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Why Does Personal Consumption Remain Stagnant?

Resolving structural problems in mid to long-term essential

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Summary

- **Three short-term factors behind stagnant personal consumption:** Personal income continues to decline despite the more than two-and-a-half years which have passed since the 2014 increase in consumption tax. Looking at the short-term factors behind this phenomenon, it is believed that personal consumption has been weighed down by (1) Elimination of the special case pension category, (2) Sluggish growth for disposable income, and (3) Reactionary decline following past economic stimulus measures. Between FY2012 and FY2014, these factors have brought downward pressure on personal consumption as follows: (1) Elimination of the special case pension category -0.4%pt, (2) Sluggish growth for disposable income -0.7%pt, and (3) Reactionary decline following past economic stimulus measures -0.2%pt, or a total of -1.3%pt. (For details see *Japan's Economic Outlook No. 191 <Revised>*, December 16, 2014, by Mitsumaru Kumagai.)
- **Structural problems such as uncertainty regarding the future are a drag on personal consumption in the mid to long-term:** Mid to long-term factors influencing personal consumption include increasing budget-mindedness on the part of households, increasing uncertainty regarding the future, and issues surrounding employment for the younger generation. These factors will not be easily resolved, but we believe that it is very likely they will continue to inhibit growth in personal consumption for the mid to long-term.
- **Measures such as the building of a sustainable social security system, and implementing reforms in the labor market are desirable:** In order to promote growth in personal consumption in the mid to long-term, it is necessary for the government to promote reforms such as building a sustainable social security system which will remove the feelings of anxiety about the future now held by citizens. Meanwhile, improvements must be made in the employment environment for younger workers. This can be done by correcting the polarization of the labor market and introducing equal pay for equal work.

1. Why Does Personal Consumption Remain Stagnant?

Increasing the consumption tax triggered a substitution effect (in other words, the last minute demand occurring before the tax hike followed by a reactionary decline), and ultimately invited the attenuation (or decay) of consumption due to the income effect which was caused by declining real income. As a result, households, which had earlier reaped the benefits of income growth in an improved economy brought on by Abenomics, had now grown cold when it came to consumer confidence. Few now would object to the viewpoint that the increase in the consumption tax in April 2014 was the turning point where personal consumption fell off track after having continued at a favorable level since the inauguration of the Second Abe Cabinet.

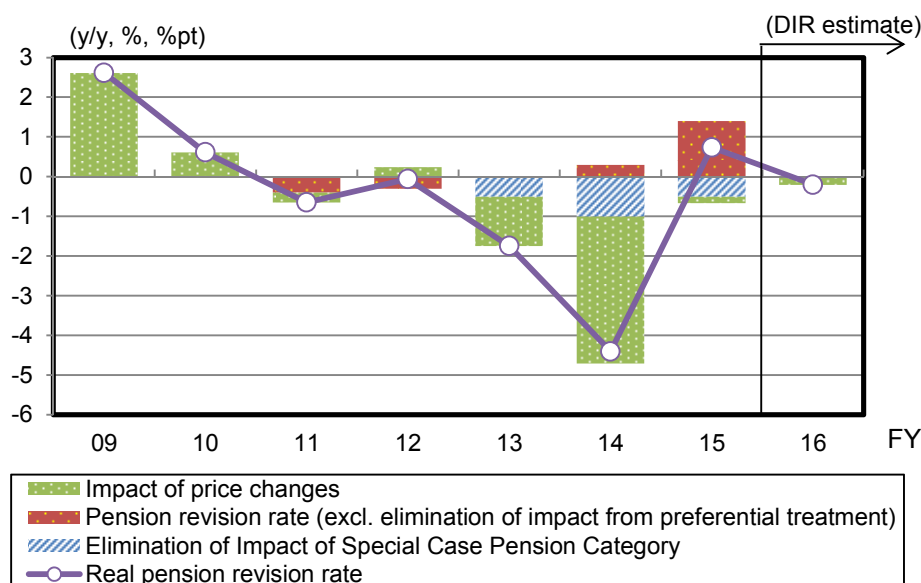
Even now, over two-and-a-half years after the tax hike, personal consumption still lacks momentum. Why is personal consumption so slow to get back on track? In this chapter, we bring the factors to light which have led to the recent lack of momentum in personal consumption, and consider the issues in moving toward expansion in personal consumption.

1.1 Three Short-Term Factors behind Stagnant Personal Consumption

The decline in income for non-working people due to the elimination of special cases for receiving pensions

Factors leading to the stagnation of personal consumption can be divided into short-term and mid to long-term categories. First we look at the short-term factors: (1) Elimination of the special case pension category, (2) Sluggish growth for disposable income, and (3) Reactionary decline following past economic stimulus measures.

First we consider the issues surrounding (1) Elimination of the special case pension category. After the inauguration of the Second Abe Cabinet, corporate earnings expanded considerably due to yen depreciation, but wages did not grow as much as had been expected. This is a discrepancy which is often pointed out. However, income of non-working people was more sluggish than worker incomes. This is because pension payment amounts suffered during this time. Annual pension amounts are determined each year by major trends in prices and wages. But despite the decline in prices in past years, pension payment amounts were left untouched until FY2012 when special measures were introduced to keep payments at an artificially high level. After FY2013 special measures were eliminated, bringing a reduction in per capita pension payments in FY2013 and FY2014 (Chart 1). As Japan's population of pensioners grows due to its super-aged society, the total amount in pension payments is actually growing, but with somewhere around 40 million people receiving public pensions as of the end of FY2014, per capita pension payments must unfortunately be reduced. We assume here that this fact has caused a decline in consumer confidence amongst the elderly.



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

Gross salaries have grown, but net payments have not

Next we look at income related issues as mentioned in (2) Sluggish growth for disposable income. In the case of disposable income, negative factors appeared even in the consumer behavior of working age individuals. Chart 2 is a factor analysis of changes in wages, salaries, employee compensation, and disposable income between FY2012 and FY2014.

The chart reveals that these years, employee compensation grew by a total of nearly 7 trillion yen. On the other hand, this also spurred growth in income tax totaling around 3.9 trillion yen, in addition to growth in employee's share of social security contributions totaling 3.3 trillion yen, all of which served to inhibit growth in disposable income. Similarly, employee compensation grew after the inauguration of the Second Abe Cabinet, only to find the pace of growth in disposable income to slow when social security contributions later increased. This kind of situation has ended up putting out the fire in working generation consumption. Meanwhile, the highest tax bracket for income tax was increased in FY2015, adding yet another factor keeping down disposable income. It appears that the situation where net payment of salaries fails to increase even when gross salaries have grown continues.

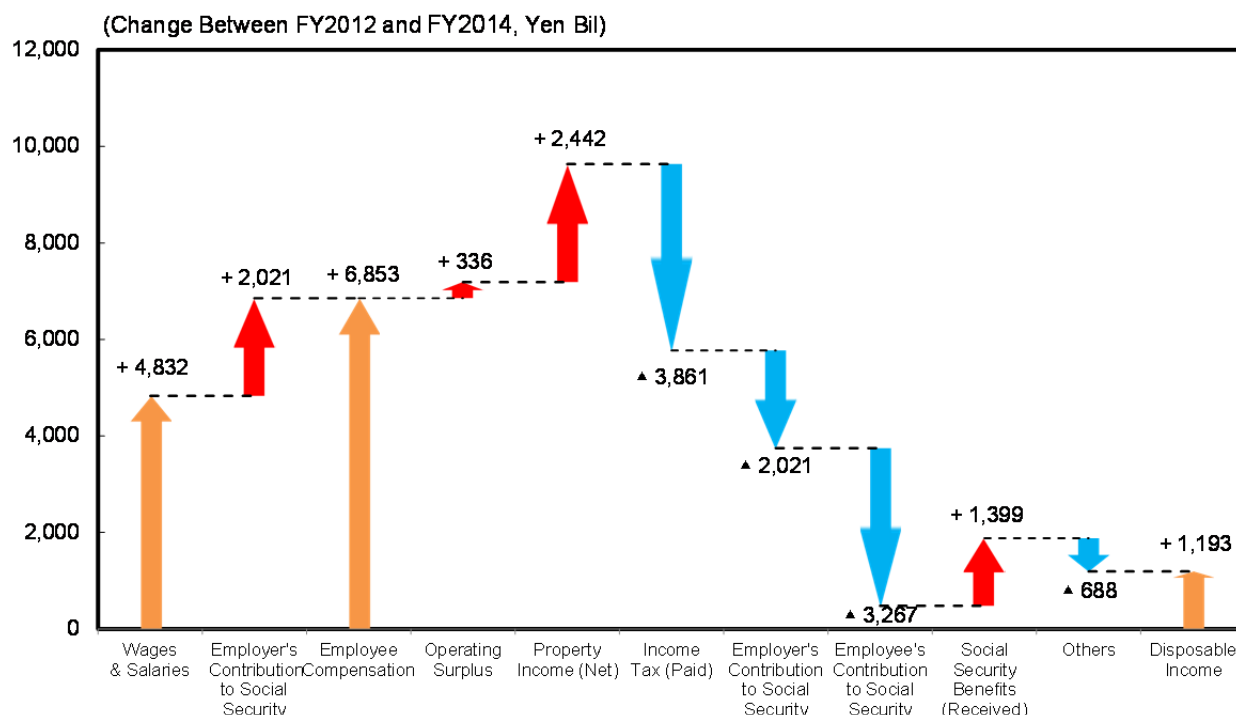
Past economic stimulus measures lead to pre-consumption over demand, putting the brakes on growth in personal consumption

The last short-term factor up for discussion here is (3) Reactionary decline following past economic stimulus measures. The economic stimulus measures referred to here were for the most part implemented after 2009 in the wake of the global financial crisis of 2008. These were the Eco-car subsidy and the Eco-Point program effecting household electronics.

Chart 3 shows changes in real consumer expenditure on durable goods since 1994. The Eco-car subsidy and the Eco-Point program for household electronics were established after the year 2009 to provide underlying support for personal consumption during the period for which they were valid. The effect of these programs until they completed their period of validity in the Jan-Mar period of 2014, coupled with the last minute demand just prior to the increase in consumption tax in April of 2014 (though this phenomenon was not, properly speaking, an economic stimulus measure) provided impetus for more growth in consumer expenditure in durable goods than at any time in the past. On the other hand, considering the fact that real employee compensation was stagnant until the inauguration of the Second Abe Cabinet, consumption expenditure on durables could be considered overly high in

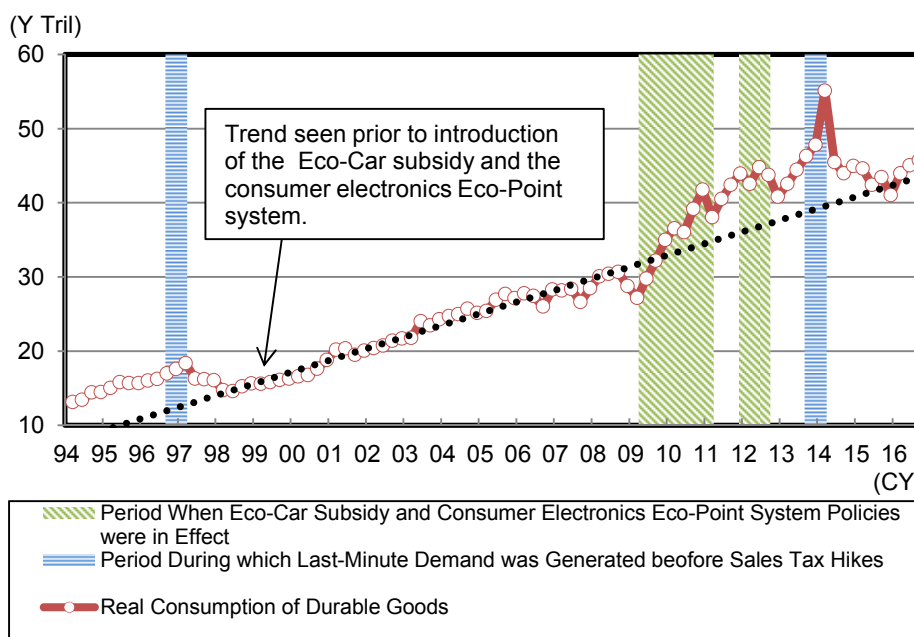
contrast to income during the year 2009 up to just before the increase in consumption tax. Because of economic stimulus programs occurring back to back with the last minute demand phenomenon, it is highly possible that pre-consumption over demand was generated. It is believed that the reactionary decline occurring after these economic stimulus programs completed their terms of validity may have been amplified by the introduction of the increase in consumption tax at the same time, thereby making the decline in consumption of durable goods after that point even worse than it might have been otherwise.

Factor Analysis of Changes in Employee Compensation and Disposable Income (FY2012 – FY2014)
Chart 2



Source: Cabinet Office; compiled by DIR.

Changes in Consumer Expenditure in Durable Goods
Chart 3



Source: Cabinet Office; compiled by DIR.

Effects of short-term factors on personal consumption

In this section we examine the extent to which short-term factors influenced personal consumption. Chart 4 provides a quantitative analysis of the extent to which each of the short-term factors mentioned earlier influenced personal consumption between FY2012 and FY2014.

One approach would be to look at a breakdown of the price factor, real personal income in terms of disposable income, and average propensity to consume, but here we want to measure the influence of short-term factors on personal income, and in order to do so we need to look at more detailed factors, such as non-consumption expenditure and income. Moreover, we want to look at the short-term factors listed in the previous section in the context of their relationship to other factors as follows: (1) Elimination of the special case pension category: the per capita pension payment factor, (2) Sluggish growth for disposable income: the social security contribution factor, and (3) Reactionary decline following past economic stimulus measures: the economic stimulus measures factor.

Looking at Chart 4 we see that the greatest weight holding down personal consumption is brought on by prices. This observation is consistent with the general opinion, which considers the increase in consumption tax in 2014 to be what triggered the stagnation in personal consumption. On the other hand, the disposable income and average propensity to spend factors have actually brought positive contributions, and considering this fact, it seems that if prices had not gone up as a result of the increase in consumption tax, personal consumption would have to have been maintaining favorable performance backed by growth in income. Next we look at each of the three short-term factors and find that they have all contributed negatively to personal consumption as follows: (1) Elimination of the special case pension category (-0.4%pt), (2) Sluggish growth for disposable income (-0.7%pt), and (3) Reactionary decline following past economic stimulus measures (-0.2%pt). Total negative contribution of the three short-term factors was -1.3%pt.

Elimination of special case pension category and reactionary decline following past economic stimulus measures are expected to lose their negative influence in the future

Next we look at the future of personal consumption based on the above arguments. First of all, there is a very good possibility that two of the short-term factors listed above will lose their negative influence in the near future. These are (1) Elimination of the special case pension category, and (3) Reactionary decline following past economic stimulus measures. The special level for pension payment amounts was eliminated in FY2015, and its influence in the form of reactionary decline after pre-consumption over demand is expected to have soon run its course. Meanwhile, seven-and-a-half years have passed since 2009 when economic stimulus measures encouraged sales of durables, meaning that we are now entering a period when consumers will be replacing older durables. And if wage hikes continue into FY2017, personal consumption stands a good chance of achieving a moderate recovery with further help from the recent fall in prices.

On the other hand, we still have the issue of sluggish growth for disposable income mentioned in (2) in the previous section. This point is expected to require continued monitoring in the future. Insurance premiums for the employee pension plan will be raised in September 2017 and then fixed at that level. With no way out seen from Japan's low birth rate, super-aged society, the social security burden on the individual will have to be raised in the mid to long-term, and it is not expected to be lowered at any time in the future.

Factor Analysis of Growth Rate for Real Personal Consumption (FY2012-FY2014)

Chart 4

Real Personal Consumption	Price Factor	Disposable Income Factor										Average propensity to Consume Factor					
		Non-Consumption Expenditure					Income Factor					Nominal Personal Consumption Factor			Disposable Income Factor		
		Income Tax Factor	Social Security Burden Factor ②	Wages & Salaries Factor	Social Benefit Factor		Income from Property and Other Factors	Economic Stimulus Measures Factor ③	Structural Factors								
▲0.6	▲2.4				1.0	▲1.8				▲1.1	▲0.7	2.2	2.0	0.2	0.6	▲0.4	0.7

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

Note: Units are % and %pt. We performed a factor analysis on changes in personal consumption between FY2012 and FY2014. Then we used the nominal value of difference between trends in real consumption of durable goods and rate of increase in the actual value as the economic stimulus measure factor. It should be noted at the same time that an error occurs in this calculation. Hence the total of extent of contribution does not agree with the growth rate of personal consumption.

1.2 Mid to Long-Term Factors Causing Stagnant Personal Consumption

Households becoming increasingly negative in regard to consumption

Next we examine mid to long-term factors influencing personal consumption. These include increasing budget-mindedness on the part of households, increasing uncertainty regarding the future, and issues surrounding employment for the younger generation.

Chart 5 shows changes in worker household propensity to consume. Though recently there has been some movement toward making a comeback, we see that since June of 2016 average propensity to consume suffered a steep decline. The recent decline in average propensity to consume is caused by sluggish consumer spending despite growth in disposable income. The other side of decline in average propensity to consume is that it means the savings rate is growing. This indicates that in response to the decision to delay the additional consumption tax hike originally planned for April 2017 and the growing sense that corporate earnings are about to peak out, the future of the Japanese economy and the government's fiscal situation have become increasingly uncertain, and with this as background, households have begun to suppress non-essential, non-urgent consumption, moving further in the direction of budget-mindedness.

Household sector may be experiencing simultaneous development of one-point luxury principle and budget-mindedness

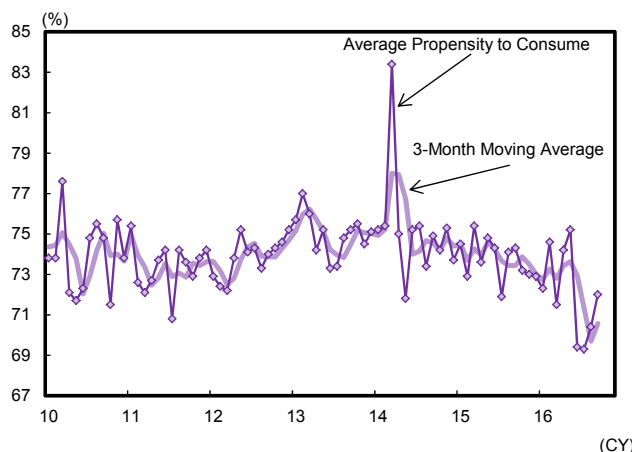
In this section we consider whether or not households are actually becoming more budget-minded recently, based on average price of purchases by households and data on purchase volume.

Chart 6 shows changes in quality and purchase volume of various goods by individual article. If the growth rate in the consumer price index associated with a particular product exceeds the growth rate of the average purchase price paid by households for this article, this means that households have begun to purchase a product whose price has risen beyond the inflation rate. (It is assumed that the product is relatively high quality.) In other words, we can assume that products purchased by households are as high-quality as those shown on the right-hand side of the chart. Now taking another look at Chart 6, we can see that rate of change in quality and purchase volume has a negative correlation. As households begin to purchase high quality goods less frequently, we see that at the same time frequency of purchase of lower quality products increases.

The implications of this phenomenon are as follows. Recently the tendency has been for households to go ahead and purchase certain high-quality / high-priced goods, but then to retain a balanced approach towards spending by increasing their purchase volume of low quality products in relation to which they reduce the average purchase price they pay, and in this way cut down on expenditures. In other words, households are making use of the one-point luxury principle in their spending habits, whereby

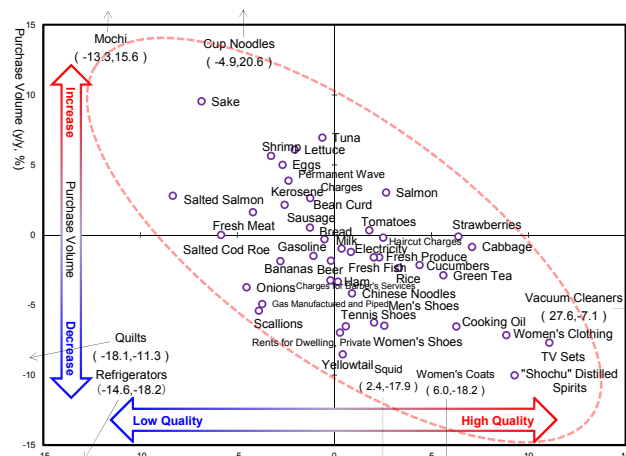
one allows oneself the purchase of one high-quality / high-priced item and for everything else one cuts back on price, while at the same time strengthening their generally budget-minded habits.

Change in Average Propensity to Consume (Worker Households)
Chart 5



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

Changes in Quality and Purchase Volume by Individual Article
Chart 6



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

Note: Apr-Jun 2015 and Apr-Jun 2016 periods, year-to-year comparison. Data from household survey and consumer price index. Fifty articles with the greatest weight in consumer price index were used and plotted on the graph.

Risk of return to deflation implied by collapse of unit purchase price

A difficult point that we must remain aware of is that behind the increasing budget-mindedness of households lies increasing risk of a return to deflation. Chart 7 compares consumer price index and unit purchase price index based on data from the Household Survey. The unit purchase price index generally leads the consumer price index. Recently the growth rate of the unit purchase price index has entered the negative area ahead of the consumer price index.

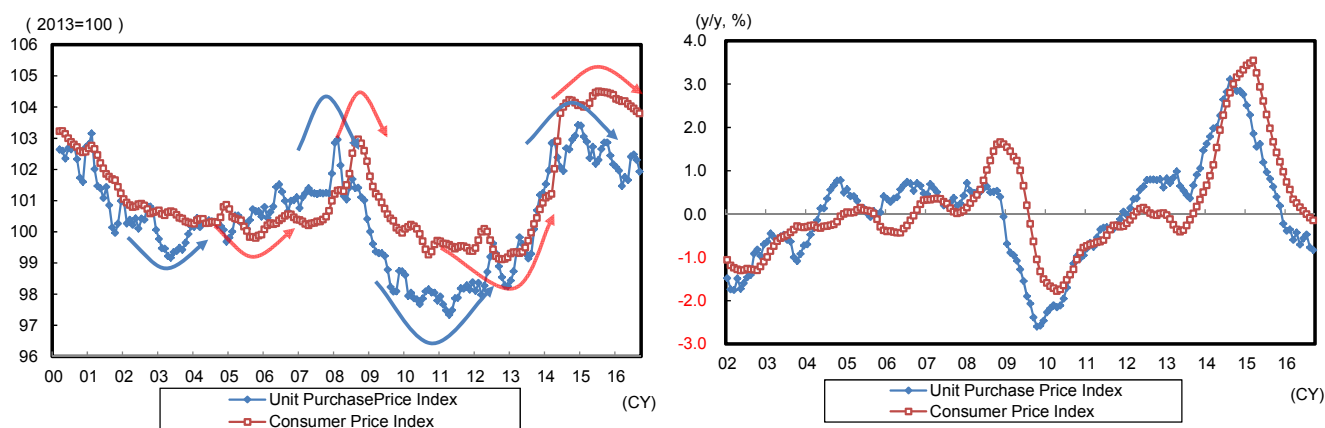
Why does the unit purchase price index lead the consumer price index? In the first place, the consumer price index principally indicates changes in regular prices of items of equal quality. On the other hand, the unit purchase price index indicates the prices actually paid by consumers. If consumers start buying higher quality products, the consumer price will remain unchanged, but a change becomes evident in the unit purchase price, which rises. Conversely, if consumers start accepting lower quality, the unit purchase price will fall. If a retail store has a sale, consumers will be able to buy a high quality product at a price lower than the regular price. Then the behaviors of consumers on the demand side and retailers on the supply-side can cause the unit purchase price to decline simply by repeating the process of consumers choosing cheaper items and the retailer responding by having more sales where products are sold more cheaply than normal.

Assuming that consumers are showing a preference for lower priced, lower quality items, corporations will then get a strong sense that they can only sell low-priced items. When this happens, a company stands a good chance of recovering market share by utilizing the strategy of cutting prices. In this way, the budget-minded behavior of consumers can invite deflation. On the other hand, repeated sales carried out by retailers can lead to avoidance of the regular price by consumers who have gotten used to the lower price, thereby causing the sale price to be adopted as the new regular price.¹

¹ “Does a Higher Frequency of Micro-level Price Changes Matter for Macro Price Stickiness?” by Yoshiyuki Kurachi, Kazuhiro Hiraki & Shinichi Nishioka, Bank of Japan Working Paper Series No.16-E-9 (2016).

The deflationary mindset of consumers and retailers can actually bring down the unit purchase price and bring strong downward pressure on the price of commodities. It goes without saying that this places the Japanese economy in an extremely precarious position, having only recently managed to pull itself out of the deflationary spiral. For this reason it is now necessary to keep in mind a new risk factor – that of a return to the deflation of the past.

Changes in Unit Purchase Price Index and Consumer Price Index (Left: Level, Right: y/y) Chart 7



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

Note: Seasonally adjusted 3-month moving average.

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

Note: Year-to-year comparison according to 12-month moving average.

Anxiety about the future may be keeping consumption in check, especially for young generation

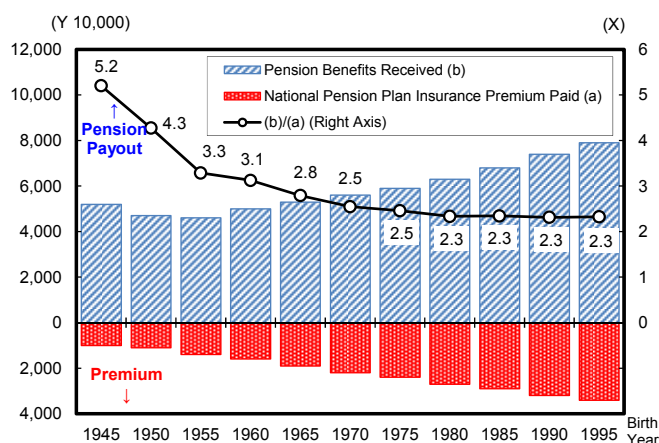
In this section, we examine the phenomenon of the rise in anxiety about the future. Chart 8 shows amounts in national pension plan insurance premiums paid and pension benefits received by birth year according to the Ministry of Health, Labour and Welfare's 2014 report on Japan's fiscal condition – *Current Fiscal Condition and Outlook as Pertains to the National Pension System and Employee Pensions*. According to estimates published in this report, total premium payment burden and benefit payout rate for persons born in 1945 who were 70 years old as of 2015 was 5.2x. The younger the beneficiary, the more the payout rate declines, with those born in 1995 (age 20 as of the year 2015) with a payout rate of 2.3x. There is quite a noticeable gap between generations. These estimates are based on the assumptions utilized by the Cabinet Office in its publication, *Mid to Long-Term Economic and Fiscal Estimate (Economic Revitalization Version)*, submitted by the Council on Fiscal and Economic Policy, January 20, 2014. Using stricter assumptions than the government, one finds that the gap in payout ratio between the generations becomes even larger. Some are of the opinion that the social security system should not take losses and gains into consideration. The younger generation considers this to be unfair. Unsurprisingly, the younger generation feels insecure and wonders whether they will be able to receive any pension at all in the future. We believe that this is one of the major factors keeping consumption in check in the younger generation.

Average propensity to consume amongst young people declines step by step for each age group

There was a time when the worries of the younger generation regarding the future were relatively few. This was certainly the case for those who are now middle-aged. But what is the relationship to consumption of the younger generation today? To what extent is their attitude negative? Chart 9 takes a look at average propensity to consume based on the generation and age of the head of household. In cases where the head of household is between age 30 and 50, incomes tend to grow and consumption expenditure expands as well. However, we found that the level of propensity to consume tends to decline as the generation gets younger.

For people born between 1946-1950, the Japanese economy was in a rapid growth phase when they were in their 30s and 40s, hence propensity to consume easily moves into the higher bracket for this

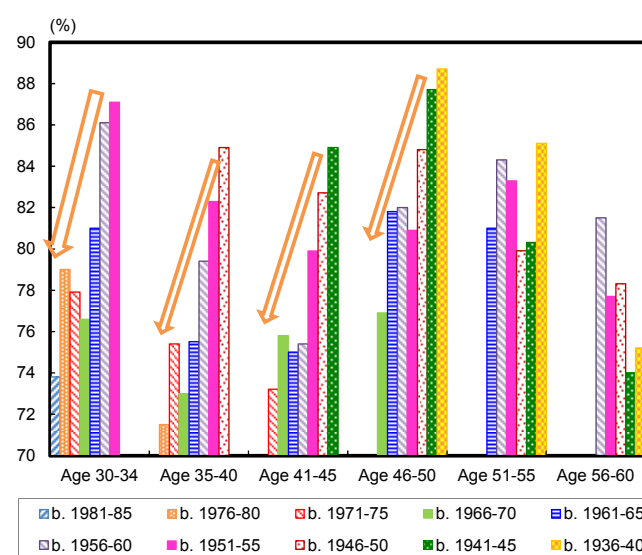
generation. However, each of the generations that follow tends toward a progressively lower average propensity to consume, with declines seen in each subsequent generation. Fears regarding the sustainability of the public pension system have grown over the years, and this sense of insecurity is thought to be a factor in pushing the younger generation more toward a preference for saving. In addition, with the continued long-term stagnation, the seniority system has crumbled and the outlook is not good for future income growth. This is yet another factor in holding down consumption amongst members of the younger generation.

Generation Gap in Employee Pension Payout Ratio
Chart 8


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

Notes: 1) Amounts of premiums paid and pension benefits received by persons in each birth year were converted using growth rate in wages to find price as of age 65, then this amount was reduced using growth rate of commodities prices to find current value (as of FY2014).

2) Economic assumptions: For years up to 2023 we used the case based on the standard in the Cabinet Office publication, *Mid to Long-Term Economic and Fiscal Estimate (Economic Revitalization Version)*, submitted by the Council on Fiscal and Economic Policy, January 20, 2014. After 2023 we used a case based on the lowest growth rate with reference to Cabinet Office estimates. Our assumptions regarding population are based on the moderate range projection in Population Projection for Japan: 2011-2060 (January 2012), produced by the National Institute of Population and Social Security Research.

Average Propensity to Consume Based on Generation and Age of Head of Household
Chart 9


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

Improvement in employment environment for younger generation urgently needed

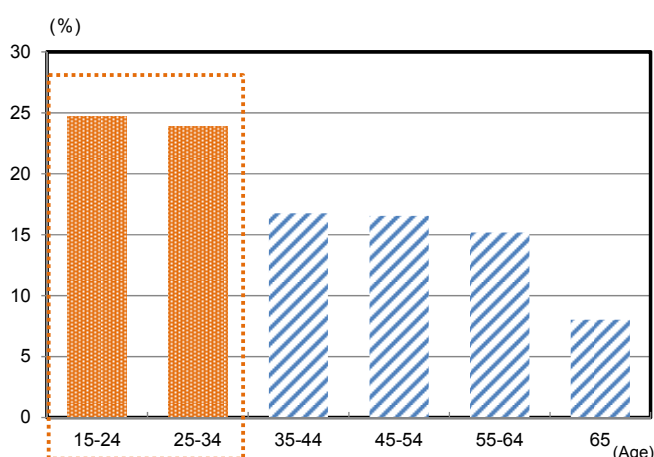
Finding ways to expand personal consumption amongst members of the younger generation is essential as a means of increasing personal consumption in the mid to long-term, and doing so requires finding ways to improve the employment environment for the young.

The first thing needed to improve the employment environment for the younger generation is to decrease the number of instances of involuntary non-regular employment. Chart 10 shows the percentage of the overall number of non-regular employees accounted for by involuntary non-regular employees. As is made clear by this chart, the ratio of involuntary non-regular employees who are members of the younger generation is high as compared to those of other generations. While there are some benefits to non-regular employment, such as the freedom to work during hours that are convenient for the individual worker, there are also disadvantageous factors, such as unstable employment and a lower wage. If involuntary non-regular employees were to be offered terms of employment more satisfactory to them, it stands to reason that anxiety about the future would recede and lifetime earnings would increase, thereby creating the possibility that consumer expenditure also might be encouraged to expand.

Second is the importance of eliminating the problem of employment mismatch. This would encourage a decline in the unemployment rate for the younger generation. Chart 11 shows the structural unemployment rate by age group. The structural unemployment rate has been high recently for the 15-24 and 25-34 age groups, in other words the younger generation, in comparison to other age groups. Meanwhile, looking at past trends we can see that structural unemployment has risen sharply for the younger generation since the mid-1990s as well. This suggests that the problem of employment mismatch is larger for the younger generation than for other age groups, and that this problem has been a long-term one. If the problem of employment mismatch can be resolved, it could also reduce the unemployment rate amongst the younger generation, leading to growth in income and a decline in feelings of anxiety about the future, and finally, it would also promise to help stimulate personal consumption.

Ratio of Involuntary Non-Regular Employees

Chart 10

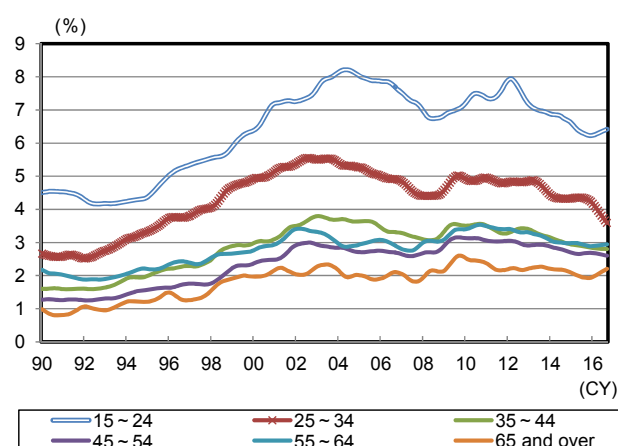


Source: Ministry of Internal Affairs and Communications; compiled by DIR.

Notes: 1) Percentage of non-regular employees accounted for by persons who accepted non-regular employment because there were no openings available for regular employees.
2) Number of non-regular employees in the 15-24 age group excludes those attending school.

Structural Unemployment Rate by Age Group

Chart 11



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

Note: Estimates by DIR.

Mid to long-term factors keeping personal consumption in check are structural problems requiring government intervention in the form of effective policy

The mid to long-term factors causing stagnant personal consumption which we have discussed in this report are structural problems which are not easy to resolve. It is quite possible that these same factors will continue to inhibit the expansion of personal consumption on into the future. Therefore we believe that it is necessary for the government to promote reforms such as building a sustainable social security system which will remove the feelings of anxiety about the future now held by citizens. Meanwhile, improvements must be made in the employment environment for younger workers. This can be done by correcting the polarization of the labor market and introducing equal pay for equal work.

Economic Indicators and Interest Rates

Chart 12

Indicator	2015	2016				2017		FY14	FY15	FY16	FY17
	Oct-Dec	Jan-Mar	Apr-Jun	Jul-Sep	Oct-Dec	Jan-Mar					
	Actual				DIR estimates		Actual		DIR estimates		
Real GDP											
Q/q %, annualized	-1.8	2.8	1.8	1.3	1.2	1.5					
Y/y %	1.1	0.4	0.9	1.1	1.8	1.4	-0.4	1.3	1.3	0.9	
Current account balance											
SAAR (Y tril)	19.2	19.9	18.5	19.6	20.4	20.8	8.7	18.0	20.1	22.5	
Unemployment rate (%)											
	3.3	3.2	3.2	3.0	3.1	3.0	3.5	3.3	3.1	3.0	
CPI (excl. fresh foods; 2015 prices; y/y %)											
	-0.1	-0.1	-0.4	-0.5	-0.2	0.5	2.8	-0.0	-0.2	0.5	
10-year JGB yield											
(period average; %)	0.29	-0.01	-0.15	-0.12	0.00	0.05	0.46	0.26	-0.05	0.05	

Source: Compiled by DIR.

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