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MILK SECTOR – (1) MILK MARGINS IN THE EUROPEAN UNION (2004)

This analysis on the *Milk sector – (1) Milk margins in the European Union (2004)* is a contribution to the Impact Assessment of the Health Check of the Common Agricultural Policy (CAP). It is part of the Annex F Microeconomic (FADN) analyses.

For more information on the Health Check:
http://ec.europa.eu/agriculture/healthcheck/index_en.htm

The Farm Accountancy Data Network (FADN) is a European system of sample surveys that take place each year and collect structural and accountancy data on the farms, with the aim to monitor the income and business activities of agricultural holdings and to evaluate the impacts of the Common Agricultural Policy measures.

The FADN field of survey covers only the farms exceeding a minimum economic size (threshold) in order to cover the most relevant part of the agricultural activity of the EU Member States, i.e. at least the 90% of the total Standard Gross Margin (SGM) covered in the Farm Structure Survey (FSS). For 2005 data, the sample gathers approximately 75 000 holdings in the EU-25, which represent 4 millions farms out of a total of about 10 millions farms (40%) included in the FSS.

The rules applied aim to provide representative data along three dimensions: region, economic size and type of farming. FADN is the only source of micro-economic data that is harmonised, i.e. the bookkeeping principles are the same in all EU countries.

For more information: http://ec.europa.eu/agriculture/rica/index.cfm

MILK SECTOR – (1) MILK MARGINS IN THE EUROPEAN UNION (2004)

Executive summary

This chapter analyses the composition and the distribution of milk margins in the EU-25, as background information for the impact assessment of the Health Check review. It provides an overview of the **diversity of milk farms in the EU-25** in terms of farm structures, production costs and margins. It is based on the most recent FADN data available and on the costs' allocation model for milk and beef, which allows assessing the milk costs and margin for the milk specialised farms.

The **average margin over variable costs per ton** (milk receipts - specific costs – farming overheads – wages) of the milk specialised farms is higher in the EU-15 (136 €/t) than in the EU-10 (82 €/t). Italy and Finland have the highest average margin (respectively 200 €/t and 193 €/t), Italy because of a high average milk price and Finland because of high national subsidies and despite the very high variable costs (266 €/t). The margin is also high in Belgium (168 €/t), Luxemburg (164 €/t), the Netherlands (160 €/t) and Spain (155 €/t). Germany and France, the two major EU producers, have an average margin over variable costs of respectively 115 €/t and 131 €/t. In the EU-10, Lithuania and Slovenia have the highest margin per ton (respectively 111 €/t and 109 €/t), followed by Poland (100 €/t). In Lithuania and Poland, it is related to lower average variable costs (respectively 86 and 98 €/t), and in Slovenia to a higher price.

The **margin over total input** corresponds to the margin over variable costs minus interest, rent and depreciation. The burden of rent, interests and depreciation, as a share of the margins over variable costs, is very different among Member States. It is particularly high in Denmark, Sweden and Slovenia.

The analysis of **costs' structures** shows high differences among the Member States, which can imply different reactions and strategies in case of policy change. Some costs (contract work, paid labour) can be adapted indeed more easily than others.

The **interregional variability of milk margins** is generally high, especially in Germany, Spain and Italy. The margin variability among **herd size classes** is higher in the EU-10 than in the EU-15. In the EU-15, the margin per ton of milk is on average smaller in the highest herd size class. It is higher for the smallest farms, because of higher milk receipts. In the EU-10, it is higher for the medium size class.

The analysis of the **distribution of the margins per ton** shows that in some Member States (Ireland, Germany, Poland, and Denmark), the population is more concentrated around the average whereas in others, the range of values is widespread. In the EU-15, the widest range of values is in Italy, with high values beyond the upper quartile. The range of values is also wide in Spain, Portugal, Austria, Sweden and Finland. Regarding the EU-10, the range of values is particularly high in Hungary. One should note the great variability of milk margins despite the low number of specialised farms in these Member States.

1. PROBLEM DEFINITION

This chapter analyses the **composition** and the **distribution** of milk margins in the EU-25, as background information for the impact assessment of the Health Check review. It is based on the most recent FADN data available[1] and on the costs' allocation model for milk and beef. The general methodology applied follows the one implemented in a similar analysis produced in 2006 in order to have comparable results.

The next section presents the model and the **methodology** applied. The third one provides an overview of **average milk production costs and margins** by Member State, regions and size of farms. The fourth section analyses the **distribution** of milk production costs and margins by Member State.

2. METHODOLOGY

The model of costs' allocation

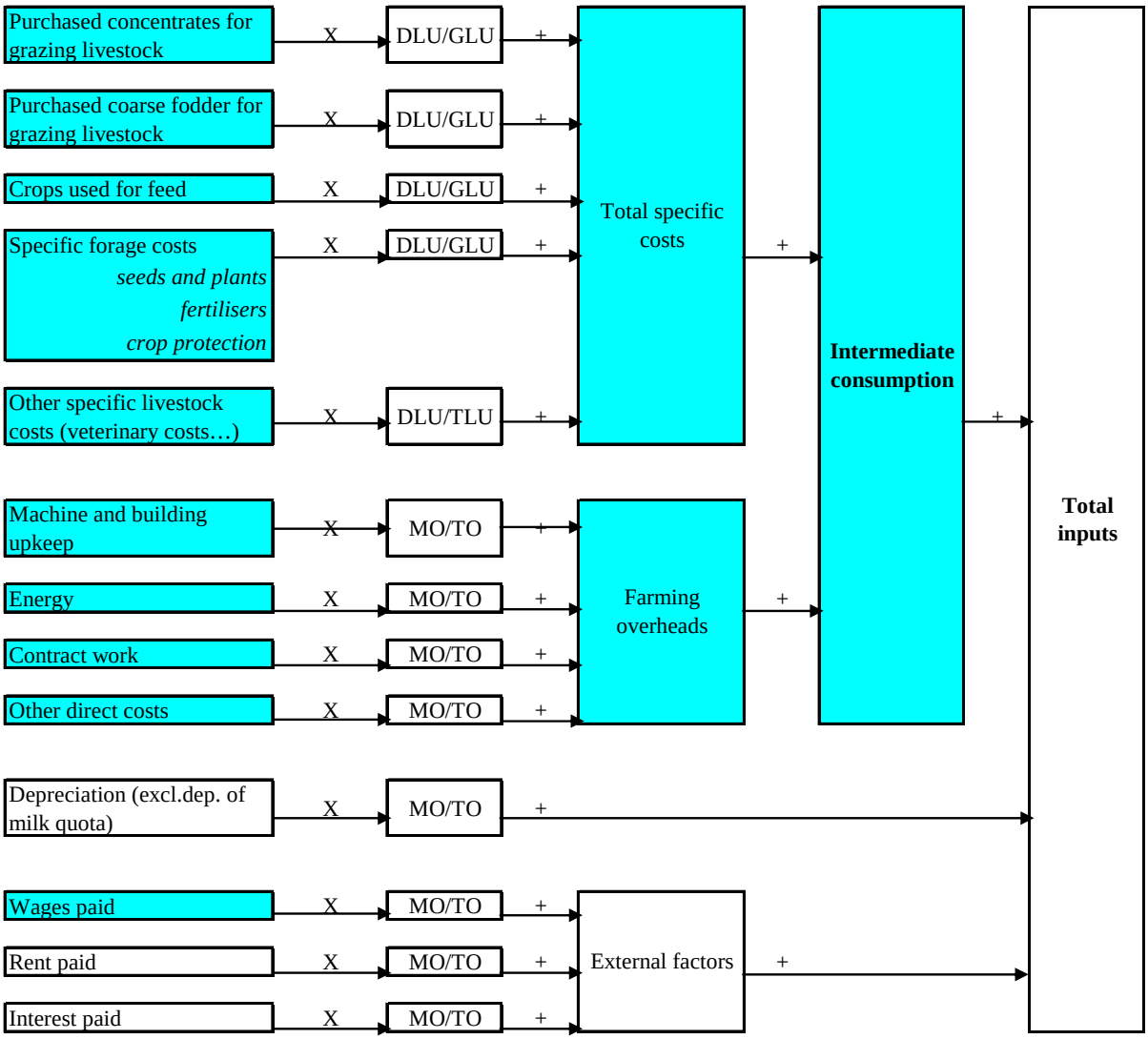
The FADN[2] database contains information regarding the output and the subsidies per enterprise; however cost specifications per enterprise are not recorded[3]. In this context, the contribution of each enterprise to the farm income is not directly available. Therefore production costs per enterprise need to be estimated. Among the several models created for cost allocation for different products (arable crops, milk and beef, permanent crops), the **model of cost allocation for milk and beef** is used in this study. It is synthesized in Figure 1.

[1] Most recent FADN data available at the time of drafting this note: 2002-2003-2004 for the average analysis in the EU-15, 2004 for the average analysis in the EU-10 and the distribution analysis.

[2] FADN: Farm Accountancy Data Network, see the general introduction for more details.

[3] It is indeed difficult for the accountant and the farmer to assess the share of water or electricity or fertilisers attributable to each enterprise, especially for mixed farms…

Figure 1: The milk production cost model



DLU/GLU: Dairy livestock units / Grazing livestock units

DLU/TLU: Dairy livestock units / Total livestock units

MO/TO:
- for EU15 % of milk and milk products output & milk subsidies in the total output & coupled subsidies after deduction of forage crops farm use
- for EU10 % milk output in the total output after deduction of forage crops farm use

Variable costs

Different ratios are used to allocate costs to milk production:

– The share of dairy livestock units[4] on the grazing livestock units is used to allocate grazing livestock feed costs;

[4] Dairy livestock units are defined as dairy cows and a share of total breeding heifers and young females. This share is equal to the proportion of dairy cows in total number of cows (dairy cows, cull dairy cows and other cows).

– The share of dairy livestock units on the total livestock units is used to allocate the other livestock specific costs (veterinary costs etc.);

– For the Member States of the EU-15, the share of milk output and subsidies in the total output[5] and coupled subsidies is used to allocate farming overheads, depreciation and other non-specific inputs. In 2004 part of the milk support previously included in the price was attributed through a direct payment. Taking into account the subsidies makes the results more comparable between 2002, 2003 and 2004. Moreover the subsidies are taken into account due to the increasing importance of direct aids support compared to market price support in beef production. This methodology enables to take better into account the co-existence of beef production in those farms where costs of milk production are estimated.

– For the Member States of the EU-10, the share of milk output in the total output[6] is used to allocate farming overheads, depreciation and other non-specific inputs. Subsidies are not taken into account because eight of the ten new Member States are applying Single Area Payment Scheme (SAPS) which is not attributed to a specific enterprise, because the top-ups coupled to milk production are different among Member States, and also because it was preferred to apply a homogenous methodology to all the new Member States.

The calculation is done for a sub-sample of FADN farms specialised in milk.

Important remarks

Another characteristic of FADN accounts is that no value is given for the fodder areas in some countries (generally in the north of the EU). It comes mainly from the difficulty to estimate production and value of forage. Considering that forage is just an input for animal production, and that not recording it - neither on the crops output side, nor on the animal costs side - does not affect the income, it is sometimes preferred not to estimate it. In other countries, generally those where fodder is more expensive, a value is allocated to the production of the fodder areas. Even if this difference should not affect margins, it leads to biases when comparing costs between Member States. In order to take into account the differences among records, the fodder used on the farm is treated in the following way:

– the value of the farm use of non-fodder plants cultivated on the farm (e.g. barley, rye, etc) is retained in the item 'Crops used for feed', but the farm use value of all crops used as forage (fodder roots, other fodder plants - e.g. silage of cereals, temporary grass, meadows and pastures and rough grazing) is excluded,

– the value of fodder plants is estimated on the basis of the specific costs of the crops (seeds, fertilisers, crop protection). Specific costs are allocated to fodder production according to a ratio (fodder on total area). However, some forage do not benefit of all inputs (e.g. no crop protection on temporary grass). Therefore, the area taken into account in the ratio varies according to the input. This item is called 'Specific forage costs'.

It must be noted that family factors, i.e. land, labour, assets and in particular the asset that can represent milk quota in some Member States, are not included in the costs' estimation. Moreover the replacement costs of livestock are not taken into account. It was indeed

[5] Output after deduction of forage crops farm use.

[6] Output after deduction of forage crops farm use.

impossible for the previous years and an aim of this note is to compare with the results provided in 2006.

Definition of the milk specialised farms

Given the use of different ratios for the allocation keys[7], some precautions are needed to prevent problems with estimates:

– The total output and the total output & subsidies should be strictly positive,

– The total output & subsidies should be greater than the milk output & subsidies,

– The total output should be greater than the milk output[8].

Farms that do not respect these conditions are excluded from the sample.

Moreover, to get reliable estimations of milk production costs and margins, it is necessary to focus on **milk specialised farms**. The following criteria are used in this analysis:

– Farms within types of farming (TF): 41 *Specialists dairying*, 43 *Cattle dairying, rearing and fattening combined*, 71 *Mixed livestock, mainly dairying*, 81 *Field crops – grazing livestock combined*;

– A specialisation rate[9] greater than 50%.

It was chosen to include TF 43, 71 and 81 in the sample in order to cover a greater share of the dairy cows, particularly in the new Member States (Table 4 in annex).

Table 1 shows the number of farms respecting those requirements (number of farms in FADN sample and number of farms represented) and the number of dairy cows covered, in comparison with the FSS 2003 (Farm Structure Survey). The very small number of sample farms for **Cyprus** does not allow displaying any data for this Member State[10]. For **Slovakia**, given the small number of farms in the sample and the very low share of dairy cows covered, the results must be considered with caution. For the following Member States, due to the low percentage of dairy cows covered, the results should be interpreted carefully: **Greece, Czech Republic, Hungary, Lithuania, Latvia and Poland**. A low share of dairy cows can be explained by two major reasons:

[7] Allocation keys: the share of dairy livestock units on the grazing livestock units, the share of dairy livestock units on the total livestock units, the share of milk output & subsidies in the total output & coupled subsidies, the share of milk output in the total output.

[8] Moreover, the number of dairy cows and of grazing livestock units must be greater than 0.

[9] Specialisation rate: for the EU-15, the share of milk output & subsidies in the total output & coupled subsidies, for EU-10, the share of milk output in the total output.

[10] Confidentiality rule: data are not displayed for cells with less than 15 farms for one year, or for less than 30 farms for a three year-average (10 farms/year).

– A lot of dairy cows are held by non commercial farms[11] which are not covered by FADN (Table 5 in annex);

– A lot of dairy cows are held by farms with a lower milk specialisation rate (Table 6 in annex).

Finally, we don't have data for **Malta** in 2004.

Table 1: Number of farms and dairy cows covered by the FADN sample of milk specialised farms

	Sample of milk specialised farms in FADN			FSS 2003	Comparison
Member State	Sample farms*	Farms represented*	Dairy cows-LU*	Number of dairy cows	FADN sample/FSS
Belgium	236	6 563	320 468	585 400	55%
Cyprus	6	nd.	nd.	25 960	nd.
Czech republic	150	1 317	100 973	467 850	22%
Denmark	393	6 484	553 397	596 030	93%
Germany	1 806	66 332	2 957 500	4 380 830	68%
Greece	12	487	32 360	170 190	19%
Spain	616	15 153	485 644	1 096 410	44%
Estonia	192	1 845	75 067	119 800	63%
France	1 260	66 074	2 736 868	4 050 960	68%
Hungary	86	2 406	86 490	294 970	29%
Ireland	300	15 623	754 134	1 155 550	65%
Italy	1 346	30 895	1 324 025	1 857 000	71%
Lithuania	230	5 582	66 443	451 050	15%
Luxembourg	214	668	28 310	40 600	70%
Latvia	197	3 416	56 831	182 480	31%
The Netherlands	343	20 935	1 454 570	1 477 770	98%
Austria	447	16 168	280 228	580 520	48%
Poland	1 575	64 651	802 843	2 851 360	28%
Portugal	317	8 301	189 357	335 280	56%
Finland	329	15 748	339 348	333 870	102%
Sweden	327	8 157	384 967	402 520	96%
Slovakia	18	143	8 178	208 200	4%
Slovenia	202	7 358	96 290	131 100	73%
The United Kingdom	559	18 339	1 791 945	2 191 940	82%
Total EU-25 (without Malta)	**11 161**	**382 157**	**14 893 875**	**23 987 640**	**62%**

Source: EU FADN – DG AGRI, FSS 2003. * sums 2002-2003-2004/3 for EU-15, 2004 for EU-10

Table 2 presents average **structural data on milk specialised farms** by Member State. The average number of dairy cows goes from 12 in Poland and Lithuania to 85 in Denmark and 98 in the United Kingdom. The range of average forage area is wide as well: from 2 ha in Greece (due to the high use of common land), 8 ha in Poland to 120 ha in Estonia, 133 ha in Slovakia and 137 ha in Czech Republic. The average milk yield is in general concentrated around 6 500 kg/cow, but some Member States have particular high yields such as Finland and Sweden (more than 8 000 kg/cow) and Denmark (7 700 kg/cow). Some new Member States have lower yields, in particular Poland, Latvia and Lithuania, also characterised by smaller structures. The average total labour, paid and unpaid labour (family labour), demonstrate also different types of strategies: for example high use of paid labour and very low family labour

[11] FADN covers only the agricultural holdings having an economic size equal to, or greater than, a minimum threshold of economic size, the so-called *commercial farms.*

in Hungary, and on the contrary, very low use of paid labour in Belgium, Austria and Slovenia.

These data reflect the **diversity of milk farm structures** in the EU-25[12], which is linked to the different natural potentialities, the differences of social, economic and regulatory environment, etc. In particular, the different national policies in terms of milk quotas' management have probably had an impact on the level of restructuring within each Member State. The differences of farm structures would imply different reactions and possible strategies for farmers in case of policy changes.

Table 2: Structural information on EU-25 milk specialised farms (average 2002-2003-2004 for EU-15, 2004 for EU-10)

Member State	Forage area - ha	Dairy cows - LU	Total labour - AWU	Unpaid labour - AWU	Paid labour - AWU	Milk yield - kg/cow	Milk production / farm - tons
Belgium	37	49	1.56	1.54	0.03	6 233	304
Cyprus	61	85	1.89	1.24	0.64	7 680	655
Czech republic	42	45	1.79	1.50	0.29	6 770	302
Denmark	2	28	1.70	1.37	0.32	5 074	143
Germany	14	32	1.48	1.40	0.08	5 983	192
Greece	52	41	1.69	1.59	0.10	6 183	256
Spain	48	48	1.59	1.39	0.21	5 250	253
Estonia	23	43	2.03	1.76	0.27	6 430	275
France	63	42	1.71	1.56	0.15	7 148	303
Hungary	41	69	1.66	1.53	0.13	7 471	519
Ireland	20	17	1.71	1.68	0.03	6 302	109
Italy	17	23	1.75	1.59	0.16	6 079	139
Lithuania	27	22	2.08	1.93	0.16	8 065	174
Luxembourg	68	47	2.09	1.61	0.49	8 046	380
Latvia	79	98	2.24	1.56	0.68	6 875	672
The Netherlands	137	77	8.81	1.74	7.07	6 339	486
Austria	120	41	4.79	1.75	3.04	5 773	235
Poland	38	36	2.85	0.70	2.16	6 298	226
Portugal	28	12	1.89	1.76	0.13	4 983	59
Finland	47	17	2.53	1.70	0.82	4 885	81
Sweden	8	12	1.80	1.75	0.05	4 744	59
Slovakia	133	57	6.50	1.31	5.19	5 643	323
Slovenia	13	13	2.14	2.12	0.02	5 196	68
EU-15	42	46	1.8			6 666	306
EU-10	17	15	2.1			5 108	77

Source: EU FADN – DG AGRI

3. AVERAGE MILK MARGINS

The studied costs are presented in Figure 1. In order to complete the analysis, two kinds of margins are calculated:

[12] For an insight in the diversity of milk herd size and the regional differences, see sections 0 and 0.

– Margin over variable costs (Total milk receipts – specific costs – farming overheads – wages),

– Margin over total inputs (Total milk receipts – specific costs – farming overheads – wages – rent – interests – depreciation).

'Total milk receipts' includes the subsidies linked to milk production, i.e. possible subsidies on dairy cows, on cows' milk, products of cows' milk and the dairy premium for 2004. The super levy is deducted.

The margin over variable costs is generally used when looking at alternative productions' opportunity (no matter the production selected, rent, interests, and depreciation still need to be paid). The margin over total inputs allows assessing the residual profits obtained from the production.

It should be noted that the averages presented (in €/t of milk) are obtained by dividing the average receipts, costs or margin in the Member State (or region, or size class) by the average quantity of milk produced in this Member State (and not by the average of the ratio by farm).

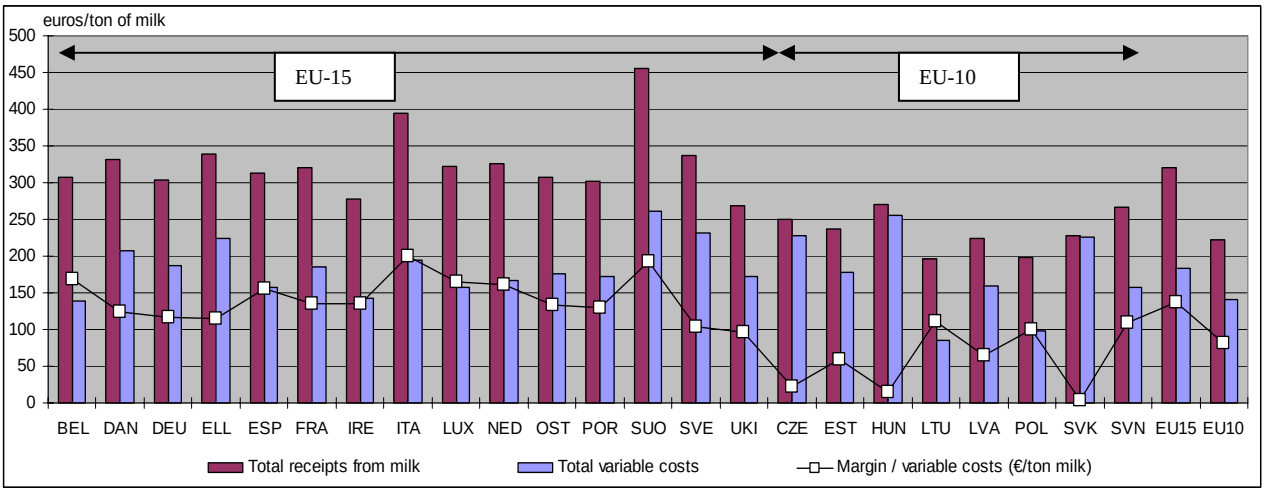
National averages

In this section, the average costs and margins per Member State are presented. The detailed tables are displayed in annex (Table 7 and Table 8).

Margins over variable costs

Figure 2 presents the averages receipts, variable costs and margins over variable costs in €/t of milk. It shows the high differences of milk price and of variable costs among the EU-25.

Figure 2: Milk receipts, variable costs and margins for milk specialised farms in the EU-25 (average 2002-2003-2004 for EU-15, 2004 for EU-10)



Source: EU FADN – DG AGRI, Milk allocation costs model.

Milk price[13] and variable costs are in average higher in EU-15 than in the new Member States, but it hides high differences among Member States. The highest receipts per ton of

[13] Milk price including the balance on subsidies/levy.

milk can be found in Finland (455 €/t) because of high national subsidies and Italy (394 €/t) because of high milk prices. The highest variable costs are observed in Finland (266 €/t), Hungary (255 €/t), Czech Republic and Sweden[14]. Lithuania and Poland have the lowest average variable costs (respectively 86 and 98 €/t).

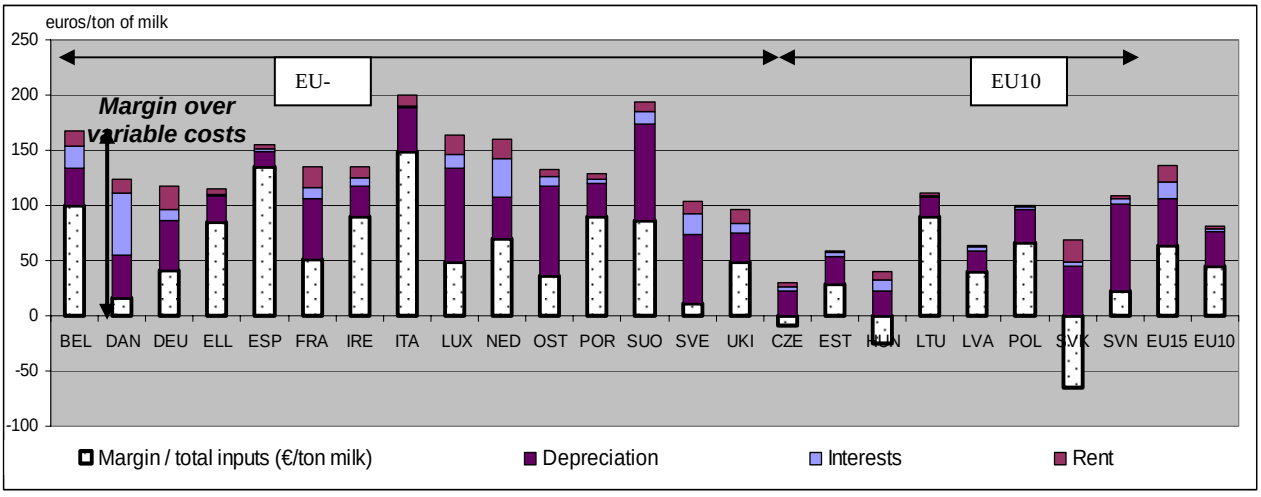
The average margin over variable costs is higher in Italy (200 €/t), Finland (193 €/t) - both because of high receipts- Belgium (168 €/t), Luxemburg, the Netherlands and Spain. Germany and France, the two major EU producers, have an average margin over variable costs of respectively 115 €/t and 131 €/t. The average margin over variable costs is low in Czech Republic (22 €/t), Hungary (15 €/t) and Slovakia (3 €/t). However, the specialised farms do not cover a high share of the dairy cows, and therefore, the results might not be representative. Within the new Member States, Lithuania has the highest margin over variable costs (90 €/t).

The average margins over variable costs by Member State seem to be more homogenous in the EU-15 than in the EU-10. However, section 4 provides more details regarding the differences among EU-15, EU-10 and within Member States.

Margins over total inputs

The margin over total input corresponds to the margin over variable costs minus interest, rent and depreciation, as reveals the Figure 3. The total bar represents the margin over variable costs (except when the margin over total input is negative).

Figure 3: Margins over total input for milk specialised farms in the EU-25 (average 2002-2003-2004 for EU-15, 2004 for EU-10)



Source: EU FADN – DG AGRI, Milk allocation costs model.

It should be noted that the comparison of the margins over total inputs between Member States is more risky given the discrepancies of the methodologies used by the Member State for **depreciation**. The depreciation method is harmonised in FADN only to a certain extent:

[14] Slovakia has very high variable costs as well according to these estimates. However, given the small number of farms in the sample and the very low share of dairy cows covered, it might not be representative. However, the eighteen farms in the sample have similar results (no farm distorting the results of the group).

the number of years for the depreciation of machinery or buildings can not be the same in all Member States (e.g. a tractor has a longer life in Poland than in France).

Rent covers not only the rent of land, but also buildings, rights and quotas. It should be taken into account that, for example, with the development of farms in partnership in France, holders often rent their own land to the company they belong to.

Interests cover interest and financial charges paid on loans and obtained for purchase of land, buildings, machinery and equipment, livestock, circulating capital, interests and charges on debts.

Finally, it should be mentioned that the cost of buying or renting milk quota is covered through interests and rent paid when it is not self-financed (but for example in the Netherlands it is often self-financed).

Figure 3 shows that the burden of rent, interests and depreciation, as a share of the margins over variable costs, is very different among Member States. This burden is particularly high in Denmark, Sweden and Slovenia. For Denmark the high level of interests can be explained by high investments[15] in machinery, equipment and buildings, which have an important weight in the farm economic accounts nowadays, but they could have a positive impact on the income in the future. In the Netherlands, the investments have been high as well, but they have been in majority self-financed, that's why the level of interests is not as high as in others[16].

The average margin over total inputs is higher in Italy (149 €/t), Spain (135 €/t), and Belgium (100 €/t). However, one should interpret prudently the relatively good result regarding Spain because depreciation is deemed to be underestimated in this Member State (particular depreciation methods applied). The average margin over total inputs is negative in Czech Republic (-8 €/t), Hungary (-25 €/t) and Slovakia (-65 €/t), however, as already reminded in the previous section, the specialised farms do not cover a high share of the dairy cows in these Member States and therefore the results might not be representative. Moreover, in the case of Hungary, one should remind the relatively low share of family labour[17] in comparison with other Member States (Table 2). In Czech Republic and Slovakia, these results can be explained by the following elements:

– farms are often big structures with a lot of other gainful activities (other than agriculture),

– the farms may keep workers on the farm for social reasons (especially in Slovakia).

Insight into the variable costs' structure

The components 'depreciation', 'rent' and 'interests' have been treated in the previous paragraph. Figure 4 shows the share of the other components of costs by Member State. It illustrates the different (average) production techniques among the Member States. In southern EU-15 countries such as Spain, Italy and Portugal, purchased feed constitute a

[15] The interests can reflect the level of investments when they are not self-financed.

[16] INRA-Institut de l'élevage *Labour productivity and income in North-European dairy farms. Diverging models.* Janvier 2007. http://www.inst-elevage.asso.fr/html1/spip.php?article13146

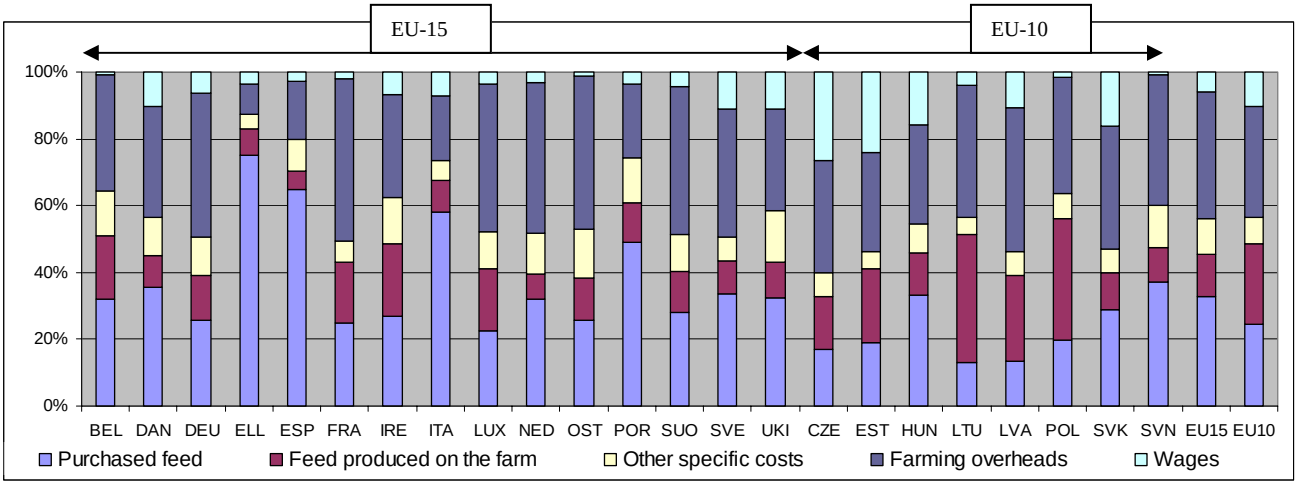
[17] Family labour is one of the factor to be paid with the remaining margin.

relative high share of the variable costs, whereas Belgium, France, Ireland, Luxemburg and the Member States of EU-10 produce more feed on the farm.

The share of farming overheads (machine and building upkeep, energy, contract work, water, etc.) is high in Germany, France, Luxemburg, the Netherlands, Austria, but also in Latvia (more than 40% of the variable costs). In particular, the value of contract work (Table 7) is high in France, Denmark and the Netherlands. In Denmark and the Netherlands, it seems to be more linked to an increasing trend of subcontracting some tasks (spreading of manure, etc.), whereas in France it could be linked in general to the location of materiel (without labour)[18].

Wages represent a greater share of the costs where less family labour is used: Czech Republic, Slovakia, Estonia, Hungary, but also (even if it is to a lesser extent) Sweden, the United Kingdom and Denmark.

Figure 4: Variable costs' structures for milk specialised farms in the EU-25 (average 2002-2003-2004 for EU-15, 2004 for EU-10)



Source: EU FADN – DG AGRI, Milk allocation costs model.

These differences in costs' structures can imply different reactions and strategies in case of policy change. Some costs (contract work, paid labour) can be adapted more easily than others.

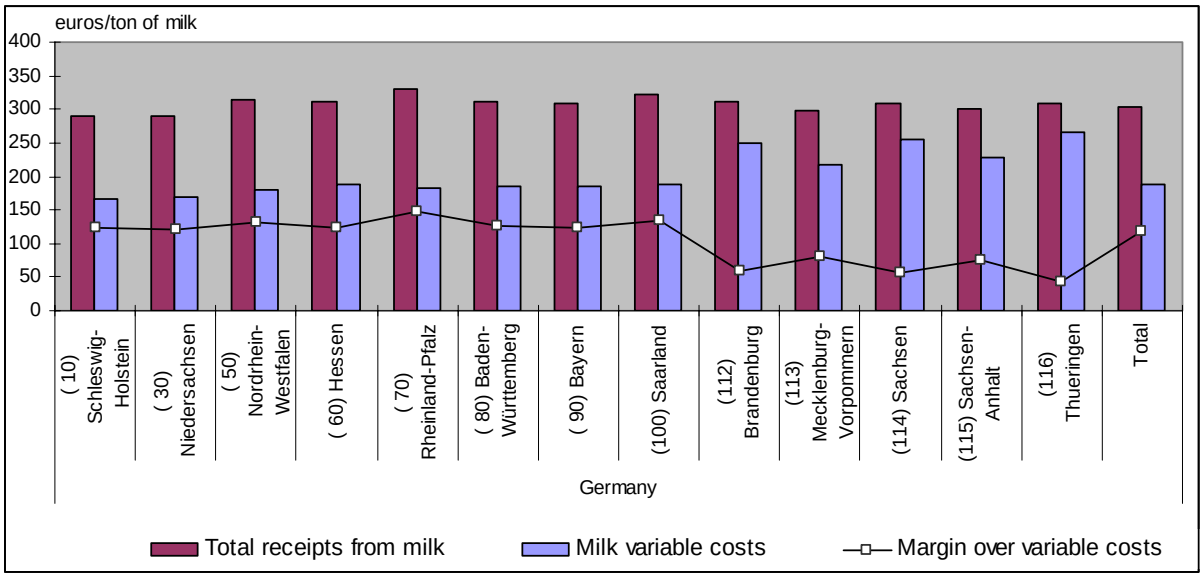
Regional analysis

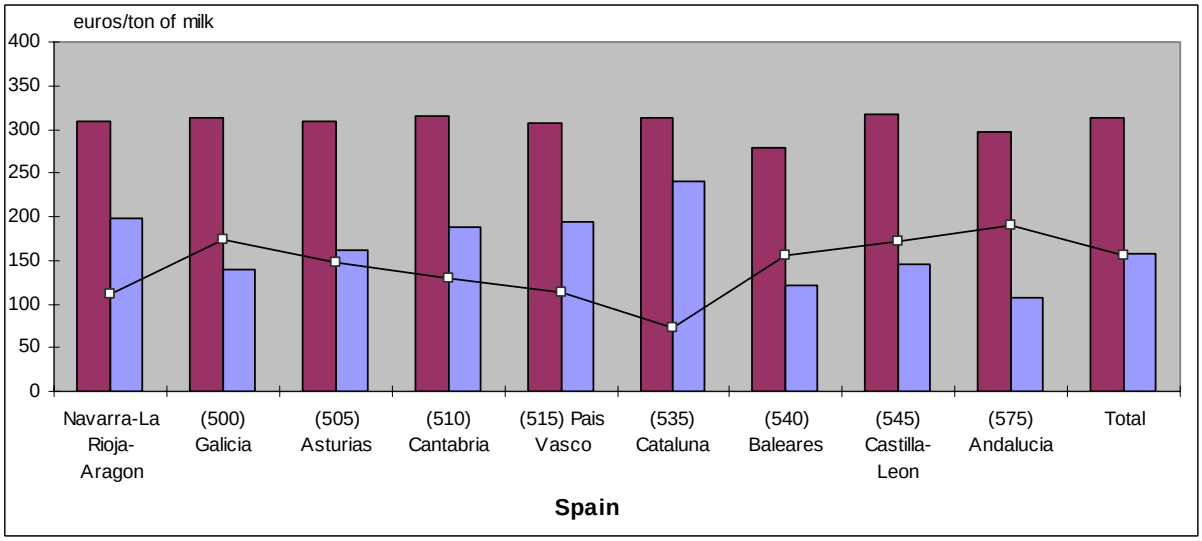
Table 9 in annex presents the average production costs and margins by FADN region for each Member State (for milk specialised farms average 2002-2003-2004 for the EU-15, 2004 for the EU-10). Some regions have been grouped for simplification purpose or in order to allow displaying data.

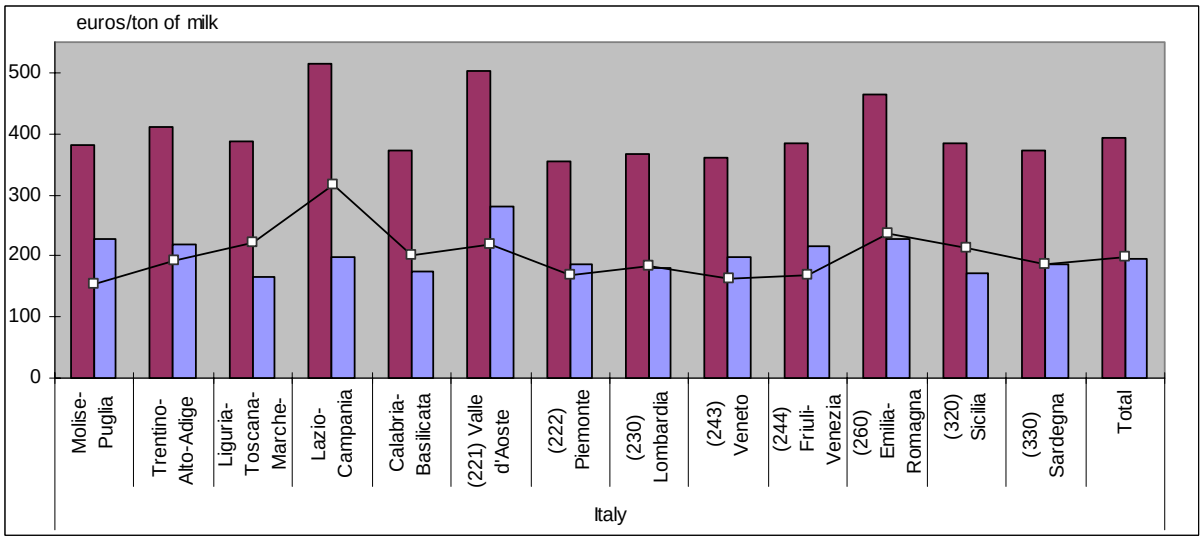
This table shows that the interregional variability of milk margins is generally high. It is particularly obvious in the following Member States:

Figure 5: Average margins by region in Germany, Spain and Italy (average 2002-2003-2004)

[18] Source: INRA-Institut de l'élevage *Labour productivity and income in North-European dairy farms. Diverging models.* Le dossier Economie de l'élevage n°364 Janvier 2007.







Source: EU FADN – DG AGRI, Milk allocation costs model.

– Germany, where the regional average margin over variable costs can vary from -63% (Thüringen, 43 €/t) to +26% (Rheinland-Pfalz, 147 €/t) around the national average (117 €/t);

– Spain, where it varies from -54% (Cataluña[19], 72 €/t) to +45% (Madrid-Castilla-La Mancha-Extremadura, 225 €/t) (national average: 155 €/t),

– Italy, where it varies from -19% (Veneto, 162 €/t) to +59% (Lazio Campania, 317 €/t[20]) (national average: 200 €/t).

Figure 5 illustrates this interregional variability for these three Member States. In Germany, the gap between eastern and western regions is clear. In this Member State, the interregional variability seems to be more linked to the differences of production costs, in average higher in the Eastern Germany. The differences of production costs between regions are also high in Spain. But in Italy the differences of margins can be explained by differences of both costs and prices. In this Member State the high prices in some regions can be linked to some renowned protected geographical indications: *Parmigiano Reggiano* in Emilia-Romagna, *Mozzarella di Bufala Campana* in Campania (buffaloes' milk is not separated from cows' milk in FADN), etc. However, one should note that the size of the regions is not identical for all Member States. The Polish regions are for example much wider than the French regions. This could hide high variations within Polish sub-regions.

For a detailed view of the milk receipts and costs' structures in the different regions, please refer to Table 9 in annex.

Analysis by milk herd size class

Table 10 and Table 11 in annex present the average production costs and margins by milk herd size class and Member State respectively, for the EU-15 and EU-10 (average 2002-2003-2004 for the EU-15, 2004 for the EU-10). Given to high differences of structures, different categories of herd size have been applied for the EU-15 and the EU-10.

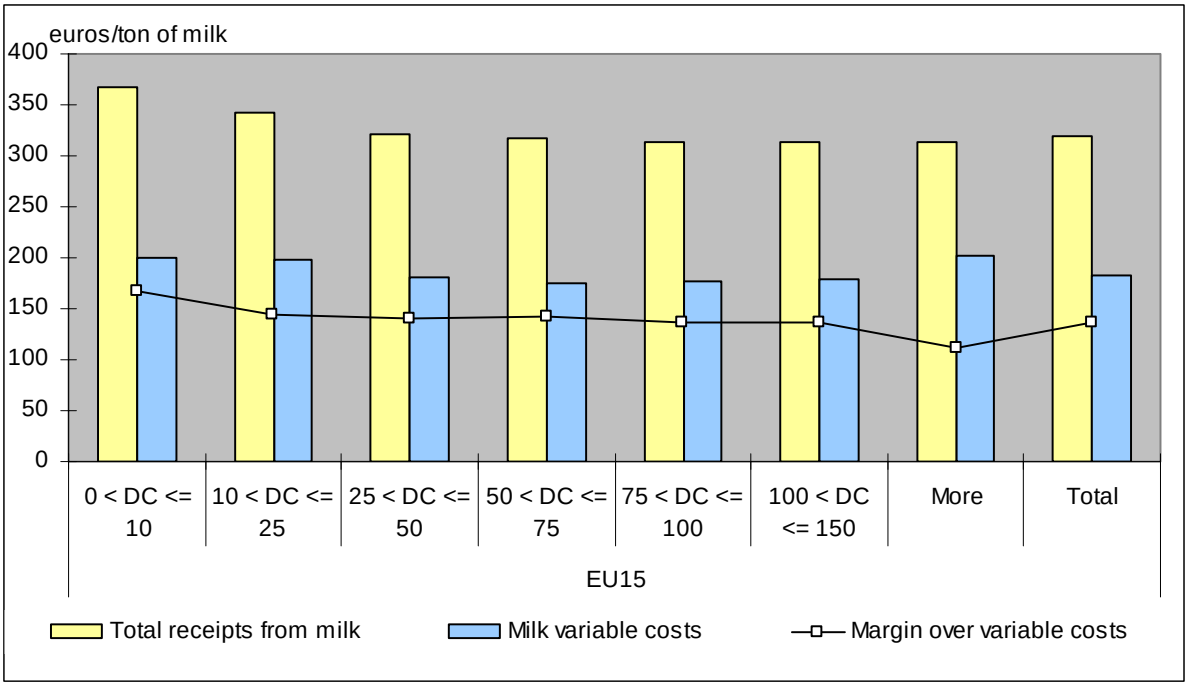
Figure 6 and Figure 7 illustrate the average receipts, variable costs and margins by size class respectively in the EU-15 and EU-10. It shows that the margin variability among size classes is higher in the new Member States. It is noticeable (particularly in the EU-15) that the margin per ton of milk does not increase with the size of the herd. On the contrary, the average margin per ton of milk is smaller in the highest flocks' herds. It illustrates probably the limit of scale economies. Moreover, for the EU-15, this result is influenced by some Member States with particular structures (big size and relatively high costs in Eastern Germany, please refer to the tables in annex).

In the EU-15, the average margin is higher for the smallest farms, because of higher milk receipts: it can reflect the milk production in mountainous areas, with high value-added cheeses, etc. In the EU-10, the average margin is higher for the medium size class from 25 to 75 dairy cows.

Figure 6: Average margins milk herd size class in the EU-15 (average 2002-2003-2004, milk specialised farms)

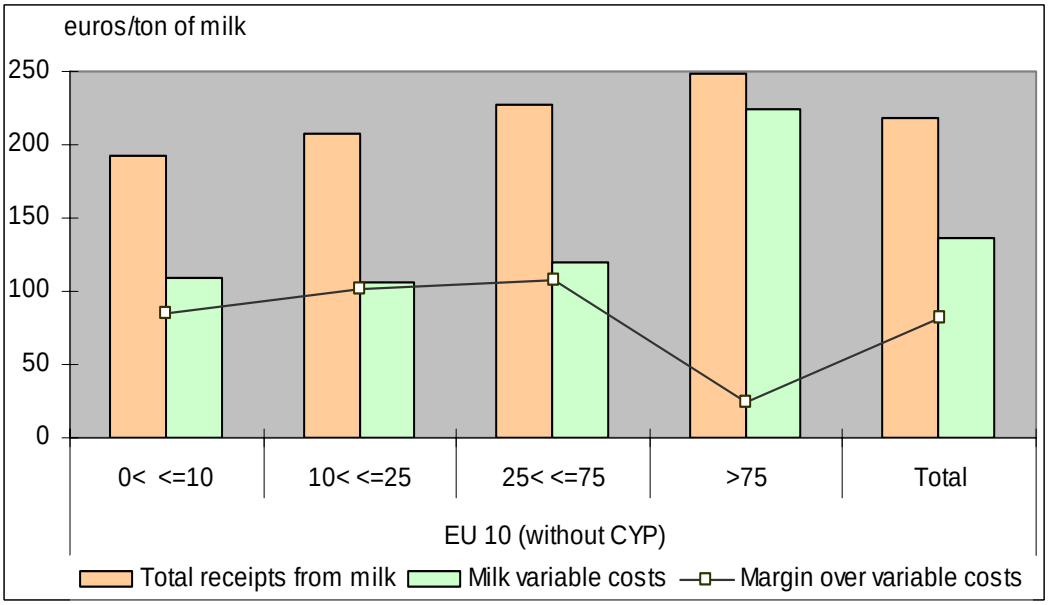
[19] It should be noted that there is no data for Cataluña in 2004.

[20] Campania is the traditional region of production of a high value added cheese, *Mozzarella di Bufala Campana*, produced from the milk of buffaloes. This cheese is protected by a geographical indication.



Source: EU FADN – DG AGRI, Milk allocation costs model. DC: dairy cows.

Figure 7: Average margins milk herd size class in the EU-10 (2004, milk specialised farms)



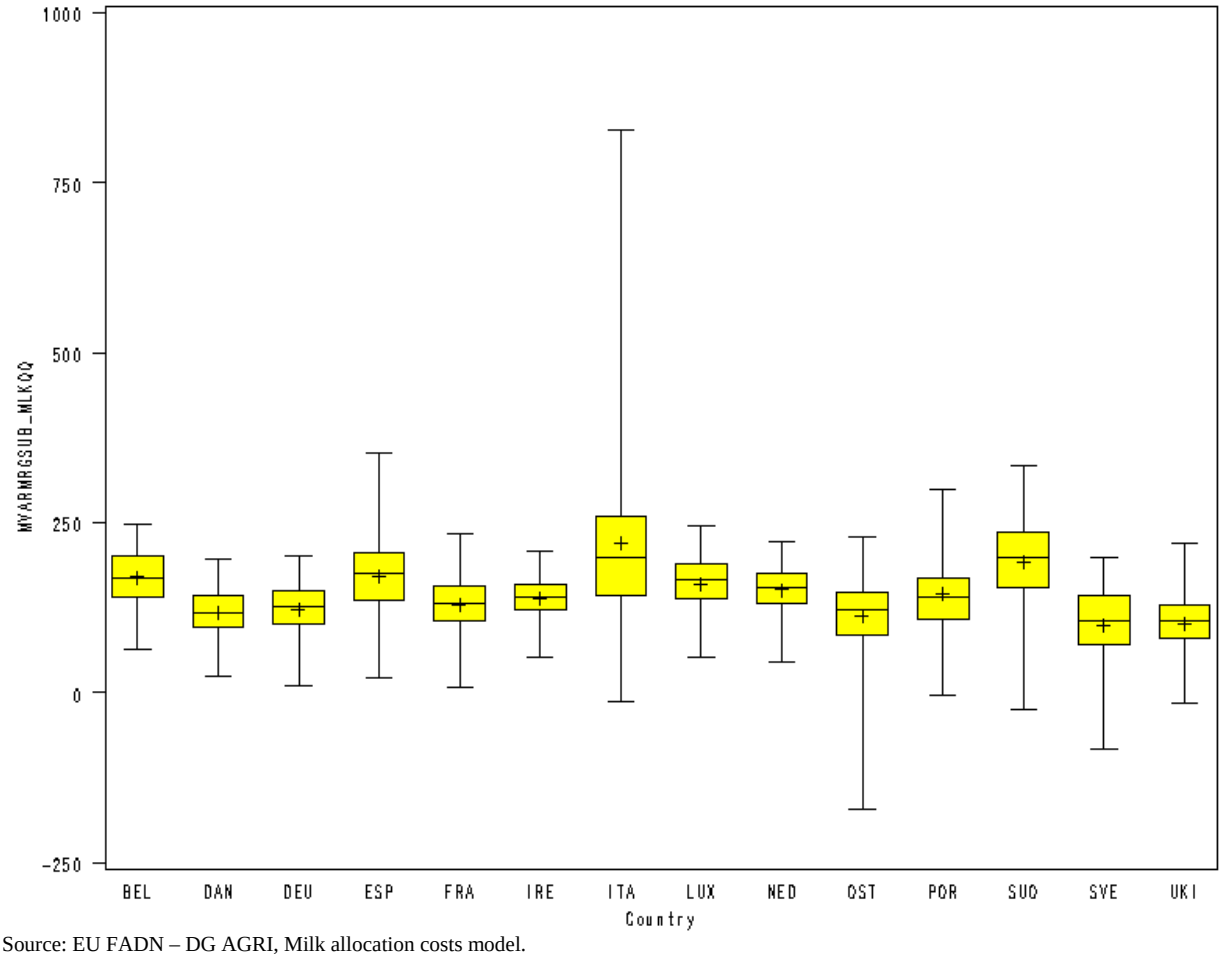
Source: EU FADN – DG AGRI, Milk allocation costs model.

4. DISTRIBUTION OF MILK MARGINS

The distribution analysis is based only on the year 2004, in order to enable the comparison of the distributions among Member States of the EU-25. For this year the number of farms in the sample is too small to display data regarding the distribution for **Cyprus** as it was already mentioned in a previous section, but also for **Greece** and **Slovakia**.

The figures below show the range of milk margins' values over variable costs by Member State respectively for EU-15 and EU-10 (2004, milk specialised farms). The extreme values are not displayed. The whiskers represent the percentile 1 and 99 (values separating 1% and 99% of the population), the cross represents the mean, and the line represents the median, the box the lower and upper quartiles. The mean presented here is the average of the individual ratio (€/t of milk) and therefore it does not correspond to the averages presented in the previous section[21]. Table 12 in annex details the statistics related to the distribution: the mean, standard deviation, minimum, maximum, median, etc.

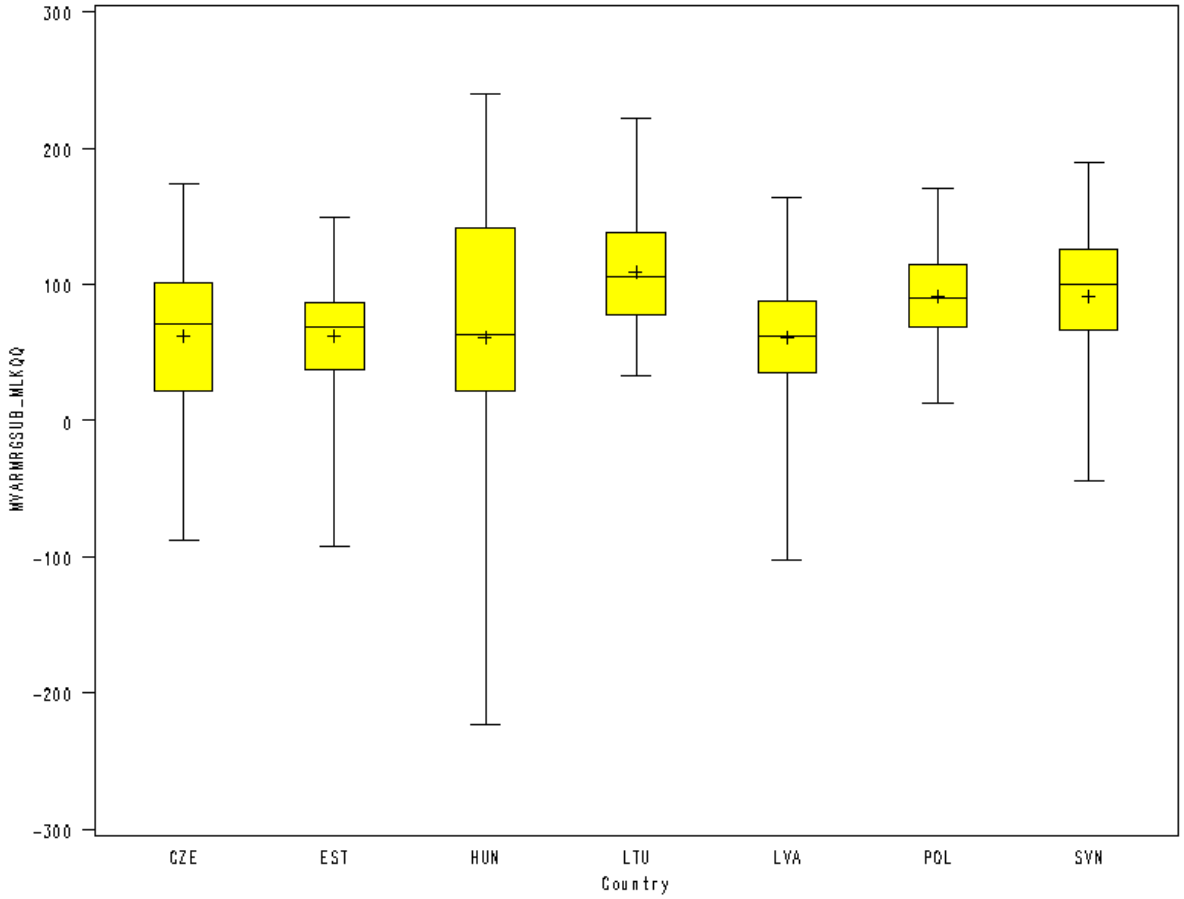
Figure 8: Range of milk margins over variable costs by Member State in EU-15 in 2004
(individual ratio €/t of milk, milk specialised farms)



Source: EU FADN – DG AGRI, Milk allocation costs model.

[21] The averages presented in the previous section are "global ratio", i.e. obtained by dividing the average farm amount in the Member State by the average quantity of milk produced in this Member State.

Figure 9: Range of milk margins over variable costs by Member State in EU-10 in 2004
(individual ratio €/t of milk, milk specialised farms)



Source: EU FADN – DG AGRI, Milk allocation costs model.

It shows that in some Member States (Ireland, Germany, Poland, and Denmark) the population is more concentrated around the average whereas in others, the range of values is widespread (especially in Italy and Hungary). However, it should be reminded here that the minimum threshold[22] of economic size defining the FADN field of observation is not identical for all Member States (see Table 3). This might influence the wideness of the spread for the lowest values in some Member States. For example, the minimum threshold is 2 ESU[23] in Latvia, and 16 ESU in Belgium.

In the EU-15, the widest range of values is in Italy, with high values beyond the upper quartile. It implies that the mean is significantly higher than the median. The range of values is also wide in Spain, Portugal, Austria, Sweden and Finland. In Portugal the mean is also higher than the median; however, it is below the median in the other Member State quoted. In Sweden the range of margins covers also negative values.

[22] The minimum thresholds are set by Member State in order to take into account the differences of agricultural structures between Member States (article 2 of Commission regulation 1859/82). They are regularly updated to follow the structural changes of the farms. According to the whereas of the Commission regulation 1555/2001, the threshold should be set in order for the field of observation to cover the most relevant part of the agricultural activity of the Member State, i.e. **at least 90% of total Standard Gross Margin (SGM) covered in the Farm Structure Survey (FSS)**.

[23] ESU: The economic size of farms is expressed in terms of European Size Units (ESU). The value of one ESU is defined as a fixed number of EUR/ECU of Farm Gross Margin. Since 2002, 1ESU=1200€.

Regarding the EU-10, the range of values is particularly high in Hungary. One should note the great variability of milk margins despite the low number of specialised farms in these Member States.

Table 3: FADN Minimum thresholds of economic size by Member State in 2004

Country	2004 thresholds (ESU)
Belgium	16
Czech Republic	4
Denmark	8
Germany	8
Estonia	2
Spain	2
France	8
Ireland	2
Italy	4
Latvia	2
Lithuania	2
Luxembourg	8
Hungary	2
Netherlands	16
Austria	8
Poland	2
Portugal	2
Slovenia	2
Finland	8
Sweden	8
United Kingdom	16*

* except Northern Ireland: 8ESU

Figure 10, Figure 11, Table 13 in annex present the same data for the margins over total inputs by Member State.

5. CONCLUSION

This note provides an overview of the diversity of milk farms in the EU-25 in terms of farm structures, production costs and margins. It shows the high interregional variability and the wide range of margins within Member States. These elements will be useful for analysing the impacts of any policy change. They will indeed imply different reactions and possible strategies in case of policy change. In addition, the possible impacts on farms' capital (land, milk quota asset, equipment…) should be taken into account.

Annexes

Table 4: Number of dairy cows by type of farming and by Member State in FSS 2003

Number of dairy cows	Type of farming	Specialist dairying	Cattle-dairying, rearing and fattening combined	Mixed livestock, mainly grazing livestock	Field crops-grazing livestock combined	TF41+TF81	TF41+TF43+TF71+TF81
	total	TF41	TF43	TF71	TF81		
Belgium	585 400	370 010	90 730	20 360	59 400	429 410	540 500
Czech Republic	467 850	59 190	13 200	48 880	226 760	285 950	348 030
Denmark	596 030	527 700	2 380	18 920	36 510	564 210	585 510
Germany	4 380 830	3 130 280	177 680	143 800	718 690	3 848 970	4 170 450
Estonia	119 800	86 180	520	11 490	17 720	103 900	115 910
Ireland	1 155 550	1 059 720	58 380	910	18 050	1 077 770	1 137 060
Greece	170 190	101 480	16 040	7 700	26 060	127 540	151 280
Spain	1 096 410	957 700	19 450	20 320	49 120	1 006 820	1 046 590
France	4 050 960	2 546 190	325 140	161 980	761 630	3 307 820	3 794 940
Italy	1 857 000	1 606 120	25 450	44 290	87 150	1 693 270	1 763 010
Cyprus	25 960	24 180	0	0	0	24 180	24 180
Latvia	182 480	55 300	910	40 400	57 140	112 440	153 750
Lithuania	451 050	89 430	9 490	107 630	164 560	253 990	371 110
Luxembourg	40 600	30 460	6 100	1 110	2 140	32 600	39 810
Hungary	294 970	120 340	1 140	27 940	80 490	200 830	229 910
Malta	7 630	6 350	0	0	0	6 350	6 350
Netherlands	1 477 770	1 383 560	14 970	11 610	15 120	1 398 680	1 425 260
Austria	580 520	435 450	102 990	12 290	14 760	450 210	565 490
Poland	2 851 360	583 600	389 860	638 870	557 430	1 141 030	2 169 760
Portugal	335 280	295 950	7 560	9 930	7 720	303 670	321 160
Slovenia	131 100	97 670	6 270	15 430	4 910	102 580	124 280
Slovakia	208 200	32 030	3 930	17 320	103 380	135 410	156 660
Finland	333 870	310 230	9 150	1 680	10 990	321 220	332 050
Sweden	402 520	381 890	1 550	4 670	12 260	394 150	400 370
United Kingdom	2 191 940	1 930 340	32 340	10 720	157 800	2 088 140	2 131 200
EU-25	**23 995 270**	**16 221 350**	**1 315 230**	**1 378 250**	**3 189 790**	**19 411 140**	**22 104 620**
		67.6%	5.5%	5.7%	13.3%	80.9%	92.1%
EU-15	**19 254 870**	**15 067 080**	**889 910**	**470 290**	**1 977 400**	**17 044 480**	**18 404 680**
		78.3%	4.6%	2.4%	10.3%	88.5%	95.6%
EU-10	**4 740 400**	**1 154 270**	**425 320**	**907 960**	**1 212 390**	**2 366 660**	**3 699 940**
		24.3%	9.0%	19.2%	25.6%	49.9%	78.1%

Source: EUROSTAT Farm Structure Survey 2003.

Table 5: Number of dairy cows covered by FADN / total population (average 2002-2003-2004 for EU-15, 2004 for EU-10)

Number of dairy cows	FADN (total sample)	FSS 2003	FADN/FSS
Belgium	627 979	585 400	107%
Denmark	609 859	596 030	102%
Germany	4 339 624	4 380 830	99%
Greece	74 096	170 190	44%
Spain	975 516	1 096 410	89%
France	4 136 977	4 050 960	102%
Ireland	1 173 684	1 155 550	102%
Italy	1 830 213	1 857 000	99%
Luxembourg	39 740	40 600	98%
The Netherlands	1 612 314	1 477 770	109%
Austria	569 096	580 520	98%
Portugal	282 633	335 280	84%
Finland	352 479	333 870	106%
Sweden	433 056	402 520	108%
United Kingdom	2 262 617	2 191 940	103%
Cyprus	34 233	25 960	132%
Czech Republic	531 007	467 850	113%
Estonia	95 600	119 800	80%
Hungary	248 245	294 970	84%
Lithuania	187 880	451 050	42%
Latvia	116 008	182 480	64%
Poland	2 427 841	2 851 360	85%
Slovakia	209 205	208 200	100%
Slovenia	121 679	131 100	93%

Source: EU FADN – DG AGRI, EUROSTAT Farm Structure Survey 2003.

Table 6: Number of dairy cows in farms with a low milk specialisation rate

average 2002-2003-2004 for EU-15, 2004 for EU-10	Farms within TF41, 43, 71, 81 (definitions in Table 4)		
	Number of dairy cows		%
	Total	Milk specialisation <=50%	
Belgium	571 026	216 413	38%
Denmark	597 860	38 203	6%
Germany	4 090 397	1 071 493	26%
Greece	68 202	27 006	40%
Spain	915 080	53 873	6%
France	3 832 992	1 051 515	27%
Ireland	1 136 915	103 095	9%
Italy	1 751 831	170 627	10%
Luxembourg	38 886	10 279	26%
The Netherlands	1 533 358	64 134	4%
Austria	557 931	277 482	50%
Portugal	274 720	9 913	4%
Finland	351 125	4 082	1%
Sweden	430 152	32 224	7%
The United Kingdom	2 215 899	192 376	9%
Czech Republic	378 199	276 255	73%
Estonia	94 516	11 986	13%
Hungary	180 792	79 702	44%
Lithuania	146 965	79 234	54%
Latvia	97 230	36 722	38%
Poland	1 877 662	1 004 930	54%
Slovakia	150 331	138 252	92%
Slovenia	118 431	13 769	12%

Source: EU FADN – DG AGRI

Table 7: Average milk production costs and margins for milk specialised farms by Member State of the EU-15 (average 2002-2003-2004)

		Belgium	Denmark	Germany	Greece	Spain	France	Ireland	Italy	Luxem-bourg	The Netherlands	Austria	Portugal	Finland	Sweden	The United Kingdom
Representati-veness	Sample farms	236	393	1 806	12	616	1 260	300	1 346	214	343	447	317	329	327	559
	Farms represented	6 563	6 484	66 332	1 152	15 153	66 074	15 623	30 895	668	20 935	16 168	8 301	15 748	8 157	18 339
Structural information	Forage area - ha	37	61	42	2	14	52	48	23	63	41	20	17	27	68	79
	Dairy cows - LU	49	85	45	28	32	41	48	43	42	69	17	23	22	47	98
	Total labour - AWU	1.6	1.9	1.8	1.7	1.5	1.7	1.6	2.0	1.7	1.7	1.7	1.8	2.1	2.1	2.2
	Milk yield - kg/cow	6 233	7 680	6 770	5 074	5 983	6 183	5 250	6 430	7 148	7 471	6 302	6 079	8 065	8 046	6 875
	Milk production - tons	304	655	302	143	192	256	253	276	303	519	109	139	174	380	672
	Milk quota - 100kg	3 085	6 392	3 158	1 369	2 630	2 477	10 528	2 714	2 941	5 160	974	1 624	1 694	3 796	8 368
Receipts from milk (€/t)	**Total receipts from milk**	**307**	**331**	**304**	**339**	**312**	**320**	**277**	**394**	**322**	**327**	**308**	**301**	**455**	**336**	**268**
	Price	305	329	302	337	309	316	275	391	322	324	304	291	355	333	264
Milk production costs (€/t of milk)	**Total feed**	**71**	**93**	**73**	**186**	**111**	**80**	**69**	**131**	**65**	**66**	**67**	**105**	**106**	**101**	**74**
	Purchased concentrates	37	62	45	111	86	41	36	94	35	41	38	79	72	74	51
	Purchased coarse fodder	8	13	3	57	16	5	2	19	1	12	7	6	1	4	5
	*Non fodder crops used for feed**	8	7	13	16	3	10	11	9	12	2	14	2	16	12	6
	*Specific forage costs**	19	13	13	2	6	24	19	9	17	11	7	19	17	11	13
	Other specific costs	19	24	21	10	15	12	20	12	17	20	26	22	29	17	26
	Total specific costs	**90**	**117**	**95**	**196**	**125**	**91**	**89**	**143**	**82**	**86**	**93**	**127**	**135**	**118**	**101**
	Farming overheads	48	69	80	20	28	90	44	37	70	75	80	38	115	88	52
	Machinery and building costs	16	22	23	3	8	19	18	7	26	22	30	13	41	24	16
	Energy	9	8	20	8	9	11	8	15	13	11	15	14	21	22	9
	Contract work	17	26	14	6	4	26	13	4	15	20	12	3	14	29	13
	Other direct inputs	6	13	24	2	6	34	5	10	16	22	23	8	39	13	15
	Total intermediate consumption	**138**	**186**	**175**	**216**	**153**	**182**	**132**	**180**	**152**	**162**	**173**	**165**	**250**	**206**	**153**
	Depreciation	34	39	45	23	14	54	27	39	85	37	81	30	87	63	25
	External factors	35	90	43	15	10	32	27	25	36	58	17	15	31	57	41
	Wages	1	22	12	8	4	4	10	14	5	5	2	6	11	26	19
	Interests	20	57	10	2	2	10	7	2	13	36	9	3	12	19	10
	Rent	15	12	21	5	4	18	10	9	18	17	6	6	8	12	12
	Total variable costs	140	208	187	224	157	185	142	194	158	167	175	172	262	232	172
	Total inputs	**207**	**315**	**264**	**253**	**177**	**268**	**187**	**245**	**273**	**257**	**271**	**211**	**368**	**326**	**219**
Milk Margins* **	Margin / variable costs (€/t milk)	168	123	117	115	155	134	135	200	164	160	133	129	193	104	96
	Margin / total inputs (€/t milk)	**100**	**16**	**41**	**86**	**135**	**51**	**91**	**149**	**49**	**70**	**37**	**90**	**87**	**11**	**49**

Source: EU FADN – DG AGRI, Milk allocation costs model. *produced on the farm **intermediate consumption + wages ***including subsidies

Table 8: Average milk production costs and margins for milk specialised farms in the EU-10 (2004) and comparison with EU-15

		Czech republic	Estonia	Hungary	Lithuania	Latvia	Poland	Slovakia	Slovenia	**EU-15**	**EU-10**
Representativeness of the sample	Sample farms	150	192	86	230	197	1 575	18	202	8 508	2 656
	Farms represented	1 317	1 845	2 406	5 582	3 416	64 651	143	7 358	296 679	86 861
Structural information	Forage area - ha	137	120	38	28	47	8	133	13	42	17
	Dairy cows - LU	77	41	36	12	17	12	57	13	46	15
	Total labour - AWU	8.8	4.8	2.9	1.9	2.5	1.8	6.5	2.1	1.8	2.1
	Milk yield - kg/cow	6 339	5 773	6 298	4 983	4 885	4 744	5 643	5 196	6 666	5 108
	Milk production - tons	486	235	226	59	81	59	323	68	306	77
	Milk quota - 100kg	0	4 356	2 302	614	6 474	44 080	0	0	3 624	33 259
Receipts from milk (€/t of milk)	**Total receipts from milk**	**250**	**237**	**270**	**197**	**224**	**198**	**229**	**266**	**319**	**222**
	Price	250	237	262	188	197	198	229	257	314	218
Milk production costs (€/t of milk)	**Total feed**	**75**	**73**	**117**	**44**	**62**	**55**	**90**	**75**	**84**	**68**
	Purchased concentrates	36	31	62	9	15	17	58	56	53	30
	Purchased coarse fodder	2	2	23	2	7	3	7	3	7	5
	*Non fodder crops used for feed**	23	30	20	23	32	24	12	2	9	22
	*Specific forage costs**	14	9	12	10	9	11	13	15	14	12
	Other specific costs (veterinary…)	16	9	22	4	12	7	16	20	19	11
	Total specific costs	**91**	**82**	**139**	**48**	**74**	**63**	**106**	**95**	**103**	**79**
	Farming overheads	76	52	75	34	69	34	83	61	70	47
	Machinery and building costs	20	13	12	7	16	10	15	30	19	13
	Energy	25	24	24	18	29	14	29	20	13	18
	Contract work	9	6	14	2	5	6	17	4	16	7
	Other direct inputs	23	10	26	7	18	4	22	8	21	9
	Total intermediate consumption	**168**	**135**	**214**	**82**	**143**	**97**	**189**	**156**	**172**	**126**
	Depreciation	23	25	22	17	20	30	45	79	43	31
	External factors	68	48	58	7	22	5	60	8	40	20
	Wages	61	43	40	3	17	2	36	1	11	15
	Interests	3	3	11	1	3	2	4	4	15	3
	Rent	4	1	7	3	1	1	19	3	15	2
	Total variable costs	228	178	255	86	160	98	225	158	183	140
	Total inputs	**259**	**208**	**295**	**107**	**184**	**132**	**294**	**244**	**256**	**177**
Milk Margins***	Margin / variable costs (€/t milk)	22	59	15	111	64	100	3	109	136	82
	Margin / total inputs (€/t milk)	**-8**	**29**	**-25**	**90**	**40**	**66**	**-65**	**23**	**64**	**45**

Source: EU FADN – DG AGRI, Milk allocation costs model. *produced on the farm **intermediate consumption + wages ***including subsidies

Table 9: Regional average milk production costs and margins for specialised farms in the EU-25 (average 2002-2003-2004 for EU-15, 2004 for EU-10)

		Representativeness of the sample		**Milk production**	**Milk receipts (€/t of milk)**	**Milk production costs (€/t of milk)**									**Milk margins* (€/t of milk)**	
Member State	(FADN code) Regions	Sample farms (/year)	Farms represented (/year)	Milk production - tons	Total receipts from milk	Total feed	Other specific costs	Farming overheads	Depreciation	Wages	Interests	Rent	Milk variable costs	Milk total inputs	Margin over variable costs	Margin over total input
Belgium	(341) Vlaanderen	42	1 454	297	325	72	22	52	38	1	16	14	147	215	178	110
	(343) Wallonie	32	729	296	313	71	20	52	25	2	25	17	145	212	168	101
	Total	236	6 563	304	307	71	19	48	34	1	20	15	140	207	168	100
Czech Republic	(745) Czech Republic	150	1 317	486	250	75	16	76	23	61	3	4	228	259	22	-8
Denmark	(370) Denmark	393	6 484	655	331	93	24	69	39	22	57	12	208	315	123	16
Germany	(10) Schleswig-Holstein	162	4 542	435	290	58	33	68	27	7	11	25	167	230	124	60
	(30) Niedersachsen	252	11 353	408	290	72	20	71	31	7	11	28	169	240	121	50
	(50) Nordrhein-Westfalen	165	4 353	368	313	72	22	80	37	6	11	29	180	256	133	57
	(60) Hessen	132	2 548	305	312	76	23	84	50	6	11	21	189	271	123	41
	(70) Rheinland-Pfalz	109	1 910	346	331	73	23	83	50	5	11	26	184	270	147	61
	(80) Baden-Württemberg	150	6 860	241	312	72	15	92	57	6	9	20	186	271	127	41
	(90) Bayern	500	32 502	190	310	76	20	88	63	3	10	14	186	274	124	36
	(100) Saarland	40	165	422	321	75	24	82	49	7	10	27	188	274	133	47
	(112) Brandenburg	42	326	1 408	310	96	24	71	37	59	12	12	250	311	60	0
	(113) Mecklenburg-Vorpommern	46	475	1 215	297	58	40	79	29	40	15	15	218	277	79	20
	(114) Sachsen	98	694	1 010	310	84	11	86	42	73	6	12	254	314	56	-4
	(115) Sachsen-Anhalt	56	367	1 071	302	88	22	76	36	41	15	17	227	295	75	7
	(116) Thueringen	55	237	1 471	308	87	11	87	42	80	8	16	265	331	43	-22
	Total	1 806	66 332	302	304	73	21	80	45	12	10	21	187	264	117	41
Greece	Total	12	1 152	143	339	186	10	20	23	8	2	5	224	253	115	86
Spain	Navarra-La Rioja-Aragon	38	307	547	309	134	23	35	25	5	4	3	197	229	112	80
	Madrid-Castilla-LaMancha-Extremadura	nd.	nd.	nd.	nd.	nd.	nd.	nd.	nd.	nd.	nd.	nd.	nd.	nd.	nd.	nd.
	(500) Galicia	139	7 059	122	314	99	14	24	14	3	1	3	140	158	174	156
	(505) Asturias	143	2 497	174	310	118	15	26	16	3	4	4	161	185	148	125

		Representativeness of the sample		**Milk production**	**Milk receipts (€/t of milk)**	**Milk production costs (€/t of milk)**									**Milk margins* (€/t of milk)**	
Member State	(FADN code) Regions	Sample farms (/year)	Farms represented (/year)	Milk production - tons	Total receipts from milk	Total feed	Other specific costs	Farming overheads	Depreciation	Wages	Interests	Rent	Milk variable costs	Milk total inputs	Margin over variable costs	Margin over total input
	(510) Cantabria	55	826	225	316	128	15	38	11	6	4	7	187	210	128	106
	(515) Pais Vasco	127	1 536	308	306	140	20	30	29	3	4	3	193	229	113	77
	(535) Cataluna	17	636	374	313	147	21	61	29	11	3	8	241	280	72	33
	(540) Baleares	26	177	332	279	95	7	20	6	1	1	9	122	137	156	141
	(545) Castilla-Leon	32	2 008	235	318	107	11	23	5	3	0	5	145	155	172	162
	(575) Andalucía	31	374	465	297	74	13	15	5	6	1	0	108	113	189	184
	Total	616	15 153	192	312	111	15	28	14	4	2	4	157	177	155	135
Estonia	(755) Estonia	192	1 845	235	237	73	9	52	25	43	3	1	178	208	59	29
France	Lorraine-Alsace	89	3 122	300	317	78	11	88	57	5	9	16	181	263	135	54
	Limousin-Auvergne	133	6 351	198	312	81	13	95	71	3	7	15	192	285	120	26
	Ile-de-France-Champagne-Ardenne-Picardie	75	2 316	326	310	88	13	78	50	5	12	21	184	266	126	44
	Pays de la Loire-Bretagne	354	22 162	274	312	71	10	91	47	3	12	16	174	249	138	63
	Centre-Bourgogne	35	1 181	350	313	85	12	87	54	3	9	15	188	266	125	47
	Languedoc-Rousillon-Provence-Alpes-Côte d'azur	nd.	nd.	nd.	nd.	nd.	nd.	nd.	nd.	nd.	nd.	nd.	nd.	nd.	nd.	nd.
	Haute et Basse Normandie	166	10 519	259	326	80	10	87	53	6	12	26	183	273	143	53
	(141) Nord-Pas-de-Calais	60	2 280	315	313	79	11	82	46	4	11	20	177	255	137	58
	(153) Franche-Comté	126	4 226	230	344	89	15	93	67	1	8	25	198	298	146	46
	(164) Poitou-Charentes	29	1 230	306	308	96	12	81	41	5	7	15	194	257	115	51
	(182) Aquitaine	42	2 053	261	313	102	21	88	54	6	6	13	216	289	97	24
	(183) Midi-Pyrénées	42	2 905	216	309	84	15	88	56	2	8	15	188	266	120	43
	(192) Rhône-Alpes	101	7 123	203	352	91	13	105	72	4	9	17	213	310	139	42
	Total	1 260	66 074	256	320	80	12	90	54	4	10	18	185	268	134	51
Hungary	Közép-Magyarország-Dél-Alföld	22	442	300	267	129	20	65	18	51	10	5	265	299	2	-31
	Észak-Magyarország-Észak-Alföld	36	1 400	101	256	111	17	58	23	34	11	5	220	259	36	-3
	Közép-Dunántúl-Nyugat-Dunántúl-Dél-Dunántúl	28	564	481	278	113	26	90	23	38	12	9	268	311	10	-33
	Total	86	2 406	226	270	117	22	75	22	40	11	7	255	295	15	-25
Ireland	(380) Ireland	300	15 623	253	277	69	20	44	27	10	7	10	142	187	135	91

		Representativeness of the sample		**Milk production**	**Milk receipts (€/t of milk)**	**Milk production costs (€/t of milk)**									**Milk margins* (€/t of milk)**	
Member State	(FADN code) Regions	Sample farms (/year)	Farms represented (/year)	Milk production - tons	Total receipts from milk	Total feed	Other specific costs	Farming overheads	Depreciation	Wages	Interests	Rent	Milk variable costs	Milk total inputs	Margin over variable costs	Margin over total input
Italy	Molise-Puglia	78	1 954	141	382	158	9	42	35	18	1	9	227	273	154	109
	Trentino-Alto-Adige	154	6 037	67	410	141	16	56	99	5	5	4	218	326	192	83
	Liguria-Toscana-Marche-Umbria-Abruzzo	106	1 081	169	388	111	12	35	45	8	1	6	166	218	222	170
	Lazio-Campania	122	3 768	216	516	133	6	36	38	24	0	4	198	241	317	275
	Calabria-Basilicata	44	534	152	374	132	5	25	34	11	0	4	174	212	200	162
	(221) Valle d'Aoste	147	509	66	502	157	24	51	84	49	16	26	282	407	220	95
	(222) Piemonte	100	2 053	338	354	132	16	33	39	4	1	10	185	235	169	119
	(230) Lombardia	205	6 432	562	366	125	11	32	35	14	1	11	181	229	184	137
	(243) Veneto	74	4 042	249	360	138	12	38	37	9	3	7	197	245	162	115
	(244) Friuli-Venezia	102	793	226	385	146	23	45	55	4	8	7	217	287	168	97
	(260) Emilia-Romagna	144	2 629	365	463	134	17	52	33	24	3	15	228	279	235	185
	(320) Sicilia	32	701	161	386	127	6	32	23	7	0	9	173	204	213	181
	(330) Sardegna	39	361	423	373	141	12	31	33	2	5	3	186	227	187	147
	Total	1 346	30 895	276	394	131	12	37	39	14	2	9	194	245	200	149
Lithuania	(775) Lithuania	230	5 582	59	197	44	4	34	17	3	1	3	86	107	111	90
Luxembourg	(350) Luxembourg	214	668	303	322	65	17	70	85	5	13	18	158	273	164	49
Latvia	(770) Latvia	197	3 416	81	224	62	12	69	20	17	3	1	160	184	64	40
The Netherlands	(360) The Netherlands	343	20 935	519	327	66	20	75	37	5	36	17	167	257	160	70
Austria	(660) Austria	447	16 168	109	308	67	26	80	81	2	9	6	175	271	133	37
Poland	(785) Pomorze and Mazury	200	8 275	77	188	51	9	33	26	4	2	1	96	126	91	62
	(790) Wielkopolska and Slask	257	7 948	73	189	58	8	33	28	2	2	1	100	131	89	58
	(795) Mazowsze and Podlasie	970	39 310	57	205	57	7	35	31	1	2	1	99	133	105	71
	(800) Malopolska and Pogórze	148	9 118	39	188	50	8	33	36	2	2	1	93	133	95	55
	Total	1 575	64 651	59	198	55	7	34	30	2	2	1	98	132	100	66

		Representativeness of the sample		**Milk production**	**Milk receipts (€/t of milk)**	**Milk production costs (€/t of milk)**									**Milk margins* (€/t of milk)**	
Member State	(FADN code) Regions	Sample farms (/year)	Farms represented (/year)	Milk production - tons	Total receipts from milk	Total feed	Other specific costs	Farming overheads	Depreciation	Wages	Interests	Rent	Milk variable costs	Milk total inputs	Margin over variable costs	Margin over total input
Portugal	(610) Entre Douro e Minho/Beira litoral	146	4 574	145	321	115	28	43	35	7	3	2	194	233	128	88
	(620) Tras-os-Montes/Beira interior	51	986	83	312	121	14	37	39	2	1	2	175	216	137	95
	(650) Açores	111	2 562	128	258	72	11	29	21	4	3	17	115	157	142	101
	Ribatejo e Oeste-Alentejo e do Algarve	nd.	nd.	nd.	nd.	nd.	nd.	nd.	nd.	nd.	nd.	nd.	nd.	nd.	nd.	nd.
	Total	317	8 301	139	301	105	22	38	30	6	3	6	172	211	129	90
Finland	(670) Etela-Suomi	87	3 933	185	423	99	30	110	89	10	11	9	248	357	175	66
	(680) Sisa-Suomi	106	5 250	157	449	101	31	114	84	11	10	8	257	358	192	91
	(690) Pohjanmaa	61	3 143	179	450	107	26	113	86	9	14	11	255	366	195	84
	(700) Pohjois-Suomi	75	3 421	182	504	118	30	126	88	16	13	6	290	397	214	108
	Total	329	15 748	174	455	106	29	115	87	11	12	8	262	368	193	87
Sweden	(710) Slattbygdslan	152	4 168	418	339	98	15	87	61	28	20	14	227	322	111	16
	(720) Skogs-och mellanbygdslan	109	2 602	388	330	102	17	83	61	26	18	9	228	317	102	13
	(730) Lan i norra	66	1 388	248	344	116	25	111	76	17	18	6	270	368	74	-25
	Total	327	8 157	380	336	101	17	88	63	26	19	12	232	326	104	11
Slovakia	(810) Slovakia	18	143	323	229	90	16	83	45	36	4	19	225	294	3	-65
Slovenia	(820) Slovenia	202	7 358	68	266	75	20	61	79	1	4	3	158	244	109	23
The United Kingdom	(411) England-North	90	3 806	639	268	74	29	53	26	18	9	12	173	221	94	47
	(412) England-East	78	1 522	894	272	79	29	58	24	29	8	16	195	244	77	29
	(413) England-West	132	5 847	742	270	73	28	52	20	22	10	13	175	218	95	51
	(421) Wales	110	2 595	671	262	67	23	54	23	16	11	9	160	203	102	59
	(431) Scotland	50	1 377	777	270	82	22	48	35	19	8	7	171	221	99	50
	(441) Northern Ireland	98	3 191	431	264	79	21	47	35	6	8	12	153	209	111	56
	Total	559	18 339	672	268	74	26	52	25	19	10	12	172	219	96	49
EU-25	Total	11 164	383 540	286	317	83	19	69	43	11	14	15	182	254	135	63

Source: EU FADN – DG AGRI, Milk allocation costs model. nd: not displayed (not enough farms in the cell) *including subsidies

Table 10: Average milk production costs and margins for farms specialised in dairying in the EU-15 by Member State and by herd size class (average 2002-2003-2004)

		Representativeness of the sample		**Milk production**	**Milk receipts (€/t of milk)**	**Milk production costs (€/t of milk)**									**Milk margins (€/t of milk)**	
Member State	Number of dairy cows (DC)	Sample farms (/year)	Farms represented (/year)	Milk production - tons	Total receipts from milk	Total feed	Other specific costs	Farming overheads	Depreciation	Wages	Interests	Rent	Milk variable costs	Milk total inputs	Margin over variable costs	Margin over total input
Belgium	10 < DC <= 25	11	897	115	287	75	18	64	29	1	21	11	158	219	129	68
	25 < DC <= 50	105	2 801	251	303	69	20	50	33	0	18	15	139	206	164	98
	50 < DC <= 75	93	2 232	386	312	70	18	46	35	1	21	14	134	204	178	109
	75 < DC <= 100	20	468	508	313	74	18	46	34	2	20	15	139	208	173	104
	100 < DC <= 150	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd
	More	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd
	Total	236	6 563	304	307	71	19	48	34	1	20	15	140	207	168	100
Denmark	10 < DC <= 25	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd
	25 < DC <= 50	44	1 278	270	327	93	25	75	34	9	46	7	201	288	126	39
	50 < DC <= 75	80	1 554	471	334	95	24	72	37	16	57	10	208	313	126	21
	75 < DC <= 100	89	1 254	694	333	92	24	71	40	19	59	11	207	316	127	17
	100 < DC <= 150	119	1 638	964	327	92	23	66	40	23	61	10	204	315	123	12
	More	54	435	1 573	336	97	24	64	37	34	51	24	219	331	118	6
	Total	393	6 484	655	331	93	24	69	39	22	57	12	208	315	123	16
Germany	0 < DC <= 10	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd
	10 < DC <= 25	334	20 061	121	310	70	21	98	62	3	8	12	192	274	118	36
	25 < DC <= 50	690	27 847	227	305	73	20	84	53	3	10	18	181	262	125	43
	50 < DC <= 75	406	11 247	426	303	73	21	77	42	6	12	25	177	256	125	47
	75 < DC <= 100	184	4 448	626	301	72	23	70	36	10	11	27	176	249	125	51
	100 < DC <= 150	95	1 868	860	298	72	23	68	34	12	12	28	175	248	124	50
	More	96	784	2 675	307	82	22	78	31	64	11	16	246	304	61	3
	Total	1 806	66 332	302	304	73	21	80	45	12	10	21	187	264	117	41
Greece	0 < DC <= 10	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd
	10 < DC <= 25	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd
	25 < DC <= 50	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd
	50 < DC <= 75	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd
	Total	12	1 152	143	339	186	10	20	23	8	2	5	224	253	115	86

		Representativeness of the sample		**Milk production**	**Milk receipts (€/t of milk)**	**Milk production costs (€/t of milk)**									**Milk margins (€/t of milk)**	
Member State	Number of dairy cows (DC)	Sample farms (/year)	Farms represented (/year)	Milk production - tons	Total receipts from milk	Total feed	Other specific costs	Farming overheads	Depreciation	Wages	Interests	Rent	Milk variable costs	Milk total inputs	Margin over variable costs	Margin over total input
Spain	0 < DC <= 10	14	1 464	40	299	81	9	23	14	0	1	3	114	131	185	168
	10 < DC <= 25	175	6 012	84	305	98	14	25	16	1	1	4	139	159	166	146
	25 < DC <= 50	254	5 333	213	315	112	14	27	14	2	2	4	155	175	159	139
	50 < DC <= 75	91	1 450	384	318	114	15	29	13	5	2	3	162	180	156	138
	75 < DC <= 100	41	452	532	305	122	15	29	14	7	3	5	173	195	132	110
	100 < DC <= 150	28	318	815	305	109	17	29	15	12	3	3	168	189	137	116
	More	12	124	1 215	327	128	19	32	13	12	3	4	191	211	136	116
	Total	616	15 153	192	312	111	15	28	14	4	2	4	157	177	155	135
France	0 < DC <= 10	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd
	10 < DC <= 25	135	10 721	118	317	81	12	98	49	1	7	13	192	260	125	57
	25 < DC <= 50	686	38 074	223	316	79	12	93	53	2	10	16	185	264	131	52
	50 < DC <= 75	305	12 892	376	321	79	11	86	57	5	11	21	180	269	141	52
	75 < DC <= 100	102	3 353	527	330	86	12	87	60	8	12	22	193	287	136	43
	100 < DC <= 150	29	753	689	326	84	12	85	53	7	11	23	188	275	138	51
	More	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd
	Total	1 260	66 074	256	320	80	12	90	54	4	10	18	185	268	134	51
Ireland	0 < DC <= 10	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd
	10 < DC <= 25	36	2 844	87	264	70	21	53	31	2	4	3	145	183	119	80
	25 < DC <= 50	131	6 990	192	271	66	18	46	28	3	6	8	133	174	138	97
	50 < DC <= 75	83	3 618	321	277	67	19	42	25	7	7	10	135	177	143	100
	75 < DC <= 100	28	1 174	486	283	67	20	40	28	17	9	12	144	192	139	91
	100 < DC <= 150	15	594	667	291	79	25	39	26	22	11	18	166	220	125	70
	More	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd
	Total	300	15 623	253	277	69	20	44	27	10	7	10	142	187	135	91
Italy	0 < DC <= 10	181	7 847	32	422	109	12	63	102	4	2	6	188	299	234	123
	10 < DC <= 25	380	8 302	94	404	123	12	48	62	4	2	8	188	260	217	144
	25 < DC <= 50	397	7 629	215	395	131	12	40	47	6	2	10	189	248	206	147
	50 < DC <= 75	143	2 921	416	399	127	11	37	44	11	2	9	186	241	213	158
	75 < DC <= 100	78	1 595	599	390	129	12	34	35	14	2	12	189	238	202	152
	100 < DC <= 150	79	1 501	873	393	130	13	36	32	18	3	12	197	243	196	149
	More	88	1 100	2 144	386	140	12	31	23	23	2	7	206	238	180	148

		Representativeness of the sample		**Milk production**	**Milk receipts (€/t of milk)**	**Milk production costs (€/t of milk)**									**Milk margins (€/t of milk)**	
Member State	Number of dairy cows (DC)	Sample farms (/year)	Farms represented (/year)	Milk production - tons	Total receipts from milk	Total feed	Other specific costs	Farming overheads	Depreciation	Wages	Interests	Rent	Milk variable costs	Milk total inputs	Margin over variable costs	Margin over total input
	Total	1 346	30 895	276	394	131	12	37	39	14	2	9	194	245	200	149
Luxembourg	10 < DC <= 25	25	87	153	320	65	19	92	108	2	14	18	177	316	143	4
	25 < DC <= 50	137	424	254	321	63	18	72	90	4	13	16	157	276	164	45
	50 < DC <= 75	38	117	423	321	64	15	63	78	8	11	19	150	257	171	64
	75 < DC <= 100	10	31	684	323	75	21	63	61	9	11	21	167	260	156	63
	100 < DC <= 150	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd
	More	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd
	Total	214	668	303	322	65	17	70	85	5	13	18	158	273	164	49
The Netherlands	10 < DC <= 25	14	1 486	130	307	70	23	105	41	0	23	24	198	286	109	20
	25 < DC <= 50	88	6 119	285	326	65	21	86	35	2	29	23	175	262	152	65
	50 < DC <= 75	91	5 506	459	328	65	20	79	37	3	36	19	168	260	160	68
	75 < DC <= 100	68	3 773	672	325	66	21	73	38	5	36	17	164	254	161	71
	100 < DC <= 150	65	3 608	881	325	68	19	67	38	6	40	13	160	251	165	74
	More	17	443	1 553	344	68	22	69	36	12	39	14	171	261	173	83
	Total	343	20 935	519	327	66	20	75	37	5	36	17	167	257	160	70
Austria	0 < DC <= 10	35	3 957	45	301	66	27	111	108	0	9	4	204	325	97	-24
	10 < DC <= 25	317	9 881	106	310	66	26	81	81	2	9	5	175	270	135	39
	25 < DC <= 50	92	2 216	214	311	69	26	71	75	2	10	8	167	260	144	51
	50 < DC <= 75	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd
	75 < DC <= 100	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd
	Total	447	16 168	109	308	67	26	80	81	2	9	6	175	271	133	37
Portugal	0 < DC <= 10	23	2 600	24	325	91	10	63	42	2	0	6	166	214	159	111
	10 < DC <= 25	140	2 941	95	282	101	16	39	29	3	1	7	160	196	123	86
	25 < DC <= 50	120	2 060	217	303	104	23	36	33	6	2	7	169	210	135	93
	50 < DC <= 75	22	435	407	313	108	30	37	31	6	6	4	181	221	132	92
	75 < DC <= 100	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd
	100 < DC <= 150	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd
	Total	317	8 301	139	301	105	22	38	30	6	3	6	172	211	129	90
Finland	0 < DC <= 10	16	1 459	56	452	109	36	162	69	5	8	9	311	398	141	54
	10 < DC <= 25	195	10 305	135	461	105	31	124	78	9	10	7	269	364	192	97

		Representativeness of the sample		**Milk production**	**Milk receipts (€/t of milk)**	**Milk production costs (€/t of milk)**									**Milk margins (€/t of milk)**	
Member State	Number of dairy cows (DC)	Sample farms (/year)	Farms represented (/year)	Milk production - tons	Total receipts from milk	Total feed	Other specific costs	Farming overheads	Depreciation	Wages	Interests	Rent	Milk variable costs	Milk total inputs	Margin over variable costs	Margin over total input
	25 < DC <= 50	100	3 375	283	450	107	28	102	95	13	13	9	250	367	200	83
	50 < DC <= 75	17	577	484	444	102	28	108	102	16	18	13	253	386	191	58
	100 < DC <= 150	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd
	Total	329	15 748	174	455	106	29	115	87	11	12	8	262	368	193	87
Sweden	0 < DC <= 10	20	301	50	333	120	27	121	91	1	3	3	268	366	64	-33
	10 < DC <= 25	116	2 466	136	335	101	22	107	72	5	8	4	235	320	100	16
	25 < DC <= 50	121	3 327	293	335	100	17	92	63	7	15	8	216	302	119	33
	50 < DC <= 75	30	887	480	337	98	16	94	67	29	21	11	237	337	100	1
	75 < DC <= 100	14	419	711	336	106	14	73	57	35	20	16	228	321	108	15
	100 < DC <= 150	13	399	968	338	100	16	77	67	38	29	14	230	340	108	-2
	More	12	358	1 853	338	103	16	83	55	52	23	18	253	350	84	-12
	Total	327	8 157	380	336	101	17	88	63	26	19	12	232	326	104	11
The United Kingdom	0 < DC <= 10	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd
	10 < DC <= 25	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd
	25 < DC <= 50	94	3 792	226	263	74	30	60	29	6	6	11	170	216	93	46
	50 < DC <= 75	116	4 019	406	263	72	28	55	26	8	9	12	163	209	100	54
	75 < DC <= 100	105	3 208	597	268	74	26	53	22	15	10	12	168	212	100	55
	100 < DC <= 150	124	3 507	873	268	76	26	50	26	19	9	10	170	215	98	53
	More	111	3 121	1 537	271	75	26	50	25	27	11	13	178	227	93	44
	Total	559	18 339	672	268	74	26	52	25	19	10	12	172	219	96	49
EU-15	0 < DC <= 10	295	18 394	37	367	92	19	86	83	2	4	6	200	293	167	74
	10 < DC <= 25	1 897	77 278	113	342	86	21	88	60	3	8	9	198	274	144	67
	25 < DC <= 50	3 066	111 783	229	320	83	17	77	49	4	11	15	181	255	139	65
	50 < DC <= 75	1 518	47 596	406	317	80	18	71	43	7	16	18	175	251	142	66
	75 < DC <= 100	750	20 423	605	314	81	20	65	38	11	19	18	177	251	137	64
	100 < DC <= 150	581	14 450	864	314	83	21	59	35	15	24	14	178	251	136	63
	More	398	6 667	1 757	314	93	21	55	29	34	14	13	202	258	112	56
	Total	8 505	296 591	306	319	84	19	70	43	11	15	15	183	256	136	64

Source: EU FADN – DG AGRI, Milk allocation costs model. *including subsidies nd: not displayed (not enough farms in the cell).

Table 11: Average milk production costs and margins for farms specialised in dairying in the EU-10 by Member State and by herd size class (2004)

		Representativeness of the sample		Milk production	Milk receipts (€/t of milk)	Milk production costs (€/t of milk)									Milk margins (€/t of milk)	
Member State	Number of dairy cows (DC)	Sample farms	Farms represented	Milk production - tons	Total receipts from milk	Total feed	Other specific costs	Farming overheads	Depreciation	Wages	Interests	Rent	Milk variable costs	Milk total inputs	Margin over variable costs	Margin over total input
Czech republic	0< DC <=10	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd
	10< DC <=25	39	457	88	248	66	10	96	33	1	1	3	173	210	74	38
	25< DC <=75	47	368	272	251	69	10	80	34	18	4	4	176	218	75	33
	DC >75	57	235	2 090	251	77	18	74	20	75	3	4	245	272	6	-22
	Total	150	1 317	486	250	75	16	76	23	61	3	4	228	259	22	-8
Estonia	0< DC <=10	37	991	39	216	71	10	70	16	1	3	2	151	172	64	44
	10< DC <=25	61	431	96	221	69	13	64	19	5	2	1	152	175	69	46
	25< DC <=75	69	237	233	231	76	14	59	24	11	5	2	160	191	71	40
	DC >75	25	185	1 613	242	73	8	47	27	60	3	1	188	220	54	23
	Total	192	1 845	235	237	73	9	52	25	43	3	1	178	208	59	29
Hungary	0< DC <=10	15	1 519	17	326	110	13	100	38	0	2	4	223	267	103	59
	10< DC <=25	20	468	61	294	101	18	71	27	20	8	4	210	249	83	44
	25< DC <=75	18	186	202	253	97	19	53	20	13	4	7	181	213	71	40
	DC >75	33	232	1 947	266	120	24	76	21	46	12	7	266	306	1	-40
	Total	86	2 406	226	270	117	22	75	22	40	11	7	255	295	15	-25
Lithuania	0< DC <=10	29	3 035	34	192	47	3	36	19	1	0	3	87	109	105	83
	10< DC <=25	108	2 242	70	193	40	5	32	16	1	1	3	78	97	115	95
	25< DC <=75	83	278	205	212	49	4	32	19	5	3	3	90	115	123	98
	DC >75	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd
	Total	230	5 582	59	197	44	4	34	17	3	1	3	86	107	111	90
Latvia	0< DC <=10	42	2 125	26	188	57	8	63	12	1	1	1	129	143	59	45
	10< DC <=25	56	901	79	223	57	12	77	21	3	3	1	149	174	74	49
	25< DC <=75	56	292	214	229	61	16	70	23	9	6	2	156	187	73	43
	DC >75	43	98	905	243	71	11	64	20	44	3	2	191	216	52	27
	Total	197	3 416	81	224	62	12	69	20	17	3	1	160	184	64	40
Poland	0< DC <=10	314	33 083	28	181	52	7	38	36	1	1	1	97	134	84	47

		Representativeness of the sample		**Milk production**	**Milk receipts (€/t of milk)**	**Milk production costs (€/t of milk)**									**Milk margins (€/t of milk)**	
Member State	Number of dairy cows (DC)	Sample farms	Farms represented	Milk production - tons	Total receipts from milk	Total feed	Other specific costs	Farming overheads	Depreciation	Wages	Interests	Rent	Milk variable costs	Milk total inputs	Margin over variable costs	Margin over total input
	10< DC <=25	906	27 326	73	199	56	7	34	30	1	2	1	97	131	102	69
	25< DC <=75	338	4 121	187	213	57	8	31	25	3	3	1	99	128	114	85
	DC >75	17	122	1 073	209	64	13	33	16	16	4	2	125	148	84	61
	Total	1 575	64 651	59	198	55	7	34	30	2	2	1	98	132	100	66
Slovakia	0< DC <=10	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd
	10< DC <=25	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd
	DC >75	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd
	Total	18	143	323	229	90	16	83	45	36	4	19	225	294	3	-65
Slovenia	0< DC <=10	29	3 912	27	255	64	17	91	119	0	3	2	173	297	82	-42
	10< DC <=25	102	2 629	79	263	73	21	61	75	1	4	2	156	236	107	27
	25< DC <=75	68	800	221	277	84	21	44	62	2	6	3	151	222	126	55
	DC >75	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd
	Total	202	7 358	68	266	75	20	61	79	1	4	3	158	244	109	23
EU-10 (without CYP)	0< DC <=10	477	44 963	28	193	55	8	46	40	1	1	1	109	151	84	42
	10< DC <=25	1 298	34 517	74	207	57	9	39	33	1	2	1	106	142	101	65
	25< DC <=75	679	6 283	200	228	64	11	41	30	5	4	2	120	156	108	72
	DC >75	196	955	1 597	249	88	17	65	22	55	6	5	224	257	24	-9
	Total	2 650	86 718	76	218	65	11	47	31	14	3	2	137	173	81	45

Source: EU FADN – DG AGRI, Milk allocation costs model. *including subsidies nd: not displayed because there are less than 15 farms in the cell.

Table 12: Statistics of milk margins over variable costs by Member State in 2004
(individual ratio €/t of milk, milk specialised farms)

Country	Number of observation	Mean	**Standard Deviation**	Minimum	Maximum	Lower Quartile	Median	Upper Quartile
Belgium	223	170	227	15	416	141	169	201
Czech republic	150	62	167	-117	184	21	71	101
Denmark	342	117	155	-39	225	96	118	142
Germany	1 754	123	251	-145	327	101	126	149
Spain	570	171	295	-67	353	136	174	206
Estonia	192	62	129	-135	176	38	69	87
France	1 212	130	338	-101	469	106	132	156
Hungary	86	61	**584**	-224	258	22	63	142
Ireland	297	139	237	4	259	121	141	160
Italy	1 262	220	**726**	-608	1 167	143	200	259
Lithuania	230	109	235	-95	222	77	105	138
Luxembourg	205	160	75	-34	246	138	166	189
Latvia	197	61	190	-133	194	35	62	87
The Netherlands	329	152	304	8	286	130	155	176
Austria	473	113	361	-171	339	84	122	148
Poland	1 575	91	222	-32	221	69	90	114
Portugal	312	145	**642**	-18	2 086	108	140	168
Finland	341	192	**464**	-79	409	155	198	236
Sweden	332	99	302	-328	218	70	106	142
Slovakia	18	-16	176	-197	36	-25	-7	25
Slovenia	202	91	320	-45	366	66	100	126
The United Kingdom	540	101	262	-173	343	79	105	128

Source: EU FADN – DG AGRI, Milk allocation costs model.

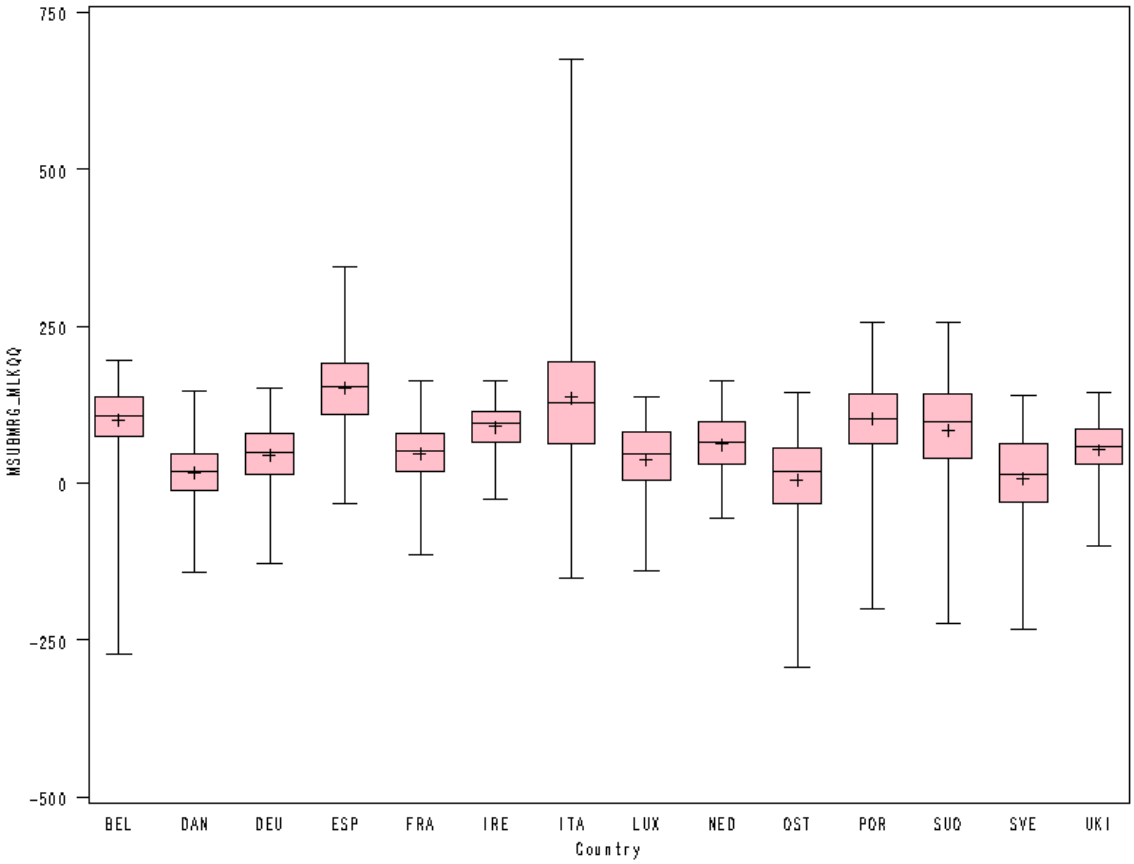
Table 13: Statistics of milk margins over total inputs by Member State in 2004
(individual ratio €/t of milk, milk specialised farms)

Country	Number of observation	Mean	**Standard Deviation**	Minimum	Maximum	Lower Quartile	Median	Upper Quartile
Belgium	223	100	348	-272	203	74	108	137
CYP	6	61	335	-11	141	-7	55	132
Czech republic	150	28	177	-158	173	-15	23	62
Denmark	342	16	213	-149	148	-11	20	47
Germany	1754	44	330	-275	172	13	49	79
Greece	11	112	485	11	168	75	129	147
Spain	570	151	333	-89	344	109	154	192
Estonia	192	38	145	-222	164	17	44	62
France	1212	47	394	-294	233	19	51	79
Hungary	86	24	**587**	-291	213	-17	40	102
Ireland	297	90	275	-47	191	66	95	115
Italy	1262	137	**706**	-765	982	62	128	193
Lithuania	230	88	213	-99	203	59	81	118
Luxembourg	205	38	109	-267	144	5	46	82
Latvia	197	44	212	-189	181	14	52	81
The Netherlands	329	62	403	-101	196	31	65	99
Austria	473	6	475	-321	193	-33	19	57
Poland	1575	53	276	-155	183	27	57	83
Portugal	312	103	**686**	-246	1989	63	103	141
Finland	341	85	**647**	-531	324	40	98	142
Sweden	332	7	393	-464	199	-30	14	62
Slovakia	18	-50	283	-484	30	-53	-23	5
Slovenia	202	-17	**676**	-418	289	-38	4	56
The United Kingdom	540	53	310	-312	297	30	59	87

Source: EU FADN – DG AGRI, Milk allocation costs model

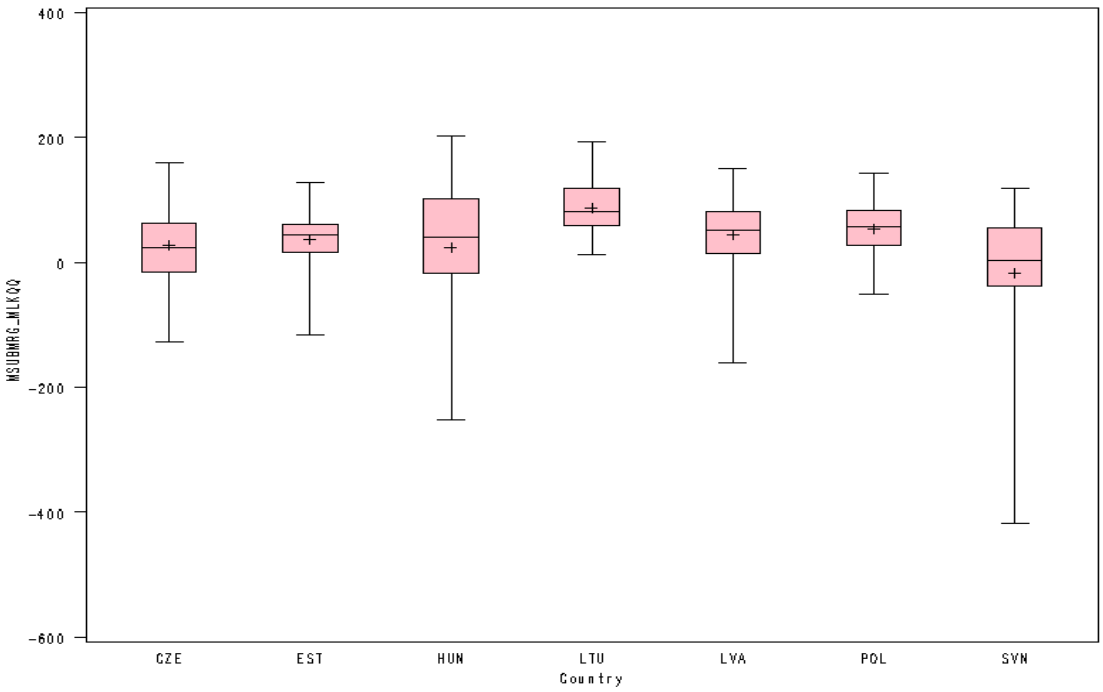
The extreme values are not displayed. The whiskers represent the percentile 1 and 99 (values separating 1% and 99% of the population), the cross represents the mean, and the line represents the median, the box the lower and upper quartiles.

Figure 10: Range of milk margins over total inputs by Member State of EU-15 in 2004 (individual ratio €/t of milk, milk specialised farms)



Source: EU FADN – DG AGRI, Milk allocation costs model.

Figure 11: Range of milk margins over total inputs by Member State of EU-10 in 2004 (individual ratio €/t of milk, milk specialised farms)



Source: EU FADN – DG AGRI, Milk allocation costs model