7 July 2016 (No. of pages: 3)

Japanese report: 24 Jun 2016

Urgent Report: Japan's Economy after Brexit

If repercussions are in the same class as the global financial crisis of 2008, Japan's real GDP could drop by as much as 1%.

Economic Intelligence Team
Keisuke Okamoto

Summary

- A national referendum was held in the UK on June 23rd to determine whether or not the citizens of that country would prefer to withdraw from the EU. The results of the vote found that the majority of citizens choose to leave behind membership in the EU (or "Brexit" as it has come to be known).

- In this report we provide estimates of the effects of Brexit on Japan's economy calculated using the DIR short-term macro model. Our conclusion is that, assuming repercussions are in the same class as the global financial crisis of 2008 with falling stock prices, yen appreciation and a shrinking global economy, Japan's real GDP could drop by as much as 1.11% in comparison to the benchmark.

UK voters choose to withdraw from the EU (Brexit)

A national referendum was held in the UK on June 23rd to determine whether or not the citizens of that country would prefer to withdraw from the EU. The results of the vote found that the majority of citizens choose to leave behind membership in the EU (or “Brexit” as it has come to be known).

As uncertainty regarding the future increases, depreciation of the pound and the euro on the global currency markets appears to be unavoidable, as well as falling stock prices on the world’s financial markets.

Responses to the situation in the world financial markets on the part of central banks of major countries in the near future will be closely watched. Hopes are that steps to stabilize the markets will be taken, such as liquidity supply measures as were implemented during the global financial crisis of 2008, and coordinated intervention to prop up the pound and the euro. Meanwhile, in domestic Japan, there is talk indicating that the BOJ may call an extraordinary Monetary Policy Meeting to discuss the possibility of using means of stabilizing the financial markets

Estimating the effects of Brexit on Japan’s economy

Brexit is most likely to have an effect on Japan’s economy via the ripple effect of (1) yen appreciation, (2) stock price lows, and (3) a slowdown in the world economy. As for (1), the purchase of yen as a means of risk avoidance is expected as the sense of uncertainty increases. Yen appreciation has a negative effect on Japan’s exports, and declining exports would cause a downturn in the economy. Meanwhile, (2) stock price lows have a chilling effect on consumer confidence, and a decline in consumer confidence would cause personal consumption to decline. Finally, (3) a slowdown in the world economy would bring with it a decline in overseas demand, leading to a decline in Japan’s exports and therefore a decline in GDP.

Chart 1 shows estimated values of the effect of Brexit on Japan’s economy using the DIR short-term macro model. We look at two cases with somewhat different assumptions: (1) repercussions in the same class as the global financial crisis of 2008 (worldwide real GDP declines by -1.3%), and (2) case using IMF estimates (worldwide real GDP declines by -0.04%). In both cases we assume the same growth rate in the yen-dollar exchange rate and in the rate of decrease in TOPIX.

According to our estimation results, if the yen-dollar rate increases by 15% and TOPIX declines by 20%, case (1) repercussions in the same class as the global financial crisis of 2008 would see Japan’s real GDP down by 1.11% in comparison to the benchmark. Meanwhile, case (2) using IMF estimates would see Japan’s real GDP down by 0.34%. Estimation results indicate that if effects are limited to the rapid appreciation of the yen and stock price lows, influence on Japan’s economy will most likely be fairly minor. However, if the world economy suffers a rapid downturn, leading to a decline in Japan’s exports, the Japanese economy could be forced downwards considerably.

Estimation of Brexit's Effects on Japan's Economy — Chart 1

Case (1) Repercussions in Same Class as Global Financial Crisis of 2008

		Rate of Decrease in TOPIX				
		-10%	-15%	-20%	-25%	-30%
Yen-Dollar Rate of Increase	5%	-0.95%	-0.98%	-1.01%	-1.04%	-1.07%
	10%	-1.00%	-1.03%	-1.06%	-1.09%	-1.12%
	15%	-1.05%	-1.08%	-1.11%	-1.14%	-1.17%
	20%	-1.11%	-1.14%	-1.17%	-1.20%	-1.23%
	25%	-1.18%	-1.20%	-1.23%	-1.26%	-1.29%

Case (2) Using IMF Estimates

		Rate of Decrease in TOPIX				
		-10%	-15%	-20%	-25%	-30%
Yen-Dollar Rate of Increase	5%	-0.17%	-0.20%	-0.23%	-0.26%	-0.29%
	10%	-0.23%	-0.26%	-0.28%	-0.31%	-0.34%
	15%	-0.28%	-0.31%	-0.34%	-0.37%	-0.40%
	20%	-0.35%	-0.38%	-0.41%	-0.44%	-0.47%
	25%	-0.42%	-0.45%	-0.48%	-0.51%	-0.54%

Source: Simulation using DIR short-term macro model.
Notes: 1) Figures show extent to which Japan's real GDP would be forced downwards in comparison to the benchmark (average values of four quarters after occurrence).
2) Case (1) Repercussions in the same class as the global financial crisis of 2008 (worldwide real GDP declines by -1.3%)
Case (2) Case using IMF estimates (worldwide real GDP declines by -0.04%).
3) Figures in red frames represent cases in which all financial markets experience the same extent of effects felt immediately after the beginning of the global financial crisis of 2008 (Oct-Dec period of 2008 recorded yen appreciation of 14% against the dollar and a 21% decline of the TOPIX index).