

EU Agricultural and Farm Economics *Briefs*

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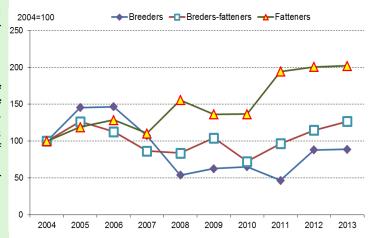
FARM ECONOMY OVERVIEW: BEEF SECTOR

Information based on FADN data 2013

This brief provides an overview of production costs, margins and incomes of EU farms specialised in beef production, based on the latest available data from the Farm Accountancy Data Network (FADN) until 2013. Trends from 2004 to 2013 are provided for breeders, breeders-fatteners and fatteners¹ at EU level. This work is accompanied by tables with detailed results, including at Member State level.

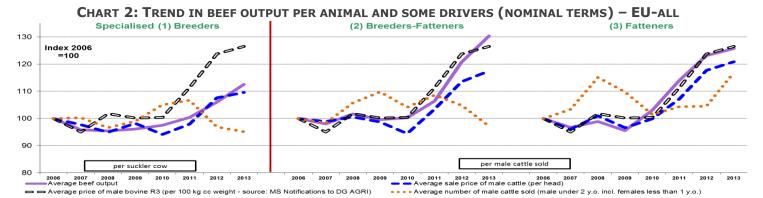
Since 2004 there has been a rising trend in **beef output**, thanks to cattle price increase. But **costs of beef production** have been on the rise too and only
fatteners saw a significant improvement in their gross
margins. As a consequence, **incomes** of EU beef
producers have been stagnating or even decreasing.
They remain roughly the same in 2013 as in 2004 for
breeders and breeders-fatteners, and much lower than
for fatteners whose income nominally increased, with **direct payments playing an essential role**.

CHART 1: TREND IN BEEF GROSS MARGIN PER ANIMAL WITHOUT COUPLED PAYMENTS—EU-ALL²



Upward trend in the beef output

The total beef output is the value of sales of bovine animals and the growth of animals staying for more than one year on the holding. Its average trend is shown per suckler cow (breeders) or male cattle sold in index form (2006=100) on the chart below. In all three groups of beef farmers, after years of stagnation, the average beef output at EU level has been on an upward trend since 2010: on breeders' farms, the beef output per suckler cow increased on average by 10%, while on breeders-fatteners and fatteners farms, the average beef output per male cattle sold increased respectively by 30% and 25%. In all these groups, the trend in output follows the trend in the average sale price of male cattle (per head), itself strongly correlated to the price per kg. In 2013, EU breeders' average beef output stood at 981 EUR per suckler cow, and respectively 1655 and 1530 EUR/male cattle sold for breeders-fatteners and fatteners.



See box on Specialised Beef Producers, p. 5 for more explanations on these categories.

The EU-all aggregate refers to EU-25 until 2006; to EU-27 from 2007 to 2012 and to EU-28 for 2013. Since most of the EU beef is anyway produced in EU-15 Member States, this change has a minor impact on time series.

Operating costs of production keep increasing

However, the upward trend in the beef output has been preceded by an upward trend in the costs of production. The chart below shows average operating costs per animal by cost item in index form (2004=100). In all three groups of beef farmers, **operating costs of production**³ have been increasing over the past decade. 2013 is no exception: breeders and breeders-fatteners experienced a growth of 7% in average operating costs per animal as compared to 2012, mostly due to feed costs. For fatteners, the increase in average operating costs per male cattle sold between 2012 and 2013 was more moderate (+2%). Overall, although the operating cost structure remained mostly unchanged since 2004, the share of feed costs in the total increased (respectively +2 % (breeders), +4 % (breeders-fatteners) and +3 % (fatteners) in 2013 as compared to 2004). Given that in 2013, at EU level, on average, feed costs represent respectively 42 %, 40 % and 29 % of the total operating costs per animal which amount on average to 874 EUR/suckler cow (breeders), 1482 EUR/male cattle sold (breeders-fatteners) and 1355 EUR/male cattle sold (fatteners), such increases are not negligible.

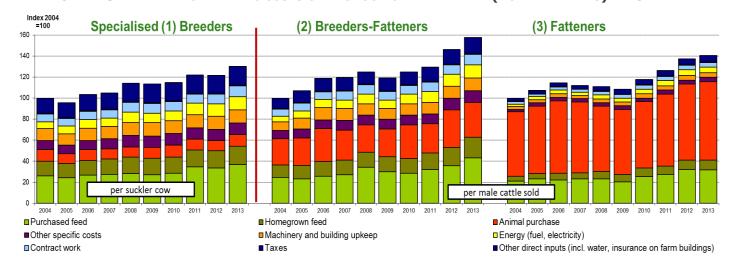


CHART 3: TREND IN OPERATING COSTS OF PRODUCTION PER ANIMAL (NOMINAL TERMS) - EU-ALL

2013: higher margins for breeders-fatteners

The chart below shows the trend in revenues of beef production (i.e. beef output but also subsidies coupled to beef production - left bar) and in operating costs (green bar) as well as the trend in the **gross margins** with coupled payments resulting of the balance (dot) in nominal terms at EU level. Breeders results refer to EUR/suckler cow, while they refer to EUR/male cattle sold for breeders-fatteners and fatteners.

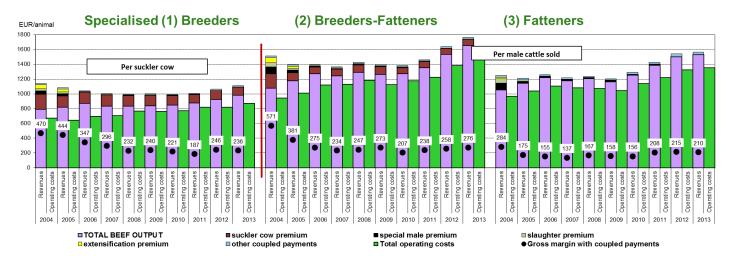


CHART 4: TREND AND COMPONENTS OF GROSS MARGIN WITH COUPLED PAYMENTS - EU-ALL

Margins in all analysed groups being relatively thin, any difference of pace between costs and revenues has a significant impact on gross margins. Indeed, despite the increase in output per head, at EU-level, gross margins

Operating costs include feed, veterinary costs, upkeep of machinery, energy, contract work, taxes on land and buildings. They do not include depreciation, wages, rent and interests paid, nor opportunity costs for family labour and assets.

without coupled payments (see chart 1 on p. 1) remained stable in nominal terms for EU breeders and fatteners in 2013 as compared to 2012, whereas it kept increasing for breeders-fatteners, whose beef output increased more than the male cattle price (probably keeping some animals on the farm). Since subsidies coupled to beef production were slightly lower, gross margins with coupled subsidies decreased likewise for breeders and fatteners in 2013 when compared to 2012, to reach respectively 236 EUR/suckler cow and 210 EUR per male cattle sold, while breeders-fatteners achieved 276 EUR/male cattle sold (chart 4).

Net margins take into consideration costs incurred by external factors and depreciation. Their overall trend follows the trend in gross margin (chart 5). However, at EU-level, breeders-fatteners saw an increase in average depreciation and rent per male cattle sold between 2012 and 2013, leading to a slight decrease in net margins. Since the decoupling, breeders' gross margins have not been sufficient to cover costs incurred by external factors and depreciation: in other words, their net margins (with coupled payments) have been negative from 2007 onward. The same holds true for breeders-fatteners. Fatteners managed to keep positive net margins throughout the 2004-2013 period. **Net economic margins** covering imputed costs for family factors (labour and capital) followed a similar path, again with fatteners having relatively better results.

Significant differences in costs and margins at MS level

The results at European level hide significant differences at MS level. The charts below show the 2013 results of selected Member States (the most important ones per category, based on their share in the EU sample).

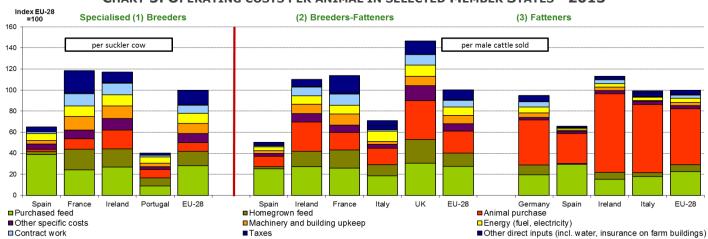
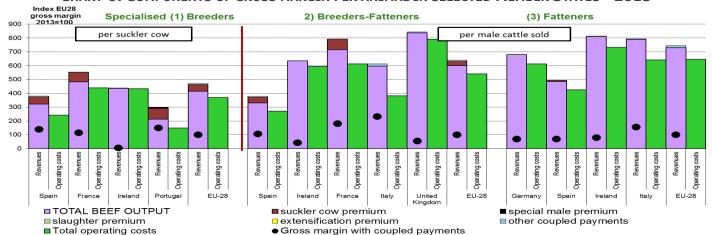


CHART 5: OPERATING COSTS PER ANIMAL IN SELECTED MEMBER STATES - 2013





The allocation of costs to the beef enterprise

In the FADN, costs are collected for the farm as a whole, not by enterprise. Therefore, in order to estimate beef production costs and margins, it is necessary to allocate part of the farm costs to the beef enterprise. To this end, the EU FADN unit has created several models for the various products: arable crops, milk and beef, and permanent crops. These models allocate farm costs to a particular product using different ratios.

Lower incomes in 2013

Chart 7 illustrates the trend in farm net value added per annual work unit (FNVA/AWU) as an index of breeders FNVA/AWU in 2004 (full green bar). Decoupled payments (dark green dashes) and total direct payments and subsidies (light green check) are also presented, as well as gross margin with (black dots) and without (grey dot) direct payments. Between 2012 and 2013, EU-15 beef producers saw their average income decrease, whatever their stage in the process.

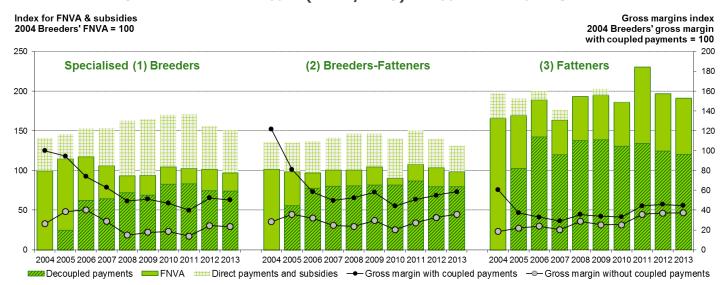


CHART 7: TREND IN INCOME (FNVA/AWU) AND SOME DRIVERS - EU-ALL

Between 2012 and 2013, on EU **breeders'** farms, the average FNVA/AWU decreased by 4%, following the trend in gross margins. With 12400 EUR/AWU, the FNVA is back to its 2004 level in nominal terms. Actually, the average labour and number of animals sold per farm and therefore the average number of animals sold per AWU are also comparable to their 2004 level. Although the average selling price of cattle, hence the beef output and in turn the total output per farm (respectively per AWU) increased tremendously over the period (+26% on average between 2006 and 2013), so did the intermediate consumption, both in absolute value and in relation to the output: in 2013, the proportion of intermediate consumption to total output reached 85% against 81% in 2004). The total output remaining modest (37500 EUR/AWU on average in 2013), the balance is not enough to cover depreciation costs. In other words, if there were no direct payments, the FNVA/AWU would be negative. It is worth noting, though, that the relative importance of direct payments has been decreasing over the period: while the absolute amount of direct payments and subsidies per AWU remained fairly stable, their amount in proportion to breeders' total output lowered to roughly 50% in 2013, due to the increase in output mentioned above. Due to the location of breeders' farms, less favoured area and environmental payments represent around 25% of the total direct payments and subsidies received by breeders, and decoupled payments about 50% of this amount.

Breeders-fatteners saw their average FNVA/AWU decrease by 5 % between 2012 and 2013, despite the increase in their gross margin between these two years. With 12600 EUR/AWU on average, it remains slightly higher than for breeders, the picture being more clear-cut at EU-15 level. Although the total output increased more than intermediate consumptions in 2013 as compared to 2012, the amount of direct payments and subsidies seems to have decreased between these two years, leading to the observed decrease in the average FNVA/AWU. Thanks to the fattening of calves, this group is less dependent on direct payments, although these remain essential - they amount to 38 % in proportion to the total output value in 2013.

The observation of time series may sometimes be difficult with FADN data. The FADN is a sample survey designed to provide the most accurate picture for the latest year available. It is therefore affected by changes in the sample design. In this respect, 2012 appears as a peculiar year: following the introduction of the typology based on Standard Output (against Standard Gross Margin), substantial modifications in Member States selection plans occurred in 2012. The sample is also affected by changes in the threshold to be considered as a commercial farm (e.g. a significant change took place in Ireland between 2011 and 2012). On top of that, time series may be affected by relative changes in output prices impacting the beef specialisation ratio and therefore the subset of beef specialised holdings (cf. box).

FNVA/AWU of EU-15 specialised **fatteners** also decreased by 3 % between 2012 and 2013 for the second year in a row, mostly due to an increase in depreciation. However, it is the only group which remained significantly higher than the 2004 level, and much higher than in the other two groups: actually with 24400 EUR/AWU on average fatteners are the only group of beef producers whose income was above the average for EU-28 agricultural holdings (18100 EUR/AWU in 2013). The ratio of intermediate consumption to total output was high for them too (78 % on average in 2013), but their total output was much higher than that of breeders. Direct payments amounted only 23 % in proportion of their total output in 2013 (46 % in 2004).

The farm net value added (FNVA) per annual work unit (AWU) is an indicator of income calculated as the sum of total production value plus direct payments minus intermediate consumption and depreciation. It represents the amount available to remunerate all fixed production factors (work, land, capital), be they owned by the farm or external.

The **farm net income (FNI) per AWU** is obtained by subtracting external factors (wages, rent, interests) from the FNVA and adding the balance of subsidies and taxes on investments.

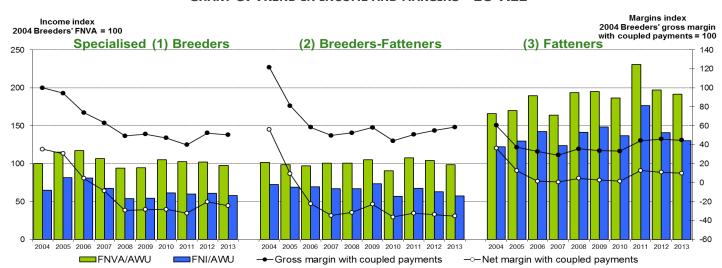


CHART 8: TREND IN INCOME AND MARGINS - EU-ALL

Between 2012 and 2013, wages and rent remained stable for the average breeder, while cost of interest decreased, limiting the decrease in farm net income. However, breeders' farm net income is lower in 2013 than it was in 2004 in nominal terms (less than 8 000 EUR per AWU), which besides the trend in FNVA/AWU is mostly due to the increase in wages. For breeders-fatteners, external factor costs remained stable between 2012 and 2013, so that the decrease in FNVA/AWU was transmitted to FNI. Over the 2004-2013 period, due to the increase in paid labour on these farms, wage payments also increased, leading to a bigger decrease in FNI than in FNVA. Fatteners are the only group whose farm net income increased between 2004 and 2013, following the overall increase in FNVA. However, EU average fatteners' FNI/AWU is lower in 2013 than in 2012, reaching about 16 600 EUR/AWU.

Specialised beef producers

To obtain reliable estimates of production costs and margins, it is necessary to focus on specialised farms. To qualify as such, a farm has to obtain more than 60 % of its production from beef production. In FADN 2013, 3 916 sample farms fulfilled this criterion, which excludes de facto animals produced on dairy farms. Three groups of farms are then distinguished, based on their main activity: breeders, breeders-fatteners and fatteners. 'Breeders' (B) are farmers with suckler cows, selling young cattle. 'Breeders & Fatteners' (BF) fatten the calves born on their farms while 'Fatteners' (F) purchase young male animals and then finish fattening them (see the Beef report for more explanation).

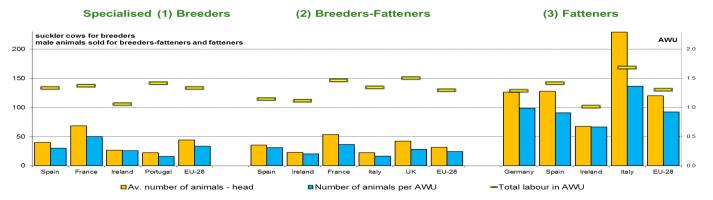
Significant differences in incomes at MS level

Chart 9 shows FNVA/AWU and FNI/AWU as well as margins in a few Member States, as an index of EU-28 breeders 2013 FNVA or gross margin with coupled payments. Significant differences can be observed as a result of various factors, including different models of production and size of operations (chart 10).

Margins index Income index reeders' FNVA = 100 EU28 Breeders' gross margin with coupled payments = 100 Specialised (1) Breeders (2) Breeders-Fatteners (3) Fatteners 350 300 300 200 250 100 0 \bigcirc \bigcirc 200 150 0 100 EU-28 EU-28 Italy United FNVA/AWU ■FNI/AWU Gross margin with coupled payments Net margin with coupled payments

CHART 9: INCOME AND MARGINS IN SELECTED MEMBER STATES - 2013





Conclusion

Although an improvement in gross margins could be observed from 2011 for breeders-fatteners and fatteners, and from 2012 for breeders, incomes did not follow suit and slightly decreased after 2011. At EU-level, despite the increase in beef output, breeders' and fatteners' gross margins without coupled payments stabilised in 2013 because of the increase of costs of production, while they kept increasing for breeders-fatteners. Income patterns in the three beef producers groups are diverse and the result of various factors. Breeders and breeders-fatteners achieved the same level of FNVA/AWU in 2013, which is very close to its 2004 level in nominal terms. This level was quite low, and it would even be negative in the absence of direct payments, out of which less-favoured area and environment related payments represent a significant share. Although their income decreased in 2013, fatteners appear better off, their average income being about twice as high as that of the other two groups.

Looking for more information (including at Member State level) and trends in costs of production and margins? Check the <u>FADN website</u> for the "EU Beef Farm Results".

THE FADN

The Farm Accountancy Data Network (FADN) is a European system of sample surveys that take place each year and collect farm-related structural and accountancy data (see: http://ec.europa.eu/agriculture/rica). Its main role is to support the common agricultural policy (CAP) by determining the income of European agricultural holdings and providing farm-level analyses based on harmonised micro-economic data collected annually from around 80 000 farms. The statistics presented here are produced by the European Commission from the FADN survey. The variables represent average values at the level of the holding.