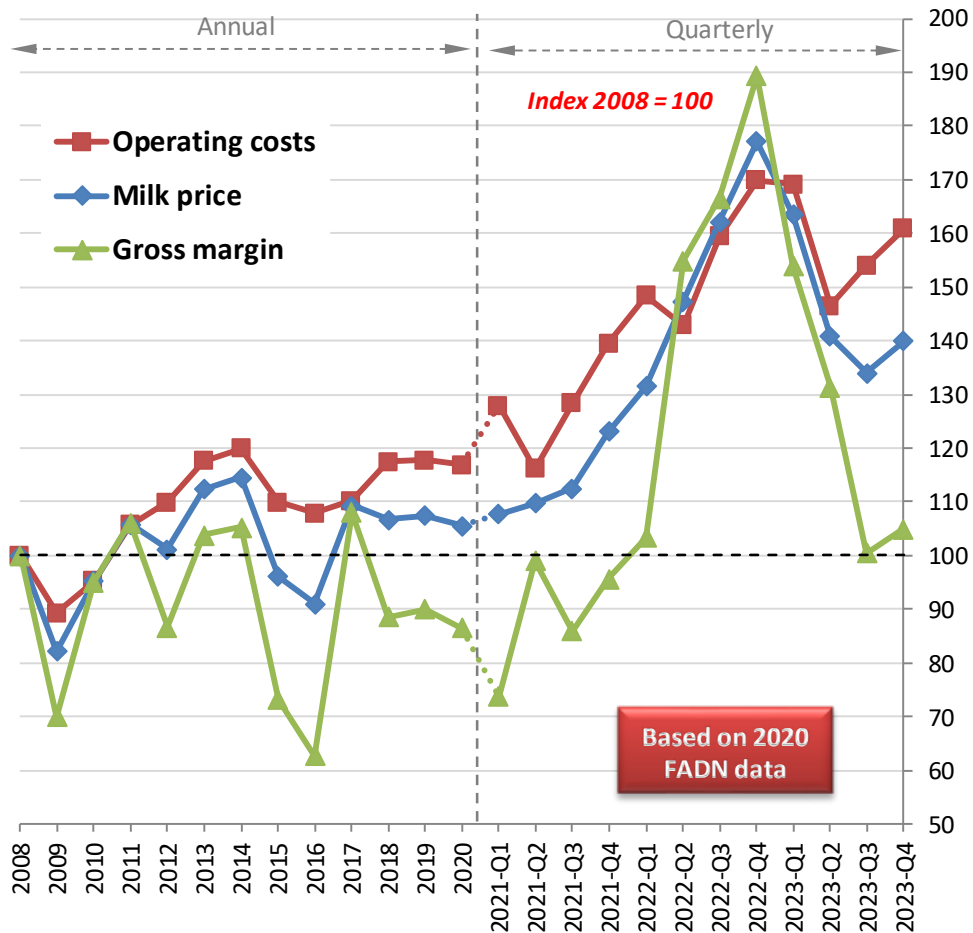
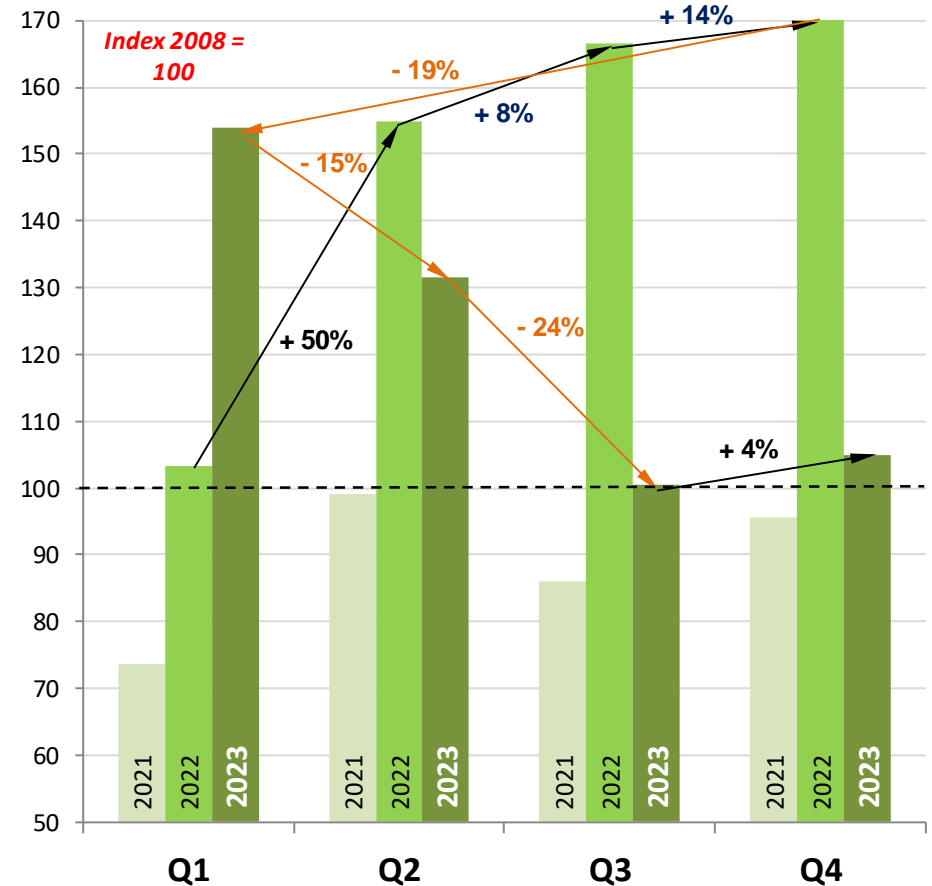


EU GROSS MARGIN (4th Quarter 2023)

EU Milk price, operating costs and margin per tonne



Estimation of EU Gross margin



Annex: Methodology

Box 1: Milk gross margin: definition

In this exercise, we focus on the gross margin, which corresponds to milk revenues minus operating costs, defined as follows:

- Revenues: milk and milk products and coupled milk payments
- Operating costs: specific costs (feed, veterinary ...) and other non-specific operating costs (upkeep of machinery, energy, contract work, taxes on land and buildings ...)

The reader should keep in mind that labour, land and capital costs still have to be paid out of the remaining amount. Likewise, it should be noted that neither receipts from 'by-products' of milk production (calf, cull dairy cow) nor subsidies (except coupled ones) are taken into account on the revenue side. More information on these aspects and on income of dairy producers can be found in the EU dairy farms report (FADN website).

Box 2: Principles of the method

The milk margin monitoring tool built by DG Agriculture and Rural Development aims at monitoring the trend of the EU milk margin up to the most recent possible market situation which is published at the Milk Market Observatory (MMO) website. It is based on FADN data as well as price and yields indices from different sources (market units of DG Agriculture and Rural Development, EUROSTAT).

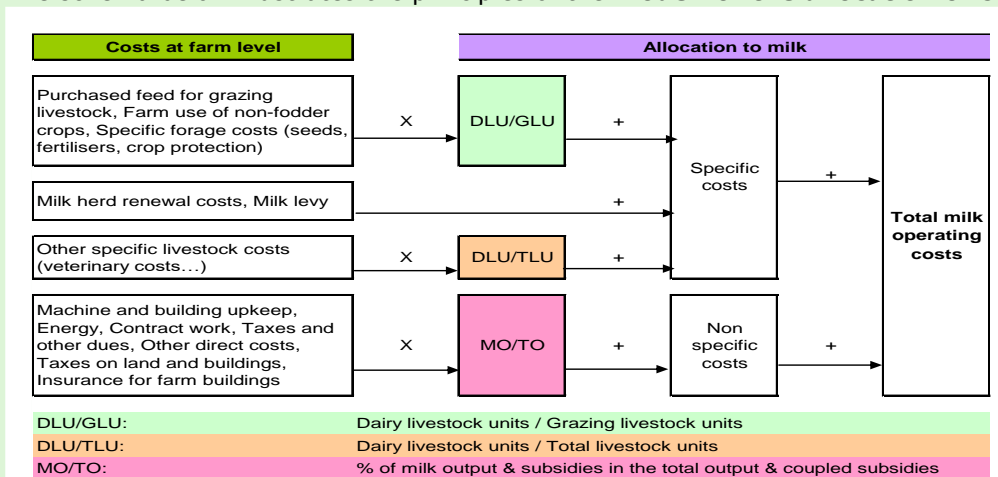
FADN (Farm Accountancy Data Network) is a European system of sample survey that takes place each year and collects structural and accountancy data relating to farms. Costs are given for the farm as a whole, not by enterprise. Therefore, in order to calculate milk production costs and margins, it is necessary to allocate part of the farm costs to the milk enterprise (see Box 3).

Furthermore, because of the time needed to collect, check and correct the data from all the EU Member States, data are available with a time lag: the most recent FADN data currently available are for the 2018 accounting year. That is why, for the purpose of the tool, it is necessary to estimate data for 2019 and its quarters and the quarters of 2020* (see Box 4 and Box 5).

** at the moment of the brief's redaction, indexes were available until the second quarter of 2020*

Box 3: The allocation of costs to the milk enterprise

The EU FADN unit has created several models to estimate costs and margins for the various products: arable crops, milk and beef, and permanent crops. These models allocate farm costs to a particular product using different ratios. The schema below illustrates the principles of the **model for the allocation of costs for milk**.



To obtain reliable estimates of production costs and margins, it is necessary to focus on specialised dairy farms. To qualify as such, a farm has to dedicate more than 40% of its production *potential* to milk production. On top of this main criterion, an *actual* specialisation rate of more than 35% is required. In FADN 2018, 14 397 sample farms fulfilled these criteria and their average milk specialisation rate was 64.8%. The total volume of milk production represented by these FADN farms corresponds to more than 90 % of the total milk production from the FADN field of survey.

Box 4: The estimates for 2019 and 2020

The yield, output, operating costs and gross margins for 2019 and 2020 are estimated based on milk yield indices, milk price indices and detailed input price indices. Specific indices for each Member State are used. In those Member State where the accounting year does not correspond to the calendar year, the underlying data are adjusted using the same methodology (indices) to fit the calendar year. It is assumed that structures (number of cows per farm, input quantities) remain unchanged as compared to the base year 2018. The sources of the indexes used are the following:

- For milk price: DG Agriculture and Rural Development
- For milk yield: EUROSTAT databases, DG Agriculture and Rural Development
- For purchased feed: EUROSTAT databases, DG Agriculture and Rural Development
- For other inputs: EUROSTAT databases (Agricultural prices and price indices).

These estimates are calculated at aggregated level.

Box 5: The quarterly estimates in 2019 and 2020

The estimates of the quarters seek to monitor closely the situation for dairy farmers. The output, operating costs and gross margin for quarters are estimated at aggregate level based on milk yield indexes, milk price indexes and simplified input price indexes for feed, energy, veterinary costs, buildings maintenance, inflation and other costs. The aggregate level and the simplified indexes make it possible to obtain quick results.

For milk price and purchased feed, we use the same source as mentioned above. The milk yield is taken from the Medium Market Observatory (MMO) done by DG Agriculture and Rural Development. For energy, after investigating the available data, we used the EU weighted average of the 'Consumer prices of heating gasoil inclusive of duties and taxes', after having adjusted it to better fit our historical data series.

For the feed, both home-grown and purchased, an index of compound feedstuffs for cattle excluding calves has been applied (the grains are valued at market price in FADN so we find this index the most appropriate to our needs).

The seasonality of milk production is taken into account:

The actual fluctuations of milk production during the year have been applied (average share of milk production by quarter at national level).

This document does not necessarily represent the official views of the European Commission

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