

# **Abstract**

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## **Exploring the leading indicators of container port demand : an econometric analysis applied to the port of Antwerp**

As maritime traffic is a derived demand, it is strongly related to changes in international trade and economic activity. As a consequence, also port throughput will be closely linked to economic growth and business cycles. Although this relation is often used in models for forecasting port throughput, it is not without problems. The main problem is that one needs forecasts of the economic indicators. For some of them, one can rely upon forecasts made available by different national and international institutions, while for some others this is not the case. Therefore in this paper, the possibility that a number of leading economic indicators and surveys lead the container throughput series applying a residual cross-correlation approach is investigated. The empirical analysis for the port of Antwerp emphasises that the Economic Sentiment Indicator can be utilised in dynamic models for short-term forecasts of the total container throughput. Also a leading relationship exists between the unloaded and loaded containers with the imports and exports, respectively. However, there is a need to develop dedicated indicators for container throughput.