

Market efficiency

COMPETE Consultation Workshop
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WP 7 - Objectives

- to assess the functioning of selected value chains in the EU
- to assess the extent of market power
- to identify factors and/or distortions of market efficiency (price integration and convergence)
- to discuss the determinants of market efficiencies at the international level

Market price integration

- non-integration of prices and price/inflation rate divergence can be translated as proxies for inherent internal market inefficiencies
- our overall results suggest markets are less efficient than expected in a single market.
- Whilst producer prices co-moved in pork meat and raw milk markets (that proved to be more horizontally integrated than beef, eggs poultry and sheep prices) for 97% and 91% of the cases (number of bivariate regressions run), even the weak version of LOP only hold for 24% and 23% of the cases respectively.
- the validity of LOP is negatively affected by the distance between markets and positively by the trade (both measured as value or quantity).

Milk market price integration example:

- *trade cost (or distance)* **negatively** affects market integration
- **increasing** *trade activity* boosts integration when export volumes (and to a lesser extent, quantities) are considered
- **positive** coefficient on the *euro* dummy
- integration is **stronger** if both exporter and importer countries are *Old Member States*
- **weaker**, if both countries are *New Member States* (posing interesting policy questions with respect of the successful post accession market integration of NSM)
- positive coefficient of *NMSOMS* dummy (i.e. the reporting exporter country is a New Member State trading with an Old Member State): **stronger** integration, perhaps possible to interpret as NMS are following OMS price signals (orienting towards the core of EU countries). except Poland, (6th largest producer) other NMS are generally smaller with respect to production and population.

Price convergence

- Although there is *some* evidence for (HCPI and food) convergence in some NMS, this is not uniform for all countries or groupings of countries.
- The only exception are the former-CEFTA members, which exhibit a group convergence.
- The producer price/inflation rate convergence, of NMS towards the benchmark price and Eurozone 17 inflation rate average, are below expectations.
- In particular, pork meat and eggs producer prices strongly convergence towards their benchmark, whereas for beef and poultry producer prices convergence was found only in few NMS.
- This suggests that markets are less efficient than expected and may point to the existence of internal market inefficiencies in price discovery and price coordination in the EU.

Market imperfections – market power

Analysis for 2003-2012 (for 24 MS) of:

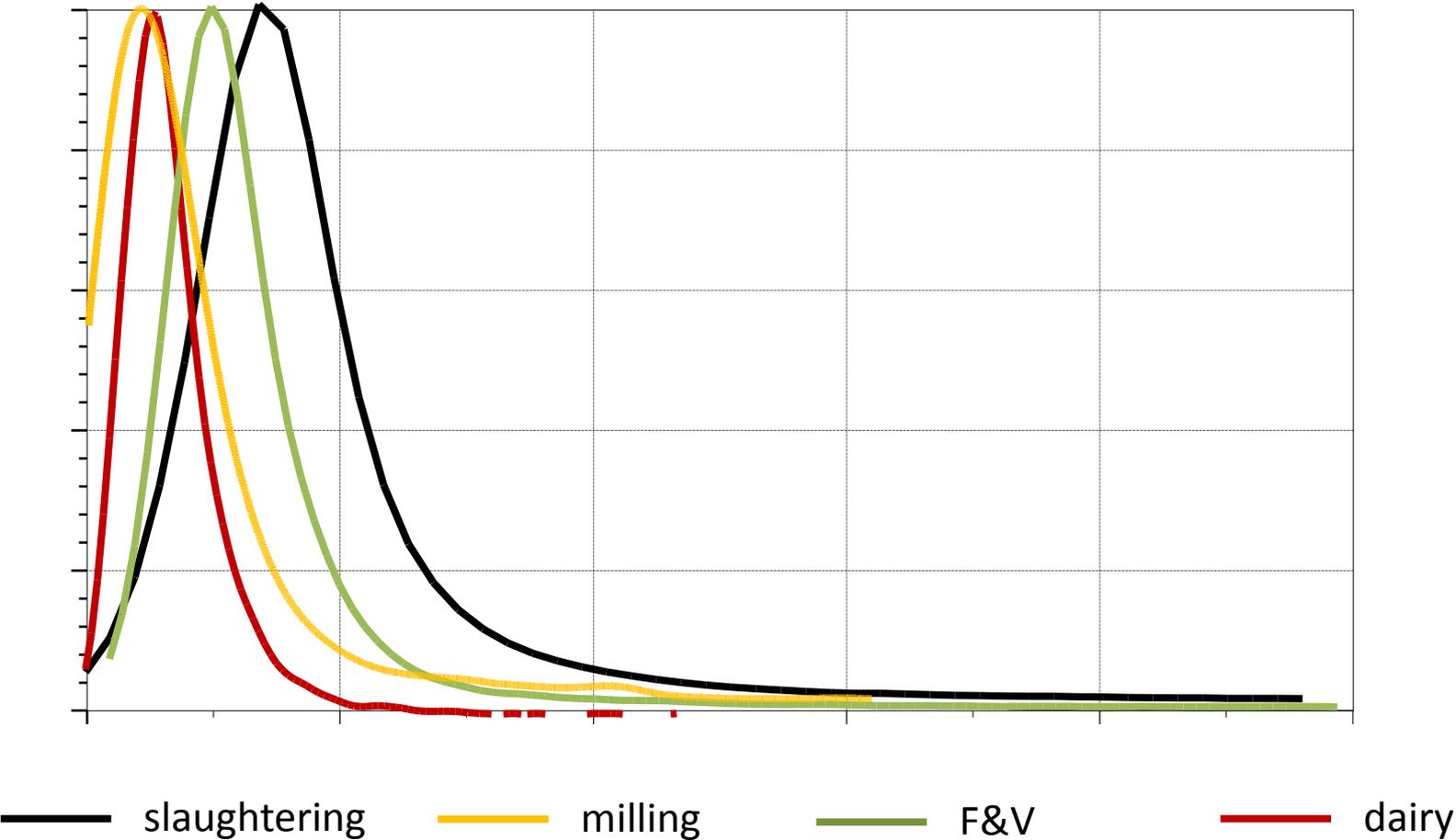
- non-competitive Input food processing market
- degree of oligopolistic market power in output food processing market

Findings:

- The input as well as output food processing markets are characterized by *some* degree of market imperfections.
- Depending on the size and specialization of the particular actor in the food chain, some farmers, food processors or retailers, can cut down prices below or increase prices above the pure competitive market price.
- It can happen at different stages of the food chain actors who have oligopsony and/or oligopoly power as opposed to the prevalent expectation that only retailers abuse the market power with respect to the food processors.
- The degree of market imperfections is stable over time for both input as well as output processing market.

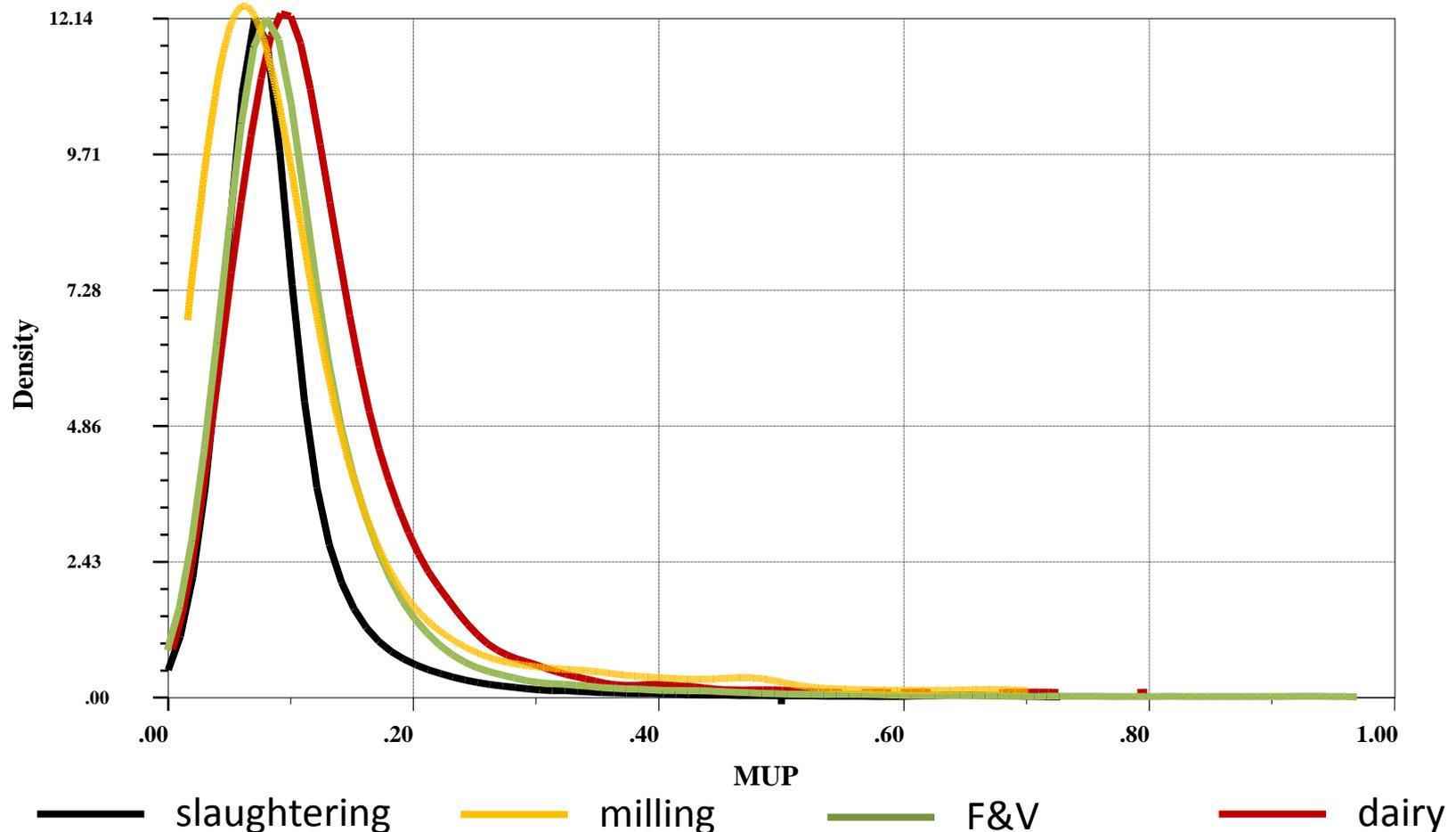
Degree of oligopsonistic food processing market power:

Density of mark down for different sectors



Degree of oligopolistic food processing market power:

Density of mark up for different product groups



Functioning of international markets

- The empirical results, based on panel cointegration methods using quarterly data for 11 importing countries for 2000-2013, provide evidence of limited PTM behaviour across export markets.
- This suggests that EU wheat export markets are generally integrated.
- Where this is not the case, EU wheat exporters adopt a local currency price stabilisation strategy, by adjusting their mark-ups to offset local exchange rate movements and maintain relatively constant prices in export markets.
- This is in line with the findings of previous PTM studies that considered agri-food markets..

Final conclusions

- *There is mixed evidence regarding the efficiency of markets.*
- The degree of market imperfections varies across sectors with significant differences between MS. Overall, markets are less efficient than expected, with the presence of internal market inefficiencies in price discovery and price coordination in the EU.
- The analysis of the domestic agricultural markets tested through indicates that markets are not perfectly integrated.
- ‘pricing to market’ (PTM) analysis of EU wheat exports suggests little evidence of price discrimination between export destinations.