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Sorting Out the Issues in Moving Towards an Increase in Consumption Tax in 2017

Downside risk continues for Japanese economy due to external factors

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Summary

- **Downside risk grows for the Japanese economy due to external factors:** Japan's economy has remained in a lull, but we expect it to move toward a gradual recovery due to the following domestic factors: (1) Inventory adjustment is progressing, (2) The price of crude oil remains low, (3) Real wages are on the increase, and (4) The government's supplementary budget has taken shape. However, caution is needed regarding downside risk in the overseas economy, especially that of China. (For further detail, see Japan's Economic Outlook No. 188 (April 1, 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 worldwide decline in stock values due to geopolitical risk, and (4) The worsening of the Eurozone economy. 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.
- **Sorting out the issues in moving towards an increase in consumption tax in 2017:** In this report we take a look at what the issues are in moving towards another consumption tax hike in 2017. The sluggish recovery of consumption of durable goods after the increase in consumption tax in 2014 was influenced by the phenomenon of spiking demand in advance of the tax hike, which then fizzled out by the time the tax hike took place. This was thought to be due to past economic policies. Moreover, the weak outlook for income is thought to have had a major influence on consumption of services, especially in the area of non-essential personal services. Considering the situation, we calculated the effect of the 2017 consumption tax hike and compared the result with real GDP assuming no tax hike. This would put degree of influence at +0.3% in FY2016 and -0.6% in FY2017. Meanwhile, the effect of underlying support for personal consumption obtained by introducing a reduced tax rate is calculated to be approximately 1.1 tril yen in FY2017.

1. Downside Risk Grows for Japan's Economy Due to External Factors

Downside risk grows for the Japanese economy due to external factors

Japan's economy has remained in a lull, but we expect it to move toward a gradual recovery due to the following domestic factors: (1) Inventory adjustment is progressing, (2) The price of crude oil remains low, (3) Real wages are on the increase, and (4) The government's supplementary budget has taken shape. However, caution is needed regarding downside risk in the overseas economy, especially that of China. (For further detail, see Japan's Economic Outlook No. 188 (April 1, 2016), by Mitsumaru Kumagai.)

Risk factors facing Japan's economy

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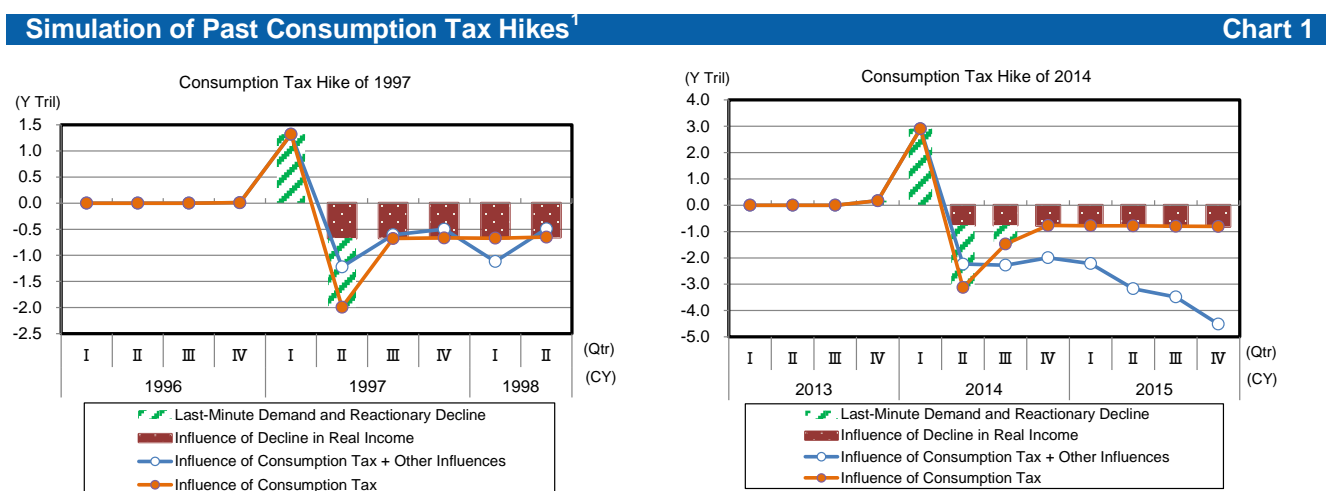
2. Sorting Out the Issues in Moving Towards an Increase in Consumption Tax in 2017

2.1 Comparison of 1997 and 2014 Consumption Tax Hikes

Trends in personal consumption fall considerably below results of simulation

In this chapter we present arguments for the planned increase in consumption tax in April of 2017. To assist us in considering this question we take a look at differences in personal consumption during previous periods when the consumption tax was increased. We analyze trends in personal consumption in 1997 and 2014 in the categories of goods and services and consider the factors leading to differences experienced during those two periods. Then we take a look at what could happen during an additional consumption tax hike in April 2017.

Chart 1 presents the results of a simulation performed using the DIR macro model. The model was able to replicate the decline in personal consumption which occurred after the increase in consumption tax in 1997, but economic performance after the tax hike of 2014 diverged considerably from the simulation results. The bottom chart explores the factors leading to this deviation by category (i.e. goods and services). Two major characteristics present were (1) Recovery in durable goods was weak, and (2) Services and non-durable goods fell into a downtrend.



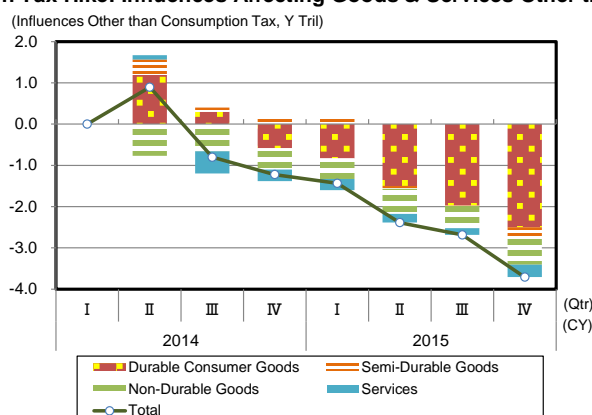
Source: Cabinet Office; compiled by DIR.

Note: Calculations according to the DIR short-term macro model.

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2014 Consumption Tax Hike: Influences Affecting Goods & Services Other than Consumption Tax



Source: Cabinet Office; compiled by DIR.

Note: Calculations according to the DIR short-term macro model.

¹ Parameters: 1997 consumption tax hike uses samples through Dec. 1996, 2014 consumption tax hike uses samples through Dec. 2013.

Weakness of regular scheduled wages suppressed consumer confidence

Next we look at the implications of trends in real compensation of employees and consumer confidence – two important indices in understanding trends in personal consumption.

A factor analysis of trends in real compensation of employees, employment, and prices tells us that at the time of the first increase in consumption tax in 1997 (Chart 2, top left), growth in employment was sluggish, but at the same time scheduled wages continued to exhibit a steady undertone. In contrast, at the time of the 2014 consumption tax hike (Chart 2, top right), growth in employment provided underlying support for real compensation of employees, but scheduled wages did not contribute anything on the positive side.

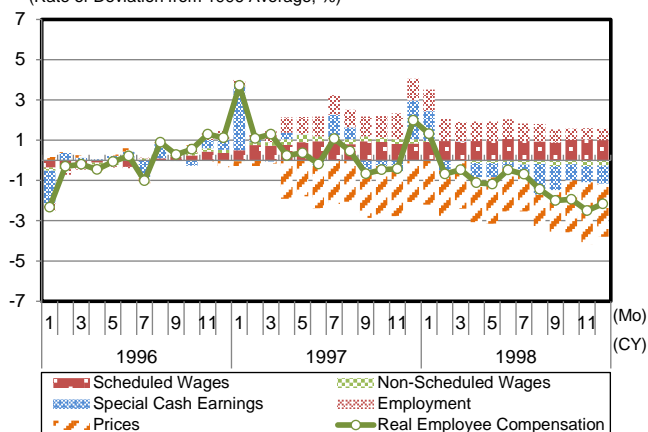
Differences in the employment and income environments during these two past instances of compensation tax increase had an influence on consumer confidence. When the consumption tax was increased in 1997 (Chart 2 lower left), the employment environment had also worsened, becoming a major factor in significantly pushing down consumer confidence. Negative contribution from other categories related to income, such as overall livelihood and income growth were not significant. On the other hand, when the consumption tax was increased in 2014 (Chart 2 lower right), supply and demand for labor was tight, though this did not have much negative pressure on the employment environment factor. However, the following two factors brought major downward pressure. These were (1) Income growth, which was negatively affected by sluggish wages, and (2) Willingness to buy durable goods, which was affected by pre-consumption over demand expected for durable goods. This indicates the possibility that weak consumption after the tax hike in 2014 may have been influenced by the fact that consumer confidence was affected by the income environment in 2014, which had deteriorated more than it did in 1997.

Simulation of Past Consumption Tax Hikes

Chart 2

Real Employee Compensation at Time of 1997 Tax Hike

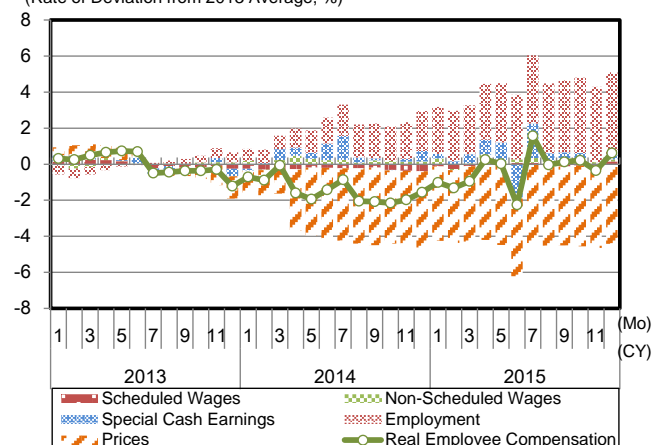
(Rate of Deviation from 1996 Average, %)



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

Real Employee Compensation at Time of 2014 Tax Hike

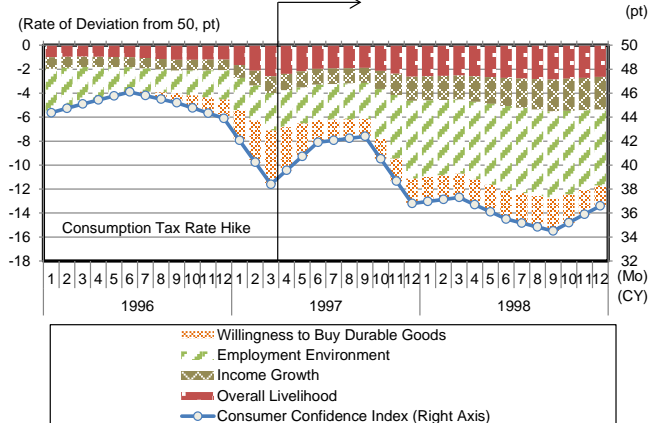
(Rate of Deviation from 2013 Average, %)



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

Consumer Confidence at Time of 1997 Tax Hike

(Rate of Deviation from 50, pt)

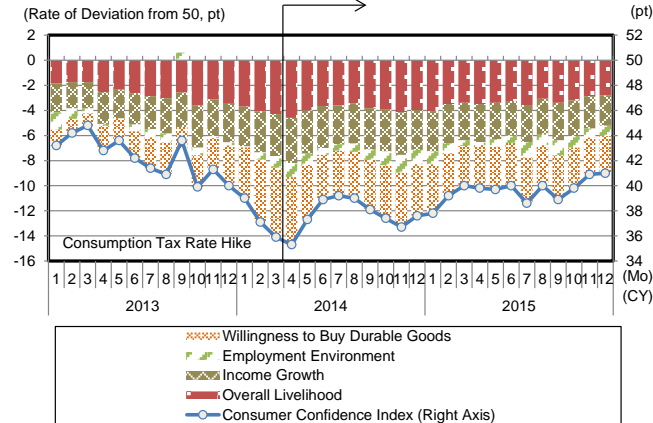


Source: Cabinet Office; compiled by DIR.

Note: Adjustments made to compensate for changes in survey method.

Consumer Confidence at Time of 2014 Tax Hike

(Rate of Deviation from 50, pt)



Source: Cabinet Office; compiled by DIR.

Note: Adjustments made to compensate for changes in survey method.

2.2 Characteristics of Personal Consumption by Goods and Services, and its Implications

Services: Deterioration of consumer confidence arising from income acts as a negative factor

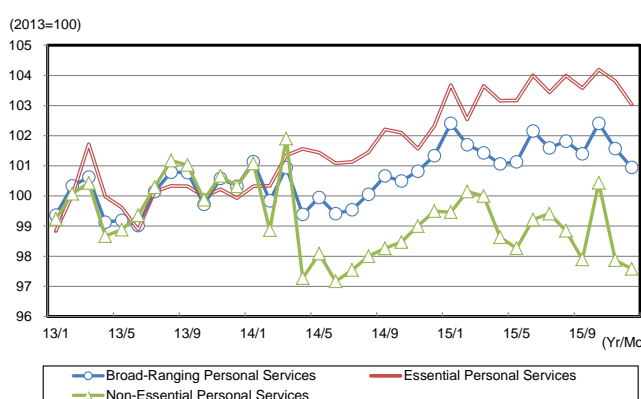
In this section we take a closer look at the period when consumption tax was increased in 2014 by each separate category (goods and services) in light of the facts on past instances of consumption tax increases covered in the last section.

First of all, we now know that it is possible that the deterioration of consumer confidence influences the slowing down of recovery in consumption of services. Chart 3 shows changes in broad-ranging personal services divided into the categories of essential personal services and non-essential personal services. Essential personal services include medical care and other services which one cannot do without, while non-essential services include travel and entertainment, in other words activities which are both non-essential and non-urgent. Changes in these categories tell us that the level of expenditure on non-essential services declined greatly after the increase in consumption tax. In contrast, essential services are in an overall growth trend, especially in the area of medical services, due to Japan's aging society. This area remained unchanged even after the increase in consumption tax.

As is mentioned in the title of this section, behind this decline in non-essential services lies the deterioration of consumer confidence arising from income related issues. Chart 4 illustrates changes in non-essential services and consumer confidence (overall livelihood and income growth). Looking at the chart we can immediately see how closely linked these items are. The data strongly suggests that there is a direct connection between the weakening of consumer confidence after an increase in consumption tax and the decline in expenditure on non-essential services.

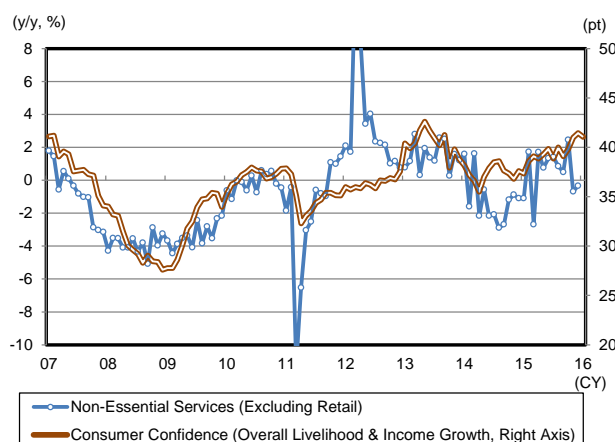
In conclusion, the question of whether or not households are able to feel confident regarding future income growth will be a major factor determining the tempo of the comeback in the consumption of services (especially non-essential services) after the next increase in consumption tax expected in 2017. However, the pace of wage increases which was looking positive recently is now lagging somewhat due to the slowdown in growth rate for corporate earnings. It is therefore essential that the income environment be improved in the future in order to ensure that consumption of services can be maintained even after the next increase in consumption tax in 2017.

Breakdown of Broad-Ranging Personal Services
Chart 3



Source: Ministry of Economy, Trade and Industry; compiled by DIR.
Note: Excluding retail industry.

Consumer Confidence and Non-Essential Services
Chart 4



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

Durables: Pre-consumption over demand arises in reaction to past economic policy

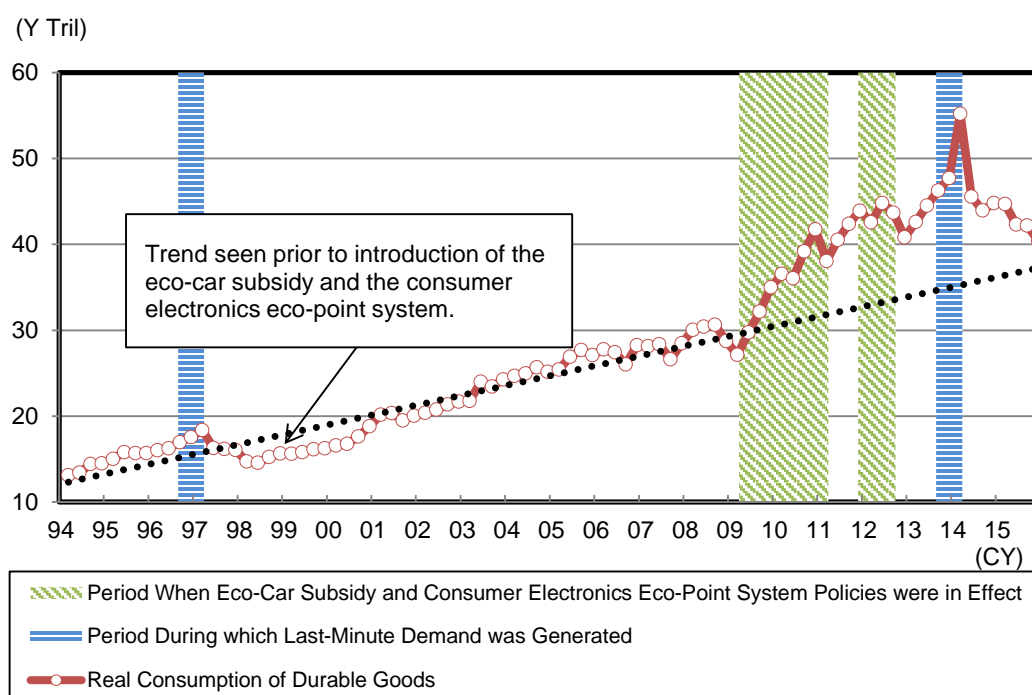
In this section we look at the situation for consumption of durables. Looking again at Chart 1 we see that consumption of durables continued to exceed their theoretical value until the Jul-Sep period of 2014. This period is when the phenomenon of reactionary decline appears, following the last-minute demand which occurs just prior to a consumption tax hike. The influence of the reactionary decline appears to have been less than expected in the case of durable goods. However, after the reactionary decline ran its course, the recovery was unexpectedly slow.

The cause of the recovery in durables being so weak may be pre-consumption over demand expected due to the reaction of consumers to the repetition of the same kind of economic policy measures many times over. Chart 5 shows changes over time in real consumption of durables. During the rapid economic slowdown during the financial crisis of 2008, the government introduced countermeasures such as the eco-car subsidy and the consumer electronics eco-point system. After these policies were introduced, consumption of durables significantly exceeded past trends. On the other hand, when one considers the fact that real employee compensation was sluggish at this time, consumption of durables just before the tax hike was probably overly strong in comparison to the income situation. The weak recovery in consumption of durables after the tax hike can be explained by this phenomenon of pre-consumption.

As we prepare for another tax hike in 2017, the above considerations have the following implications. Replacement demand for durable goods with a short replacement cycle (i.e. the same goods purchased during previous economic policies such as during the global financial crisis) can easily be generated prior to the next increase in consumption tax in 2017. However, since consumption of durables is already on the high side in comparison to past trends due to pre-consumption over demand, we will also have to expect a similar pattern as was experienced during the last tax hike – in other words, it is quite possible that the adjustment period after the tax hike will be a long one.

Trends in Real Consumption of Durables

Chart 5



Source: Cabinet Office; compiled by DIR.

Non-Durables: Reduced tax rate may help to avoid sudden changes in consumer behavior of households

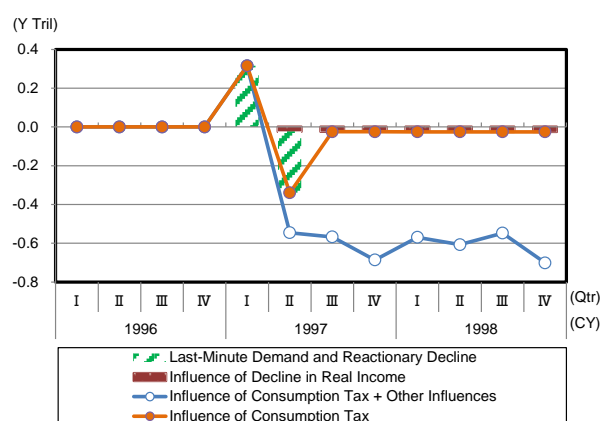
Lastly we look at the characteristics of non-durable goods. Since non-durable goods have little elasticity of intertemporal substitution, the effects of last-minute demand and reactionary decline are much more limited in comparison to other goods. In addition, its income elasticity value is also low, so the influence of declines in real income on consumption of non-durables is also considered to be limited.

However, non-durables actually experienced major declines never seen before during both the 1997 and 2014 tax hikes, one that cannot be explained by past estimation formulas. In other words, due to the decline in real purchasing power after the consumption tax hikes, households were holding onto their wallets much more tightly than had been imagined in the past.

However, it is expected that this tendency can be avoided during the next consumption tax hike in 2017. This is because the government has decided to introduce a reduced tax rate this time around. The current tax rate will be maintained on many non-durable goods, nearly all of which is accounted for by foodstuffs. Foods are the consumer goods which households purchased with the highest frequency. Hence it is believed that a reduced tax rate will resolve the sense of burden associated with the tax hike. For this reason it is not thought that last-minute demand for non-durables followed by reactionary decline will be as major as it has in past instances of consumption tax hikes.

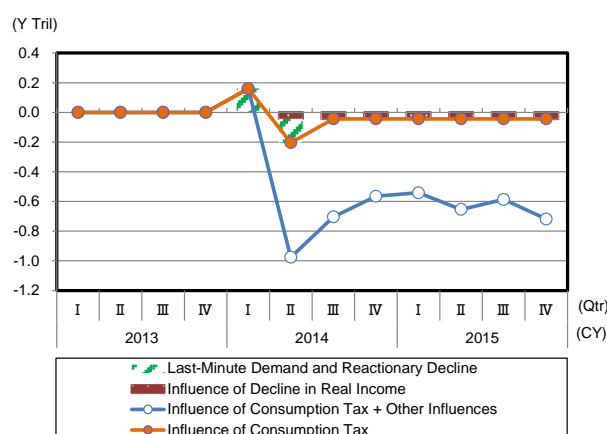
Trends in Non-Durables During Tax Hike Phases

Chart 6



Source: Cabinet Office; compiled by DIR.

Note: Calculations according to the DIR short-term macro model.



Source: Cabinet Office; compiled by DIR.

Note: Calculations according to the DIR short-term macro model.

2.3 Calculating the Influence of the Planned 2017 Increase in Consumption Tax

Reduced tax rate to provide approximately 1.1 tril yen in underlying support for personal consumption in FY2017

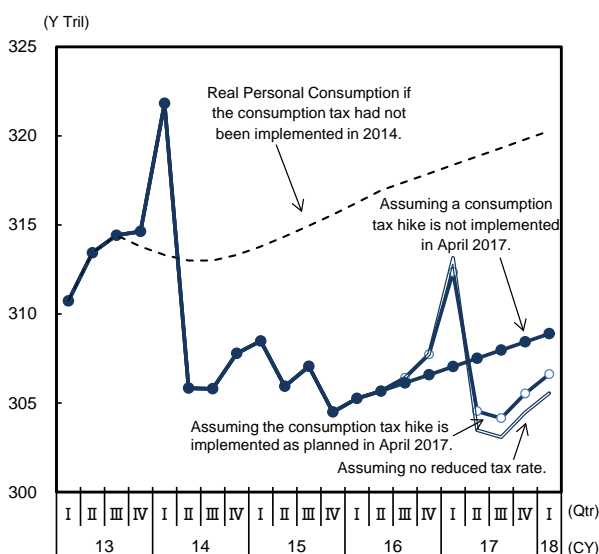
Lastly, we turn our attention to the conclusion of this chapter, in which we present our calculations of the influence the planned 2017 increase in consumption tax in light of the questions discussed up to this point.

In this chapter we compare the situation in which an additional increase in consumption tax is implemented in April 2017 with the situation as it would look if the tax hike is not implemented. According to our thinking, we expect personal consumption to be up by +0.3% to GDP in FY2016 in comparison to -0.6% to GDP in FY2017 assuming the tax hike is implemented. An increase in the consumption tax will trigger last-minute demand followed by a reactionary decline, as well as bringing major fluctuations in personal consumption and housing investment. We also expect there to be influence on trends in inventory investment and imports.

At the same time, according to our calculations we expect the reduced tax rate to provide approximately 1.1 tril yen in underlying support for personal consumption in FY2017. The reduced tax rate focuses on foodstuffs, which have a high frequency of purchase by households, and promises to relieve some of the burden associated with the consumption tax felt by households. The effect of the reduced tax rate in providing underlying support for the economy is expected to work mainly by virtue of providing some relief for the decline in real income.

Outlook for Personal Consumption During 2017 Consumption Tax Hike Phase

Chart 7



Source: Cabinet Office; compiled by DIR.

Note: Estimated values obtained using the DIR short-term macro model.

Assuming there is a Reduced Tax Rate				
Amount (Y Tril)				
	FY2015	FY2016	FY2017	
Real GDP	-	1.3	-3.1	
Private Sector Final Consumption Expenditure	-	1.7	-3.0	
Rate of Deviation from No Tax Hike Case (%)				
	FY2015	FY2016	FY2017	
Real GDP	-	0.3	-0.6	
Private Sector Final Consumption Expenditure	-	0.6	-1.0	
Assuming no Reduced Tax Rate				
Amount (Y Tril)				
	FY2015	FY2016	FY2017	
Private Sector Final Consumption Expenditure	-	1.9	-4.1	
Rate of Deviation from No Tax Hike Case (%)				
	FY2015	FY2016	FY2017	
Private Sector Final Consumption Expenditure	-	0.6	-1.3	
Effect of Reduced Tax Rate in Supporting Personal Consumption				
Amount (Y Tril)				
	FY2015	FY2016	FY2017	
Private Sector Final Consumption Expenditure	-	-0.2	1.1	
Rate of Deviation (%)				
	FY2015	FY2016	FY2017	
Private Sector Final Consumption Expenditure	-	-0.1	0.3	

Source: Produced by DIR.

Economic Indicators and Interest Rates

Chart 8

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	-1.1	0.5	1.0	1.2	1.5	2.7				
Y/y %	0.7	-0.1	0.4	0.4	1.1	1.6	-1.0	0.7	0.9	-0.1
Current account balance										
SAAR (Y tril)	19.6	19.8	20.0	19.8	20.1	19.3	7.9	17.7	19.7	22.1
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	0.8	2.8	-0.0	0.2	2.0
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.188 Update*.