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# Estimation of Capital Mobility by Focusing on Home Bias Based on the Comparative Role of Trade Openness and Kof Index in a Selection of Oil-Exporting Countries

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#### EXTENDED ABSTRACT

#### **INTRODUCTION**

The degree of international capital mobility is a decisive and vital factor in the economic, political, and social life of countries and low capital mobility is considered as a concern for them. Capital mobility among countries has always been the focus of many policymakers and observers of the international economy. The main issue in this research is to address a new approach in measuring the degree of capital mobility and solving the Feldstein-Horioka (FH) puzzle in the studied countries. The main purpose of this study is to investigate the status of international capital mobility between 10 developing oil-exporting countries in the period 2000-2018 using the dynamic panel data technique. Theoretically in an open economy, saving and investment are more affected by capital flows and global interest rates. Hence, the relationship between these two variables is not expected to be strong in an economy that is open to capital flows. This analysis contradicts the results of the FH study. Their experimental findings in 1980, using cross-sectional analysis, showed that the correlation between savings and investment for the 16 OECD countries during the period 1960-1974 was close to one (between 0.85 and 0.95). They interpreted the value of this coefficient as the reason for the low mobility of capital. This finding was contrary to the expectations of



capital mobility in these countries, because, in fact, the degree of integration of these countries in international capital markets has been high. This became known as the FH puzzle and became the source of discussions about the degree of financial integration and the degree of trade openness in the industrialized world. The results of research in many cases indicate that experimental models that do not take into account the degree of financial openness and economic globalization, lead to an upward bias in the savings coefficient. Therefore, our empirical approach includes adding the variables of the degree of trade openness and the Kof index as indicators of traditional and modern globalization, respectively, as well as the interactive effect of the Kof index on the original equation, which has been used for the first time in domestic and foreign studies. Also, for the first time, by adding new variables on the initial form of the FH equation, a new specification of the initial equation for solving the puzzle in internal studies has been investigated. Given the characteristics of the countries under study that have sufficient financial resources to finance and do not need external resources, the study of international capital mobility for them can be important because it clarifies the role of home bias in accurately estimating international capital flows. The results indicate the elimination of home bias in estimating the relationship between saving and investment and the realization of the relationship between the two variables

# METHODOLOGY

After performing the unit root test on the model variables, through the Leimer test, the H0 hypothesis was rejected for the pooled data model, so we used cross-sectional analysis to estimate panel data for 10 developing oil-exporting countries (Iran, UAE, Oman, Saudi Arabia, Azerbaijan, Ecuador, Kazakhstan, Indonesia, Egypt, and Sudan). Then we used two cointegration techniques called the Pedroni panel-data cointegration test and the Kao panel-data cointegration test to detect the existence of a long-term relationship between variables. Finally, two fully modified ordinary least squares (FMOLS) and dynamic ordinary least squares (DOLS) estimators were used to estimate the long-run equilibrium parameters in estimating the models. All research variables except the Kof index are extracted from World Bank (WDI) database. KOF Globalization Index statistics are taken from the 2021 time series on the website of the Swiss Economic Institute.

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### FINDINGS

As expected, the Kof variable has a significant positive coefficient in determining the investment ratio. The degree of openness has not helped to explain the investment ratio. The interaction effect of the Kof index with the savings ratio has a significant negative coefficient. The savings ratio variable with a significant (close to one) positive and significant coefficient indicates the importance of the savings ratio coefficient in determining the investment ratio. Under these conditions, domestic investment is made only through domestic savings.

# CONCLUSION

The inclusion of the Kof index, the degree of trade openness, and the interaction of the Kof index in the original FH equation eliminated home bias and made the value of the savings ratio coefficients a reality. Therefore, the very low degree of capital mobility among the studied countries can be conclusively concluded. In general, our main conclusion is that there is no evidence of the confirmation of the FH conundrum for the selected study countries. The degree of openness of trade as a factor reducing trade friction did not play a role in determining the investment ratio and reducing home bias, while increasing the Kof index as a factor reducing trade and financial friction played a decisive role in determining the investment ratio. The changes made to the FH equation play an important role in solving this important puzzle of the international economy. The degree of trade openness is not the best representative for reducing trade friction. Therefore, the results of our research confirm the introduction of the Kof index as an advanced and modern version of the degree of trade openness for studies on the FH puzzle.

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