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Modeling Study On The Effects Of Maritime Transportation on Turkey's Economy

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Abstract: Due to its nature, maritime trade is in the area of regional and national, as well as international and supranational policy. In terms of maritime environment, several variable factors affect maritime trade and relevant policies. In today's world where technology renovates itself very fast, political events affect trade markets, major economic mergers and alliances are experienced due to competition, social and cultural mobility increases, environment sensitivity is developed and legal obligations and rules are standardized, making policies and strategic decisions in maritime trade has become even more complicated but important [1].

This study takes into consideration the literature [2] in maritime trade and Turkey's worldwide position. Its aim is to generate an ideal model to measure the effects of Turkish maritime trade on county's economic development. Main dataset includes Industrial Production Index, Amounts of Handling in Ports Based on Months Loading Total Export, Amounts of Handling in Ports Based on Months Dumping Total Imports, Amount of Handling in Ports Based on Months Total Import-Export, Balance of Payment Balance of Services Freight, Transportation Income, Imports by Sea Transportation Systems, Export by Sea Transportation Systems, Total number of vessels in connection with harbors based on port authorities, Total number of vessels with Turkish Flag.

When Industrial Production Index was appointed as dependent variable, Log-linear regression model was found as superior with monthly-based dataset, which covers the years 2005-2017. The estimated model was statistically significant, with high R^2 [3]. In addition to that unit root, autocorrelation, heteroscedasticity and, multicollinearity tests were applied and final model demonstrated that there is a linear and positive but unfortunately limited impact of maritime transport on Turkey's economy.

References

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