
Mizuho Economic Outlook & Analysis

October 28, 2022

US Economy struggles with persistent inflation Further tightening could lead to a recession in 2023

< Summary >

- ◆ The Federal Reserve Board clarified its stance to prioritize measures to curb persistent inflation, even at the cost of economic growth. Despite aggressive interest rate hikes, there is no sign of inflation abating.
- ◆ Inflation is driven by a strained balance of labor supply and demand and businesses' cost pass-through. There are structural aspects to these problems that will take time to resolve. The inflation rate will likely remain above the Fed's 2% target for the time being.
- ◆ Domestic demand is expected to fall in 2023, dragged down by sluggish housing investment and personal consumption. Slowdown of the US economy will become increasingly unavoidable. The growth rate for 2023 is forecast at -0.8%, while the unemployment rate is predicted to rise to 5%.

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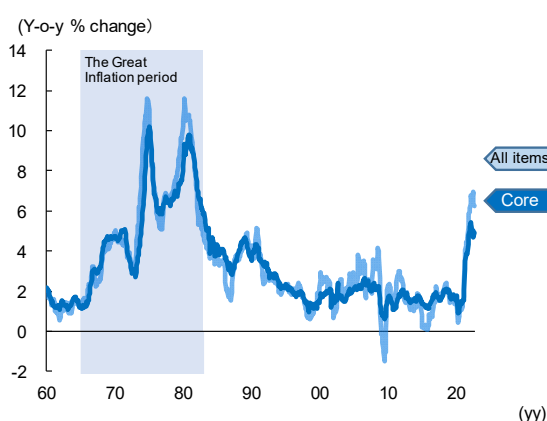
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1. The Fed quickens the pace of rate hikes to curb persistent inflation

The US economy has been grappling with prolonged inflation. The inflation rate (the increase rate of the personal consumption expenditure deflator) has hovered around 6%, year on year, climbing at a record pace since the Great Inflation (1965-1982), a period when the US economy was beset with high inflation (**Chart 1**). The core inflation rate, a gauge of price trends, excluding energy and food, has been accelerating since August, with no sign of inflation slowing down just yet.

Since the end of 2021, the Federal Reserve Board has shifted gears to tackling inflation, but its response has been described as tardy. The Fed has repeatedly raised its policy rate forecasts. The FOMC (Federal Open Market Committee) at its September meeting projected rate hikes to a range between 4.50% and 4.75% by the end of 2023 (**Chart 2**). Compared with a year ago, the projection has been raised by as much as 4.00 percentage points.

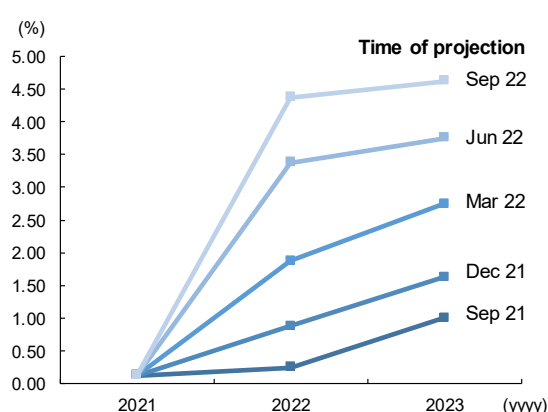
Chart 1: Changes in inflation rate



Note: Increase rates of the personal consumption expenditure deflator. The shaded part is from 1965 to 1982.

Source: Made by MHRT based upon the US Department of Commerce.

Chart 2: Changes in the Fed's policy rate projections



Note: Median figures of the FOMC participants' projections.

Source: Made by MHRT based upon the FRB.

The Central Bank's drastic tightening has strained financial conditions in the United States. As illustrated by inflation adjustments to the housing market, tighter financial conditions make borrowing harder for households and businesses and affect the real economy. Since the Fed is tasked with the two missions of maximizing employment and stabilizing prices, it will inevitably face a dilemma in the short term. This year, however, Federal Reserve Chair Jerome Powell said the Fed's "overarching focus" is to bring inflation down to 2%. He also said the process will cause households and businesses "some pain," revealing his stance to prioritize bringing down inflation over economic growth.

FOMC members at the September meeting revised downward the real GDP and unemployment rate projections for 2022 and 2023, indicating the Fed is ready to accept slower growth and a higher jobless rate to fight inflation.

This report looks at the factors behind the historic rise in inflation in the US and provides the country’s economic outlook for 2023.

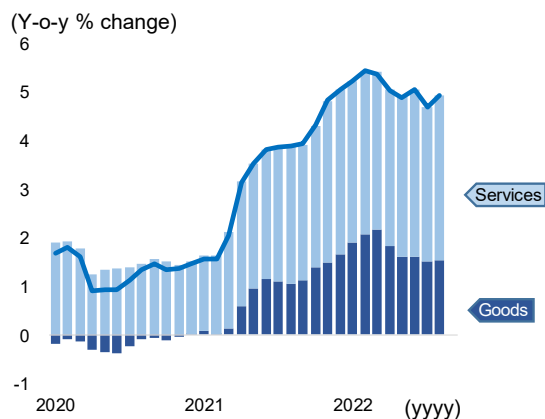
2. Tight labor market and firms’ cost pass-through fuel high inflation

Inflation in the US was triggered by the rapid rise in goods prices (**Chart 3**). The pace of increase has passed its peak with the shift in demand from services to goods during the pandemic returning to the original state, while measures have been taken to ease supply chain constraints. But prices still remain high at the moment, largely because businesses have stronger pricing powers as inventory shortages continue. Inflation rose further as service prices also began to increase as a result of surging wages amid the historic labor market crunch. Since these two factors, strong pricing power of businesses and supply-demand imbalances in the job market, are structural problems, bringing inflation under control has proved tricky. The following sections examine the factors behind price hikes by focusing on goods and services separately.

(1) Rising wages leading to service price hikes

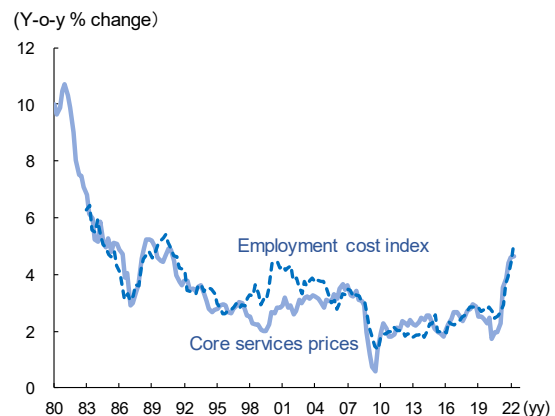
Service prices are basically interlocked with wage trends and they closely correlate with company employment costs (**Chart 4**). The latest employment cost index rose to around 5%, year on year, apparently contributing to higher service prices.

Chart 3: Breakdown of core inflation rate



Note: Figures on the basis of the personal consumption expenditure deflator.
Source: Made by MHRT based upon the US Department of Commerce.

Chart 4: Changes in service prices and employment cost index



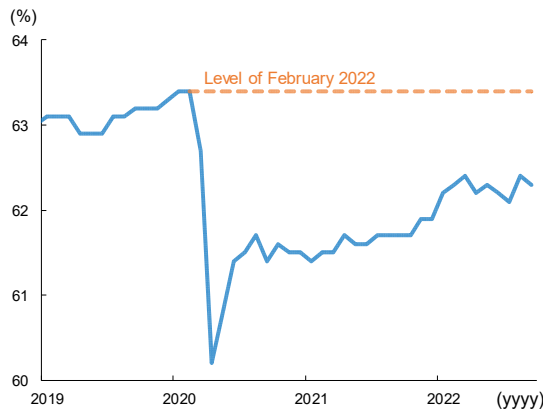
Source: Made by MHRT based upon the US Department of Commerce and US Department of Labor.

Wages are rising on the back of a historic labor shortage. The job opening-to-application rate has grown to around two this year, meaning there are twice as many job openings as the number of unemployed people. The rate has been hitting record highs since 2000 when statistical data first became available. To deal with the extreme labor shortage, companies are raising wages to hire or retain employees. This situation is likely to continue, since structural factors exist both in labor supply and labor demand.

First we look at labor supply. The US is facing serious labor shortages, partly because workers who left the job market amid the spreading coronavirus are not returning. Many people left work for various reasons during the pandemic, for instance, to avoid infection or to take care of their children whose schools were closed. As a result, the labor force participation rate (the ratio of labor force to the working-age population aged 16 or above) has declined dramatically (**Chart 5**). As vaccination became widely available and economic activities resumed, the rate began to recover, but has yet to reach pre-pandemic levels. One reason is the early retirement of older workers. With a higher COVID-19 mortality risk than younger people, it is thought that many older workers took this opportunity to retire. Additionally, the Fed's bold quantitative easing in response to the COVID-19 pandemic pushed up the value of assets such as stocks and houses, and provided people with the extra means to make early retirement easier. An additional 4 million workers retired as of August 2022, compared with the pre-pandemic level (February 2020). This largely explains the recent decline in the labor force participation rate. Since most retirees are unlikely to return to the job market, labor shortages in the US may take some time to recover.

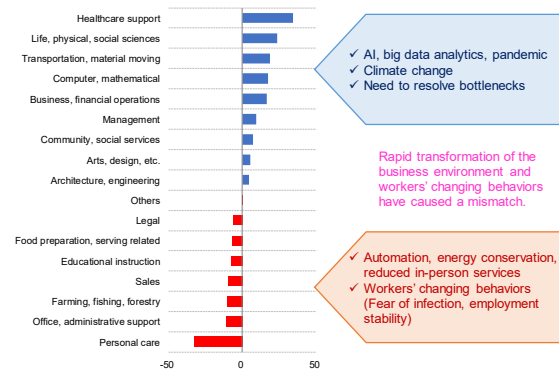
Turning the focus onto labor demand, some qualitative changes can be seen in industries' labor demands against the backdrop of shifting global trends. The data reflecting changes in the workforce since the start of the pandemic (**Chart 6**) show significantly rising employment in such industries as healthcare support, life, physical and social sciences, while businesses in some other areas, including personal care and sales, are slashing their workforce. Today, companies are expected to adapt to changes in the business environment, such as the advances in innovative technologies like AI or big data analytics or the need for climate actions. The recent situation has caused structural changes in the demand for labor. Because it is not always easy to secure workers with the skills to meet these needs, company labor demands will not be satisfied in the short term.

Chart 5: Labor force participation rate



Source: Made by MHRT based upon the US Department of Labor.

Chart 6: Changes in employment (Comparison with 2019, %)



Source: Made by MHRT based upon the FRB.

(2) Goods prices remain high driven by expanding distribution margins

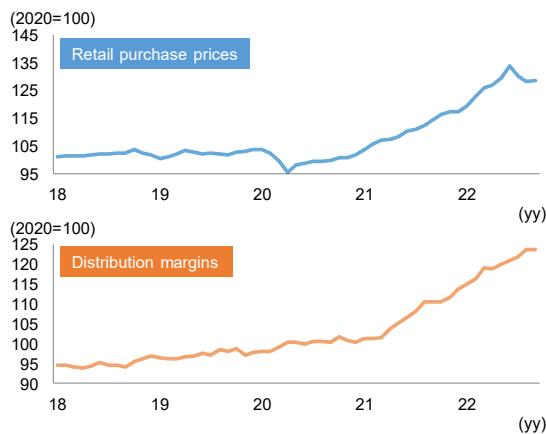
The prices of goods soared with the onset of the pandemic. The core price inflation rate of goods rose 7.6% as of February 2022 from a year ago. Behind this trend lie three factors: (1) the government’s massive COVID-19 economic relief, (2) the continued shift in demand from services to goods even after lockdowns were lifted, and (3) the shortage of goods caused by supply chain disruptions. As the country recovers from the pandemic, factors (1) and (2) seem to have moderated. The situation regarding (3) is also returning to normal, as seen by improvements in the global supply chain pressure index. Nevertheless, the core inflation rate is far from settled, with the year-on-year reading standing at 5.6% as of August.

As for reasons behind the high goods prices, Federal Reserve Vice Chair Lael Brainard pointed to retail trade margins. Actual data indicate that margin increases occurred during the distribution phase, although retail trades’ purchasing costs have moderated (Chart 7). Greater margins can be attributed to growing demand and limited supply, a situation that has caused stock shortages. The retailer inventory turnover rate (inventory divided by sales) was 1.24 months in August (Chart 8), down from 1.42 months before the pandemic (February 2020). Inventories of such items as furniture, home appliances, clothing and foods are already normalizing, or even moving to a surplus. Some major retailers are reportedly offering discounts to reduce their stock. However, supply constraints in the automotive industry, which accounts for a large portion of the total value of retail sales, have yet to ease, hampering the recovery of the retail sector’s overall inventory shortage. The inventory turnover rate of auto retailers was 1.5 months in August, remaining low compared with 2.3 months before the pandemic. This means that vehicle prices are unlikely

to drop. Currently, the supply of passenger vehicles (total units of production and net-imports) is larger than auto demand (total units sold), but the surplus is just tens of thousands per month. Alleviating the shortfall of some 400,000 units is expected to take a long time. Price hikes of home appliances and some other goods are slowing down, but automotive prices remain high, accounting for about 30% of the increase in the core goods inflation rate in August.

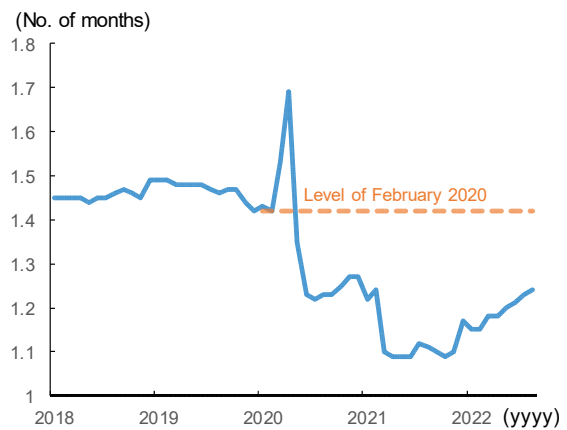
For these reasons, the factors driving price hikes of both goods and services are unlikely to subside anytime soon. Based on these circumstances, Mizuho Research & Technologies forecasts the inflation rate to stand at 5.6% as of the end of 2022, and 2.7% at the end of 2023 (on the personal consumption expenditure deflator basis.) The core inflation rate is projected at 4.5% and 2.9%, respectively, remaining above the Fed’s 2% target.

Chart 7: Consumer goods retail purchase price and distribution margin



Source: Made by MHRT based upon the US Department of Labor.

Chart 8: Inventory turnover rate (Inventory divided by sales)



Note: Length of period required to sell inventory stock. Source: Made by MHRT based upon the US Department of Commerce.

3. Inflation and rate hikes push the US economy into a slump around the year end

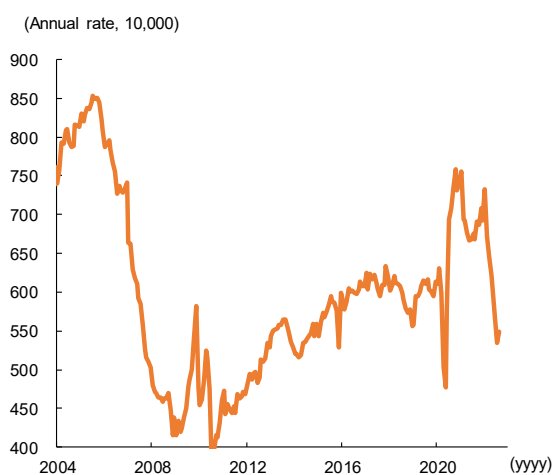
High inflation and the Fed’s tight monetary policy are leading the US economy to a tipping point. Personal spending has supported the economy in 2022, despite the extensive housing market correction. In 2023, however, the effects of monetary tightening are expected to spread and bring on a recession. This section projects the US economy in 2023 by focusing on housing investment and personal consumption.

(1) Intensified housing market correction

The housing market has been affected by the tight monetary policy and is entering a rapid adjustment phase before other demand components. The number of houses sold from January to August dropped almost 25%, declining faster than the previous record market

correction that occurred between 2005 and 2009 (**Chart 9**). This is because mortgage payments incurred at the time of borrowing are now steep for average home buyers. Mortgage payments began to rise prior to the Fed's monetary tightening, driven by soaring home prices (the reason for larger loans) and the situation has escalated with rising interest rates. Mortgage rates jumped to 7.16% as of October 21, increasing monthly repayments by more than 500 dollars over the past year (**Chart 10**). The ratio of monthly mortgage payment to household income has climbed to about 25% from the 2021 average of 16.9%. Heavy mortgages have dampened home buyers' appetite as tight financial conditions are expected to continue. It is highly probable that the home investment situation will remain severe for a while.

Chart 9: Number of home sales



Source: Made by MHRT based upon the US Department of Commerce.

Chart 10: Households' mortgage payments



Note: Figures up to February 2018 are MHRT's estimates. Figures after that are from the National Association of Realtors.

Source: Made by MHRT based upon the NAR and MBA.

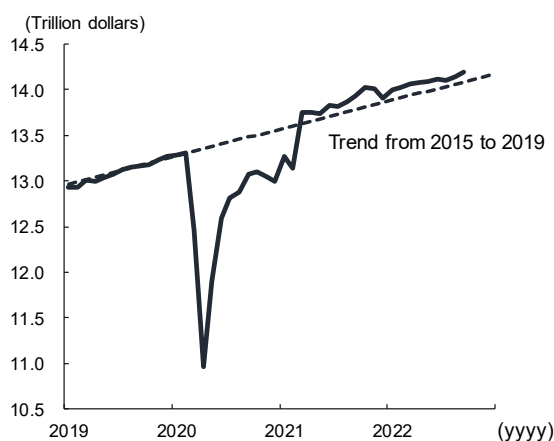
(2) Personal consumption slows due to sharply higher inflation and weakened asset effect

Backed by a favorable employment situation and the asset effect of rising stock prices, personal consumption has expanded steadily to exceed pre-pandemic levels, leading the economic recovery from the COVID-19 damage (**Chart 11**). However, the downward pressure brought on by high inflation, weakened asset effects caused by the Fed's tight monetary policy, and the worsening employment condition are likely to deflate the momentum of personal consumption.

High inflation has already strained household budgets. The prices of daily necessities, particularly gasoline and foods, have skyrocketed, prompting consumers to cut back

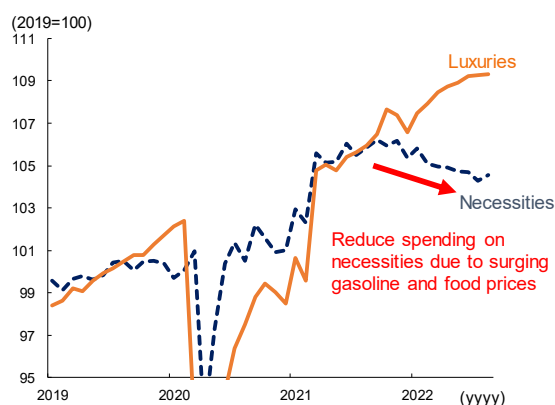
considerably on spending (**Chart 12**). Meanwhile, outlays on luxury items have grown steadily. The contrast in the trends of necessities and luxuries can be explained by different spending structures among income classes. According to the 2021 Consumer Expenditure Survey, expenditures on essential goods accounted for about 62% of total consumption in the low-income class (the lowest Group I of the quintiles of income before tax), but necessity spending of the high-income class (the highest Group V of the quintiles) was around 46%. Surging necessity prices have forced low-income households to cut down on luxury expenses to pay for essential items, and eventually reduce their spending on necessities, which account for a large portion of their total consumption. On the other hand, the high-income class's ratio of necessity expenses is relatively low. Moreover, rising stock prices have boosted their asset values in recent months. It would be reasonable to speculate that these factors are prompting them to spend more on luxury goods. Since 2020, monetary easing has helped increase stock prices and expanded households' financial assets by approximately 25 trillion dollars. As a result, the spending of the wealthy on luxuries has swelled and bolstered personal consumption. Luxury expenses are growing, thanks to the consumption patterns of the rich, but spending on necessities is shrinking, particularly among low-income households, slowing down overall personal consumption.

Chart 11: Real personal consumption expenditures



Source: Made by MHRT based upon the US Department of Commerce.

Chart 12: Real expenditures on necessities and luxuries

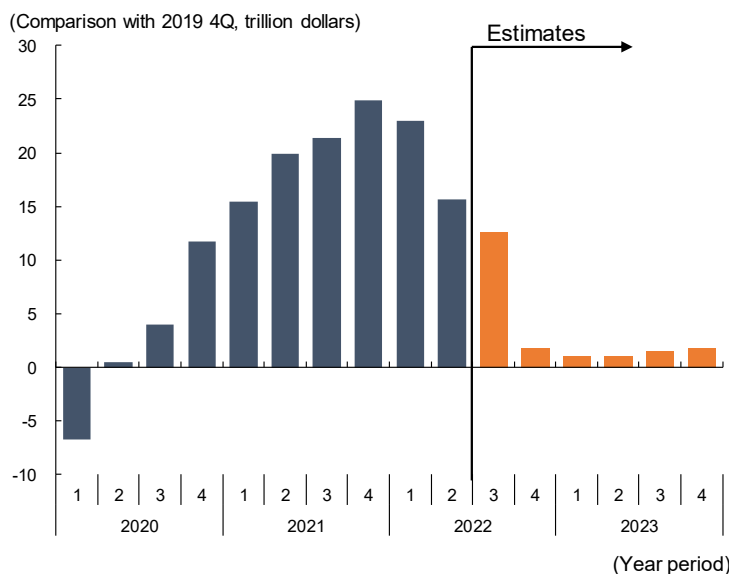


Source: Made by MHRT based upon the US Department of Commerce.

Spending on necessities is expected to continue decreasing, while the upper class's consumption of luxuries is likely to cool as the asset effect weakens. The value of financial assets has already diminished due to the rapid market correction from July to September 2022. Increases in asset values from 2020 are expected to mostly vanish by the end of 2022 (**Chart 13**).

But a greater concern than the weakening asset effect is the worsening of the employment situation. Mizuho Research & Technologies projects that the tight monetary policy will begin to affect the labor market in 2023, and the unemployment rate, which is currently low at 3.5% (September 2022), will be driven up to 5%.

Chart 13: Increase in financial assets after 2020



Note: The figure for 2022 3Q is based on actual stock prices up to the end of September. Figures for 2022 4Q onward are estimates based on MHRT's forecasts.
 Source: Made by MHRT based upon the FRB.

(3) US economy will post negative growth in 2023

As explained above, the sluggish housing market and the slowdown in personal consumption are likely to push the US economy toward contraction from the year end. Mizuho Research & Technologies forecasts that the US economy will turn into negative territory in 2023 with real GDP growth at -0.8%.

Chart 14 is a comparison of the potential economic recession (Mizuho Research & Technologies' forecast) and past recessions in terms of GDP, fluctuations in the unemployment rate, and period of economic downturn. Considering that the Fed is likely to maintain monetary tightening for the time being to combat the prolonged inflation, the economic downturn is estimated to last for 12 months, a period slightly longer than past recessions.

4. Remaining risk of the Fed hiking rates further

Considering the difficulty of handling the ongoing inflation situation, we must be aware of the risks of further Fed rate hikes. Although the Fed's tight monetary policy has caused demand to moderate, mainly in the housing market, inflation remains high. The current

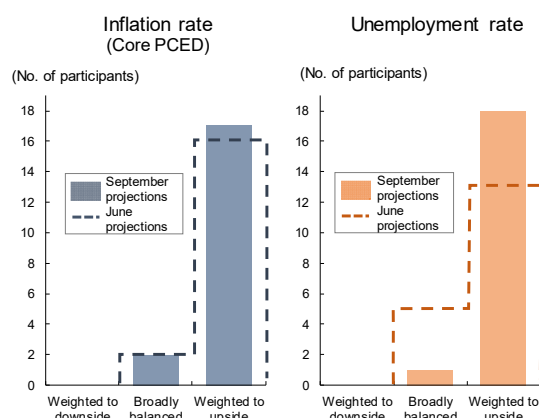
circumstances do not allow for an optimistic outlook. **Chart 15** shows how the FOMC members assessed risks to the inflation rate and unemployment rate projections, ranging from “weighted to upside” to “broadly balanced” and “weighted downside.” A majority of the FOMC officials recognized the upside risks for both inflation and unemployment. It is highly plausible that further tightening to control inflation will result in a downturn of the real economy. Mizuho Research & Technologies forecasts the benchmark interest rate to peak at 4.50% to 4.75%, but if the rate exceeds 5.00%, the US economy might be driven into a more serious slump. Further correction of stock markets and the rapid capital outflow from emerging countries could impose the significant downward pressure on the global economy and financial markets. We need to prepare for this worst scenario.

Chart 14: Comparison with past recessions

	Period of downturn	GDP	Jobless rate
Nov 1973-Mar 1975	17 months	- 3.1%	3.5
Jan 1980-Jul 1980	7 months	- 2.2%	1.7
Jul 1981-Nov 1982	17 months	- 2.5%	3.3
Jul 1990-Mar 1991	9 months	- 1.4%	0.9
Mar 2001-Nov 2001	9 months	0.5%	1.3
Dec 2007-Jun 2009	19 months	- 3.8%	4.5
Feb 2020-Apr 2020	3 months	- 9.6%	9.4
Oct 2022-Sep 2023	12 monts	- 1.3%	1.4

Source: Made by MHRT based upon the US Department of Commerce.

Chart 15: FOMC members’ risk weight



Source: Made by MHRT based upon the FRB and Bloomberg.

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/insight-us221028.pdf>