

# **Abstract**

**Yasmin R. Mohamed**

## **Consequences of applying a bunker adjustment factor**

This paper discusses the controversy surrounding the application of a Bunker Adjustment Factor (BAF), a surcharge that compensates for fluctuating fuel costs incurred by shipping operators. Opinions are divided on whether not the surcharge should be imposed on top of the base sea freight rate incorporated into it. Some shippers oppose the idea of incorporation, arguing that BAF charges constitute a hidden profit centre. A number of academic studies, all dating from before the 2008 financial and economic turndown, have indeed found that BAF charges do not necessarily reflect the actual bunker costs incurred by liner carriers. Using monthly data, the present paper examines the relationship between crude oil prices, bunker prices and BAF on one hand and freight rates on the other, over the period stretching from January 2000 to February 2015. The analysis identifies lead-lag relationships on the basis of a cross-correlation function. The results show that the lead-lag relationship between crude oil prices (BRENT) and bunker prices (Rotterdam) is concurrent, while the bunker price leads BAF by 2 months. The volatility of freight rates is determined by other (supply and demand) factors surcharges than bunker prices.