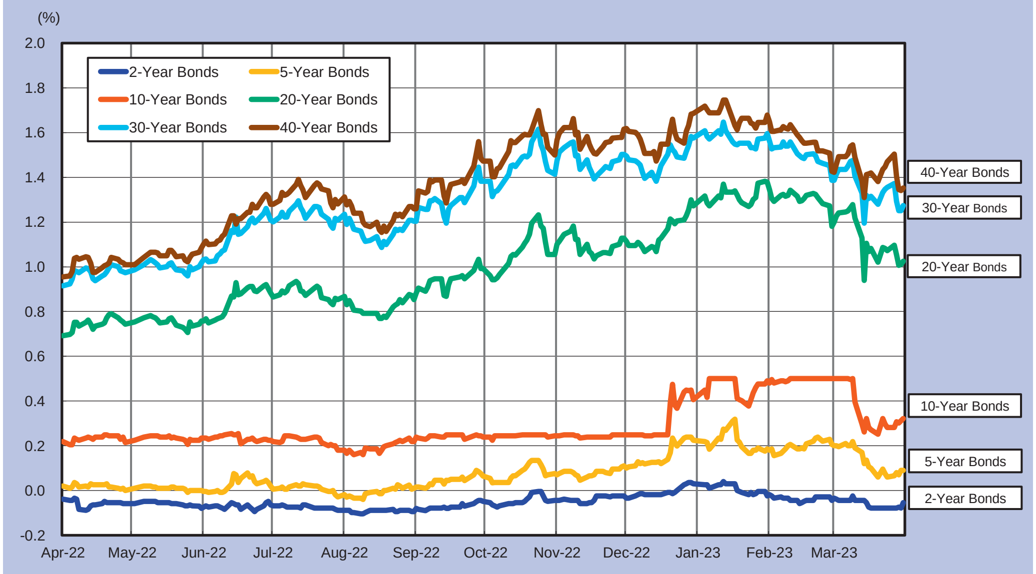
1 Trends of JGB Market in FY2022

(1) Overview

In FY2022, the JGB market fluctuated due to factors such as the rise in overseas interest rates and revisions to the BOJ's monetary policy. In the wake of Russia's invasion of Ukraine in February 2022, and amidst a rise in global prices and central banks around the world moving to increasing policy interest rates, in Japan as well upward pressure on interest rates has intensified since April as the inflation rate exceeded 2% year-on-year. In December, the BOJ expanded the range of 10-year JGB yield fluctuations to between around ± 0.5% under the yield curve control, and domestic interest rates sharply rose in January 2023. In March, expectations of BOJ policy revisions receded as U.S. interest rates fell due to financial system instability triggered by the failure of regional U.S. banks, and domestic interest rates declined.

Fig. 1-1 JGB Yield Trends by maturity



(Source) Nikkei QUICK

Trading volume of coupon-bearing JGBs (☞) in the secondary market in FY2022 was 108.8 trillion yen per month, a significant increase from the 88.7 trillion yen in FY2021. In addition, the day session and night session trading volume of 10-year JGB futures in FY2022 averaged 32,191 contracts per day, a slight decrease from the 33,320 contracts in FY2021.

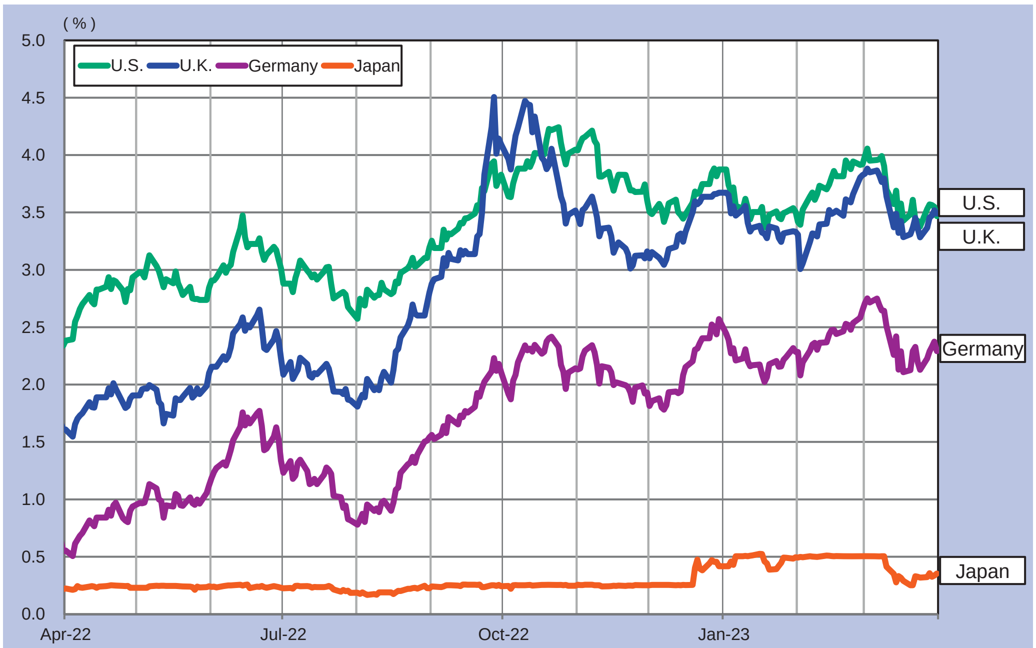
In February 2022 Russia invaded Ukraine, and crude oil and other commodity prices rose as the fighting between the two countries dragged on. As inflationary pressures intensified in various countries, overseas interest rates rose across the board, and the 10-year JGB yield also approached 0.25%, the upper limit on the fluctuation range set by the BOJ. In order to curb the rise in the 10-year JGB yield, at the end of April the BOJ decided to in principle conduct Fixed-Rate Purchase Operations every day, but interest rates for other maturities continued to rise.

In June, central banks around the world strengthened their stance on raising policy interest rates, and upward pressure on interest rates increased in the domestic market as well. In particular, as the strong selling pressure was seen in the futures market, the BOJ conducted

☞General trading volume of coupon-bearing JGBs from the Japan Securities Dealers Association's "Trading Volume of Over-the-Counter Bonds." Calculated by subtracting one-half of the trading volume between bond dealers from the total trading volume.

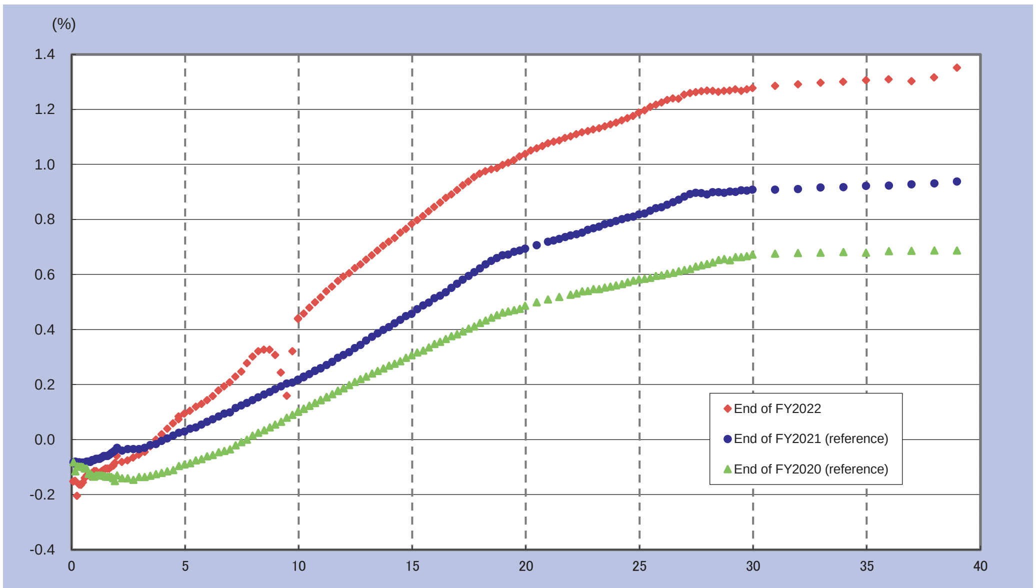
Fixed-Rate Purchase Operations for Consecutive Days on the Cheapest-to-Deliver issue, which could be expected to have the effect of indirectly controlling futures prices.

Fig. 1-2 Changes in 10-Year Bond Interest Rates



(Source) Bloomberg

Fig. 1-3 Changes in yield curve



(Source) Japan Bond Trading Co., Ltd.

After this, when U.S. interest rates began to decline, the rise in domestic interest rates also paused. However, when U.S. interest rates began to rise again in the fall, upward pressure on interest rates in the domestic market once again increased in the lead up to the BOJ's Monetary Policy Meeting in September. Thereafter, upward pressure on domestic interest rates eased against a backdrop of speculation that the pace of policy interest rate increases in the U.S. would slow down. However, there was a growing tendency for companies to pass on costs to prices, and in October, the rate of increase in the consumer price index (excluding fresh food and energy) also exceeded 2% year-on-year.

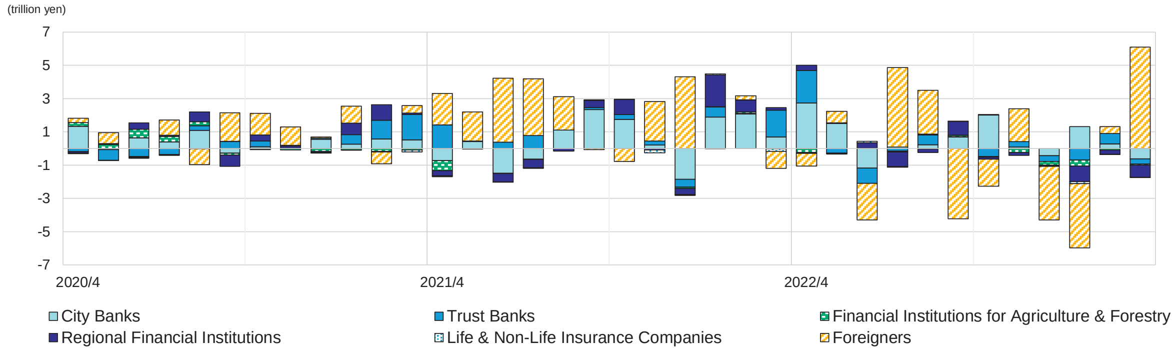
In December, the BOJ, citing a decline in market functioning, expanded the range of 10-year JGB yield fluctuations from between around ±0.25% to between around ±0.5%. As a result, interest rates sharply rose, and in mid-January the prices of JGBs with various maturities hit their lowest prices (high yields) in FY2022. In response, the BOJ, in addition to conducting regular Outright Purchases of JGBs, also conducted extraordinary Outright Purchases of JGBs, Fixed-Rate Purchase Operations for 10-year on-the-run issues and the Cheapest-to-Deliver issue, and Funds-Supplying Operations against Pooled Collateral for two years and five years. As a result of these operations, the rise in interest rates have reached a lull.

Financial system unrest intensified in early March, triggered by the failure of regional U.S. banks, and interest rates in the U.S. Treasury market declined due to widespread expectations of policy interest rate cuts on the back of recessionary fears. Domestic interest rates also fell due to the BOJ's decision to maintain monetary policy at the March Monetary Policy Meeting and the decline in U.S. interest rates.

(2) Investor Trends

Looking at investment trends in JGBs by investor category in FY2022, medium-to-long-term bonds (2-year bonds, 5-year bonds, and 10-year bonds) were primarily bought and sold by foreign investors. In June, foreign investors and domestic investors sold off medium-to-long-term JGBs against the expectation that the BOJ's monetary policy, especially the yield curve control, would be revised. Then, in July and August, the rise in U.S. interest rates came to a lull and the market turned to net buying of medium-to-long-term JGBs. In September, as U.S. interest rates began to rise again and the rate of increase in Japan's consumer price index accelerated, expectations for future monetary policy revisions remained strong, and 10-year JGB yield stuck to the upper limit of their fluctuation range, resulting in several months of net selling. In December, the BOJ expanded the range of 10-year JGB yield fluctuations from between around ±0.25% to between around ±0.5%, which caused medium-to-long-term interest rates to rise sharply, and net selling by foreign investors in December and January increased even further. Subsequently, the BOJ left its monetary policy unchanged in March, and, amidst growing anxiety about the financial system due to the bankruptcies of regional U.S. banks, foreign investors began to buy JGBs and the amount of net buying substantially increased.

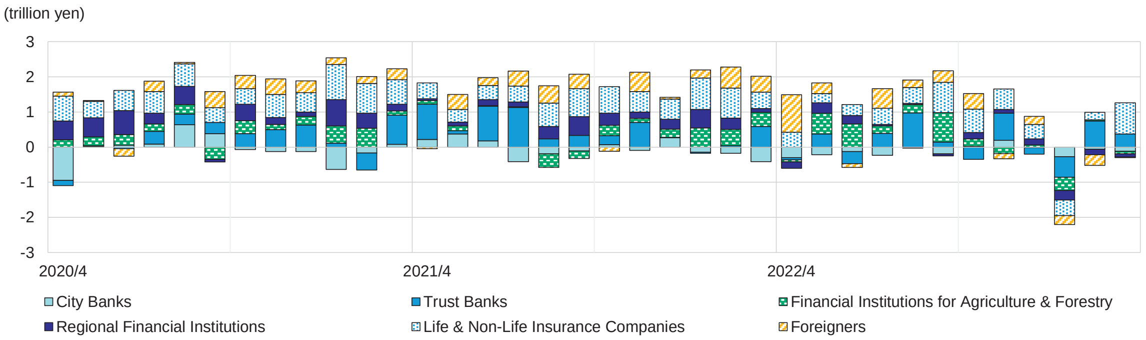
Fig. 1-4 Net buying/selling of medium-to-long-term JGBs by investor category



(Note) Medium- to long-term JGBs are 2-Year, 5-Year and 10-Year JGBs. Investors' direct purchases through auctions are excluded. Trust Banks' trading covers their proprietary trading as well as transactions on behalf of pension funds, etc. "Regional Financial Institution" includes Shinkin Banks.
(Source) Japan Securities Dealers Association

Next, ultra-long-term bonds (20-year bonds, 30-year bonds, and 40-year bonds) were bought by a wide range of investors, including life insurance companies, pension funds, financial institutions for Agricultural and Forestry, and foreign investors. In particular, as in the previous fiscal year, life insurance companies continued to need to buy ultra-long-term bonds in order to comply with new Insurance Capital Standard, and the sharp rise in ultra-long-term interest rates is thought to have led to the net buying until December. Although there was significant net selling in January, this was likely a temporary move by investors who are suffering losses on foreign bond investments due to rising overseas interest rates to their losses by selling ultra-long-term JGBs in which they have unrealized gains. Following this, in February and March there was net buying of ultra-long-term JGBs under the situation that ultra-long-term interest rates began to decline.

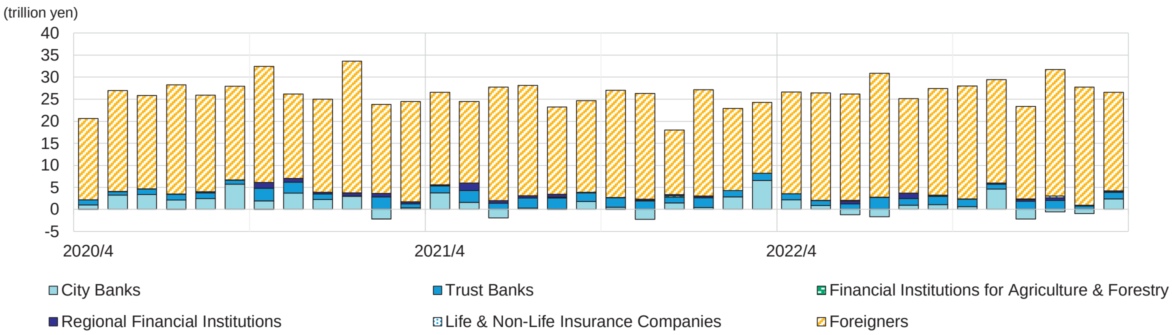
Fig. 1-5 Net buying/selling of ultra-long-term JGBs by investor category



(Note) Ultra-long-term JGBs are 20-Year, 30-Year and 40-Year JGBs. Investors' direct purchases through auctions are excluded. Trust Banks' trading covers their proprietary trading as well as transactions on behalf of pension funds, etc. "Regional Financial Institution" includes Shinkin Banks.
(Source) Japan Securities Dealers Association

Foreign investors continued to be the largest buyers of short-term JGBs (Treasury Discount Bills). The continued availability of premiums to dollar providers in the currency basis swap market is believed to be the primary reason for the ongoing high level of investment in short-term JGBs by foreign investors.

Fig. 1-6 Net buying/selling of short-term JGBs by investor category



(Note) Short-term JGBs are T-Bills. Investors' direct purchases through auctions are excluded. Trust Banks' trading covers their proprietary trading as well as transactions on behalf of pension funds, etc. "Regional Financial Institution" includes Shinkin Banks.
(Source) Japan Securities Dealers Association