

# Moderate Inflation May Be Achieved – the Outlook from Statistics



Author  
Nariyasu Yamasawa

By Nariyasu Yamasawa

## Introduction

The rate of inflation rate is rising globally. Disruption to supply chains due to the spread of novel coronavirus infections has caused restrictions in supplies of electronic parts such as semiconductors, and in addition Russia's invasion of Ukraine in 2022 has led to a rise in energy prices. While Japan's inflation rate is comparatively low, it has been continuing to rise and the upward trend is expected to continue.

This article summarizes the current state of inflation in Japan and its outlook. Diverse factors behind inflation are reviewed, and the linkage between wages and prices in particular is examined.

It is not the case that there has been a dramatic structural change in the Japanese economy following the spread of Covid-19, and there is therefore a possibility of a reversion to the previous deflationary economy. Employment adjustment subsidies were effective in limiting a rise in the unemployment rate, but the regeneration of companies has hardly occurred. However, there were major changes to inflationary expectations. As moderate inflationary expectations are created, and if moderate increases in wages occur, there may be a possibility of overcoming a deflationary economy.

## Global Inflation Trend After 2021

Prices have been soaring across the world. In 2020, the impact of the spread of Covid-19 caused restrictions in movements, and demand dropped with prices on a downward trend. But since 2021, prices have been rising due to the impact of restrictions in supplies.

According to the Bureau of Labor Statistics in the United States, the US inflation rate remained high at around 10% year-on-year at one point, but its rise has now slowed. The consumer price index (CPI) for April 2023 was up by 4.9% compared to the same month in the previous year. The main reason behind the slowdown is energy prices passing their peak to become negative year-on-year. Prices for other commodities are rising and the CPI (overall) excluding food and energy was up by 5.5%. Inflationary pressure is still firm.

According to Eurostat, the consumer price index for the Eurozone for April 2023 was up by 7.0% year-on-year. The rate of rise slowed with a fall in resource prices, but on a basis excluding food and energy it was a high 5.6%. Inflation is especially high in Germany and Italy, and inflation continues to accelerate. According to the Office of National Statistics of the United Kingdom, a labor shortage is

encouraging inflation in the UK. Although the peak has passed, the figure for April was still at a high level of 7.8%.

## Japan's Core Core Inflation Rate on Rising Trend

According to the Ministry of Internal Affairs and Communications, the CPI in Japan for March 2023 was up by 3.2% year-on-year for the overall index. The rate of rise has been falling since its peak at 4.0% in January 2023, but the main reason behind the fall is the "electricity and gas price fluctuation mitigation project" by the government. The ministry estimates that the index dropped by 1 percentage point counting this policy as a factor. Without this portion, prices were up by 4% and inflation has not calmed down.

Doing a factor analysis, while energy, which had thus far been an upward factor by around 1 percentage point, has remained at a negative 0.3 percentage point with the aforementioned policy, food was an upward factor by 2.0 percentage points. The rise in prices of food is likely to continue. Teikoku Databank announced that 195 major food manufacturers will raise prices for 824 products in May, a three-fold increase from the same month in the previous year. The forces behind rising prices have not abated.

What should be noted is that the "core core CPI", which is not easily affected by weather or external factors, is on a rising trend (*Chart 1*). In Japan, the core core CPI is the overall index for a basket of goods excluding the prices of fresh food (excluding liquor) and energy. It has exceeded 2% for two consecutive months since February 2023, with March 2023 seeing a rise of 2.3%. This indicates that rises in prices for a vast array of goods and services are continuing, and also that the trend of inflation is ongoing.

Movements in the GDP deflator are also important. The GDP deflator can be calculated by dividing nominal GDP by real GDP. The CPI studies prices of goods and services that consumers purchase, but the GDP deflator shows inflation that occurs due to domestic factors within Japan (homemade inflation). For example, when import prices rise, unless they are passed on to domestic prices the GDP deflator becomes negative. Imports are deducted items from GDP, and therefore when only import prices rise, the GDP deflator becomes negative. Japanese companies have been trying not to raise domestic prices even when import prices rise, and thus the GDP deflator had been trending in negative territory. However, recently there have been an increasing number of companies passing on the rise in import prices to domestic prices. The GDP deflator for the period January-

March 2023, which the Cabinet Office has released, was a rise of 1.2% year-on-year, and it is highly likely that this upward trend will remain fixed

### Rise in Prices Beyond Expectation

By looking at the forecasted values of economists, it can be confirmed that Japan's rise in prices is progressing more than previously estimated. The "ESP Forecast" released by the Japan Center for Economic Research is a survey which aggregates forecasted values of Japan's leading economists. *Chart 2* collects these outlooks for the inflation rate (overall, excluding fresh food) after April 2020.

First, looking at the trend in forecasted value for fiscal 2020, as of April 2020 the impact of decreased demand due to the spread of coronavirus infections was emphasized, and the outlook for the inflation rate for fiscal 2020 was a negative 0.1%. It was revised downward to a negative 0.4% in April 2021 and the actual value was also a fall of 0.4%.

The inflation outlook for fiscal 2021 was gradually revised downward. As of April 2020, it was a 0.4% forecast but as of April 2021 it became 0.3%. In April 2022, it became 0.1% and the actual rate was flat at 0.0%. But the revision range was small and it can be said that it turned out largely in line with the outlook.

A major revision to the outlook was seen for fiscal 2022. The outlook as of April 2021 was 0.6%, but in April 2022 it became 1.7%. The response period for that month was from March 31 to April 7, and therefore the impact of Russia's invasion of Ukraine in March is considered to have been factored in somewhat. But revision of the forecasted value continued, and in April 2023 it was 3.0%, with the actual rate being 3.1%. This means that the forecast was revised upwards by 2.4 percentage points in two years.

However, looking at the most recent forecast value as of April

2023, 2.1% for fiscal 2023 and 1.4% for fiscal 2024 are estimated, and the forecast does not see inflation expanding. It is below 2% for fiscal 2024 and it can be seen as anticipating a reversal to a deflationary economy.

### Weak Upward Pressure from the Economy

Let us examine the factors that impact prices. Factors such as economic trends, import prices, wages and inflation expectations come to mind. As prices are referred to as being the body temperature of the economy, it is impacted by consumer trends. When the economy is doing well, demand exceeds supply which becomes an upward pressure on prices, but when the economy is bad, prices become a downward pressure.

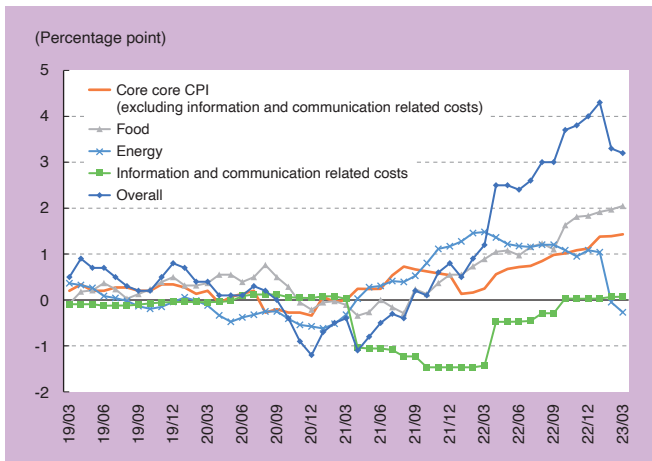
Every month, the government releases its "Monthly Economic Report" which reports on the state of the economy. In the report for April 2023, it states that "while part of the economy is showing weakness, it is slowly recovering", indicating that the economy is on a recovery path. However, while as of December 2022 it said point-blank "the economy is gradually recovering", since January 2023 the words "while sections show weakness" have been added, indicating that the forces for economic recovery are weak.

Looking at the coincident index of the diffusion index which the Cabinet Office releases, having dropped significantly with the start of the spread of Covid-19, it is now on a recovery path. However, the economy is not in a state where it is visibly better after the start of 2023. Assessment of the current situation as of February 2023, which the Cabinet Office mechanically produces from movements of the diffusion index, was a "standstill".

Looking at the National Short-Term Economic Survey of Enterprises in Japan (Tankan) released by the Bank of Japan, business sentiment DI ("good" – "bad") for large companies and manufacturing industries surveyed in March 2023 was worse for the

CHART 1

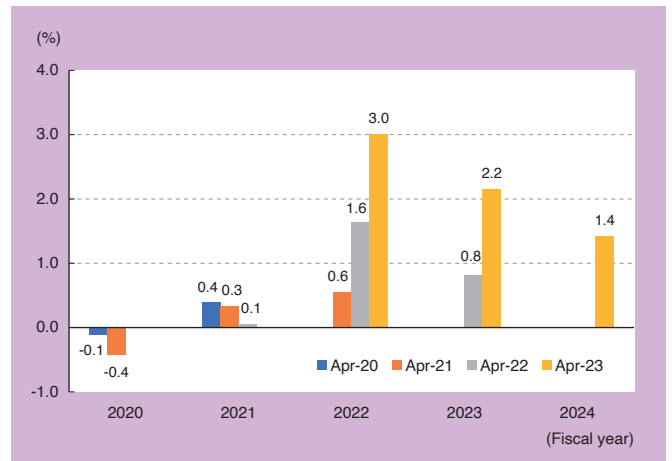
### Rising trend of core core CPI continues (contribution displayed)



Source: Ministry of Internal Affairs and Communications "Consumer Price Index". Overall index is the rate of rise, and others are contributions to the overall index.

CHART 2

### Inflation rate outlook by point of estimation



Source: Japan Center for Economic Research "ESP Forecast". Forecasted value of year-on-year rate of rise for consumer price index (overall). Actual rate for fiscal 2020 was a negative 0.4%, 0.0% for fiscal 2021 and 3.1% for fiscal 2022.

fifth consecutive quarter. Supply and demand conditions DI (“excess demand” – “excess supply”) for domestic products and services for the same period were negative (excess supply) for both manufacturing and non-manufacturing industries, and upward pressure on prices from supply and demand was weak.

### Rises in Import Prices

Import prices are affected by movements in primary commodity prices such as crude oil prices, and the exchange rate of the yen against the US dollar. Since the spread of the coronavirus, international commodity prices have risen. This is because demand for goods has increased while service activities, on the other hand, have been restricted.

Russia’s invasion of Ukraine further enhanced this movement. Ukraine is a major producer of wheat and corn, and concerns over its supplies stalling have pushed up prices of agricultural products. Economic sanctions against Russia have caused the supply of Russian crude oil to drop and crude oil prices rose sharply. Since the summer of 2022, the possibility of crude oil prices continuing to rise has declined with increased supply of US crude oil. Looking at import prices of crude oil on a customs clearance basis (when it has cleared Japanese customs), it has turned to a decline after its peak in July 2022 at \$119 per barrel, and since 2023 it has been trending at a level below \$100 per barrel.

The yen-dollar exchange rate also hugely affects yen-denominated import prices. With an expanding gap between interest rates in Japan and in the US, the exchange rate saw a weak yen close to 150 yen to the dollar in the fall of 2022, but it is currently trending at around 130 yen to the dollar. The rise in dollar-denominated import prices combined with a weak yen resulted in yen-denominated import prices rising sharply at one point, but this movement has now stopped, and yen-denominated import prices are now expected to trend calmly compared to the previous year.

### Wages Not Reflecting Labor Supply & Demand

Wages and prices are closely related. A rise in wages means a rise in labor costs and results in costs for companies increasing. It is one of the factors behind the rise in prices of goods and services.

With prices rising, real wages – which subtract the rate of price rises from wages – became negative. Hence, the government requested economic organizations such as the Federation of Economic Organizations to raise wages, and economic organizations have been showing a certain degree of understanding. In Japan, labor-management negotiations over wages which are conducted in the spring (*shunto*, spring wage talks) have a huge impact on scheduled wages. The spring wage talks for fiscal 2023 saw the number of companies agreeing to wage increases rise.

The spring rate of wage increases can be divided into two elements: the part where wages increase as a result of being employed continuously (periodic wage increases) and the part where the wage standard itself increases (basic level of wages). While

periodic wage increases are a factor of increases for individual workers, if the age structure does not change, overall wages do not change. The part that increases the costs for companies is the basic level of wages.

Since the 2000s, companies have not conducted basic-level wage raises, regardless of the labor supply and demand. *Chart 3* shows the spring wage increase rate from fiscal 1975 to fiscal 2022 and the active job openings-to-applicants ratio (previous fiscal year). This is the ratio of the number of job offers to the number of job applications, and the higher it is, the stronger the companies’ demand for workers. Between the 1970s and 1990s, there was a positive relationship between labor supply and demand and wage increases, but since the 2000s the rate of wage increases is around 2%. Since periodic wage increases are around 2%, it shows that the basic level of wages is close to zero.

The cautious attitude towards wage increases reflects the conservative attitudes of Japanese companies. As a result, “excess savings” has become normalized for Japanese companies. From a savings-investment balance point of view, companies should intrinsically become “excess investment” by expanding their business through aggressive investments. But Japanese companies have continued to be excess savings since 2000, holding back on aggressive investing and saving up profits instead. Since increasing wages is also a means of investing in human capital, a more proactive attitude towards wage increases is desirable (*Chart 3*).

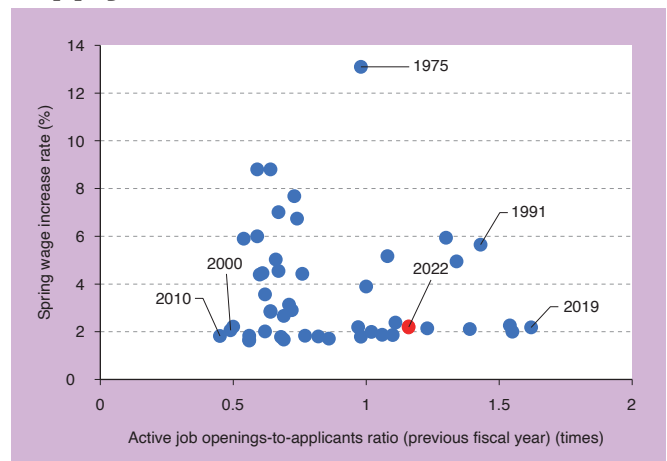
### Labor Supply at Ceiling

One of the reasons why wages are not increasing even when labor supply and demand is tight, is the rise in labor supply of women and the elderly, with the labor participation rate for both having been continuously rising.

Because women leave the workforce due to pregnancy and giving

CHART 3

### Wages not responding to labor supply & demand



Source: Active job openings-to-applicants ratio from the Ministry of Health, Labour and Welfare “Status of Job Referrals”; spring wage increase rate from Ministry of Health, Labour and Welfare “Comprehensive Survey on Wages”.

birth, and later return, the labor productivity rate has been M-shaped. In recent years, more women work before and after giving birth, and hence this M-shape is starting to change. The labor participation rate for women aged 30-34 for the period January-March 2023 was 79.2%, and for women aged 35-39 it was 77.7% – both close to 80% (Chart 4).

The labor participation rate of the elderly is also continuing to rise. For the period January-March 2023, it was 73.9% for those aged 60-64, 51.6% for those aged 65-69, and 33.8% for those aged 70-74. They have all increased compared to the same period the previous year. But looking at the chart, those aged 70-74 seem to have reached a ceiling, and those in other age groups may sooner or later also reach a ceiling.

What will happen when entry of women and the elderly to the labor market subsides? If labor supply and demand continue to be tight even after the labor participation rates for both have reached a ceiling, upward pressure on wages will likely become strong. Companies will pass on increases in wages to prices, and rises in prices will then lead to increases in wages again, creating a continuous spiral.

In fiscal 2023, more companies are agreeing to increase their basic-level wages. But the standard does not quite meet that demanded by workers. The Japanese Trade Union Confederation called for a spring wage increase of around 5%, but the actual increase will likely be around a high 3%. To cause a spiral of prices and wages, a more-than-expected increase in wages and a rise in prices are necessary, but the current wage situation does not quite meet that level of upward pressure.

### Change in Inflation Expectations

An important factor impacting prices is inflation expectations. Inflation expectations are people's outlook on prices, and as this changes, so do prices in real life in a self-fulfilling way.

Under a deflationary economy, people thought that “prices are

something that do *not* rise”, and therefore prices in real life also did not go up. Companies were also reluctant to raise prices. If one company were to raise its prices, rival companies might snatch its customers. Because market share may be lost, raising prices has been avoided even at the expense of profits. But if inflation expectations are that “prices are something that *will* rise”, it will become easier for companies to raise prices.

The outlook for prices is changing. There is a break-even inflation rate which the financial markets look at in assessing price outlooks. It calculates the inflation outlook in the financial markets by looking back at movements in inflation-indexed bonds. In 2022, it remained high at around 1% but has since declined, and as of April 21, 2023 it is 0.67%. Inflation expectations as seen from the financial markets are not that great.

The Consumer Confidence Survey of the Cabinet Office is conducted on consumers, and looks at the inflation rate outlook for the future. It was around 2% in 2020, but sharply rose in 2022, and the outlook for March 2023 is 4.0%. Inflation expectations among consumers seem to be changing.

### Desired Balance

The desired balance from now on is the co-existence of moderate inflation and moderate wage increases. This is the normal form often seen in many countries. One of the reasons why Japan was in a special state was its low “inflation expectations”. Consumers believed “prices are something that do not rise” and thus kept an especially keen eye on price rises. Recently, however, prices have been slowly rising also for non-food and non-energy goods and services, and “inflation expectations” have been fostered.

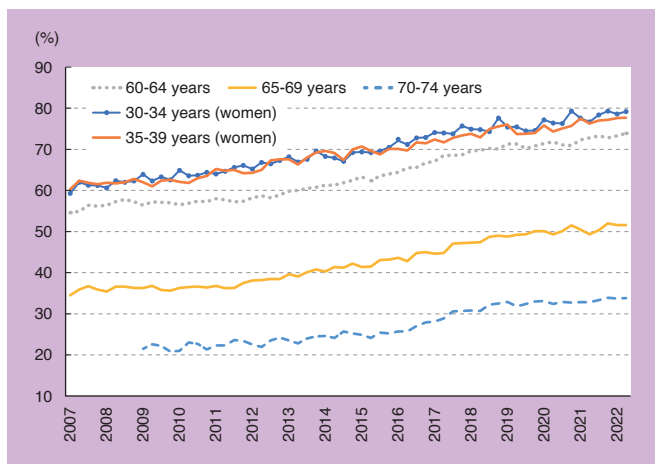
Of course, if we see just a rise in prices, demand will cool off and lead to a recession. Moderate wage increases are necessary. A price and wage spiral should be avoided but companies have room to increase wages. According to the Financial Statements Statistics of Corporations by Industry, ordinary profits for the period October-December 2022 were at their second record level in total of all sizes and all industries. There is room to increase labor costs. Since a labor shortage is foreseen in the future, setting attractive wages in order to upgrade human capital is also essential.

If a moderate increase in wages and a rise in prices of around 2% continue, interest rates will also rise. This will mean that the Japanese economy will finally revert to its normal form.

*Article translated from the original Japanese by Mio Uchida.* **JS**

CHART 4

### Labor participation rate of elderly & women



Source: Ministry of Internal Affairs and Communications “Labour Force Survey”

Nariyasu Yamasawa is a professor of the Faculty of Management at Atomi University. He has worked for the *Nihon Keizai Shimbun (Nikkei)* and the Japan Center for Economic Research, and is a former director of the Statistics Commission Office at the Ministry of Internal Affairs and Communications.