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Japan's Economy: Monthly Review

Will Japan's Economy Remain in a Lull or Lapse into recession?

Japan's economy expected to remain in a temporary lull, but there is still risk of recession

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Summary

- Japan's economy enters a temporary Iull: In light of the 2nd preliminary Apr-Jun 2015 GDP release (Cabinet Office), we have revised our economic growth outlook. We now forecast real GDP growth of +1.0% in comparison with the previous year for FY15 (+1.1% in the previous forecast) and +1.7% in comparison with the previous year for FY16 (+1.9% in the previous forecast). Japan's economy has entered a temporary Iull, but we expect it to avoid falling into recession due to the following factors: (1) Continuation of the virtuous circle brought on by Abenomics, and (2) A gradual comeback in exports centering on the US. (See *Japan's Economic Outlook No. 186 Update(Summary)*, by Mitsumaru Kumagai, 11 September 2015.)
- Will Japan's Economy Remain in a Lull or Lapse into recession?: The major focal point for Japan's economy in the near future is the question of whether the current situation is merely a temporary lull, or whether Japan will become mired in a recession. Judging from the performance of major demand components according to GDP statistics, there is some risk of the economy falling into recession. However, examination of three major judgment criteria ("merkmal") suggests that Japan's economy will be able to avoid a recession and head toward a moderate economic growth phase.



1. Japan's Economy Enters Temporary Lull

Japan's economy enters a temporary lull

In light of the 2nd preliminary Apr-Jun 2015 GDP release (Cabinet Office), we have revised our economic growth outlook. We now forecast real GDP growth of +1.0% in comparison with the previous year for FY15 (+1.1% in the previous forecast) and +1.7% in comparison with the previous year for FY16 (+1.9% in the previous forecast). Japan's economy has entered a temporary lull, but we expect it to avoid falling into recession due to the following factors: (1) Continuation of the virtuous circle brought on by Abenomics, and (2) A gradual comeback in exports centering on the US. (See *Japan's Economic Outlook No. 186 Update(Summary)*, by Mitsumaru Kumagai, 11 September 2015.)

Real GDP growth rate for the Apr-Jun 2015 period declined by -1.2% q/q annualized (-0.3% q/q)

The real GDP growth rate for Apr-Jun 2015 (2^{nd} preliminary est) was revised upwards to -1.2% q/q annualized (-0.3% q/q) in comparison to the 1^{st} preliminary report (-1.6% q/q annualized and -0.4% q/q). Results also exceeded market consensus at -1.6% q/q annualized (-0.4% q/q). The fact that results exceeded market consensus is attributed to the extent to which inventory investment was revised upwards, coming in well above original expectations. Our comprehensive assessment of this modest revision of the real GDP growth rate is that the 2^{nd} preliminary estimate confirms our previous opinion that Japan's economy is in a temporary lull due to weak exports and consumption. With inventories accumulating to an extent which was previously unexpected and capex receiving a downward revision, the substance of this revision does not look good.

While inventory investment was revised upwards more than expected, capex suffered a downward revision

Performance by demand component in the revised Apr-Jun 2015 results shows capex suffering a downward revision, but inventory investment getting a larger upward revision than was originally expected, thereby providing some upward pressure to overall results. The results of corporate statistics brought capex investment down by -0.9% q/q, a downward revision in comparison to the 1st preliminary GDP estimate (-0.1%). Meanwhile inventory investment grew by +0.3%pt q/q, an upward revision from the 1st preliminary's +0.1%pt, exceeding market consensus by +0.2%pt q/q. Looking at inventory investment by category we see that all four major categories were revised upwards, with inventory growth seen in three areas – finished goods, raw materials, and distribution inventory. It should be noted, however, that there are recent signs of inventory accumulating.

Meanwhile, public investment was revised downwards from the 1st preliminary report, but no so much as to have a great influence on the final GDP figure. Housing investment, imports and exports were flat in comparison to the 1st preliminary report, while personal consumption and government consumption were revised upwards.

Japan's economy expected to gradually make a comeback, but a sense of uncertainty regarding the future has been increasing recently

Our basic economic scenario sees Japan's economy gradually making a comeback. We expect real GDP to improve with personal consumption and exports, which contributed to downward pressure on this report, making a turnaround and capex gradually make a comeback. We expect the economy to return to a positive growth trend in the Jul-Sep 2015 period, even if only by a small amount. However, there is a certain amount of risk that real GDP could be sluggish for the time being. We suggest keeping an eye on the trend in inventory adjustment. Final demand during the Apr-Jun 2015 period was weak, and inventories have accumulated. For this reason we believe that there will be growing pressure to carry out inventory adjustment during the Jul-Sep 2015 period. In addition, considering the



trends in the monthly indices, the pace of the comeback for personal consumption and exports could be slow.

As for personal consumption, the positive environment for households in the areas of employment and income is expected to gradually lead to a recovery of the growth trend. Nominal wages and income are gaining support from positive factors including the following: (1) According to a survey carried out by the Japanese Trade Union Confederation, this year's pay scale increase is +0.69% y/y, (2) The FY2015 pension revision rate is +0.9% y/y (it was -0.7% in FY2014), and (3) Summer bonuses are expected to increase for the third consecutive year due to improvements in corporate business performance. This is expected to begin showing up in increases in household disposable income and promises to become a factor in increasing personal consumption a little further up the road. Meanwhile, the price of crude oil, which has experienced steep declines since the summer of 2014 is expected to continue at a low. There tends to be a time lag in the effects of this phenomenon, meaning that the consumer price will see downward pressure and real household wages will get a boost. However, considering the weak performance of personal consumption this period, chances are that households will continue to budget more carefully in response to the rush to raise prices of foodstuffs. Weakening consumer confidence is something which must be watched over carefully on into the future.

Housing investment is expected to be free of the effects of the reactionary decline after the increase in consumption tax last year, and backed by improvements in the employment and income environment, is expected to move toward a moderate recovery now that housing starts, a leading indicator, are clearly making a comeback.

As for exports, growth is seen gradually increasing centering on the advanced countries, and a shift to a growth trend is expected. However, both the US economy, and China's economy are becoming increasingly uncertain. There is some risk here that the recovery in exports could begin dragging its feet. The US economy experienced a major slowdown during the Jan-Mar 2015 period due to special factors, but has been making a comeback since the Apr-Jun 2015 period and should continue favorably in the future. The recovery in the US economy is expected to help not only Japan's exports to the US, but exports of Japanese intermediate goods to Asia since the US is the location of final demand for many goods. Europe's economy is expected to move gradually toward a comeback due to the effects of additional monetary easing on the part of the ECB, and so Japan's exports are seen continuing a steady undertone. As for China, whose economy has experienced slower growth recently, positive factors are now developing including the People's Bank of China showing stronger interest in monetary easing, and bringing expectations that moderate growth can be maintained on into the future and that the economy's back will not be broken due to recent developments. However, risk remains that US capital spending could remain in a downtrend due to weakening corporate earnings, and the possibility that the slowdown in the Chinese economy could continue unabated are factors which must be continually watched over with care in the future.

As for capex, a moderately paced comeback is expected despite fluctuations. Machinery orders, another leading indicator, are expected to continue in a growth trend, while the BOJ Tankan indicates that capex activities are reflecting a steady undertone. Both non-manufacturing, which has reflected a growing sense of deficiency in capex for some time now, and the manufacturing sector will continue to be relieved of any sense of surplus in capex, and this should encourage more capex related demand in the future. Meanwhile, as the yen continues to be weak, some manufacturers appear to be increasing the percentage of their domestic production, while improvements in corporate earnings due to the major decline in the price of crude oil should also become a factor encouraging an increase in capex spending. However, considerable downtrends being experienced in personal consumption and exports could, if they continue, bring cuts in industrial production and capacity utilization. If this occurs, it would throw a shadow over hoped for recovery in capex spending. We suggest vigilance in this area.



2. Will Japan's Economy Remain in a Lull or Lapse into recession?

2.1 Japan's Economy Enters Temporary Lull

Index of business conditions indicates that Japan's economy has entered a temporary lull

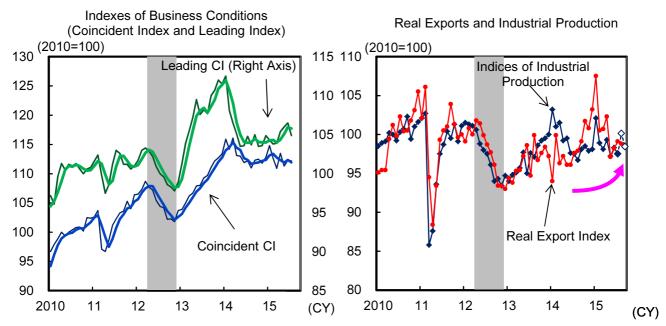
There has been a growing sense of uncertainty of late regarding the Japanese economy. The Cabinet Office revised its view of the economy downward in May 2015, saying that the assessment of the coincident index is weakening. Those involved with the financial markets have even begun saying that there are possibilities the economy could be about to enter a period of recession.

In this chapter we provide an overview of the recent economic climate, and consider whether there is a possibility that Japan's economy might enter a recessionary period. Our conclusion in this chapter is that we expect that Japan's economy will be able to avoid a recession and head toward a moderate economic growth phase. There will be some hint of a slowdown during the Jul-Sep period due to inventory adjustment as the accumulation of inventories puts a damper on production. However, during the Oct-Dec period and beyond, there is a good chance that the economy will achieve a full-fledged recovery, focused mostly on domestic demand. The overseas economy is a major risk factor, but exports to the US are expected to make a comeback, allowing exports to avoid falling through the floor. However, as was argued in the previous chapter, fears are rising that China's economy will be taking a further downturn, hence caution is advised.

Chart 1 shows Japan's index of business conditions as well as the trend in real exports and industrial production. A turning point came in the index of business conditions after January 2015 when the coincident indicators associated with production and shipping became depressed. Meanwhile, leading indicators such as household related indices and the financial markets showed marked improvement, while on the other hand, indices associated with the inventory rate were deteriorating. Behind this was likely the influence of the lack of dynamism in domestic demand, and the rapid decline in real exports. The main reasons for the downturn in exports were a decline in demand for iron and steel in Asia due mainly to the slow economy in China, sluggish capital spending in the US, and in relation to this tendency, a sharp downturn in exports of general machinery to that country.

Japan's Coincident & Leading Indicators, 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 recessionary periods. Thick lines denoting the index of business conditions based on the 3-month moving average. The most recent two months of industrial production is based on METI's Production Forecast Survey.



2.2 Shrinking Trade Volume Suggests Maturation of World Economy

Declining worldwide trade volume is a drag on Japan's economy

Here we would like to point out that the recent slowdown in exports is influenced to a certain extent by the fact that the world economy is maturing.

Chart 2 shows the relationship between the maturation of the world economy and the economic slowdown (we use historical trends in the US to examine the relation to economic slowdowns). We divide global GDP into the household sector (personal consumption) and the corporate sector (gross capital formation), and measure the degree of maturation by looking at the difference between the growth rates of the household and corporate sectors.

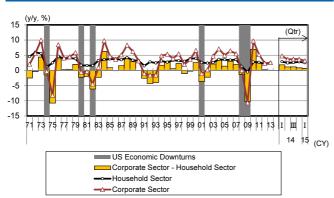
The chart indicates that at the beginning of an economic recovery, activity in the corporate sector tends to heat up ahead of the household sector, then, as the economic environment matures, the increase in corporate earnings is reflected in wages, after which the household sector is activated.

Chart 3 shows changes in maturation of the world economy and trade volume. This chart indicates that these two data sets tend to move in parallel. In other words, as the world economy matures, the corporate sector experiences a relative slowdown, causing worldwide trade volume to become sluggish.

Next we use quarterly data to measure the degree of maturation in the recent world economy. At this time, the degree of increase in the corporate sector (gross capital formation) – household sector (personal consumption) is contracting, and it is believed that this tendency is contributing to the decline in worldwide trade volume. In conclusion, the recent downturn in exports experienced in Japan is likely being influenced to at least some extent by one negative factor, that of the maturation of the world economy.

Relationship Between Maturation of World **Economy and Economic Slowdown**

Chart 2



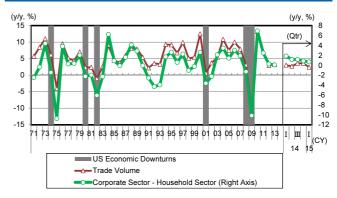
Source: World Bank, U.S. Department of Commerce, Haver Analytics; compiled by DIR

Notes: 1) The household sector consists of personal consumption, and the corporate sector consists of gross capital

2) Annual data is from the World Bank. Quarterly data is calculated using the growth rates of the corporate and household sectors of various countries. Hence the association is not especially precise.

Relationship Between Maturation of World **Economy and Trade Volume**

Chart 3



Source: World Bank, U.S. Department of Commerce, Haver Analytics; compiled by DIR

Notes: 1) The household sector consists of personal consumption, and the corporate sector consists of gross capital

> 2) Annual data is from the World Bank. Quarterly data is calculated using the growth rates of the corporate and household sectors of various countries. Hence the association is not especially precise.



2.3 Will Japan's Economy Remain in a Lull or Lapse into recession?

2.3.1 Looking at historic GDP statistics, there is some risk of a recession

GDP statistics by source of demand suggest that a recession is possible

The big question regarding the future of Japan's economy is whether the current situation is merely a temporary lull, or whether it will lapse into recession.

Chart 4 provides a comparison between average real GDP figures during periods of temporary lull and periods of recession experienced since the 1980s. There are two major points we would like to make here.

First, there is the question of what drives the economy during these periods. In the case of a temporary lull, the largest factor often seems to be a temporary adjustment in personal consumption sparked by worsening consumer confidence. Meanwhile, exports also tend to slow down during a temporary lull, though it is important to note that they still maintain a basically positive tone. In contrast, during a full-blown recession, exports tend toward negative growth.

Secondly, private sector inventory also behaves differently during periods of temporary lull and periods of recession. Looking at past averages, we see that one quarter before entering a temporary lull, private sector inventory provides a negative contribution to GDP, but then turns in the positive direction after entering a lull. Conversely, one quarter before entering a recession, private sector inventory provides a major positive contribution to GDP, but then its contribution becomes small once the economy has entered recession.

Judging from these two characteristics seen in GDP statistics by source of demand, there is some risk that Japan's economy could lapse into recession.

First, looking at GDP statistics by source of demand during the Apr-Jun 2015 period, we see that exports to Asia and the US fell sharply, bringing major downward pressure on the economy. As was mentioned earlier, a large part of this has to do with the maturation of the world economy, causing global trade volume to become sluggish.

Secondly, taking a look now at inventory trends, we see that private sector inventory contributed considerably to positive GDP statistics during the Jan-Mar period when the economy recorded high growth, but then the extent to which it contributed was much smaller during the Apr-Jun period.

Judging from these two tendencies, Japan's economy shows risk of lapsing into a recession.

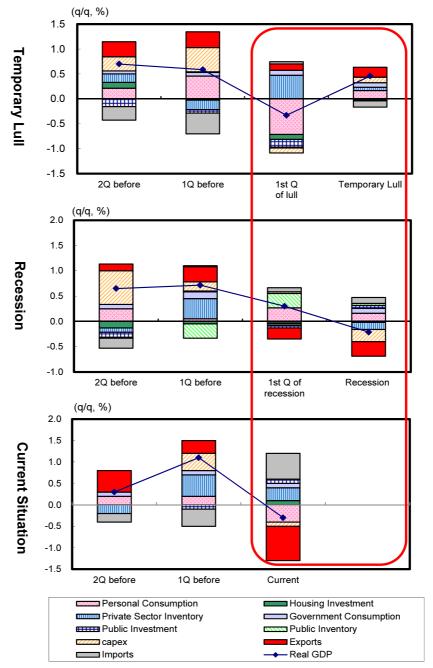
Overseas economic trends a major key

Another factor which can be observed in Chart 4 and which helps give us an idea of what the future holds for Japan's economy is change in average GDP during periods of temporary lull and periods of recession. The deciding difference between the two resides in the behavior of three sources of demand -(1) exports, (2) capex, and (3) private sector inventory. During a recession, all three of these factors tend to decline, while during a temporary lull, they perform slightly on the positive side.

Considering these factors, it must be said that the ultimate key to the future of Japan's economy is overseas economic trends. If overseas trading partners can avoid the bottom falling out of their economies, then Japan's exports will rise, and capex spending will be activated as a result. This could happen if inventory adjustment can avoid becoming too serious.

Comparison of Recent Economic Situation to Historic Periods of Temporary Lull and Recession (Quarterly Basis)

Chart 4



Source: Cabinet Office; compiled by DIR.

Notes: 1) Average period of temporary lull since 1980s. Periods set by DIR.

2) Jan-Mar period of 1980 to Apr-Jun period of 1994 uses year 2000 as reference. Jul-Sep period of 1994 to 2005 uses year 2005 as reference.

2.3.2 Our main scenario sees Japan avoiding a recession

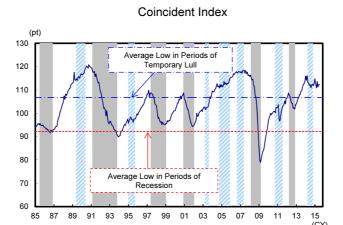
Three major merkmal (judgment criteria) divide periods of temporary lull from periods of recession

Next we examine the current condition of Japan's economy as seen in monthly statistics in order to get a better grasp of the recent economic trend. As a result of studying and comparing a broad range of economic indices and financial data occurring within Japan's historic periods of temporary lull and recession, we have identified three indices which act as merkmal (judgment criteria), and which provide a means of differentiating between these two types of periods. These are (1) The coincident index, (2) The ISM manufacturing index, and (3) The shipment-inventory balance.



Chart 5 (top) shows changes in the coincident index. Recently the index has been maintaining a higher level than its average low during past periods of temporary lull. This tells us that there is no need for pessimism in regard to the recent economic situation. The lower left portion of Chart 5 shows changes in the ISM manufacturing index (an index used in the US to measure business confidence in the manufacturing industry). Here too we have reached similar conclusions. In other words, trends in overseas economies, which have great influence on Japan's economy, do not show the kind of weakness that would be required to push the Japanese economy into recession. In addition, looking at the bottom right portion of Chart 5, which shows the shipment-inventory balance, a leading indicator of production, we see that this index also has been maintaining a higher level than its average low during past periods of temporary lull. We can also see that industrial inventories have been trending upwards of late, but this is due largely to special factors, mainly the revision of the ministerial ordinance and notification regarding the off-road law, which has led to the tendency to keep a certain portion of machinery in storage after its production. As a result, inventory levels have increased, though most of it is not "unintentional", in other words it is not due to slow business. Inventory other than that falling under the above category is actually beginning to decline. Hence there is no need for undue anxiety as regards inventory adjustment.

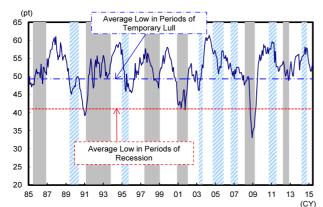
Three Merkmal (Judgment Criteria) Differentiate Periods of Temporary Lull from Periods of Recession Chart 5



Source: Cabinet Office; compiled by DIR.

Note: Shaded areas represent periods of recession in Japan, while those with diagonal stripes represent periods of temporary lull.

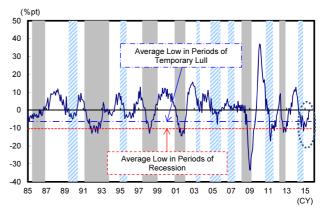
ISM Manufacturing Index



Source: Cabinet Office, Haver Analysis; compiled by DIR.

Note: Shaded areas represent periods of recession in Japan,
while those with diagonal stripes represent periods of
temporary lull.

Shipment-Inventory Index (Less Construction Machinery)



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

Notes: 1) Shaded areas represent periods of recession in Japan, while those with diagonal stripes represent periods of temporary lull.

 Shipment-Inventory Balance = Y/y Comparison of Shipments – Previous Year's Inventory Level.



Conclusion: Though there is some risk, our main scenario expects that there is a good chance Japan's economy will be able to avoid lapsing into recession

To sum up our argument, in light of data provided by three merkmal (judgment criteria) which clearly differentiate between periods of temporary lull and periods of recession, our main scenario expects that the Japanese economy will be able to avoid lapsing into recession and head toward a moderate economic growth phase. At the same time, as far as we can see by the trends in major sources of demand in Apr-Jun period 2015 GDP statistics, there is a certain amount of risk of Japan's economy entering a recession instead of a merely temporary lull, and we must remain aware of this danger.

US economic trends are an important factor

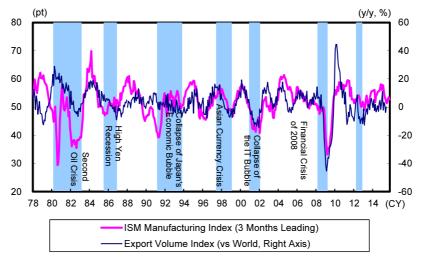
Lastly, we would like to emphasize the importance of US economic trends in forecasting the future of Japan's economy. Japan's exports are closely linked to business sentiment in the US corporate sector.

Chart 6 shows changes in the ISM manufacturing index (an index used in the US to measure business confidence in the manufacturing industry) and Japan's export volume index. Both reveal a high rate of linkage, and the chart confirms that US manufacturing getting back on its feet is what holds the key to the future of Japan's exports. The US has been Japan's biggest trading partner for a long time now, and it goes without saying that the US economy continues to have great influence on the Japanese economy through export business. But US influence doesn't stop there. It also comes in the form of exports of intermediate goods to countries other than the US. This is why Japan's export volume to the rest of the world tends to follow behind business sentiment in the US.

The ISM manufacturing index declined rapidly toward the end of 2014, then lagging somewhat behind this index, Japan's exports declined sharply. However, the ISM manufacturing index has recently managed a slight rebound. It is still just the beginning, but in light of the historic relationship of this index with Japan's economic performance, prospects are good that Japan's export volume will gradually return to a growth trend in the future.

Relationship Between the ISM Manufacturing Index and Japan's Export Volume Index

Chart 6



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

Notes: 1) Figures prior to 1987 represent year-to-year difference in real exports (export value/export price).

2) The shaded areas represent periods of recession.



Economic Indicators and Interest Rates

Chart 7

	2014	2014 2015				2016	FY13	FY14	FY15	FY16
	Oct-Dec	Jan-Mar	Apr-Jun	Jul-Sep	Oct-Dec	Jan-Mar		•		
Indicator	Actual			DIR estimates			Actual		DIR estimates	
Real GDP										
Q/q %, annualized	1.3	4.5	-1.2	0.4	1.2	1.7				
Y/y %	-1.0	-0.8	0.8	1.3	1.3	0.5	2.1	-0.9	1.0	1.7
Current account balance SAAR (Y tril)	10.7	15.5	16.8	17.1	17.4	17.9	1.5	7.8	17.3	18.1
Unemployment rate (%)	3.5	3.5	3.3	3.3	3.3	3.3	3.9	3.6	3.3	3.2
CPI (excl. fresh foods; 2010 prices; y/y %)	2.7	2.1	0.1	-0.2	-0.1	0.4	0.8	2.8	0.0	0.8
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; %)	0.40	0.34	0.40	0.40	0.45	0.50	0.46	0.37	0.44	0.65

Source: compiled by DIR.

Note: Estimates taken from DIR's Japan's Economic Outlook No.186 Update.