CHAPTER 1

THE EFFECTS OF EXCHANGE RATE VOLATILITY ON FOREIGN TRADE IN TURKEY

Aydanur GACENER ATIŞ[1]
Deniz ERER[2]
Elif ERER[3]

1. INTRODUCTION

It is assumed that exchange rate volatility has a symmetric effect on foreign trade. According to this assumption, an increase in exchange rate volatiltiy leads to decrease trade flows while a decrease in the volatility enhances bilateral trade. However, countries react differently to fluctuations in exchange rates. De Grauwe (1988) stated that the response of a country to exchange rate risk depends on its risk attitude. Risk averse countries prefer to trade less when exchange rate volatility rises while risk tolerant countries will increase trade today in order to decrease any loss of income in the future. The increasing volatility reduces bilateral trade. On the other hand, counterparties feel themselves more confident by means of stabilizing of exchange rate by the central bank and the ability to decrease exchange rate volatility of it. So-called confidence factor may enhance foreign trade volume. Therefore, an asymmetric effect from exchange rates to domestic prices, import and export occurs (Delatte & Lopez Villavicencio, 2012; Bahmani-Oskooeea &Afta, 2017).

The aim of this study is to examine the effect of exchange rate volatility on bilateral trade on sectoral basis under different economic cycles. Thus, this study is expected to contribute to the existing literature in several ways:

- We measured the asymmetric response of foreign trade on sectoral basis to exchange rate volatility by using nonlinear econometric methods in Turkey.
- We estimated exchange rate volatility by using Generalized Autoregressive Score Model (GAS) with time varying parameters.

1 Assoc.Prof.Dr., Ege University, Department of Economics, aydanur.gacener@ege.edu.tr
2 PhD in Economics, Independent Researcher, denizerer@hotmail.com
3 PhD in Economics, Independent Researcher, elif_erer_@hotmail.com

ture, competitive advange in industrial products and also structural economic situation reflecting dependence of our exports on imports.

REFERENCES

Amiti, M., Itskhoki, O. & Konings, J. Importers, Exporters, And Exchange Rate Disconnect. American Economic Review, 2014, 104(7):1942–78. DOI: 10.1257/aer.104.7.1942

Arora, S., Bahmani-Oskooee M. & Goswami G., Bilateral J-curve Between India and Her Trading Partners, Applied Economics, 2003; 35:1037-41.

Baek, J., Exchange Rate Sensitivity of Korea-U.S. Bilateral Trade: Evidence From Industrial Trade Data, Journal of Korea Trade, 2012, 16(3):1-21.

Bahmani-Oskooee, M., Determinants of International Trade Flows: The Case of Developing Countries, Journal of Development Economics, 1986, 20:107-23.

Bahmani-Oskooee, M. & Aftab, M., On the Asymmetric Effects of Exchange Rate Volatility on Trade Flows: New Evidence From US-Malaysia Trade Industry Level". Economic Modelling, 2017:63, 86-103. https://doi.org/10.1016/j.econmod.2017.02.004.

Bahmani-Oskooee, M. & Durmaz, N., Asymmetric Cointegration and the J-Curve: Evidence from Commodity Trade between Turkey and EU. MPRA Paper, 2016, No: 83183.

Bahmani-Oskooee, M. & Goswami G., Exchange Rate Sensitivity of Japan's Bilateral Trade Flows, Japan and the World Economy, 2004, 16:1.

Bahmani-Oskooee, M. & Hegerty, S.W., Exchange Rate Volatility and Trade Flows: A Review Article. Journal of Economic Studies, 2007, 34:211-55.

Berman, N., Martin, P. & Mayer, T., How Do Different Exporters React To Exchange Rate Changes? Quarterly Journal of Economics, 2012, 127:437-92. https://doi.org/10.1093/qje/qjr057.

Colacelli, M., Export Responses to Real Exchange Rate Fluctuations: Development Status and Exported Good Effects, 2008, Barnard College, Columbia University.

Creal, D., Koopman, S.J. & Lucas, A., Generalized Autoregressive Score Models With Application. Journal of Applied Econometrics, 2012, 28:777-95. https://doi.org/10.1002/jae.1279.

Çelik, R., Döviz Kuru Volatilitesinin İhracat Üzerine Etkileri: Türkiye Örneği (1995-2017). İstanbul İktisat Dergisi, 2018, 68:181-220. DOI: 10.26650/ISTJECON404747.

De Grauwe, P., Exchange rate variability and the slowdown in growth of international Trade. IMF Staff Paper, 1988, 35:63-84.

Delatte, A.L., Lopez-Villavicencio, A., Asymmetry Exchange Rate Pass-Through: Evidence From Major Countries. Journal of Macroeconomics, 2012, 34:833-44.

Erdal, B., The Effects of Real Exchange Rate Volatility on Sectoral Export Flows under Intermediate and Flexible Exchange Rate Regimes: Empirical Evidence from Turkey. New Trends and Issues Proceedings on Humanities and Social Sciences, 2018, 4(10), 172-184. https://doi.org/10.18844/prosoc. v4i10.3073.

Kaplan, F. ve Güngör, Ş., Türkiye'nin Avrupa Birliği'ne Sektörel İhracatına Döviz Kurunun Etkisi: Panel Veri Analizi. Ekonomi Bilimleri Dergisi, 2017, 9(1), 33-48.

Karamollaoğlu, N. and Yalçın, C., Exports, Real Exchange Rates and Dollarization: Empirical Evidence from Turkish Manufacturing Firms. Empirical Economics, 2019, July: 1-31. https://doi.org/ 10.1007/s00181-019-01733-1.

Melitz, M., The Impact Of Trade On Intra-Industry Reallocations and Aggregate Industry Productivity. Econometrica, 2003, 71 (6):1695–725.

Nazlıoğlu, Ş., Exchange Rate Volatility and Turkish Industry-level Export: Panel Cointegration Analysis, The Journal of International Trade & Economic Development. 2013, 22 (7):1088-107. https://doi.org/10.1080/09638199.2012.660978.

Saraçoğlu, B., Açıkgöz, Ş. & Karpat Ç.G., Döviz Kuru Oynaklığının Türkiye'nin Almanya ile Mal Ticareti Üzerine Etkileri. Anadolu Üniversitesi Sosyal Bilimler Dergisi, 2018, 18 (4), 39-58. https://doi.org/10.18037/ausbd.552677.

Shambaugh, J., A New Look at Pass-Through, Journal of International Money & Finance, 2008, 27:560-91.
Wilson, P., Exchange rates and the trade balance for dynamic Asian economies: does the J-curve exist for Singapore, Malaysia and Korea? Open Economies Review, 2001, 12:389-413.