

Assessment of the effective factors on sawn wood import in Iran

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Abstract

The import of sawn wood in Iran for the period of 1984 to 2009 is empirically analyzed using a Ordinary Least Square model (OLS).the stationary character of the data was checked by applying the Augmented Dickey-Fuller (ADF) and Philips-Perron tests. Also, Breusch-Godfrey test was used for testing the presence of serial autocorrelation in the error term of the regression model. The presence of a long-run relationship between demand for the sawn wood import and the affective factors was measured applying Engle–Granger and Johansen-Julius cointegration tests and finally the short run causal relation was analyzed by the causality test of Granger. The results indicate that the nominal exchange rate and domestic production quantity variables impart adverse impact on this commodity import and GDP and the

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petroleum export income imposes positive impact on the demand for the import of sawn wood. The results also showed that there exists a long-run equilibrium relationship between the imports of sawn wood in Iran and the selected macroeconomic and market variables. We find that there exists a one-side causal relation from the mentioned explanatory variables to the explained variable.

Introduction

Population growth and the change in the consumption and demand pattern, has contributed to the steady increase in the consumption of various wood products in Iran, both as end products or intermediate products. Iran is located in arid and semi arid region with limited coverage of forests and faces serious shortage of wood. Therefore, vast quantities of its sawn wood requirements has been supplied through imports (Shoaibi, et al. 2010). The import statistics show that over the last ten years, the import quantity of these products to Iran has witnessed the growth rate of almost 17.1 % (Mollahasani 2011). Of course, the ever increasing import of sawn wood is not limited to Iran and the emerging economies in Asia including China and India also import significant quantities of industrial round wood and sawn wood from UNECE region and then export the furniture made from these imported wood. Chinese import of industrial round wood increased from 6.1 million m³ in 1995 to 43.4 million m³ in 2011. In addition, India imported almost 355,000 m³ industrial round wood in 1995 which was dramatically increased to 6 million m³ in 2011 (FAO 2012). According to the European Forest Sector outlook study II (EFSOS II 2010), Europe is, and will remain in all scenarios (a reference scenario and four policy scenarios), a net exporter of wood and forest products commodities, and a significant net exports of products will outweigh the relatively minor net imports of wood. The positive balance (net exports, aggregate of wood and products, in m³ RWE) was about 20 million m³ in 2010, and would triple, to 60 million m³, in most scenarios. Even in the case of the wood as energy source scenario, the imports of wood will rise to over 30 million m³, then still excesses net exports of the whole sector will be more than 10 million m³. The data do not take into account the trade in processed wood products such as furniture, joinery (windows and doors, building components), toys, or books. This trade has been expanding and Europe may become a net importer of the wood products, especially in the era that China has been increasing its exports.

It is accepted that in addition to the market variables (e.g., domestic and imported prices of sawn wood), macroeconomic variables (e.g., exchange rate and GDP) are also important influential factors affecting the wood pro-