

the scrap steel buyer to the shipbreaker. This flow can be in the local currency if the buyer is a local steel mill or in USD if the buyer is a foreign company.

Therefore, the flows of money described above will affect the profitability of the shipbreaker in a number of ways. Some of the flows are in USD and some in the local currency. The possible difference in the currency exchange rate at the points of payments will affect the profitability. As the shipbreaker is mainly located in a developing country there is increased possibility of adverse exchange rate shift with the USD increasing in value. In case the sale of the scrap steel is made overseas an additional financial risk accrues for the shipbreaker as the sale will again be in USD that always entails a risk of adverse exchange rate movements.

In addition currency exchange rates will also affect financial costs of the letter of credit issued for the ship purchase. The letter of credit is drawn in the foreign currency. The financial cost therefore will include a risk for an adverse shift in the foreign exchange rate. This risk is higher the longer the duration of the Letter of credit. The duration of the letter of credit also affects the financial cost in terms of interest. This financial cost is also affected by the exchange rates as it regards purchase of ships in a foreign currency.

5. Methodology

Following the above analysis in this paper we focus our investigation on the relation between exchange rates and the ship scrap prices.

In order to evaluate our hypothesis we used Microsoft Excel for our regressions and utilized secondary monthly data from Clarksons (Clarksons SIN, 2016) with ship scrap value between May 2006 and April 2016. The period chosen includes a shipping cycle from trough to trough and thus our investigation will not be affected by the cyclical shipping market conditions (Scarsi, 2007).

From the same database we utilized the relevant freight indices of Baltic HandySize Index (BHSI) Baltic Supramax Index (BSI), Baltic Panamax Index (BPI) and Baltic Capesize Index (BCI) (Balticexchange.com, 2016) for the Handysize¹, Supramax², Panamax³ and Capesize⁴ bulk carriers respectively. These variables were chosen as a proxy for the market freight levels at each size category.

¹ Baltic Handysize description: 28,000mt dwt on 9.78m SSW draft Max age 15 yrs LOA 169m, beam 27m, TPC 39.6

37,523cbm grain, 35,762cbm bale 5 holds, 5 hatches 4 x 30mt cranes 14 knots average laden/ballast on 22mt fuel oil (380cst), no diesel at sea

² Baltic Supramax description: 52,454mt dwt on 12.02m SSW draft Max age 15 yrs LOA 189.99m, beam 32.26m, TPC 54 67,756 cbm grain / 65,600 cbm bale 5 holds, 5 hatches 4 x 30mt cranes with 12cbm grabs 14 knots laden / 14.5 knots ballast on 30mt fuel oil (380cst), no diesel at sea

³ Baltic Panamax description: 74,000mt dwt on 13.95m SSW draft, Max age 12 yrs, LOA 225m, beam 32.2m, TPC 66.5 89,000 cbm grain 14 knots laden on 32mt fuel oil (380cst) / 14 knots ballast on 28mt fuel oil (380cst), no diesel at sea

⁴ Baltic Capesize description: 180.000mt dwt on 18.2m SSW draft Max age 10 yrs, LOA 290m, beam 45m, TPC 121

198,000cbm grain, 14 knots laden / 15 knots ballast on 62mt fuel oil (380cst), no diesel at sea, 12 knots laden / 13 knots ballast on 43mt fuel oil (380cst), no diesel at sea

