) the sluggishness of the Chinese economy, and (3) concerns that money will be taken out of emerging economies based on worries that the Fed will implement exit measures from a quantitative easing. In the final analysis, we anticipate that the collapse of emerging economies will be avoided as the US economy continues to expand. Nevertheless, the state and the future direction of the Chinese economy will continue to require close monitoring.

2. Will a Virtuous Economic Circle Actually Take Hold in Japan?

Two virtuous circles

In this section we examine the question of whether a virtuous economic circle will actually take hold in Japan as intended by the government. Specifically, we analyze the wage cycle and the capex cycle.

First, from a wage perspective, an increase in wages will have a positive impact on non-manufacturing sector. In particular, higher contractual cash earnings will invigorate personal consumption, centering on durable goods. However for the virtuous circle to be sustained, a key issue will be whether or not the increase in wages can be passed through to output prices.

Second, from a capex perspective, a tax cut for capital investments could invoke more such investments in the future. However, given Japan's sluggish capacity utilization rate, the ability of capex to recover will likely to be weak. The moderate downtrend of capex's production inducement coefficient in recent years is also a matter of concern. The capex trend is greatly influenced by growth expectations. Hence, increasing the growth expectations of companies through measures such as cutting the corporation tax and drastic deregulation is the true path towards the recovery of capex.

Finally, we examine the effects of corporation tax cut and present a quantitative simulation of economic trends.

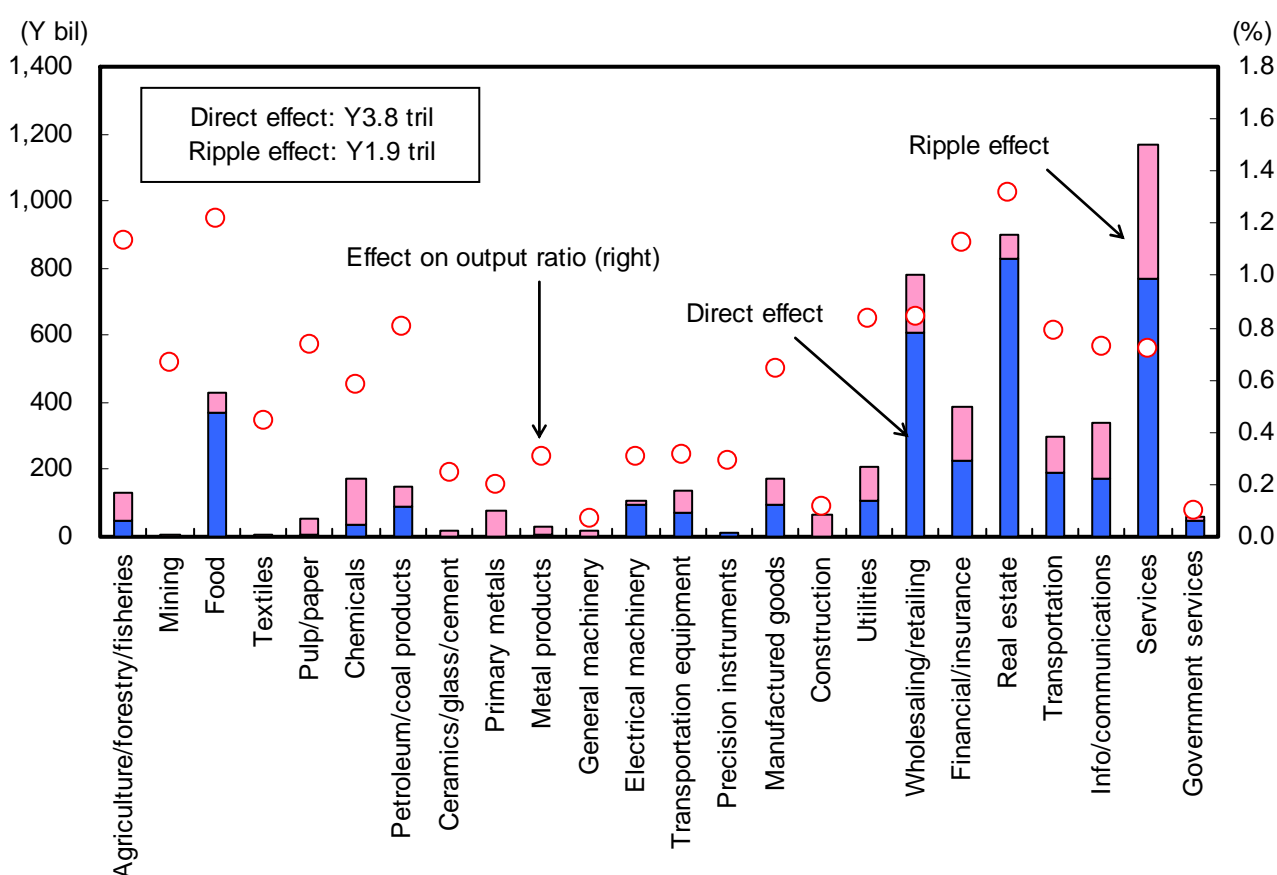
2.1 Virtuous circle stemming from higher wages

Higher household income will have a positive impact centering on non-manufacturing sector

First, we examine a virtuous circle stemming from higher wages. To achieve such a virtuous circle, it will be necessary for the improvement in corporate earnings to lead to higher wages and personal consumption and for the increase in personal consumption to further improve corporate earnings. Chart 1 presents an estimate using input-output tables (Cabinet Office) of the impact of a 2% rise in employee compensation on the output of domestic industries. Should employee compensation rise by 2% (about Y4 trillion), overall output would increase by Y3.8 trillion along with increased personal consumption. Ripple effects (increased output of raw materials and other goods from the direct effect and increased output from the higher income) would boost output by another Y1.9 trillion. Hence, output would grow by a total of Y5.7 trillion. By industry, the increase in output would be substantial for non-manufacturing sectors such as services, real estate, and wholesaling/retailing with a large share of output oriented towards personal consumption. In contrast, in the manufacturing sector where only a small share of the output goes to personal consumption, only a few industries like food products would benefit, and the impact, including ripple effects, of the higher income on output would not be that large.

Impact of 2% Rise in Employee Compensation on Industries

Chart 1



Source: Cabinet Office, Ministry of Internal Affairs and Communications; compiled by DIR.

Notes: 1) Direct and ripple effects mean increases in output through direct and ripple effects.

2) Effect on output ratio = increase in output through direct and ripple effects / output when employee compensation is not raised.

Higher contractual cash earnings will invigorate personal consumption centering on durable goods

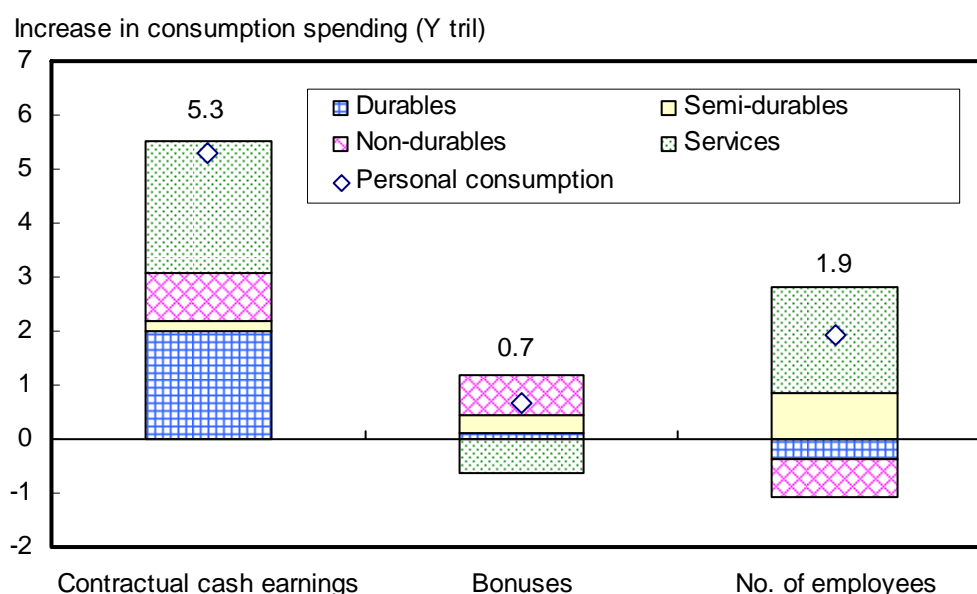
Income growth will lead to an increase in personal consumption. A question worth asking at this point is whether the impact on personal consumption would differ depending on how income increases. In other words, would an increase in basic pay have a different impact on personal consumption than an

increase in one-time payments such as bonuses or an increase in the number of employees? To better understand these differences on a quantitative basis, we divided employee income into contractual cash earnings (regular payments plus overtime payments), bonuses, and the number of employees to estimate how each change would influence personal consumption (Chart 2). Our estimates show that an increase in contractual cash earnings would have the greatest effect in increasing personal consumption. If an increase in contractual cash earnings boosts total employee income by 2%, personal consumption would increase Y5.3 trillion, mainly through more consumption of durable goods and services. The effect of an increase in the number of employees would be Y1.9 trillion, less than half that of higher contractual cash earnings, and the effect of an increase in bonuses would be an even smaller, at Y0.7 trillion.

We can conclude from the above results that, in order to achieve a virtuous circle where higher wages invigorate personal consumption and improve corporate earnings, it would be more effective if the increase in wages occurs through contractual cash earnings centering on regular payments rather than through bonuses.

Impact of 2% Rise in Employee Compensation on Personal Consumption

Chart 2



Source: Cabinet Office, Ministry of Health, Labour and Welfare, Ministry of Internal Affairs and Communications; compiled by DIR.

Note: Employee compensation expressed as "total cash payments multiplied by no. of employees". If employee compensation rises 2%, contractual cash earnings would be up 2.4%, bonuses up 12.0%, and no. of employees up 2.0%. If this is the case, personal consumption would increase as shown in the chart. Estimation period: Jan-Mar 1994 to Apr-Jun 2013.

To overcome deflation, passing through the increase in wages to output prices will be essential

From the perspective of overcoming deflation, it will be important for the wage increase to become broadly based and for the country to return to an economy where base pay rises each year. Currently, statements regarding increasing base pay are being heard from the heads of large corporations, and the Japanese economy has finally taken the first steps toward overcoming deflation.

The key is the sentiment for increasing wages to be sustained beyond 2014. Should wages rise for only one year and decline afterwards, a virtuous circle will not be generated and deflation will return. Wage increases mean higher costs for companies and decreased earnings. If earnings do not recover, wages will stop increasing and there is even a possibility of an eventual wage cut. Hence, the condition for

achieving a virtuous circle through an ongoing wage increase is for corporate earnings to improve concurrently with an increase in wages.

Wage increases are not easily passed through to output prices

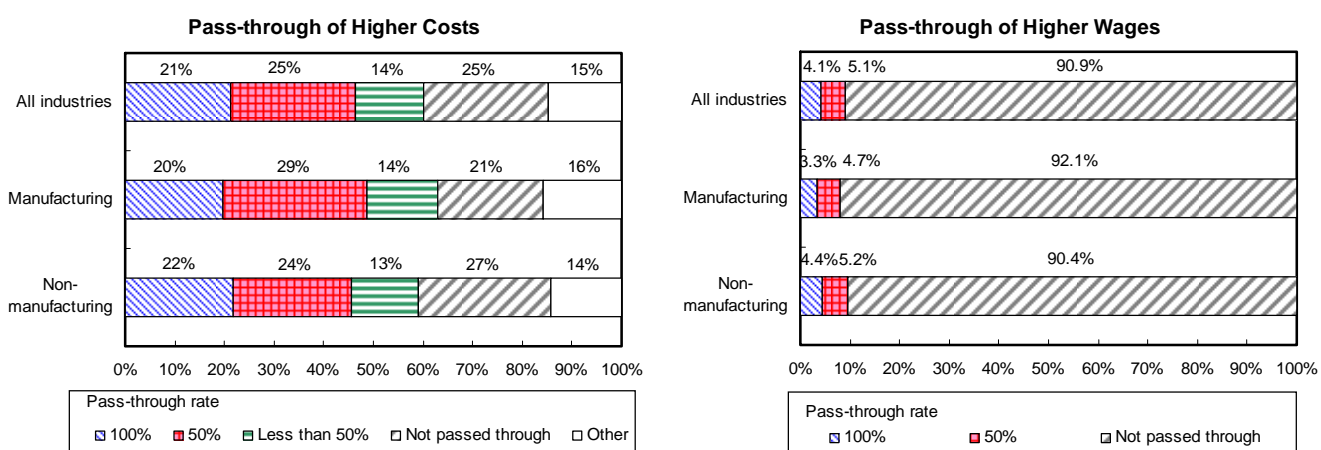
Wages can be increased through a number of ways without damaging earnings. From the perspective of overcoming deflation, it is important to pass through the increase in wages to output prices. A Cabinet Office survey indicates, however, that many business executives believe it will be difficult to pass through the increase in wages to output prices.

Chart 3 depicts the results of a survey asking how much output pieces reflect cost increases and changes in wages. While 60% of companies responded that cost increases are reflected in output prices, less than 10% said that changes in wages are reflected in output prices.

Consumers must also accept higher prices

A major reason for the difficulty of reflecting changes in wages in output prices is the belief held by companies that consumers will not accept higher prices. Thus for deflation to end in Japan, it is crucial for companies to pass through, in full, the increase in wages to output prices and for consumers to accept them.

Pass-through of Higher Costs and Wages to Output Prices Chart 3



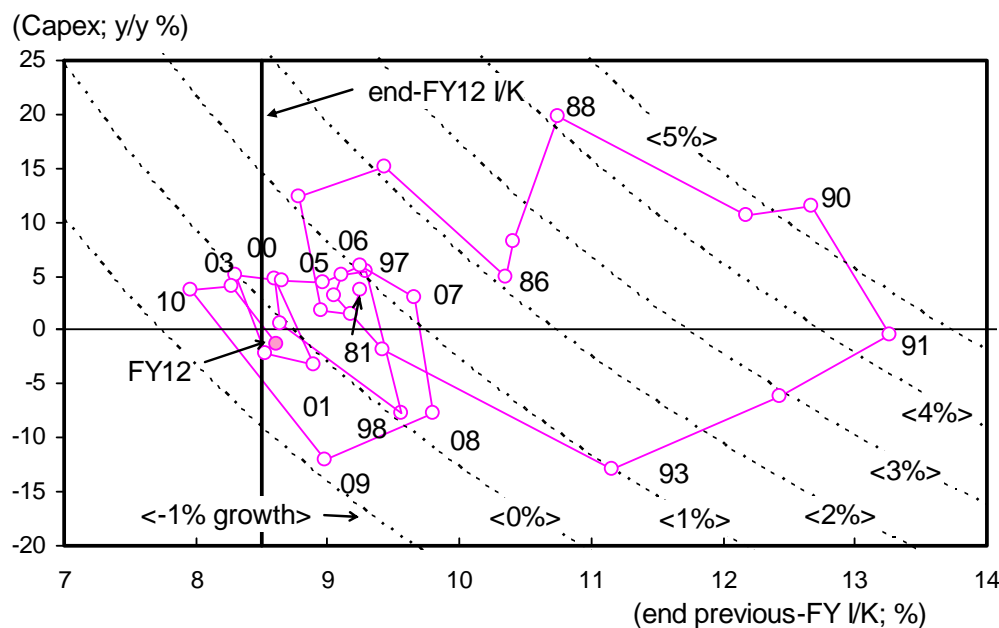
Source: Cabinet Office, *Opinion Survey on Corporate Management* (available in Japanese); compiled by DIR.

2.2 Virtuous circle stemming from higher capex

Tax cut for capital investments should “prime the pump” for more investments

Next, we examine a virtuous circle stemming from higher capex. A tax cut for capital investments currently being promoted by the government can be expected to “prime the pump” for such investments to a certain degree.

The capital stock cycle portrayed in Chart 4 indicates that the adjustment of capital stock is progressing steadily in Japan. A graph with the y/y growth rate of capex plotted along the vertical axis and the ratio of capex (flow) to capital stock as of the end of the previous year plotted along the horizontal axis traces a clockwise cycle. The relationship between this clockwise cycle and the hyperbolic curve corresponding to the expected economic growth rate enables us to judge the current stage of capital expenditures.

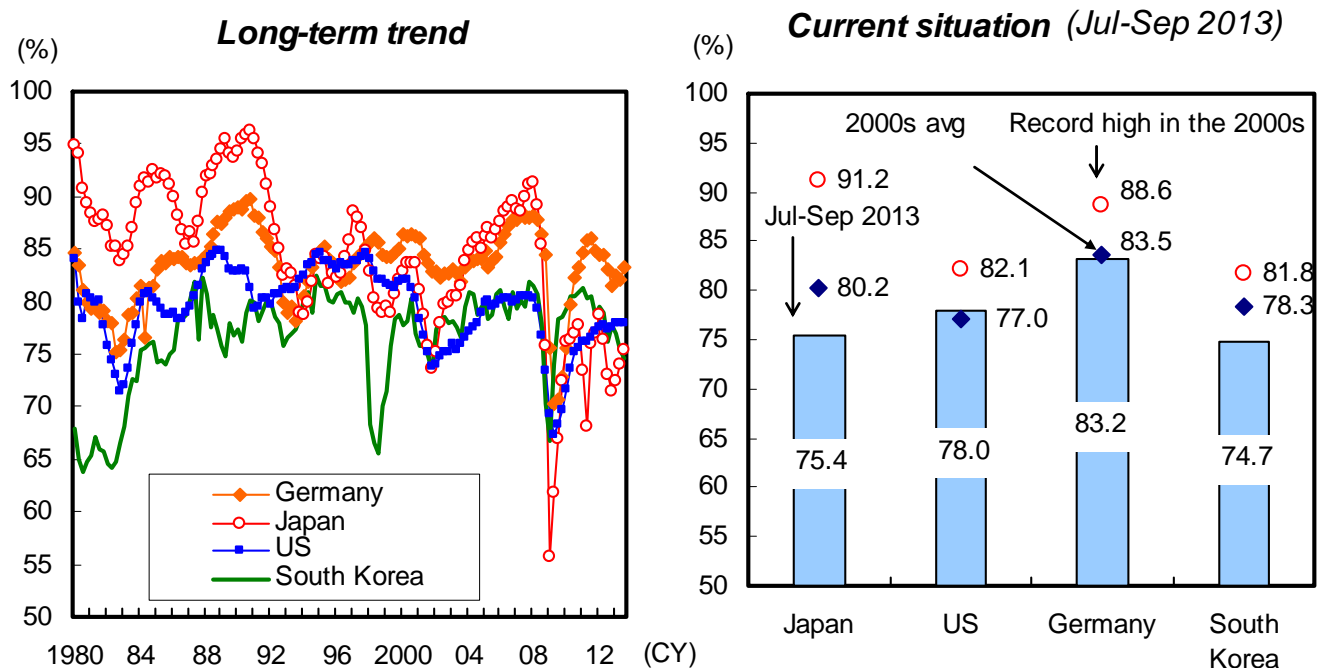


Source: Bank of Japan.

At the present moment, the adjustment of capital stock has progressed to a sufficient extent. Even if we assume 0% growth expectations, the likelihood is high that capex will increase going forward. In the *Financial Statements Statistics of Corporations by Industry* (Ministry of Finance), capex is trending at a level far below depreciation, meaning net investment is negative. There are hardly any cases in the last half century or so where net investment has been negative. This suggests the possibility that companies have overshot the mark in reducing capex.

Japan's capacity utilization rate is at a low level

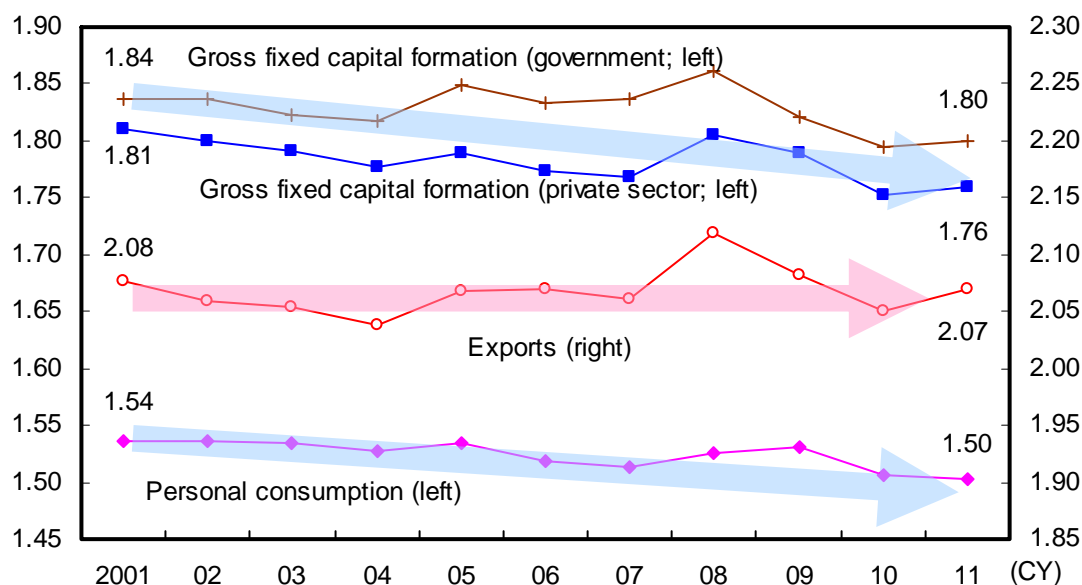
Given Japan's sluggish capacity utilization rate, the ability of capex to recover will likely be weak on the whole. Chart 5 illustrates the long-term trend of the capacity utilization rate in Japan, the US, Germany, and South Korea. Focusing on Japan's utilization rate, it has trended between 80% and 95% for the most part before the Lehman crisis. With the onset of the Lehman crisis, however, Japan's capacity utilization rate receded to an unprecedented level. As the economy subsequently recovered, the capacity utilization rate has increased, but it is still trending at an extremely low level in the 70% range. The US, Germany, and South Korea also experienced plunging production and the sharp decline in the capacity utilization rate as a consequence of the Lehman crisis. A comparison of the current level of the capacity utilization rate indicates, however, that it has returned to its average level in the 2000s in the US and Germany. In the case of South Korea, while its capacity utilization rate is currently at about the same level as Japan, in historical terms it has been less than that of Japan. A comparison of the average rate and the maximum rate since 2000 for South Korea and Japan discloses that the capacity utilization rate has not retreated as far in South Korea. In the years since the Lehman crisis, companies in Japan have curtailed new capex to adjust the level of capital stock. In both historical and international terms, the capacity utilization rate remains at a very low level in Japan, and the substantial improvement of capex is still hard to foresee. Given this situation, the manufacturing sector should be able to respond to higher demand by increasing the capacity utilization rate. Hence, Japan remains at a place where increases to capex will be difficult at least for the purpose of expanding capacity.



Source: Ministry of Economy, Trade and Industry, Federal Reserve Board, Ifo Institute, Statistics Korea; compiled by DIR.

Ripple effects of domestic demand on production is trending downward

The moderate downtrend of production inducement coefficient of capex in recent years is also a matter of concern. Chart 6 uses input-output tables to portray how the coefficient of demand components changed in the 2000s. First, regarding the coefficient of exports, while fluctuating year to year, it has generally trended flat. In the case of other demand components, we can see that the coefficient is trending downward for personal consumption, gross fixed capital formation (private sector), and gross fixed capital formation (public sector). This suggests that the ripple effects of domestic demand on production have diminished in the 2000s. For Japan's economy to achieve an autonomous virtuous circle, a proper functioning will be needed of the relationship where higher domestic demand leads to higher corporate earnings and where the improvement in corporate earnings gives rise to higher corporate investments and personal consumption. The ripple effects of domestic demand on the corporate sector tending to weaken is a matter that will need to be monitored with care.



Source: Cabinet Office; compiled by DIR.

Abenomics will stimulate companies' interest in capex through two routes

The trend of capex is greatly influenced by growth expectations. Hence, increasing growth expectations of companies through such measures as corporation tax cut and drastic deregulation is the true path toward the recovery of capex.

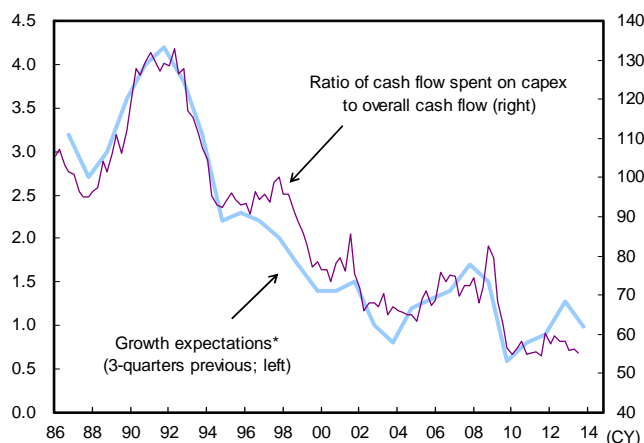
Chart 7 compares real growth expectations and the ratio of capex to cash flow. We can ascertain from the chart that real growth expectations lead capex. This indicates that companies consider the economic outlook (real growth expectations) when making decisions about capex. Thus, if the economic outlook of the corporate sector improves, companies can be expected to invest actively in production facilities.

This brings us to consider the correlation between real growth expectations of the corporate sector and the growth rate of nominal and real GDP. This correlation is shown in Chart 8, where we learn that real growth expectations are correlated more highly with nominal GDP than real GDP. Generally speaking, nominal GDP is said to be closer than real GDP to the sentiment on the economy held by business executives. The possibility is suggested that the corporate sector places more importance on nominal GDP than on real GDP in considering the economic outlook (real growth expectations).

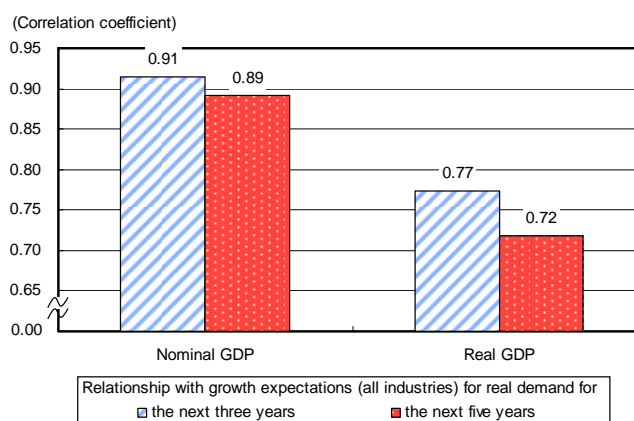
Given the relationship described above, it is reasonable to think that the decrease in capex in Japan is largely the outcome of the lackluster growth of nominal GDP ensuing from prolonged deflation, which in turn reduced growth expectations of the corporate sector.

The economic policies currently being pursued by the Abe administration have the potential of stimulating corporate interest in capex by increasing real growth expectations through two routes. First, if Japan is able to surmount a prolonged period of deflation through bold monetary easing, the growth rate of nominal GDP can be expected to rise. Then, with the pickup of nominal GDP, real growth expectations of companies should improve. Second, if the third arrow of Abenomics (growth strategies) can be strengthened through the corporation tax cut and drastic deregulation, this will directly increase real growth expectations of the corporate sector.

Capex-Cash Flow Ratio and Growth Expectations*
(all industries; %)
Chart 7



Relationship between Growth Expectations* and GDP Growth
Chart 8



2.3 What will be effects of corporation tax cut?

Quantitative analysis of effects of corporation tax cut

The Abe administration is placing expectations on corporation tax cut as a means of setting off a virtuous circle in Japan's economy. Based on the above analysis, we now present a quantitative analysis of effects of corporation tax cut.

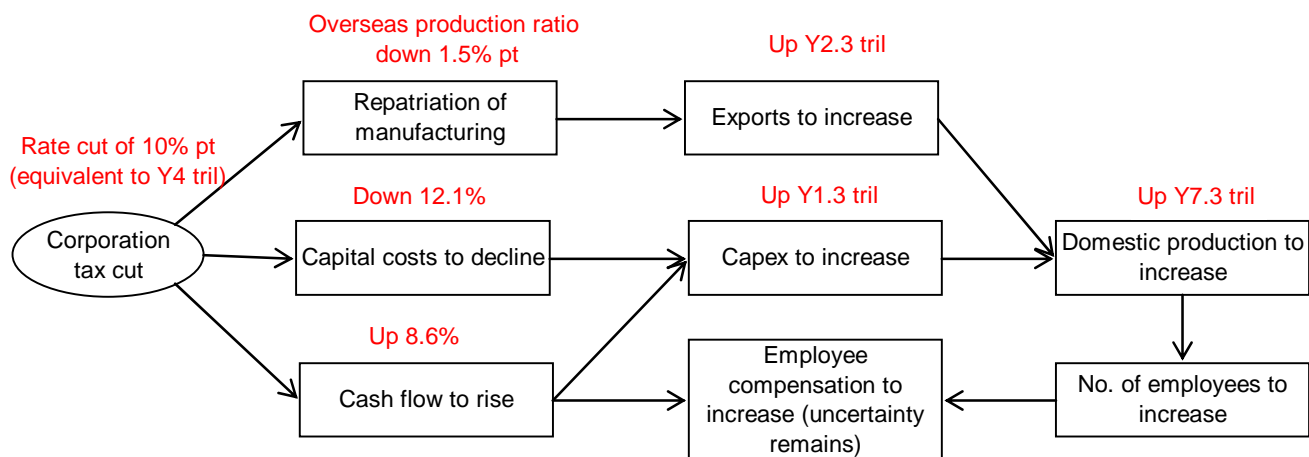
First, the corporation tax cut will increase the after-tax profits and corporate cash flows. Also, since it will lower the cost of capital, companies will adopt a more positive stance toward capex.

In addition, since the corporation tax cut will improve the domestic business environment, a certain proportion of ongoing transfer of business operations overseas is likely to be brought back to Japan. The expansion of domestic production and exports rather than overseas production will be a factor that further pushes up capex. Should the domestic activity of manufacturers gain momentum, positive effects can be expected to spread to the production of parts and other intermediate goods and to a broad range of industries such as the transportation industry.

When we estimate the effect of higher production, exports, and capex on the economy, reducing the corporation tax rate by 10 percentage points (about Y4 trillion) would boost domestic production by around Y7.3 trillion. Also, employee income would rise as corporations return some of the increase in cash flow to workers and as the number of employees increases accompanying higher domestic production. As a result, personal consumption would become energized, and the economy would expand further.

While there is much uncertainty about effects of corporation tax cut, such as the degree to which companies would return to employees the increase in cash flow, there can be no doubt that its impact would be considerable.

Effects of Corporation Tax Cut Chart 9



Source: Compiled by DIR.

Impact of corporation tax cut on capex

Avg reduction in effective corporation tax	5% pt	10% pt
(a) Change in capital costs (%)	-6.5	-12.1
Effect of (a) on capex (%)	0.7	1.4
(b) Change in cash flow (%)	4.3	8.6
Effect of (b) on capex (%)	0.3	0.6
Aggregate impact on capex (%)	1.0	2.0

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

Note: Estimation result of capex function as follows:

$\text{Log(IP)} = 10.77 + 0.07\text{log(RCF)} - 0.01\text{DI} - 0.11\text{log(CC)}$, and $\text{Adj-R} = 0.74$, where significance of all variables is 1%, IP is real capex, RCF (real cash flow) = (recurring profit x (1 - effective corporation tax rate) + depreciation) / capex deflator, DI is production capacity DI (all companies, all industries), and CC stands for capital costs.

Impact of corporation tax cut on exports and production

Avg reduction in effective corporation tax	5% pt	10% pt
Change in overseas production ratio	-0.8% pt	-1.5% pt
Increase in exports	Y1.2 tril	Y2.3 tril
Increase in domestic production	Y2.3 tril	Y4.7 tril

Source: Ministry of Economy, Trade and Industry, Ministry of Finance, Institute for Fiscal Studies, Haver Analytics; compiled by DIR.

Notes:1) Estimation equation for overseas production ratio as follows:

$$\text{log(Overseas production ratio)} = 3.29 + 0.0029 \text{EATR} + 0.066 \text{log(DEMAND)} + 0.11 \text{log(NEER)}$$

Where, overseas production ratio = sales of companies incorporated abroad / (sales of companies incorporated abroad + export value) x 100, EATR = effective average corporation tax rate in Japan - effective average corporation tax rate abroad, DEMAND = sales of companies incorporated abroad + export value, NEER=nominal effective exchange rate. Significance of all variables is 1%.

2) Sales of companies incorporated in and export value to the US, UK, Belgium, France, Germany, Italy, Netherlands, Canada, Spain, and Australia based on panel estimation using fixed effect model. Estimation period: CY1990-2005; NEER one-quarter posterior.

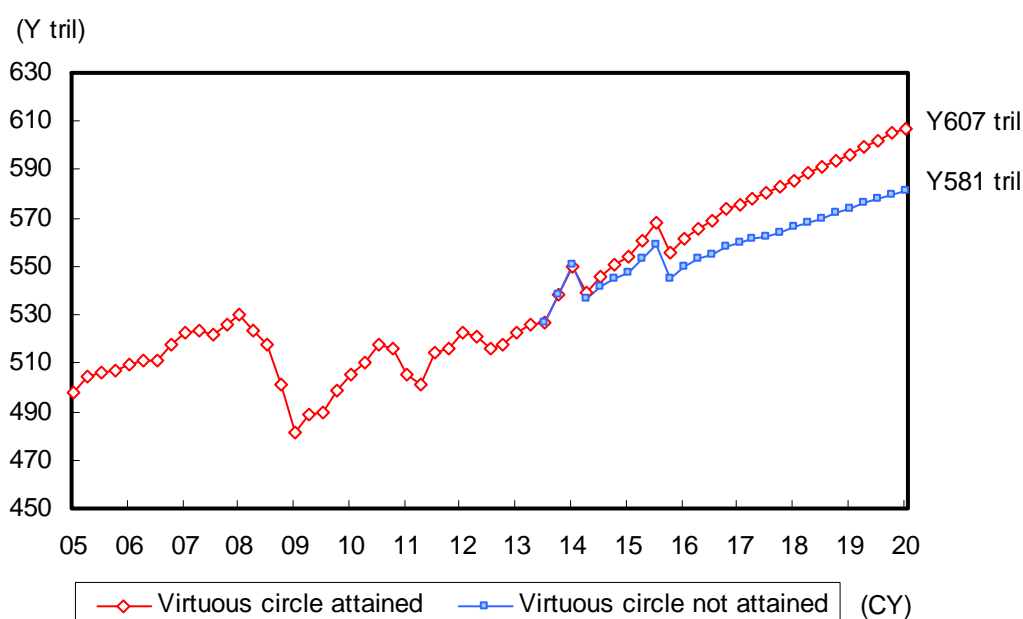
Supplement: Simulation of Economic Trends

Will a virtuous circle actually take hold in Japan's economy?

To summarize our analysis of a virtuous circle in this section, we now present a simulation of economic trends. Chart 10 provides a quantitative simulation of Japan's economy for the case of a virtuous circle taking hold and the case where it does not do so.

In the case where a virtuous circle is achieved, wages would rise on a sustained basis through the increase in base pay, and Japan would be able to surmount deflation. Also, through such effects as corporation tax cut, domestic corporate activity would gain momentum and capex would rise. Should special economic zones that are currently being considered bear fruit and should Japan gain competitiveness as a site of businesses, manufacturing operations that have moved overseas would begin to return to Japan. Furthermore, labor productivity would increase reflecting higher capex and the expansion of demand. With the rise of labor productivity, real wages would also increase and personal consumption would be greatly invigorated. Under such assumptions, Japan's potential growth rate would dramatically increase. We estimate that real GDP would be augmented by around Y25 trillion in 2020, compared to the case where a virtuous circle is not achieved.

GDP Outlook: Virtuous Circle Attained vs. Not Attained Scenario Chart 10



Source: Cabinet Office; compiled by DIR.

Assumptions for virtuous circle attained scenario

	Virtuous circle attained scenario	Virtuous circle not attained scenario
Wages	Increase in base pay occurs, pushing up wages	Increase in base pay doesn't occur and real wages decline reflecting consumption tax
Corporation tax	Corporation tax is cut	No corporation tax cut
Capex	Capex increases reflecting improvement in corporate earnings and corporation tax cut	Capex doesn't increase even if corporate earnings increase
Manufacturing	Repatriation of manufacturing occurs	Overseas manufacturing not reduced

Source: Compiled by DIR.

Outlook for Japanese Economy, Interest Rates

Chart 11

Indicator	2012	2013			2014		FY11	FY12	FY13	FY14
	Oct-Dec	Jan-Mar	Apr-Jun	Jul-Sep	Oct-Dec	Jan-Mar				
	Actual				DIR estimates		Actual		DIR estimates	
Real GDP										
Q/q %, annualized	0.6	4.5	3.6	1.1	3.6	4.2				
Y/y %	-0.3	0.1	1.2	2.4	3.1	3.0	0.3	0.7	2.5	1.0
Current account balance										
SAAR (Y tril)	4.3	3.1	8.9	2.2	2.6	3.1	7.6	4.4	4.2	8.0
Unemployment rate (%)	4.2	4.2	4.0	4.0	4.0	3.9	4.5	4.3	4.0	3.8
CPI (excl. fresh foods; 2010 prices; y/y %)	-0.1	-0.3	0.0	0.7	0.8	0.9	-0.0	-0.2	0.6	2.9
Unsecured overnight call rate										
(period end; %)	0.100	0.100	0.100	0.100	0.100	0.100	0.100	0.100	0.100	0.100
10-year JGB yield										
(period average; %)	0.76	0.66	0.77	0.73	0.70	0.75	1.05	0.76	0.74	0.85

Source: Compiled by DIR based on various statistics.

Note: Estimates taken from DIR's *Japan's Economic Outlook No. 179 Update*.