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Extended Abstract

The Impact of Short-Term Foreign Capital Flows on Economic Growth: Analysis of BRICS-T Countries*

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Abstract

The purpose of this study is to analyze whether or not foreign capital movements, which have increased along with globalization, have contributed to economic growth for countries. For this purpose, analyzing the effect of these variables on economic growth is attempted by using data from 1994-2017 on the fixed capital investments, labor-force participation rate, foreign direct investments, net foreign-trade revenues, and short-term foreign debt of Turkey's economy alongside those of Brazil, Russia, India, China, and South Africa (known as BRICS countries in the literature) . In the short term within the six countries that the analysis has been performed, coefficient values belonging to short-term foreign resources are positively estimated only for Russia, Turkey, and China. Of these countries, however, while the analysis results have been found to be statistically significant for the economies of Russia and Turkey, the results obtained for China could not be surmised as statistically significant. Of the results obtained on the long term, despite the coefficient values for short-term foreign resources being positive for Russia, India, and Brazil, only the analysis performed for Brazil is seen to have been estimated as statistically significant.

Keywords

Economic growth • Foreign capital • Short-term foreign capital movements • Economy of Turkey • BRICS countries • Autoregressive Distributed Lag (ARDL) approach

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Foreign capital is seen as an important resource for economies. Sometimes in order for countries to finance budget deficits or perform over-due debt payments, they are sometimes able to apply for foreign capital in order to achieve economic growth. Short-term foreign capital that is used for financing budget deficits or for paying off debts can create huge problems for economies. On the other hand, how and in what form foreign capital supplied from abroad for the purpose of financing growth is used is a very important topic. By using the foreign capital countries have procured for the purpose of financing investments, these capital inflows are able to become an important factor for countries' economic growth if they are able to ensure the real sector's growth and revitalization.

Capital movements, which have increased with globalization, have become an important resource for the economies of countries, particularly in the last quarter century. Developing countries that are unable to provide sufficient capital accumulation are able to apply these kinds of capital incentive policies for the purpose of attracting foreign capitals, especially for the purpose of financing growth. Individuals have opportunities to be able to retrench by generally looking at low levels of falling per-capita income amounts. Having low savings also complicates investment financing in developing countries. Those countries that cannot reach a sufficient level of investment are also unable to close the existing social and economic gaps that they have with developed economies. Again, having underdeveloped and developing economies that lag in terms of technology in countries is also stated to be among the elements that push them to search for foreign capital. When considering all these factors together, foreign capital is seen to become so important, especially for developing countries. However, having a very fragile capital-investment structure is a factor that at the same time also facilitates this type of capital's exit from the country. Sudden out-of-country departures of short-term capitals can form a huge risk particularly for economies that have not completed structural reforms and that are yet unable to provide financial stability. Therefore, the initial provision of macroeconomic stability by a country that opens or plans to open its economy to foreign capital poses great significance. Additionally, not being under the delusion that all foreign capital inflows an economy experiences are in good faith is also an important point. The facts that global capital is fond of excessive interest, sees this as a financial opportunity, and are able to also enter countries strictly with the aim of obtaining interest returns are realities that need to absolutely be taken into consideration.

Turkey also became a country whose economy began to experience foreign capital inflows and outflows after the financial liberation experienced in the 1990s. Foreign capital became an important resource after this period for the economy of Turkey, which had adopted an economic growth model open to the outside. However, the economic fluctuations and crises that the Turkish economy experienced in the last quarter century have prevented a stable economic structure with full meaning from being established, also unable to bring foreign capital inflows and outflows to a somewhat stable state. The economy of Turkey, which had partly acquired economic stability in the early 2000s, has been unable to maintain the stable period it had captured through the impact of the economic crisis that began in the USA in 2008 and later became a global crisis.

This study attempts to analyze the impacts of short-term foreign resources on economic growth between the years 1994-2017 for both the economy of Turkey and those of Brazil, Russia, India, China, and South Africa (BRIC countries). In the analysis phase, the variables determining economic growth have been identified using the Cobb-Douglas production function based on the Solow growth model. Apart from the variables of labor (*lp*) and capital (*gfcf*), various variables harmonious with the literature have also been included in the model. The other variables used in the model have been identified as foreign direct investments (*fdi*), countries' net foreign trade income (*nettrade*), and countries' short-term external debt flows (*stdebt*). The data for these variables have been supplied from the Organisation for Economic Co-Operation and Development (OECD) database. The model most appropriate for use in the analysis phase has been determined as the Autoregressive Distributed Lag model (ARDL); short-term and long-term results have been estimated within the framework of this model. Analyses have been separately performed for Brazil, Russia, India, China, South Africa, and Turkey in the analysis stage, and the obtained findings have been interpreted separately for each country.

The results from the study have been summarized as follows. The topic in question is the presence of a cointegration relationship for the variables used in the model for BRICS and Turkey (BRICS-T). According to the model results estimated for Brazil, coefficient values for the variables of gross fixed capital formation (*gfcf*) and net foreign trade revenues (*nettrade*) are found positive in the short term, and the results have been identified as being statistically significant. In the long term, the variables of gross fixed capital formation(*gfcf*), labor force participation rate (*lp*), net foreign trade revenues (*nettrade*), and short-term foreign capital (*stdebt*) have been estimated as being statistically significant. According to the estimation results performed for Russia, the result has been reached that the variables of gdp_{t-1}, fdi_{t-1}, $gfcf_{t}$, $gfcf_{t-1}$, lp_{t-1}, $nettrade_{t-1}$, *nettrade*, and $stdebt_{tt}$ are statistically significant. According to this, *fdi* being significant in the period *t-1* indicates foreign direct investments to be more impactful on growth after a 1-year period for the economy of Russia. Short-term foreign capital (*stdebt*)'s impact on economic growth in the *t* period indicates the result that short-term foreign resources have been used effectively. The only variable that is statistically significant in the short term according to the model results estimated for the economy of India is workforce participation rate (*lp*). Meanwhile, short-term foreign capital's lack of statistical significance shows short-term foreign capital flows to not have an impact on economic growth for the economy of India. According to the estimation results performed for the economy of China, *gfcf* and *lp* have been found statistically significant in the short term. Despite the positive estimation, the variable of short-term foreign capital is not statistically significant. In the long-term, the only variable that shows a significant impact on growth for the economy of China is *lp*. According to the Akaike (1,0,1,0,0,0,0) information criteria in the ARDL model performed for South Africa, only *gfcf* has been included in the short-term model, and no result of its statistical significance could be obtained. Again for this country, no statistically significant result could be reached according to the long-term analysis results. Lastly, according to the ARDL model's short-term results estimated for the economy of Turkey, *gfcf* and *stdebt* have been estimated to be statistically significant, and the result has been reached that these variables have a positive impact on economic growth. However, the only statistically significant variable for the economy of Turkey in the long term is *gfcf*.

According to the model results, error-correction terms have been estimated to be between zero and negative one and to be statistically significant for all economies except for South Africa's. Of the countries that were analyzed, the one with the highest error-correction term has been estimated as China.

As a result, when looking at the impact on foreign growth of short-term foreign resources, which has been the main subject of the study, within the BRICS-T countries, the ones whose *stdebt* has been estimated as positive in the short term are the economies of Russia, Turkey, and China. Of these results, however, only the estimations for Russia and Turkey have given statistically significant results. In the long term, despite the positive estimations for *stdebt* for the economies of Russia, India, and Brazil, only the estimation made for Brazil has given a statistically significant result. This situation reveals the result that short-term capital movements are not included among the main determinants of growth for BRICS-T countries in the short or long term.

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