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DIRECTORATE-GENERAL FOR AGRICULTURE AND RURAL  
DEVELOPMENT

Directorate L. Economic analyses and evaluation  
**L.3. Analysis of the situation of agricultural holdings**

## **EU FARM ECONOMICS OVERVIEW**

### **FADN 2006**

#### **EXECUTIVE SUMMARY**

The Farm Accountancy Data Network (FADN) is an instrument for evaluating the income of agricultural holdings. It can also be used to study the impact of the Common Agricultural Policy (CAP). Drawing on this database, this report analyses the economic results of EU farms in 2006 in the light of the trend over the last ten years.

Agricultural holding **income**, measured in terms of FNVA/AWU<sup>1</sup> and profit/AWU<sup>2</sup> per farm, for EU25 in 2006 was €18 289 and €264 respectively. Denmark, the Netherlands and Belgium were the Member States (MS) with the largest FNVA/AWU, while Slovakia, Slovenia and Lithuania showed the lowest values for this indicator. Granivore (pig and poultry) farms shared the largest FNVA/AWU and profit/AWU in 2006 with €29 714 and €11 189 respectively. Mixed holdings, on the other hand, recorded the lowest FNVA/AWU and grazing livestock farms the lowest profit/AWU, with €13 260 and €1 824 respectively.

The **multi-factor productivity ratio** (output-to-input ratio) was highest in Spain, Greece and Italy (over 1.5, meaning that for every euro spent on farm inputs, more than €1.5 was obtained from the outputs) and lowest in Slovakia, Finland and Sweden (under 0.85). Farms growing other permanent crops exhibited the highest productivity ratio in 2006 (1.59), followed by wine, horticulture and granivores (all above 1.2). By contrast, field crops, mixed holdings and grazing livestock continued to show a productivity ratio around 1.

**Total public support in total receipts** (i.e. the proportion of EU payments and national aid in total farm receipts) stood at 16% for EU25 in 2006, when Finland was the Member State (MS) with the largest percentage (38.2%) and the Netherlands the lowest, with 4.9%. The highest level of dependence on public support was found in grazing livestock, with 28.6%, and the lowest in horticulture, with 1.2%.

Denmark was the MS with the highest **wage rate** (€19.65/hour), while Lithuania paid the lowest (€1.67/hour). In 2006, Sweden and Ireland spent more money in terms of total inputs

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<sup>1</sup> Farm net value added (FNVA) is obtained by deducting total intermediate consumption (farm-specific costs and overheads) and depreciation from farm receipts (total output and public support). When expressed per annual work unit (AWU) it takes into account differences in the labour force to be remunerated per holding.

<sup>2</sup> Profit is calculated by, on the one hand, adding subsidies on investment to FNVA and, on the other, deducting total external factors (interest, wages and rent paid) and the total own factors of the farm (labour, capital and land, excluding interest paid). When expressed per annual work unit (AWU) it takes differences in the labour force into account in what is left at the farm after remunerating all costs.

on **contractual work per farm** (7.3% and 7.0% respectively) and Lithuania was the MS with the lowest (0.8%). In the same year, the share of farms with contractual work ranged from 99.33% of the total holdings in the sample in Luxembourg to 21.90% in Lithuania. In 15 MS more than 75% of holdings offered contractual work. Cyprus, Portugal and Lithuania were the only MS where contractual work was equal to or less than 50%.

The average **net worth** (total capital minus total debts) value for FADN farms in EU25 was €264 095 in 2006. Slovakia showed the highest net worth value (€1 049 374), while the Latvian average farm was lowest on €57 757. None of the total assets averages by type of farming showed a financial structure with more than 35% liabilities. Horticulture and granivore holdings showed the largest percentage of liabilities (over 25%). Milk farms reported the largest net worth per farm (€491 801), while farms specialising in other permanent crops had the lowest (€154 764).

**Solvency** (expressed as the liabilities-to-assets ratio, indicating the proportion of liabilities (debts) used to finance assets) stood at 15% for both EU15 and EU25. Greece and Italy were the MS with the most solvent farms, with values lower than 1% (low values for this ratio give farms better options to meet their payment obligations) and Denmark, France and the Netherlands the least solvent (with ratios higher than 35%). FADN horticulture holdings were the least solvent in EU25 in 2006 (31%). By contrast, farms focusing on other permanent crops were the most solvent (4%).

**Liquidity** (expressed as current assets divided by current liabilities) on the average EU25 farm showed a value of 5.41 in 2006. Cypriot and Spanish farms had the highest liquidity (and were therefore in a better position to face any sudden financial difficulty by selling current assets), while Germany and Estonia registered the lowest. Holdings focusing on growing other permanent crops showed the largest current ratio (19.73). Horticulture farms proved the least liquid in EU25, with current ratios of 3.36.

Latvian farms were the most profitable in terms of **return on assets** (ROA, expressed as FNVA divided by average total assets), as they obtained the largest income from their assets (before paying external and internal factors). At the other end of the scale, Slovakian farms were the least profitable in 2006. Horticultural holdings yielded the largest ROA per EU25 farm (22.89%). The other types of farming remained in a range from 14.31% to 7.09% in 2006, with grazing livestock holdings showing the lowest profitability.

In general, most of these indicators of farm performance showed an improvement from 1996 to 2006, apart from the productivity ratio for which a general decrease was observed over the years. This improvement was accompanied by a parallel increase in average farm size. The productivity decrease can be partly explained by the subsequent CAP reforms, which implied a progressive decrease in price support, while direct payments have been progressively introduced. This price support is reflected in output and any reduction in it produces a productivity drop. While EU10 farms' profitability has increased since 2004, the ROA of the average EU15 farm has kept in a range from 9% to 11%.

The **Farm Accountancy Data Network (FADN)** is a European system of sample surveys conducted every year to collect structural and accountancy data on farms, with the aim of monitoring the income and business activities of agricultural holdings and evaluating the impact of the measures taken under the Common Agricultural Policy.

The FADN field of survey covers only farms above a minimum economic size (threshold) in order to include the most relevant part of the agricultural activity of the EU Member States, i.e. at least 90% of the total standard gross margin (SGM) covered in the Farm Structure Survey (FSS). In 2006 the sample consisted of approximately 75 000 holdings in EU-25, which represent 4 million out of a total of about 10 million farms (40%) included in the FSS.

The rules applied aim to provide representative data from three dimensions: region, economic size and type of farming. The FADN is the only source of micro-economic data that is harmonised, i.e. applies the same book-keeping principles in every EU country.

For further information see: <http://ec.europa.eu/agriculture/rca/index.cfm>.

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# 1. FARM INCOME

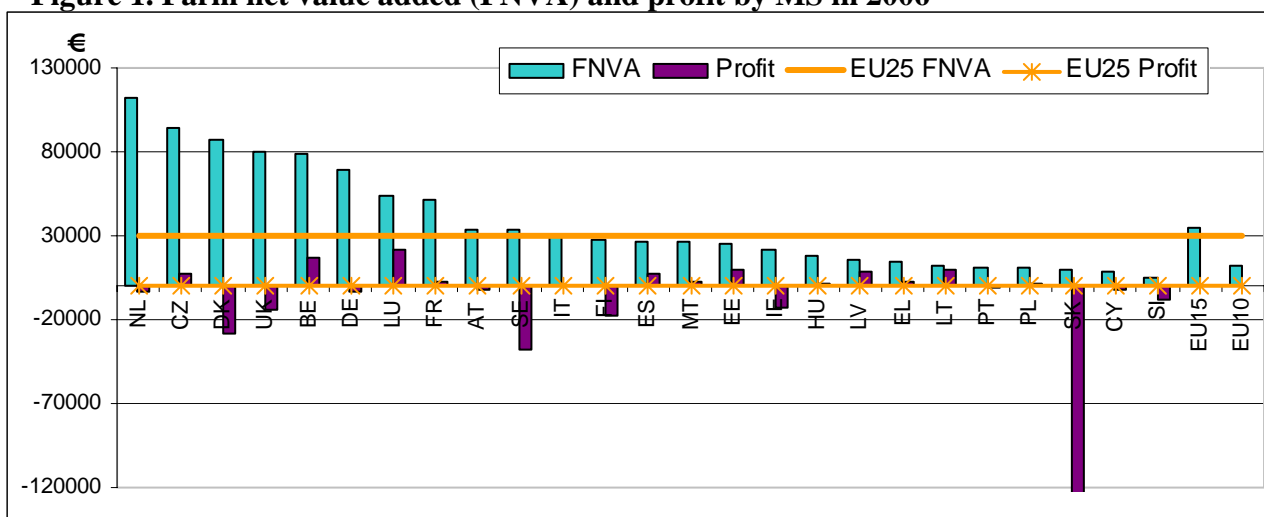
For the purpose of this report holding's income is measured by estimating the **farm net value added (FNVA)**<sup>3</sup> and **profit**<sup>4</sup>.

**FNVA** indicates the remuneration of all production factors (land, capital and labour), both owned by the farm and external. It equals outputs (production value) plus public support (current subsidies minus taxes) minus both intermediate consumption (specific costs and farming overheads) and depreciation. Thus, it is an indicator of the economic performance of the farms from which wages, rents and interest still need to be paid and own factors remunerated. Appendix 1 shows the method followed for calculation of the different income components.

**Farm profit** is another indicator of the economic performance of holdings. It is obtained when total external factors (interest and other financial costs, wages and rents) and the farm's own factors (labour, land and capital) are paid and the subsidies and taxes on investment are taken into account. When comparing profit between MS, it must be taken into account that the profit is needed to remunerate the farm's capital and family labour, but not land in the MS in which renting land is a common practice (as in France).

Total own factors are estimated from FADN data. Own labour costs are estimated as the expense that would be added to the farm if it needed to hire as many employees as the number of family members working on the farm. Own land is estimated as the cost that would be added to the holding if it needed to rent as much land as it owns. Finally, own capital costs are valued using an interest rate equal to the rate for long-term government bonds minus the inflation rate. For the calculation of profit, the interest paid is added again to the equation.

**Figure 1. Farm net value added (FNVA) and profit by MS in 2006\***



Source: DG AGRI EU FADN

\*2006 data from Spain and Germany are provisional; therefore the EU25 and EU15 averages are also provisional.

<sup>3</sup> Farm net value added (FNVA) is obtained by deducting total intermediate consumption (farm-specific costs and overheads) and depreciation from farm receipts (total output and public support).

<sup>4</sup> Profit is calculated by adding subsidies on investment to FNVA and deducting total external factors (interest, wages and rent paid) and total own factors (labour, capital and land).

## 1.1. FARM NET VALUE ADDED AND FARM NET INCOME IN 2006

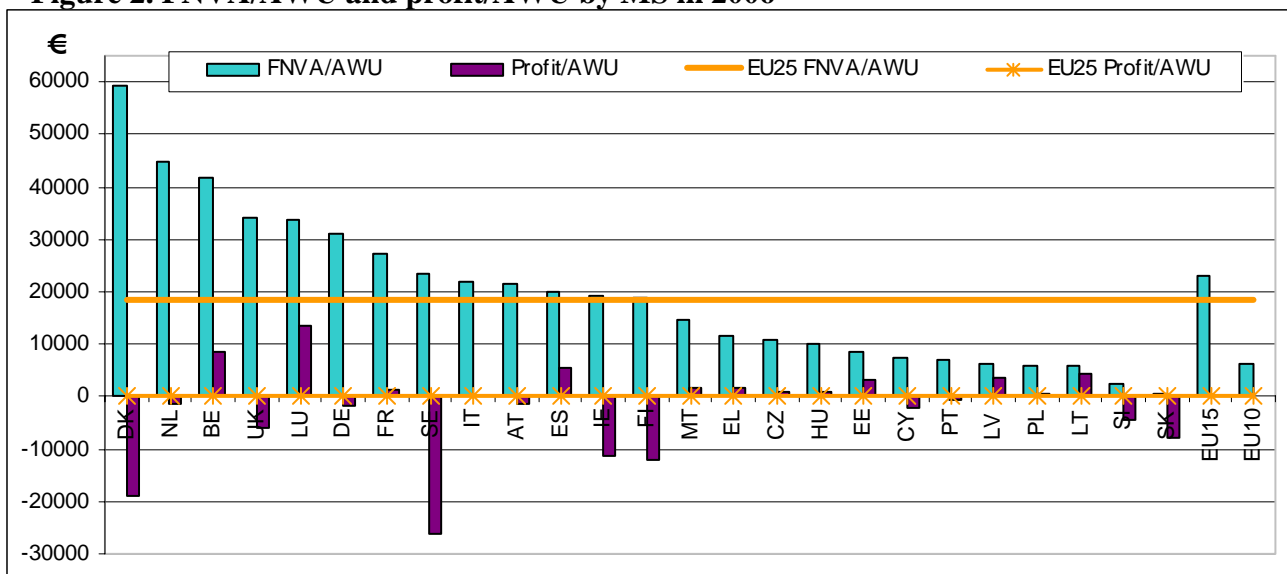
### A. ANALYSIS BY MS

The average FNVA per farm for EU25 was €29 708 in 2006, when the Netherlands was the MS with the largest FNVA (€12 397) and Slovenia with the lowest (€4 592) (see Figure 1). The average profit per farm for EU25 was €129, with Luxembourg at the head of the EU (€1 606) and Slovakia the tail-ender (€-135 768). The result for Slovakia, where less than 10% of the labour is unpaid, illustrates the labour intensity of Slovakian farms (17.6 AWU per farm on average) (see Figure 1). Apart from this fact, this negative figure might be a consequence of the method used to estimate the cost of depreciation (which makes this cost very high) and own feedstuff production costs.

Other MS show a large gap between FNVA and profit that can be explained by different reasons. While the Netherlands and Denmark have large expenses on interest, in Slovakia, the Czech Republic, the United Kingdom or Germany the amount of wages paid is the main factor behind this gap. In France, it is common practice for farmers to form companies that then rent land to their members. Therefore, the expenditure on renting land goes a long way towards explaining the differences between these two indicators.

The picture painted by Figure 1 changes slightly when FNVA and profit are expressed per AWU (annual work unit) (see Figure 2). As far as EU25 is concerned, the large differences between MS shown by the results of the analysis are inherent in the structure of their agriculture. The MS with the highest average FNVA per AWU were Denmark, the Netherlands and Belgium. These MS have a relatively high economic size threshold (see Appendix 2), which excludes smaller farms from the sample studied. Specialist horticulture, granivore and arable crop production are the main types of farming that pull up the income results of these countries. However, the MS with the highest FNVA/AWU (Denmark) showed a wide gap between the two income indicators, due to the large amount of interest paid by Danish farmers. From EU15, Portugal and Greece, two MS with a large number of small farms, had an average FNVA/AWU below the EU average. All EU10 MS had average incomes below the EU25 average.

**Figure 2. FNVA/AWU and profit/AWU by MS in 2006\***

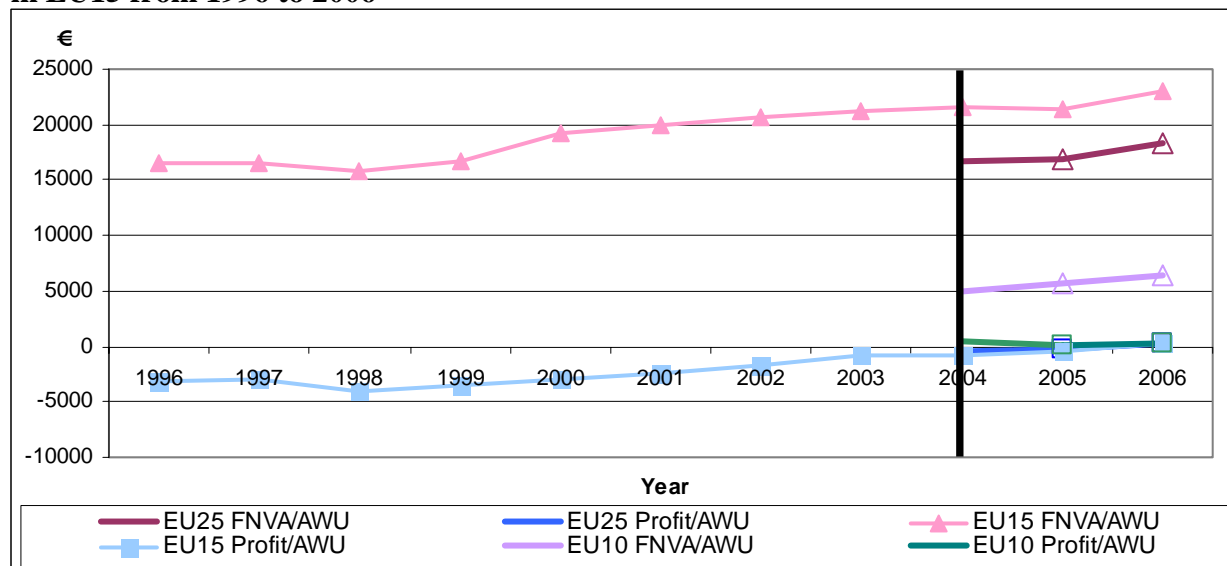


Source: DG AGRI EU FADN

\*2006 data from Spain and Germany are provisional; therefore the EU25 and EU15 averages are also provisional.

The average FNVA/AWU for EU25 was €18 289 in 2006, while profit/AWU was €264. Within the EU10, Slovakia, Slovenia and Lithuania showed the lowest values for FNVA/AWU, ranging from €581 in Slovakia to €6 014 in Lithuania. Slovakia, Slovenia and Cyprus had profit/AWU values below € 785. Slovakia had negative values for profit/AWU (€5 739). Profit/AWU and FNVA/AWU both showed an upward trend from 1996 to 2006 (see Figure 3) for EU15 and from 2004 to 2006 for EU10.

**Figure 3. Trend in income per labour unit (expressed as FNVA/AWU and profit/AWU) in EU15 from 1996 to 2006\***



Source: DG AGRI EU FADN

Note: the vertical line corresponds to 2004, the year in which the first data from the new Member States (the Czech Republic, Estonia, Cyprus, Latvia, Lithuania, Hungary, Malta, Poland, Slovenia and Slovakia) were recorded. Values in current euros.

\*Data for 2000 from the Netherlands are estimates based on 1999. No FADN data were recorded from Malta and Cataluña (Spain) in 2004. 2006 data from Spain and Germany are provisional; therefore the EU15 and EU25 averages are also provisional.

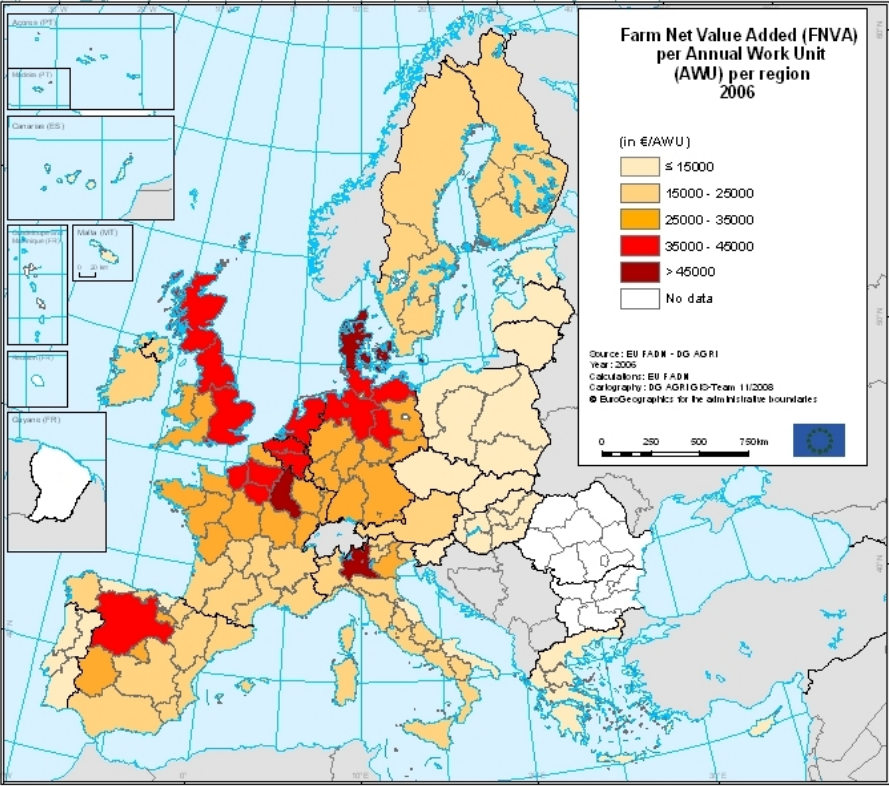
At regional level, the holdings with the largest income in terms of FNVA/AWU were located in north-west Europe, Castilla y León (Spain) and Lombardia (Italy) (see Map 1). In these regions there is a large percentage of milk farms, granivore production, horticulture, arable crops and livestock breeders (either with intensive production systems for meat or benefiting from high prices during 2006). If both total external and own factors are deducted from FNVA/AWU, the location of the farms with the largest income in terms of profit/AWU changes. Regarding external factors, Danish and Dutch farms have, on average, large interest expenses, while UK and German farms pay relatively large amounts in wages. Therefore, farms in these regions may shift from having large income in terms of FNVA/AWU to much lower income in terms of profit/AWU. When own factors are taken into account, again Denmark, the Netherlands, the United Kingdom and Sweden are the MS with the highest costs. Farms in north-western Europe still earn relatively large profit/AWU, but regions in the south of Europe (in Spain, Portugal, Greece and Italy) and in Estonia, Latvia and Lithuania also generate high profit/AWU. In some MS, like Luxembourg, Estonia, Latvia and Lithuania, the cost of own capital is actually not a cost but a source of revenue. This happens when the inflation rate is higher than the interest rate for long-term government bonds.

## B. ANALYSIS BY TYPE OF FARMING

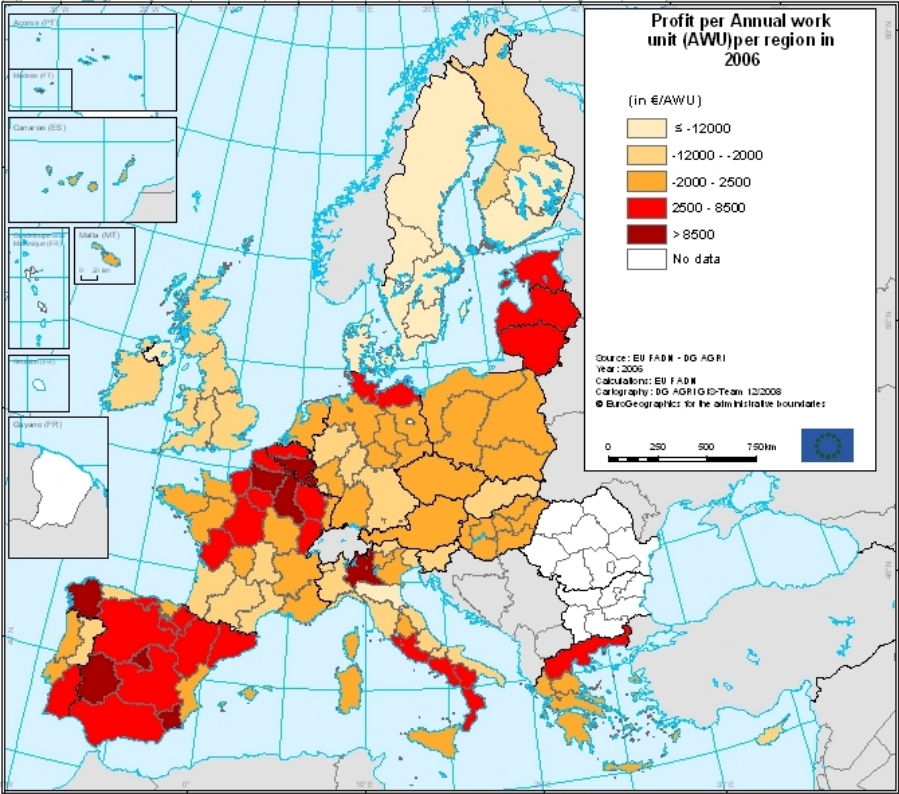
Horticulture, granivore production (pig and poultry farms) and milk are the types of farming with the highest FNVA per farm, with €66 380, €9 859 and €47 818 respectively (see Figure 4). By contrast, holdings producing other permanent crops (citrus and other fruit,

olives and other permanent crops) have the lowest FNVA per farm (€18 519). Horticulture exhibits a wide difference between FNVA and profit, mainly due to its paid labour intensity.

**Map 1. FNVA/AWU by region in 2006**



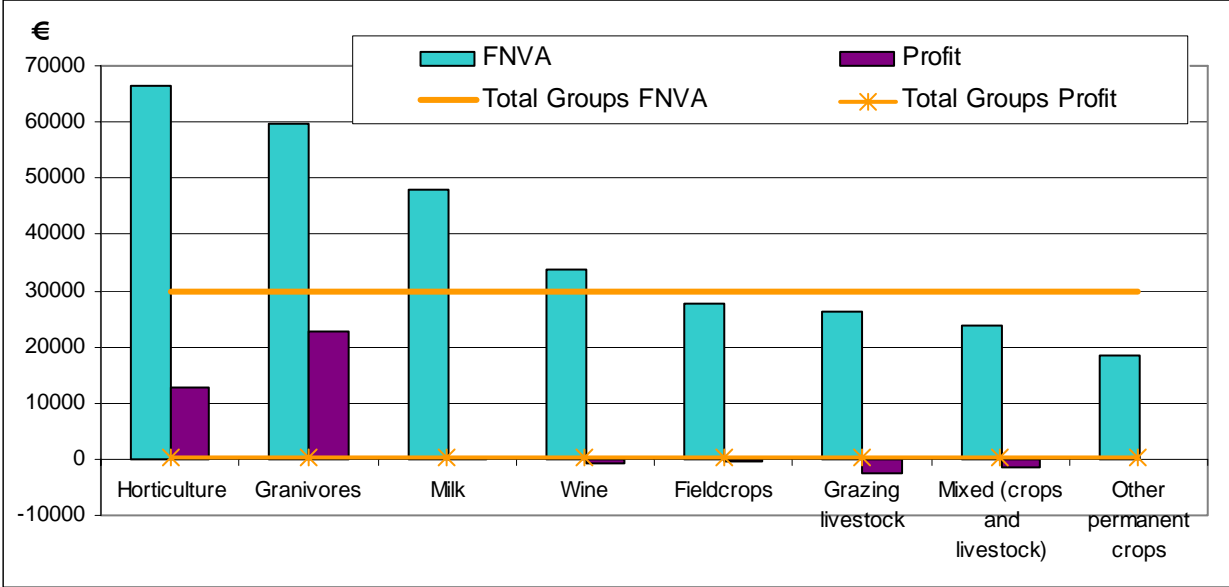
**Map 2. Profit/AWU by region in 2006**





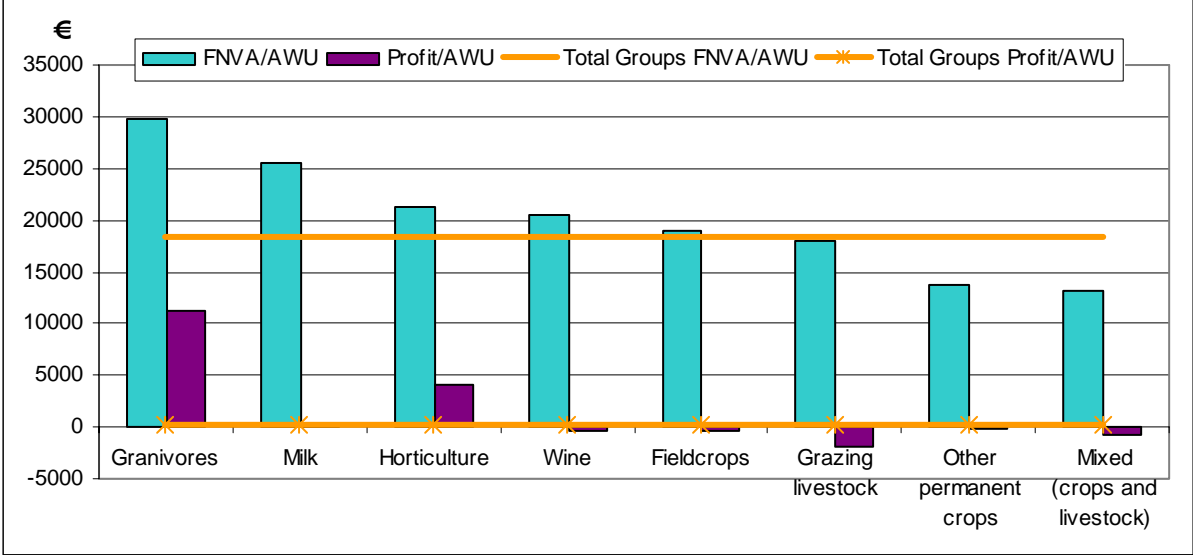
Granivore holdings shared the largest FNVA/AWU and profit/AWU in 2006 with €29 714 and €1 189 respectively. Mixed holdings had the lowest FNVA/AWU and grazing livestock the lowest profit/AWU, with €13 260 and €1 824 respectively (see Figure 5).

**Figure 4. Farm net value added (FNVA) and profit for EU25 by type of farming in 2006\***



Source: DG AGRI EU FADN  
 \*2006 data from Spain and Germany are provisional; therefore the total groups average is also provisional.

**Figure 5. FNVA/AWU and profit/AWU by type of farming in 2006\***



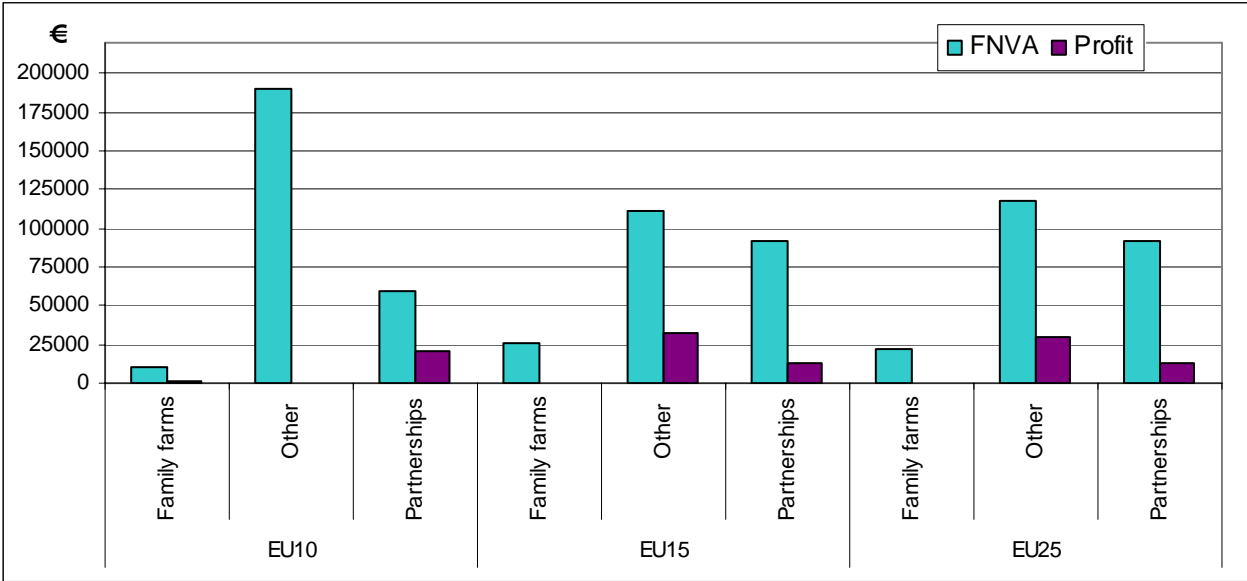
Source: DG AGRI EU FADN  
 \*2006 data from Spain and Germany are provisional; therefore the total groups average is also provisional.

**C. ANALYSIS BY ORGANISATIONAL FORM OF THE HOLDING**

From the organisational point of view, holdings can be divided into three groups: (1) family farms, where the economic results cover the unpaid labour and own capital of the holder and the holder’s family; (2) partnerships, where the economic results cover the production factors brought into the holding by several partners (at least half of whom participate in the farm’s work as unpaid labour); and (3) other holdings with no unpaid labour or not included in the other two groups (e.g. companies).

The EU averages for these three groups generally show larger FNVA values for non-family farms in absolute terms. Holdings classified as “other” in EU10 showed the largest FNVA with about €190 700, compared with €111 200 in EU15. However, the difference between FNVA and profit after remunerating external and own factors was largest for the holdings classified as “other” in EU10 (see Figure 6). By contrast, despite the fact that family farms earn less money in terms of FNVA in all the EU groups, they retained approximately 7% of their income after paying all their costs. Partnerships in the three EU groups retained between 14% and 35% of FNVA after paying all their dues.

**Figure 6. Farm net value added (FNVA) and profit by EU group and organisational form in 2006\***

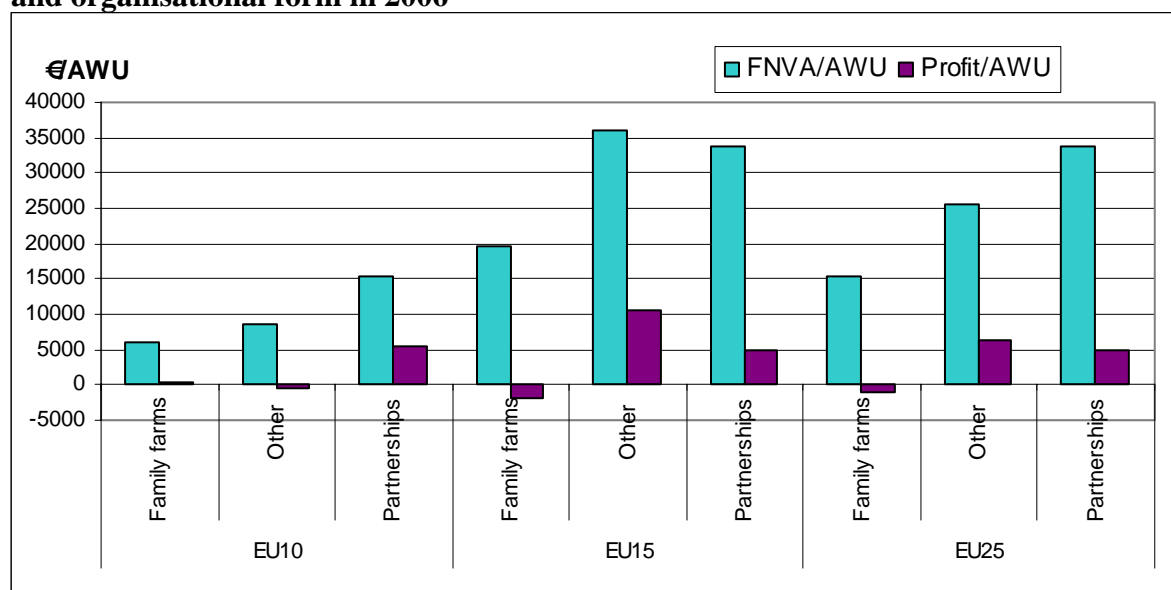


Source: DG AGRI EU FADN  
 \*2006 data from Spain and Germany are provisional; therefore the total groups average is also provisional.

When the above-mentioned indicators are expressed per AWU, non-family farms still record higher values (see Figure 7). However, the holdings classified under partnerships and “other” in EU15 now emerge with higher values. This can be explained by the larger labour force typifying the EU10 MS (3.8 AWU for partnerships and 22.5 AWU for others, compared with 2.7 AWU and 3.0 AWU respectively in EU15). In relative terms, family farms in EU15 showed the widest gap between FNVA and profit per AWU, followed by holdings classified as “other” in EU10.

See Appendix 3 for a bar chart of the income of the different organisational forms by MS.

**Figure 7. Farm net value added (FNVA) per AWU and profit per AWU by EU group and organisational form in 2006\***



Source: DG AGRI EU FADN

\*2006 data from Spain and Germany are provisional; therefore the total groups average is also provisional.

## 1.2. INCOME DISTRIBUTION ANALYSIS

### A. ANALYSIS BY MS

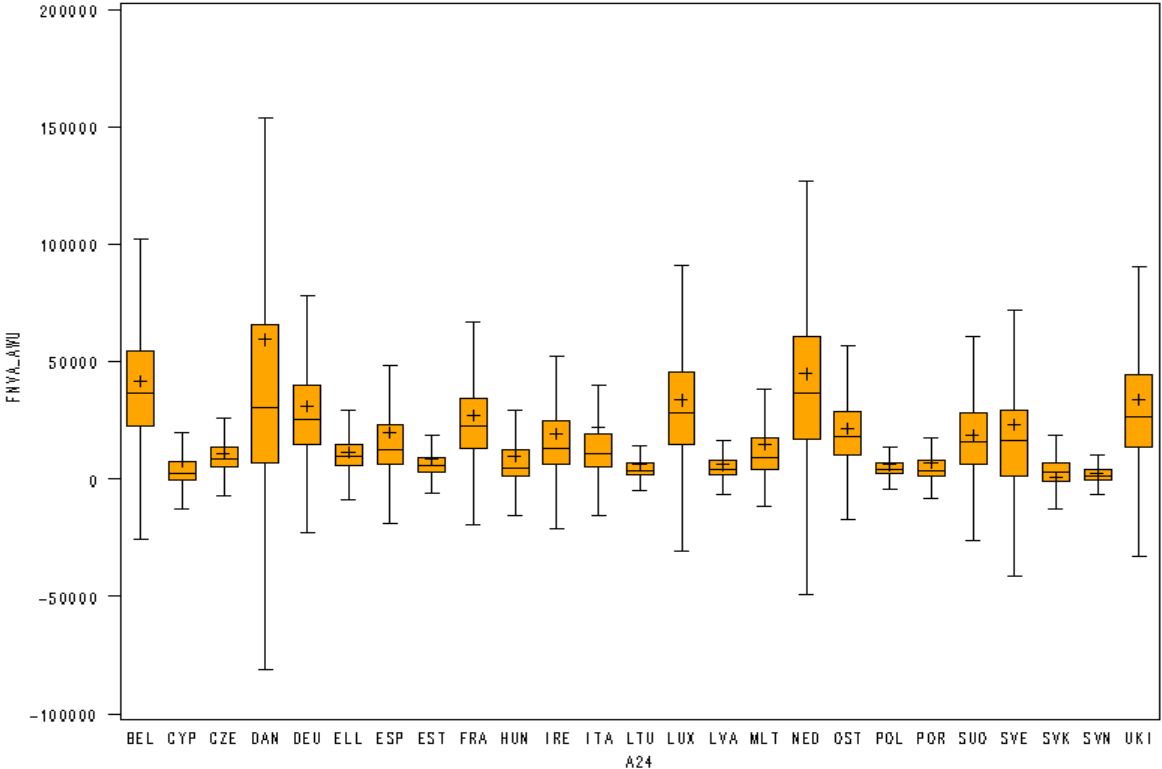
So far the farm FNVA/AWU and profit/AWU averages by MS have been addressed. This section gives further insight into the distribution of FNVA/AWU. This is illustrated by box-plot charts (see Figures 8 and 9), where the average is marked by a cross and the median by a line inside the box. Fifty per cent of the holdings receive at least the median income. The lower edge of the box corresponds to the 25th percentile and the upper edge to the 75th percentile. 50% of the population has income between these two values.

The Netherlands was the MS with the highest median FNVA/AWU, with 50% of holdings with an income higher than €36 657 and 25% receiving more than €60 806 (see Figure 6). Second came Belgium, where half of the farmers obtained at least €36 637. High incomes were also received by holdings in Denmark, Luxembourg and the United Kingdom. Relatively significant income scatter was observed in Denmark, where 50% of holdings received €30 308, but 25% of farmers had income lower than €7 031 and 25% at least €65 761. The Netherlands, Belgium, the United Kingdom and Luxembourg followed Denmark in income scatter, the difference between the 75th and 25th percentiles being above €30 000 in all four cases. This means that, excluding extreme values (the 25% of farmers with the highest income and the 25% with the lowest), farmers in these MS can have an income difference of more than €30 000. It should be added that some of the MS mentioned (Belgium, the Netherlands and the United Kingdom) have the largest thresholds in the EU. See Appendix 2 for details of the thresholds by MS in 2006.

The lowest median value for FNVA/AWU was found in Slovenia, where half of the holdings received less than €1 496 even though the average income was €2 274. The Slovenian median is closely followed by the figure for Cyprus, where half the farms obtained €2 459 even though the average income was €5 588. Slovenia, Poland and Latvia were the MS with the smallest scatter in their income, with a difference between the 75th and 25th percentiles of

around € 500, meaning that excluding extreme values (the 25% of farmers with the highest income and the 25% with the lowest), farmers from these MS can have an income difference of around € 500.

**Figure 8. Distribution of FNVA/AWU by MS in 2006. Means and medians\***



Source: DG AGRI EU FADN

Note: Weighted box plot. Outliers are not displayed. Whiskers indicate percentiles 5 and 95. BEL: Belgium, CYP: Cyprus, CZE: Czech Republic, DAN: Denmark, DEU: Germany, ELL: Greece, ESP: Spain, EST: Estonia, FRA: France, HUN: Hungary, IRE: Ireland, ITA: Italy, LTU: Lithuania, LUX: Luxembourg, LVA: Latvia, MLT: Malta, NED: Netherlands, OST: Austria, POL: Poland, POR: Portugal, SUO: Finland, SVE: Sweden, SVK: Slovakia, SVN: Slovenia, UKI: United Kingdom.

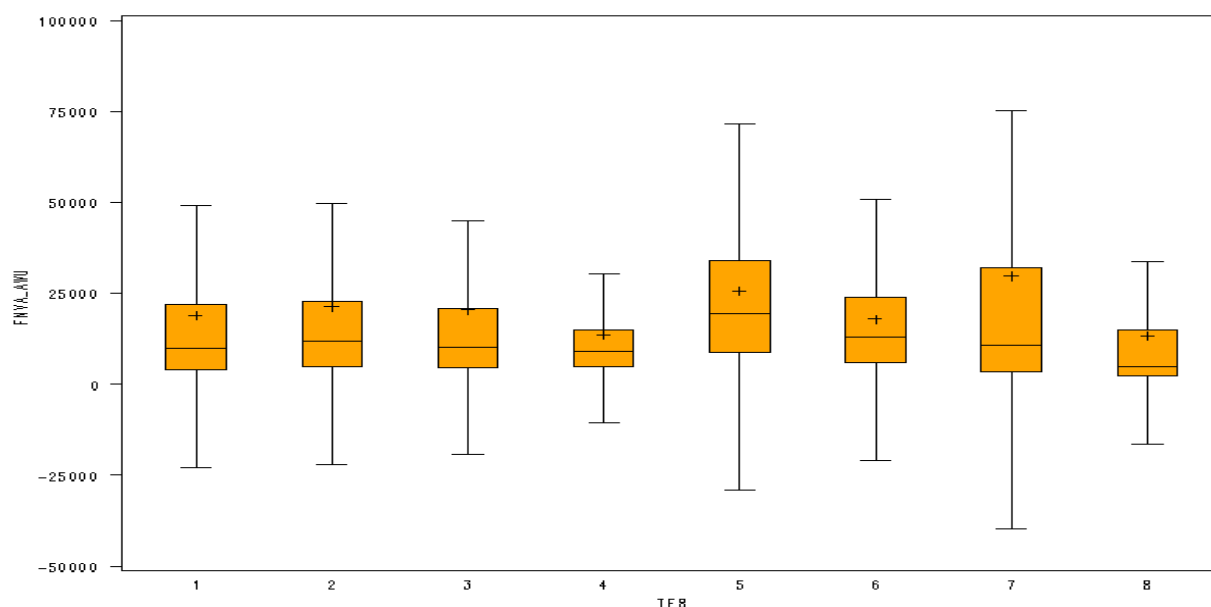
\*2006 data from Spain and Germany are provisional.

**B. ANALYSIS BY TYPE OF FARMING**

The lowest scatter of FNVA/AWU was found in other permanent crops and mixed holdings (see Figure 9). The average FNVA/AWU for holdings producing other permanent crops was €13 658, with 50% reporting incomes lower than €9 098 and the upper quartile (75% of the holdings) higher than €14 974. However, there was a significant gap between the average and the lower quartile (25th percentile) where 25% of farms generated at most €4 755. The largest scatter of income was observed for granivores and milk specialists. Granivore holdings showed the largest difference (€14 005) between the average and median FNVA/AWU, which was exacerbated by the relatively small number of holdings specialising in this line of production (see Appendix 4). It can therefore be concluded that the differences between the average and median recorded by type of farming were larger than those found by MS. This reveals that the differences in structure observed in each MS probably have a stronger influence on income than the type of farming.

The highest median income is obtained by milk farms, half of which generate at least €19 445 FNVA/AWU, a quarter less than €8 799 and a quarter more than €34 023.

**Figure 9. Distribution of FNVA/AWU by type of farming in 2006. Means and medians\***



Source: DG AGRI EU FADN

Note: 1- Field crops. 2- Horticulture. 3- Wine. 4- Other permanent crops. 5- Milk. 6- Grazing livestock. 7- Granivores. 8- Mixed (livestock and crops). Weighted box plot. Outliers are not displayed. Whiskers indicate percentiles 5 and 95.

\*2006 data from Spain and Germany are provisional.

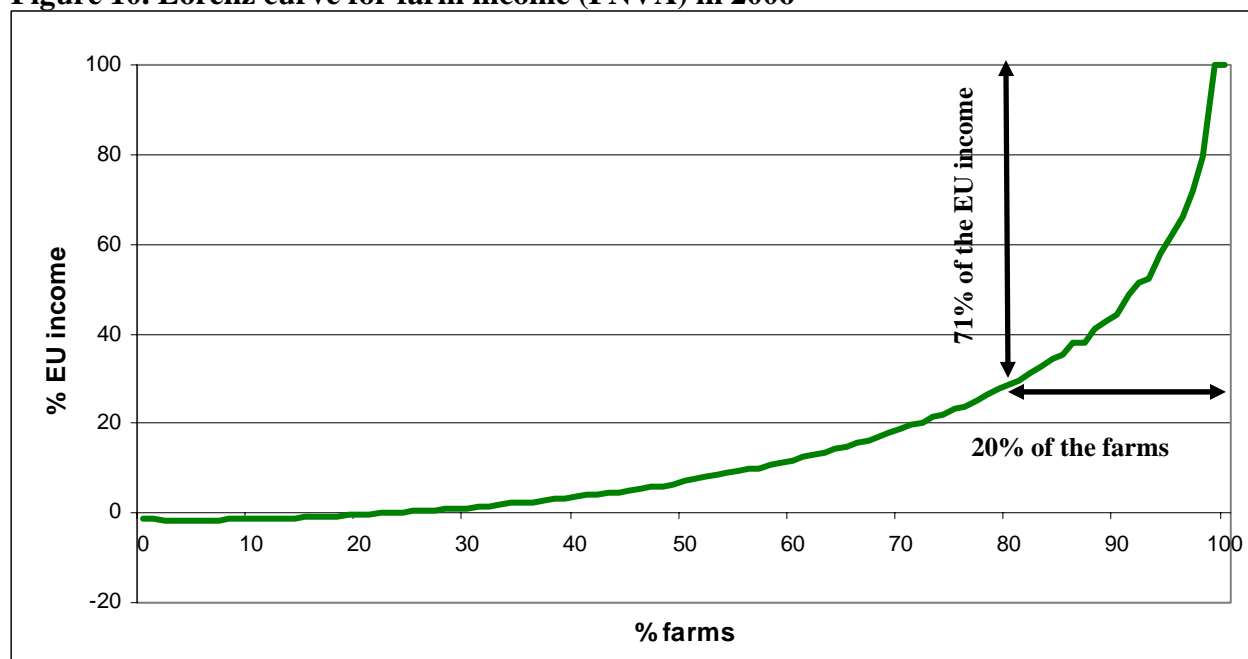
### C. GINI COEFFICIENT

The Gini coefficient is another measure of statistical distribution of a variable, in this case the scatter of income, among a population. Its value is always between 0 and 1. A Gini coefficient of 0 means that the distribution of income (measured as FNVA) is uniform (e.g. 50% of the income is earned by 50% of the farms). The Gini coefficient moves towards 1 as the income concentration increases (i.e. a higher share of the income is received by a smaller proportion of farms). In 2006, the Gini coefficients for the three EU groups remained in the range of 0.67 to 0.70. The small differences in income distribution between EU groups might be due to differences in farm structure and size. Generally, in EU10 MS there is a wider variety of farm structure than in EU15, ranging from small family farms (that are usually found in Poland or Czech Republic) to very large cooperatives (that are frequent in Slovakia, the Czech Republic or Hungary).

The trend in the Gini coefficient in EU15 from 1996 to 2006 showed a small increase, as can be seen in Table 1. This might be due to a progressive general increase in farm size at the same time as the number of farms decreased in EU15, producing a concentration of income. This leads to a smaller number of farms earning higher FNVA.

The Lorenz curve plots the cumulated share of FNVA received by the cumulated share of farmers (see Figure 10). For example, it illustrates the share of the income earned by 80% of the farmers ranked by increasing amount of income. In 2006, approximately 20% of the farm population of the three MS groups (EU25, EU15 and EU10) earned between 69.7% and 71.9% of the income.

**Figure 10. Lorenz curve for farm income (FNVA) in 2006\***



Source: DG AGRI EU FADN

\*2006 data from Spain and Germany are provisional.

The concentration of income differs when the type of farming is considered, with milk holdings showing the lowest Gini coefficient (0.468, with 20% of the milk farms earning 48% of the income) and granivore holdings the largest (0.667, with 20% of the granivore holdings earning 63% of the income).

**Table 1. Trend in the Gini coefficient from 1996 to 2006\***

Year	Gini coefficient/year			20% of farms earned the following % of income/year		
	EU25	EU15	EU10	EU25	EU15	EU10
1996		0.64			65.08%	
1997		0.65			66.51%	
1998		0.66			66.85%	
1999		0.66			67.50%	
2000		0.67			68.16%	
2001		0.67			69.28%	
2002		0.65			66.14%	
2003		0.67			67.95%	
2004	0.71	0.67	0.76	72.30%	69.15%	77.74%
2005	0.71	0.68	0.74	71.79%	68.51%	75.17%
2006	0.70	0.67	0.70	71.17%	69.69%	70.90%

Source: DG AGRI EU FADN

\*2006 data from Spain and Germany are provisional.

## 1.3 NET FARM INCOME COMPONENTS

### A. ANALYSIS FOR EU25, EU15 AND EU10

In line with the definitions set out above, FNVA is calculated from farm outputs, intermediate consumption (including total specific costs and farming overheads) plus depreciation (IC + D) and public support. In 2006, the average **output** per EU25 farm was €63 476 (see Figure 11) compared with €73 488 for EU15 and €30 916 for EU10.

Average **public support**<sup>5</sup> (current subsidies minus taxes) stood at €12 119 in 2006 for EU25, making up 16% of the total receipts. The average EU15 farm received €13 713 in public funding (16%) and the average EU10 farm €6 937 (18%). **IC + D** for the average EU25 farm equalled €45 608 (81% of the total expenses). Slightly different figures emerge for the average EU15 farm, in which IC + D expenses totalled €19 620 in 2006 (81%). In the same year EU10 farms averaged €24 940 for expenses on IC + D (86%).

**Taxes** made little impact on the total expenses of EU25, EU15 and EU10 farms, accounting in all three groups for approximately 1% of total farm expenses (€46, €750 and €307 respectively).

Farm net income (FNI) is obtained by deducting total external factors and other subsidies or taxes on investment not arising from current productive activity in the accounting year from FNVA. From FNI, the own factors of the farm still need to be paid to obtain the holding's net profit. **Total external factors** include three cost drivers: wages, rent and interest paid. These make up approximately 18% of the average EU25 farm expenses (€9 910); by comparison, the average total external factors are higher for EU15 (18% of total farm expenses) than for EU10 (13%).

See Appendix 5 for detailed information by MS.

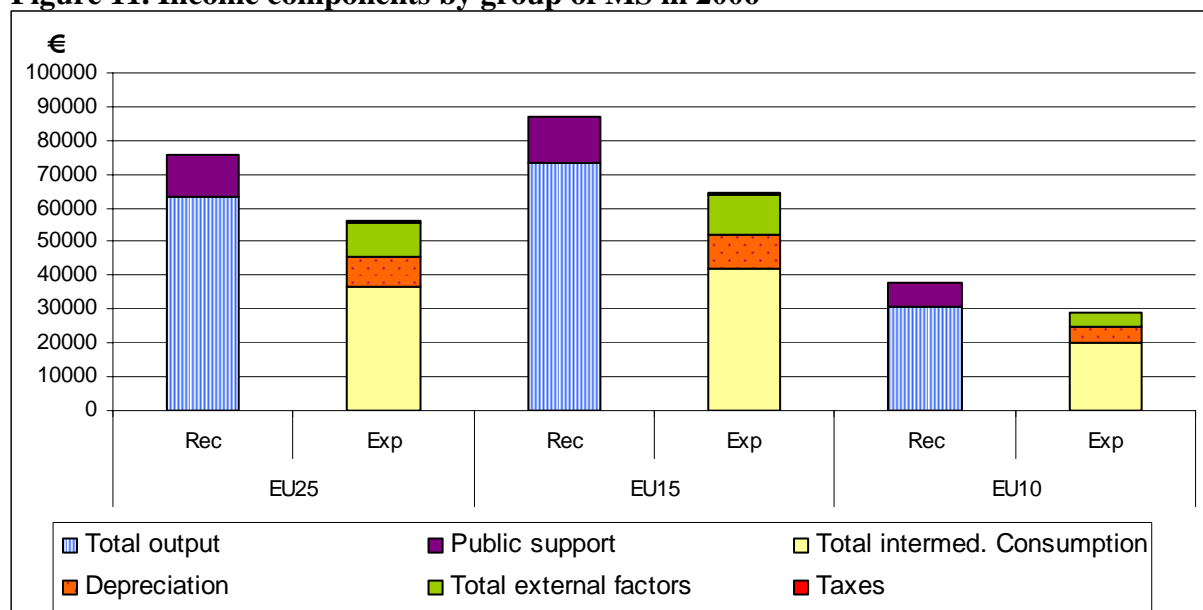
### B. ANALYSIS BY TYPE OF FARMING

Firstly, the largest average **output** by type of farming was shown by granivore holdings, with €197 955 and the lowest by farms growing other permanent crops, with €28 181 (see Figure 12). Secondly, milk holdings received the highest average **public support** per holding by type of farming (€22 085), followed by holdings specialising in grazing livestock, field crops and mixed production (€19 811, €15 065 and €13 425 respectively). Milk, grazing livestock and field crops received the highest public support per farm, in part because of implementation of the Common Agricultural Policy (CAP). Horticulture farms received the lowest funding per farm (€1 884). Thirdly, the highest average **intermediate consumption plus depreciation** by type of farming was, once again, found in granivore production (€46 731) and the lowest in other permanent crops (€12 728). Finally, the highest average **FNVA** was in horticulture holdings, with €66 380 and the lowest in farms producing other permanent crops, with €18 519.

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<sup>5</sup> Public support includes EU coupled and decoupled payments, less favoured area (LFA) payments, rural development payments and national aid.

**Figure 11. Income components by group of MS in 2006\***



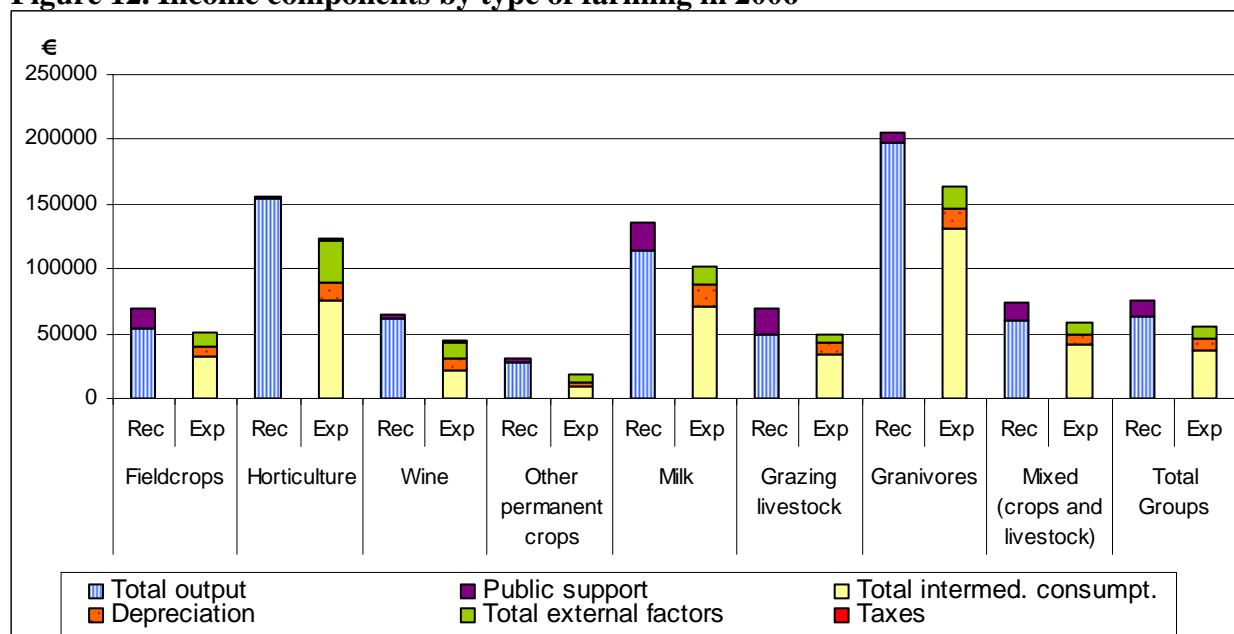
Source: DG AGRI EU FADN

Note. Rec. stands for receipts and Exp. stands for expenses.

\*2006 data from Spain and Germany are provisional; therefore the EU25 and EU15 averages are also provisional.

**Total external factors** (wages, rent and interest paid) were highest in wine holdings (29% of total farm expenses), followed by farms growing other permanent crops and horticulture holdings (28% and 26% respectively). The type of farm on which total external factors made the smallest impact are granivore holdings (10%). This could be linked mainly to their labour intensity and mechanisation. In absolute terms, however, horticulture holdings spent the most money on total external factors (€32 426), while growers of other permanent crops spent the least (€5 050).

**Figure 12. Income components by type of farming in 2006\***



Source: DG AGRI EU FADN

Note. Rec. stands for receipts and Exp. stands for expenses.

\*2006 data from Spain and Germany are provisional; therefore the total groups average is also provisional.



## 1.4. MULTI-FACTOR PRODUCTIVITY

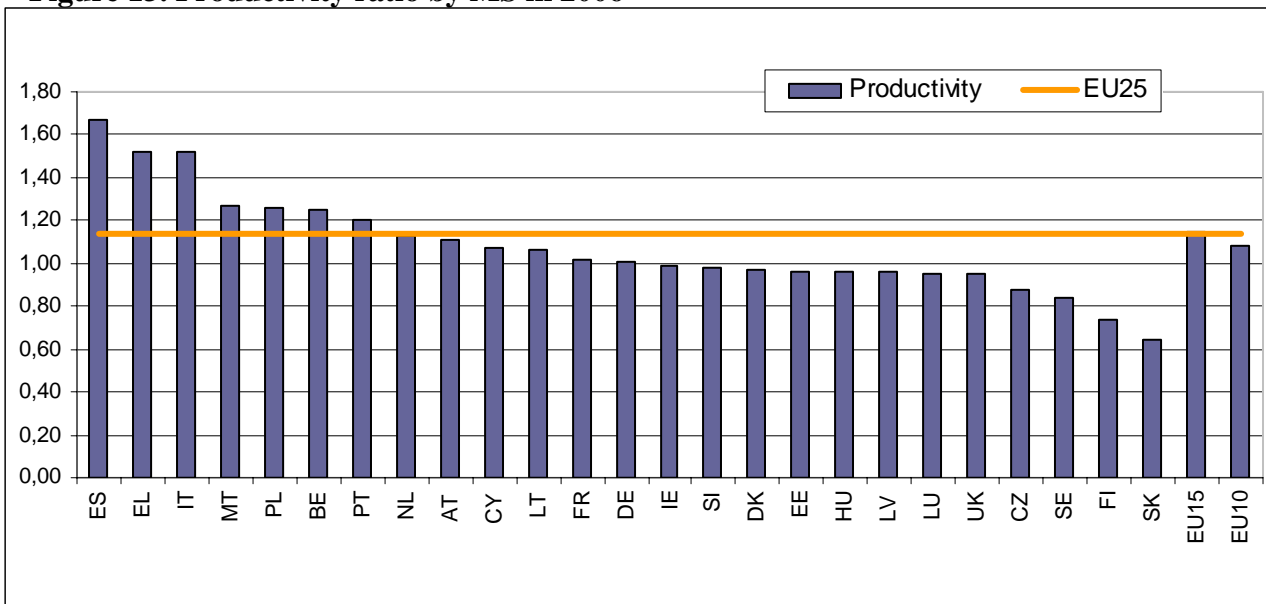
Figures 13 to 14 show the level of productivity of EU farms, expressed as the total output to total input ratio. There are several definitions of productivity, depending on the choice of input factors taken into account in the calculations, for example the total factor productivity (output obtained in relation to capital, labour, land and raw materials used), multi-factor productivity (if only some of these input factors are included) and partial productivity (if a single input factor is taken into account in the ratio, normally labour). For the purpose of this study, the second option was chosen. Therefore, in this ratio inputs cover total intermediate consumption, depreciation, external factors and taxes. Public support has not been included in the output calculation. Multi-factor productivity values larger than one indicate that the inputs used during the production process are covered by the outputs obtained. By contrast, values below one indicate a negative situation in which inputs cannot be paid for by the outputs obtained.

### A. ANALYSIS BY MS

In 2006, for every euro spent on farming by the average EU25 holding, €1.14 was earned. At MS level, Spain, Greece and Italy had the highest ratios (over 1.5) and Finland, Sweden and the Czech Republic the lowest (below 0.9, indicating larger inputs than outputs).

This ratio followed a downward trend over the period 1996 to 2006 for EU25, and also for EU15 and EU10 from 2004 on. Furthermore, the productivity ratio needs to be interpreted carefully, as price support is reflected in the output and any reduction in price support leads to a productivity drop. Therefore, part of the productivity decrease observed over the last ten years can be explained by the subsequent CAP reforms, which implied a progressive decrease in price support, while direct EU payments have been progressively introduced.

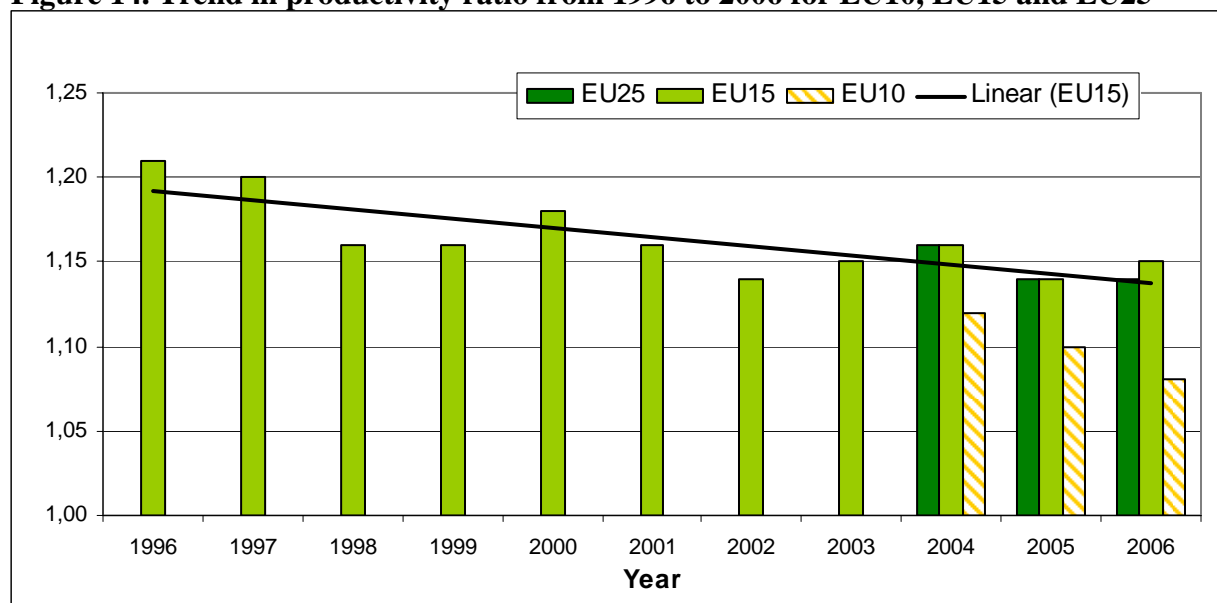
**Figure 13. Productivity ratio by MS in 2006\***



Source: DG AGRI EU FADN

\*2006 data from Spain and Germany are provisional; therefore the EU25 and EU15 averages are also provisional.

**Figure 14. Trend in productivity ratio from 1996 to 2006 for EU10, EU15 and EU25\***



Source: DG AGRI EU FADN

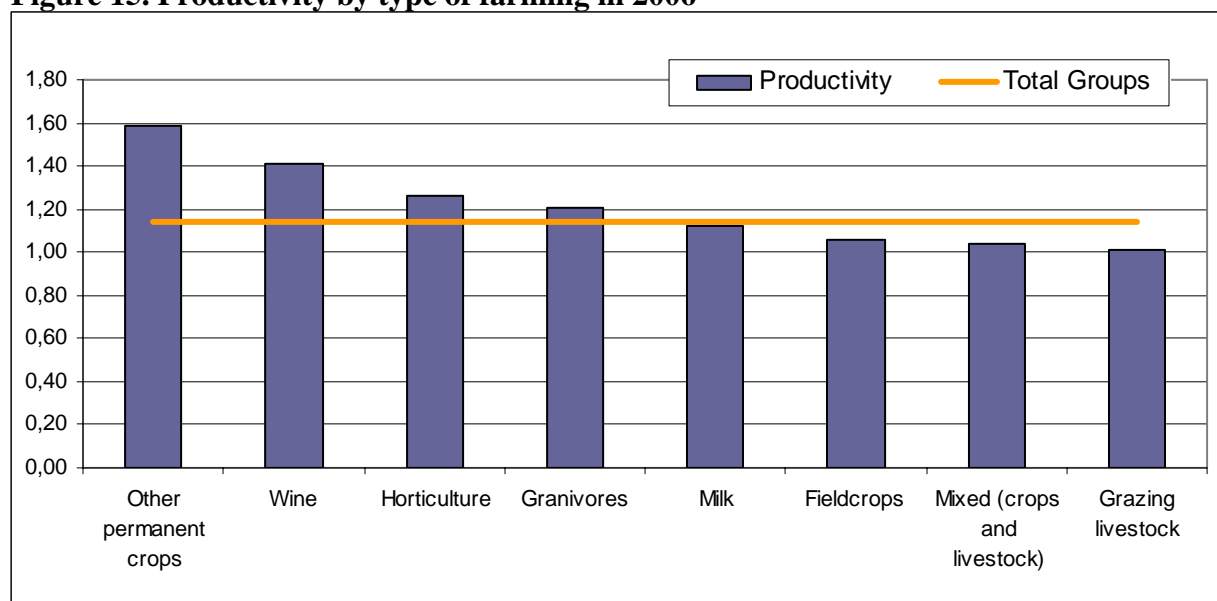
Note: EU10 comprises the new MS from 2004 (the Czech Republic, Cyprus, Estonia, Hungary, Latvia, Lithuania, Malta, Poland, Slovenia and Slovakia). EU15 comprises the MS that formed the EU until 2003.

\*Data for 2000 from the Netherlands are estimates based on 1999. No FADN data were recorded from Malta and Cataluña (Spain) in 2004.

Looking at the trend by MS (EU15), a fluctuating, but generally upward, trend in this ratio can be observed in Spain and, after 1998, in Greece, despite the fact that in 2006 Greek average productivity fell (from 1.69 to 1.52). Apart from having the lowest ratio, Finland showed constantly decreasing values over the period considered. The trend in the productivity ratio by MS (EU25) from 1996 to 2006 is shown in Appendix 6.

At regional level, Map 3 paints a picture opposite to that portrayed by the FNVA/AWU. Farms with high productivity are located mainly in southern Europe.

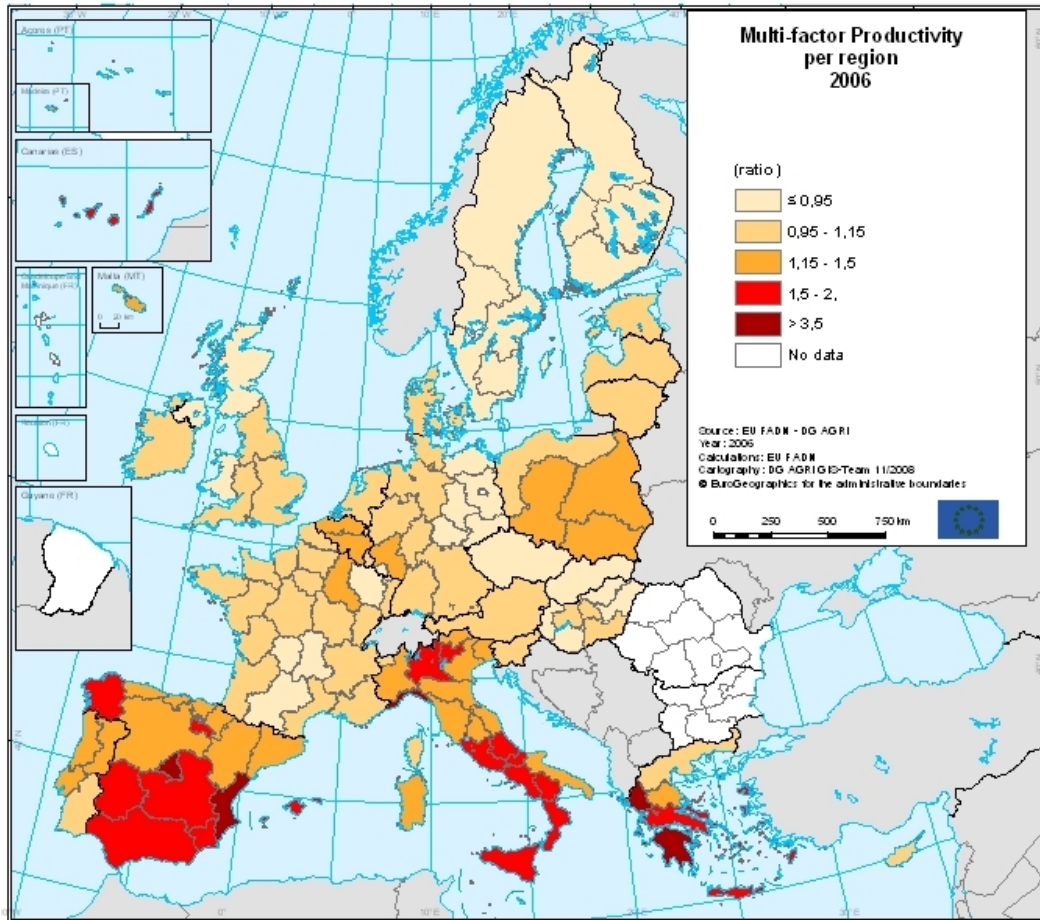
**Figure 15. Productivity by type of farming in 2006\***



Source: DG AGRI EU FADN

\*2006 data from Spain and Germany are provisional; therefore the total groups average is also provisional.

**Map 3. Productivity by region in 2006**



## **B. ANALYSIS BY TYPE OF FARMING**

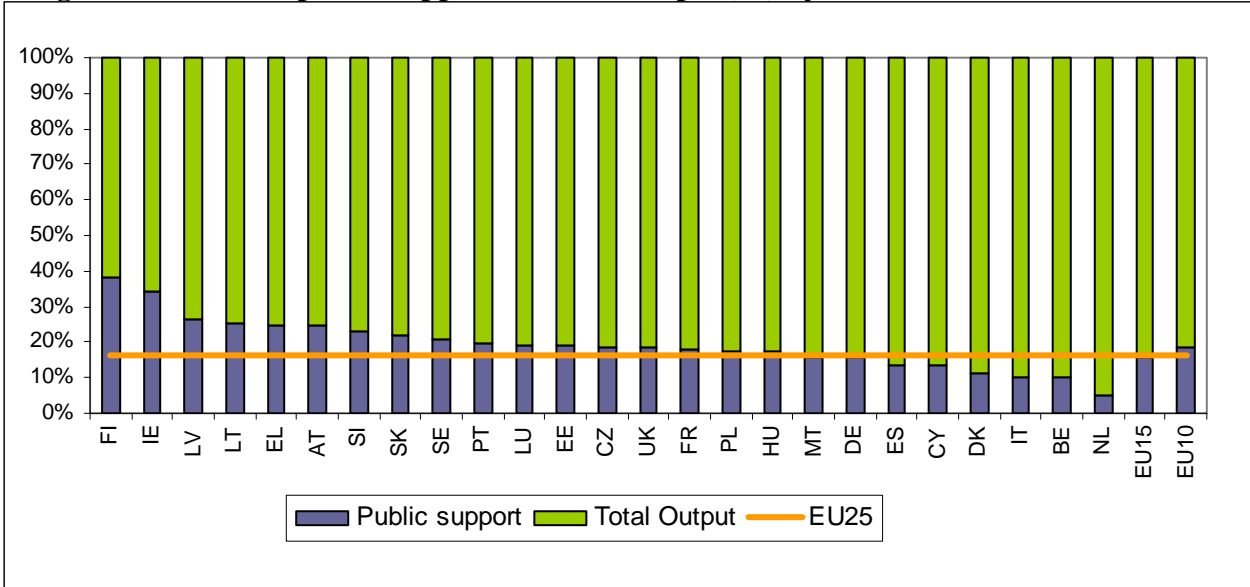
Other permanent crops showed the highest productivity ratio in 2006 (1.59), followed by wine, horticulture and granivores (see Figure 15). They all remained above the EU25 productivity average (1.14). By contrast, field crops, mixed farming and grazing livestock maintained a productivity ratio of around 1. However, these results need to be interpreted carefully, since in 2006 some products (e.g. milk and sugar beet) were still benefiting from price support schemes.

## **1.5. LEVEL OF PUBLIC SUPPORT IN TOTAL RECEIPTS (%)**

### **A. ANALYSIS BY MS**

By estimating the level of public support (current subsidies minus taxes) in total receipts, the importance of public funding in total farm receipts can be addressed (i.e. the dependence of farm receipts on the market or public support by MS). Lower percentages for this indicator point to greater independence from funding. This indicator was 16.03% for EU25. It was highest in Finland (38.22%) and lowest in the Netherlands, on 4.85% (see Figure 16).

**Figure 16. Share of public support in total receipts (%) by MS in 2006\***



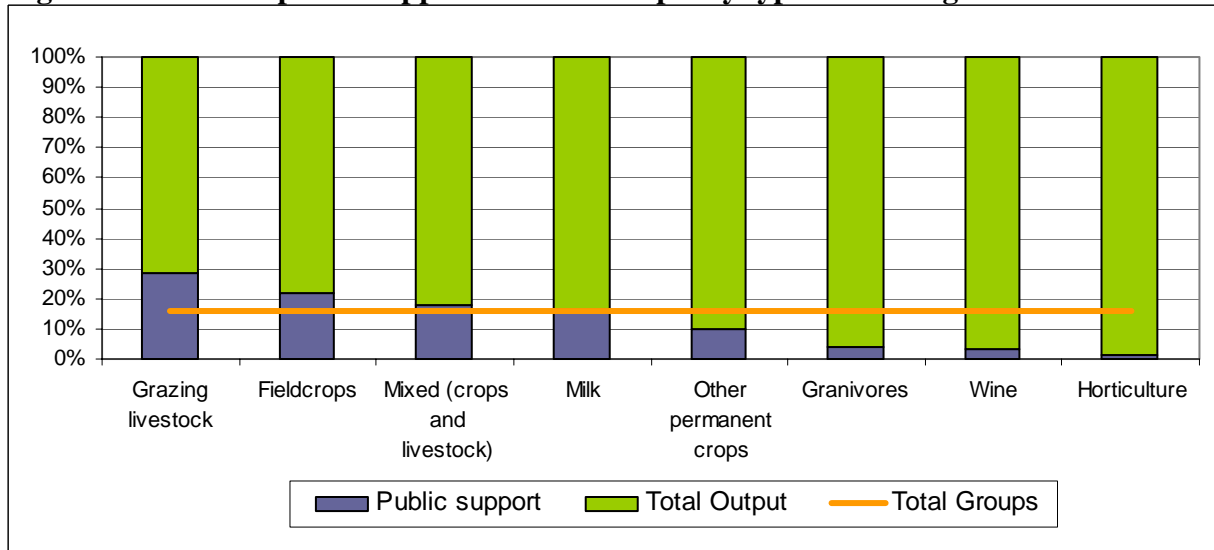
Source: DG AGRI EU FADN

\*2006 data from Spain and Germany are provisional; therefore the EU25 and EU15 averages are also provisional.

## B. ANALYSIS BY TYPE OF FARMING

The highest level of public support was found in grazing livestock with 28.57% and the lowest in horticulture with 1.21% (see Figure 17).

**Figure 17. Share of public support in total receipts by type of farming in 2006\***



Source: DG AGRI EU FADN

\*2006 data from Spain and Germany are provisional; therefore the total groups average is also provisional.

## 2. LABOUR, WAGES AND CONTRACTUAL WORK

### 2.1. LABOUR INPUT

#### ANALYSIS BY MS

The labour input of holdings, expressed in AWU, differed considerably between MS, from 1.11 AWU in Ireland and 1.13 AWU in Cyprus to 17.63 AWU in Slovakia and 8.55 AWU in the Czech Republic in 2006. On average, EU25 farms reported 1.62 AWU.

Figure 18 shows that the MS with big companies, such as Slovakia, the United Kingdom or Denmark, have the highest share of holdings with paid labour, with 79.40%, 74.22% and 71.28% respectively. The MS registering the smallest number of farms with paid labour were Malta, Slovenia and Luxembourg, with 25.07%, 25.95% and 33.63% of the total holdings respectively.

With the accession of the new MS, holdings without family labour are no longer uncommon: around 50% of Slovak farms and 37.23% of Czech farms had no unpaid labour. Before accession, this kind of holding was recorded almost only in eastern Germany.

Holdings having both paid and unpaid labour were generally in the minority. The lowest level was in Malta and the Czech Republic, with approximately 17% and 20% respectively, and the highest in the United Kingdom, Denmark and the Netherlands, with 74.22%, 71.28% and 69.03% respectively.

**Figure 18. Share of holdings with paid labour, unpaid labour and both by MS in 2006\***

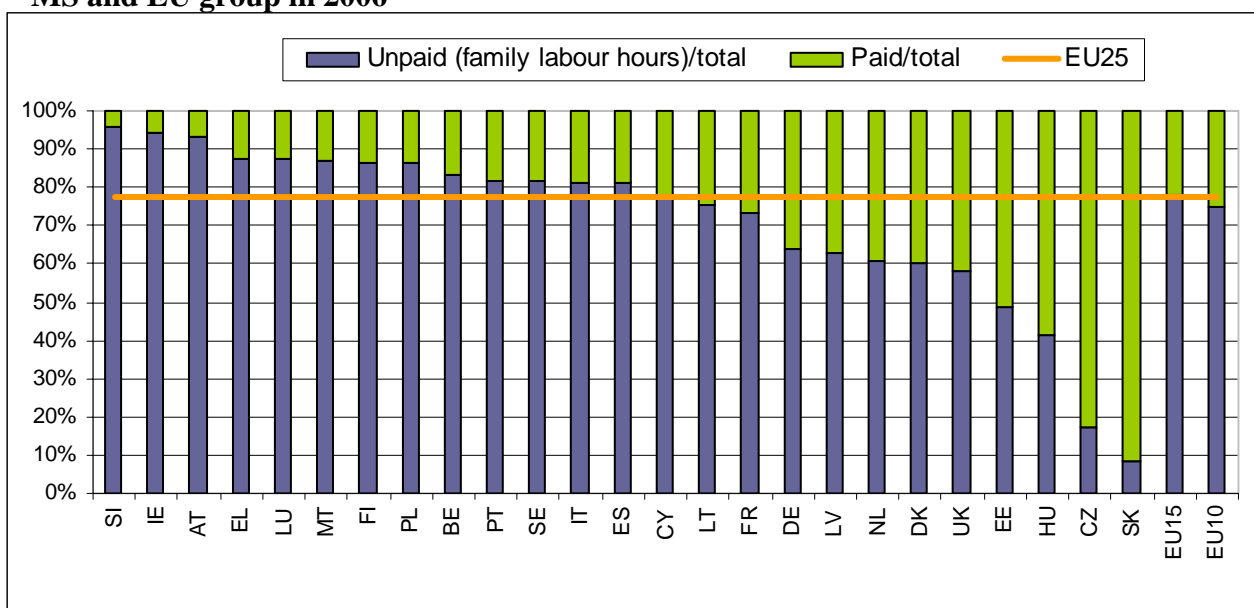


Source: DG AGRI EU FADN

\*2006 data from Spain and Germany are provisional.

Nevertheless, paid labour as a proportion of the total working hours is less important. In only three MS did working hours by paid labour account for more than 90% of the total: Slovakia, the Czech Republic and Hungary (see Figure 19).

**Figure 19. Share of working hours accounted for by paid labour and unpaid labour by MS and EU group in 2006\***



Source: DG AGRI EU FADN

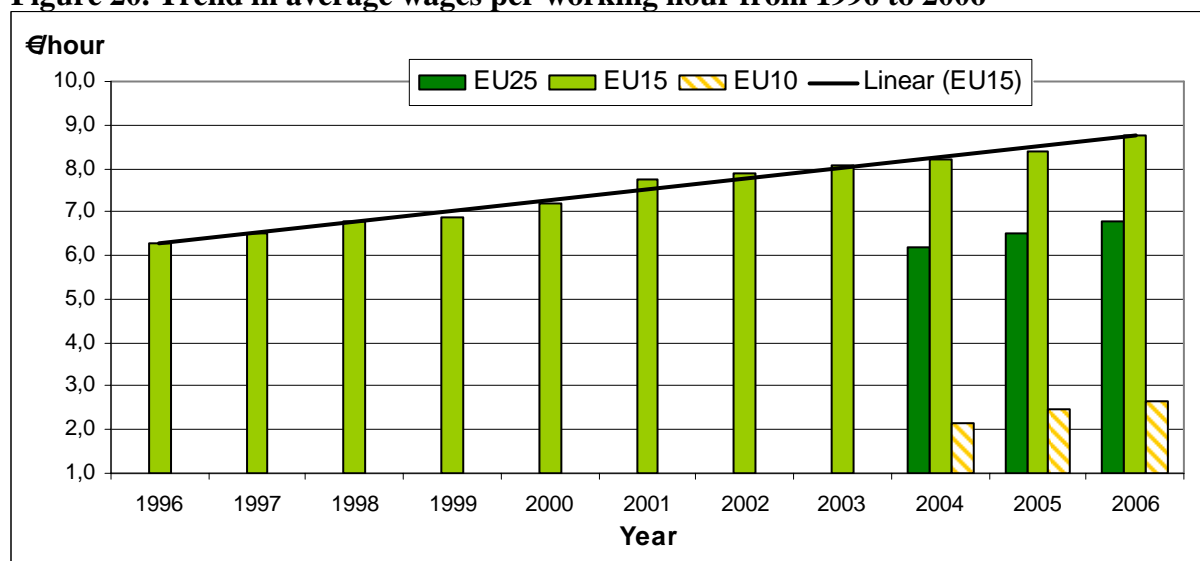
\*2006 data from Spain and Germany are provisional.

## 2.2. WAGES

### ANALYSIS BY MS

The average wage (€/hour) showed an upward trend from 1996 to 2006 (see Figure 20, values in current euros). In EU15, wages increased by 38.9% on average, from €6.30/hour in 1996 to €8.75 in 2006. In EU10, wages rose by 5.75% in 2006 compared with the previous year, with the amount paid increasing from €2.49/hour to €2.63. Average wages in EU25 were €6.79/hour in 2006, an increase of 4.25% in comparison with the previous year.

**Figure 20. Trend in average wages per working hour from 1996 to 2006\***



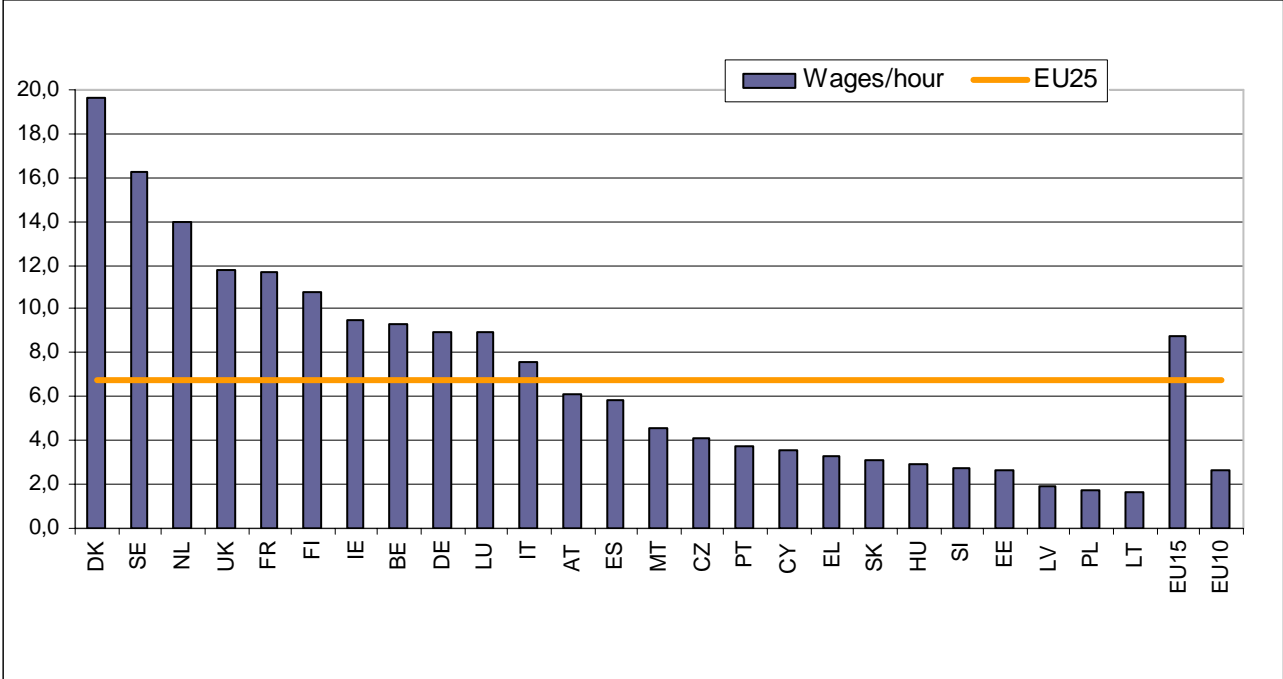
Source: DG AGRI EU FADN

Note: EU10 comprises the new MS from 2004 (the Czech Republic, Cyprus, Estonia, Hungary, Latvia, Lithuania, Malta, Poland, Slovenia and Slovakia). EU15 comprises the MS that formed the EU until 2003. Values in current euros.

\*Data for 2000 from the Netherlands are estimates based on 1999. No FADN data were recorded from Malta and Cataluña (Spain) in 2004.

The highest wages were found in Denmark (€19.65/hour) and Sweden (€16.21) and the lowest in Lithuania (€1.67/hour), closely followed by Poland (€1.71) and Latvia (€1.93). All EU10 MS fell below the EU25 average, together with Austria, Spain, Portugal and Greece (see Figure 21).

**Figure 21. Average wages per hour of paid labour by MS and EU group in 2006\***



Source: DG AGRI EU FADN

\*2006 data from Spain and Germany are provisional; therefore the EU25 and EU15 averages are also provisional.

### 2.3. CONTRACTUAL WORK

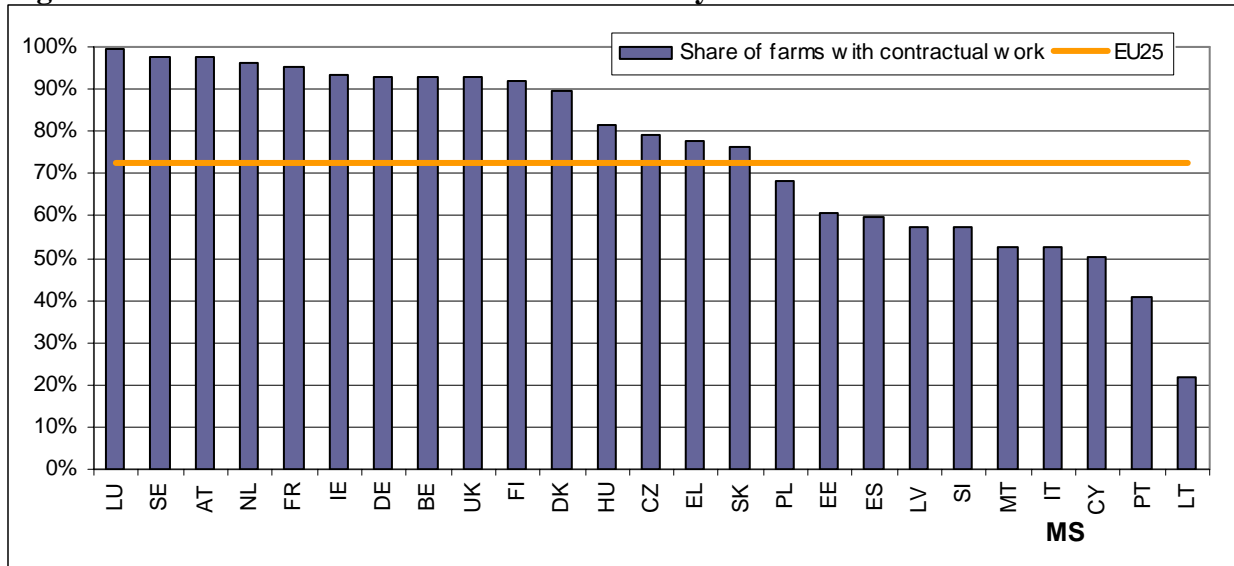
Contractual work includes the costs linked to work carried out by contractors or the hire of machinery.

#### ANALYSIS BY MS

The importance of contractual work in agricultural holdings is illustrated in Figure 22. The share of farms with contractual work out of the total holdings in the sample varied from 99.33% in Luxembourg to 21.90% in Lithuania. In 15 MS, more than 75% of holdings had contractual work and only Cyprus, Portugal and Lithuania showed shares of less than 50%.

Nevertheless, the impact of the cost of the contractual work on the total inputs (see Figure 23) is different in each MS. In EU25 contractual work made up 4.67% of the total input, with Sweden and Ireland top on 7.29% and 7.02% respectively.

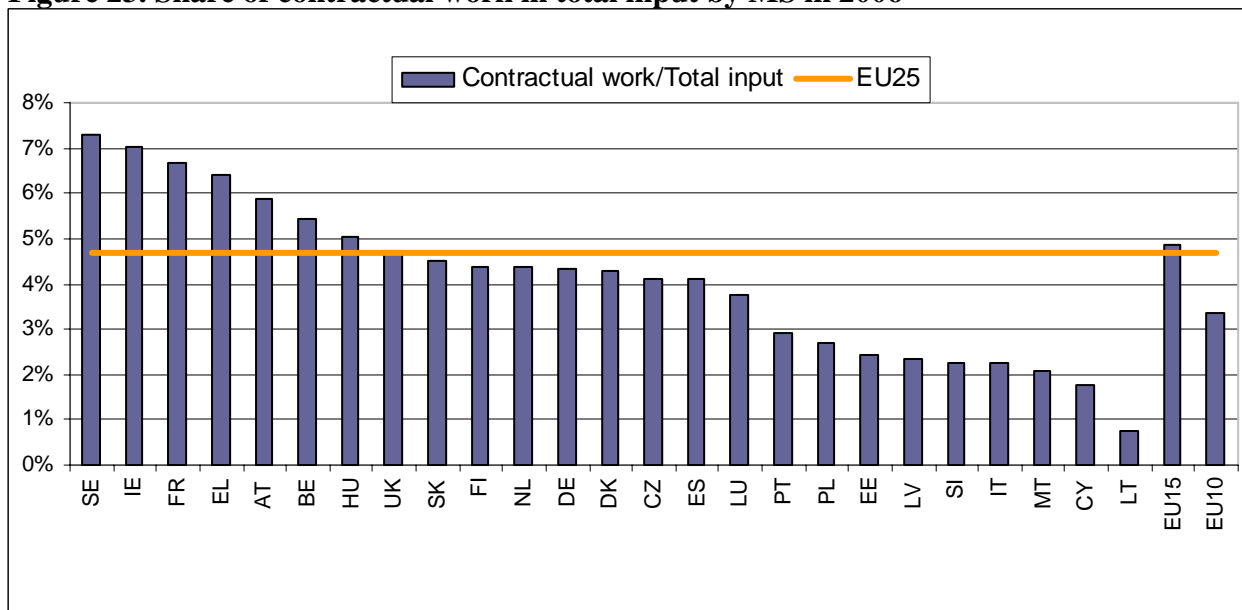
**Figure 22. Share of farms with contractual work by MS in 2006\***



Source: DG AGRI EU FADN

\*2006 data from Spain and Germany are provisional; therefore the EU25 and EU15 averages are also provisional.

**Figure 23. Share of contractual work in total input by MS in 2006\***



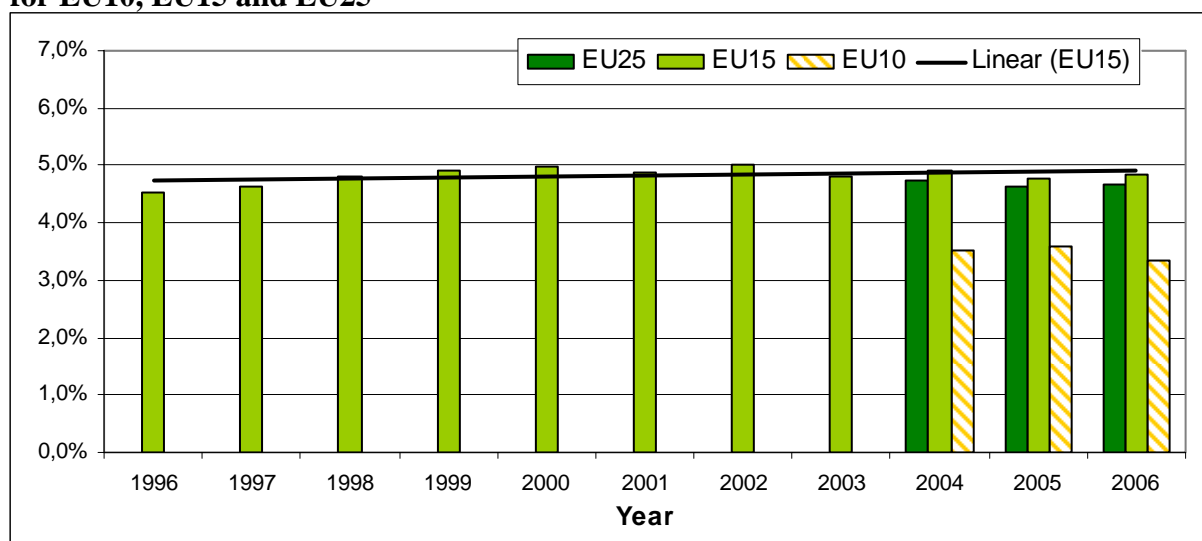
Source: DG AGRI EU FADN

\*2006 data from Spain and Germany are provisional; therefore the EU25 and EU15 averages are also provisional.

The costs of contractual work by holding in EU15 increased by 58.6% from € 951 in 1996 to € 095 in 2006. The same costs decreased by 1.9% for EU10 (from €82 to €64), but increased by 4.3% for EU25 (from € 486 to € 594) (see Figure 24).



**Figure 24. Trend in the average costs of contractual work by holding from 1996 to 2006 for EU10, EU15 and EU25\***



Source: DG AGRI EU FADN

Note: EU10 comprises the new MS from 2004 (the Czech Republic, Cyprus, Estonia, Hungary, Latvia, Lithuania, Malta, Poland, Slovenia and Slovakia). EU15 comprises the MS that formed the EU until 2003.

\*Data for 2000 from the Netherlands are estimates based on 1999. No FADN data were recorded from Malta and Cataluña (Spain) in 2004.

### 3. FARM FINANCIAL STRUCTURE

#### 3.1. TOTAL ASSETS AND LIABILITIES

Total assets are the agricultural holding's property. They are calculated as the sum of the current and fixed assets of the holding and equal the sum of liabilities plus net farm worth. Current assets include non-breeding livestock, stock of agricultural products and other circulating capital (such as advances for crops, holdings of agricultural shares and amounts receivable in short-term or cash balances in hand or at the bank). Fixed assets include agricultural land, farm and other buildings, forest capital, machinery and equipment and breeding livestock.

Appendix 7 shows the composition of the balance sheet and the parameters used for the indicators described below.

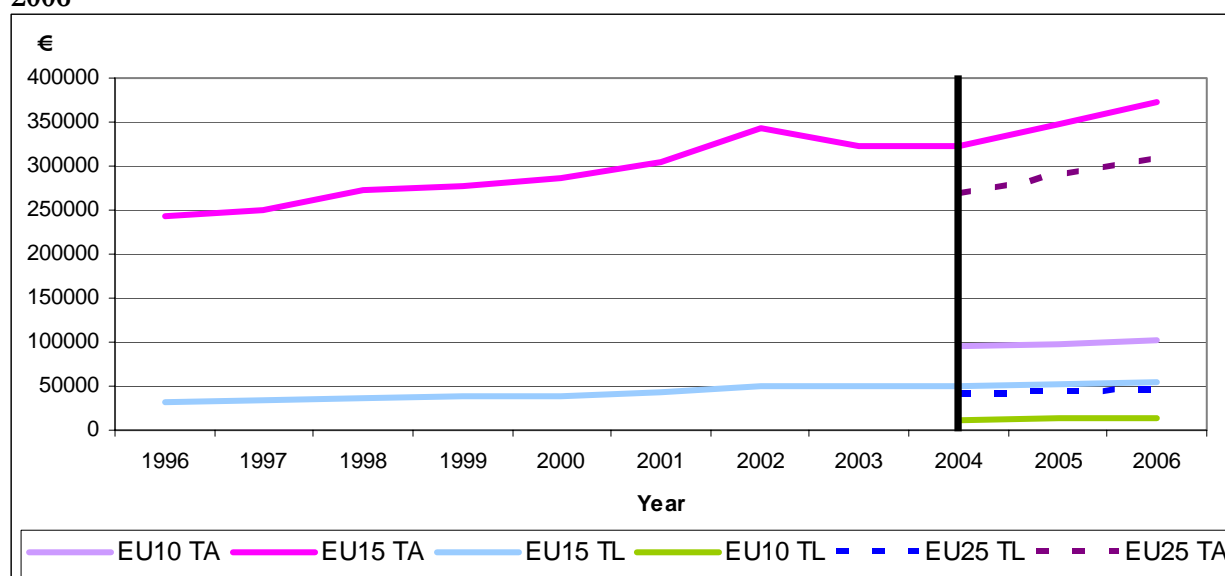
##### 3.1.1. TOTAL ASSETS. TREND FROM 1996 TO 2006

###### A. ANALYSIS BY MS

EU15 showed an upward trend in total assets per farm (with a parallel increase in average farm size) from 1996 to 2002, when the value of an average holding's assets stood at €343 064. However, the data show a slight decrease (to €321 964) in 2003. This was followed by another rise in the average value from 2004 to 2006.

The first FADN data from the new MS (the Czech Republic, Estonia, Cyprus, Latvia, Lithuania, Hungary, Malta, Poland, Slovenia and Slovakia) were delivered in 2004. Taking them into account, the average total assets value for EU25 was €267 593 in 2004. In 2006 the EU25 average total assets per farm stood at €309 205 (see Figure 25).

Figure 25. Total assets (TA) and total liabilities (TL) trends by EU group from 1996 to 2006\*



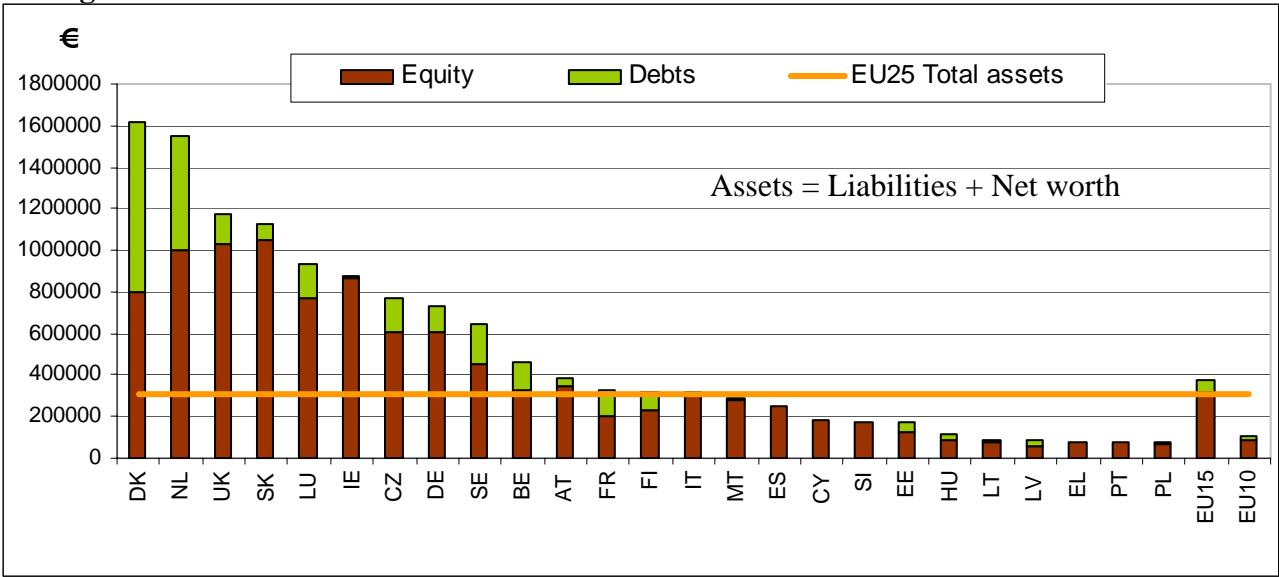
Source: DG AGRI EU FADN

Note: the vertical line corresponds to 2004, the year in which the first data from the new Member States (the Czech Republic, Estonia, Cyprus, Latvia, Lithuania, Hungary, Malta, Poland, Slovenia and Slovakia) were registered. Values in current euros. TA: Total assets, TL: Total liabilities.

\*Data for 2000 from the Netherlands are estimates based on 1999. No FADN data were recorded from Malta and Cataluña (Spain) in 2004.

Figure 26 compares each country's assets with the EU25 mean and shows their composition in liabilities and net worth. According to the 2006 FADN survey, the average farm in Denmark (largest total assets per farm: €1 620 822), the Netherlands, the United Kingdom, Slovakia, Luxembourg and Ireland invested most in assets in 2006. By contrast, the average farm in Poland (lowest total assets per farm: €77 142), Portugal or Greece invested the lowest amounts in EU25. In general, farmers from Greece, Italy, Cyprus, Slovenia, Ireland and Spain rely more on net worth to pay their assets than on total liabilities (total liabilities make up < 3% of total assets on average). By contrast, Denmark, the Netherlands, France and Latvia rely, in relative terms, more on liabilities than on net worth to finance their assets (>30%). Luxembourg farmers receive public support to encourage investment in capital and, therefore, have, on average, large assets. The remaining MS showed a larger or smaller proportion of liabilities, but all remained between the two previous groups of countries.

**Figure 26. Farm financial structure by EU group and MS in comparison with EU25 average in 2006\***



Source: DG AGRI EU FADN  
 Note: Total assets are depicted by the length of the bar, including both liabilities and net worth. The average EU25 total assets are indicated by the horizontal line.  
 \*2006 data from Spain and Germany are provisional; therefore the EU25 and EU15 averages are also provisional.

**B. ANALYSIS BY TYPE OF FARMING**

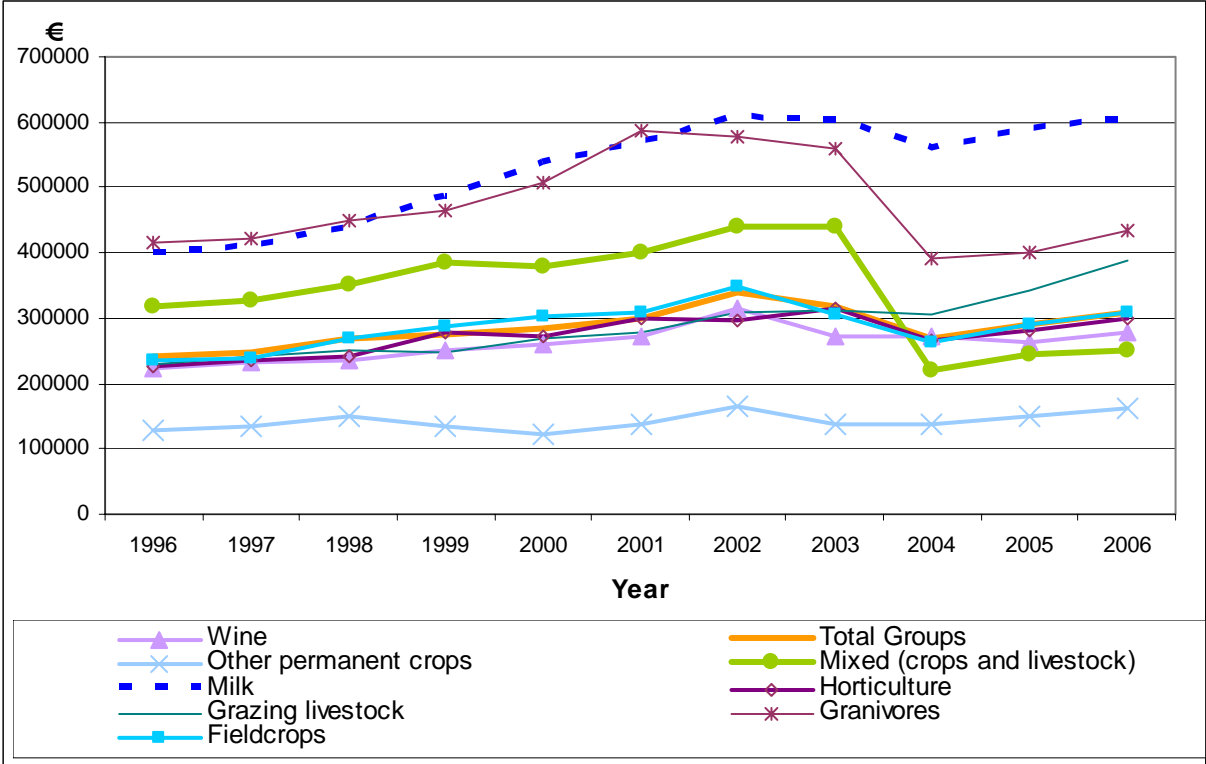
Other permanent crops scored the lowest value for total assets during the ten-year period, followed by wine and horticulture. By contrast, livestock-related farming (milk, granivores and mixed farms) showed the largest total assets (see Figure 27). Apart from other permanent crops, for which the total asset value remained stable over the ten years, the remaining types of farming showed an upward trend from 1996 to 2003 in EU25. Following the accession of the EU10 countries, the total assets of granivore, mixed, milk and horticulture farms fell in 2004, with granivore and mixed farms recording the most drastic drop. All these types of farming showed an upward trend in 2005 that continued in 2006. By contrast, wine and grazing livestock reported no such trend but continued growing after 2003. Field crop and wine farms peaked in 2002, the former being hit harder by the drop in 2003 than the latter.

Milk (dairy) farming was the type with the largest total assets (€606 028) in 2006 (see Figure 28), followed by pig and poultry (granivore) farms with €434 353. Other permanent crops (holdings producing citrus and other fruit, olives and other permanent crops) posted the

lowest total assets, with €161 417. The average EU25 farm had total assets of €309 205, liabilities of €45 109 and net worth of €264 095.

As shown by Figure 24, EU25 farms are mostly financed by net worth (see also Figure 28). Other permanent crops, grazing livestock, field crops and wine are the types of farming financed with the largest proportion of net worth (from 96% to 86% of total assets). In absolute terms, farms with livestock production show the largest net worth, with milk farms recording the highest net worth in 2006 (€491 801). Grazing livestock farms and granivore farms follow with €353 605 and €315 681 respectively. None of the total assets averages by type of farming show a financial structure based on more than 35% liabilities. Milk, granivore and horticulture holdings had the largest percentage of liabilities (which could indicate a higher investment and capital intensity).

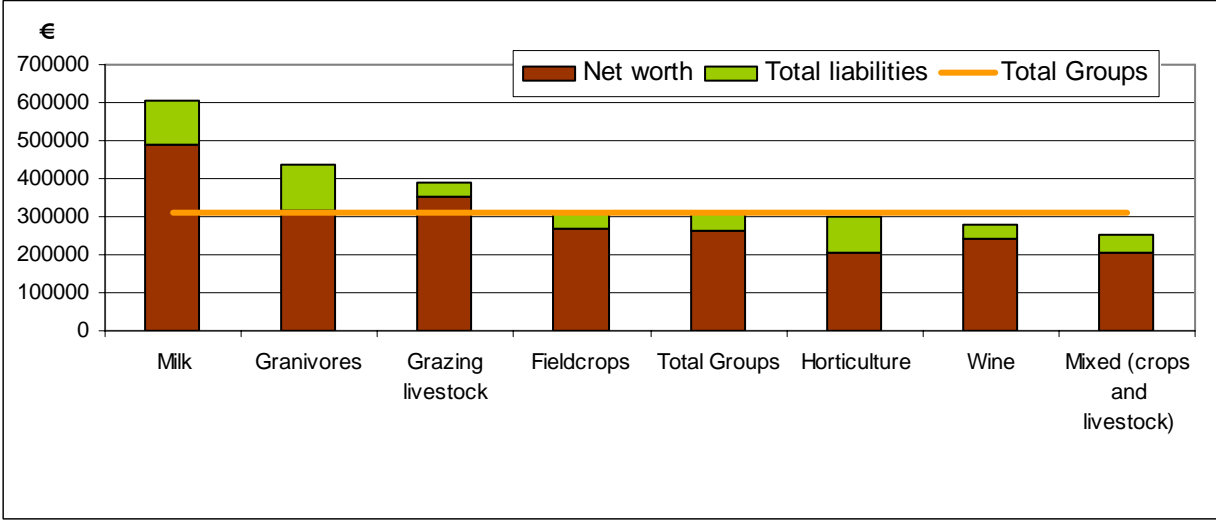
**Figure 27. Trend in total assets for EU15 (and EU25 from 2004) by type of farming from 1996 to 2006**



Source: DG AGRI EU FADN

\*Data for 2000 from the Netherlands are estimates based on 1999. No FADN data were recorded from Malta and Cataluña (Spain) in 2004.

**Figure 28. Farm financial structure by type of farming for EU25 in comparison with TF8 average in 2006\***



Source: DG AGRI EU FADN

Note: Total assets are depicted by the length of the bar, including both liabilities and net worth. The average EU25 total assets are indicated by the horizontal line.

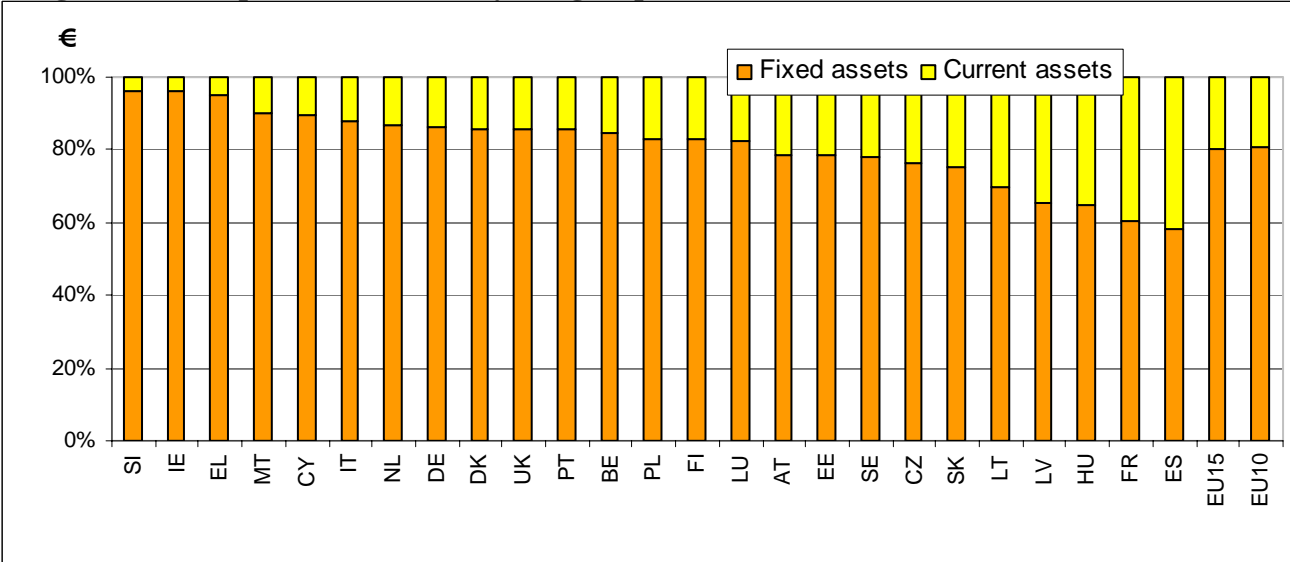
\*2006 data from Spain and Germany are provisional.

**3.1.2. COMPOSITION OF TOTAL ASSETS**

**A. ANALYSIS BY MS**

Fixed assets<sup>6</sup> make up the largest proportion of the total assets of each farm in EU25 (see Figure 29). In Greece, Ireland and Slovenia the total assets of each farm consist almost exclusively of fixed assets (more than 95% of total assets).

**Figure 29. Composition of assets by EU group and MS in 2006\***



Source: DG AGRI EU FADN

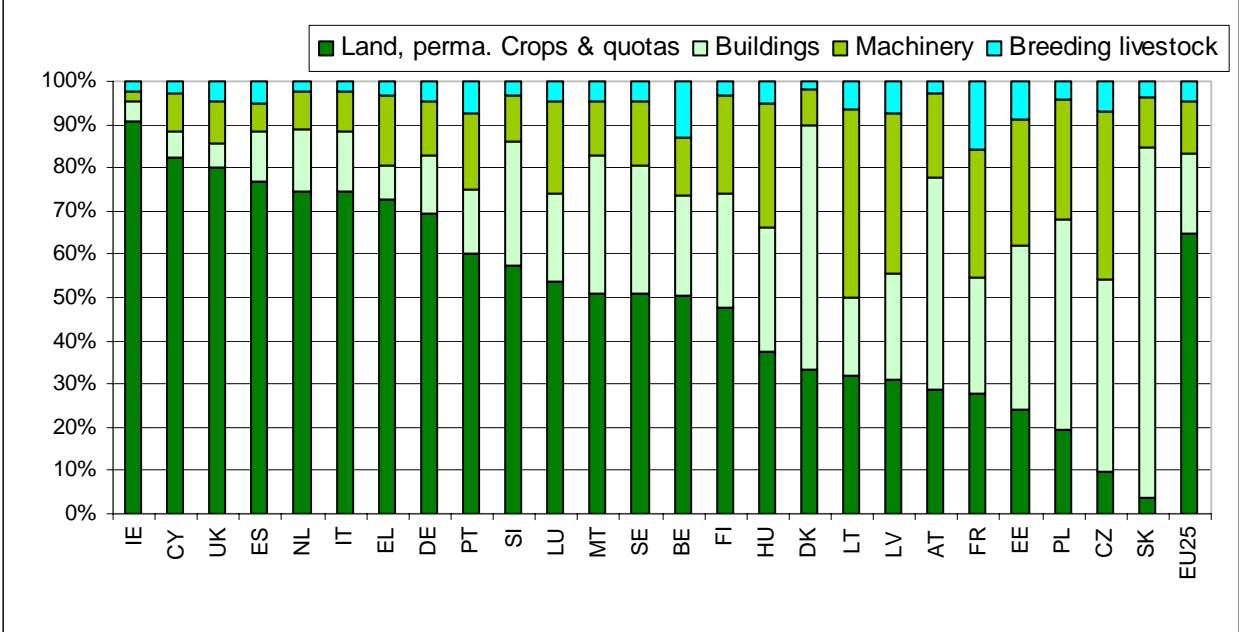
\*2006 data from Spain and Germany are provisional; therefore the EU25 and EU15 averages are also provisional.

<sup>6</sup> Fixed assets include agricultural land, farm and other buildings, forest capital, machinery and equipment and breeding livestock.

The composition of the total fixed assets of each farm by MS depends on the composition for each type of farming in each MS. It therefore depends on the MS. In 2006 “land, permanent crops and quotas” were the biggest components in countries like the Netherlands, the United Kingdom, Ireland, Spain and Cyprus and “buildings” were in Slovakia and Denmark (see Figure 30). Lithuania, the Czech Republic and Latvia spent relatively more on “machinery”. “Breeding livestock” remained in a range from 2% (Denmark) to 15% (France) of total fixed assets in every MS.

At this point it must be added that there are differences between MS in the way that assets and factors are recorded. Quotas, for instance, are not handled in the same way in every MS. In some they are not marketable, so they are not recorded in the total assets of the farm, although they might be reflected as they are partly included in the land value. As a result, the item “land, permanent crops and quotas” is lower. These differences can be seen, for example, between the Netherlands, which has marketable quotas, and France, which does not. There are also differences in recording data about land, as is the case with France, where farmers form companies that rent land to their members. Consequently, land is not included in French farms’ total assets, adding to the other assets’ relative share.

**Figure 30. Composition of total fixed assets in EU25 and by MS in 2006\***

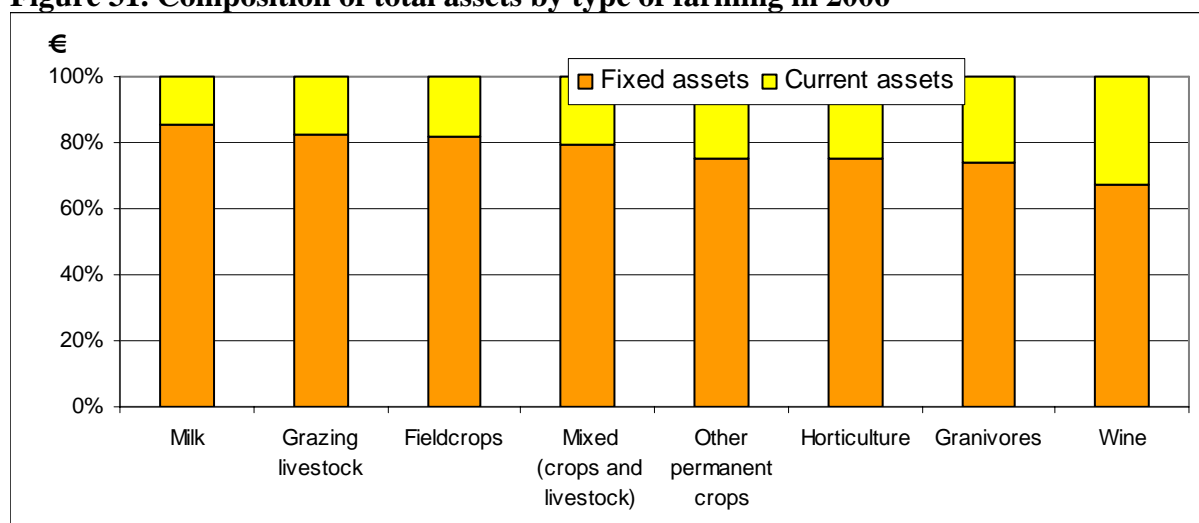


Source: DG AGRI EU FADN  
 \*2006 data from Spain and Germany are provisional; therefore the EU25 and EU15 averages are also provisional.

**B. ANALYSIS BY TYPE OF FARMING**

The total assets of all types of farming were based mainly on fixed assets in 2006 (see Figure 31): 64.8% took the form of “land, permanent crops and quotas”, 18.4% “buildings”, 12.2% “machinery” and the remaining 4.6% “breeding livestock”. These percentages vary widely, depending on the type of farming considered (see Figure 32). Other permanent crops, wine, field crops, grazing livestock and milk show a larger percentage for the first of these items (all over 60%), whereas granivore farms are less dependent on land and rely more on “buildings”. Horticulture farms have the highest share of “machinery” (18.4% of fixed assets), followed by mixed farming (16.3%), field crops (13.7%) and granivore farms (13.6%). “Breeding livestock” accounts for a higher share of total assets in grazing livestock holdings (10%) than in milk (8.6%), mixed (6.9%) or granivore farms (5.7%).

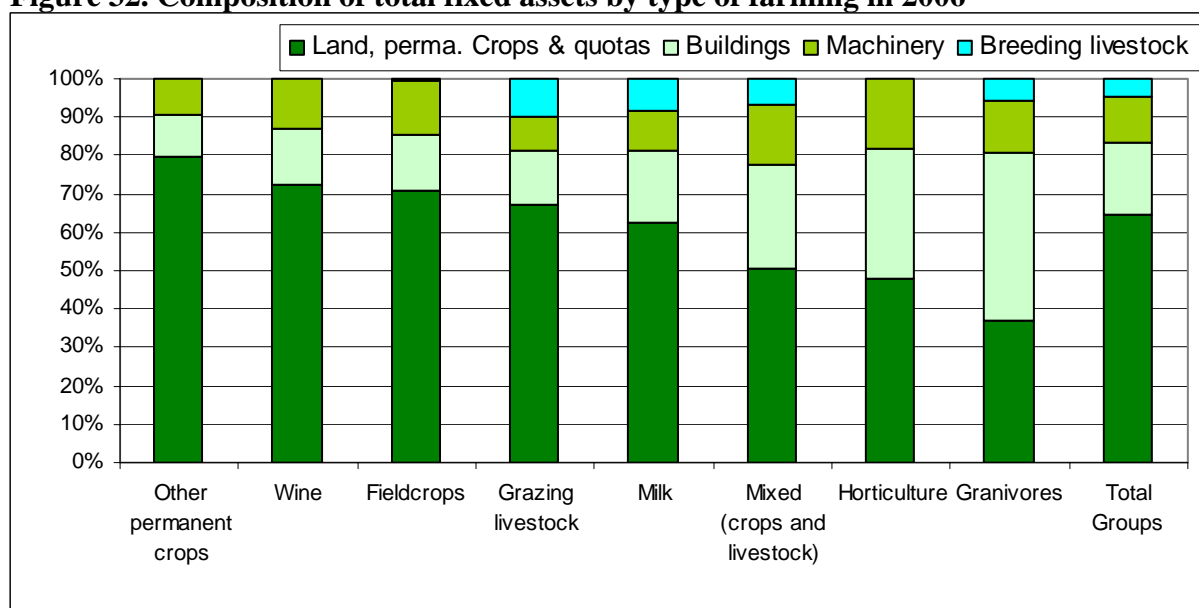
**Figure 31. Composition of total assets by type of farming in 2006\***



Source: DG AGRI EU FADN

\*2006 data from Spain and Germany are provisional.

**Figure 32. Composition of total fixed assets by type of farming in 2006\***



Source: DG AGRI EU FADN

\*2006 data from Spain and Germany are provisional; therefore the total groups average is also provisional.

### 3.1.3. TOTAL LIABILITIES

In EU25 total liabilities (total debts) were equivalent, on average, to a small proportion of total assets during the period studied, showing slight but steady growth. Although the enlargement to EU25 also had an effect on average total liabilities per farm, the impact was much smaller than on total assets, reducing them by only one fourth.

Similarly to the last ten-year trend for total assets (see Figure 25), total debts showed a steady increase in EU15, starting with €31 988 in 1996 and ending on €52 248 in 2005 and €54 930 in 2006. The enlargement to EU25 made an impact on average total farm liabilities, which stood at €42 843 in 2005 and €45 109 in 2006.

### A. ANALYSIS BY MS

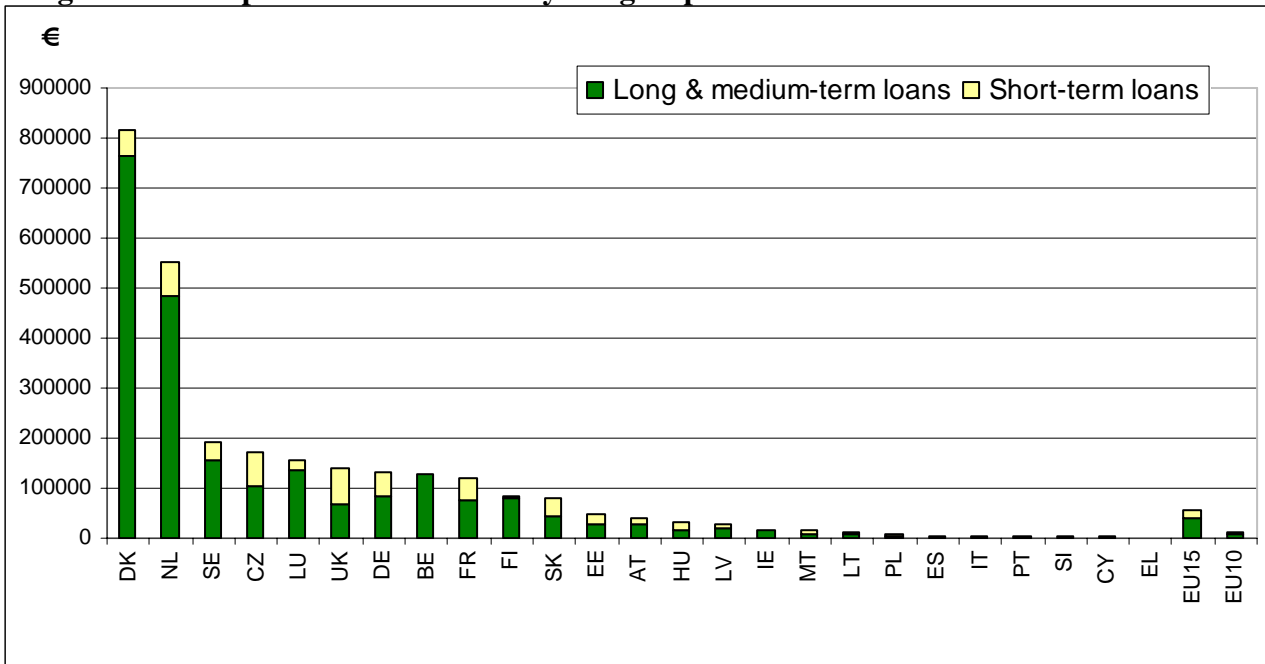
As just mentioned, the average liability per agricultural holding in EU25 was €45 109 in 2006 (see Figure 33). Denmark was the MS with the heaviest debts per farm (€17 227), followed by the Netherlands (€51 846). Greek agricultural holdings, with total liabilities of €308, and Cypriot farms, with €2 693, showed the lowest levels of debt. The United Kingdom, Portugal, Malta and Greece are the countries where farmers rely least on long- and medium-term loans to finance their holdings, with such loans accounting for under 50% of their total liabilities. In Belgian, Slovenian and Cypriot farms, by contrast, long- and medium-term loans make up at least 95% of their liabilities.

### B. ANALYSIS BY TYPE OF FARMING

As shown in Figure 28, granivore, milk and horticulture are the types of farm with the largest debts (€18 672, €14 227 and €1 844 respectively), due to their production and investment intensity. On the other hand, holdings growing other permanent crops recorded the lowest debts in 2006 (€653).

As regards the composition of these liabilities (see Figure 33), all types of farming have a percentage of short-term loans within a range from 17% (milk) to 30% (other permanent crops), with the exception of wine (45%).

**Figure 33. Composition of liabilities by EU group and MS in 2006\***

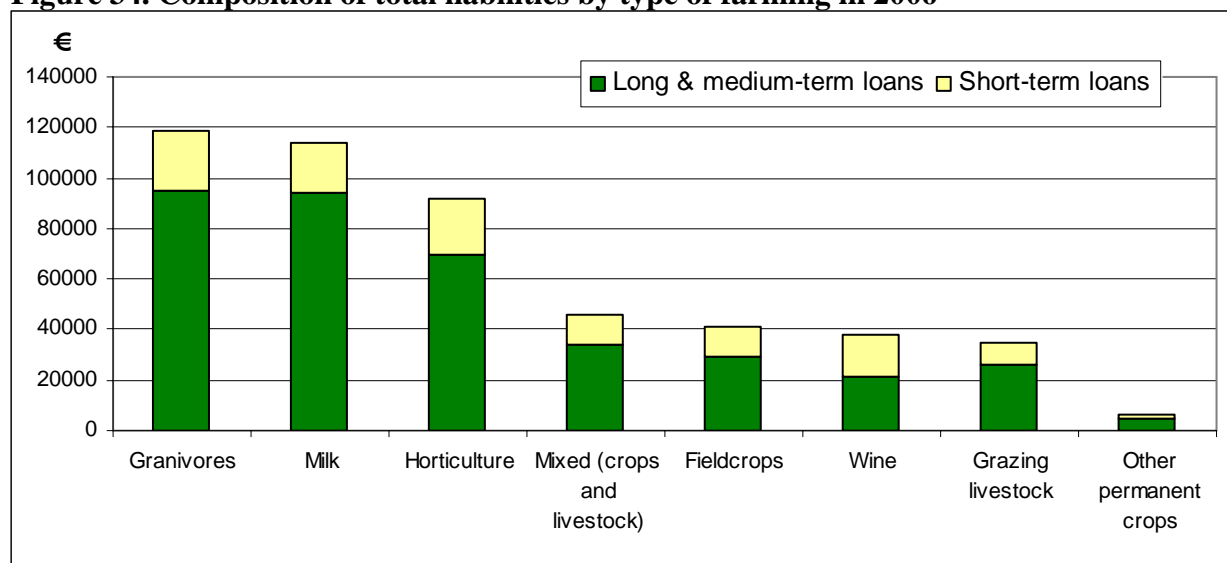


Source: DG AGRI EU FADN

\*2006 data from Spain and Germany are provisional; therefore the EU25 and EU15 averages are also provisional.



**Figure 34. Composition of total liabilities by type of farming in 2006\***



Source: DG AGRI EU FADN

\*2006 data from Spain and Germany are provisional; therefore the total groups average is also provisional.

## 3.2. PERFORMANCE INDICATORS

The indicators described in this section provide ways to compare the financial structure and performance of different agricultural holdings. Items from the balance sheet and income statement have been used to calculate them. Despite the fact that they can be expressed as absolute values, such as the net worth of a farm, they are normally expressed in the form of ratios or percentages, such as the liabilities-to-assets ratio, liabilities-to-net-worth ratio, etc. In each case the trend since the enlargement to EU25 is addressed. Appendix 8 sums up the values of the different farm business financial indicators by MS and the EU25 average in 2006.

### 3.2.1. FARM NET WORTH (2005-06)

Farm net worth (also called “owner’s equity”) equals total assets minus total debts at the end of the accounting year.

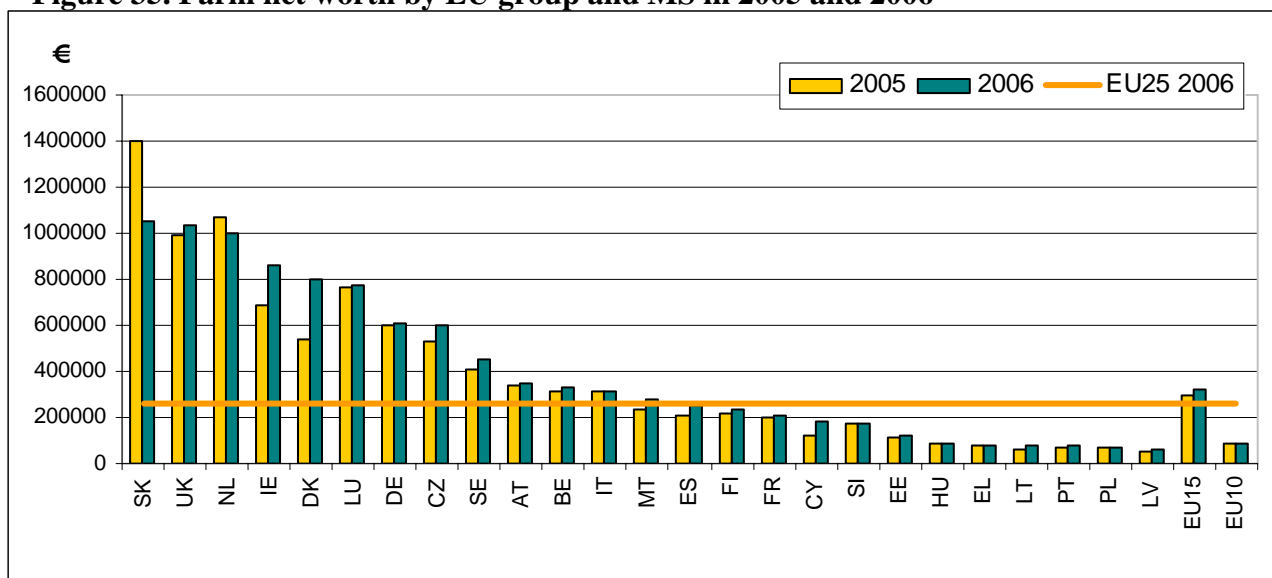
#### A. ANALYSIS BY MS

The average net worth values for FADN farms in EU25 were €246 022 in 2005 and €264 095 in 2006, when Slovakia showed the highest net worth value, with €1 049 374, whereas the average Latvian farm reported only €57 757 (see Figure 35).

#### B. ANALYSIS BY TYPE OF FARMING

Milk farms had the highest net worth (€91 801) and farms growing other permanent crops the lowest (€154 764). A general upward trend in net worth can be observed between both years for all types of farming (see Figure 36).

**Figure 35. Farm net worth by EU group and MS in 2005 and 2006\***

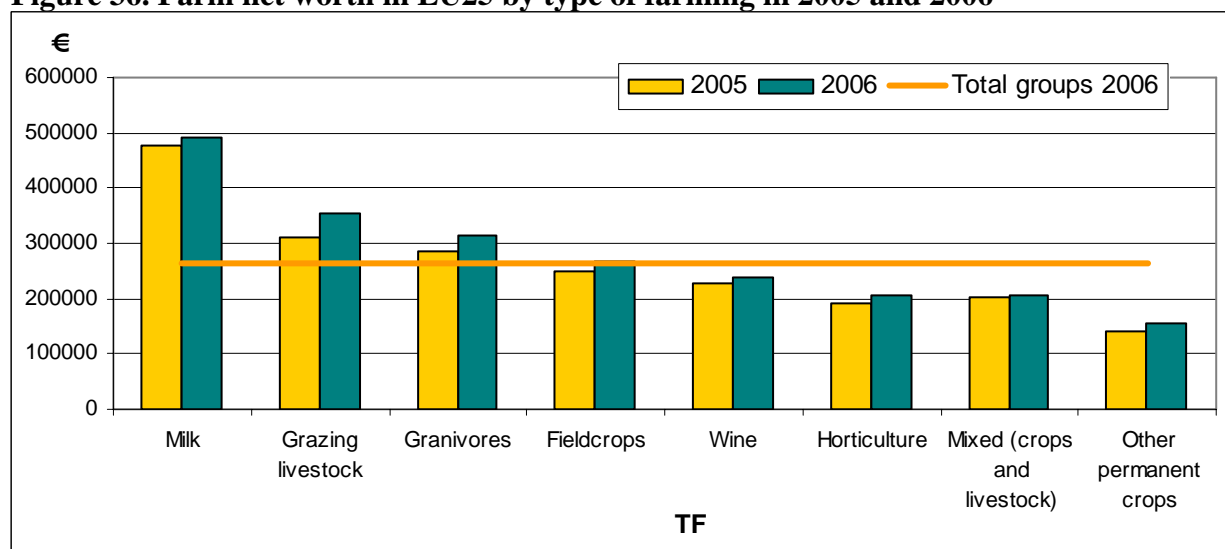


Source: DG AGRI EU FADN

Note: Values in current euros.

\*2006 data from Spain and Germany are provisional; therefore the EU25 and EU15 averages are also provisional.

**Figure 36. Farm net worth in EU25 by type of farming in 2005 and 2006\***



Source: DG AGRI EU FADN

Note: Values in current euros.

\*2006 data from Spain and Germany are provisional; therefore the total groups average is also provisional.

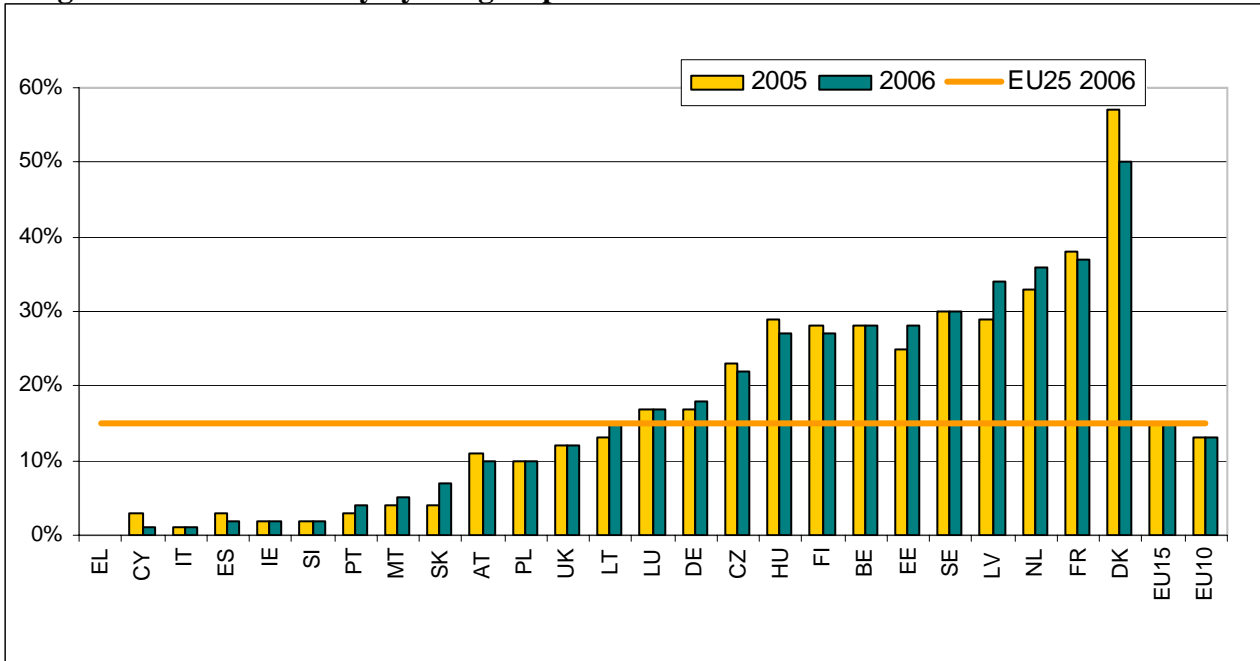
### 3.2.2. FARM SOLVENCY (2005-06)

Solvency is the ability of an entity to pay its debts with its available cash or the ability of a business to meet its long-term fixed expenses. The greater a company's solvency, the better its financial position. When a company is insolvent, it can no longer operate and goes bankrupt. Solvency has been measured on the basis of the liabilities-to-assets ratio at the end of the accounting year. Therefore, low values indicate better options for farms to meet their payment obligations.

### A. ANALYSIS BY MS

Farm solvency in EU25 remained fairly stable around 15% from 2005 to 2006 (see Figure 37). Danish FADN farms were the least solvent with 57% in 2005 and 50% in 2006, while Greek farms were the most solvent with 0.5% and 0.4% in the same years.

**Figure 37. Farm solvency by EU group and MS in 2005 and 2006\***



Source: DG AGRI EU FADN

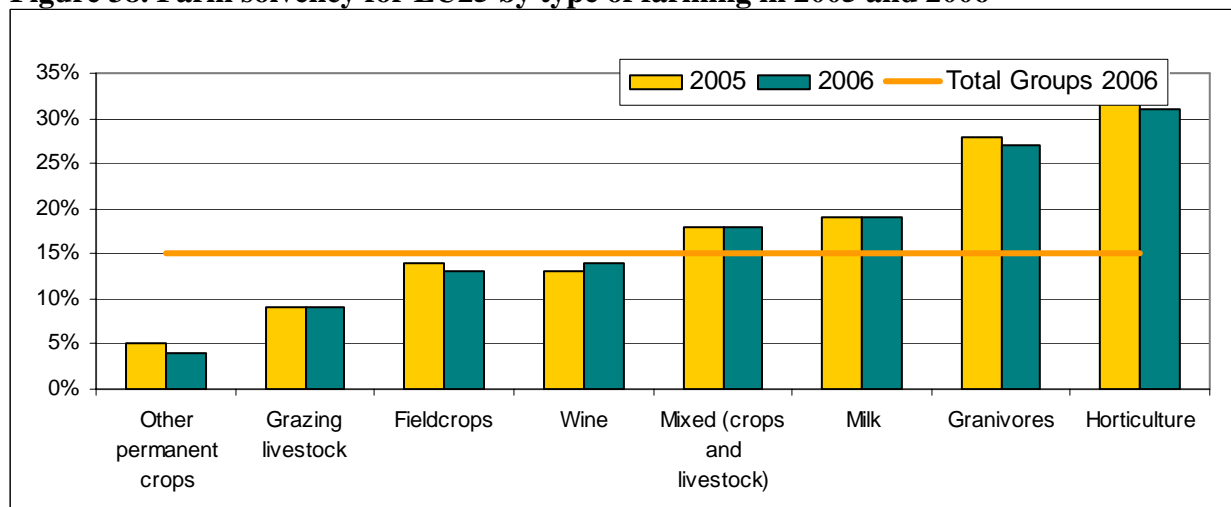
Note: Values in current euros.

\*2006 data from Spain and Germany are provisional; therefore the EU25 and EU15 averages are also provisional.

### B. ANALYSIS BY TYPE OF FARMING

FADN horticulture holdings were the least solvent both in 2005 and 2006, with percentages of 32% and 31% respectively (see Figure 38). No significant changes could be observed for pig and poultry farms, which remained in second position on around 27%. By contrast, farms specialising in other permanent crops were the most solvent (5% in 2005 and 4% in 2006).

**Figure 38. Farm solvency for EU25 by type of farming in 2005 and 2006\***



Source: DG AGRI EU FADN

Note: Values in current euros.

\*2006 data from Spain and Germany are provisional; therefore the total groups average is also provisional.

### 3.2.3. LIQUIDITY (2005-06)

Liquidity measures the ratio between current assets<sup>7</sup> and current liabilities. It is the business quality that enables an agricultural holding to meet its short-term payment obligations, by virtue of possessing sufficient current assets which can be sold rapidly with minimum loss of value at any time. Lenders normally prefer current ratios of at least 1.5:1 or 2:1. This measure is influenced by the method of valuation of the assets.

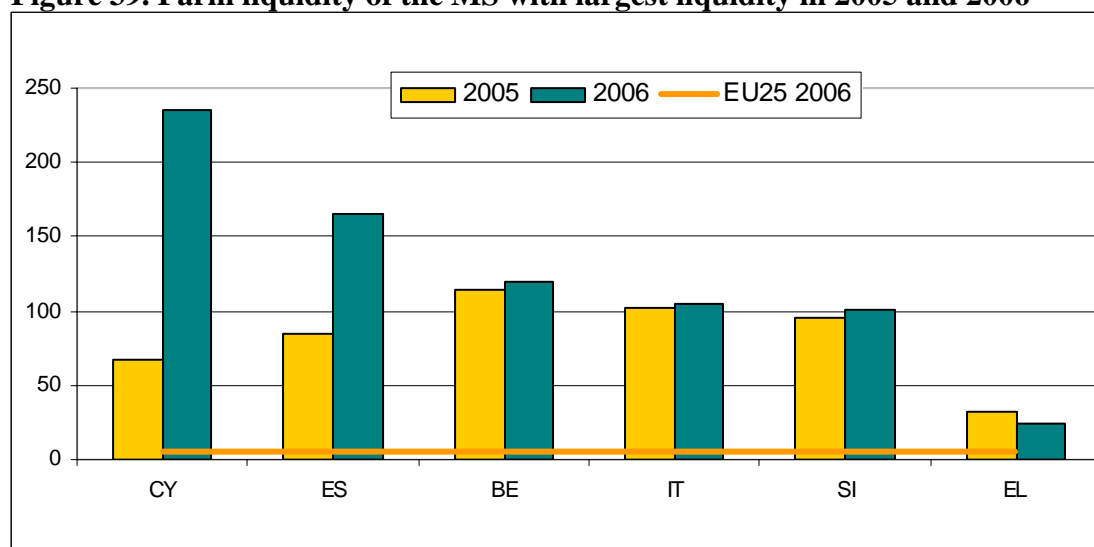
#### A. ANALYSIS BY MS

The average current ratios for EU25 were 4.77 in 2005 and 5.41 in 2006. Belgium showed the highest current ratio in 2005 (114.44) and Cyprus in 2006 (235.61) (see Figure 39). Cypriot holdings rely mainly on current accounts not only to buy the necessary inputs (fertilisers, seeds, pesticides, etc.) but also to cover their personal expenses. The United Kingdom recorded the lowest ratio in 2005 (1.97) and Estonia was the MS with the lowest liquidity in 2006 (1.95) (see Figure 40). However, liquidity values vary widely between MS. Similarly, there was variation between 2005 and 2006, which was more striking in the countries that registered very high liquidity values (Spain and Cyprus).

#### B. ANALYSIS BY TYPE OF FARMING

Holdings growing mainly other permanent crops presented the largest current ratio in the two years considered and were also the type of farming in which the year-on-year variation was the most dramatic (5.43) (see Figure 41). Grazing livestock farms remained above the European mean, surpassing the liquidity of the other types of farming. Horticulture farms proved the least liquid in EU25, with current ratios of 2.64 in 2005 and 3.36 in 2006.

**Figure 39. Farm liquidity of the MS with largest liquidity in 2005 and 2006\***



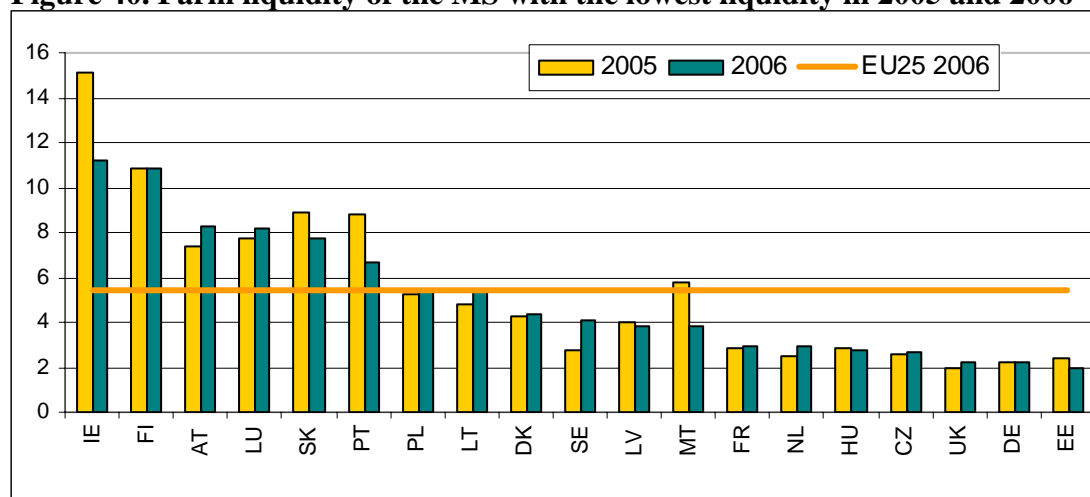
Source: DG AGRI EU FADN

Note: Values in current euros.

\*2006 data from Spain and Germany are provisional.

<sup>7</sup> Current assets include non-breeding livestock, circulating capital (stocks of agricultural products) and other circulating capital.

**Figure 40. Farm liquidity of the MS with the lowest liquidity in 2005 and 2006\***

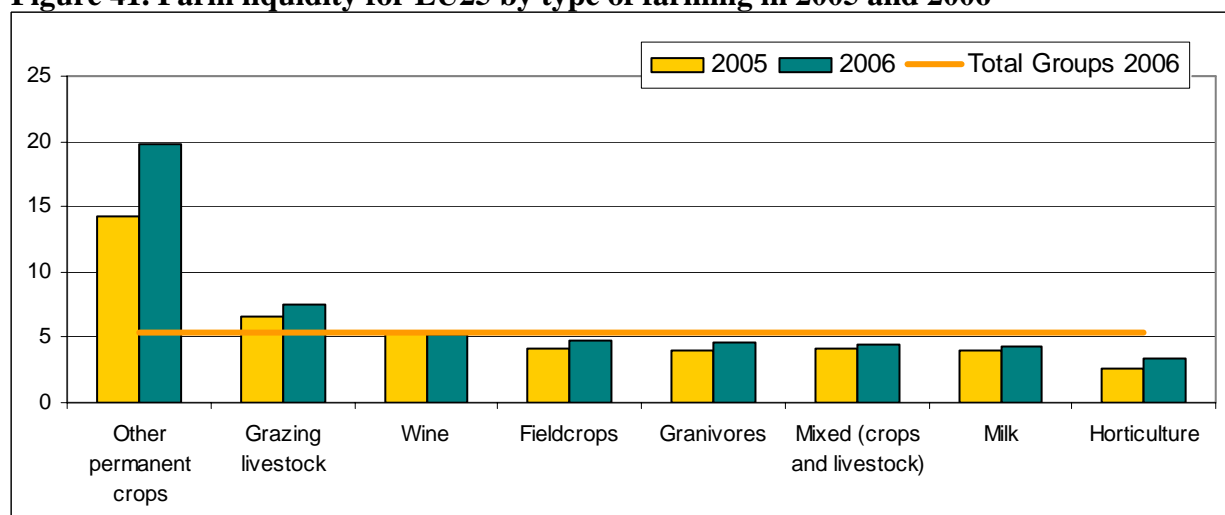


Source: DG AGRI EU FADN

Note: Values in current euros.

\*2006 data from Spain and Germany are provisional.

**Figure 41. Farm liquidity for EU25 by type of farming in 2005 and 2006\***



Source: DG AGRI EU FADN

Note: Values in current euros.

\*2006 data from Spain and Germany are provisional.

### 3.2.4. PROFITABILITY: RETURN ON ASSETS (2005-06)

The return on assets (ROA) shows how profitable a company's assets are in generating revenue. It gives an idea of the returns received by the farm operator for both debt and net worth capital invested. It is defined as the relationship between the farm net value added (FNVA) and the average total assets in an accounting year.

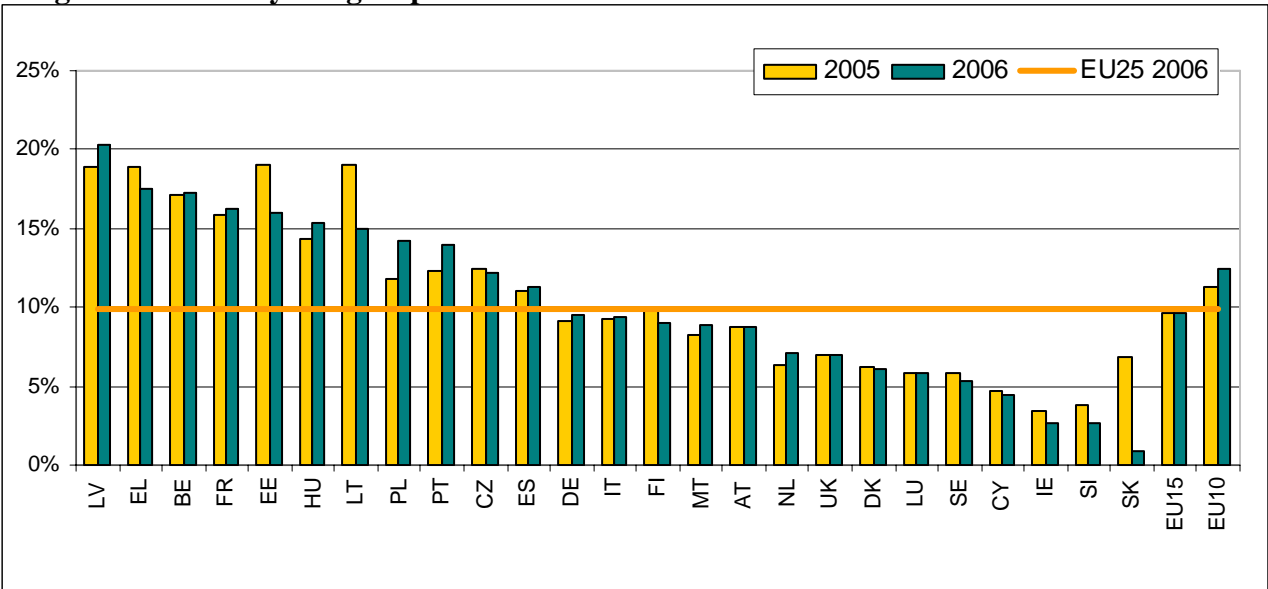
#### A. ANALYSIS BY MS

The average ROA for EU25 was 9.87% in 2006, up from 9.74% in 2005. Holdings from Lithuania, Estonia, Greece and Latvia showed the largest ROA in 2005 (all above 18%) and Slovenia and Ireland the lowest (both under 4%) (see Figure 42). In 2006, Latvian holdings yielded an ROA of 20.25%, followed by 17% in Greece and Belgium. Slovenia and Ireland again generated the lowest ROA in 2006, together with Slovakia, with 2.66%, 2.65% and 0.87% respectively.

A number of factors must be considered regarding interpretation of the ROA of the individual MS. As mentioned earlier, average total assets are influenced by the other circulating capital integrated in current assets. As indicated in section 3.2.4, Spanish holdings showed the biggest change in liquidity from 2005 to 2006, mainly due to variation in the values of circulating capital. Furthermore, depreciation also has an impact on FNVA. Countries that overestimate their depreciation (as could be the case with Slovakia) show lower ROA than countries that underestimate it.

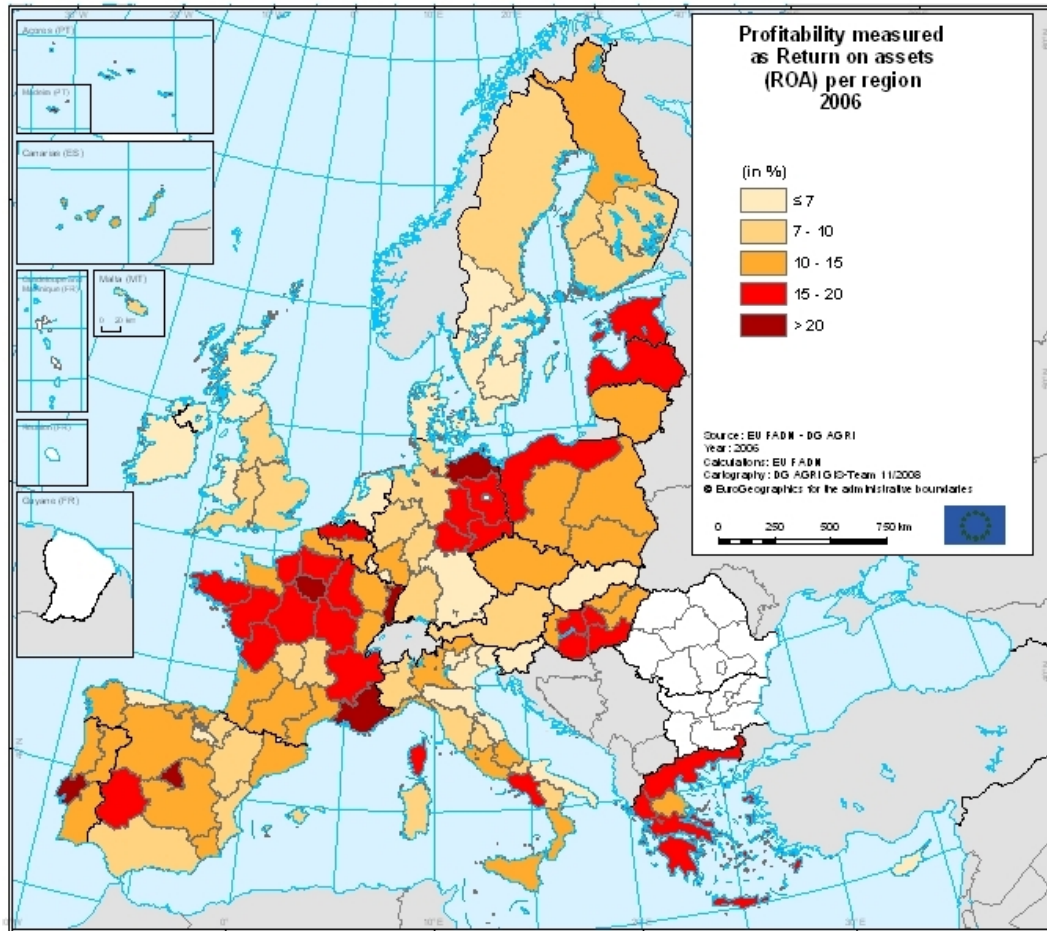
No clear division can be drawn in Europe when the ROA is considered by FADN region (see Map 4). On the one hand, regions with an ROA over 10% may include farms with two different profiles: either holdings with very low assets in comparison with the income they earn (as could be the case in Extremadura (Spain)) or holdings with an optimum ratio between income and assets (e.g. Latvia). On the other hand, an ROA lower than 10% could be the consequence of the opposite situations: either large amount of assets (e.g. the Netherlands) or little income earned in relation to the assets of the farm (as could be the case in Puglia (Italy)).

**Figure 42. ROA by EU group and MS in 2005 and 2006\***



Source: DG AGRI EU FADN  
 Note: Values in current euros.  
 \*2006 data from Spain and Germany are provisional.

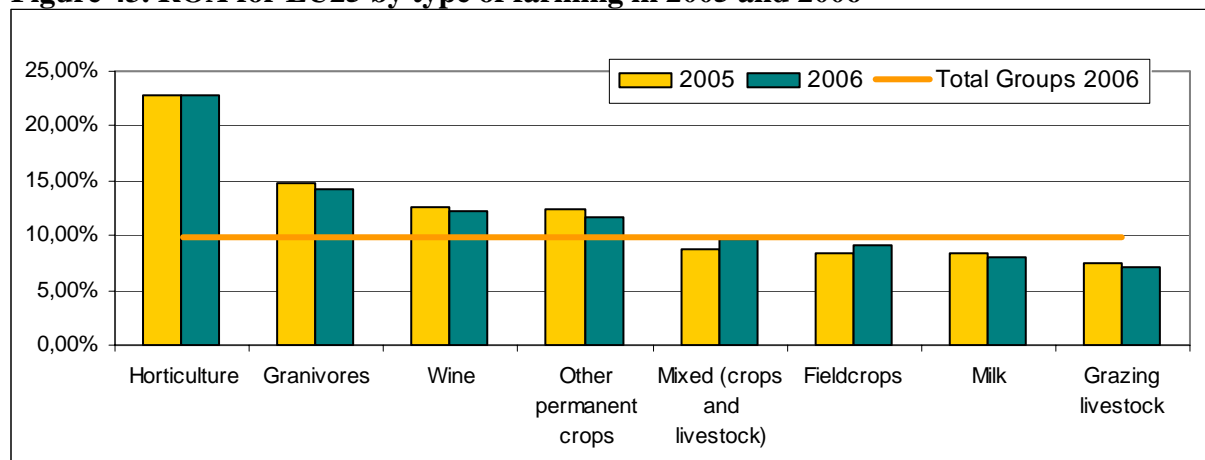
**Map 4. ROA by region in 2006**



**B. ANALYSIS BY TYPE OF FARMING**

The picture emerging for changes by MS when the types of farming are taken into account is shown in Figure 43. Horticultural holdings show the largest ROA, considering the EU25 averages, remaining stable from 2005 to 2006 (around 23%). The other types of farming remained in a range from 14.7% to 7% during both years, with grazing livestock holdings recording the lowest profitability in 2006.

**Figure 43. ROA for EU25 by type of farming in 2005 and 2006\***



Source: DG AGRI EU FADN

Note: Values in current euros.

\*2006 data from Spain and Germany are provisional.

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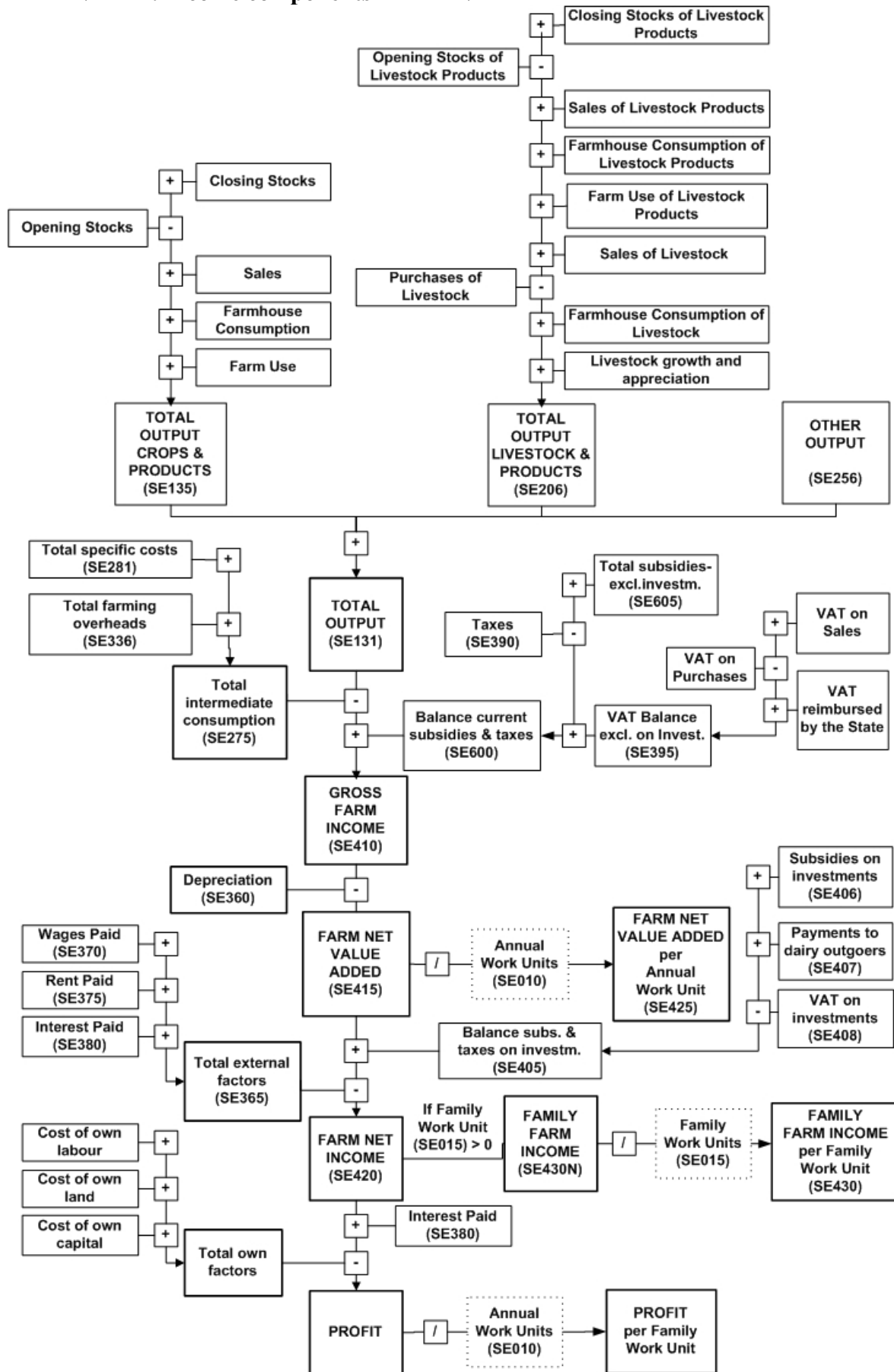
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# APPENDIX 1. Income components in FADN



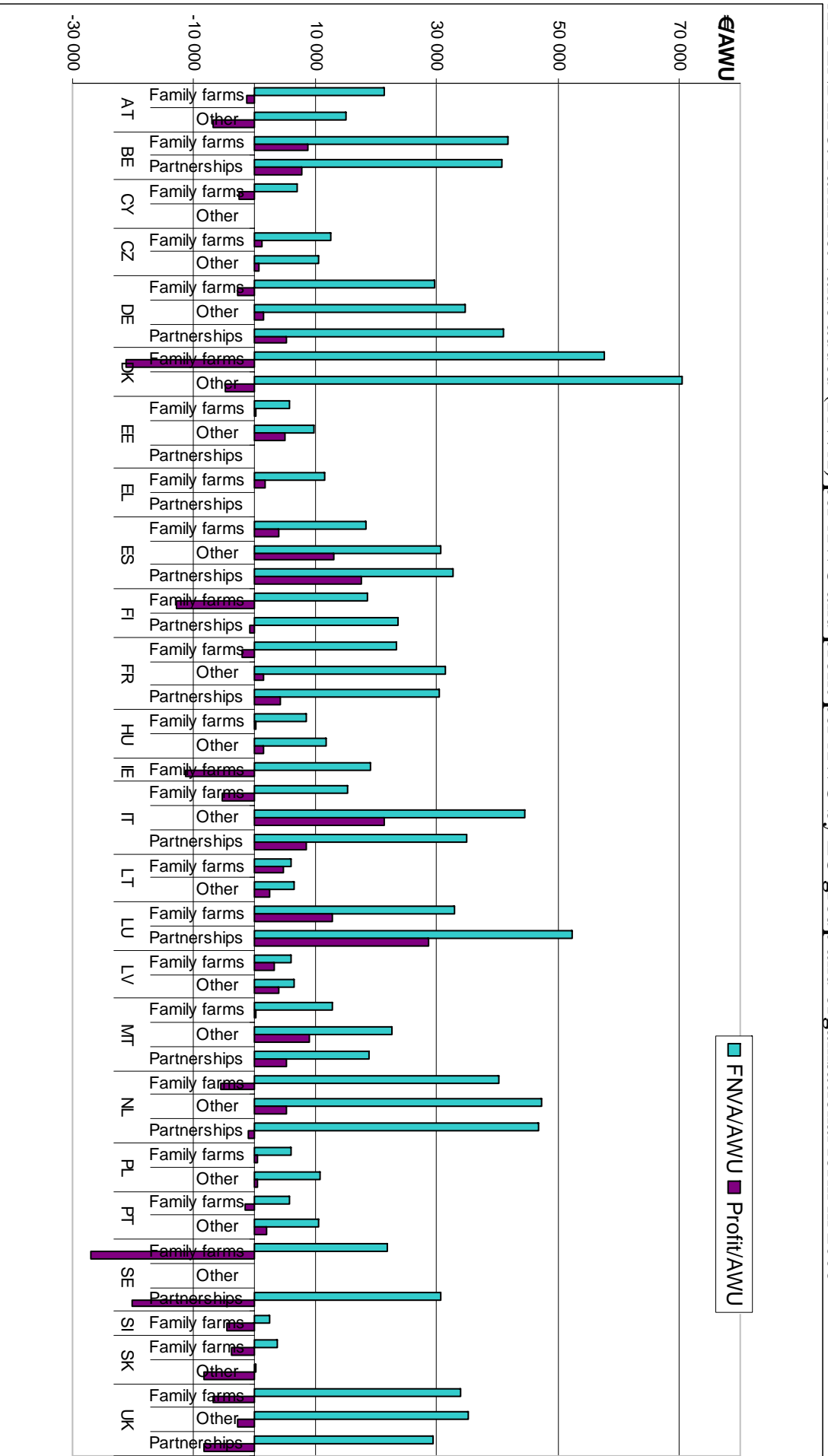
Source: DG AGRI EU FADN

**APPENDIX 2. Threshold by Member State in 2006 (ESU: European size units)**

<b>Member State</b>	<b>Threshold (ESU)</b>
Belgium	16
Cyprus	2
Czech Republic	4
Denmark	8
Germany	16
Greece	2
Spain	2
Estonia	2
France	8
Hungary	2
Ireland	2
Italy	4
Lithuania	2
Luxembourg	8
Latvia	2
Malta	8
The Netherlands	16
Austria	8
Poland	2
Portugal	2
Finland	8
Sweden	8
Slovakia	6
Slovenia	2
The United Kingdom	16*
<b>EU25</b>	

\* The threshold of 16 was used for the whole UK, but Northern Ireland has an ESU threshold of 8.  
Source: DG AGRI EU FADN

**APPENDIX 3. Farm net value added (FNVA) per AWU and profit per AWU by EU group and organisational form in 2006\***



Source: DG AGRI EU FADN  
 Note: In cases where no information is displayed in a column, this is for confidentiality reasons (because there are fewer than 15 holdings in the category concerned in the sample studied).

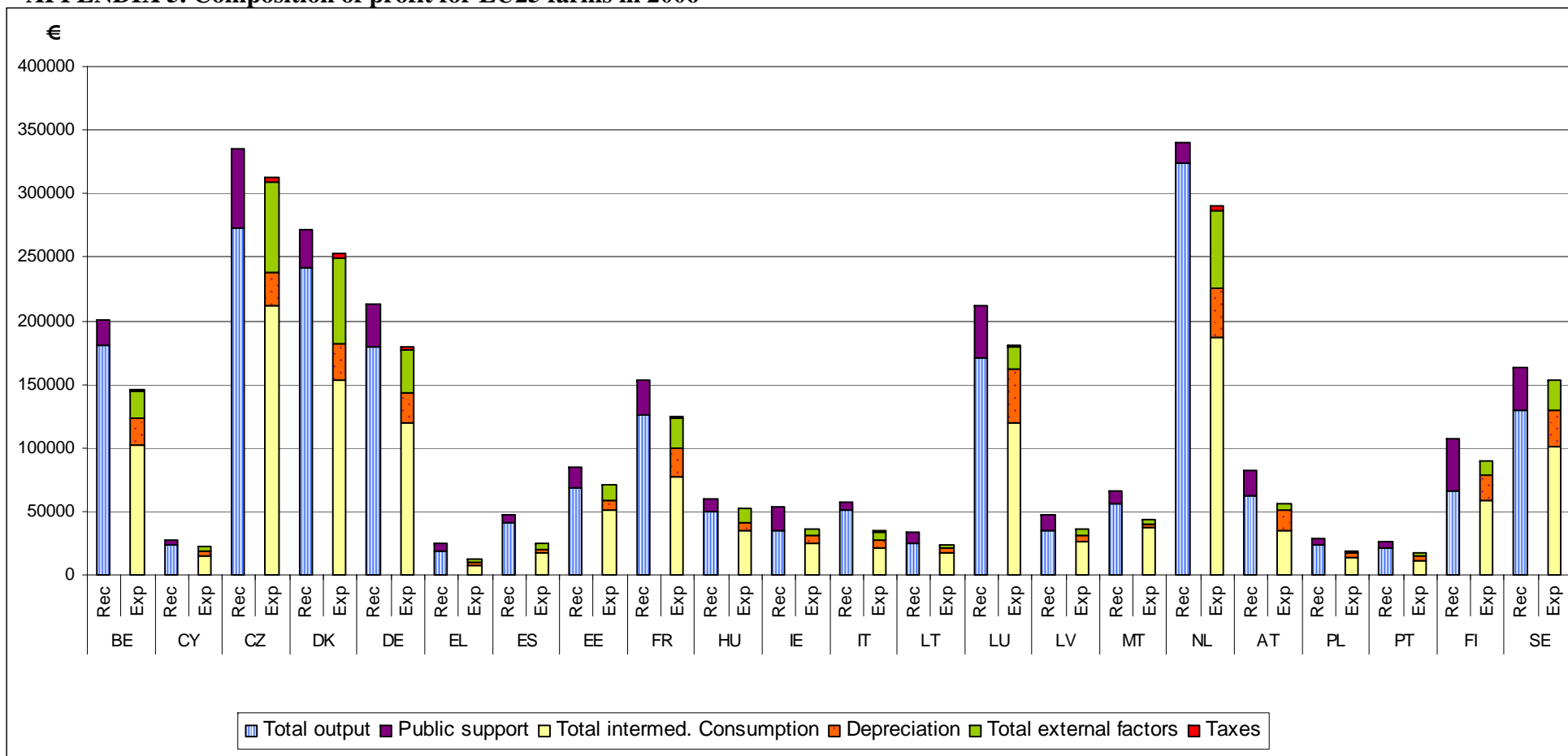
**APPENDIX 4. Number of holdings by type of farming in 2006\***

	Farms represented	Sample farms
Types of farming	Sum	Sum
Field crops	1 210 034	21 952
Horticulture	157 167	4 815
Wine	260 509	4 057
Other permanent crops	832 785	7 544
Milk	387 894	10 998
Grazing livestock	506 904	10 496
Granivores	125 349	4 609
Mixed (crops and livestock)	688 412	13 077
Total groups	4 169 054	77 548

Source: DG AGRI EU FADN

\*2006 data from Spain and Germany are provisional; therefore the total groups average is also provisional.

### APPENDIX 5. Composition of profit for EU25 farms in 2006\*

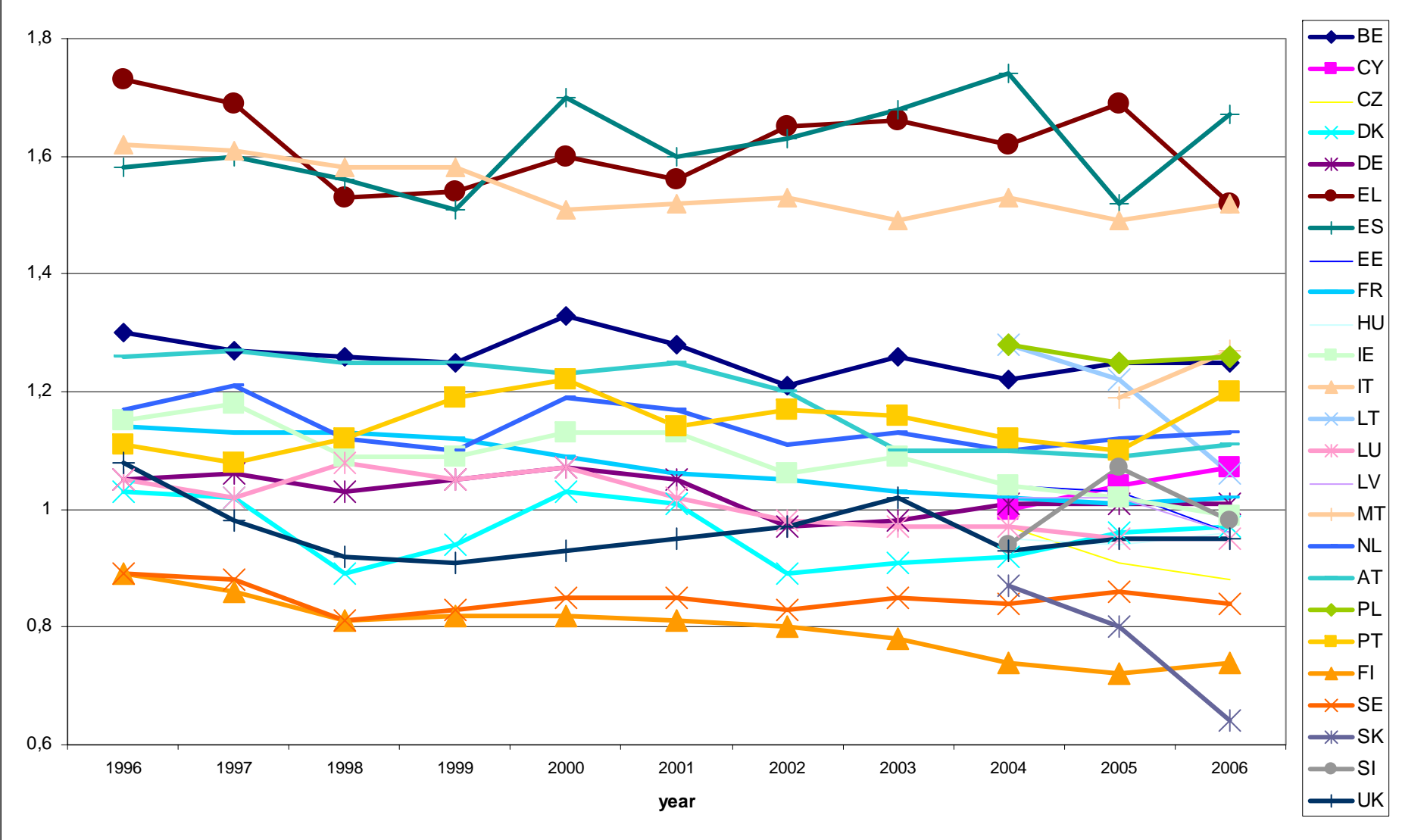


Source: DG AGRI EU FADN

Note. Rec. stands for Receipts and Exp. stands for expenses.

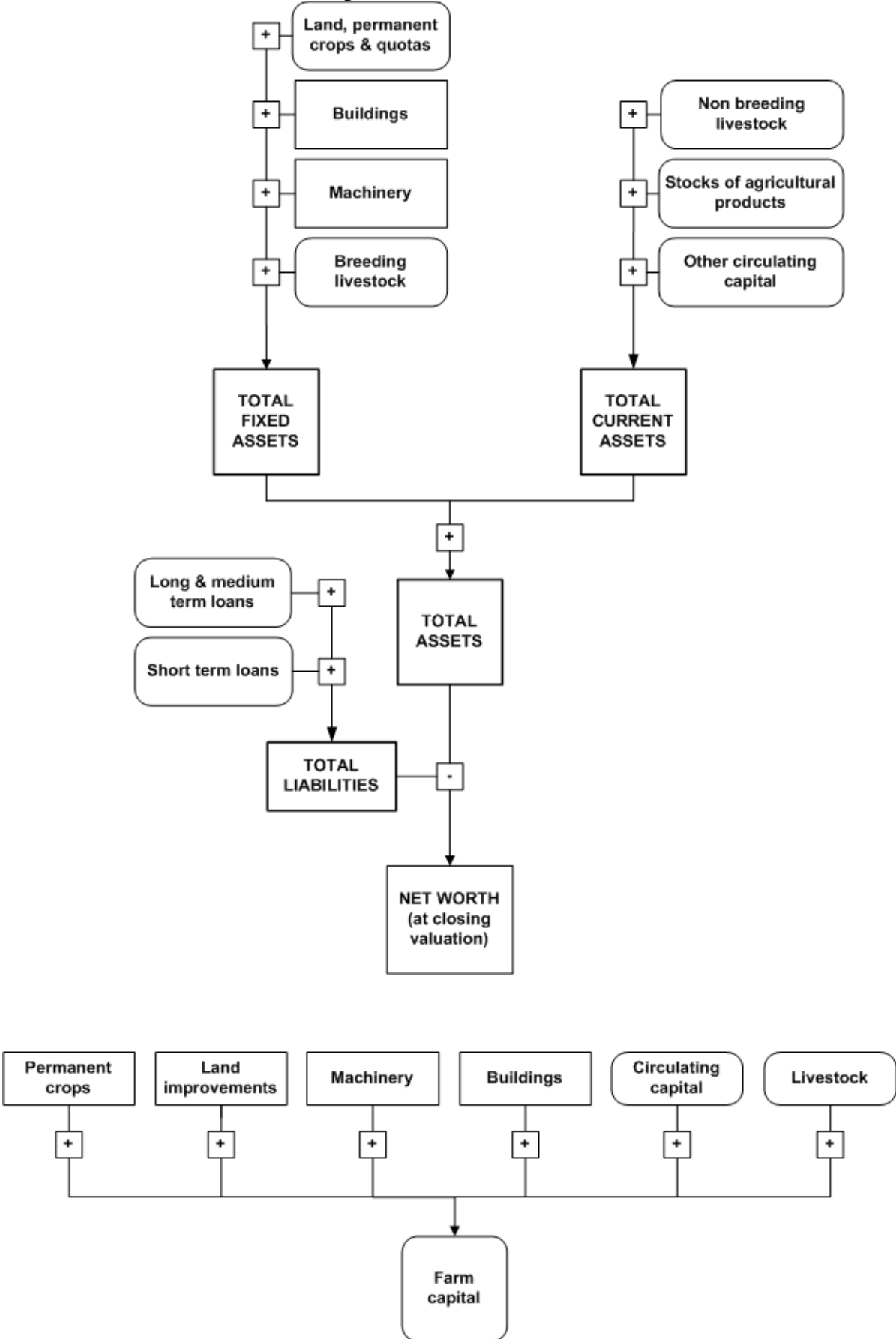
\*2006 data from Spain and Germany are provisional.

**APPENDIX 6. Trend in productivity ratio by MS (EU15) from 1996 to 2006\***



Source: DG AGRI EU FADN  
 \*2006 data from Spain and Germany are provisional.

**APPENDIX 7. Balance sheet components in FADN**



Source: DG AGRI EU FADN



## APPENDIX 8. Performance indicators by MS in 2006

Member State	FNVA	Profit	FNVA / AWU	Profit/AWU	Productivity	Direct payments on receipts	Wages / hour	Paid labour input*	Unpaid labour input**	Contract work / input	Net worth	Solvency	Liquidity	Return on assets
	€	€	€/AWU	€/AWU		%	€/hour	%	%	%	€	%		%
BE	78 254	55 178	41 571	29 312	1.25	10.1%	9.34	16.7%	83.2%	5.4%	331 869	28.0%	119.02	17.3%
CY	8 364	5 470	7 420	4 853	1.07	13.3%	3.60	23.0%	77.0%	1.7%	183 624	1.0%	235.61	4.4%
CZ	94 026	23 826	10 992	2 785	0.88	18.7%	4.10	82.9%	17.1%	4.1%	601 800	22.0%	2.69	12.2%
DK	86 968	19 222	59 464	13 143	0.97	11.2%	19.65	39.9%	60.1%	4.3%	803 594	50.0%	4.34	6.1%
DE	69 794	34 350	31 079	15 296	1.01	15.6%	9.00	36.3%	63.7%	4.3%	604 424	18.0%	2.24	9.6%
EL	14 281	12 449	11 481	10 008	1.52	24.9%	3.28	12.4%	87.6%	6.4%	79 729	0.0%	24.59	17.6%
ES	26 656	22 659	20 034	17 030	1.67	13.4%	5.81	18.9%	81.1%	4.1%	248 599	2.0%	165.30	11.3%
EE	25 697	14 229	8 390	4 645	0.96	19.3%	2.69	51.1%	48.9%	2.4%	122 183	28.0%	1.95	15.9%
FR	51 574	30 230	27 168	15 924	1.02	18.0%	11.68	26.6%	73.4%	6.7%	204 670	37.0%	2.94	16.2%
HU	18 076	7 930	9 939	4 360	0.96	17.3%	2.91	58.8%	41.2%	5.0%	87 097	27.0%	2.74	15.3%
IE	21 159	16 722	19 149	15 133	0.99	34.3%	9.54	6.0%	94.0%	7.0%	862 143	2.0%	11.19	2.7%
IT	29 514	23 952	21 883	17 759	1.52	10.3%	7.57	18.8%	81.2%	2.2%	309 927	1.0%	105.10	9.4%
LT	12 530	13 976	6 014	6 709	1.06	25.1%	1.67	24.6%	75.4%	0.8%	77 101	15.0%	5.38	14.9%
LU	54 295	40 916	33 668	25 372	0.95	19.3%	8.97	12.8%	87.2%	3.7%	773 731	17.0%	8.18	5.9%
LV	15 731	12 490	6 158	4 889	0.96	26.4%	1.93	37.1%	62.9%	2.4%	57 757	34.0%	3.80	20.2%
MT	25 840	22 691	14 644	12 859	1.27	15.8%	4.57	12.9%	87.1%	2.1%	278 249	5.0%	3.78	8.9%
NL	112 397	49 253	44 867	19 661	1.13	4.9%	13.93	39.1%	60.9%	4.4%	999 772	36.0%	2.92	7.1%
AT	33 788	27 690	21 353	17 499	1.11	24.8%	6.10	6.7%	93.3%	5.9%	349 394	10.0%	8.26	8.8%
PL	10 706	9 087	6 028	5 116	1.26	17.4%	1.71	13.6%	86.4%	2.7%	69 342	10.0%	5.45	14.2%
PT	11 041	8 756	6 882	5 458	1.20	19.5%	3.70	18.2%	81.8%	2.9%	75 717	4.0%	6.64	14.0%
FI	27 664	17 941	18 881	12 245	0.74	38.2%	10.74	13.5%	86.5%	4.4%	230 442	27.0%	10.86	9.1%
SE	33 696	10 048	23 289	6 944	0.84	21.0%	16.21	18.4%	81.6%	7.3%	449 085	30.0%	4.11	5.3%
SK	10 241	-101 158	581	-5 739	0.64	22.1%	3.13	91.6%	8.4%	4.5%	1 049 374	7.0%	7.69	0.9%
SI	4 592	3 668	2 447	1 955	0.98	23.2%	2.76	4.0%	96.0%	2.3%	170 314	2.0%	100.69	2.7%
UK	80 595	36 113	33 955	15 214	0.95	18.5%	11.76	41.9%	58.1%	4.7%	1 030 497	12.0%	2.26	7.0%
<b>EU25</b>	<b>29 708</b>	<b>19 924</b>	<b>18 289</b>	<b>12 266</b>	<b>1.14</b>	<b>16.0%</b>	<b>6.79</b>	<b>22.8%</b>	<b>77.2%</b>	<b>4.7%</b>	<b>264 095</b>	<b>15.0%</b>	<b>5.41</b>	<b>9.9%</b>
<b>EU15</b>	<b>34 978</b>	<b>23 353</b>	<b>23 008</b>	<b>15 361</b>	<b>1.15</b>	<b>15.7%</b>	<b>8.75</b>	<b>21.8%</b>	<b>78.2%</b>	<b>4.9%</b>	<b>317 814</b>	<b>15.0%</b>	<b>5.55</b>	<b>9.7%</b>
<b>EU10</b>	<b>12 570</b>	<b>8 772</b>	<b>6 404</b>	<b>4 469</b>	<b>1.08</b>	<b>18.3%</b>	<b>2.63</b>	<b>25.1%</b>	<b>74.9%</b>	<b>3.4%</b>	<b>89 398</b>	<b>13.0%</b>	<b>4.15</b>	<b>12.4%</b>

Source: DG AGRI EU FADN

Note: Provisional results for MS, EU15 and EU25 highlighted in grey.

FNVA: Farm Net Value Added; AWU: Annual Working Unit

\* Time worked by paid labour from the total amount of hours worked at the holding

\*\* Time worked by unpaid labour from the total amount of hours worked at the holding