

Chapter 2

COMPARING THE BALANCE OF PAYMENTS OF NORTHERN AND SOUTHERN EUROPEAN COUNTRIES IN TERMS OF HECKSCHER OHLIN THEORY

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1. INTRODUCTION

The comparative advantage theory, which was based on the difference of labor productivity, is inadequate to explain the reasons for this difference, and Heckscher-Ohlin “Theory of Factor Endowments” was developed. In the model of $2 \times 2 \times 2$, which is assumed to be used by two countries, two commodities and two factors of production (labor and capital), it is also stated that countries are different in terms of factor equipment’s and goods are different from each other in terms of factor densities; it is assumed that according to scale in production the law of fixed income is valid (Seyidoglu, 1999: 64).

The Heckscher-Ohlin Theory is based on a very clear, simple and rational thought. The main idea that is defended in theory can be expressed as follows: If a country has rich production factors, it produces comparative advantages in goods that require its production in a highly intensive manner (Seyidoglu, 2015:84).

Factor Endowments: The Heckscher & Ohlin Model, which will be discussed in the future, is the first model dealing with the origin of the Comparative Advantages. Heckscher & Ohlin’s observations demonstrate that some countries have more capital in the form of machinery, buildings and other production tools; some countries have more workforce. We see that the country in the left panel of Chart 1 has a high level of production factor (eg labor). This shows that the equilibrium price of labor, ie P_0 , is relatively low. In contrast, labor supply in the country’s right panel is relatively low. This naturally leads to a higher price balance, ie a higher wage level (See Figure 1).

In this case, labor supply is more expensive in the country with more labor. Therefore, the production of labor-intensive goods is more profitable than the production of goods that use less labor but require more capital or other inputs. Therefore, the relative prices of input factors create comparative advantage over the supply of these factors (Heckscher and Ohlin, 1991).

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1980 to 2013 as annual by taking into account the variables of BOP, energy use, air transportation and inflation. Data is derived from World Bank's official website. According to result of econometric findings, air transportation and energy use affects BOP significantly for northern countries.

Heckscher Ohlin theory is one of the most important international trade theories which includes labor and capital intensive good and its production. Considering the both northern and southern countries, Finland, France, United Kingdom and Netherlands produce capital intensive goods and Turkey, Italy, Greece and Spain labor intensive goods. The panel data test of this paper demonstrates as empirically. According to research results of northern countries the impact of energy use on balance of payments is remarkably which is founded as 0.0000 (See Table: 2). On the other hand, the research results of southern countries in terms of the correlation of energy use on balance of payments is low which is founded as 0.2508. Thus, southern countries achieve to transfer its energy source efficient area in order to increase trade surplus of current account balance. The other main component of BOP is capital account that 4 northern countries attract more FDI and portfolio investment due to stable political confidence. In addition, northern countries' trade deficit is less than southern countries which is mostly related with Heckscher Ohlin's trade theory (See Figure:2 and Figure:3). However, considering to southern countries, they more focus on labor intensive goods and its production instead of capital intensive goods. For this reason, southern countries should more concentrate on technology based production by increasing their know-how. Besides, they should invest in research and development especially Turkey and Greece rather than construction sector.

REFERENCES

1. Brey, J. J., Carazo, A. F., & Brey, R. (2012). Using AHP and binary integer programming to optimize the initial distribution of hydrogen infrastructures in Andalusia. *International Journal of hydrogen energy*, 37(6), 5372-5384. Doi.org/10.1016/j.ijhydene.2011.08.040
2. Calvo, G. A., & Végh, C. A. (1999). Inflation stabilization and BOP crises in developing countries. *Handbook of macroeconomics*, 1, 1531-1614. Doi.org/10.1016/S1574-0048(99)10037-5
3. Christopoulos, D. K., & Tsionas, E. G. (2003). A reassessment of balance of payments constrained growth: results from panel unit root and panel cointegration tests. *International Economic Journal*, 17(3), 39-54. Doi.org/10.1080/10168730300000003.
4. Douthwaite, R. (2012). Degrowth and the supply of money in an energy-scarce world. *Ecological Economics*, 84, 187-193. Doi.org/10.1016/j.ecolecon.2011.03.020
5. Heckscher, E. F., & Ohlin, B. G. (1991). *Heckscher-Ohlin trade theory*. The MIT Press.

6. Karluk, R. (2013). *Uluslararası Ekonomi Teori Politika*. İstanbul: Beta Basım Yayım Dağıtım
7. Katircioglu, S. T. (2009). Revisiting the tourism-led-growth hypothesis for Turkey using the bounds test and Johansen approach for cointegration. *Tourism Management*, 30(1), 17-20. Doi.org/10.1016/j.tourman.2008.04.004
8. Katircioglu, S. (2011). Tourism, trade and growth: the case of Cyprus. *Applied Economics*, 41(21), 2741-2750.
9. Katircioglu, S. T., & Feridun, M. (2011). Do macroeconomic fundamentals affect exchange market pressure? Evidence from bounds testing approach for Turkey. *Applied Economics Letters*, 18(3), 295-300. Doi.org/10.1080/00036840701335512
10. Mankiw, N. G. (2014). *Principles of Macroeconomics*. 5. th. ed., United States: SouthWestern Cengage Learning, 2008.
11. Modigliani, F., & La Malfa, G. (2014). Inflation, balance of payments deficit and their cure through monetary policy: the Italian example. *PSL Quarterly Review*, 20(80), 3-47.
12. Pacheco-López, P., & Thirlwall, A. P. (2007). Trade Liberalisation and the Trade-Off Between Growth and the Balance of Payments in Latin America. *International Review of Applied Economics*, 21(4), 469-490. Doi.org/10.1080/02692170701474587
13. Rocha Gouvêa, R., & Tadeu Lima, G. (2013). Balance of payments constrained growth in a multisectoral framework: a panel data investigation. *Journal of Economic Studies*, 40(2), 240-254. Doi.org/10.1108/01443581311283691
14. Santos-Paulino, A., & Thirlwall, A. P. (2004). The impact of trade liberalisation on exports, imports and the balance of payments of developing countries. *The Economic Journal*, 114(493), 50-72. Doi.org/10.1111/j.0013-0133.2004.00187
15. Semboja, H. H. H. (1994). The effects of energy taxes on the Kenyan economy: A CGE analysis. *Energy Economics*, 16(3), 205-215. Doi.org/10.1016/0140-9883(94)90034-5
16. Seyidoğlu, H. (1999), *Uluslararası İktisat-Teori, Politika ve Uygulama*, Güzem Yayınları, 13. B., İstanbul.
17. Seyidoğlu, H. (2015), *Uluslararası İktisat-Teori, Politika ve Uygulama*, Güzem Can Yayınları, 20. B., İstanbul.
18. World Bank (2018) Inflation Rate (annual %), Retrieved April 22, 2018 from <https://data.worldbank.org/indicator/FP.CPI.TOTL.ZG>
19. World Bank (2018) Air transport, Passengers Carried, Retrieved March 11, 2018 from <https://data.worldbank.org/indicator/IS.AIR.PSGR>
20. World Bank (2018) Energy Use (kg of oil equivalent per capita), Retrieved June 25, 2018 from <https://data.worldbank.org/indicator/EG.USE.PCAP.KG.OE>
21. World Bank (2018) Balance of Payments (BoP, current US\$), Retrieved June 12, 2018 from <https://data.worldbank.org/indicator/BN.CAB.XOKA.CD>
22. World Bank (2018) Current Account Balance, Retrieved June 25, 2018 from <https://data.worldbank.org/indicator/BN.CAB.XOKA.CD?end=2013&locations=TR-IT-GR-ES&start=1980>
23. Yergin, D. (2006). Ensuring energy security. *Foreign affairs*, 85(2), 69-82. DOI:10.2307/20031912