KIEP Opinions

What determines the exchange rate of the Korean won?

DeokRyong Yoon

Ph.D., Senior Research Fellow, International Macroeconomics Team
Korea Institute for International Economic Policy

Korea achieved a current account surplus for 87 consecutive months from May 2012 to August this year, with April 2019 being the only exception. In terms of annual statistics, Korea has remained in the black for 20 years since 1998. Despite the long-running current account surplus and consequent increase in foreign exchange reserves, the Korean won's gain against the dollar has been marginal.

Starting from April 2016 the United States has included Korea in its currency monitoring list as Korea's current account surplus continued without a rise in the won's value. Although the Korean government is unable to intervene arbitrarily in the foreign exchange market, the current account surplus continues and the won's value has been falling this year. What on earth determines the Korean won's exchange rate?

The determination of exchange rates in international financial markets is, of course, based on the supply and demand between foreign exchange and the local currency. The supply of foreign exchange is determined by the current and capital account balances. In the world before the 1990s, when the capital market was not liberalized, the current account determined the supply of foreign exchange. As the share of income transfer between countries remained relatively low, the current account balance was actually determined by the trade balance. The Mundell-Fleming model is an open macroeconomy model based on this. In the world described by this model, the current account balance is the main source of foreign exchange, so if the current account achieves a sustained surplus, the exchange rate rises and the current account surplus decreases, restoring balance again. As such, throughout this process the capital account balance is in effect a passive account created as a result of the current account balance, and therefore not a leading factor in determining the exchange rate. In particular, developing countries like Korea have controlled capital markets, so trade balance has traditionally been the most important determinant of exchange rates.

The liberalization of the capital market since the 1990s has made Korea's foreign exchange market increasingly vulnerable to the movement of capital. After joining the OECD, Korea opened its capital market in accordance with the OECD Code of Liberalization of Capital Movements. Korea suffered from the 1997 currency crisis because it was not sufficiently prepared for the effects of such capital market opening. In the course of overcoming the foreign currency crisis with IMF funding, Korea's capital markets were rapidly liberalized. As a result, the supply and demand of foreign exchange due to the movement of capital came to have a greater influence than the supply of trade balance. As the globalization of capital markets has progressed, the capital markets of small open economies such as Korea have become increasingly affected by the economic policies of major advanced economies with key currencies.

The Korean foreign exchange market is traded on a dollar basis, so the supply and demand of the dollar determines the Korean won's exchange rate. In South Korea's foreign exchange market, it is U.S. monetary policy that most directly affects the supply and demand of the dollar. U.S. monetary policy is more influential than Korea's in determining the won's exchange rate. This phenomenon is hardly limited to the Korean currency market. According to studies by Rey (2013, 2016), U.S. monetary policy has a dominant influence on every country in the world.[1] This is because the dollar market is the largest among global foreign exchange markets, and because the dollar is the biggest payment currency in international trade. In particular, the monetary policies of countries that do not have a key currency, or those who have not opened

[1] See Rey, Helene (2013) "Dilemma not trilemma: the global cycle and monetary policy independence," Proceedings – Economic Policy Symposium – Jackson Hole. Rey, Helene (2016) "The International Channels of Transmission of Monetary Policy and the Mundellian Trilemma," IMF Economic Review, Vol. 64, No. 1, pp. 6-35.

their capital market to the outside world, have but a very small impact on exchange rate decisions. In some emerging economies, raising the benchmark interest rate may cause the currency to depreciate.[2] This is because changes in the monetary policy of countries that do not have a key currency only affect their own foreign exchange markets, which makes it difficult to influence changes made in the international market. South Korea's monetary policy also has but a limited impact on the exchange rate. Some empirical analysis does indicate that the currency value will appreciate if the Bank of Korea raises interest rates. These findings, however, were shown to lack statistical significance.

In a highly open economy such as Korea, the stability of the exchange rate has a profound impact on macroeconomic stability. The high volatility of the exchange rate can also be an important risk factor for Korean firms with a high volume of foreign transactions. However, Korea lacks policy tools that can directly affect the exchange rate of its currency. As Korea does not have a key currency, the volatility of the exchange rate is relatively high compared to that of countries with a key currency. The current dollar-based international monetary system does not perform the function of a lender of last resort. Under this system, even a sound economy could face a foreign exchange crisis at any time, as we saw during the global financial crisis of 2008. However, the international community has only discussed the need to improve the monetary system, which has produced no fundamental change. In effect, maintaining a current account surplus and securing a certain level of foreign exchange reserves only serves as a safeguard for the Korean economy, rather than actually influencing foreign exchange rate decisions.

The index that works most closely with the Korean won's exchange rate is the U.S. dollar index. The dollar index is an indicator of the international value of the U.S. dollar. The most important factor that determines the dollar index is U.S. monetary policy. Therefore, in order to predict any changes in the Korean won's exchange rate, one must first look at the variables affecting the dollar index. Those looking to understand changes in Korea's exchange rate should pay particular attention to changes in U.S. monetary policy. Changes in South Korea's monetary policy and current account balance are just subordinated factors. KIEP

[2] This phenomenon, in which exchange rates move differently from theory predictions, is called the "exchange rate puzzle." According to Yoon, Kim, Lee (2018) this phenomenon is observed in some Southeast Asian countries. See Yoon, Deok Ryong, Soyoung Kim, and Jinhee Lee (2018), *The Impact of Monetary Policy on Exchange Rate and Its Policy Implications*. KIEP. p. 57.