



## **Analysis of the Stainless Steel Market in the EU, China and US Using Co-integration and VECM<sup>1</sup>**

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In this work, we analyse the relationship between European domestic prices and the prices prevailing in two major trading regions, China and the USA. We also consider the relationship between prices and the volume of imports into Europe. The analysis seeks to determine two aspects related to pricing in the stainless steel market. It first seeks to determine whether China's current standing as the largest worldwide producer of stainless steel is relevant in defining its price. Stemming from the first question, we secondly seek to understand if the European market is simply one component in the global stainless steel market with no significant power in pricing determination. Through a co-integration analysis and the vector error correction model, the estimates suggest that prices in Europe and the US react to at least two of the three long-run relationships, whereas China's price reacts only to the long-term relationship with the US. Moreover, results express that China's price cause in Granger sense to the European prices, but the reverse relationship does not hold. With respect to European imports, there is a long-run relationship between import volume and Chinese and German prices. The German short-run price elasticity is larger than one, and import demand tends to be income elastic. The study primarily concludes that European producers of stainless steel are price followers, and that the volume of imports into Europe is affected by long-run relations of relative prices.

**Keywords:** Price Follower; Granger Causality; Income Import Demand; Income Elasticity; Unit Root Test.

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