

## Is household tolerance of rising prices really improving?

“Price increase tolerance DI” is declining, which suggests Japan’s households are still price-sensitive

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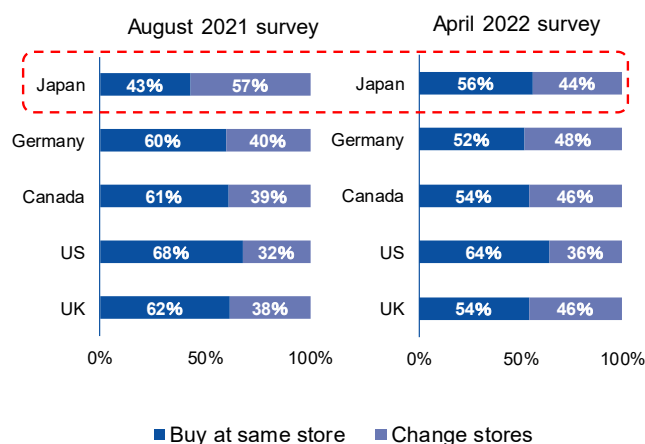
### Is household tolerance of rising prices really improving?

In a speech on June 6, the Bank of Japan’s Governor Haruhiko Kuroda stated “as firms adopt an increasingly active price-setting stance, Japanese households' tolerance of rising prices has been improving,” “this can be regarded as an important change from the perspective of aiming to achieve sustainable inflation,” and “forced savings accumulated as a result of restrictions during the pandemic may have improved household tolerance of rising prices” (but he later retracted these remarks after criticism from consumers, saying the expression was inappropriate).

If household “tolerance of rising prices” is really improving, firms may find it easier to raise prices (and thus be able to increase wages) as Governor Kuroda explained, and it may affect the future development of prices and wages. In this report, we will examine whether “household tolerance of rising prices is really improving” based on various datasets.

Governor Kuroda referred to a survey conducted by University of Tokyo professor Tsutomu Watanabe, in which households were asked how they will react when the price of an everyday product rises by 10% at the supermarkets they usually go. In the previous survey conducted in August 2021, 43% of respondents answered they would accept the 10% price rise for products they always buy and continue to buy the same amount at the same supermarkets; but the April 2022 survey saw the ratio of such households jump to 56%, a level on par with Europe and the United States (Chart 1). This result seems to suggest that household tolerance of rising prices has improved

[ Chart 1: Survey on rising prices (covers households of five countries) ]



Note: Ratio of answers to the question “what will you do when the price of a product you always buy rises by 10% at the supermarkets?”

Source: Made by MHRT based on Tsutomu Watanabe, *Inflation forecast survey of five countries*.

(because of forced savings, as explained by Governor Kuroda).

As the impact of the import item price surge resulting from the intensifying situation in Ukraine and the depreciation of the yen is far too big to be absorbed by company efforts alone, many consumers may feel that retail price increases are somewhat unavoidable, and have no choice but to continue the same consumption patterns at the same stores. We do not believe, however, that consumers are willing to “tolerate (accept)” rising prices; rather, consumers seem more “compelled to tolerate” price increases.

In fact, when asked the same question, more than 60% of respondents selected “highly applicable” to the answer “I will continue buying at the same supermarkets but will lessen the quantity or frequency to save money,” marking the highest rate over the past three years. We can see that households have become more prone to saving money. In addition, the survey included a question on the one-year outlook of wages, and while more people answered their wages are expected to “increase” or “slightly increase” in Europe and the United States, the majority of Japanese households said their wages will “remain unchanged.” From this we find it difficult to believe that the price increase tolerance of Japanese households is improving in the same manner as in Europe and the United States.

Even now, retailers seem to refrain from raising the prices of their in-house brand (PB: Private Brands) food items and daily necessities to retain customers, and this implies that retailers believe that the demerits of falling demand when raising prices outweigh the demerits of deteriorating terms of trade caused by higher procurement prices. In view of this behavior of companies, we hold it is not appropriate to conclude that household tolerance to rising prices is improving.

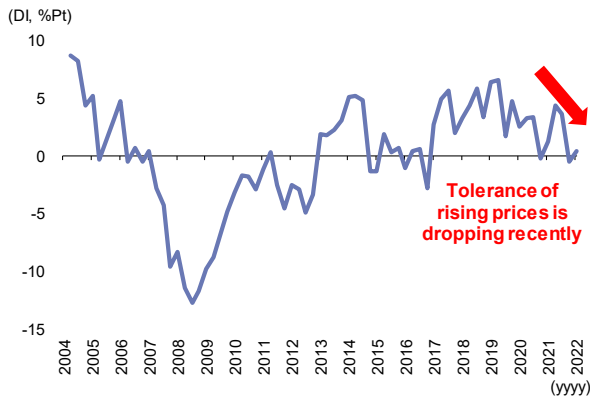
### **Household “price increase tolerance DI” has declined recently. This suggests a heightened cost-saving mentality**

Although it is hard to show household “tolerance to rising prices” quantitatively, **Chart 2** depicts our calculation of the household “price increase tolerance DI (Diffusion Index)” using the “Opinion Survey on the General Public's Views and Behavior” compiled by the Bank of Japan, based on the BOJ’s working paper (Takahashi and Tamanyu, 2022). More specifically, we computed the DI by subtracting the ratio of respondents who answered “rather unfavorable” to the question of rising prices from the ratio who answered “rather favorable,” and showed the deviation from the average value during the sample period (from June 2004 to March 2022). We used the survey data up to March 2022, but the DI dropped recently (the latter half of FY2021 when commodity prices skyrocketed), and thus we can interpret the DI to suggest that household tolerance of higher prices is rather worsening. According to the daily price index covering daily necessities including food items released in Nowcast Inc.’s “Nikkei CPINow” (**Chart 3**), the index continued to rise after April. Considering that the price hike of daily necessities purchased frequently has a stronger impact on the consumers’ perception of rising prices compared with other items, the DI will highly likely drop after April (meaning after the June survey of the “Opinion Survey on the General Public’s Views and Behavior”).

If we look at Economy Watchers Survey in May, we see such comments as “people are more conscious about prices and refraining from buying” (supermarket); “wages are not rising along with prices, so consumers are refraining from new purchases” (general retail store); and “although newly confirmed COVID-19 cases are declining, it is not translating into improved consumption appetite as more people are cutting back on spending” (supermarket). **Chart 4** depicts the number of comments that include words related to rising prices and household savings (such as “price rise,” “higher price,” “saving,” “refrain from buying,” and so forth) of respondents who

judged the current economic condition to be “worse” or “slightly worse.” The number of such comments has been rising in 2022, implying the possibility of a higher cost-saving mentality due to price hikes. If we look at the ratio of these comments to the overall comments of respondents who judged the current economic condition as “worse” or “slightly worse,” it is also rising. We can see that the impact of the cost-saving mentality on spending is growing gradually.

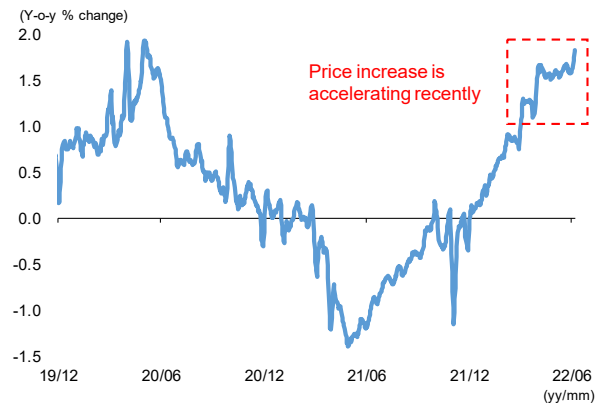
**[ Chart 2: Household price increase tolerance (DI) ]**



Note: We calculated the DI by subtracting the ratio of respondents who answered “rather unfavorable” to the question of what they think of price increases from the ratio who answered “rather favorable,” and showed the deviation from the average value during the sample period (from June 2004 to March 2022).

Source: Made by MHRT based on the Bank of Japan, *Opinion Survey on the General Public’s Views and Behavior*.

**[ Chart 3: Daily price index (y-o-y change, 7-day moving average) ]**



Source: Made by MHRT based on Nowcast Inc., *Nikkei CPINow*.

**Personal consumption remains sluggish despite higher excess savings. Consumption is being dragged down by the pandemic and rising prices**

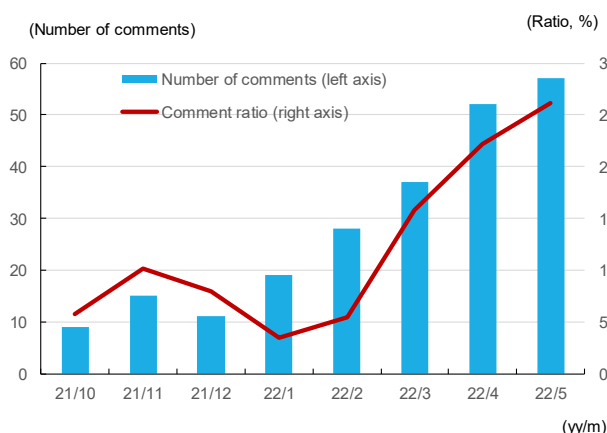
The pace of recovery in personal consumption is dull. During the January to March period, personal consumption remained sluggish on the back of the spreading Omicron variant (the sixth wave of infections), and its recovery has continued to lag since April. The Consumption Activity Index (travel balance adjusted and real, seasonally adjusted basis) in April was as low as -4.8% compared with the pre-pandemic period (2019 average). While the impact of COVID-19 is gradually diminishing as the number of confirmed cases declines nationwide, consumers centering on the elderly remain cautious about going out, and the decline in real income and the deteriorating consumer mindset (cost-saving mentality) have become downward pressures on personal consumption.

**Chart 5** presents our calculation of the “cost-saving mentality index” by item using CPI and Family Income and Expenditure Survey data up to April using the same methodology as Sakai and Minami (2022a). The cost-saving mentality index is a value derived by subtracting the average unit price increase rate of spending in the Family Income and Expenditure Survey from the price increase rate of CPI by item, and the more consumers purchase greater volumes of cheaper products driven by a higher cost-saving mentality, the lower the growth of the average unit price of spending relative to CPI, pushing up the cost-saving mentality index. Here, we picked the common items in the two statistics (165 items) and calculated the cost-saving mentality index of the items (100 items) whose year-on-year CPI growth rate was positive. We showed the ranking of the top and bottom 15 items (we calculated the period average after the latter half of 2021 when commodity prices started rising sharply). The results reveal that for apparel-related items, consumers seem to be searching for higher added-value products

now as there are more opportunities to go out, while for items like food and beverages, households seem to have a stronger incentive to buy relatively cheaper products. As the intensifying Russia-Ukraine conflict is certain to keep the prices of wheat products (flour and pasta, among others) high going forward,<sup>1</sup> consumers are expected to continue tightening their purse strings.

The situation in the Ukraine continues to be highly unpredictable, and we cannot deny the possibility that the prices of certain items, such as crude oil, natural gas and wheat, will remain high due to uncertainty over the supply situation on the back of stronger economic sanctions against Russia, among other factors. Although OPEC Plus decided to boost production from July, the volume falls short of the amount needed to substitute the crude oil produced by Russia, and the price of crude oil (WTI) recently surged to the 1 barrel = USD120 level for the first time in three months. Furthermore, the firmness of US economic indicators has raised the expectation that the Federal Reserve Board will tighten the monetary policy and push US long-term interest rates up above 3%, creating strong downward pressure on the Japanese yen and causing it to weaken to the 1USD = 134JPY level. Under these circumstances, more firms will eventually have no choice but to raise prices due to skyrocketing procurement prices, regardless of whether households will tolerate price hikes or not.

[ Chart 4: Comments on current conditions that reflect concerns over consumer cost-saving mentality ]



Note: The "comment ratio" is derived by counting the number of comments that included keywords that imply a cost-saving mentality (such as "saving," "refrain from buying," "price rise," "higher price") out of the comments of respondents who judged the current economic condition as "worse" or "slightly worse," and dividing the number by the total number of comments of respondents who judged the current economic condition as "worse" or "slightly worse."

Source: Made by MHRT based on the Cabinet Office, *Economy Watchers Survey*.

[ Chart 5: Cost-saving mentality index by item ]

Top items (high cost-saving mentality)					Bottom items (low cost-saving mentality)				
Ranking	Item	CPI	Unit price	cost-saving mentality index	Ranking	Item	CPI	Unit price	cost-saving mentality index
1	Black tea	15.5	-8.8	24.3	86	Onion	59.0	66.1	-7.1
2	Futon (bedding)	0.9	-22.1	23.0	87	Horse mackerel	2.0	9.3	-7.3
3	TV	3.7	-11.0	14.7	88	Skirt	3.1	10.6	-7.6
4	Women's coat	6.2	-6.9	13.1	89	Athletic shoes	0.3	9.2	-8.9
5	Amberjack	18.0	7.1	10.9	90	Sandals	2.2	12.4	-10.2
6	Coffee	12.0	1.5	10.4	91	Video recorder	2.0	12.3	-10.4
7	Air conditioner	2.6	-7.7	10.3	92	Automobile	1.0	11.6	-10.7
8	Vacuum cleaner	1.8	-7.9	9.8	93	Handbag	6.8	21.0	-14.2
9	Tuna	16.1	6.7	9.4	94	Cupboard	2.0	17.4	-15.4
10	Octopus	20.2	11.2	9.0	95	Microwave oven	2.0	18.4	-16.4
11	Cooking oil	26.9	18.8	8.1	96	Men's jacket	3.7	23.0	-19.3
12	Margarine	10.0	2.3	7.7	97	Rice cooker	2.0	21.8	-19.8
13	Apple	26.0	18.6	7.4	98	Women's apparel	2.1	23.8	-21.8
14	Flour	8.2	1.6	6.6	99	School bag	1.9	26.0	-24.1
15	Pasta	4.8	-1.0	5.8	100	Girls' school uniform	4.1	46.8	-42.7

Note: Data above are period averages after the latter half of 2021 when commodity prices started rising sharply up until April 2022. Of the 165 items subject to the cost-saving mentality index, we ranked 100 items whose change in year-on-year CPI growth rate was positive.

Source: Made by MHRT based on the Ministry of Internal Affairs and Communications, *Family Income and Expenditure Survey* and *Consumer Price Index*.

Accumulated excess savings (excess savings defined as accumulated household savings from the pre-pandemic period of 2019 amounted to about 50 trillion yen in the October to December period in 2021, **Chart 6**) are expected to become a source of future consumption,<sup>2</sup> and as concerns of the further spread of infections

<sup>1</sup> The government resale price of wheat was raised 17% this April, and is highly likely to be raised again in the next price revision in October.

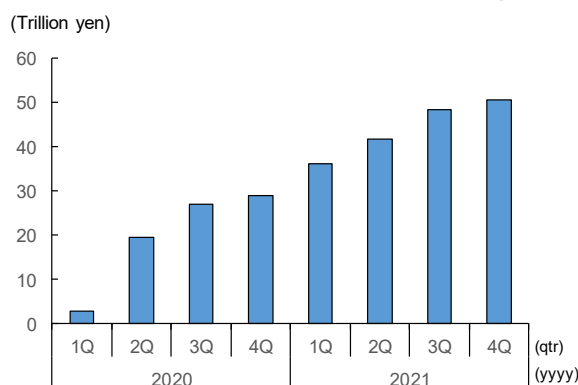
<sup>2</sup> As Shimanaka (2021) points out, the majority is retained as savings deposits, and since the share of stocks and investment trusts is small in Japan, we cannot expect the wealth effect to materialize as in the United States.

diminish, personal consumption centering on services with personal contact (dining out, accommodations, travel/transportation, amusement, etc.) is projected to head toward recovery. But the recent price hikes and subsequent heightened cost-saving mentality will unavoidably dampen the pace of recovery in personal spending.

As for excess savings, which are expected to alleviate the impact of rising prices, we need to pay attention to the fact that the savings situation varies depending on households. As Shimanaka (2021) points out, the bulk of excess savings is formed by high income earners with a lower propensity to consume, and in this sense, “tolerance of rising prices” tends to be relatively low among low-income earners. Also, Minami (2022) points out

that spending of low-income earners reflects a high share of daily necessities, and hence they are more vulnerable to price hikes of daily items such as food,<sup>3</sup> driving down their “tolerance of rising prices” even lower. We can see that “tolerance of rising prices” depends on the characteristics of households, and as a result, the impact of rising prices on personal consumption also varies depending on various factors that include the savings situation of households. We would like to analyze personal consumption based on household characteristics as a topic of interest in our future research activities.

**[ Chart 6: Household excess savings ]**



Note: Data are the cumulative differences from the same period in 2019.

Source: Made by MHRT based on the Cabinet Office.

## Reference

Refer to the original Japanese report by clicking the URL below for the reference material.

<https://www.mizuho-rt.co.jp/publication/report/2022/pdf/express-jp220610.pdf>

<sup>3</sup> Sakai and Minami (2022b) estimates that the increase in spending due to rising food and energy prices expected in 2022 will be (if excluding the impact of government subsidies to mitigate the sharp rise in gasoline prices) around 58,000 yen for low-income households (annual income under 3 million yen), and the increase in the burden rate relative to income (spending on food and energy/annual income) will be +2.5%Pt, a level equivalent to the effect of a +3% consumption tax increase.

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