



Competitive without quotas

Research from **TEAGASC** is looking at the international competitiveness of the Irish dairy sector post quotas.

The dairy industry in the European Union (EU) has undergone significant structural adjustments over recent years due to various factors such as prices, weather, environment, and policies. Of particular importance to this study is the removal of the EU milk quota regime in 2015. The milk quota system was introduced in 1984 to constrain the growth of milk production and to ensure that the EU would be able to continue to fund the growing cost of the price support framework. While the policy was beneficial in the beginning, it later became a constraint on the development of the industry because the demand for dairy exports was growing much faster than supply, especially for a net export-oriented country like Ireland.

The objectives of this research are to examine how the competitiveness of the Irish dairy sector at farm and trade level, relative to selected EU member states, has evolved in the post-quota period. The countries selected for comparison in the analysis are among the largest milk producers within the EU, accounting for approximately 75 % of raw cow's milk delivered to dairies in the EU in 2015. The methods employed in the research examined data for a pre-quota abolition period (2012-2014) and a post-quota period (2015-2017), and include:

- partial productivity measures and accountancy-based indicators constructed at the farm level using data from the European Commission's Farm Accountancy Data Network (FADN); and,
- trade-based indicators to assess export competitiveness, namely net export market share and normalised revealed comparative advantage (NRCA), which were constructed using international trade data.

Farm-level indicators of competitiveness

Partial productivity indicators examined included milk yield and solids per cow, stocking rate per hectare, milk production per hectare, milk solids per hectare, and milk production per labour unit.

All of the indicators showed that Ireland had the fastest partial productivity growth compared to a list of competitor countries in the EU in the post-quota period.

In addition to partial productivity indicators, both cash costs and total economic costs per kg of milk solids and as a percentage of total output value were also examined. Cash costs of production include all specific costs directly incurred in the production of milk and overhead costs, less depreciation.

Total economic costs include all cash costs of production, plus depreciation and an imputed opportunity cost for family-owned labour, equity and land. While cash costs of production are considered an appropriate indicator of competitive performance in the short term, total economic costs are considered more appropriate indicators of medium- to long-run competitive performance.

Despite the high opportunity costs for owned land and labour in Ireland, Ireland still ranked first in terms of lowest total and cash costs per kg of milk solids post quota (**Figure 1**). This demonstrates an improvement in the competitive ranking for Irish dairy farms from the pre-quota period.

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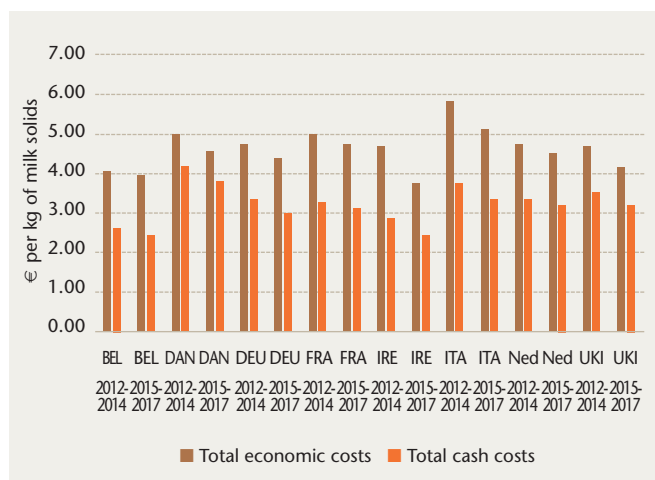


FIGURE 1: Costs per kg milk solids pre and post quota. Source: authors' estimates based on FADN data.

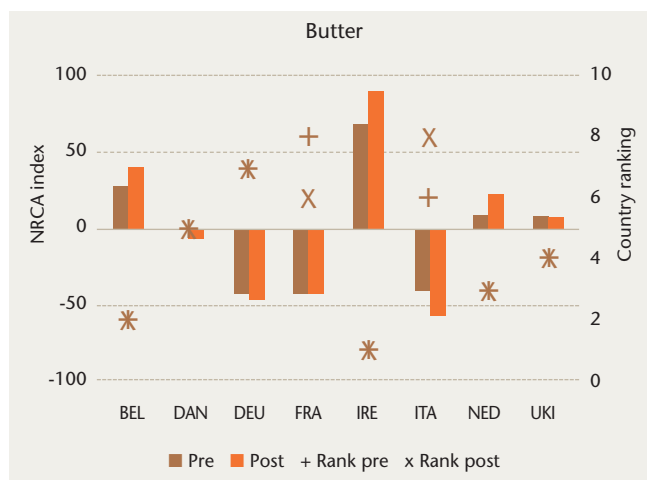


FIGURE 2: NRCA competitiveness ranking across countries for butter. Source: authors' estimates based on FAOstat dataset.

Trade-based indicators of competitiveness

The NRCA was the key indicator of trade-based competitiveness for milk products used in the analysis. The NRCA considers both the country's market share of all commodities in the world export market and the specific commodity market share in the world market.

The higher (or lower) the NRCA score is from zero, the greater the comparative advantage (or disadvantage) for a country. The country with the highest NRCA score is the most competitive across countries within a particular commodity.

The results from the NRCA analysis indicate that Irish dairy products (butter and whey) have demonstrated growth in competitiveness post quota. Irish butter and whey were ranked in the top three across countries, while cheese and liquid milk declined in competitiveness post quota. The results for the NRCA for butter are illustrated in Figure 2.

Implications

The study is the first of its kind to use both farm- and trade-based competitiveness measures to analyse the Irish dairy industry relative to other countries.

The results indicate that among the EU countries examined, Ireland was ranked as the most competitive at farm level in the post-quota period and the competitive position in Ireland has improved in the post-quota period.

Unlike previous studies on dairy export competitiveness, this study has disaggregated processed dairy products, which facilitates the ranking of countries at the product level. Similar to the results at farm level, the competitiveness position of Ireland in the butter and powders market has improved in the post-quota period and Ireland is one of the most competitive exporters in the EU.

However, Ireland's competitiveness position in the international cheese market has declined in the post-quota period, an interesting finding that warrants further investigation.

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