

## Price Transmission in Vertical Dairy Chains: The Italian Case

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**Abstract** – At a theoretic level, price transmission does not provide a clear signal of competitiveness as many conditions may induce stickiness and even asymmetry in the speed of adjustment to positive and negative changes. While evidence from past EU studies for the dairy sector is mixed, several studies have found evidence of asymmetry in particular countries. However, none to our knowledge have considered evidence for Italy. We examine price dynamics within the chain and test for presence of asymmetry in the transmission of price changes along the chain. Using a parametric test of asymmetry in a multivariate VECM, we find strong evidence of symmetry in co-movement. To explore whether these results are robust with respect to nonlinearity we estimate threshold VECM models and also find strong evidence to reject asymmetry except for the transmission between raw milk and wholesale butter prices. While inference with respect to competitiveness of markets cannot be inferred from evidence of asymmetry, findings of symmetry confirm that the market organization and performance is not controlling price change to be asymmetric.

**Key words:** dairy sector, CMO, time series analysis, industrial organization, market efficiency.