Daiwa's View

Impact of restarting nuclear power plants on yen exchange rate

➢ Inbound demand likely to have greater impact on improving yen supply/demand balance than restarting nuclear power plants

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Last week the yen depreciated beyond USD/JPY136 to reach its weakest point in 24 years. However, on 23 June the pair pulled back to a USD/JPY134.0-134.5 range as US Treasury yields continued sliding on concerns about a recession. Yen weakness until now has basically been attributed to the widening US/Japan interest rate differential. However, we should not overlook the deteriorating supply/demand balance behind this yen weakness.

The main factor behind worsening yen supply/demand conditions is Japan's large trade deficit brought about by surging energy prices. The energy situation has dramatically changed due to the Ukraine crisis and there has been talk of restarting nuclear power plants as a promising way to resolve the short supply of power in Japan. The idea of bringing more nuclear power plants back online has also attracted attention as a way to curb yen depreciation. Against this backdrop, our Equity Research Department summarized the current status and future prospects for nuclear power plant resumption and analyzed how the macroeconomy would be impacted by bringing more reactors back online.

Based on that analysis, this report considers how restarting nuclear power plants would impact the yen exchange rate. With FY24 in mind, our Equity Research Department simulated the impacts of nuclear power plant resumption on Japan's trade balance and current account balance for different scenarios. Specifically, they assume that the number of nuclear reactors in operation will remain constant (10 reactors) until FY22, after which our assumptions for the number of reactors in operation as of FY24 will change depending on the scenarios provided below.

Nuclear power plant resumption scenarios

- S0 (0 reactors): Scenario in which nuclear power plant output again reduced to zero
- S1 (14 reactors): Main scenario in which current status of applications to restart plants considered
- S2 (20 reactors): Scenario with relatively strong likelihood of restarting plants
- S3 (25 reactors): Scenario with strong likelihood of restarting plants
- S4 (30 reactors): Scenario including plants that have yet to apply for permission to restart

S1, our main scenario, considers the current status of applications to restart nuclear power plants and is seen as the most probable. In the case of S1, we calculated that the value of Japan's imports would decline by about Y370bn each year through FY24. In the case of S4, the most bullish scenario, the value of Japan's imports would decline roughly Y1.03tn each year, but the hurdles to realizing that scenario are quite high.

While Japan's trade deficit is expected to swell to around Y10.0tn this year based on the current energy prices, our calculations show that the restarting of nuclear power plants would only reduce this deficit by about Y1.0tn annually even under the most bullish scenario. This is because electricity accounts for about 40% of Japan's energy consumption (nuclear power accounts for at most 20% of this total), and fuel imports used for the remaining 60% of power consumption other than electricity (fuel for transportation fuel, petroleum products, others) will not decrease with the restarting of nuclear power plants.

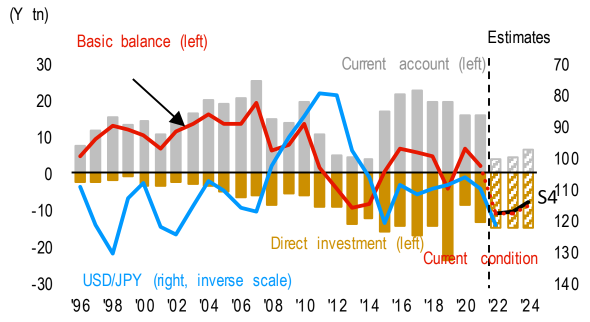
Chart 1 shows trends for USD/JPY and Japan's basic balance (current account balance + direct investment), which reflects real demand among companies and individuals. We estimated Japan's current account balance from 2022 based on recent resource prices and the global economic outlook, assuming the number of nuclear power plants in operation remains at the current 10 reactors. Direct investment is assumed to remain unchanged at the 2013-2021 average and the estimated basic balance from these investments is the red dotted line, which is the "current status." Also, the basic balance, calculated based on the balance improvement from the above S4 scenario, is indicated by the solid black line. As the chart clearly shows, the yen supply-demand balance will not improve much simply by adjusting the "volume" of fuel imports associated with the restarting of nuclear power plants.

Chart 2 compares estimates for the "current status" basic balance estimate and the basic balance that reflects the trade balance improvement if fuel import prices were to decline to 2021 level and if fuel import prices were to decline to the 2015-2019 average price. Based on this approach, we can expect that a decline in fuel import prices to the 2021 level would improve the basic balance by about Y4.0tn and a decrease in fuel import prices to the 2015-2019 average level would improve the basic balance by about Y6.0tn.

As explained here, a decrease in the "volume" of fuel imports due to the restart of nuclear power plants would not improve yen supply-demand conditions that much. Rather, a decrease in energy "prices" is more important for improving yen supply-demand conditions. However, Japan, which relies almost entirely on imports for its energy resources, has no control over energy prices. There is very little that Japan can do to address its worsening trade balance due to the increased value of fuel imports.

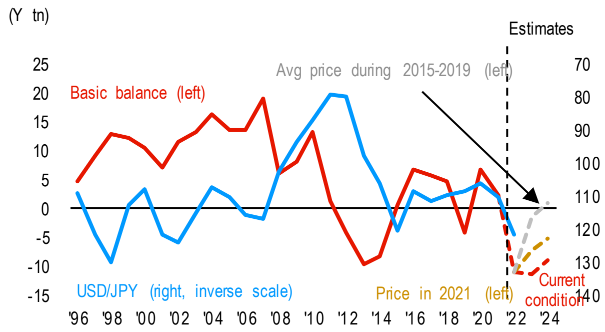
The deteriorating yen supply-demand balance is not only due to the trade deficit caused by high energy prices. Indeed, the disappearance of foreign tourist demand due to the coronavirus outbreak has also had an impact. While there is little that can be done to address the current widening trade deficit, Japan probably has some policy control over tourists entering Japan.

Chart 1: Basic Balance, USD/JPY (only improvement for fuel import amount)



Source: MOF, Bloomberg; compiled by Daiwa Securities.
Note: Basic balance is current account balance + direct investment. Current account balance estimates provided by our Equity Research Dept. Direct investment assumed to remain flat at 2013-2021 average.

Chart 2: Basic Balance, USD/JPY (improvement for fuel import amount and prices)



Source: MOF, Bloomberg; compiled by Daiwa Securities.

31.88mn foreign tourists visited Japan in 2019, before the pandemic. The travel balance was a surplus of Y2.7tn, which was the amount of yen-buying demand generated in the foreign exchange market. However, restrictions on entry into Japan following the coronavirus outbreak caused a sharp decline in the number of foreign tourists and yen purchases by these foreign visitors to Japan evaporated.

If the travel balance returns to the 2019 level, yen demand would increase Y2.7tn, an impact nearly three times that resulting from restarting nuclear power plants explained earlier. Furthermore, with global inbound demand continuing to grow as a long-term trend, and taking into account the recent depreciation of the yen and other factors, the scale of latent yen demand is expected to grow meaningfully.

If the international movement of people normalizes, the government's pre-pandemic goal of 60mn visitors to Japan by 2030 may be achieved. Even if that target is missed, there is still plenty of room for inbound demand to grow. In terms of improving the yen supply-demand balance from a policy perspective, a focus on increasing inbound demand is expected to have a greater impact than restarting nuclear power plants[1].

[1] Refer to *Will reopening Japan to foreign tourists help strengthen yen?* by Kenta Tadaide *(Daiwa's View* dated 13 Jun 2022*).*

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