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IS PRICE TRANSMISSION SYMMETRIC OVER TRANSNATIONAL VALUE CHAINS FOR CODFISH PRODUCTS ?

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Abstract. This paper uses a threshold adjustment methodology to find out whether price transmission over the cod value chain between Norway and Portugal is asymmetric. The basic setting relies on price theory and the relationship between prices in the fish market. Empirical tests of price transmission use a cointegration framework similar to many other non-stationary time series analyses. However, it appears that testing for asymmetric price transmission has not been done so often in the fish market, despite the recent availability of non-linear time series techniques designed to this end. TAR and M-TAR adjustment models can be used in this context. Our results show that while the three price series used in the cod value chain between Norway and Portugal are cointegrated, there is no evidence of asymmetric price adjustment in this market.

Keywords. Asymmetric price transmission, threshold adjustment, cointegration, seafood value chains

Price theory has been used as a framework in analyses of vertical market integration where agent decisions are taken so as to lower transactions costs, attenuate the effects of market power, etc. There are at least two advantages in using this approach. The first is that price data is more readily available than many other forms of data, namely costs data, and analyses can be conducted in chains where only limited information is available. The second is that many industries, particularly primary industries, have a structure where one factor, the primary good, is the main factor in the chain, and therefore influences the use of other factors and also often has a high budget share. However, this comes at the cost that less precise information may be obtained using this approach compared with others based on more intensive datasets.

Of special interest in this context is the study of asymmetric price transmission over a given value chain. This is based on the common feeling that market power is exerted by big retailers to perfectly pass on price increases while mitigating or simply not fully transmitting price decreases, that is, asymmetric transmission of price changes according to the sign (positive or negative) of past variation. It may be a source of distortion in the transmission of information down the marketing chain in response to supply shocks. Thus, an input factor price cut associated with an increased