ECONOMETRIC MODELLING AND FORECASTING FOR NORWAY'S REVENUE FROM EXPORT OF SHIPS: AN APPLICATION TO TWO-WAY FACTORIAL WITH INTERACTION MODEL

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ABSTRACT

This paper applies two-way factorial with interaction econometric models to make analysis about the continental and business cycle effect on revenue generated from Norwegian export of Ships over the world's continents. The model's ability to analyse the variation of Norway's export of ships gives us following interesting details: (1) access to deep knowledge about the characteristics of the revenue of Norway's export of ships, (2) provide a guideline to build trend equation of the revenue collected from the export of ships of Norway. The results suggest the following important policy implications for Norway. First, Europe is the most important trade partner for Norway. In fact, more than 40% of Norwegian exports of ships are transported to Europe. Second, there is a structural break on the revenue from the export of ships for business cycle of every five years. Third, the revenue collected from the export of the item is volatile across all destination continents. Fourth, the study gives the forecasted values of the revenue that Norway will collect from the year 2013 to 2017.

Keywords: two-way factorial with interaction model, non-linear trend model, Norway's export of ships, structural breaks, trade volatility