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How long will Japan's high inflation last?

Combined factors slow the CPI to the 1% range year-on-year in the second half of FY2023

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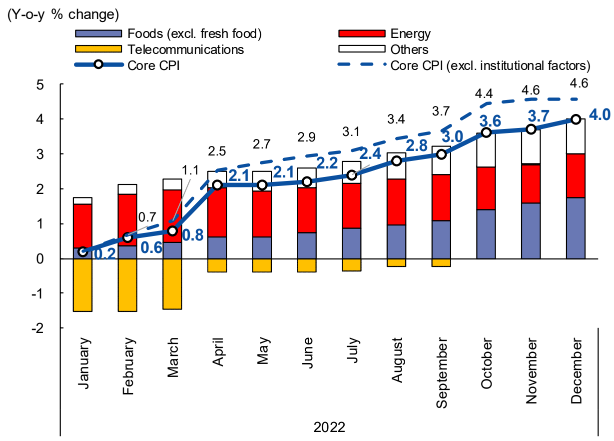
Core CPI rose to +4.0% year-on-year in December with service prices rising along with food

The Consumer Price Index (all items less fresh food, hereinafter "core CPI") for December 2022 climbed to +4.0% year-on-year, showing the fastest rise in 41 years (December 1981: +4.0%), as the impact of soaring import costs on the back of higher raw material prices and a weaker yen spread to the retail prices of food products and other items (**Chart 1**). With the government's mitigation measures on fuel oil prices suppressing gasoline and kerosene prices (pushing down the core CPI year-on-year by about -0.3%Pt) and the implementation of a nationwide travel support campaign reducing accommodation fees (lowering the core CPI by about -0.3%Pt), the actual rate of price increase is considered to have reached around +4.6% year-on-year.

The Bank of Japan's "Tankan (Short-Term Economic Survey of Enterprises in Japan)" for December showed the output prices DI of B2C-related industries (retail and accommodations/eating and drinking services) rising more than it did during the raw material price hike phase in 2008, with a widespread movement to pass on higher procurement costs to prices (**Chart 2**). The movement to raise prices seems to be expanding among business operators in a synchronized manner, as if to say "that store is raising prices, so we should too," and an increasing number of operators who had held off on increasing prices in the past, wary of losing customers, are now raising prices.

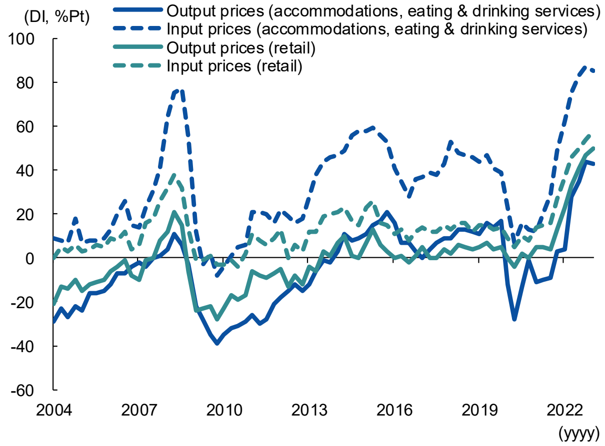
The rate of price increase is also expanding in the service sector, where price increases have been relatively mild compared to goods (the year-on-year CPI increase for services, excluding special factors such as lower telecommunications charges, rose from +0.5% in December 2021 to +1.4% in December 2022). The accelerating trend of raising prices can also be seen in the number of service items with a year-on-year increase exceeding 2% growing by 24% over the past year (**Chart 3**). Growth was particularly strong in eating out services (+5.8% year-on-year in December) and accommodations (+11.3% year-on-year, excluding the impact of the nationwide travel support campaign). In addition to the impact of soaring procurement costs driven by surging raw material prices and a weaker yen, it seems that rising labor costs, especially for part-time workers due to the nation's labor shortage, also contributed to higher prices (**Chart 4**). As pointed out by Sakai et al. (2022), operators in various sectors including accommodations are trying to secure higher revenue by raising the price per customer given the difficulty of increasing utilization rates due to the worker shortage (**Chart 5**).

[Chart 1: Core CPI year-on-year change (Contribution breakdown)]



Note: The series excludes institutional factors and the impact of the fuel oil price hike mitigation measures and the National Travel Support campaign.
Source: Made by MHRT based upon the Ministry of Internal Affairs and Communications, *Consumer Price Index*.

[Chart 2: Input and output prices DIs of B2C-related industries]



Note: Jan-Mar 2023 is the forecast DI.
Source: Made by MHRT based upon the Bank of Japan, *Tankan (Short-Term Economic Survey of Enterprises in Japan)*.

Even after the beginning of 2023, price increases are planned for a wide range of items. According to Teikoku Databank's price revision trend survey of 105 major food companies for January 2023, a total of 7,390 items are scheduled for price hikes from January to April, with February in particular having the second highest number of items (4,283) subject to price increases after October 2022 (**Chart 6**).

This widespread trend to raise prices is likely attributable in part to robust consumer spending despite higher prices. Ever since the outbreak of the COVID-19 pandemic, household savings rates have been increasing, especially among high-income earners, as a result of curbed travel spending and other consumption (**Chart 7**). Household savings as a whole have increased by about 60 trillion yen from the level before the COVID-19 crisis (2019), and this increase in savings is thought to be supporting personal consumption by easing the impact of the decline in real income due to higher prices. From a company perspective, the resilience of personal consumption, especially among high-income earners, serves an incentive to pass on higher prices to consumers.

On the other hand, rising prices are certainly putting pressure on household livelihoods, especially for low income households. According to the Bank of Japan's "Opinion Survey" for December, more than 90% of respondents answered that prices have risen compared to one year ago and expenditures have also increased, while income remained almost flat compared to a year ago, suggesting that higher prices are the main reason for increased expenditures (**Chart 8**). An increasing number of survey respondents stated that their living conditions "have become worse off" (**Chart 9**), indicating that higher prices are having a great impact on household livelihoods.

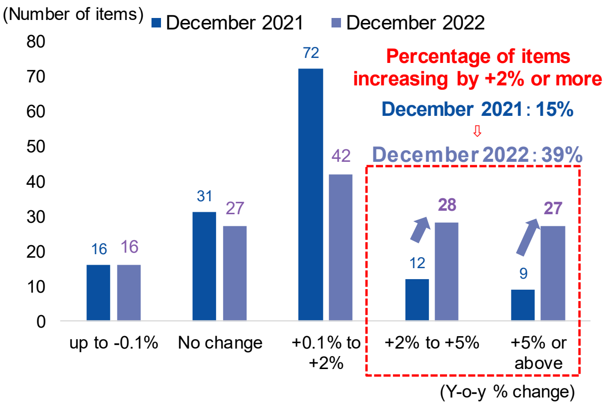
Import prices will decline in FY2023 from the previous year. CPI increase will gradually slow due to price hike mitigation measures

As shown in **Chart 6**, the spread of price pass-through on the back of sharply rising raw material costs will likely persist until around the first half of 2023. Electricity rates are expected to rise in the spring and beyond (electricity fees are expected to jump by 30% to 40% at the six major electric power companies, including Tokyo

Electric Power Company,[1] which applied to the government for an electricity price hike on January 23).

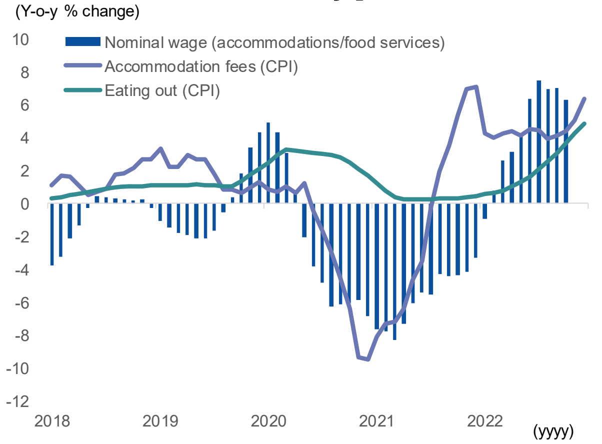
On the other hand, we hold that the year-on-year CPI increase will gradually ease in 2023 due to several factors pushing down the CPI.

[Chart 3: Change in growth rate of all service items]



Source: Made by MHRT based upon the Ministry of Internal Affairs and Communications, *Consumer Price Index*.

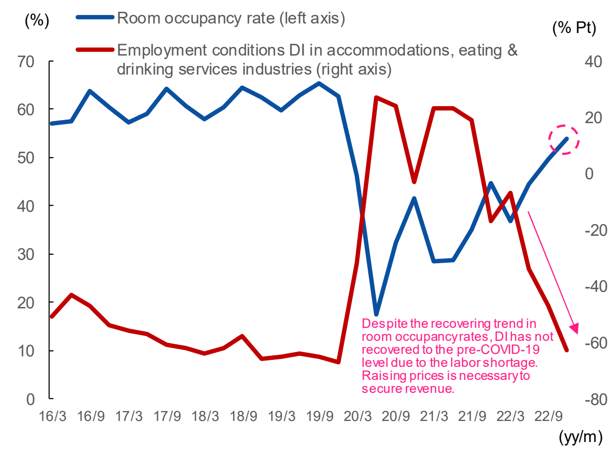
[Chart 4: Wages and prices in the service industry]



Note: Accommodation fees (CPI) exclude the impact of the Go To Travel and National Travel Support campaigns. Nominal wages are based on common business bases. All data are six-month moving averages.

Source: Made by MHRT based upon the Ministry of Health, Labour and Welfare, *Monthly Labor Survey*, and the Ministry of Internal Affairs and Communications, *Consumer Price Index*.

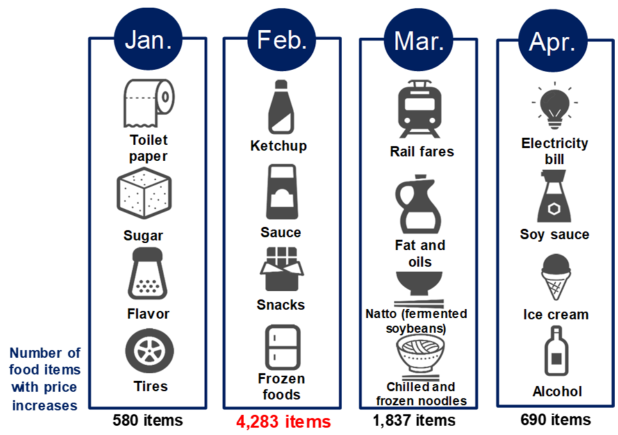
[Chart 5: Occupancy rates and employment conditions DI]



Note: The occupancy rate is all-nation and facilities based. Employment conditions DI is accommodations and food services of all sizes.

Source: Made by MHRT based upon the Japan Tourism Agency, *Survey of Room Rates Statistics*, and the Bank of Japan, *Tankan (Short-Term Economic Survey of Enterprises in Japan)*.

[Chart 6: Items scheduled for price increases in the first half of 2023]



Note: The number of food items scheduled for price increases is based on the Teikoku Databank, *Survey of Price Revision Trends of 105 Major Food Companies (January)*.

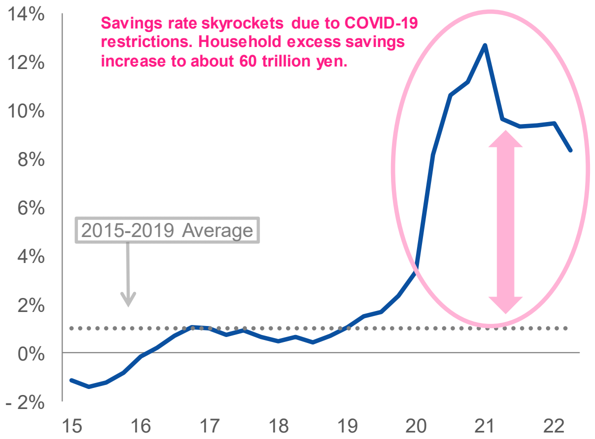
Source: Made by MHRT based upon the Teikoku Databank and the press releases of various companies.

First, both Europe and the United States are expected to fall into recession due to persistent inflationary pressures and subsequent rapid interest rate hikes, and the economic slowdown overseas will cause the prices of crude oil and other raw materials to decline. The global manufacturing PMI has already fallen below 50, and the global economy is expected to cool further in the future due to the recession in the US and Europe. (Mizuho

[1] About 36% of consumers in Japan have signed up with TEPCO. The utility has filed for price increases of 2,611 yen for regulated rates and 515 yen for free rates for the average household. Realization of these price increases (an average +29.3% increase in electricity rates) is estimated to push up the nationwide core CPI by +0.3%.

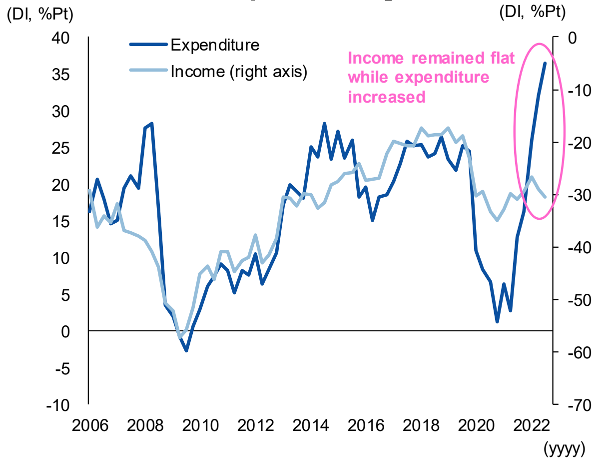
Research & Technologies (2022b) forecasts that the US and Eurozone economies will contract by -0.8% year-on-year in 2023, and that global economic growth will fall below the 2% level to +1.8%, indicating a global recession.) The recovery of China's economy will also be centered on services stemming from the waning of COVID infections, and the spillover to global demand for goods will be limited. As Sakamoto (2023) points out, the yen is also expected to strengthen fueled by lower US long-term interest rates and risk-off buying of the yen in response to the US economic slowdown (Mizuho Research & Technologies (2022b) and Sakamoto (2023) forecast the USD/JPY exchange rate in the second half of 2023 to hover around the mid-120 yen range), and import prices in yen terms are likely to remain in the negative territory compared to the preceding year (**Chart 10**). Looking at current import prices, the downward trend continued with -5.3% in November and -4.1% in December from the month before. With the decline in import prices, the pressure to pass on higher prices driven by cost factors is expected to gradually recede, especially in the goods sector.

[Chart 7: Household savings rate]



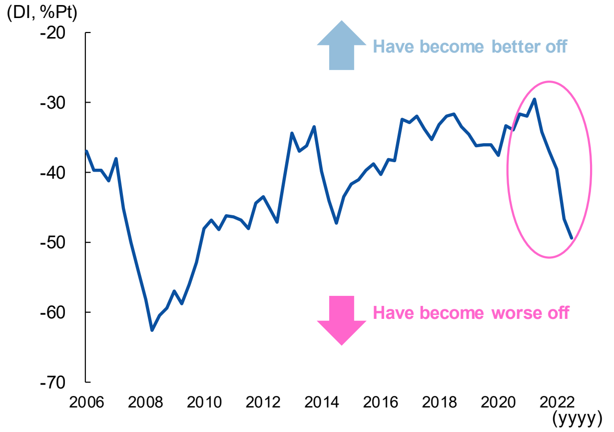
Source: Made by MHRT based upon the Cabinet Office, *National Accounts*.

[Chart 8: Current view on income and expenditure]



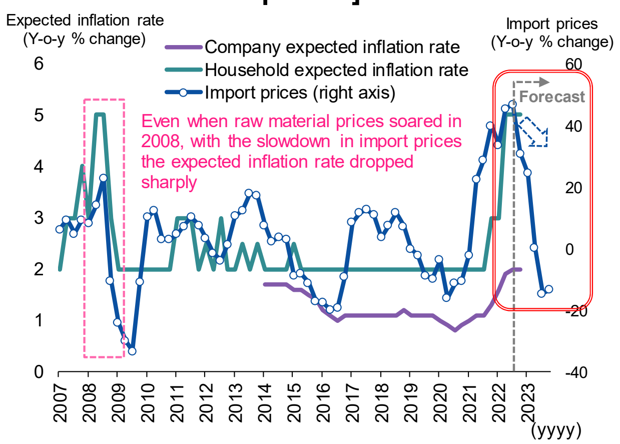
Note: Expenditure and income represent values calculated by subtracting the response percentage of "decreased" from "increased" from one year ago.
Source: Made by MHRT based upon the Bank of Japan, *Opinion Survey*.

[Chart 9: Current view of household circumstances]



Note: The data represent value calculated by subtracting the response percentage of "Have become worse off" from "Have become better off" compared to one year ago.
Source: Made by MHRT based upon the Bank of Japan, *Opinion Survey*.

[Chart 10: Expected inflation and import prices]



Note: Company expected inflation rate is the average of expected inflation rates over the next 5 years (total of all sizes, all industries), and household expected inflation rate is the median of expected inflation rates over the next 5 years.
Source: Made by MHRT based upon the Bank of Japan, *Tankan (Short-Term Economic Survey of Enterprises in Japan)*, *Opinion Survey*, and *Corporate Goods Price Index*.

Furthermore, after the beginning of 2023, in addition to the existing gasoline and kerosene price controls owing to fuel oil price hike mitigation measures, electricity and gas prices will be tamped down by the government's comprehensive economic measures. The CPI in February will start to reflect the effects of the comprehensive economic stimulus measures, and together with the oil price hike easing measures, they are expected to lower the core CPI by more than -1% in the immediate future (for more details on the effects of the comprehensive economic stimulus measures, refer to Sakai and Minami (2022a)). These measures are expected to offset the impact of the power companies' price increases to a significant degree.

The effect of higher household savings supporting consumption mentioned earlier is expected to diminish over time (the household savings rate will eventually fall back to its normal level, and the trend of personal consumption will be influenced more by real wages), and inflationary pressure from the demand side is unlikely to be sustained.

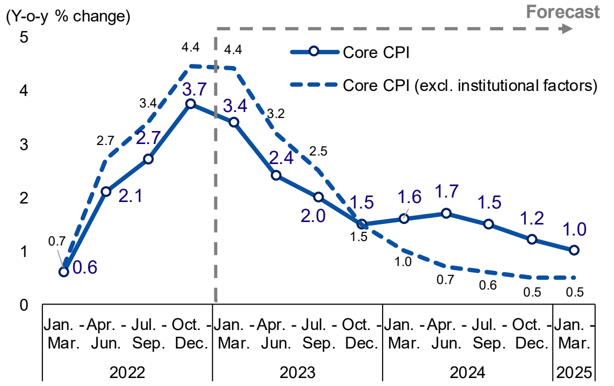
Due to these combined factors, core CPI growth is expected to gradually slow. At present, we expect the core CPI to rise to +4.2% to 4.3% year-on-year in January 2023 before peaking out and slowing to the +1% range in the second half of FY2023[2] (**Chart 11**. The average year-on-year CPI growth rate in FY2023 is projected to be +1.9%).

It should be noted that if the Bank of Japan were to revise its policy and eliminate yield curve control (YCC), long-term interest rates would most probably rise and heighten the appreciation pressure on the yen. Uemura et al. (2023) believe the elimination of YCC may see the yen appreciate to below 120 yen against the dollar due to the narrowing of the gap between domestic and foreign interest rates and the unwinding of yen selling by speculators. If the yen appreciates from the FY2022 average of 136 yen (forecast) to 120 yen in FY2023, and we estimate the impact on the CPI using Mizuho Research & Technologies' macroeconomic model, the year-on-year core CPI change rate is estimated to fall by -0.1%Pt to 0.3%Pt (**Chart 12**). With distortion of the yield curve remaining after the January Monetary Policy Meeting, and the possibility that YCC may be revised, we need to closely monitor the future actions of the Bank of Japan.

On the other hand, if CPI growth were to swing upward from this report’s forecast, it would probably occur under the circumstances where price increases become more widespread than expected, especially in the service sector. As mentioned earlier, the rise in service prices is due to a worker shortage in the service sector, a factor that will persist as upward pressure on prices even after raw material prices begin to come down. As indicated by Mizuho Research & Technologies (2022b), given the prospects of a full-fledged recovery in inbound demand in addition to service consumption in the future (inbound demand is recovering at an accelerating pace, especially tourists from South Korea, Taiwan, and Hong Kong, and we expect inbound demand from China to pick up after spring 2023, when the impact of COVID infections will have receded), the overall pace of slowdown in the CPI year-on-year may be slower than assumed in this report due to bullish pricing in the service sector, including accommodations and eating out services.

[2] The year-on-year CPI growth rate will rise again at the end of FY2023, with the reaction to reduced government measures to mitigate price hikes pushing up the year-on-year CPI growth rate from the second half of FY2023 onward.

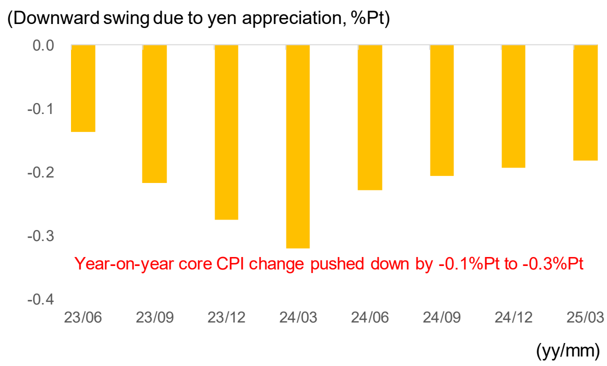
[Chart 11: Outlook of the core CPI]



Note: Electricity prices reflect price hikes by the six major electric power companies, including Tokyo Electric Power Company. The series excludes institutional factors and the impact of the National Travel Support campaign and the government's comprehensive economic stimulus package (electricity, gas, and fuel oil assistance). We assume that measures to curb electricity and other costs under the comprehensive economic stimulus package will be implemented until the end of September 2024, with a gradual reduction in the subsidy amounts beginning in September 2023.

Source: Made by MHRT based upon the Ministry of Internal Affairs and Communications, *Consumer Price Index*.

[Chart 12: Impact of yen appreciation on the core CPI]



Note: The figure shows the impact of eliminating YCC in the April-June 2023 period and the JPY/USD appreciating to 120 yen. Estimated using Mizuho Research & Technologies' macroeconomic model.

Source: Made by MHRT based upon the Cabinet Office and other sources.

Household burden in FY2023 will increase by 51,000 yen. Increased wage hikes are not expected and companies are cautious about raising prices

As discussed in the previous section, core CPI year-on-year growth is expected to lose steam in 2023. But with prices expected to remain in the +2% to 3% range for the time being as shown in **Chart 11**, it is more likely that household finances will continue to bear the burden of higher prices.

Similar to Sakai and Minami (2022b), **Chart 13** shows the estimated increase in household spending in FY2023 driven by higher prices compared to the previous year. While spending on energy such as gasoline, electricity, and gas is expected to fall, household spending will likely increase by 51,000 yen from FY2022 due to the ongoing surge in food spending coupled with price hikes in the service sector (restaurants, accommodations, etc.) owing to expanded in-person service consumption and inbound demand, as well as higher worker costs associated with the labor shortage.[3] High prices are expected to remain a burden on households for the time being.

Against this backdrop, public expectations are rising on higher pay through the annual spring wage offensive, because the realization of sufficient wage hikes would help absorb the impact of higher prices. The Kishida administration is also seeking to achieve wage gains higher than the rate of price increases.

As noted by Nakanobu and Kazama (2022), companies are increasingly willing to raise wages in response to the labor shortage and higher prices. An increasing number of companies are citing "securing and retaining labor" as an important factor in raising wages, and in addition to this trend, more companies were taking higher prices into account as they entered 2022 (**Chart 14**). We have actually seen an increasing number of reports on large

[3] Compared to the estimate of Sakai and Minami (2022b), the overall increase in burden has risen due to such factors as the greater-than-expected price pass-through in the food and service sectors and TEPCO's intention to raise utility fees. As indicated by Sakai and Minami (2022b), the burden is expected to increase by approximately 100,000 yen in FY2022, and compared to FY2021, the cumulative increase in FY2022 and FY2023 is calculated at +150,000 yen.

wage increases by various companies.

On the other hand, as shown in **Chart 14**, corporate earnings remain the most important factor in determining wage increases for most companies. While some large companies operating globally are reporting strong earnings on the back of the weak yen and other factors, non-manufacturers and small and midsized companies are experiencing a weak earnings recovery mainly due to rising raw material costs, making it difficult to realize large wage increases (**Chart 15**). Given that the uncertainty surrounding the economic slowdown overseas mentioned earlier is also making companies more cautious about raising wages, it is highly likely that the 2023 spring wage offensive will see base pay increases limited to less than 1% (Nakanobu and Kazama (2022) forecasts a 0.8% base wage increase and a 2.6% wage increase including regular pay raises). We project that price inflation will continue to outpace nominal wage growth. While we expect personal consumption to maintain a recovery trend centering on the service sector, the pace of recovery, particularly in goods consumption, will be hindered by a decline in real wages from the previous year.

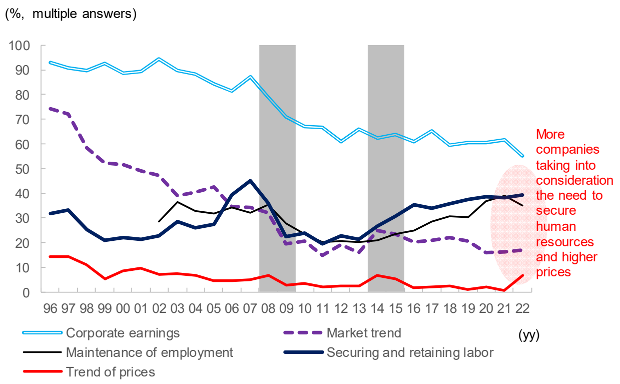
[Chart 13: Increasing burden of higher food, energy, and other costs by annual income (FY2023)]

Annual income	Burden increase in FY2023 (yen)				Increase in burden rate (%Pt)
	Foods	Energy	Others	Total	
Under 3 million	24,134	-2,416	14,466	36,183	+1.5
3 - 4 million	27,608	-2,682	19,653	44,579	+1.3
4 - 5 million	29,863	-2,861	20,873	47,874	+1.1
5 - 6 million	30,340	-3,021	22,760	50,079	+0.9
6 - 7 million	32,385	-3,055	22,419	51,750	+0.8
7 - 8 million	34,180	-3,041	23,566	54,706	+0.7
8 - 9 million	34,719	-3,259	29,423	60,882	+0.7
9 - 10 million	37,348	-3,308	32,651	66,691	+0.7
10 million or more	42,606	-3,426	35,141	74,320	+0.5
Overall average	31,562	-2,937	22,121	50,745	+0.8

Note: The table shows the estimated increase in burden for FY2023 relative to FY2022. Data for households of two or more persons, by use category. The burden rate is the ratio of burden to annual income.

Source: Made by MHRT based upon the Ministry of International Affairs and Communications, *Family Income and Expenditure Survey*.

[Chart 14: Percentage of firms placing importance on each factor in revising wages]



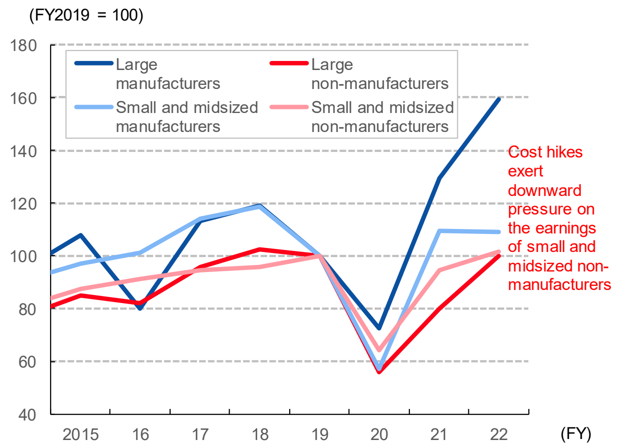
Note: The shadowed areas represent the year and the following year in which the CPI (All items) rose by more than +1.0% year-on-year. The CPI (All items) rose +1.4% year-on-year in 2008 and +2.7% in 2014, including the impact of the consumption tax hike.

Source: Made by MHRT based upon the Ministry of Health, Labour and Welfare, *Survey on Wage Increases*.

It is difficult to imagine the rate of wage increases accelerating in 2024. If import prices decline and CPI growth slows in 2023 as mentioned above, the expected inflation rates of households and companies are also predicted to decline (**Chart 10**). Although the expected inflation rates of households and companies have moved higher lately, these rises are largely driven by the recent surge in prices, and it would be premature to assume that we have escaped the "norm (social norm) of low inflation" (see Sakai et al. (2021)). Looking at the past time series in **Chart 10**, when import inflation slows, expected inflation tends to decline as well. As the momentum for higher wages on the expectation of higher prices will likely recede before the 2024 spring wage offensive, we do not anticipate large wage increases.

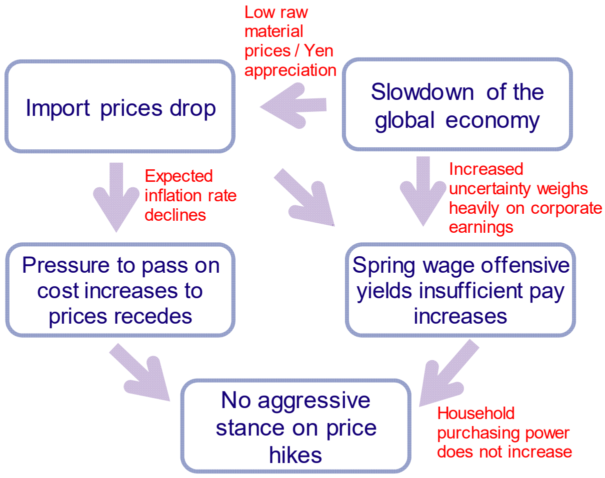
According to the "Annual Survey of Corporate Behavior" compiled by the Cabinet Office, the expected growth rate of companies (growth rate forecast over the next three years) will stagnate at around 1% (Mizuho Research & Technologies (2022a) also forecasts a GDP growth rate of +1.0% in FY2023, +0.9% in FY2024, and moderate growth in the mid-0% range thereafter). With future growth in revenue unlikely, companies must be cautious about raising wages, which will directly lead to fixed cost inflation. Even if a certain level of wage increase takes hold in the short term due to high prices and a labor shortage, a 2% to 3% increase in nominal wages will be a high hurdle.[4] If wages do not grow sufficiently after 2023, consumer purchasing power will not improve and the budget-conscious mindset will remain strong, leading companies to adopt a more cautious pricing stance (**Chart 16**). As seen in **Chart 11**, The average year-on-year CPI growth rate for FY2024 is projected to be in the low to mid 1% range, but on an actual basis, excluding institutional factors such as the reaction to the reduction or termination of price hike mitigation measures after the second half of 2023, the year-on-year CPI growth rate is expected to linger in the 0% range. Our main scenario at present highlights the difficulty of achieving the Bank of Japan's 2% price target for the time being.[5]

[Chart 15: Ordinary income by company size and industry]



Note: The chart is based on the December survey. Levels are calculated from year-on-year changes of plans and actual data.
Source: Made by MHRT based upon the Bank of Japan, *Tankan (Short-Term Economic Survey of Enterprises in Japan)*.

[Chart 16: Trends in the pricing stance of companies after 2023]



Source: Made by MHRT.

Reference

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

https://www.mizuho-rt.co.jp/publication/report/research/express/2023/express-jp230125.html

[4] Nominal wage growth remained in the mid-0% range even during the Abenomics period when the jobs-to-applicants ratio (= labor shortage) reached a record high.

[5] Mizuho Research & Technologies (2022a) forecasts that while Japan's aging population and declining birthrate will exacerbate the labor shortage and increase the upward pressure on wages in the late 2020s and beyond, price inflation will expand only to the low 1% range, making it difficult to achieve the Bank of Japan's 2% price target even in the medium term.