



Brussels, December 2010

Developments in the income situation of the EU agricultural sector

EXECUTIVE SUMMARY

This note provides an overview of income developments in the agricultural sector, focusing on the main explanatory factors of income variability and their link to the ongoing debate on the Common Agricultural Policy (CAP) post-2013.

In recent years, agricultural incomes in the EU, measured as real factor income per worker, have shown a general improvement. For the EU as a whole, they increased only by 0.6% per year between 2000 and 2009, but developments over the past few years have highlighted big differences between EU-15 and for EU-12. In EU-15, income improved by 30% between 1993 and 2007, but fell by 17% between 2007 and 2009. This led also to an income growth of 0.6% per year. In EU-12, agricultural income improved by 67%, or 7.4% per year, between 2000 and 2009. Agricultural income dropped sharply with the end of the commodity price bubble of 2007 and the beginning of the economic recession. In EU-15, this caused agricultural incomes to plummet to the levels of 1994, while agricultural incomes in EU-12 - despite a drop in 2009 - stayed well above their respective levels before accession.

The development in recent years has shown (or served as a reminder) that agricultural income is highly volatile. This is even more evident when one looks at income developments for single farms. Farm income varied on average by more than 30 % in about 54 % of cases (difference relative to the average of the three previous years). This is mostly due to the volatility of input and output prices and changing yields. Volatility is particularly critical for small farms, because income is low and small changes can have a large relative impact. Of all farm types, pig and poultry farms show the greatest volatility, even though their incomes tend to be relatively large.

The development of agricultural incomes has been determined by two major trends:

- **Technological progress led to a significant improvement in factor productivity** and allowed a major expansion of the volume of production, which outpaced the slower increase in demand for agricultural and food products. As an example, during the period 2002-2009 one full time worker produced 26% more agricultural products. This led to prices for agricultural products declining by 14% in real terms, while input prices rose by 3%. **The prices trend is therefore not favourable for the agricultural sector.**

- **Structural change led to a significant decrease in the agricultural labour force.** Between 2000 and 2009, employment in the agricultural sector in the EU-27 fell by 25%, the equivalent of 3.7 million full-time jobs. It fell by 17% in the EU-15 and by 31% in the 12 Member States.

Productivity increase and structural change led to a **significant increase in farm size** and the amount of land per worker, because the remaining farmers buy or rent the land made available to extend production. Between 2003 and 2007 the agricultural area per farm increased by an average of 10%. **This supported the improvement of agricultural incomes** as the income per worker increases with farm size.

Although the income situation of farms has improved slightly over the last decade, it has to be stressed that it is highly heterogeneous. It differs between

- **Regions and Member States:** agricultural income in the EU-15, particularly in northern Europe, remains much higher than in the EU-12, due not only to larger farm structures (on average) and better yields, but also to higher income levels in the overall economy of the EU-15. However, incomes in the EU-15 and EU-12 have been steadily converging since accession.
- **Farm types:** both in EU-15 and EU-10 pig and poultry farms have had the highest average incomes, with specialised dairy farms in second place for most years. Field crop farms, grazing livestock and mixed farms have had lower incomes in most years. However, the income of field crop farms increased steadily until 2007.
- **Individual farms:** due to the specific situation of each farm, there remain large variations in farm incomes, even when various structural parameters are taken into account.

The vast majority of farms are able to cover their variable costs. However, the agricultural sector still has a profitability problem. It becomes visible when looking at the capacity to cover total costs, including costs for own and external production factors. **In the period 2004-2006 only 35% of farms in EU-25 were able to cover all of their costs.** This was mainly true for small farms. However, the share of profitable large farms is also just above 62%. In practice, this means either that family labour is not appropriately remunerated or that family assets do not provide adequate returns.

The low profitability of agricultural activity also explains why, despite the increase in size and the improvement of productivity, many farms depend heavily on direct payments. In the period 2006-2008 the average share of direct payments in agricultural income (from which all production factors have to be remunerated) was 27 %. This figure has not changed significantly in recent years, but it differs widely from one Member State to another. Direct payments as a share of income also differ considerably between farm types, being highest in field crop and other grazing livestock farms, with 50 % and 55 % respectively. By contrast, in the horticulture and wine sectors the share is below 10 %.

The profitability of farms depends very much on the receipt of direct payments. Without Pillar I and Pillar II payments the share of profitable farms would fall below 20%. Field crops, grazing livestock and mixed farms in particular would be affected. In these sectors even the vast majority of large farms would not be profitable, as only 20-25% of these farms would be able to cover all of their costs. Large farms in the pig and poultry, horticulture and permanent crop sectors are more profitable and less reliant on direct payments.

Because of the low profitability, farm incomes are lower than in the rest of the economy. Although full-scale comparisons are difficult due to data limitations and conceptual differences, the evidence clearly points to the conclusion that agricultural incomes in the EU are significantly lower than earnings outside the sector. In 2008, the entrepreneurial income per worker employed in agriculture in the EU-27 was estimated at around 58% of the average wage in the EU. The gap is more pronounced in the EU-12 than in the EU-15. Since the year 2000, the gap has widened in the EU-15, but shrunk in the EU-12.

This is why many farmers are trying to improve their income by engaging in off-farm activities or by diversifying the farm. It is difficult to quantify this phenomenon, because data on agricultural household incomes are scarce and calculation methods are not harmonised. Nevertheless, it can be concluded that farm households in many Member States derive a significant share of income from off-farm sources, i.e. mainly other gainful activities, but also social transfers and property income. Importantly, the share of off-farm income has increased in many of the countries for which data are available.

When looking to the agricultural situation outside the EU, it appears that **the economic crisis has also affected farm incomes in the US, Canada, Australia and New Zealand.** However, due to differences in farm structure and farm data reporting, income developments are not fully comparable. Nonetheless, it is clear that the fall in commodity prices brought on by the crisis has caused farm incomes to decline in these countries too. This is particularly the case for dairy farms, whose incomes plummeted in the US, Australia and New Zealand in 2008-09. In Canada, on the other hand, dairy farms are estimated to be among the highest earners of all farm types.

Furthermore, it is revealed that, in the US, farm incomes rely on government support to a similar extent as in the EU, and in Canada the dependence is even greater. In 2007, commodity payments in the US accounted for 29 % of farm income, while payments from the Canadian government accounted for 55 % of farm income in the period 2007-2009. **In recent years, no government support for farm incomes has been reported in Australia or New Zealand.**

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1. INTRODUCTION

The aim of this note is to provide an overview of income developments in the EU agricultural sector during the last decade and some insights into the main explanatory factors.

The report begins with a brief description of the development of the CAP in order to set the findings on income within the framework of the evolving agricultural policy. Chapter 3 analyses the income trends at sector and more disaggregated levels (regions, farm types, farm size), providing insights into the main drivers of the development and explaining the importance of direct payments for the income situation of farms. It goes on to provide information on the distribution and volatility of farm income. Chapter 4 briefly examines trends in other sources of income and Chapter 5 compares the income situation of farms with incomes in other sectors. Lastly, Chapter 6 analyses recent developments in farm income in the US, Canada, Australia and New Zealand.

2. DEVELOPMENT OF THE CAP

The EU Common Agricultural Policy (CAP), one of the oldest policies of the European Union, is strongly rooted in the European integration project. Due to the CAP's long history, it is also a policy that has been reformed on many occasions, in particular during the past 15 years. Today's CAP has been transformed into a multi-functional policy, supporting market oriented agricultural production throughout Europe, while also contributing to living and vibrant rural areas, and environmentally sustainable production.

The initial objectives of the CAP have remained unchanged over the years. However, the weight given to the different objectives has changed drastically, and sustainability has become an overriding objective of the EU. Meanwhile, the instruments to achieve the objectives have also changed considerably. The CAP has moved away from supporting product prices to supporting producers' incomes and rural development.

The CAP has undergone substantial changes since the early 1990s. We should be aware that the CAP of today benefits society by

- encouraging the production of safe and high-quality food throughout the Union,
- supporting the livelihood of thriving rural communities, and
- giving farmers incentives to take good care of the environment.

Through its two pillar structure (direct payments and market measures – the First Pillar - and Rural Development Policy – the Second Pillar), the CAP seeks to respond to the public demand for a sustainable agriculture sector in Europe by enhancing the competitiveness of the agricultural sector, ensuring a sufficient and secure food supply, preserving the environment and the countryside and facing new challenges, such as climate change, while providing a fair standard of living for the agriculture community.

Moving away from product support...

The core element in the reform process of the CAP has been the move away from product support to producer support. Today the CAP focuses on supporting farmers' income directly, rather than ensuring a fixed price for the products they produce (hence supporting farmers' income indirectly).

In the past, as a result of guaranteed fixed prices for certain products, and – in many cases – prices that were set far above world market prices, European farmers were to a large extent isolated from world market signals.

Today, the market instruments are designed instead as safety nets. Intervention prices are set at levels which ensure that they are only used in times of real crisis. Over the past 17 years the EU has moved away from using market instruments as the main tool towards using them as safety nets...

Decreasing levels of expenditure on market support in the CAP reform process have led to a narrowing of the gap between EU and world market prices, as well as a decrease in the exportable surplus of all supported EU products – even going as far as to turn the EU into a net importer, where previously it was the major world net exporter.

...towards producer support...

Cuts in support prices meant a potential loss of income for European farmers. These cuts had to be accompanied by compensatory payments to farmers in order not to undermine the vitality of much of the European farming community. In 1992, when the first cut in support measures was made, direct payments were introduced. The payments were linked either to the farming of fixed areas (or to the production of fixed yields), or to a fixed number of animals – which led to these payments being referred to as "coupled payments".

The movement towards a real market orientation for the European agricultural sector took place in 2003, when a major overhaul of the CAP was carried out. The aim was to "decouple" direct payments from production. This meant that farmers were no longer to receive payments related to particular kinds of production. Instead payments were linked to entitlements based on the value of historical production.

The decoupled direct payment ensures basic income support for farmers. The rest of their income is determined by the market. In order to maximise profits, producers must respond to market signals, producing products that consumers want, because a major determinant of a farmer's income will tend to be the receipts from the market.

Payments are linked to observing environmental standards, as well as standards related to animal and plant health. This system is referred to as "cross compliance", and it applies also to land that is left idle. Failure to comply with cross compliance standards results in a (gradual) reduction in farmers' support.

In this way, the current decoupled direct payment helps to keep sustainable farming in place by ensuring the longer term economic viability and a smooth structural adjustment

of the farming sector. Direct payments in conjunction with cross-compliance, contribute to providing basic public goods delivered through sustainable farming.

Before the process of CAP-reform began, farm income was in steady decline. Reform has resulted in a stabilisation of income levels. Yet, despite structural adjustments in the agricultural sector and the income support provided, farmers' incomes are still below the average income levels of other sectors of the economy.

...and with the strengthening of rural development

Measures relating to structural adjustment of farming have been supported for a long time. These measures are now an important component of the part of the CAP known as the Rural Development Policy.

In the last decade, rural development reform has been an integral part of the CAP reform process, and a much stronger emphasis has been put on this component of agricultural policy, developing it into the Second Pillar of the CAP. Rural development measures serve to complement the overall reform process by enhancing the general market orientation of the policy, while providing the necessary safety-nets for products and producers.

Rural development programmes today assist the overall process of adjustment of rural regions in three broad areas ("axes"): investment and modernisation; protection of the environment; and development of the wider rural economy.

The programmes are individual to each Member State (or region), although there is a common framework for measures involving all Member States, and a minimum budget share that must be allocated to each axis is fixed at Community level. This allows each Member State (or region) to address the issues of greatest concern in their part of the Union, since the adjustment problems vary considerably from region to region and between Member States. In contrast to First Pillar measures, which are 100 % Community funded, Rural Development measures are co-financed by the Member States.

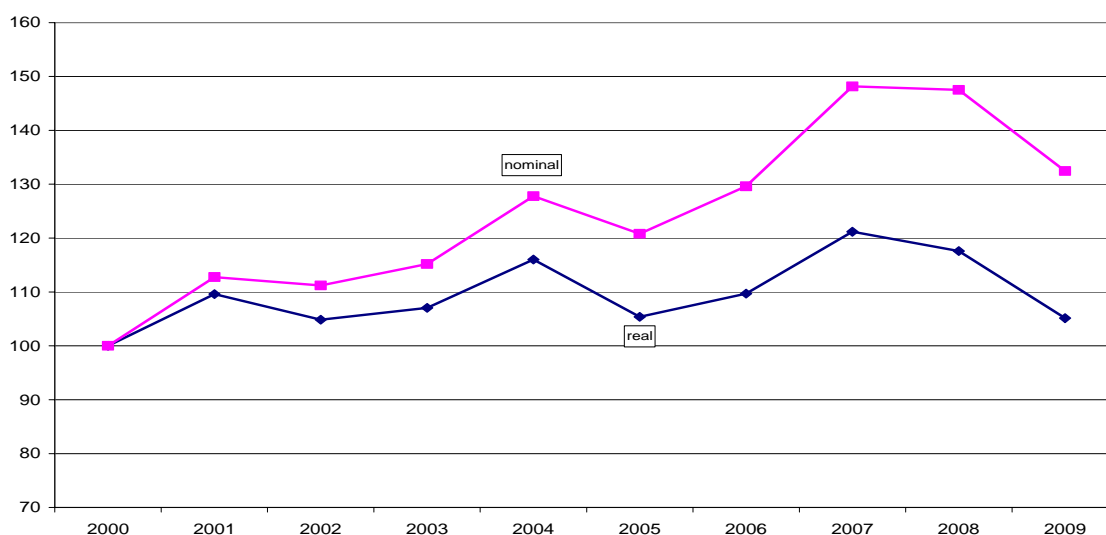
In order to further strengthen the budgetary allocation directed towards Rural Development, a tool for redistributing funds between pillars ("modulation") has been introduced. Modulation involves a cut in direct payments for all farmers receiving direct payments above 5 000 EUR, with the corresponding amounts being channelled into rural development. The size of the cut in direct payments has gradually been increased since its introduction in 2003, and will reach 10% by 2013.

3. INCOME SITUATION IN THE EU AGRICULTURAL SECTOR

3.1. Developments in agricultural income at sector level

Over the last decade, agricultural income per (annual) worker in the EU-27 has grown both in nominal and in real terms (Graph 3.1). On average, however, the increase in real terms has been very modest (0.6% per year) and the trend in real income has been volatile. After increasing by 15% between 2000 and 2004, agricultural income fell by 10% in 2005 as a consequence of the strong contraction in the larger EU-15 Member States. During 2006 and 2007, income increased by a total of 15% due to soaring commodity prices, before dropping sharply after 2008 with the end of the price bubble and the beginning of the economic recession. This brought income in the EU-27 down to close to the level of the year 2000.

Graph 3.1: Development of agricultural factor income per annual work unit (AWU) in the EU-27, 2000-2009, 2000=100, in real terms

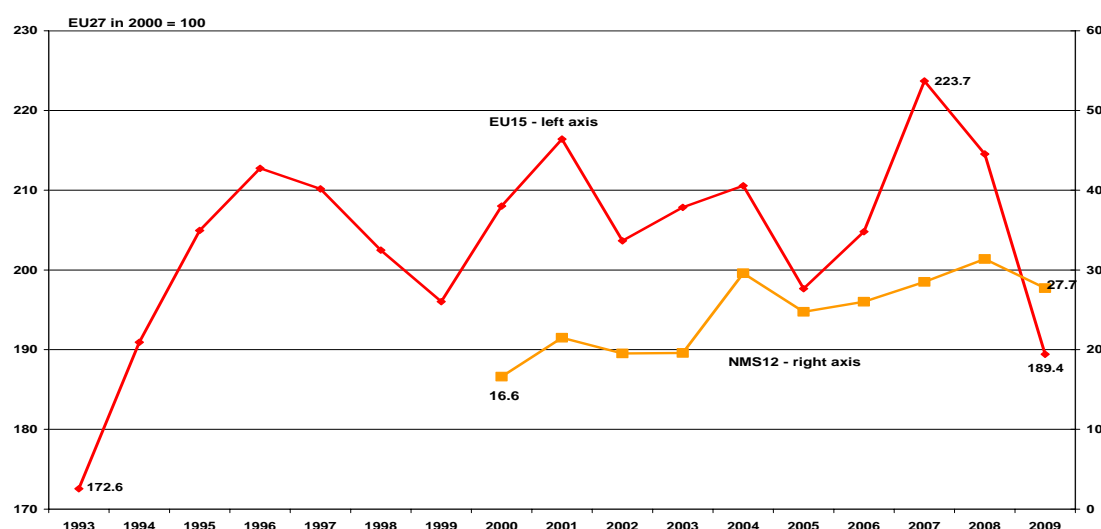


Source: Eurostat — Economic Accounts for Agriculture — Elaboration DG AGRI

As Graph 3.2 shows, the development of agricultural income has not been the same in the EU-12 and the EU-15. Real income in the EU-15 has increased. After a strong increase following the McSharry reform, real income in the EU-15 followed a basically stable path until 2006. But the pronounced increase in real income in 2007 was followed by two successive declines, including a fall of 11.6% in 2009, which caused income to plummet to 1994 levels.

By contrast, in the EU-12 income has grown significantly. Although the 2009 decline in income was slightly stronger in the EU-12 (about -12.5%), real income per worker has increased by 34% since accession. This is mainly due to the higher market prices prevailing in the single market and the increase in public support for the farm sector.

Graph 3.2: Development of agricultural factor income per AWU in the EU-15 and EU-12, 1993-2009, EU-27 in 2000=100, in real terms



Source: Eurostat — Economic Accounts for Agriculture — Elaboration DG AGRI

The 11.6 % drop in EU-27 **real agricultural income per worker** observed in 2009 results from a reduction in **agricultural labour input** (-2.3%) and in **real agricultural income** (-13.6%).

This fall in EU-27 **real agricultural income** in 2009 results mainly from a **strong decrease in the value of agricultural output** (-10.9%), linked to the sharp drop in the value of crop production (-13%, due essentially to the price drop) as well as for animal output (-9.3%, again largely due to the price decline) in spite of the **strong decrease in the cost of production** which dropped by 9.2% on average in real terms driven by the sharp decline in the real prices of feedingstuffs, energy and fertilizers (estimated at -16.7%, 14.5% and 11.5% respectively).

In the crop sector the strong decline in **average producer prices** (-11.9%) was not compensated by higher volumes, which actually declined slightly by 0.9%. Prices of most crops fell substantially in 2009 as compared to 2008, notably those of **cereals** (-25.2%), **oilseeds** (-23.8%), olive oil (-16%), **fruit** (-15%) and **potatoes** (-10.1%).

The pronounced decline in the value of animal output in 2009 is the result of a decline in **production volumes** (-1% on average) and a stronger decline in **real producer prices** (-8.2%). The stability in output volumes of **pig production** and lower real producer prices (-4.2%) led to a reduction of output value of 3.8% for pig production.

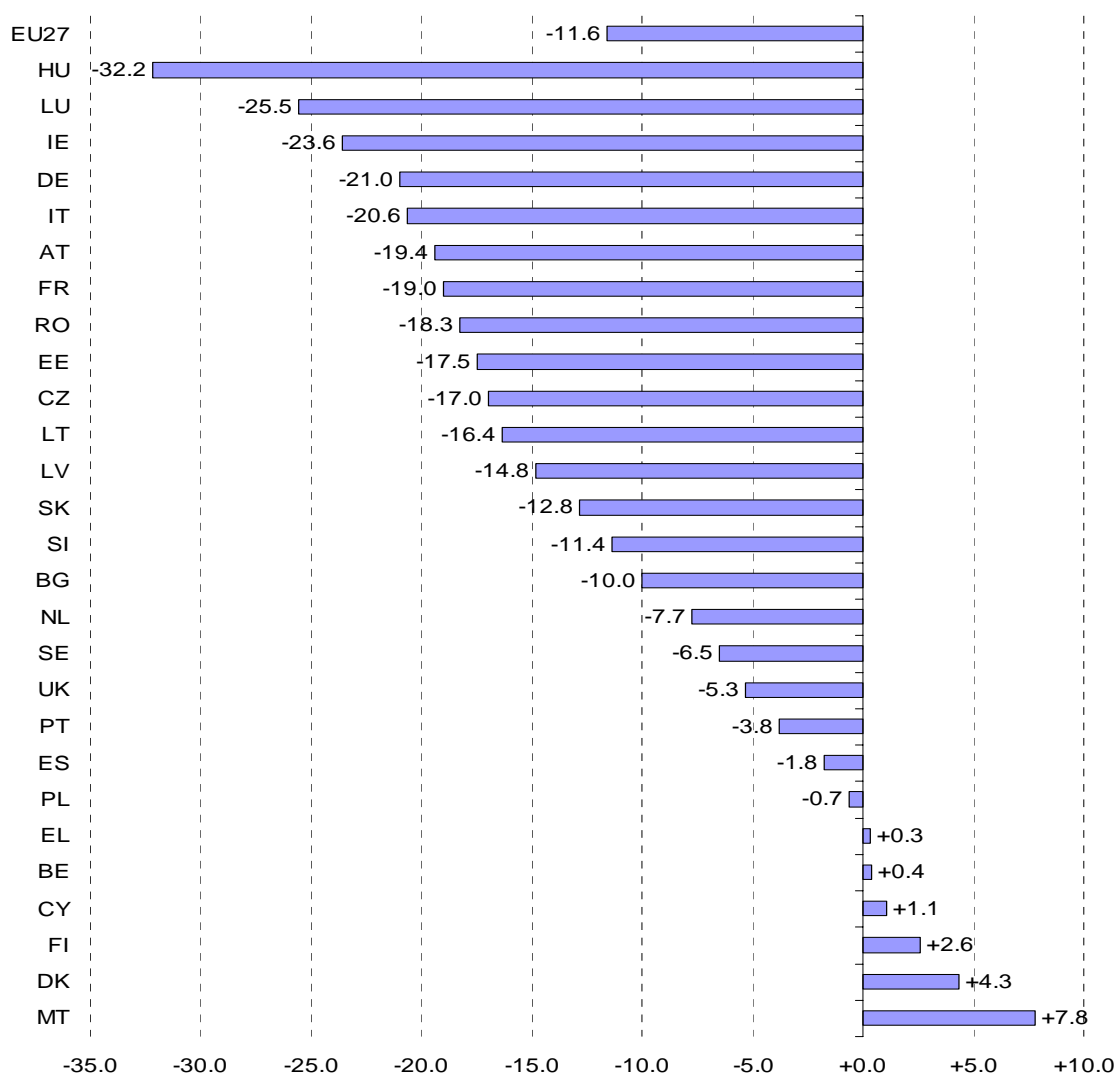
Milk output volume decreased slightly by 0.4% in spite of the 2% quota increase decided in 2008 and used only to a limited extent so far in most Member States. **Real milk prices declined sharply** (-20.3%) in 2009 as the drop in dairy commodity prices of 2008 is gradually transmitted to the milk producers.

Whereas the **volume of input costs** (intermediate consumption) declined by 2.7% (driven by essentially by the lower use of fertilisers (-14.7%)), their prices in real terms exhibited a more substantial decrease. This is notably the case for feedstuffs (-15.1%) and energy (-12.3%). However, the real prices of fertilizers are reported to have increased in 2009 (+3.7%) in spite of the decline in energy prices (with wide variations between Member States, ranging from +38.8% in France to -30.7% in neighbouring Belgium).

These developments led to a strong and continued deterioration of the **terms of trade** of the agricultural sector in the EU and **constitute the main factor behind the pronounced decline in farm income in 2009**.

In 2009, income per annual work unit decreased in 21 of the 27 Member States. The steepest decrease was in Hungary (-32.2%), followed by Luxembourg (-25.2%), Ireland (-23.6%), Germany (-21.0%), Italy (-20.6%), Austria (-19.4%) and France (-19.0%). Only six countries posted an increase in income: Malta (+7.8%), Denmark (+4.3%), Finland (+2.6%), Cyprus (+1.1%), Belgium (+0.4%) and Greece (+0.3%).

Graph 3.3: Change (%) in agricultural income in the EU-27 in 2009 (compared to 2008)



Source: Eurostat — Economic Accounts for Agriculture

3.2. Trend in farm income: a closer view

This section provides information on the situation of agricultural incomes at a more disaggregated level. In contrast to the previous section, income estimates are derived from FADN data. The FADN contains farm accounting data of a sample of farms representing about 90% of agricultural production¹. Due to the different methodological approaches of the FADN and the Economic Accounts for Agriculture, income estimates will always differ slightly.

Methodology

Income indicators

*In this section two indicators are used. The farm net value added (FNVA) and the economic profit. **The FNVA corresponds to the factor income** used in the previous chapter. The economic profit takes into account not only intermediate consumption and depreciation but also costs for the remuneration of production factors (own and external). **All income figures presented in this section are expressed in current terms.***

FNVA: FNVA is used to remunerate the fixed factors of production (work, land and capital), whether they be external or family factors. As a result, holdings can be compared regardless of the family/non-family nature of the factors of production employed.

FNVA = output + Pillar I and Pillar II-type payments + VAT balance - intermediate consumption - farm taxes - depreciation.

The value is given per AWU in order to take into account the differences in the scale of farms and to obtain a better measure of the productivity of the agricultural workforce.

Economic profit: the economic profit corresponds to the amount remaining after remuneration of all production factors. Thus, as in the case of the FNVA, holdings can be compared irrespective of the family/non-family nature of the factors of production employed. However, a part of the costs is not taken from the FADN farm accounts but is estimated. The size of the estimates depends to a large extent on the methodological assumptions made when they are calculated.

Economic profit = FNVA + subsidies on investment-taxes on investment-wages-rent-costs of own labour- costs of own capital- costs of own land.

The value is given per AWU.

A negative value for economic profit does not necessarily mean that a farm is forced to cease production. It can continue to produce even if the economic profit is negative over a long period, because the farmer might decide to continue with farming even if his/her own production factors are not fully remunerated. Of course, this is only possible if other costs such as intermediate consumption, depreciation and external factors can be paid and the farmer has sufficient income to live on.

¹ For more information on FADN: http://ec.europa.eu/agriculture/rca/index_en.cfm.

Revenue

Output: includes not only output of crops and livestock activities but also other output if it is directly linked to the farm activity e.g. farm tourism, forestry, renewable energy, etc. It does not include non farm income of the household.

Pillar I and Pillar II-type payments: in the context of this analysis with Pillar I and Pillar II-type payments reference is made not only to the part financed by the EU but also to subsidies financed by the MS, including national aids. The FADN does not allow a clear distinction to be made between EU and national payments over such a long time period.

Investment subsidies: investment subsidies could be regarded as part of the Pillar II payments. However, they are shown separately because they are treated differently in the calculation of the income estimators. As in the case of the Pillar I and Pillar II-type payments, they include national payments.

Costs

Intermediate consumption: total specific costs and overheads arising from production in the accounting year. Intermediate consumption includes e.g. costs for feed, fertilisers, crop protection and energy.

Depreciation: depreciation of capital assets estimated at replacement value.

Farm taxes: farm taxes and other dues (not including VAT and the personal taxes of the holder) and taxes and other charges on land and buildings. Subsidies on taxes are deducted. Taxes on income are not taken into account.

Taxes on investment: subsidies and taxes not arising from current productive activity in the accounting year.

Wages: wages and social security charges. Amounts received by workers considered as unpaid workers (wages lower than a normal wage) are excluded.

Rents: rent paid for farm land and buildings and rental charges.

Family labour costs: the estimate of family labour costs is derived on the basis of the wages the owner of the farm would have to pay if he were to hire employees to do the work carried out by the family members. It is estimated as the average regional wage per hour multiplied by the number of working hours of family workers.

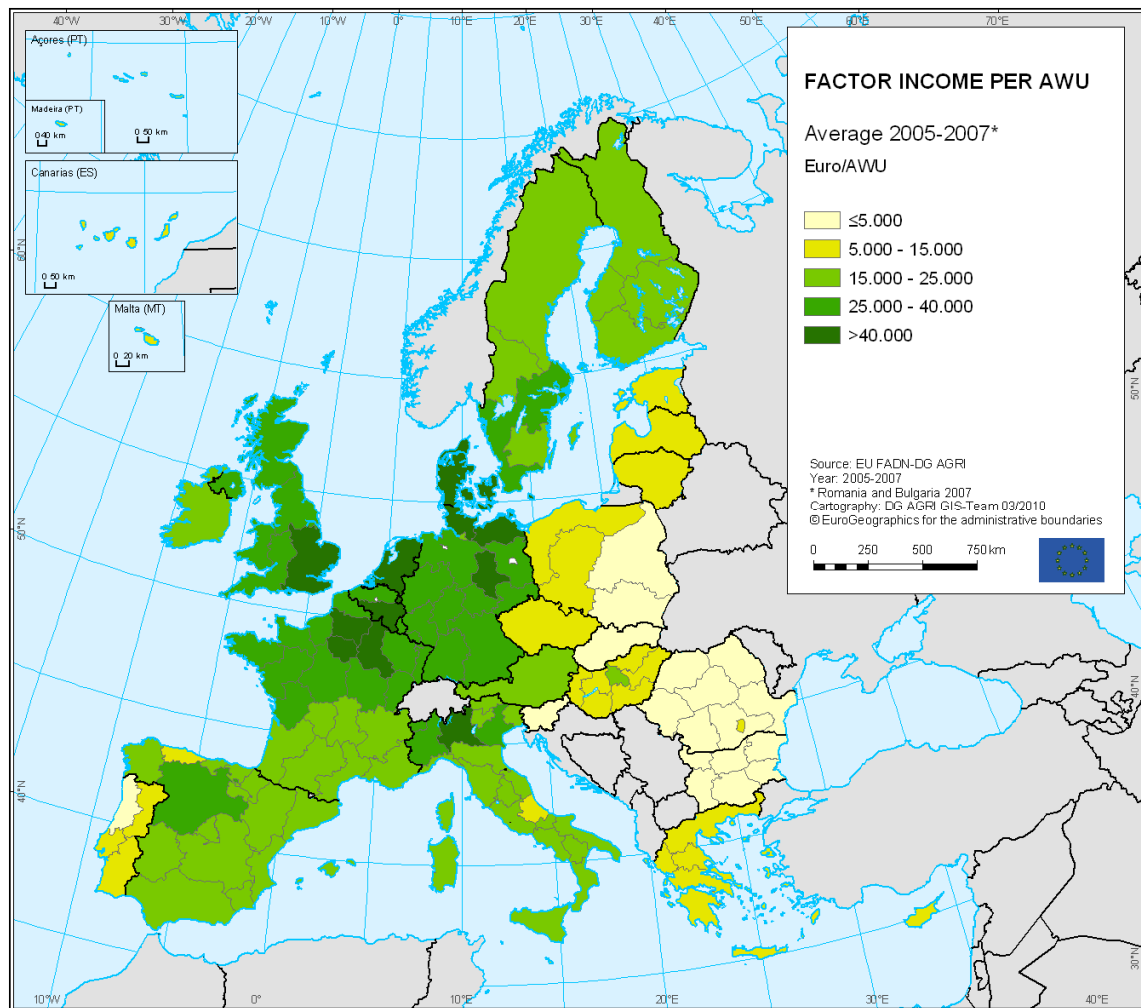
Own land costs: the estimate of own land costs is derived on the basis of the rent the owner of the farm would have to pay if he would need to rent the land he is using. It is estimated as the owned area multiplied by the rent paid per ha on the same farm or, if there is no rented land on the farm, by the average rent paid per ha in the same region and for the same type of farming.

Own capital costs: the estimate of own capital costs (permanent crops, buildings, machinery and equipment, forest land, livestock and crop stocks) is derived on the basis of the opportunity costs for capital. In order to calculate the opportunity costs, the value of farm assets (without land) is multiplied by the real interest rate (long term interest rate minus inflation). As inflation is higher than the long term interest rate in some cases, the estimate of capital costs can be negative.

3.2.1. Differences in agricultural income between regions

Agricultural incomes differ considerably between regions. Although income in the new Member States has increased at a much higher rate, absolute income levels are still far higher in the EU-15 (Map 1)². The regions with the highest agricultural FNVA per worker (> €40 000 per year) are mainly located in Benelux, northern Germany, northern Italy and the UK. Most regions with low incomes (< €15 000 per year) are located in eastern Europe. Greece and Portugal also have low average incomes.

Map 3.1: Agricultural FNVA in €per AWU at regional level, average 2005-2007

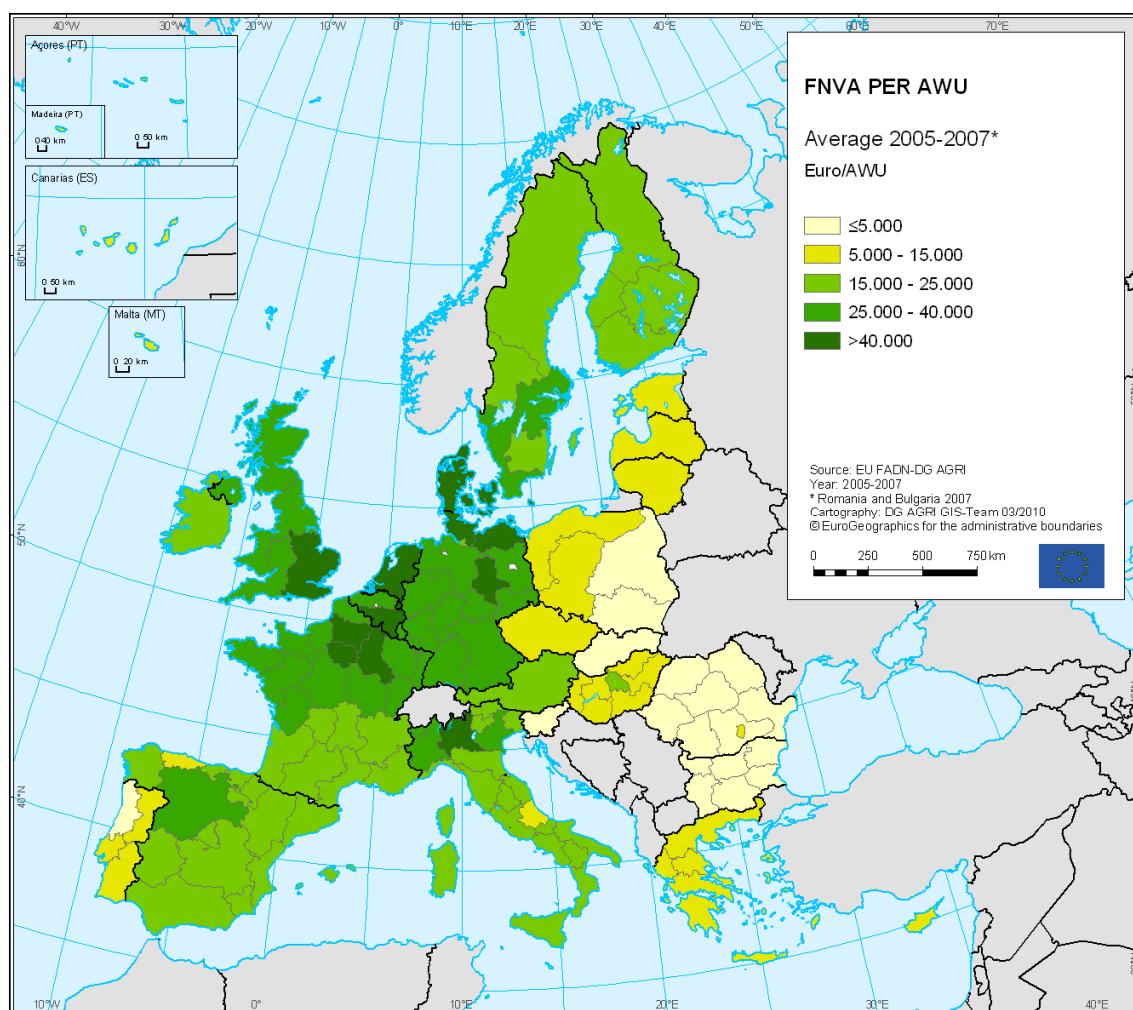


Source: DG AGRI EU-FADN

However, nominal income growth between 2004 and 2007 was highest in Eastern Europe, while income in southern Italy and southern Greece decreased (Map 3.2). Several Member States with high incomes in northern Europe, such as Belgium, Denmark, Germany (North-West) and The Netherlands, showed only a moderate increase in income over this period. This was mainly due to the importance of pig production in these regions, which was hit by unfavourable market conditions in 2007.

² The source for information on income at disaggregated level (region, type of farm and farm size) is DG AGRI's Farm Accountancy Data Network. The most recent year available is 2007. More detailed information on the income situation of farms in EU-15, EU-10, EU-2 and the Member States can be found in the annex (Tables A.1-A.4)

Map 3.2: Change of FNVA/AWU in the FADN regions between 2004 and 2007

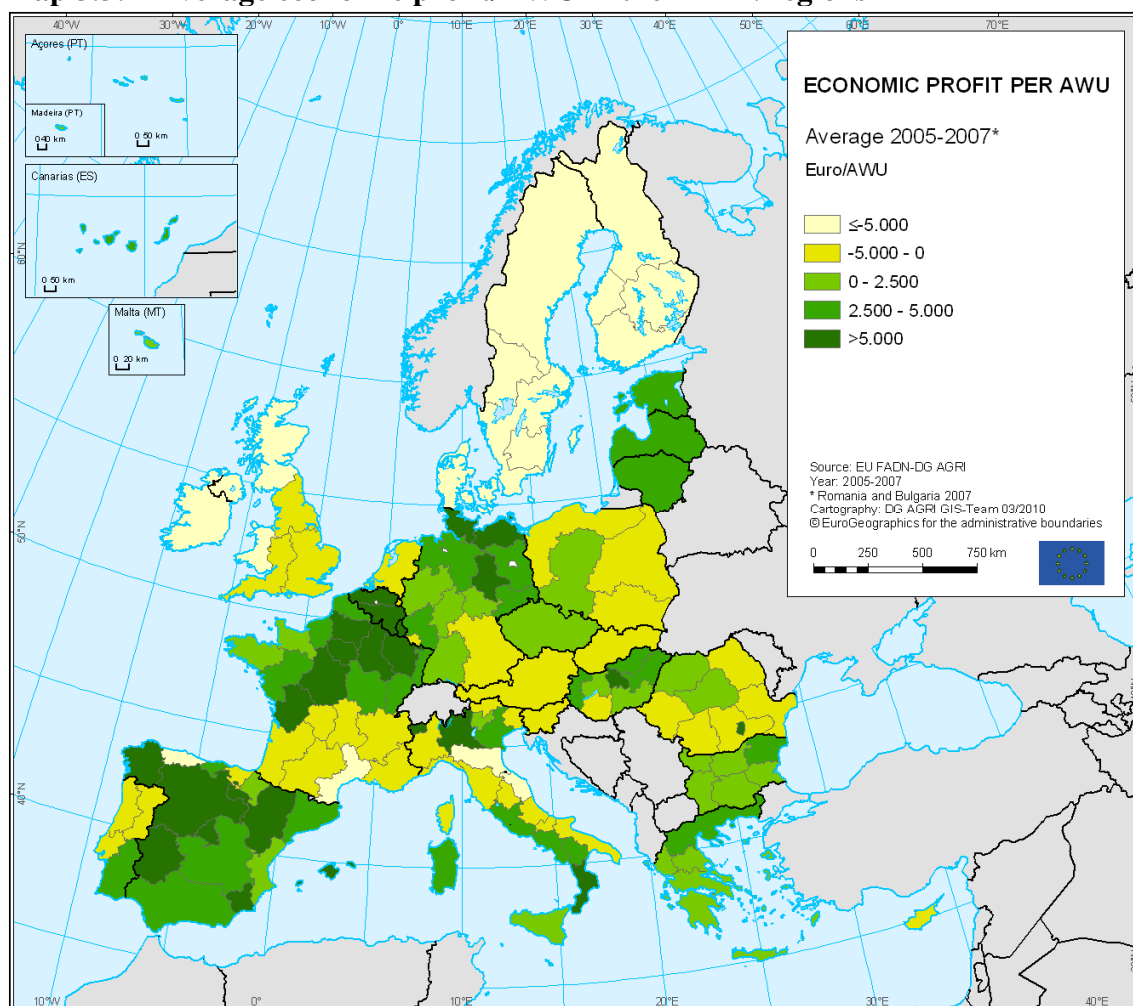


Source: DG AGRI EU-FADN

With respect to economic profit, the differences in income between the EU-15 and the EU-12 are less pronounced (Map 3.3). Regions in Spain, northern Germany, northern France and some regions in Italy and Hungary display the highest values for economic profit, while the economic profit in, for example, the Scandinavian countries, southern France, the UK, Slovakia and in parts of Italy, Poland, Portugal and Romania is negative. The regional pattern for the economic profit indicator does not always correspond to that for the indicator FNVA. For instance, the Baltic countries, the Czech Republic and northern Hungary, which have low FNVA/AWU, show a relatively high value for economic profit, while in Denmark, the Netherlands and partially Sweden and Finland, on the other hand, the estimate of the economic profit/AWU is negative. This is mostly due to the labour costs, which are very high in the Scandinavian countries and the Netherlands, but are low in the EU-12³. Additionally, in many MS of the EU-12, the real interest rate was low due to high inflation. This led to lower and sometimes negative values for the estimate of own capital costs.

³ As most of the farms have a "family character", labour costs are mainly due to the family labour that is estimated using the wage level of the agricultural employed workers (which is particularly high in Scandinavian countries).

Map 3.3: Average economic profit/AWU in the FADN regions



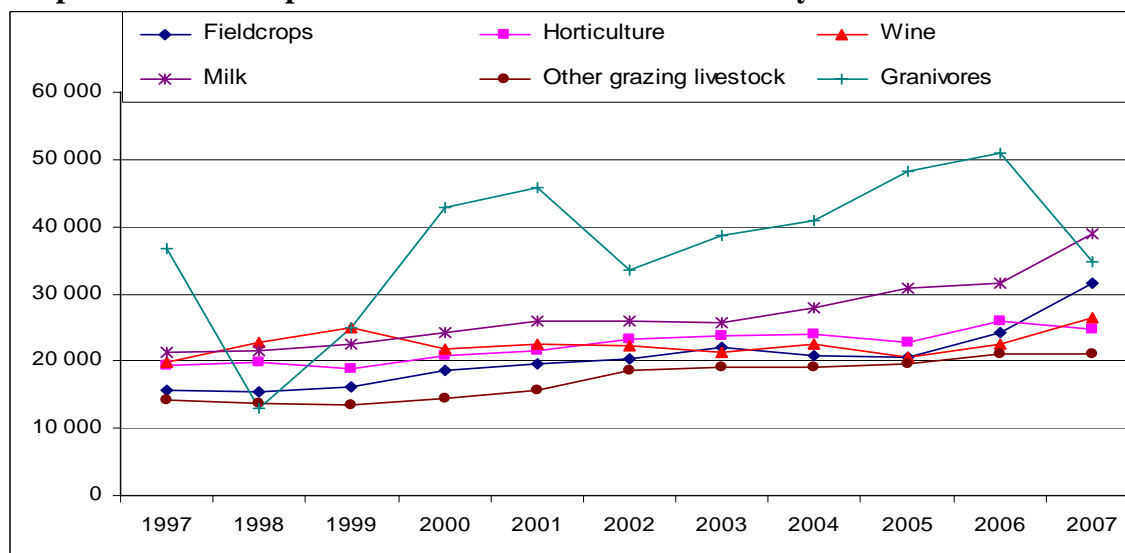
Source: DG AGRI EU-FADN

3.2.2. Differences between farm types

Agricultural income also differs between farm types. **In the EU-15**, the level of income per worker was highest in granivore farms (in most years > €40 000), while it was lowest in grazing livestock farms (Graph 3.4). The most pronounced growth in income between 1997 and 2007 was observed for dairy farms and field crop farms, which include cereal farms. In 2007 in particular, incomes of dairy and field crop farms rose significantly due to high prices for milk and cereals⁴. Granivore farms also saw a positive trend in incomes, but this was accompanied by high volatility. In 2007, for instance, they suffered a significant drop in income due to high input prices (the previous low in their income in 1998 was due to exceptionally low prices for pork). Detailed tables containing information on the development of revenue and costs per farm type in the EU-15 and the EU-10 can be found in the annex (Tables A.5-A.20).

⁴ It has to be noted, however, that the income of dairy and field crop farms fell sharply in 2008 and 2009.

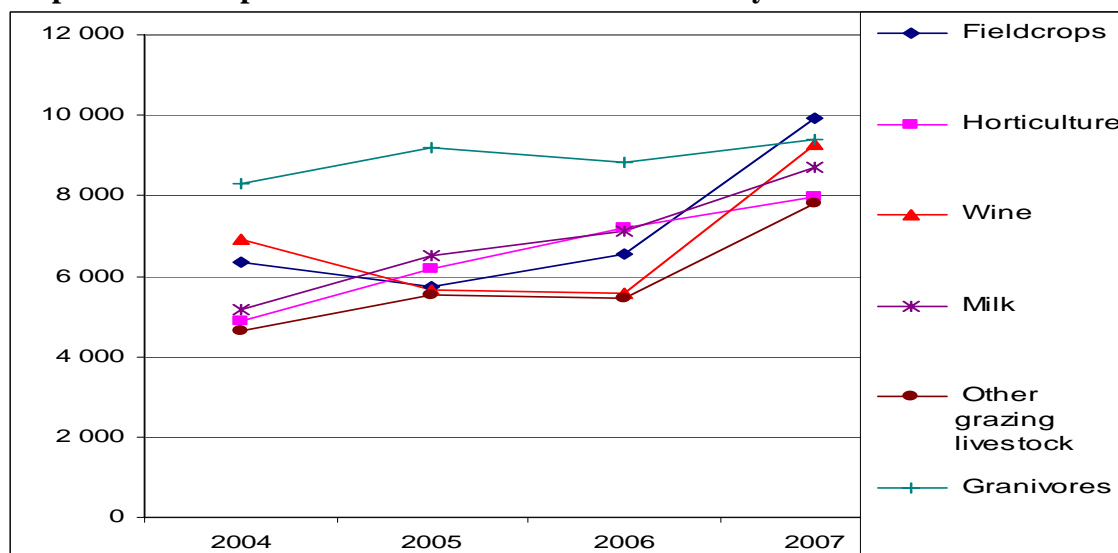
Graph 3.4: Development of FNVA/AWU in the EU-15 by TF8



Source: DG AGRI EU-FADN

In the EU-10 the development of average FNVA/AWU per farm type was different from that in the EU-15 (Graph 3.5). First, the income of all farm types is lower than in the EU-15. Furthermore, for farms specialised in milk production and horticulture, the income has increased fairly steadily, while the income of field crops farms and other grazing livestock farms showed a significant improvement mainly in 2007. As in the EU-15, the income of farms specialised in granivores is also relatively higher, but does not display the same variability.

Graph 3.5: Development of FNVA/AWU in the EU-10 by TF8

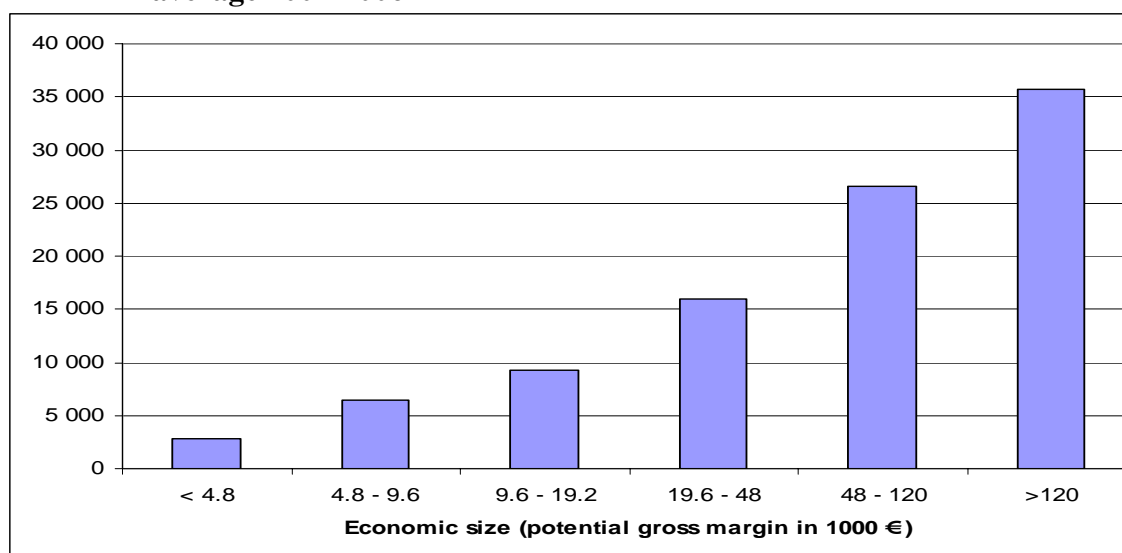


Source: DG AGRI EU-FADN

3.2.3. Differences due to farm size

Income per worker increases with farm size (Graph 3.6)⁵. On average, the FNVA per worker of the largest farms (size class with > €120 000 potential gross margin⁶) was about €35 000, which is more than 10 times the figure for the smallest farms.

Graph 3.6: Agricultural FNVA in € per AWU by economic size class in the EU-25, average 2004-2006⁷



Source: DG AGRI EU-FADN

This is partially explained by differences in farm structure (Table 3.1). In the largest size class, the average amount of land (168 ha) is 20 times higher than in the smallest, while the number of workers is only four times greater. Interestingly, the share of external factors is also much higher in large farms. This is partially explained by the fact that some of the large farms are agribusiness companies. These have mainly paid labour and they rent most, if not all, of their land. However, the tendency is the same for family farms. This can also be seen as an indication that farms grow mostly by renting land rather than buying, and tend to increase their debt ratio in order to buy assets.

Table 3.1: Structure of farms of different sizes in the EU-25, average 2004-2006

EU-25, average 2004-2006	Economic size (potential gross margin in 1000 €)					
	< 4.8	4.8 - 9.6	9.6 - 19.2	19.6 - 48	48 - 120	>120
UAA in ha (per farm)	8	9	17	36	70	164
Share of rented land	20%	22%	29%	42%	58%	70%
Labour in AWU (per farm)	1.2	1.2	1.3	1.5	2.0	4.8
Share of paid labour	7%	8%	11%	16%	26%	65%
Share of liabilities in assets	3%	2%	5%	9%	16%	26%
Share in sector output	2%	6%	7%	16%	25%	45%
Farms represented	1 701 746	3 437 803	2 304 228	2 486 256	1 607 795	837 240

Source: DG AGRI EU-FADN

⁵ Detailed tables containing information on the composition of revenue and costs in farms differing in size and the development of income can be found in the annex (Tables A.21-A.23, Graphs A1 and A2).

⁶ To compare farms of different sizes with very different types of production - such as wheat, milk, flowers under glass, or wine - the size of the farm is measured in economic terms (potential gross value added) as established in the EU typology of farms.

⁷ Figures refer to the 2004-2006 period and to the EU-25 because the situation in the year 2007 was exceptional, and the inclusion of the EU-2 would distort the results as their figures are available only for 2007.

3.2.4. *Income developments in selected farm sectors*

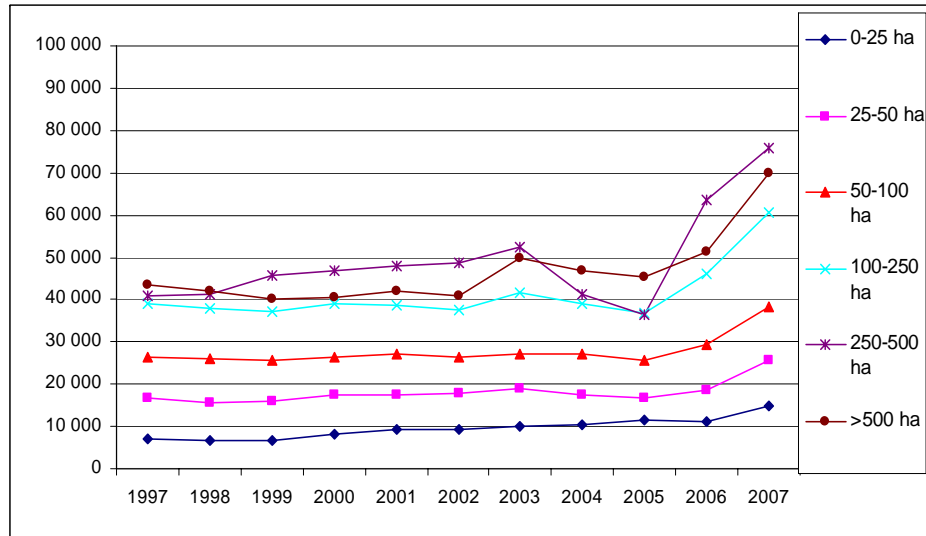
This section focuses on the development of the income situation for selected farm types (field crops, dairy farms, cattle rearers and fatteners and pig farms). In order to illustrate the situation more clearly, the chosen size classes refer not to the economic size but to the amount of area (field crop farms), the number of dairy cows (dairy farms) or the number of livestock units (pigs and cattle rearers and fatteners). The analysis only covers the EU-15 so as to show the development over a longer time period.

The first result is that FNVA per worker increases significantly with increasing farm size (Graphs 3.7-3.10). In principle this is true for all farm types, but it is not always true for all size classes:

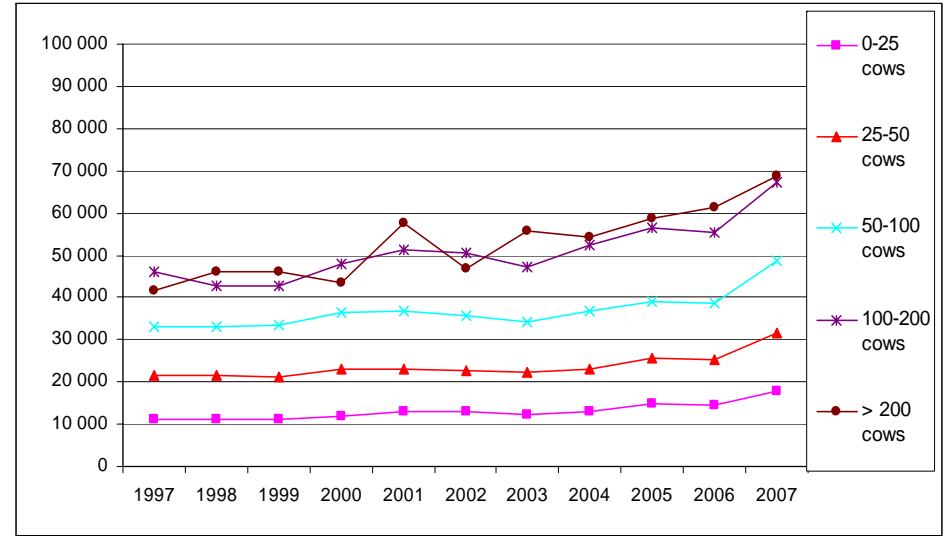
- The FNVA/AWU of farms rearing and fattening cattle and of farms specialised in pig production increases steadily with increasing size. Indeed the income of the largest size class is well above the second largest. In the case of farms rearing and breeding cattle, the situation actually differs between breeders and fatteners. While the FNVA/AWU of large cattle fatteners is much higher than the one of smaller ones, in the case of breeders the differences are less pronounced, although still significant (see Graphs A.3 and A.4 in the annex). Furthermore, it has to be noted that, the production of fatteners is much more concentrated than for breeders. The situation of cattle fatteners is therefore more similar to the situation in the pig sector.
- In the case of field crop and dairy farms, the difference in income between the two largest size classes is less significant and their income ranking changes from year to year. At a high aggregated level such as the EU-15, this might give the impression that the biggest farms are already beyond the "optimal" farm size. However, one reason why the income of the largest field crop farms is not the highest is that there are structural differences between countries and regions. Consequently, regions are not equally represented in the size classes, and their effect on the EU average varies from one size class to another. For example, former agricultural production cooperatives in eastern Germany make up a large share of field crop farms above 500 ha. These often tend to employ relatively large numbers of workers for historical reasons and, therefore have a relatively low level of FNVA per AWU. Due to the large share in the sample this specific situation is reflected in the EU-15 average of the largest size class, despite the fact that in other MS the largest farms have the highest FNVA/AWU. The explanation of the results is therefore related more to historical factors than to effects of size.

In most cases income trends were similar among size classes of the same farm type, as farms are generally confronted by the same changes in market conditions regardless of their size. However, it has to be noted that FNVA did not increase at the same speed. It is clear that the increase in absolute terms may differ. While **the growth rate of FNVA of large farms was in most cases the highest**, in some cases FNVA of the smallest farms also increased relatively rapidly.

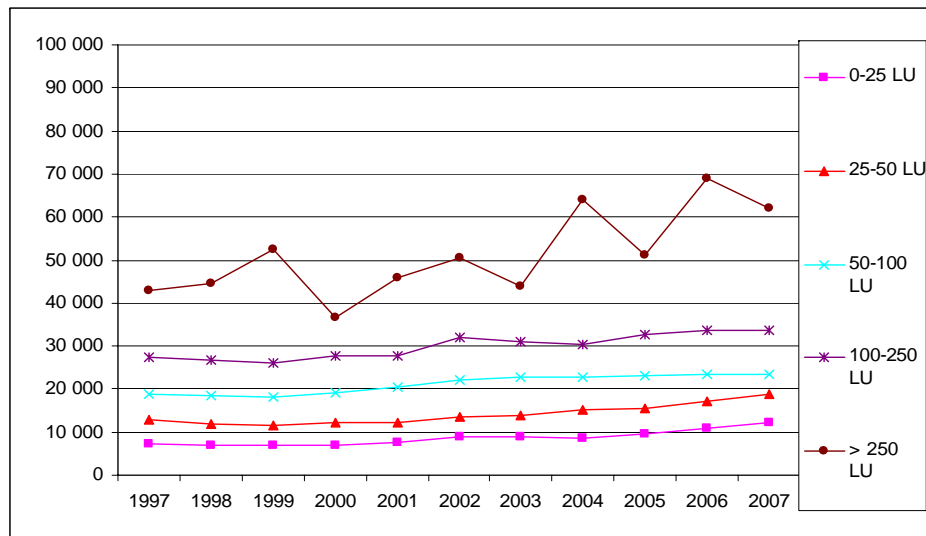
Graph 3.7: FNVA/AWU of field crop farms in the EU-15 by size class



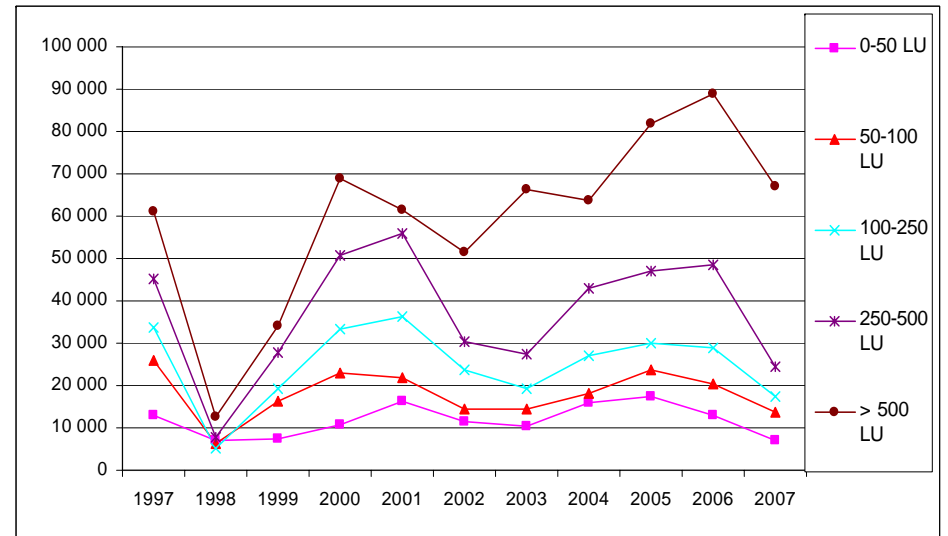
Graph 3.8: FNVA/AWU of dairy farms in the EU-15 by size class



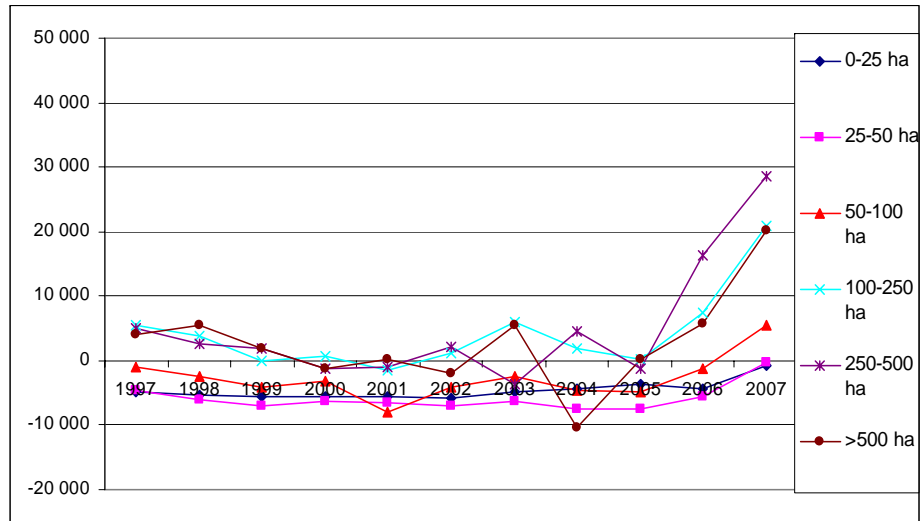
Graph 3.9: FNVA/AWU of farms rearing and fattening cattle in the EU-15



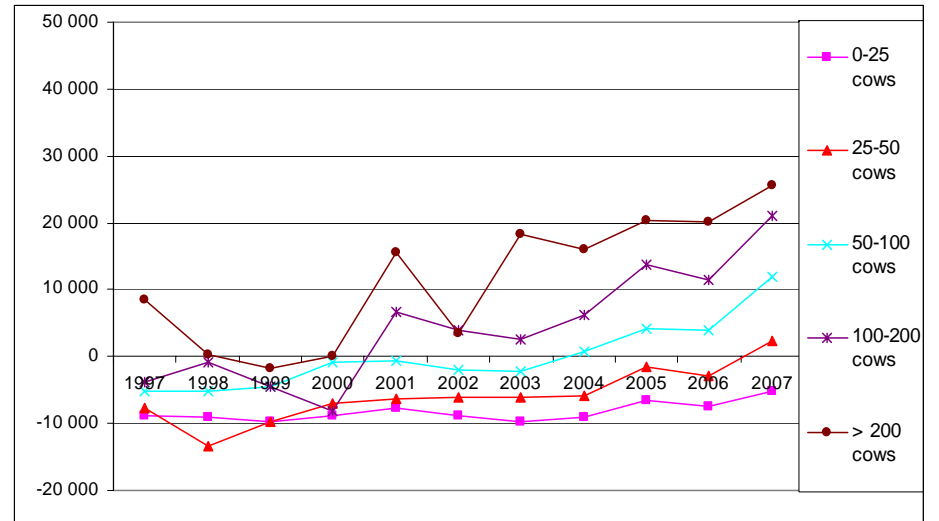
Graph 3.10: FNVA/AWU of pig farms in the EU-15 by size class



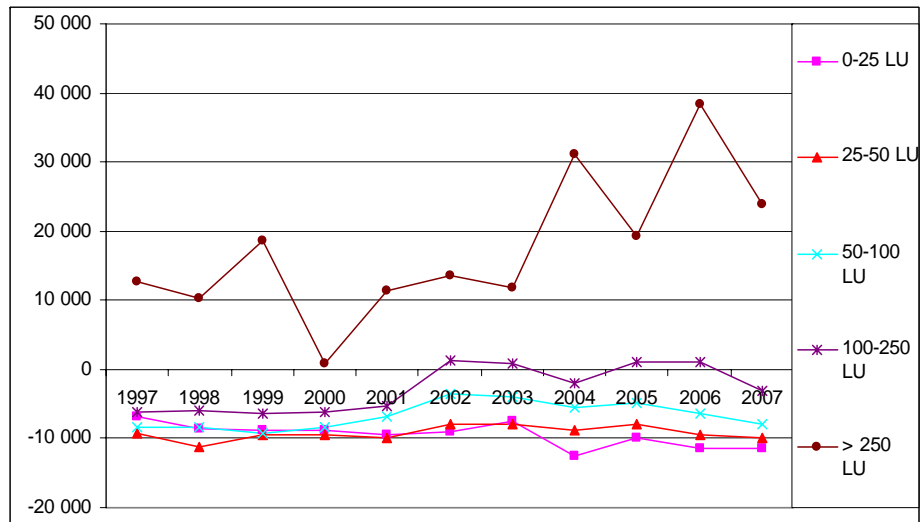
Graph 3.11: ec. profit /AWU of field crop farms in the EU-15 by size class



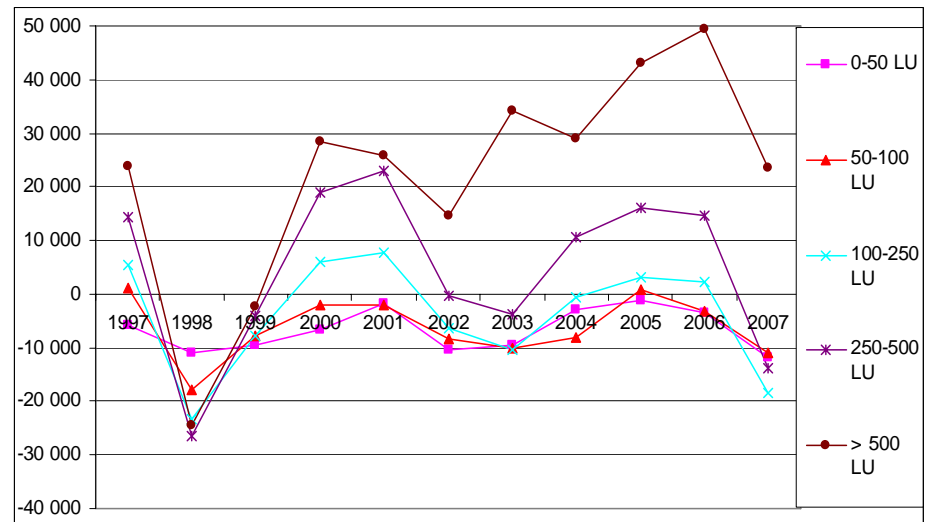
Graph 3.12: ec. profit /AWU of dairy farms in the EU-15 by size class



Graph 3.13: ec. profit /AWU of farms rearing and fattening cattle in EU-15



Graph 3.14: ec. profit /AWU of pig farms in the EU-15 by size class



The developments in FNVA are in line with the results of the analysis of the economic profit. The analysis shows that **large farms are more profitable than small farms on average** (Graphs 3.11-3.14).

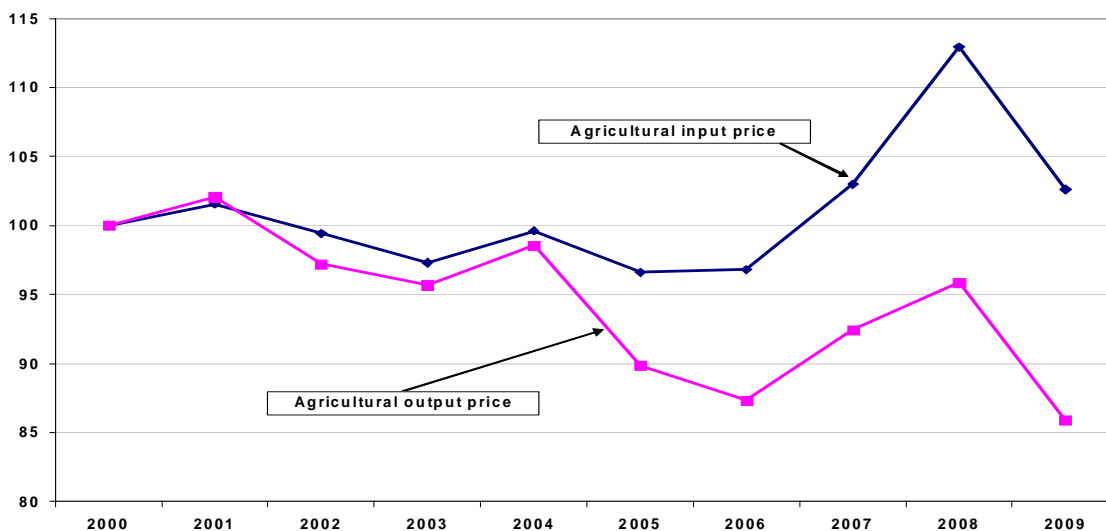
Additionally, the estimates of **the economic profit/AWU provide a rough idea of the minimum farm size needed to remunerate all production factors:**

- In the case of field crop farms, only farms with a UAA of more than 100 ha had an economic profit close to or greater than zero. For the smaller farms it was negative in all years except 2007. Furthermore, even for the large farms, the economic profit was very low in comparison with the other farm types.
- In the case of dairy farms, only farms with more than 100 cows made an economic profit greater than zero in most years. As for the FNVA, the economic profit increased almost constantly during the period under review. Thus, in the more recent years, farms with 50-100 cows also obtained a positive economic profit.
- The economic profit of farms rearing and fattening cattle continued to be above zero only in the largest class, with more than 250 livestock units. However, the second largest size class also made a small profit in the more recent years under review. For the majority of cattle rearers and fatteners the economic profit was negative.
- Finally, in the case of pig farms, only farms with more than 250 LU had made a profit in most years. However, the case of specialised pig producers shows that even large farms with normally high income can be hit hard by bad market conditions. When prices fall sharply, as was the case in the pig sector in 1998, the impact on the economic profit in large farms can be even more severe. Reasons for this include higher specialisation and its leverage of the farm results. As large farms produce more pigs or piglets per working unit, income per AWU is high when income per LU is positive but, if income per LU is negative, the losses are incurred are higher. However, due to economies of scale, large farms have lower costs and remain profitable longer than small farms. Therefore, large farms are vulnerable only if prices drop sharply.

3.3. Main factors influencing the trend in income

Agricultural factor income per worker has increased in the EU-27 during the last decade. However, the increase in income in real terms (after accounting for inflation) has been minimal. The main explanation for this phenomenon is that the development of input and output prices has not been favourable for agricultural producers (Graph 3.15).

Graph 3.15: Development of agricultural output and input prices in the EU-27, 2000-2009, in real terms⁸



Source: Eurostat — price statistics — Elaboration DG AGRI

Due to the low growth in demand, prices for agricultural products have tended to fall in real terms, except when production decreases due to adverse natural conditions. On the other hand, input prices - largely driven by energy prices - have either been stable or have tended to increase (by 15% between 2000 and 2008). Consequently, the income of the agricultural sector has declined overall.

This deterioration in the terms of trade is essentially due to input price developments, as agricultural intermediate consumption in volume terms has hardly changed in recent years (-0.3% between 2005 and 2009). The share of intermediate consumption in the total agricultural output value at producer prices rose continuously, from 56% in 2000 to 62% in 2009.

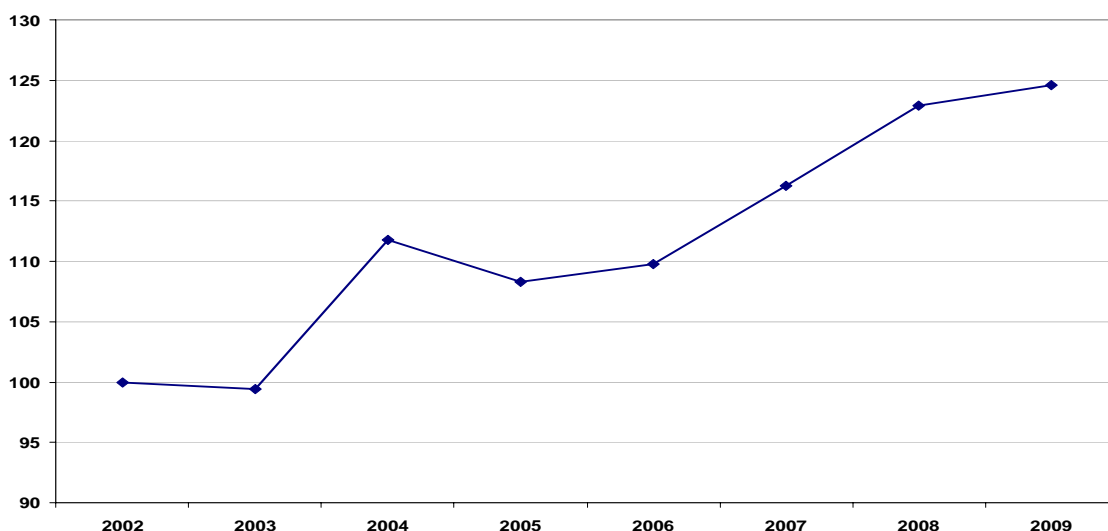
The remuneration of production factors not owned by the agricultural holder also showed an increase in recent years, in particular with respect to capital, as interest paid increased sharply between 2005 and 2009 (+35% in a period of relatively low interest rates) but declined somewhat in 2009.

The fact that agricultural income per worker has continued to grow is mainly due to the significant improvement in labour productivity (Graph 3.16); in some sectors the improvement in physical yields has contributed to this increase, although to a lesser extent. Recent reports indicate that Total Factor Productivity (i.e. the residual growth in outputs not explained by the growth in inputs) in Western European countries has

⁸ The price development in 2000 and 2001 is based on data from the EU-15 only

increased at an annual rate of 1.5% between 2006 and 2006, as compared to 2% annual growth in the nineties.

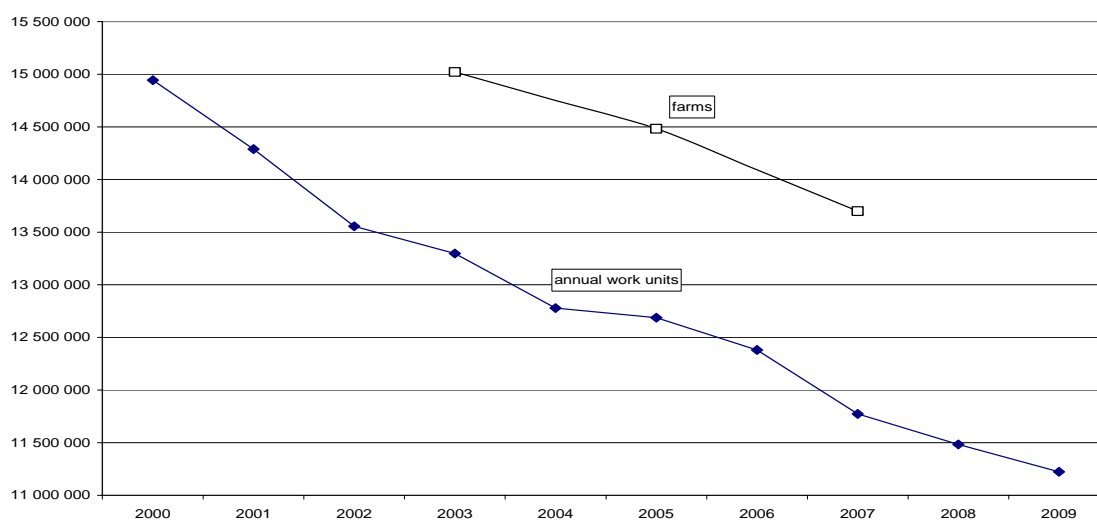
Graph 3.16: Evolution of agricultural labour productivity in the EU-27, 2002-2009, 2002=100



Source: Eurostat — Economic Accounts for Agriculture — Elaboration DG AGRI

The increase in labour productivity is strongly linked to a decrease in the agricultural labour force (Graph 3.17). Between 2000 and 2009, employment in the agricultural sector in the EU-27 was down by 25%, the equivalent of 3.7 million full-time jobs. It fell by 17% in the EU-15 and by 31% in the 12 Member States that joined the EU in 2004 and 2007. In 2009, employment in the agricultural sector was equivalent to 11.2 million full-time jobs in the EU-27, of which 5.4 million were in the EU-15 and 5.8 million in the EU-12.

Graph 3.17: Evolution of annual work units and farms in the EU-27, 2000-2009



Source: Eurostat — Agricultural labour force statistics and Farm Structure Surveys

The trend was the same across all Member States. In general, the largest decreases were found among the EU-12: Estonia (-55%), Bulgaria (-48%) and Slovakia (-43%). The smallest decreases were recorded in Greece (-3%) and Ireland (-4%). Among the five Member States with the highest employment in the agricultural sector, employment fell by 11% in Poland, 41% in Romania, 16% in Italy and 17% in both Spain and France.

The decrease in the labour force has led to a significant increase in farm sizes because the remaining farmers buy or rent the land made available in order to extend production. As the amount of available land remained more or less constant⁹, the average area on a EU farm increased by 10% between 2003 and 2007.

The development of labour productivity has differed between sectors. As a complete analysis of all agricultural sectors would be outside the scope of this report, the development is illustrated by means of examples: cereal production in specialised field crop farms and milk production in specialised dairy farms. Both sectors are of major importance for the agricultural policy:

Average cereal output per worker in the EU-15 rose by 32% between the periods 1997-1999 and 2004-2006. This development was mainly due to structural change. The cereal acreage per farm increased due to the structural change, while the labour force employed per farm and the cereal yields remained almost constant. The increase in the acreage is thus the main explanatory factor as to why the quantity of cereals produced by one labour unit grew by a remarkable 39% over seven years. Prices for cereals dropped by 5.2% in nominal terms, which meant that the real price of cereals decreased significantly

In the EU-10 and the EU-2 the level of output per worker was lower than in the EU-15. This was partially due to lower price levels (respectively -7% and -11%), but mainly due to technical and structural factors: smaller farms, higher labour input and lower yields. All together this explains why the quantity of cereals produced per labour unit in the EU-10 and the EU-2 in 2007 was, respectively, 54% and 87% lower than in the EU-15.

Table 3.2: Indicators of labour productivity in cereal production.

	EU-15				EU-10		EU-2
	Ø 97-99	Ø 04-06	change	2007	Ø 04-06	2007	2007
UAA in ha	35.5	46.9	32.3%	48.2	42.0	41.7	22.4
Cereals acreage in ha	19.2	25.4	32.4%	26.3	25.9	25.3	14.5
Price of cereals per ton	122	115	-5.2%	196	97	183	175
Yield of cereals per ha	5.6	5.8	3.3%	5.8	4.6	4.0	2.2
Output of cereals per ha	682	668	-2.1%	1 129	448	725	388
Total output cereals	13 111	17 017	29.8%	29 654	11 578	18 360	5 630
FNVA in €	20 886	29 368	40.6%	41 310	12 363	19 324	6 674
Labour force in AWU	1.3	1.3	-1.2%	1.3	2.0	1.9	2.2
Acreage of cereals in ha per AWU	14.3	19.1	34.3%	20.0	13.2	13.4	6.7
Output of cereals in € per AWU	9 727	12 812	31.7%	22 626	5 931	9 713	2 579
Cereals produced in tons per AWU	80	111	38.5%	115	62	53	15
FNVA in € per AWU	15 510	22 081	42.4%	31 534	6 318	10 224	3 061

Source: DG AGRI EU-FADN

Milk output per worker in the EU-15 increased even slightly more than in the cereals sector. The increase per AWU was due both to the growth in farm size and to the increase in milk yields. As in the case of cereals, prices for milk fell slightly over time,

⁹ The amount of agricultural land decreases slightly due to alternative uses of land e.g. the growth of urban areas and the use of land for the further development of infrastructure.

while the labour force showed a slight increase (because milk production is more labour-intensive than cereal production). With regard to the trend in milk prices, it must be kept in mind that intervention prices were lowered during the period. Therefore, the decrease in prices is not surprising. In turn, direct payments for milk producers were increased, which partially explains why the increase in FNVA/AWU was greater than the increase in output/AWU.

As in the case of field crop farms, productivity of dairy producers in the EU-10 and the EU-2 was lower than in the EU-15. This was due to a lower price level (–minus 21% and minus 12 % respectively), smaller farms, higher labour input and lower yields. Due to these factors, the quantity of milk produced per labour unit in the EU-10 and the EU-2 was respectively 77% and 94% lower than in the EU-15. Interestingly, prices for milk in 2007 were higher in the EU-2 than in the EU-10¹⁰. However, other factors contributing to productivity are higher in the EU-10. Overall, the difference in productivity between the EU-15 on the one hand and the EU-10 and the EU-2 on the other are even more pronounced in the dairy sector than in the cereal sector¹¹.

Table 3.3: Indicators of labour productivity in the dairy sector

	EU-15				EU-10		EU-2
	Ø 97-99	Ø 04-06	change	2007	Ø 04-06	2007	2007
No. of dairy cows	35.6	46.5	30.5%	49.1	16.8	16.8	5.7
Price of milk in € per ton	306.5	296.1	-3.4%	341.3	227.1	269.3	301.8
Milk yield per cow and year in tons	6.0	6.7	11.0%	6.9	5.1	5.3	3.8
Output in € per cow	1 880.3	2 006.3	6.7%	2 389.2	1 198.0	1 473.7	1 212.0
Total production of milk per year	215	311	44.7%	339	85	89	22
Total milk output in €	132 208	184 645	39.7%	232 409	39 465	48 720	12 935
FNVA	37 551	54 275	44.5%	71 299	13 582	18 817	5 514
Labour force in AWU	1.7	1.8	3.8%	1.8	2.2	2.1	1.9
Dairy cows per AWU	20.5	25.8	25.8%	26.9	7.8	8.1	3.1
Milk output in € per AWU	38 530	51 721	34.2%	64 155	9 357	11 905	3 731
Production of milk in tons per AWU	123	172	39.5%	185	40	43	12
FNVA per AWU	21 581	30 042	39.2%	38 961	6 317	9 047	2 965

Source: DG AGRI EU-FADN

¹⁰ This is observed in FADN sample farms for Romania. It seems that these are large dairy farms producing good quality milk for the industry from which they receive a very good price.

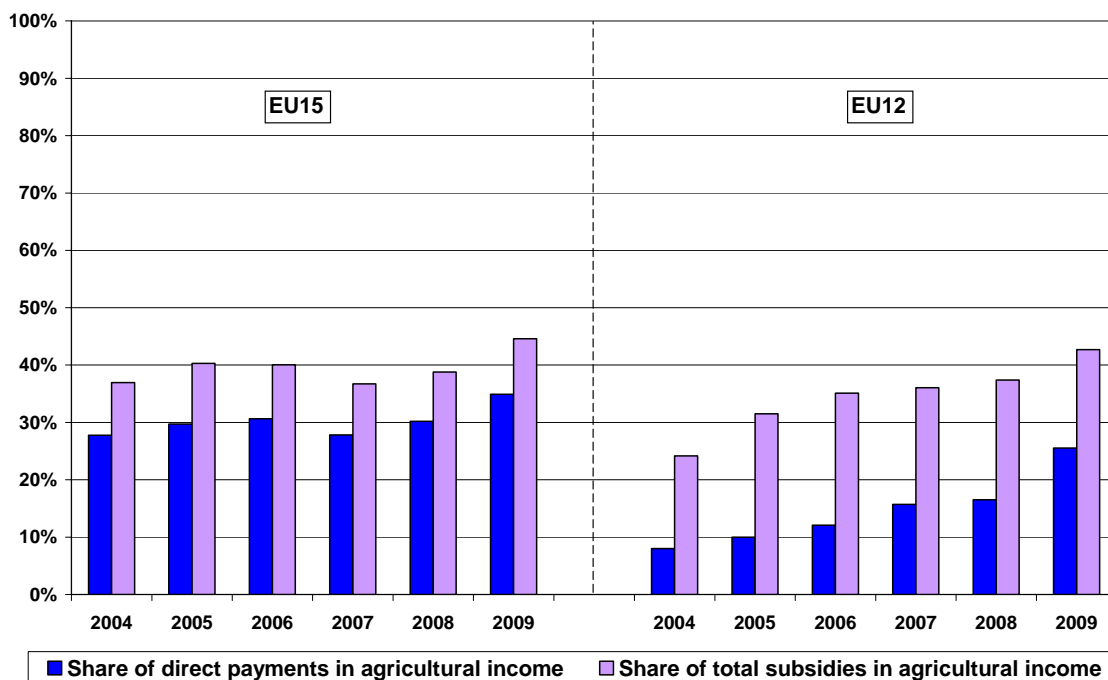
¹¹ In this context it has to be reminded, that the thresholds limiting the field of observation differ between Member States. Most Member States of EU-15 tend to have higher thresholds. Therefore, in particular in EU-2, the field of survey includes very small farms and, thus, on average, farms are much smaller. However, the thresholds reflect the structure of production in the Member States and differences are, therefore, justified.

3.4. Importance of direct payments for agricultural income

3.4.1. Share of direct payments in farm income

Direct payments are of major importance for EU farms. **The average share of EU direct payments in agricultural income in the EU was 27% in the period 2006-2008** ranging from 9% in Romania to 53% in Sweden. At EU-27 level, this figure has not changed significantly in recent years, but has ranged between 26% and 30% according to the market situation.

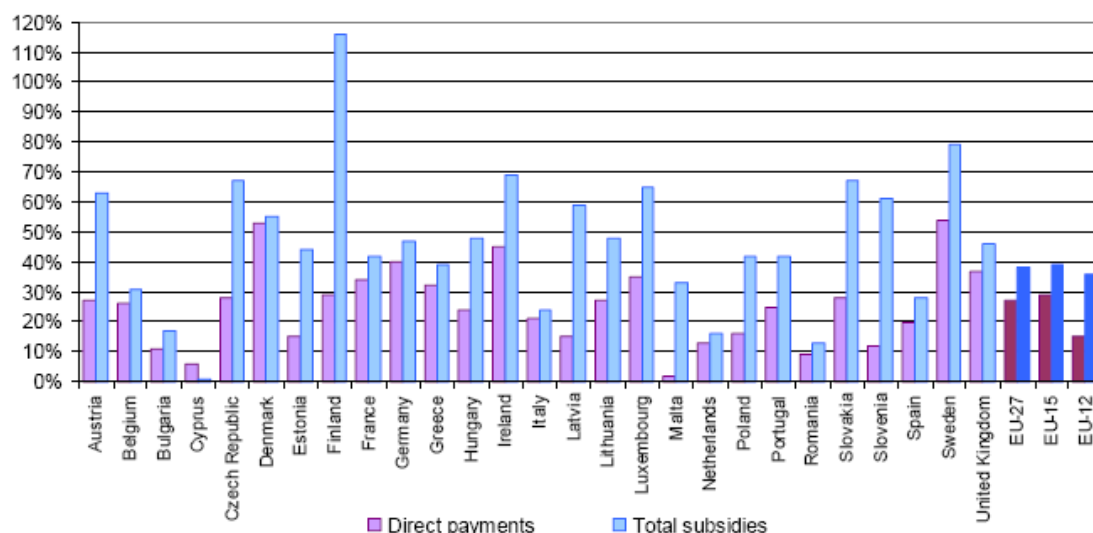
Graph 3.18: Share of direct payments in agricultural factor income (2004-2009)



Source: DG AGRI (EAGGF/EAGF Financial reports) and Eurostat (Economic Accounts for Agriculture) - Elaboration DG AGRI

While the share of direct payments in income is higher in the EU 15 (30% on average between 2004 and 2009) than in the EU12, the share of total subsidies in income is comparable and converging between the two regions.

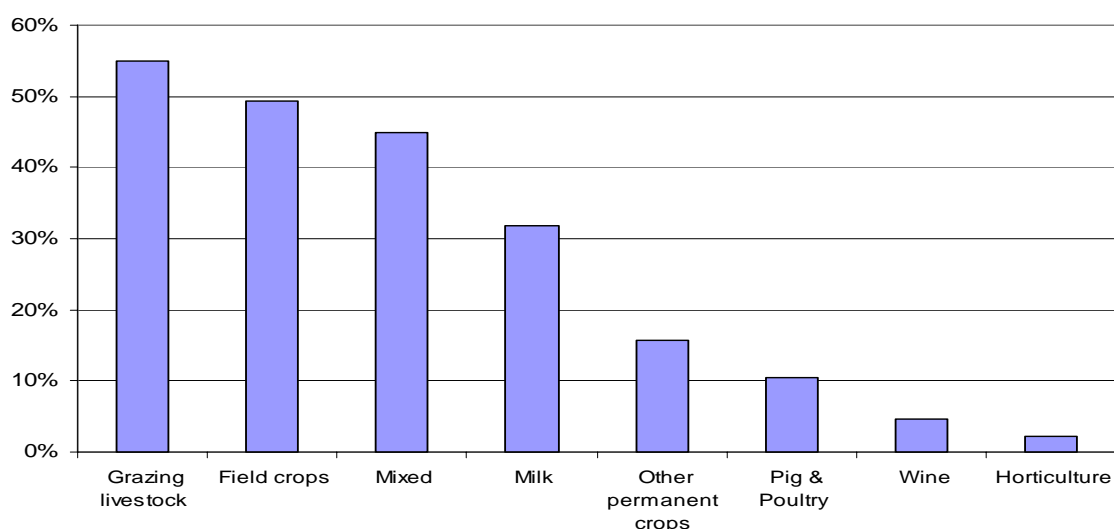
Graph 3.19: Share of direct payments in agricultural factor income by Member State (average 2006-2008)



Source: Eurostat — Economic Accounts for Agriculture — Elaboration DG AGRI

Direct payments as a share of agricultural income differ from one farm type to another. In particular, direct payments as a share of the incomes of field crop farms and other grazing livestock farms accounted for 55% and 50%, respectively, which was well above the average (Graph 3.20).

Graph 3.20: Share of direct payments in agricultural factor income by farm type in the EU-25, average 2004 – 2006.



Source: DG AGRI EU-FADN

The share of direct payments in agricultural income also differs as between large farms and small farms (Table 3.4). In wine and other permanent crop farms the share decreases with farm size. In the other farm types the pattern is less clear. In the largest farms, direct payments as a share of factor income are lower than the average. However, if the extremes of smallest and largest farms are disregarded, the share of direct payments in factor income often increases with farm size.

Table 3.4: Share of direct payments in agricultural factor by farm type and size class in EU-25, average 2004 - 2006

EU-25, average 2004-2006	Economic size (potential gross margin in 1000 €)						Total
	< 4.8	4.8 - 9.6	9.6 - 19.2	19.6 - 48	48 - 120	>120	
Field crops	41.9%	36.4%	46.4%	51.0%	56.0%	48.4%	49.3%
Horticulture	2.8%	1.7%	1.6%	2.4%	2.8%	2.0%	2.2%
Wine	13.4%	8.5%	8.2%	5.5%	4.9%	3.2%	4.7%
Other permanent crops	30.6%	20.7%	17.7%	15.4%	11.2%	11.3%	15.8%
Milk	32.2%	28.0%	21.9%	29.9%	35.5%	30.3%	31.8%
Other grazing livestock	61.8%	46.2%	49.0%	59.7%	59.2%	47.0%	55.0%
Granivores	3.8%	6.7%	15.2%	13.8%	12.2%	9.8%	10.5%
Mixed	44.6%	36.6%	34.8%	47.5%	51.3%	43.6%	44.9%
Total	37.9%	27.8%	31.5%	36.1%	37.5%	28.7%	32.5%

Source: DG AGRI EU-FADN

3.4.2. Importance of direct payments for farm profitability

So far, under the heading of farm income we have mainly referred to FNVA, which represents the amount of income available to remunerate the production factors land, labour and capital. The profitability problem of the agricultural sector and its dependency on direct payments becomes even more visible when the costs for own and external production factors are taken into account. Table 3.5 provides information on production costs, including the imputed costs for own production factors. It is shown that by far the majority of farms are able to cover variable costs. This is not true, however, for total costs, as total costs are higher than market revenue on average, even for the largest farms. Thus, on average, farms need direct payments in order to be profitable.

Table 3.5: Farm structure, revenue and share of input costs in farm output in the EU-25 by size class. Average 2004-2006.

EU-25, average 2004-2006		Economic size (potential gross margin in 1000 €)						Total
		< 4.8	4.8 - 9.6	9.6 - 19.2	19.6 - 48	48 - 120	>120	
Structure	Economic size (per farm)	3	6	12	27	64	227	34
	UAA (per farm)	8	9	17	36	70	163	34
	Labour (per farm)	1.23	1.17	1.33	1.54	1.97	4.71	1.63
	Farms represented by FADN	1 644 559	3 357 608	2 251 274	2 432 416	1 579 453	828 077	12 093 387
	Share in output of the sector	2%	6%	7%	16%	25%	45%	100%
Revenue	Output (per farm)	7 974	12 932	22 586	48 771	117 554	404 377	61 731
	share of output							
	PI payments (per farm)*	16%	16%	17%	18%	17%	12%	15%
	PfI payments (per farm)*	9%	5%	8%	7%	4%	1%	4%
Costs/Output	Intermediate consumption	58.7%	44.3%	50.5%	56.4%	59.6%	59.3%	57.4%
	Depreciation	21.7%	15.3%	16.7%	15.7%	14.9%	11.5%	13.8%
	Farm taxes	1.1%	1.2%	1.1%	1.2%	1.1%	1.0%	1.1%
	Taxes on investment	0.8%	0.7%	0.7%	0.7%	0.5%	0.2%	0.5%
	Wages	3.2%	5.3%	5.4%	5.5%	5.9%	12.2%	8.5%
	Rents	1.0%	1.4%	2.1%	3.6%	5.2%	5.3%	4.5%
	Costs own labour**	69.8%	71.7%	52.6%	36.9%	22.4%	8.8%	24.4%
	Costs own land**	5.3%	7.4%	7.5%	7.0%	5.2%	4.0%	5.2%
	Costs capital**	9.4%	4.5%	5.4%	4.6%	3.7%	3.0%	3.8%
Total costs	170.9%	151.8%	142.0%	131.7%	118.5%	105.2%	119.1%	

* Includes national part of subsidies ** imputed costs

Source: DG AGRI EU-FADN

However, results differ between farm types and size classes. To illustrate this Table 3.6 and Table 3.7 provide information on variable (intermediate consumption) and total costs as a share of market revenue. It is shown that, for all size classes and farm types, variable costs are lower than market revenue on average (the share is below 100%). Thus, farms are generally able to cover variable costs with market revenue. However, this is often not the case for total costs, as they are often higher than market revenue. This is true in particular in the cases of field crops, milk, grazing livestock and mixed farms. Although

the gap between costs and revenue narrows with increasing farm size, even large farms are not profitable on average based on market revenue alone.

Table 3.6: Share of variable costs (intermediate consumption) in market revenue by farm type and size class in the EU-25, average 2004 – 2006

EU-25, average 2004-2006	Economic size (potential gross margin in 1000 €)						Total
	< 4.8	4.8 - 9.6	9.6 - 19.2	19.6 - 48	48 - 120	>120	
Field crops	53%	47%	55%	61%	63%	62%	60%
Horticulture	52%	43%	41%	42%	47%	51%	48%
Wine	31%	31%	28%	33%	36%	34%	34%
Other permanent crops	60%	58%	55%	60%	61%	60%	60%
Milk	60%	58%	55%	60%	61%	60%	60%
Other grazing livestock	79%	65%	65%	69%	69%	66%	68%
Granivores	77%	74%	73%	67%	67%	66%	67%
Mixed	64%	60%	59%	66%	69%	68%	67%
Total	59%	44%	51%	56%	60%	59%	57%

Source: DG AGRI EU-FADN

Table 3.7: Share of total costs in output by farm type and size class in the EU-25. Average 2004-2006

EU-25, average 2004-2006	Economic size (potential gross margin in 1000 €)						Total
	< 4.8	4.8 - 9.6	9.6 - 19.2	19.6 - 48	48 - 120	>120	
Field crops	168.5%	162.7%	158.6%	144.7%	131.4%	118.8%	132.9%
Horticulture	106.6%	101.6%	103.7%	94.5%	95.0%	92.9%	94.2%
Wine	199.3%	166.7%	137.6%	113.3%	99.3%	87.8%	103.1%
Other permanent crops	187.5%	138.6%	124.1%	107.3%	95.5%	92.7%	112.4%
Milk		153.8%	137.7%	133.7%	121.1%	107.8%	118.3%
Other grazing livestock	287.8%	196.3%	171.0%	157.0%	136.1%	112.3%	147.2%
Granivores	98.3%	96.8%	105.2%	102.5%	96.2%	91.0%	93.7%
Mixed	181.1%	153.9%	133.5%	134.7%	122.1%	113.3%	123.3%
Total	170.9%	151.8%	142.0%	131.7%	118.5%	105.2%	119.1%

Source: DG AGRI EU-FADN

We should remember, however, that these are only averages. The situation at farm level is more complex. To illustrate this, Tables 3.8 and 3.9 provide information on the share of farms in EU-25 which are able to cover variable and total costs respectively, based on market revenue alone. It is shown that more than 90% of farms cover their variable costs, while only 20% of farms would be able to cover total costs without receiving Pillar I and Pillar II payments. The situation is likely to be particularly difficult for field crops, grazing livestock and mixed farms. In these sectors even the vast majority of large farms would not be profitable, because only 20-25% of these farms would be able to cover total costs. Large farms in the pig & poultry, horticulture and permanent crop sectors are more profitable and less reliant on direct payments.

Table 3.8: Share of farms where variable costs (intermediate consumption) are covered by market revenue by farm type and size class in EU-25, Average 2004-2006

EU-25, average 2004-2006	Economic size (potential gross margin in 1000 €)						Total
	< 4.8	4.8 - 9.6	9.6 - 19.2	19.6 - 48	48 - 120	>120	
Field crops	89%	90%	84%	84%	89%	94%	88%
Horticulture	99%	99%	99%	99%	98%	99%	99%
Wine	95%	89%	98%	97%	97%	99%	95%
Other permanent crops	89%	98%	97%	98%	98%	98%	97%
Milk	94%	96%	96%	96%	98%	99%	97%
Grazing livestock	70%	82%	81%	80%	86%	91%	81%
Pig & poultry	97%	96%	98%	98%	97%	96%	97%
Mixed	93%	96%	94%	89%	94%	98%	94%
Total	89%	93%	91%	89%	93%	97%	92%

Source: DG AGRI EU-FADN

Table 3.9: Share of farms where total costs are covered by market revenue by farm type and size class in the EU-25, Average 2004-2006

EU-25, average 2004-2006	Economic size (potential gross margin in 1000 €)						Total
	< 4.8	4.8 - 9.6	9.6 - 19.2	19.6 - 48	48 - 120	>120	
Field crops	9.2%	12.4%	14.7%	16.8%	17.8%	20.5%	14.4%
Horticulture	21.5%	37.3%	40.5%	49.4%	47.2%	50.9%	44.4%
Wine	10.2%	13.6%	18.7%	32.1%	42.9%	57.2%	27.1%
Other permanent crops	10.6%	23.1%	29.1%	40.4%	50.4%	53.6%	27.4%
Milk	6.2%	13.1%	21.6%	18.1%	16.0%	29.5%	18.4%
Grazing livestock	3.1%	6.3%	14.7%	18.7%	18.0%	24.0%	13.6%
Pig & poultry	29.5%	21.9%	22.6%	37.4%	49.7%	57.9%	39.5%
Mixed	3.5%	7.4%	16.4%	24.7%	19.1%	24.4%	12.6%
Total	7.6%	15.5%	20.1%	24.9%	24.8%	34.1%	19.7%

Source: DG AGRI EU-FADN

This situation is addressed by the CAP, as field crop, grazing livestock and mixed farms are the ones that receive the highest amount of direct payments (Table 3.10). Furthermore, it has to be noted that the amount of direct payments increases considerably with the size of farms.

Table 3.10: Amount of direct payments per AWU by farm type and size class in the EU-25, average 2004-2006

EU-25, average 2004-2006	Economic size (potential gross margin in 1000 €)						Total
	< 4.8	4.8 - 9.6	9.6 - 19.2	19.6 - 48	48 - 120	>120	
Field crops	1 225	2 386	4 445	8 414	15 444	17 240	8 456
Horticulture	123	124	151	363	576	666	475
Wine	393	559	867	957	1 324	1 293	1 018
Other permanent crops	1 201	1 742	1 853	2 445	2 666	3 410	2 080
Milk	788	1 023	1 811	4 970	10 307	13 595	7 841
Grazing livestock	2 116	3 259	5 539	10 846	16 538	20 216	9 527
Pig & poultry	229	498	989	1 850	3 764	4 917	3 043
Mixed	785	1 193	2 272	6 297	13 910	12 279	5 552

Source: DG AGRI EU-FADN

Thanks to the receipt of Pillar I and Pillar II payments, the profitability of farms increases significantly (Table 3.11 and 3.12). The share of farms that cover variable costs is up to almost 100% and the share of profitable farms (which cover total costs) increases from less than 20% to 35%. The profitability of field crop, mixed and other grazing livestock farms improves the most. This is true for large farms in particular for large farms. For instance, the share of large profitable field crop, grazing livestock and mixed farms jumps from just over 20% to more than 60%. Overall this shows that in particular land based production systems such as field crop and grazing livestock farms which ensure that the bulk of the agricultural area is kept in good agricultural and environmental condition are the most dependent on direct payments.

Table 3.11: Share of farms with positive gross farm income by farm type and size class in EU-25, Average 2004-2006

EU-25, average 2004-2006	Economic size (potential gross margin in 1000 €)						Total
	< 4.8	4.8 - 9.6	9.6 - 19.2	19.6 - 48	48 - 120	>120	
Field crops	98%	99%	97%	98%	99%	99%	99%
Horticulture	100%	99%	99%	99%	98%	99%	99%
Wine	98%	99%	98%	98%	98%	99%	98%
Other permanent crops	96%	99%	99%	99%	99%	99%	99%
Milk	99%	99%	100%	99%	100%	100%	99%
Grazing livestock	96%	98%	98%	98%	99%	99%	98%
Pig & poultry	97%	98%	99%	98%	98%	98%	98%
Mixed	98%	99%	99%	98%	99%	100%	99%
Total	98%	99%	98%	98%	99%	99%	99%

Source: DG AGRI EU-FADN

Table 3.12: Share of profitable farms by farm type and size class in the EU-25, Average 2004-2006

EU-25, average 2004-2006	Economic size (potential gross margin in 1000 €)						Total
	< 4.8	4.8 - 9.6	9.6 - 19.2	19.6 - 48	48 - 120	>120	
Field crops	19.2%	22.0%	29.9%	38.0%	48.6%	61.3%	32.0%
Horticulture	29.0%	39.1%	43.7%	51.3%	49.6%	53.4%	47.0%
Wine	15.9%	16.0%	23.9%	37.0%	50.0%	63.3%	31.8%
Other permanent crops	15.6%	33.0%	37.4%	51.1%	59.7%	64.4%	36.4%
Milk	21.3%	29.3%	38.4%	37.6%	45.4%	62.5%	42.1%
Grazing livestock	12.6%	21.5%	34.3%	41.9%	49.8%	65.1%	34.7%
Pig & poultry	31.8%	25.7%	34.5%	51.1%	60.7%	68.1%	49.1%
Mixed	8.6%	15.8%	35.1%	44.2%	47.7%	63.3%	27.4%
Total	14.9%	25.0%	33.7%	42.2%	49.5%	62.4%	34.5%

Source: DG AGRI EU-FADN

3.4.3. Role of direct payments in selected sectors

Section 3.2.4 analysed the income development of field crop, dairy, pig and cattle fatteners and rearers in the EU-15. In this chapter the importance of direct payments for the income situation of these farm types is described, providing information on the share of P I-type payments in FNVA and an estimate of the economic profit/AWU in the absence of P I-type payments. Results are differentiated by size class and compared over time. In order to reduce the impact of market fluctuations, three-year averages are used. 2007 is not taken into account because of the exceptional market situation during that year.

Table 3.13 provides the results of specialised field crop farms. Three things are of interest. First, it is shown that the share of direct payments in FNVA is higher on average in large farms than in small farms. Secondly, the table shows that the estimate of the economic profit/AWU in the absence of P I-type payments is particularly low in large farms. Finally, it is surprising that profitability without direct payments decreased between the two periods analysed. Two processes are in this context of importance: first, due to structural change the amount of area per AWU increased over time and second, the level of the economic profit per ha improved (partly due to the increase of the farm size). However, the economic profit was still negative. As the size of farms increased faster than the loss per ha diminished the economic profit per AWU dropped even more. Given the scale of the loss, it is shown that both small and large field crop farms alike continue to rely heavily on P I-type payments.

Table 3.13: Share of Pillar 1-type payments in FNVA and estimate of the economic profit/AWU without Pillar 1-type payments for field crop farms by size class

	P I payments/AWU		Share P I payments in FNVA			Profit wo P I payments	
	ø 97-99	ø 04-06	ø 97-99	ø 04-06	change	ø 97-99	ø 04-06
0-25 ha	2 645	3 436	38.1%	31.1%	-18.3%	-7 943	-7 609
25-50 ha	7 974	8 795	49.1%	50.1%	2.2%	-13 870	-15 645
50-100 ha	13 312	14 456	51.1%	52.4%	2.7%	-15 775	-17 969
100-250 ha	22 966	24 527	60.2%	60.2%	0.0%	-19 917	-21 278
250-500 ha	25 680	25 761	60.3%	56.6%	-6.2%	-22 676	-19 799
>500 ha	23 342	26 110	55.6%	54.5%	-1.9%	-19 653	-27 559
Total	8 158	10 870	51%	50%	-2.6%	-11 842	-13 617

Source: DG AGRI EU-FADN

Table 3.14 shows the results for specialised dairy farms, where the situation has changed significantly over time. In both of the periods 1997-1999 and 2004-2006 the share of P I-type payments in FNVA was lower in the large size classes. However, this difference decreased over time, due to the introduction of the dairy premium. Both the amount of P I-payments and their share of FNVA increased, particularly in the large size classes. The economic profit/AWU in the absence of P I-type payments also changed over time. Here, it is interesting to note that the economic profit increased for large farms in particular, while it remained almost constant in the case of small farms. In the period 2004-2006 the economic profit of farms with more than 200 cows would have been positive even if they had not received P I-type payments.

Table 3.14: Share of Pillar 1-type payments in FNVA and estimate of the economic profit/AWU without Pillar 1-type payments of dairy farms by size class

	P I payments/AWU		Share of P I payments in FNVA			Profit wo P I payments	
	ø 97-99	ø 04-06	ø 97-99	ø 04-06	change	ø 97-99	ø 04-06
0-25 cows	3 600	4 945	31.6%	34.8%	10.1%	-12 780	-12 632
25-50 cows	4 424	8 945	20.6%	36.2%	75.3%	-14 733	-12 362
50-100 cows	5 039	12 221	15.2%	32.0%	110.6%	-10 018	-9 264
100-200 cows	4 956	14 330	11.3%	26.2%	132.4%	-7 959	-3 825
> 200 cows	6 816	16 661	15.3%	28.9%	88.7%	-4 510	2 198
Total	4 303	9 699	19.8%	32.2%	62.6%	-12 380	-10 076

Source: DG AGRI EU-FADN

Table 3.15 shows the results for specialised cattle rearing and fattening farms., The share of P I-type direct payments in FNVA was very large overall, at over 60%. The largest shares are seen in the medium size classes. Furthermore, it is striking that the share of P I-type direct payments decreased for small farms, whereas it increased for larger farms. This is because large farms in particular were affected by the introduction of the slaughter premium as part of the Agenda 2000. In contrast to other beef payments, the receipt of the slaughter premium did not involve any restrictions on livestock density.

The economic profit/AWU in the absence of P I-type payments did not change significantly over time. For all size classes except the largest, the economic profit/AWU decreases with size. Only in the class with more than 250 LU was the loss significantly lower. This class includes a relatively large share of fatteners. Overall, specialised cattle rearers and breeders are highly dependent on P I-type payments.

Table 3.15: Share of Pillar 1-type payments in FNVA and estimate of the economic profit/AWU without Pillar 1-type payments of cattle rearers and fatteners by size class

	P I payments/AWU		Share of P I payments in FNVA			Profit wo P I payments	
	Ø 97-99	Ø 04-06	Ø 97-99	Ø 04-06	change	Ø 97-99	Ø 04-06
0-25 LU	4 046	4 825	77.8%	64.7%	-16.8%	-12 082	-16 192
25-50 LU	8 273	10 077	84.7%	72.5%	-14.4%	-18 265	-18 773
50-100 LU	12 625	17 896	76.9%	85.3%	10.9%	-21 307	-23 476
100-250 LU	16 571	25 159	68.1%	82.1%	20.5%	-22 828	-25 142
> 250 LU	19 017	33 632	38.0%	50.9%	34.0%	-5 095	-4 023
Total	9 652	15 078	73.2%	75.3%	2.9%	-17 713	-20 036

Source: DG AGRI EU-FADN

Table 3.16 provides results for farms specialised in granivore production. These have the lowest share of Pillar I-type payments in FNVA on average. This is because farms mainly receive direct support for their area of crops, and large pig farms tend to have a large amount of stabling in comparison to their area. The share has actually decreased over time. This development, however, was mainly due to the very bad market conditions in 1998 which led to a low estimate of income. The share of P I-type payments tends to decrease with size. This is understandable, as large pig producers produce only a very limited share of the feed from their own crops, with the majority being bought in.

As the importance of Pillar 1-type payments is relatively low, granivore farms are less dependent on direct payments. For instance, in the period 2004-2006, the economic profit after deduction of Pillar I-type direct payments was positive for the size classes above 250 LU, which make up the bulk of production. However, bad years - such as 1998 - might have a severe impact on income. The situation in 1998 caused even the three-year average of the economic profit to be negative. Thus, farms have to offset the loss during a bad year with profits accumulated over several years.

Table 3.16: Share of Pillar 1-type payments in FNVA and estimate of the economic profit/AWU without Pillar 1-type payments of pig farms by size class

	P I payments/AWU		Share of P I payments in FNVA			Profit wo P I payments	
	Ø 97-99	Ø 04-06	Ø 97-99	Ø 04-06	change	Ø 97-99	Ø 04-06
0-50 LU	4 947	2 270	54.2%	14.4%	-73.4%	-13 743	-4 770
50-100 LU	6 956	4 172	42.6%	20.1%	-52.8%	-15 069	-7 649
100-250 LU	6 151	5 176	31.6%	17.6%	-44.4%	-14 799	-3 448
250-500 LU	4 831	5 701	17.6%	12.4%	-29.9%	-10 187	8 152
> 500 LU	3 962	5 720	10.9%	7.3%	-32.8%	-4 944	34 788
Total	5 276	5 268	21.6%	10.3%	-52.5%	-11 280	14 012

Source: DG AGRI EU-FADN

3.5. Distribution of income

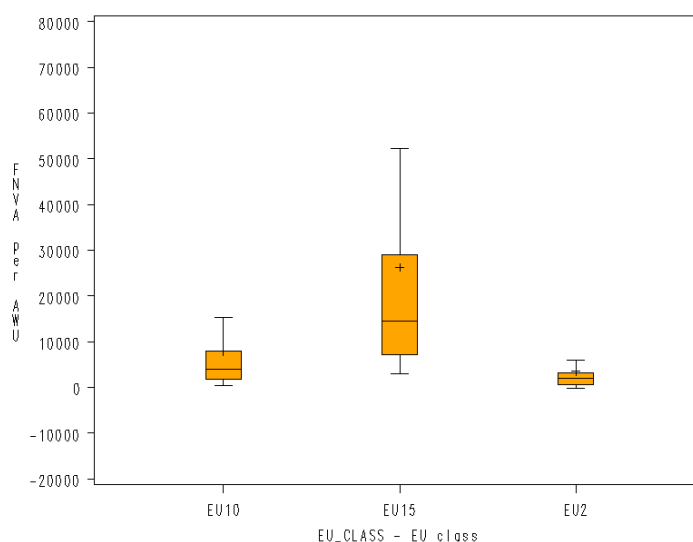
Agricultural income varies considerably between farms. The pattern is that a large share of farms have relatively low income levels per worker, while a small proportion of farms have a very high income per worker.

For instance, in 2007, the average income per worker in the EU-15 was around € 26 200; however, about 10% of the farms had an income per worker of more than € 53 000, while more than half of the farms had an income per worker of less than € 17 500.

In the EU-10 and the EU-12 the average income is much lower, but the income is also not evenly distributed. Average income per worker in the EU-10 was around € 7 900, but more than half of the farms had an income per worker of less than € 4 000. In the EU-2, half of the farms had a annual income of even less than € 1 300 per worker.

The distribution of the agricultural income is illustrated in Graph 3.21 with the help of "box-plots"¹².

Graph 3.21: Distribution of FNVA/AWU by EU groups

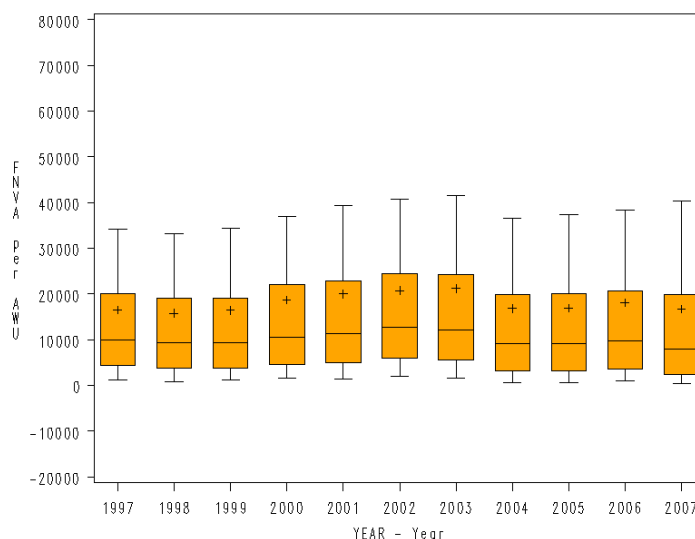


Source: DG AGRI EU-FADN

Graph 3.22 provides information on the change in income distribution over time for the entire EU. Between 1997 and 1999, the distribution was fairly stable, while average income and its variability increased slightly between 2000 and 2003. The most significant change occurred after the enlargement in 2004, when the EU-10 joined. This led to a the general level of income and a reduction of the variability.

¹² In the box plots the inter quartile range (range between 25% of farms and 75% of farms) is indicated by the yellow box; the limits of 10% of farms and 90% of farms corresponds to the end of lines (whiskers); the median (50% of farms) is the line crossing the yellow boxes and the mean corresponds to the '+' sign in the yellow boxes.

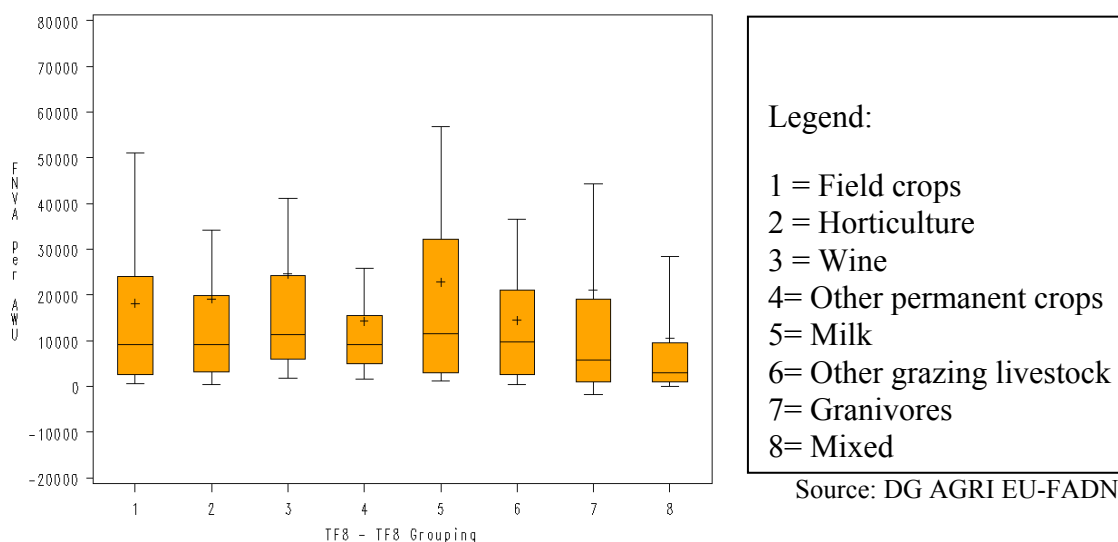
Graph 3.22: Distribution of FNVA/AWU by year



Source: DG AGRI EU-FADN

Graph 3.23 provides information on the distribution of income by type of farming in 2007. In each sector there is a small proportion of farms with very high income and a larger proportion of farms with low income (the high income farms raise the mean income significantly, but have little impact on the median). The most pronounced deviations are observed for granivore and wine producing farms. We may also note that the distribution of income is very wide for the milk, field crop and granivore sector (the interquartile range is higher).

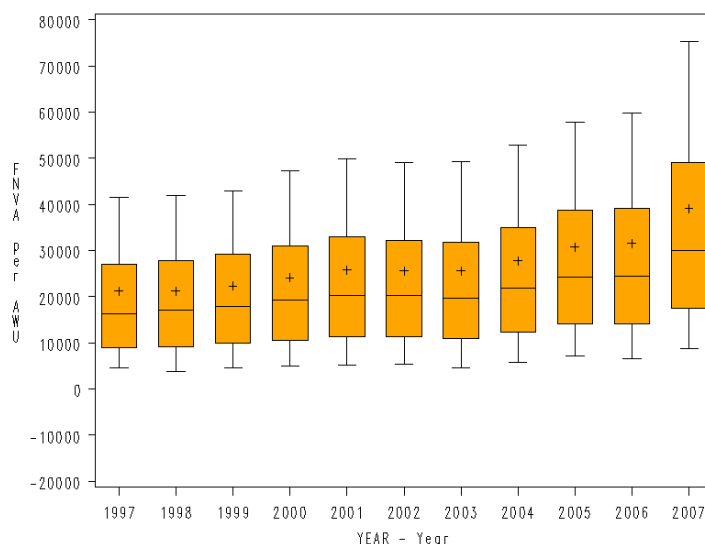
Graph 3.23: Distribution of FNVA/AWU by type of farming in the EU-15



Source: DG AGRI EU-FADN

The trend in the distribution of income over time varies from one sector to another. For specialised dairy farms the distribution of income widened slightly over time (Graph 3.24). Median and mean levels increased almost constantly. In 2007, income increased due to exceptionally high milk prices.

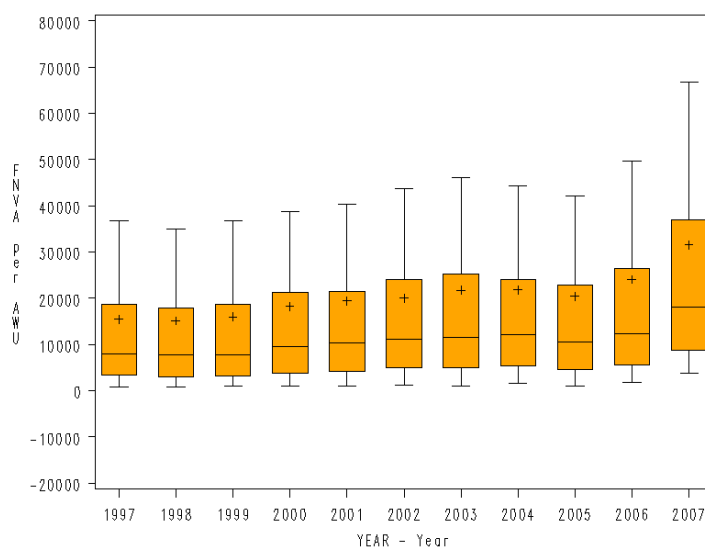
Graph 3.24: Distribution of FNVA/AWU of dairy farms in the EU-15 by year



Source: DG AGRI EU-FADN

For specialised field crop farms, the distribution did not display a marked change over time, except in 2007 (Graph 3.25). However, median and mean levels show a slow but relatively constant increase, and the distribution appeared to have become wider after 1999. The biggest change can be observed in the year 2007, when income rose due to the high price levels.

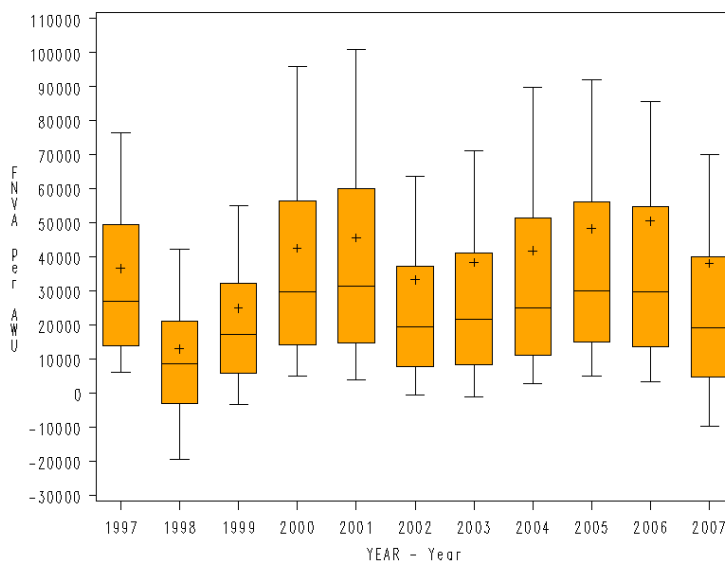
Graph 3.25: Distribution of FNVA/AWU of field crop farms in the EU-15 by year



Source: DG AGRI EU-FADN

In the case of farms specialised in granivore production, there were significant changes in both median and mean levels over time (Graph 3.26). This was mainly due to highly volatile output prices. Income was particularly low in the years 1998 and 2007. In 2007, income fell due to extremely high feed prices which could not be offset by higher output. Generally, the distribution seems to be wider in years with high income, which indicates that some of the farms can benefit more from the favourable situation than others. This could be explained by economies of scale.

Graph 3.26: Distribution of FNVA/AWU of granivore farms in the EU-15 by year

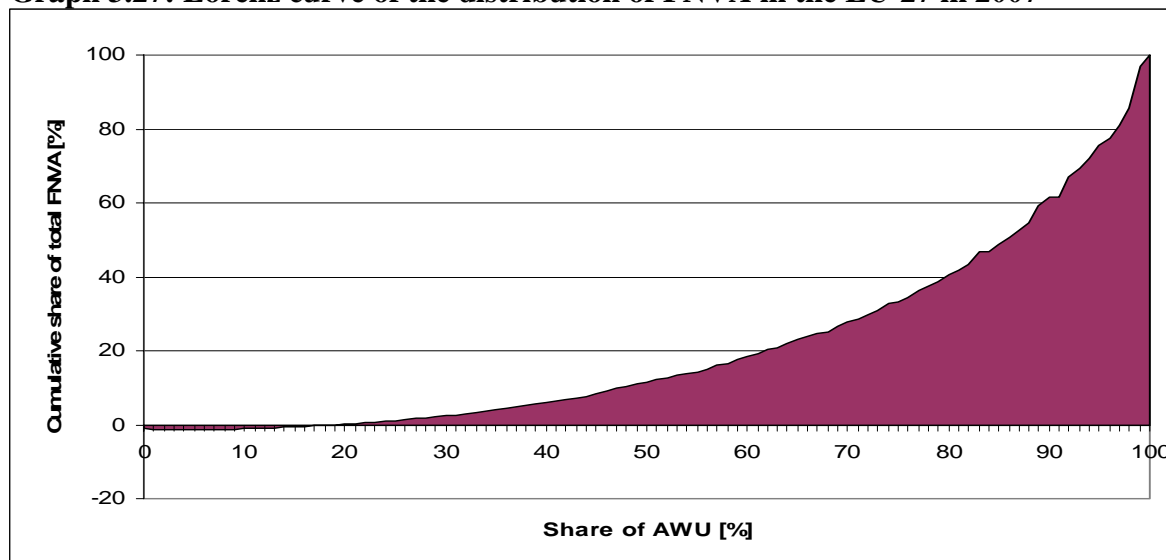


Source: DG AGRI EU-FADN

In Graph 3.27 the distribution of income (FNVA) among the labour force (AWU) in the EU-27 in 2007 is displayed in the form of a Lorenz curve¹³. As the income of some farms was negative, the cumulated share of income is initially negative.

The graph shows that income is not equally distributed among AWU. If this were the case, cumulated income would increase in a linear fashion from the bottom left corner to the upper right corner. FNVA/AWU in the EU-27 was negative for about 5 % of total AWU engaged in agriculture. Thereafter the cumulative income started to increase, indicating that the FNVA of these AWU was greater than zero. 80% of the AWU generate about 40% of income. Thus, 60% of income was realised by the remaining 20%.

Graph 3.27: Lorenz curve of the distribution of FNVA in the EU-27 in 2007



Source: DG AGRI EU-FADN

¹³ In order to draw the Lorenz curve, all AWU represented by the sample are sorted according to the income estimator FNVA/AWU. Thus, for each farm the number of AWU of the farm multiplied by the weighting of the farm is included.

The GINI index measures the importance of the unequal distribution of income¹⁴. The coefficient may range from 0 to 1. In this context, 1 means that income is completely concentrated and 0 that income is evenly distributed among AWU.

The figures show that the income concentration in the EU-15 is lower than in the EU-10 or the EU-12 (table 3.17). However, in the EU-15 it remained almost constant, whereas it decreased in the EU-10. The highest concentration (unequal distribution) was observed for the EU-2. Comparisons between groups should be made with care, as the field of observation differs. In the EU-10 and the EU-2 the sample also includes very small farms, which in most cases are excluded in the EU-15. However, the differences in the sample resemble the structure of the farm sector and are therefore justified. Nonetheless, it is the development of the coefficient over time that is the most meaningful indicator.

Table 3.17: Development of the Gini coefficient of FNVA/AWU by EU-groups

	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007
EU15	0.51	0.53	0.53	0.51	0.51	0.50	0.53	0.52	0.53	0.52	0.53
EU10								0.63	0.62	0.59	0.58
EU2											0.72

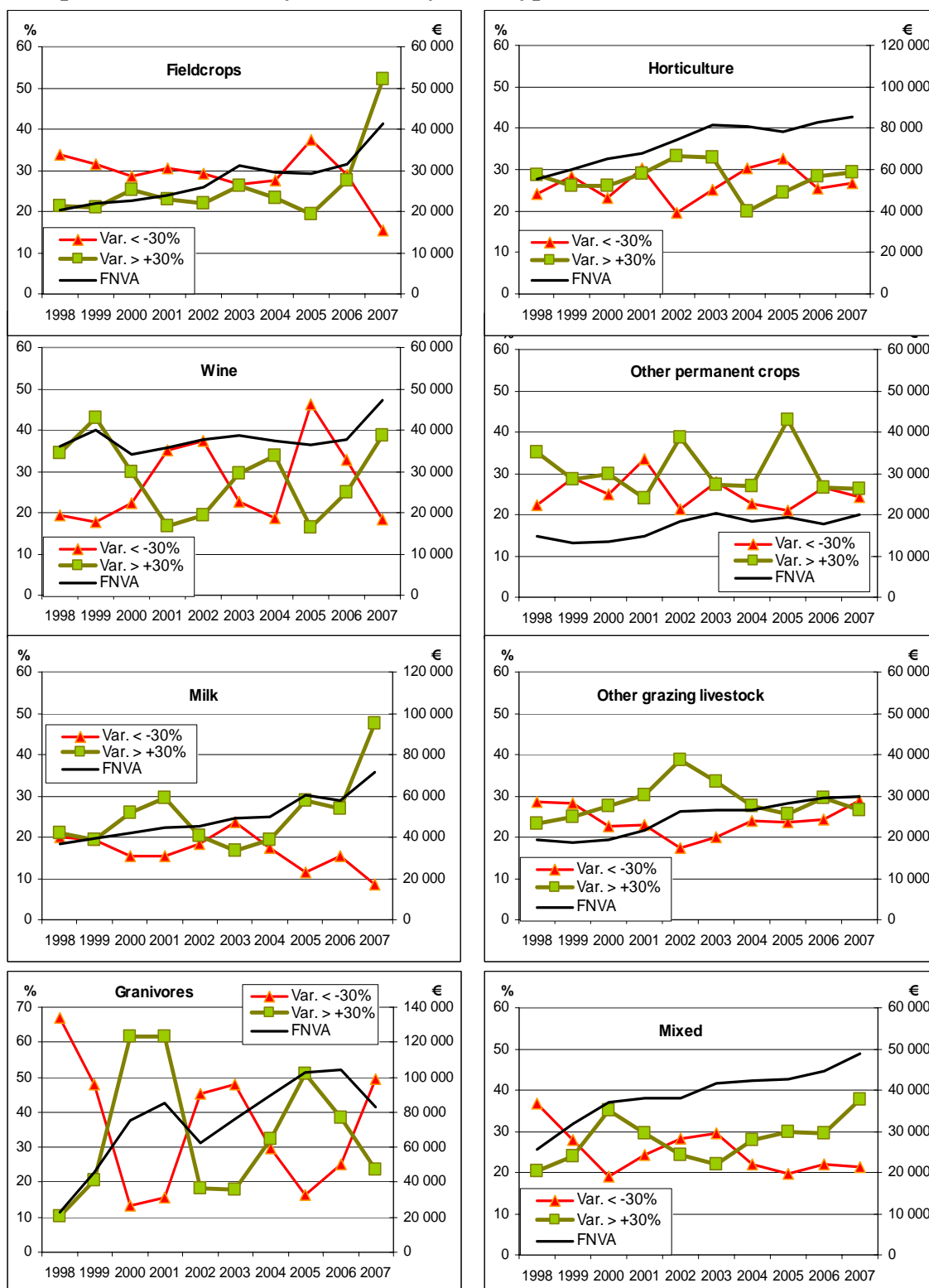
Source: DG AGRI EU-FADN

¹⁴ The Gini coefficient is usually defined mathematically, based on the Lorenz curve. It can be thought of as the ratio of the area that lies between the line of equality and the Lorenz curve over the total area below the line of equality.

3.6. Volatility of income

In past decades the CAP was further developed in order to allow for greater orientation of the market. However, there is a concern that further liberalisation leads to more market fluctuations and to less stable farm incomes. In this section we have tried to provide information on the variability of farm income in the different agricultural sectors and on the effect of farm size.

Graph 3.28: Variability of FNVA by farm type



Source: DG AGRI EU-FADN

Graph 3.28 provides information on the share of farms whose income (measured in FNVA) has changed by more than 30% compared to the average of the three previous years. It is differentiated by farm type. The green line indicates the share of farms whose income rose by more than 30% and the red line the share of those whose income fell by more than 30%. The black line gives the average FNVA per farm during the time period analysed.

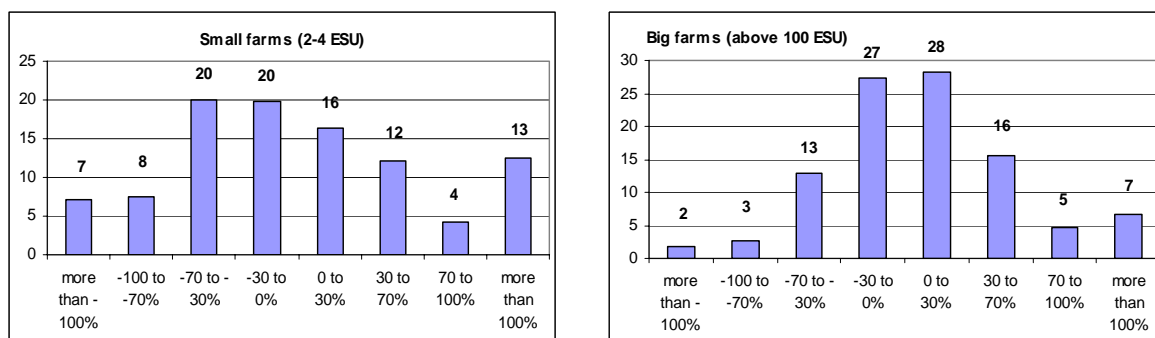
The first thing which stands out is that, overall, income changed by more than 30% annually in more than 54% of all farms. This shows that FNVA is very sensitive to changes in revenue and costs.

As was generally expected, the direction of the change of FNVA corresponds to the gradient of the green and red graph: i.e. the share of farms where there is an increase of income rises when FNVA increases and vice versa. However, it is also demonstrated that the agricultural sector is highly diverse. Although the conditions for field crop farms, for example, in 2007 were generally favourable, a number of farms also saw their income decrease in that year. There are many possible explanations: the rise in output was limited by contracts, while inputs had to be purchased at high prices; bad weather conditions more than offset the increase in prices; farms were also involved in pig and poultry production; crops were sold at a time when prices were falling again or had not yet reached high levels, or the range of crops grown was less affected by price increases.

Income volatility seemed to be particularly pronounced in the farming of granivores. While the increase in output prices for field crop farms and milk farms in 2007 is directly mirrored by the graphs, the same price trend led to a fall in the income of granivore farms. There was a corresponding increase in the share of farms where the income fell by more than 30%. Although volatility of income is often regarded as undesirable, the figures on income volatility have to be placed in the context of the general income situation. For instance, granivore farms are faced with high income volatility, but their income level is often much higher than the income of other farms and, in that sense, a volatile high income could be regarded as preferable to a constant low income.

In Graph 3.28, farms are grouped according to the degree of change of FNVA compared to the average of the previous three years. This information is given both for small farms (2-4 ESU) and large farms (>100 ESU). It is striking that the relative changes were generally more pronounced for small farms than for large farms.

Graph 3.29: Histograms of the share of farms which FNVA changed compared to the average of previous 3 years. Covered period: 1998-2007.



Source: DG AGRI EU-FADN

One possible explanation is that the income of small farms was low or close to zero, and that small changes of revenue or costs led to high relative differences in income. On the other hand, it could have been assumed that large farms are characterised by a higher degree of specialisation and a higher leverage, which might lead to more volatility. For example, it was shown that granivore farms - which are generally large and specialised - are characterised by a highly volatile income. However, a low income apparently has a greater impact on volatility.

In most cases, volatility is due to changes in the market environment. The effects of changes of agricultural policy on the market environment are not easy to detect on the basis of the income volatility figures, because they do not provide information on the extent to which decoupling and changes of intervention prices, for example, have affected market prices. Such issues, however, lie outside the scope of this analysis. Nevertheless, it is reasonable to assume that decoupled direct payments tend to reduce income volatility because they are not related to the market situation and production. Reducing direct payments would therefore increase income volatility, mainly because the income level would be much lower without direct payments, and changes in prices would result in higher relative changes in income.

3.7. Costs for land, labour and capital

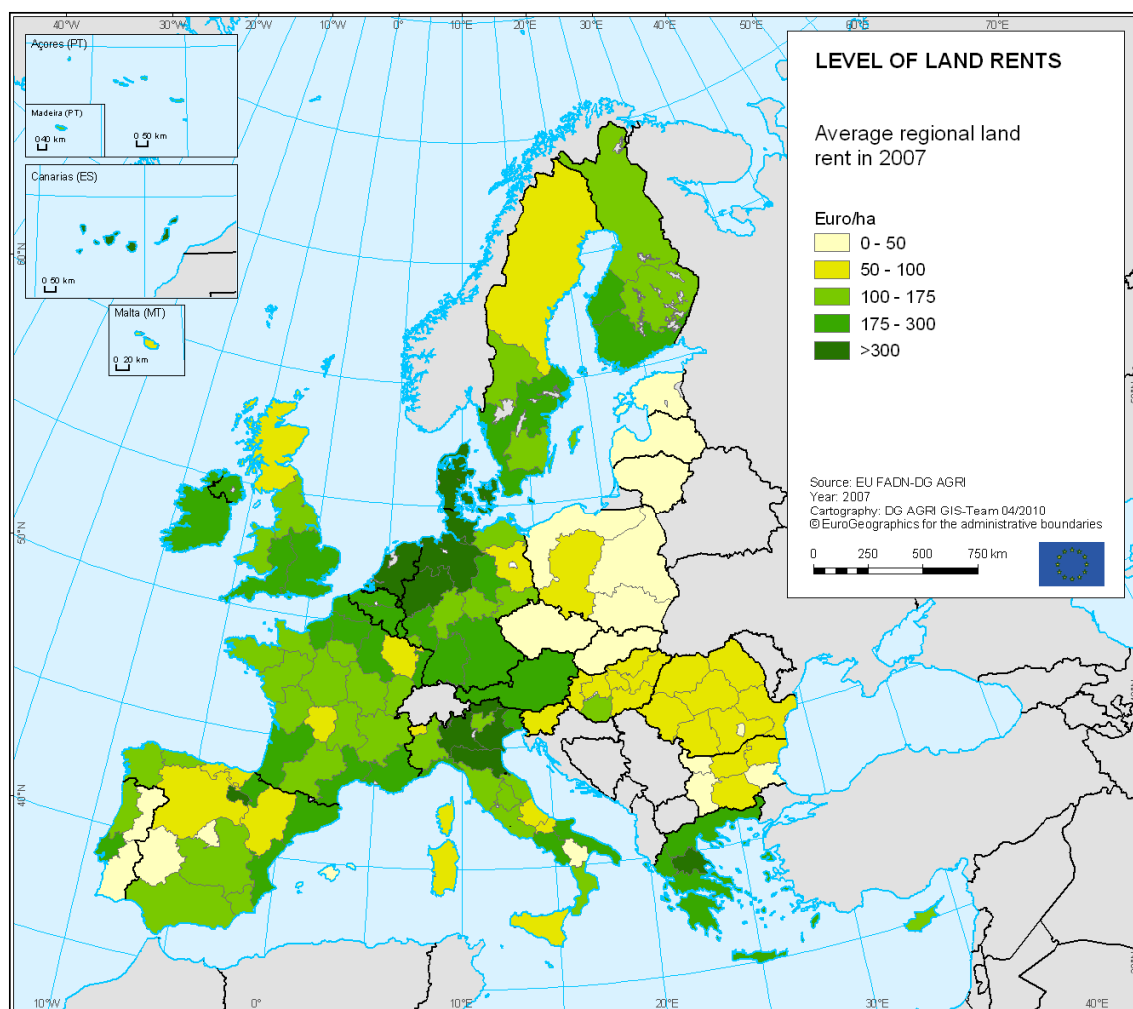
The costs for production factors (land, labour and capital) are crucial for the income situation of farms because the share of rented land, paid labour and the amount of borrowed capital tends to increase. Furthermore, the costs for external production factors can also be interpreted as opportunity costs for own production factors in order to estimate farm profitability (as it is done in this report). This section therefore provides an overview of the level of land rents, wages and interest rates.

- **Costs for land**

As land prices are often influenced by factors outside the agricultural sector, the best measure of the cost of land is usually the annual rent that farmers have to pay for one hectare. Map 4.4 displays the regional level of land rents. It shows the differing cost of leasing land within the EU. Rents are particularly high in the Netherlands, Denmark, northern Germany and Greece, whereas they are very low in eastern Europe and in many regions with unfavourable conditions for intensive agricultural production, such as dry and mountainous areas.

The level of the land rent can be used as an indicator for the risk of land abandonment. It reflects the scarcity and the potential for economic use of the production factor. If the land rent is high, it can be deduced that farming is profitable and that there are enough farmers willing to use the land. Conversely, if land rents are low, this is an indication that there is little economic incentive to use the land and that negative changes in the economic environment involve a risk of the land being abandoned.

Map 4.4: Average land rent in the FADN regions, 2007

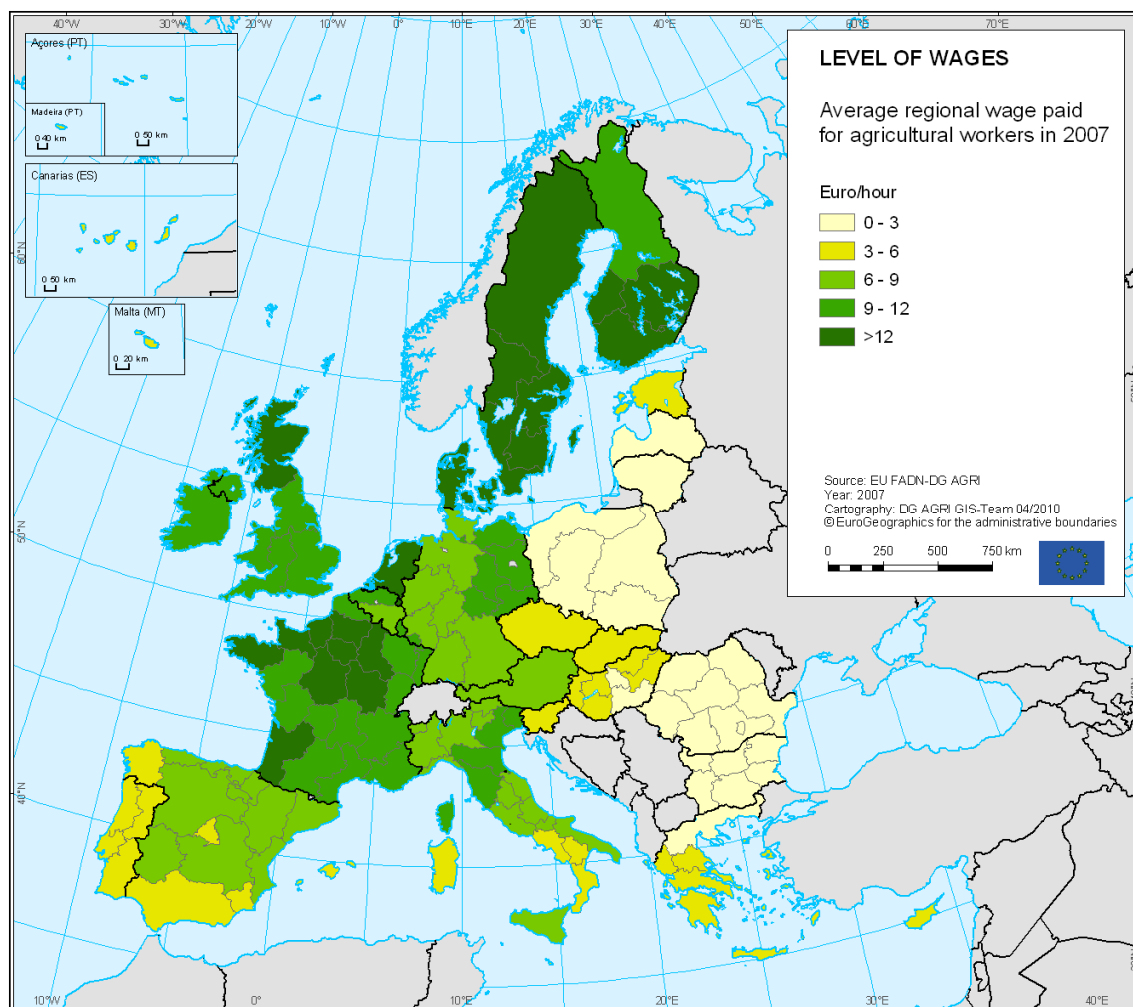


Source: DG AGRI EU-FADN

- Costs for labour

Owing to structural change and increasing farm sizes, the share of non family labour in the total workforce in the EU-15 is increasing. In large farms in eastern Europe, which often have legal personality, non-family labour dominates. Thus, the costs of non-family labour are of increasing importance for the competitiveness of farms. Map 4.6 shows that the costs for labour differ significantly between FADN regions. In the year 2007, wages were highest in the north-west of Europe. In Denmark, the Netherlands and many Scandinavian and French regions, the average wage per working hour was higher than 12 euro. By contrast in the EU-12, Portugal, Greece and some regions in southern Italy and southern Spain the average wage per working hour was below 6 euro. In Poland, Rumania, Bulgaria, Latvia and Lithuania the wages per hour were even below three euro.

Map 4.6: Average wage in the FADN regions, 2007



Source: DG AGRI EU-FADN

- Cost of capital

The cost of capital (other than land) also differs between Member States. As an indication of the cost of capital, Map 4.7 shows the regional level of the real interest rate. The real interest rate is calculated by subtracting the inflation rate from the nominal rate of interest for long term bonds. It therefore represents the real costs of borrowing money for one year.

In 2007 the real interest rate ranged from -3.3% in Bulgaria to 4.9% in Latvia. The negative figure in Bulgaria is due to the fact that inflation in Bulgaria was higher than the interest rate. All other things being equal, this implies that in Bulgaria it was economically more profitable to buy assets instead of long term bonds. Although the differences in the real interest rate are significant, it has to be emphasised that this applies mainly to those Member States that did not adopt the Euro. Within the Euro zone, real interest rates were similar.

Table 3.18: Average real interest rate in the FADN regions, 2007

	year	Interest rate	Inflation rate	Real interest rate
Belgium	2007	4.34	1.8	2.5
Bulgaria	2007	4.27	7.6	-3.3
Cyprus	2007	4.48	2.2	2.3
Czech Republic	2007	4.27	3.0	1.3
Denmark	2007	4.29	1.7	2.6
Germany	2007	4.21	2.3	1.9
Greece	2007	4.5	2.8	1.7
Spain	2007	4.31	3.0	1.3
Estonia	2007	8.69	6.7	2.0
France	2007	4.3	1.6	2.7
Hungary	2007	7.02	7.9	-0.9
Ireland	2007	4.34	2.9	1.4
Italy	2007	4.47	2.0	2.5
Lithuania	2007	7.93	5.8	2.1
Luxembourg	2007	4.56	2.7	1.9
Latvia	2007	14.97	10.1	4.9
Malta	2007	4.72	0.7	4.0
Netherlands	2007	4.29	1.6	2.7
Austria	2007	4.29	2.2	2.1
Poland	2007	5.48	2.6	2.9
Portugal	2007	4.42	2.4	2.0
Romania	2007	7.5	4.9	2.6
Finland	2007	4.29	1.6	2.7
Sweden	2007	4.16	1.7	2.5
Slovakia	2007	4.49	1.9	2.6
Slovenia	2007	4.53	3.8	0.7
United Kingdom	2007	5.01	2.3	2.7

Source: EUROSTAT, Global Insight — Elaboration DG AGRI

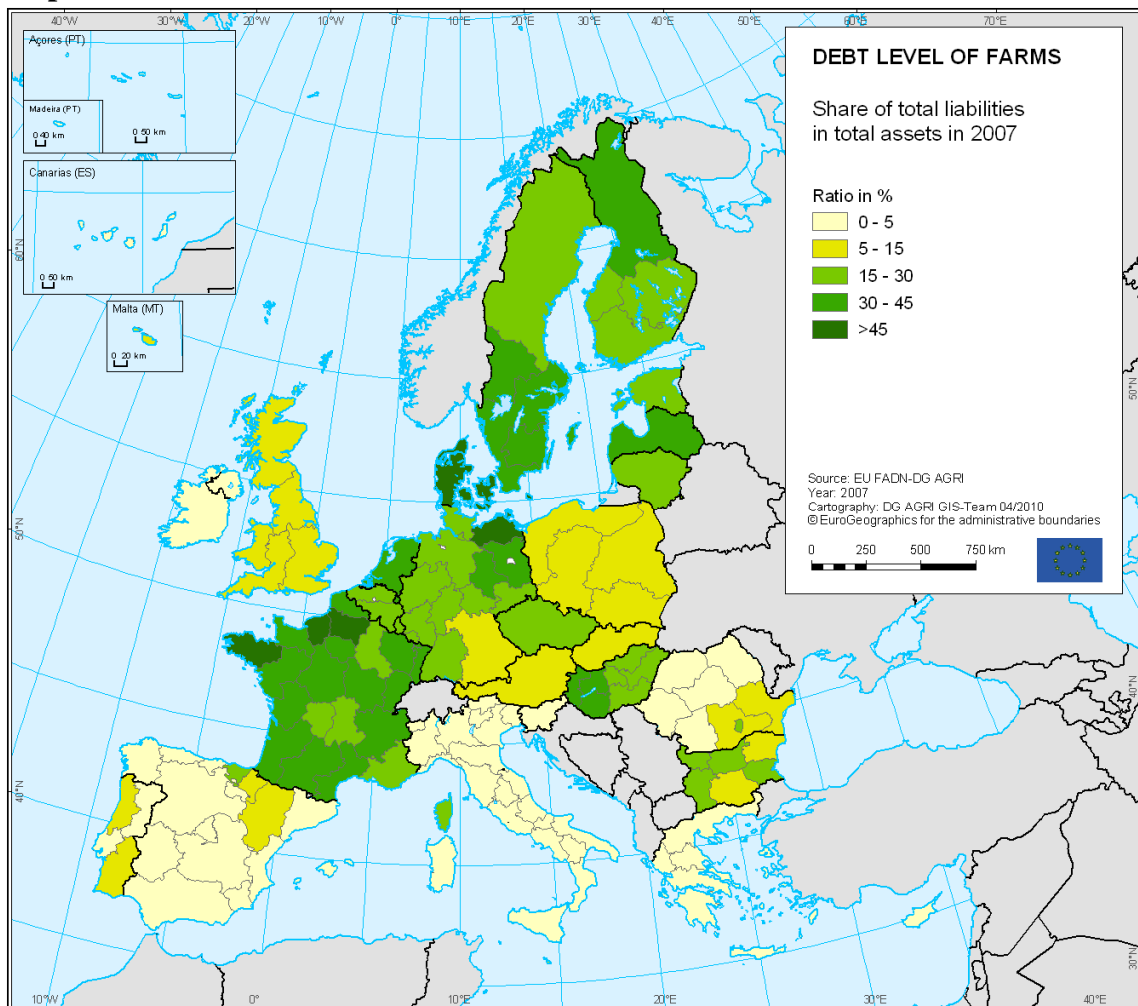
The level of the real interest rate is also important in relation to the debt level of farms. The higher the relative importance of debts in the financial structure of the farm, the more significant will be the consequences of changes in interest rates. As an indication of the debt level of farms, the average share of total liabilities in total assets is shown in Map 3.7. There are differences between regions. Farms in Denmark, Brittany, Picardie, Haute-Normandie and Mecklenburg-Vorpommern have the highest share of liabilities in total assets – with more than 45%. The lowest shares are found in Greece, Spain, Italy and Romania¹⁵.

For the purposes of interpreting the results, it has to be emphasised that a high level of debt is not necessarily a bad sign. On the contrary, it can be an indication of profitability, as it shows that farms have access to the financial markets. It indicates that creditors are confident that the farmers will be able to pay back their loans. Of course, if the debt goes beyond a certain level, e.g. 100%, it is an indication that the farm is in serious trouble.

The level of debt varies not only between regions but also between farm types (Graph 3.30). It is highest in horticulture, pig and poultry farms and dairy farms. This confirms that a high level of debt does not necessarily indicate a problem, because the income of these farm types in most years is above average.

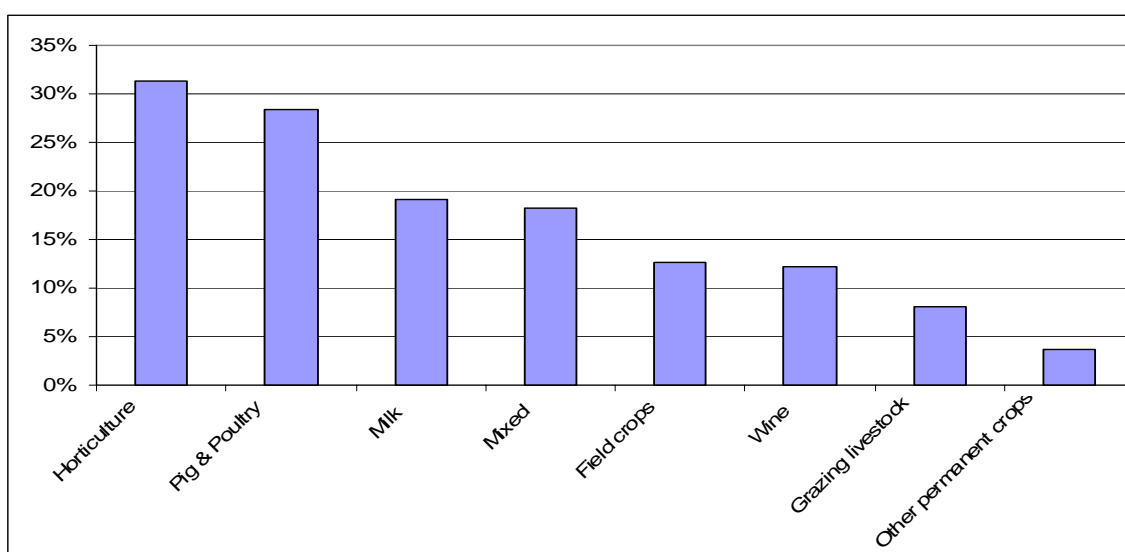
¹⁵ In some Member States, the share of debts is surprisingly low. One explanation could be that in these countries debts are not included in the farm accounts but in the private accounts of the farmers.

Map 3.7: Debt level of farms: share of total liabilities in total assets in 2007



Source: DG AGRI EU-FADN

Graph 3.30: Share of total liabilities in total assets in the EU-27 by type of farming, 2007



Source: DG AGRI EU-FADN

4. OTHER SOURCES OF INCOME

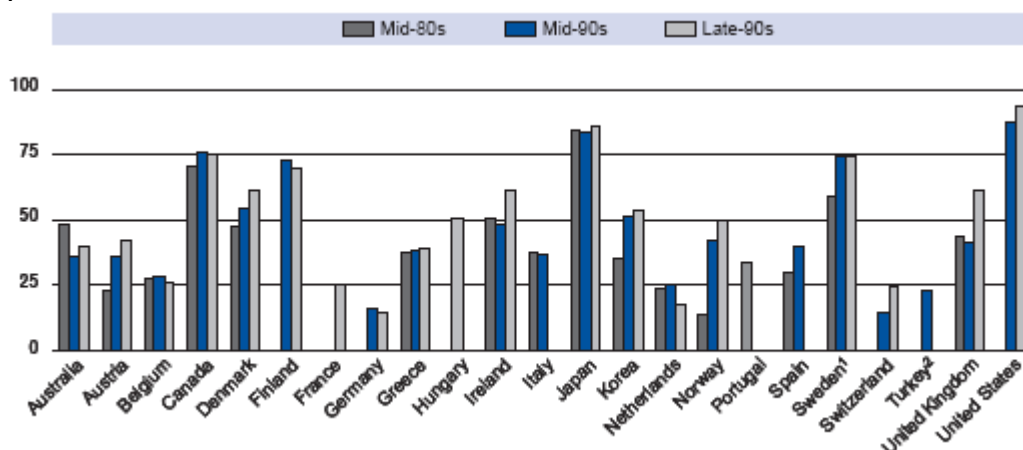
While this report focuses primarily on the income generated by the agricultural activity, it is interesting to also take a look at the other activities carried out by the farm leader or by family members which contribute to the income of the agricultural household.

In the past few years, the practice of farmers and farming households to be involved in more than one activity has been increasing, and over one third of EU-27 family farmers (36.4%) now carry out another gainful activity. Although they are mainly small farmers looking for supplementary income, they may have genuine entrepreneurial aspirations, and may set up diversification activities on their own farm. This option is currently implemented on 12% of EU-27 holdings.

Multi-activity is mainly a feature of small farms, whereas diversification is found more frequently on large holdings, where the size of the farm also influences the type of activity, with small farms developing the processing of agricultural products, and larger ones providing contract work.

Data on other sources of farmers' incomes are scarce. An OECD publication¹⁶ dating from 2003 gives results on the income of farm households and more recent data in Austria, Denmark, Poland and Romania. Although comparing data on farm household income is difficult and quite risky due to the lack of harmonised and/or appropriate data, the results can be regarded as informative. According to the OECD study, farm households derive a significant share of income from off-farm sources: these are mainly other gainful activities, but also social transfers and property income. Importantly, the share of off-farm income has increased in many countries for which data are available.

Graph 4.1: Share of off-farm income in total income of farm households¹⁷



Average of two or three years whenever possible.

1. Income from independent activities.

2. Agricultural households in rural areas.

Source: OECD Secretariat's calculation based on national statistics and EUROSTAT database (EUROSTAT, 1999 and 2002).

¹⁶ OECD — Farm Household Income — Issues and Policy Responses — 2003.

¹⁷ Definitions of farm households vary both with respect to who constitutes a household (which family members) and what constitutes a *farm* household.

More recent information on farm household income is available for Austria, Denmark, Romania and Poland. In Denmark, in particular, off-farm income is of major importance, while in Austria, Romania and Poland farm income is still the main source of household income¹⁸. In the latter four countries it is not possible to discern a clear trend in the importance of off-farm income. While the share of farm income in household income has tended to decline in Denmark and Romania, it has increased in Austria and Poland.

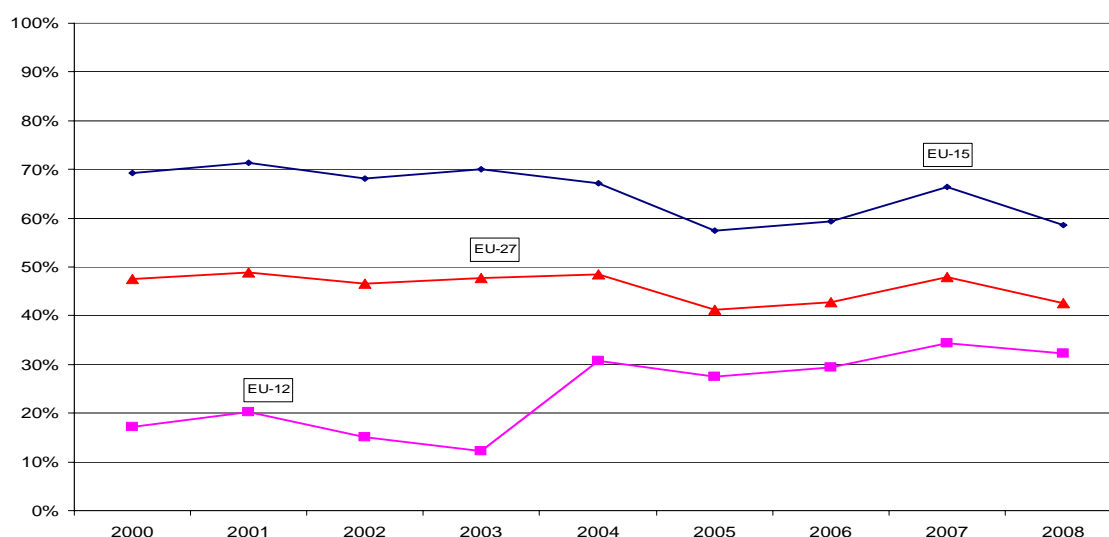
¹⁸ In Romania the value of agricultural products consumed on the farm represents a large part of farm income.

5. COMPARISON OF INCOME BETWEEN THE FARM SECTOR AND THE REST OF THE ECONOMY

It is useful to place agricultural incomes in the context of income levels in the rest of the economy, but difficult to accomplish due to the lack of data and major conceptual differences¹⁹.

For the purposes of this study the income of agricultural producers (generated by agricultural activities) is compared with the average income of an employee and, although these income concepts are not directly comparable, this comparison does give an idea of the income situation in the farm sector. It shows that the income per worker in the agricultural sector is significantly below that of the rest of the economy. In 2008 the average agricultural income in the EU-27 was equal to 58% of the average wage in the total economy. In the EU-15 the income gap has widened over time. The ratio decreased from 70% in the year 2000 to 60% in 2008. In the EU-12 the gap is even more pronounced, but it has declined over time. The ratio has increased from less than 20% in 2000 to over 30% in 2008.

Graph 5.1: Entrepreneurial income in agriculture/self-employed AWU as % of wages in total economy/AWU



Source: Eurostat– Economic Accounts for Agriculture – Elaboration DG AGRI

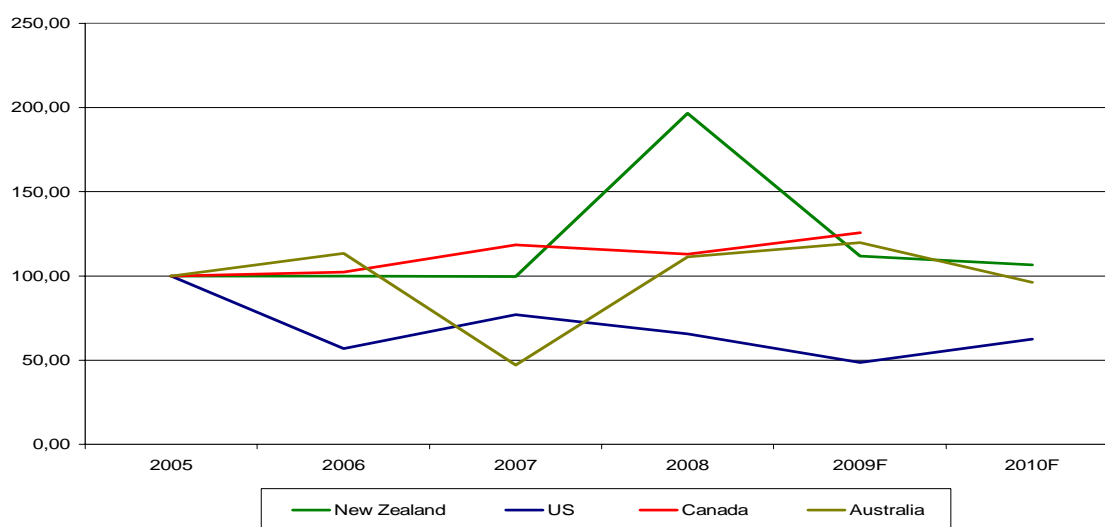
¹⁹ The approach developed by DG AGRI, compares the level of entrepreneurial income of agricultural producers per full-time equivalent and the salary of employees in the total economy per full-time equivalent (measured by AWU). It should be noted that, whereas data on the abovementioned ratio on agriculture are available, the EUROSTAT database is not complete for all Member States on data for the whole economy. This concerns most notably the data on the volume of labour for the whole economy. The missing data was extrapolated with the help of proxies.

6. FARM INCOME IN THE US, CANADA, AUSTRALIA AND NEW ZEALAND

Income Trends

After two years of decline (-15% and -25% in 2008 and 2009), farm income in the US is projected to rise by 28% in 2010, mainly as a result of the recovery anticipated in the livestock sector. Canadian farm income also fell, by nearly 5% in 2008, but it is expected to recover by 11% in 2009. However, the Canadian data are forecasts, so they may be revised in line with the trend projected for net value added and farm cash receipts. It is predicted that net value added will fall by nearly 30% in 2009, and farm cash receipts (including government payments) from Jan-Sept 2009 were down 4.2% compared to the same period in 2008.

Graph 6.1: Development of farm income in US, Can, Aus (2005=100) and NZ (2006=100)



In Australia and New Zealand (NZ) farm income has been extremely volatile in recent years due to severe weather conditions, fluctuations in international agri-food prices and exchange rates. Following the drought in 2006-07, the averages of farm income across arable crops, livestock and dairy farms hit a record low in Australia in 2007, followed by a strong recovery on the back of high commodity prices in 2007-08. In the past year, although average income increased further, this masked a decline in dairy farm incomes resulting from plummeting prices internationally. In 2009-10, the financial performance of Australian farms is projected to deteriorate across all farm types. In NZ, average farm income peaked in 2007-08, as high dairy prices pushed up the average farm income, compensating for lower livestock revenues due to drought. NZ farm income fell dramatically last season and it is forecast to decrease further in 2009-10, mostly owing to lower prices for some commodities and a stronger NZ dollar.

Dairy income in NZ, Australia and the US plummeted in 2008-09 (NZ was 60% down from its record level, Australia was down 36% and US down 80% in 2009). However, dairy farms in Canada are seen as being among the highest earners of all farm types in 2009. For 2009-10, dairy income in Australia is due to decrease further (-43%), while the financial situation of dairy farmers in NZ and US (2010 forecast) will show a moderate improvement.

Reliance on government payments and non-farm sources of income

In the US, government payments for farm and conservation programmes account for 38% of farm income for all farms (commodity payments are 29% of farm income). Farm income as a share of total household income for all farms is only around 10%, as there are so many small non-professional farms (60% of total). If we look at commercial farms with over 80% of production, government payments make up just 18% of farm income, which in turn accounts for three quarters of their average farm household income. In Canada, the share of family income earned from farming is relatively constant (35%-38%). Farm families are becoming less dependent on government support, which represents 55% of farm income in 2007-2009, down from roughly 75% in 2004-2006.

Table 6.1: Farm Operator Household Income for US and Canada

	US	Canada
	2007	2007
No of farms	2069346	229000
Farm Income as % of total family income	12%	36%
Government payments as % of farm income	29%	55%

In recent years, Australia or NZ have not reported any government support to farm income.

6.1. Development of farm income in the US

Overall trend in the income of farming households in the US

This analysis provides an overview of the recent development of farm income in the US, based mainly on USDA's 2008 ARMS data²⁰. The principal measures of income considered here are *average farm household income*, (including non-farm sources) and *average net earnings from the household from farming* (net value added by agriculture to the national economy earned by farm operators, referred to here as "farm income"). US data relating to average income for all farms must be treated with caution because the US definition of a farm includes many "rural residence farms", which earn most of their household income off-farm. Although they account for only 7% of production, they make up 63% of all US farms (2008). Professional farms account for just 37% of the total number of farms, but are responsible for 93% of production.²¹

The most recent forecasts for 2009 and 2010 relate to *all farms*, including the non-professional farms. Overall farm household income declined for two years in a row in 2008 and 2009 by 10% and 3% respectively, to 6.5% below the 5-year average for 2004-08. An increase of 5.9% is projected for 2010. Meanwhile, farm income is more volatile. Average farm income for all farms declined by 14.9% in 2008 and by a further 25% in 2009, to reach just 61% of the 5-year average for 2004-08. For 2010, farm income is

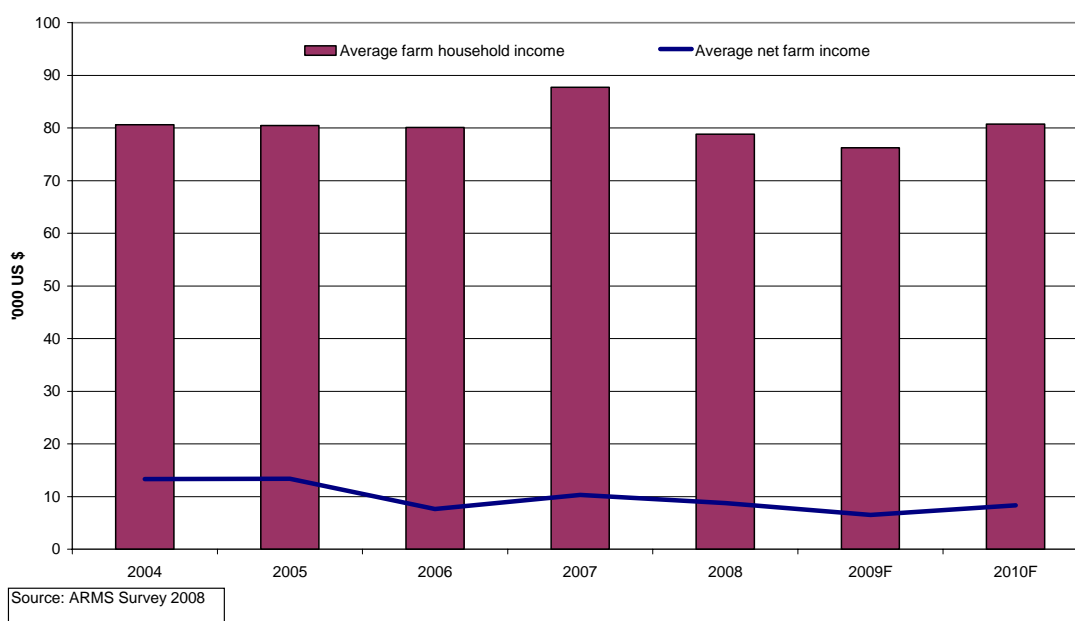
²⁰ The Agricultural Resource Management Survey data is broadly comparable to FADN data as it is based on a survey of 20,000 family farms. However the ARMS survey looks at average total family farm household income, both farm and off-farm and does not include income per labour unit as in FADN.

²¹ Professional farms may be split into intermediate farms and commercial farms with sales below and above \$250,000. The former account for 27% of family farms and 13% of production, while commercial farms represent just 10% of family farms but 81% of production.

forecast to rise by 28% above 2009 levels, mainly due to recovery in the livestock sector. Farm income as a share of total farm household income for all farms fell to just 8.5% in 2009, down from 11.1 % in 2008, but it is projected to rise to 10.3% in 2010.

Comparing the wellbeing of all farm households with US households in general, on average farm household income has been 15-30% higher than the average US household income every year since 1996. In 2008 it reached 115% of average income compared to 125% for 2004-08. Median income is roughly equivalent, at \$50,971 for farm households and \$50,303 for all US households (2008).

Graph 6.2: US Average Farm Household Income and Income from Farming



Turning to the income patterns for *professional farmers*, data are only available up to 2008. Farm income for commercial farms with annual sales of over \$250,000 accounts for almost 75% of their total farm household income. Farm income fell by 8% in 2008 (having risen by 27% in 2007), while non-farm income grew and overall farm household income fell by 5% as a result. The household income on these large farms is 2-3 times higher than for average US households.

Intermediate farms, with sales below \$250,000, had positive earnings from farming until 2008, although earnings have declined sharply since 2005. Overall household income in this category is lower than for rural residence farms, for which off-farm incomes are higher. Household income on these farms (which represent 74% of professional farms) is below the average US household, and the gap has been widening since 2006.

Table 6.2: US Income of farm households by farm types, 2004-2008 (US \$)

	2004	2005	2006	2007	2008
Intermediate Farms					
Average farm income	8.285	8.870	4.681	729	-818
Average household income	54.736	57.982	63.187	50.168	47.786
Farm Income as % of total farm household income	15,14	15,30	7,41	1,45	-1,71
Total income as % of average US household income	90,52	91,53	94,92	74,20	69,84
Large farms					
Average farm income	143.025	159.052	115.253	146.657	134.320
Average household income	189.060	200.201	175.107	191.789	182.842
Farm Income as % of total farm household income	75,7	79,4	65,8	76,5	73,5
Total income as % of average US household income	312,67	316,05	263,04	283,67	267,22

Source: ARMS Survey 2008

Variation in Income by sector

Rice/cotton/peanut farms had the highest average farm income in 2006-2008, followed by dairy, corn and pig farms. Farm income on specialised beef farms and general livestock farms was negative. Not all farms have been affected by the economic crisis in the same way. Using a different measure of income, *net cash income for farm businesses* (gross receipts from farming, less variable and fixed costs before depreciation) for intermediate and commercial farms is projected to decline by 10.6% in 2009. Net cash income for corn businesses was 5% down, soybeans were unchanged and wheat was up 12%. In the livestock sector, the falling cost of feed and energy pushed up the net cash income for broiler producers. In 2009 net cash incomes for pig and dairy farmers are forecast to be down by 52% and 82% respectively. For 2010, lower incomes are projected for crop farm businesses (down by 1-10%), while livestock farms should improve, bringing pig farms back to the level of profitability they enjoyed in 2008, together with a strong recovery in the dairy sector (still 15% below 2008) and a 13% rise for poultry producers.

Importance of government payments

Farm income also includes government payments (farm and conservation payments). Around 40% of all farms, i.e. approximately 800,000 farms out of a total of 2.1 million, receive government payments. Based on ARMS data for 2007 we have attempted to correlate size of farm with government payments for all farms (see table 6.3).

Table 6.3: US Farm Income and government payments by Sales Class (2007)

	All	Less than \$10,000	\$10,000 - \$249,999	\$250,000 or more
Total Farms	2.069.346	1.185.701	706.254	177.391
Farms which receive government payments (%)	40,32	23,46	59,76	75,58
Share of Production %	100,00	1,48	18,63	79,89
Farm Income \$	10.302	-7.687	2.870	146.657
Government payments (\$)	3.948	479	4.171	26.250
Government Payments % of farm income	38,33	n.a.	145,34	17,90

Source: ARMS Survey 2007

Total government payments account for 38% of farm income for all farms. As commodity support accounted for 76% of total payments for all farms, this equates to 29% of farm income. The bigger the farm, the higher the farm payments, as most of them are linked to production (past or present). For farms with less than \$10,000 in annual sales, farm income is negative. For intermediate farms with sales of \$10,000- \$250,000, government payments are 145% of farm income. Meanwhile, for farms with sales in excess of \$250,000, 18% of the farm income came from government payments.

6.2. Development of farm income in Canada

Overall trend in the income of farming households in Canada

This analysis provides a brief overview of the recent development of farm income in Canada, based on publications by Agriculture and Agri-food Canada²², using mainly farm level data, which measures the income for farm households²³. Farm income is measured as net operating income (net market income and government payments)²⁴. Farm income declined by nearly 5% in 2008, as net market income fell by 8% in 2008 and government payments also declined by nearly 2% in 2008. For 2009, farm income per farm household is expected to recover by 11%, with net market income projected to grow by 20% and government payments up by 4%.

Table 6.4: Average Income of farm households in Canada, 2004-2009 (CN\$)

	2004	2005	2006	2007	2008(f)	2009(f)
Net Market Income	8591	6972	7430	15305	14068	16913
Program Payments	18928	21652	21815	18612	18276	19068
Net Farm income	27519	28624	29245	33917	32344	35981
Total Family Income	73019	79124	83345	90814	92860	98723
Farm Income as % of total family income	38	36	35	37	35	36
Government payments as % of farm income	69	76	75	55	57	53

Source: Statistics Canada and Agriculture and Agri-food Canada.

However, as the farm-level data for both 2008 and 2009 are still forecasts, they are liable to be revised. A decline can be expected based on forecasts of net value added and farm cash receipts at **aggregate sector level** (rather than farm-level). Net value added of agriculture (which measures agriculture's contribution to the economy) is projected to fall by nearly 30% in 2009, after two consecutive years of growth, largely as a result of continued high crop prices offsetting higher input costs and lower receipts in the red meat sector. Farm cash receipts (crop and livestock revenue plus program payments) from Jan-Sept 2009 were down 4.2% compared to the first nine months of 2008 (programme payments fell 24.5% to \$2.4 billion).

Importance of government payments and other sources of income

Total income earned by farm families has grown steadily since 2004. The share of family income earned from farming is relatively constant (35%-38%), but the composition of this income has changed, with farm families becoming less dependent on government support. In 2004-2006 such payments represented almost three quarters of farm income, compared to 55% in 2007-2009.

Variation in income by sector

Not all farms have been affected by the economic crisis in the same way. On average, dairy and potato farms are projected to have the highest net operating income in 2009,

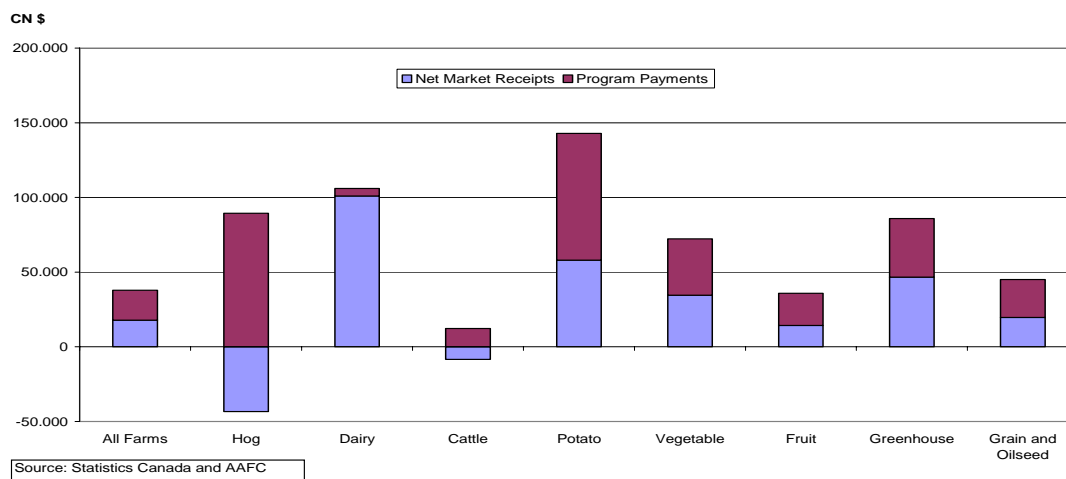
²² Source: Financial Situation and Performance of Canadian Farms 2009 and Overview of Canadian Agriculture 2009.

²³ In 2006 there were over 229,000 farms in Canada. Close to half (49%) of farms are business-focused, with gross revenues of \$10,000 and over. The remaining 51% of farms account for just 12% of gross revenue. Production tends to be concentrated on large (\$100,000 - \$499,999) and very large (\$500,000 +) farms, together accounting for roughly three quarters of gross revenue.

²⁴ Net operating income is also defined as the difference between gross farm revenues and total farm cash expenses.

with dairy achieving almost triple the average net operating income for all farms. This is the second consecutive year that dairy farms are among the highest income earners. Pig and cattle farms are expected to have the lowest average income in 2008. Net market receipts for these farms are expected to be negative, although program payments have more than offset market losses. The pigs sector experienced the greatest year-on-year fluctuation in net operating income²⁵ while the supply-managed sectors had stable and rising net operating income. On average, program payments accounted for 53% of net operating income in 2009.

Graph 6.3: Canada: Net Operating Income by Farm Type (2009 forecast)



6.3. Development of farm income in Australia

This note gives an overview of the recent developments of farm incomes in Australia, with provisional estimates for the 2009/10 financial year (1 July - 30 June). Where possible, insights into the main factors behind the changes and references to average values of the last decade are provided. The analysis is based on data collected by the Australian Bureau of Agricultural and Resource Economics (ABARE) in its annual survey on broadacre and dairy sectors²⁶.

²⁵ Source: Financial Situation and Performance of Canadian Farms 2009.

²⁶ The survey covers producers from the broadacre and dairy sectors. Broadacre industries include: wheat and other crops, mixed livestock-crops, sheep, beef and sheep-beef industries. According to ABARE's explanatory note, broadacre and dairy farms account for 68 per cent of commercial-scale Australian farm businesses and are also responsible for the management of more than 90 per cent of the total area of agricultural land in Australia and account for the majority of Australia's family owned and operated farms. The latest data available provides preliminary estimates for the 2008-09 and provisional projection for the 2009-10 financial year.

Farm cash income²⁷

Over the past two years, the cash income from Australian broadacre farms recovered from the record low of 2006-07 (slightly above \$30 000 per farm), caused by severe and widespread drought, to reach an average of \$64 220 (more than twice the value of the previous year) and \$76 000 (+18% year-on-year) respectively per farm in the financial years 2007-08 and 2008-09.

Similarly, the cash income of dairy farms showed a substantial improvement (a 200% increase!) compared to the drought affected season and, on the back of high international prices for dairy products, achieved a record high of almost \$130 000 in 2007-08. This positive trend was reversed last year, when dairy prices collapsed in the wake of the global slowdown, and average cash dairy farm income fell by 32% to \$88 000 in 2008-09.

In 2009-10, mainly as a result of substantially lower grain and milk prices, the financial performance of Australian farms is likely to deteriorate. The worsening conditions will be reflected in a lower average farm cash income of \$62 000 per farm and \$50 000 per farm for broadacre and dairy farms respectively in 2009-10, which is 19% and 45% below the respective averages of the preceding 10 financial years.

Specific sectors within broadacre farms

Among the Australian farming sectors, the highest average cash incomes over the last decade were achieved by farms growing wheat and other crops²⁸, followed by dairy with an average of \$137 500 and \$91 000 per farm respectively. This far exceeds the performance of the livestock (sheep and beef) farms where the average cash income over the last decade was around \$44 000 and \$35 000 a farm in real terms.

Despite lower grain prices, average farm cash income for **wheat and other crops** improved in 2008-09 as a result of increased production in some states. However, the lower grain and oilseed prices are projected to bring the average income for the sector down to \$132 000 in 2009-10 (one quarter below the average income of the preceding year and 4% below the average of 1999-2008).

Average **sheep** farm income declined slightly during the last financial year, mainly as a result of lower wool prices and falling sales of sheep and lambs. With higher wool, sheep and lamb prices, there are plans to increase income substantially in 2009-10 to an average of \$57 000 a farm, which is around 30% higher than the average of the past decade.

²⁷ Farm cash income is the difference between total cash receipts (total revenues received by the farm business during the financial year) and total cash costs (total payments made by the farm business for materials and services and for permanent and casual hired labour, excluding owner manager, partner and family labour). It is a measure of short-term farm performance because it does not take into account depreciation or changes in farm inventories. Farm cash income can be compared to OECD's notion of net operating income, which is the difference between gross receipt and farm cash expenses (also before depreciation).

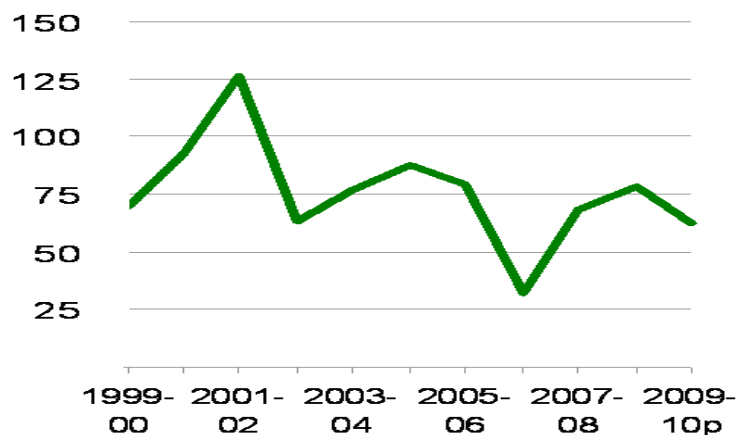
²⁸ Wheat and other crops industry: representing the more specialised producers of cereal grains, coarse grains, pulses and oilseeds.

In 2008-09, the average cash income from **beef** farming rose by 20% on the previous year's value, with increased production and sale prices partially offset by higher fodder costs due to drier conditions. This financial year, as a result of lower beef prices, the average beef farm income is projected to decline sharply to \$26 000, which is around a quarter below the average for the previous 10 years.

Volatility

Farm cash income, averaged across the country and individual sectors proved volatile in the last ten years (Graph 6.4). Climate (drought, in particular) and changes in international commodity prices, combined with exchange rate fluctuations, are the most important factors behind the ebbs and flows in farm income. In the case of the broadacre sector, the average farm income - after peaking at around \$120 000 in 2001-02 - fell by half in the following year due to the severe drought. Again in the 2006-07 financial year, as the result of yet another widespread drought, income plummeted to a record low (two thirds below the previous 10 year average).

Graph 6.4: Australian Farm cash income – broadacre farms, average per farm in \$1000



Source: ABARE Commodity reports

The Australian dairy farmers saw their cash incomes fluctuating even more. Twice during the last decade, in 2001-02 and 2007-08, their cash income had skyrocketed above \$130 000 a farm on the back of high commodity prices. These levels were roughly 50% higher than the average for the years 1999-2009. Also, as a result of the widespread severe drought during 2002 and 2007, income levels were pushed down to a level that was two thirds below the average for the decade in 2002-03 and 2006-07.

6.4. Development of farm income in New Zealand

This chapter gives an overview of the recent developments in the cash operating surplus (referred to here as "farm income")²⁹ in New Zealand, including a forecast for the

²⁹ The terminology used to illustrate farm income varies between the different countries analysed in this note. Cash operating surplus as defined in NZ survey refers to the difference between net cash income (total revenue less new inventory expenditure) and farm working expenses. However, contrary to Australian farm cash income, NZ revenue figures include off-farm income, new borrowings and other cash income.

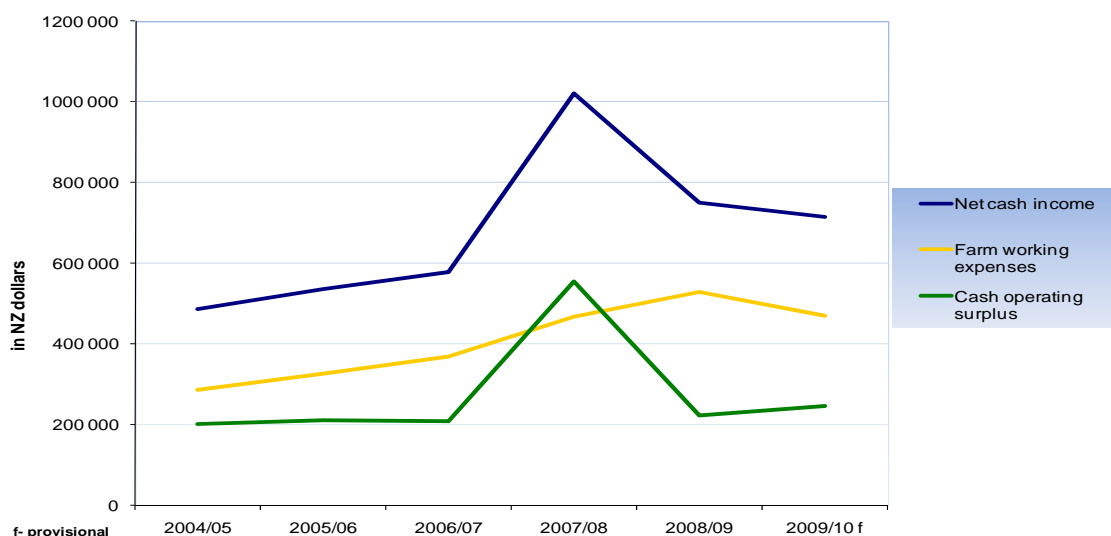
2009/10 financial year (1 July - 30 June). Where possible, insights into the main factors behind the changes and references to average values of the past years are provided. The analysis is based on survey data compiled by the Ministry of Agriculture and Forestry of New Zealand (MAF) through its Farm Monitoring Programme³⁰.

Dairying and sheep & beef farming are the two major pillars of New Zealand's agricultural production (with 18% and 46% of farms respectively according to a 2007 NZ farm census). As a consequence, the data analysed in this note focus on revenues, expenditure and incomes of farms involved in these types of production. As regards the data on sheep & beef farming, they provide information on all the revenue streams of sheep & beef farms (including wool, sheep, cattle, dairy grazing, deer, goats, crops, other) and provide an indication of the profitability of those specific types of production.

Income of dairy farms

Overall, the average NZ dairy farm cash surplus posted a moderately rising trend over the 5 years to the 2008-09 financial year.

Graph 6.5: NZ dairy net cash income, working expenses and cash operating surplus per farm



Source: Farm Monitoring Programme, MAF

This increase could have been more pronounced as a result of the strong growth in NZ dairy farm revenue, but it was offset by an equally bullish expansion of farm working expenses. Variable climatic conditions, international agri-food product prices and exchange rate fluctuations have been the major factors influencing farm income during this period. The average for the years 2005-09 was a farm cash surplus of 278 780 NZ dollars (NZD) for the dairy sector.

In 2007-08 dairy farm cash income reached a record level of 553 400 NZD per farm (50% above the 2005-2009 average). This was achieved on the back of the high international dairy product prices in 2007-08 and despite lower production (a 4%

³⁰ Farm Monitoring Programme by MAF examines on a yearly basis revenue and expenditure for the past season and outlines what farmers are budgeting for the year ahead. Programme collects data from a range of farm types throughout New Zealand and is supplemented with farmer and industry expectations.

decrease year-on-year) resulting from a widespread drought that affected NZ agriculture that year.

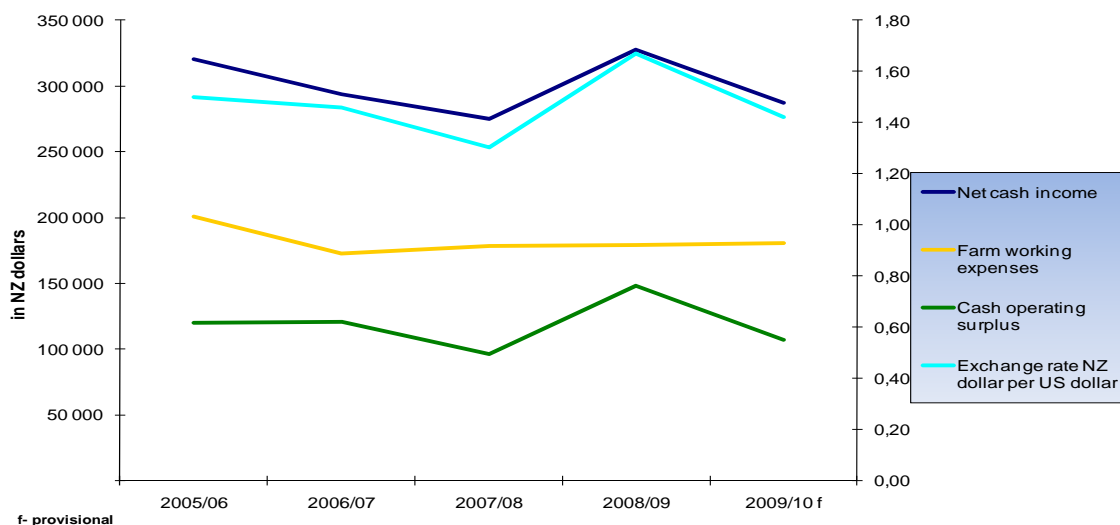
In the following year, as world dairy prices fell from their peaks, NZ dairy farm receipts were sharply down from their record levels and the farm cash surplus fell by 60% to 221 400 NZD. This was due to a combination of lower farm revenue and the farm working expenses peaking in 2008-09 (the latter increasing by 85% between 2004-05 and 2008-09) driven largely by higher spending on feed in a drought affected environment.

For 2009-10, a further decline in cash receipts (-5%) is forecast due to lower milk payments. However, farmers' expectations of reducing their farm running costs (especially for feed, fertiliser, repairs and maintenance expenses) are projected to lead to an 11% increase in farm income to 27 800 NZD. This income level would still be 12% below the average of 2005-2009.

Sheep and beef

As Graph 6.6 illustrates, the financial condition of NZ sheep and beef farms developed in a starkly contrasting way to dairy farming. The average farm cash income hit a record low of 96 258 NZD per farm in 2007-08 (roughly 20% below the 2006-09 average). This was mostly due to the combination of a strong New Zealand dollar and higher operating costs resulting from the drought of 2007-08.

Graph 6.6: NZ sheep & beef net cash income, working expenses and cash surplus (per farm) and NZ dollar exchange rate



Source: Farm Monitoring Programme, MAF

With 80% or more of meat and wool production going to export, farm income in NZ is driven by the strength or weakness of the NZ dollar (especially against the US dollar, British pound and Euro in the countries where the majority of NZ beef and lamb is sold). According to Meat & Wool New Zealand (M&WZN), a 10% appreciation of the NZD against the USD and cross rate appreciation against the GBP and EUR lowers the farm-gate price for lamb, beef and wool by 14%, 13% and 12% respectively. The opposite applies with the depreciation of the NZD by 10% against the USD, raising the farm-gate price for lamb, beef and wool by 17%, 16% and 14% respectively.

While dairy farmers, with the incentive of a steadily increasing payout for 2007-08, were able to mitigate much of the drought's impact by buying in supplementary feed to maintain milk production, sheep and beef producers, faced with a strong NZD and consequently lower farm-gate prices, were unable to afford the increasingly expensive feed, and had to sell their livestock stock on an oversupplied, low priced market. In addition, the ratio of average farm working expenses to average net cash income increased from 56% in 2000-01 to 65% in 2007-08, which squeezed their profits. Also, farm debt costs had increased substantially during the previous 4 years.

In the past financial year (2008-09), the NZ sheep and beef farmers recovered from the extremely poor returns of the preceding year, and the average cash operating surplus reached 148 069NZD per farm (a 54% increase year-on-year). However, the forecast for 2009/2010 is that the surplus will fall again by almost 30%, with prices for lamb, sheep, cattle and wool predicted to decrease owing to the combined effects of the higher exchange rate for the New Zealand dollar and, for some commodities, reduced market demand due to the global economic slowdown.

Net cash income broken down by the main income streams of sheep and beef farms

The M&WNZ figures for revenue coming from **sheep** production give an average value over the 5 years to 2008-09 of 144 600 NZD per farm. From 2008-2009 to 2009-2010, sheep revenue is due to fall by 6.5%, primarily because of a decrease in the prime lamb price (down 19.4%), although this will be partly offset by an increase in the number of lambs sold (+7%).

As regards **beef** production, the past 5 years brought in an average revenue of 75 800 NZD per farm. From 2008/2009 to 2009 /2010, there are forecasts of substantial reductions in cattle revenue (-22.4%) due to two main factors: a decrease in per kg farm-gate prices (-20.6%) and a fall in total sales (-5.4%).

The average figures for the period 2004-05 – 2008-09 indicate revenue of 38 800 NZD per **wool** farm. From 2008-09 to 2009-10, wool farm revenue is projected to fall by only a minimal amount (-0.9%).

ANNEX

Table A.1: Development of income components in the EU-15. Values by AWU

EU-15		1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	Ø change
Structure	Economic size	18	19	21	22	24	26	26	26	26	27	27	3.9%
	UAA	20	20	21	22	23	24	24	23	24	24	24	1.8%
	Labour (per farm)	1.53	1.52	1.53	1.43	1.44	1.50	1.54	1.54	1.53	1.51	1.53	0.0%
Revenue	Output	36 002	35 228	36 175	40 489	43 994	45 203	46 502	45 878	46 320	48 945	54 646	4.3%
	PI payments*	5 142	5 281	5 546	5 713	6 208	6 809	6 696	6 787	7 018	7 720	7 369	3.7%
	PII payments*	359	451	486	900	1 083	1 190	1 189	1 226	1 373	1 458	1 410	14.7%
	Investment subsidies*	203	234	212	189	262	249	248	194	238	297	235	1.5%
Costs	Intermediate consumption	19 429	19 418	19 897	22 045	24 582	25 540	26 162	25 818	26 253	27 723	29 832	4.4%
	Seeds	1 308	1 364	1 404	1 473	1 732	1 902	1 955	1 930	1 836	1 937	2 104	4.9%
	Fertilisers	1 786	1 693	1 656	1 792	1 994	2 041	2 020	2 032	2 084	2 178	2 359	2.8%
	Crop protection	1 263	1 307	1 376	1 492	1 563	1 679	1 642	1 664	1 644	1 690	1 793	3.6%
	Feed	6 001	5 837	5 855	6 507	7 280	7 339	7 758	7 537	7 296	7 813	8 884	4.0%
	Machinery & buildings	2 080	2 050	2 081	2 287	2 507	2 601	2 540	2 529	2 601	2 748	2 882	3.3%
	Energy	1 596	1 552	1 654	2 057	2 325	2 227	2 303	2 405	2 829	3 083	3 233	7.3%
	Contract work	1 387	1 458	1 527	1 702	1 844	1 977	1 936	1 938	1 960	2 053	2 208	4.8%
	Other	4 007	4 157	4 343	4 735	5 339	5 774	6 008	5 784	6 003	6 220	6 369	4.7%
	Depreciation	4 942	5 153	5 239	5 701	6 078	6 257	6 313	6 197	6 310	6 766	7 063	3.6%
	Farm taxes	365	398	405	424	488	499	507	523	497	501	498	3.2%
	Taxes on investment	214	210	203	197	195	188	240	201	195	201	253	1.7%
	Wages	2 540	2 615	2 875	3 075	3 406	3 767	3 840	3 938	4 039	4 075	4 320	5.5%
	Rents	1 536	1 627	1 782	1 920	2 088	2 295	2 294	2 215	2 229	2 363	2 345	4.3%
	Costs own labour**	10 271	10 763	10 573	11 227	12 079	11 650	11 550	11 621	11 817	12 126	12 191	1.7%
	Costs own land**	2 354	2 673	2 621	2 731	2 891	2 830	2 821	2 729	2 664	2 573	2 618	1.1%
	Costs capital**	2 900	2 590	2 471	2 439	2 079	2 152	1 817	1 834	1 289	1 609	1 883	-4.2%
Indicators	FNVA	16 767	15 992	16 667	18 931	20 138	20 905	21 403	21 352	21 651	23 134	26 031	4.5%
	Economic profit	-2 844	-4 252	-3 645	-2 468	-2 338	-1 728	-909	-991	-344	482	2 657	-

* Includes national part of subsidies ** imputed costs

Source: DG AGRI EU-FADN

Table A.2: Income components in the EU-10 and the EU-2. Values by AWU

	EU-10					EU-2	
	2004	2005	2006	2007	Ø change	2007	
Structure	Economic size	6	6	7	7	3.4%	2
	UAA	13	14	14	15	3.9%	6
	Labour (per farm)	1.98	1.95	1.94	1.91	-1.2%	2.11
Revenue	Output	14 433	14 917	15 403	19 184	10.0%	5 439
	PI payments*	1 631	1 710	2 171	2 481	15.0%	838
	PII payments*	237	516	899	901	56.1%	0
	Investment subsidies*	129	124	174	202	16.1%	17
Costs	Intermediate consumption	9 245	9 612	10 084	11 963	9.0%	3 177
	Seeds	643	672	720	858	10.1%	316
	Fertilisers	862	947	1 058	1 236	12.8%	265
	Crop protection	559	613	655	739	9.8%	164
	Feed	3 579	3 368	3 439	4 424	7.3%	955
	Machinery & buildings	654	774	853	999	15.2%	209
	Energy	1 219	1 479	1 590	1 711	12.0%	485
	Contract work	438	478	475	520	5.9%	275
	Other	1 290	1 281	1 294	1 475	4.6%	507
	Depreciation	1 944	2 211	2 365	2 612	10.3%	541
	Farm taxes	152	165	155	174	4.8%	84
	Taxes on investment	79	122	170	180	31.5%	0
	Wages	1 159	1 295	1 380	1 604	11.4%	644
	Rents	227	250	275	334	13.6%	207
Costs own labour**	2 267	2 729	2 961	3 519	15.8%	2 113	
Costs own land**	225	258	336	380	19.1%	141	
Costs capital**	771	932	1 148	784	0.6%	151	
Indicators	FNVA	4 960	5 154	5 871	7 817	16.4%	2 475
	Economic profit	361	-310	-226	1 219	50.0%	-764

* Includes national part of subsidies ** imputed costs

Source: DG AGRI EU-FADN

Table A.3: Development of FNVA/AWU by MS

	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007
Belgium	32 601	30 714	34 135	37 779	38 501	33 442	39 170	36 427	38 837	42 705	43 807
Bulgaria											3 427
Cyprus								5 295	5 955	7 200	7 539
Czech Republic								9 618	9 944	11 044	13 515
Denmark	39 755	27 803	35 006	46 493	46 693	37 366	39 843	44 394	50 981	62 322	59 650
Germany	22 795	21 041	25 135	27 071	26 739	24 227	24 921	29 505	29 293	32 119	37 762
Greece	6 105	6 298	6 360	9 054	8 861	10 290	10 019	9 920	11 394	11 386	12 391
Spain	16 963	16 495	15 548	18 329	17 749	20 135	19 647	19 557	17 486	18 640	20 339
Estonia								7 431	8 448	8 370	13 440
France	25 479	26 517	26 939	26 209	26 379	25 789	24 984	25 888	25 628	27 828	32 951
Hungary								11 171	11 159	11 021	14 921
Ireland	15 564	13 121	13 402	15 380	16 438	16 932	18 902	19 011	20 082	19 647	22 653
Italy	13 043	12 732	14 039	14 933	16 023	19 773	21 152	20 272	21 288	22 536	24 929
Lithuania								6 247	6 395	5 932	10 484
Luxembourg	25 019	29 078	28 954	33 582	34 140	32 046	33 065	32 027	32 354	34 264	40 051
Latvia								4 409	4 863	6 266	7 583
Malta									11 901	14 470	15 330
Netherlands	36 349	28 766	28 568	37 922	41 258	36 390	39 874	36 939	40 705	45 159	43 793
Austria	16 397	15 558	16 149	16 572	18 809	18 280	18 044	19 445	20 366	22 021	25 438
Poland								4 097	4 202	5 288	6 710
Portugal	2 842	3 576	3 771	3 967	5 605	6 057	6 099	6 355	5 701	7 160	7 221
Romania											2 331
Finland	14 410	12 871	14 462	17 563	18 548	20 156	19 538	19 418	19 311	19 677	27 105
Sweden	15 590	10 667	14 318	17 563	18 185	20 255	20 162	20 368	24 117	24 442	37 546
Slovakia								3 709	5 446	1 150	8 219
Slovenia								2 409	3 655	2 372	3 861
United Kingdom	26 473	23 404	25 053	26 685	29 817	32 543	34 707	30 212	33 147	35 794	42 621
Total	16 767	15 992	16 667	18 931	20 138	20 905	21 403	16 753	16 997	18 192	16 515

Source: DG AGRI EU-FADN

Table A.4: Development of economic profit/AWU by MS

	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007
Belgium	3 466	2 058	4 094	9 079	8 518	1 887	6 665	3 410	7 649	9 999	10 100
Bulgaria											1 278
Cyprus								-5 297	-3 763	-2 551	-2 647
Czech Republic								835	-118	408	2 513
Denmark	-12 301	-26 489	-20 343	-10 724	-14 511	-26 844	-27 468	-30 205	-23 039	-19 289	-24 251
Germany	-6 411	-9 522	-5 968	-4 681	-7 034	-8 118	-8 341	-2 241	-202	784	5 742
Greece	-14	431	513	1 647	1 115	2 374	1 664	1 260	1 896	1 687	2 010
Spain	5 542	4 132	1 711	5 208	4 246	5 837	6 159	5 108	3 014	4 006	3 864
Estonia								3 227	2 396	502	4 560
France	-1 096	-756	-1 320	-2 420	-1 941	1 434	851	494	28	1 528	5 055
Hungary								1 908	1 048	774	4 786
Ireland	-7 628	-8 799	-8 796	-6 532	-7 761	-7 072	-6 937	-8 961	-8 093	-10 608	-8 507
Italy	-4 575	-6 146	-4 972	-4 745	-4 288	-3 509	-487	-726	323	546	3 518
Lithuania								2 913	2 542	3 189	5 480
Luxembourg	-8 362	-5 472	-5 663	4 658	2 593	-1 791	1 879	3 092	6 924	4 474	7 235
Latvia								1 589	1 785	1 861	2 136
Malta									532	1 431	1 104
Netherlands	-3 458	-9 865	-10 472	-3 258	-1 327	-9 015	-6 121	-11 209	-4 674	-928	-3 305
Austria	-2 741	-3 257	-4 124	-3 594	-906	-2 615	-3 844	-2 240	-928	-1 308	1 616
Poland								44	-551	-225	683
Portugal	-3 272	-2 898	-3 314	-3 688	-2 173	-2 319	-2 153	-2 718	-1 799	-389	-1 279
Romania											-1 109
Finland	-8 535	-9 212	-8 972	-5 436	-5 151	-5 849	-7 838	-10 673	-9 922	-11 811	-7 144
Sweden	-33 419	-39 755	-46 712	-33 543	-24 017	-25 898	-26 636	-31 815	-26 467	-25 455	-13 951
Slovakia								1 089	-1 282	-6 579	-1 326
Slovenia								-2 528	-2 823	-4 864	-3 694
United Kingdom	-9 805	-11 996	-14 205	-16 057	-11 678	-9 647	-4 511	-11 439	-6 242	-4 574	1 250
Total	-2 822	-4 154	-3 641	-2 482	-2 307	-1 714	-892	-643	-349	241	1 407

Source: DG AGRI EU-FADN

Table A.5: Revenue and costs per AWU of field crop farms in the EU-15.

EU-15	Fieldcrops	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	∅ change
Structure	Economic size	19	19	23	25	26	28	28	27	28	30	29	4.2%
	UAA	26	26	29	32	33	36	36	34	35	38	37	3.6%
	Labour (per farm)	1.35	1.36	1.39	1.26	1.24	1.30	1.33	1.35	1.34	1.30	1.31	-0.3%
Revenue	Output	30 270	29 619	31 654	36 752	39 019	40 015	42 547	41 633	42 079	46 023	55 744	6.3%
	PI payments*	7 314	7 766	9 008	9 816	10 579	10 926	10 786	10 423	10 239	11 987	11 610	4.7%
	PII payments*	280	322	439	724	855	919	941	1 052	1 192	1 436	1 436	17.8%
	Investment subsidies*	121	165	106	115	219	162	144	118	119	195	143	1.6%
Costs	Intermediate consumption	16 754	16 732	18 698	21 552	23 255	24 053	24 602	24 829	25 477	27 162	29 044	5.7%
	Seeds	1 963	2 069	2 322	2 514	2 766	2 958	3 181	3 203	3 038	3 098	3 407	5.7%
	Fertilisers	2 617	2 510	2 623	3 005	3 435	3 594	3 494	3 550	3 680	4 052	4 456	5.5%
	Crop protection	2 256	2 332	2 593	2 906	3 089	3 322	3 241	3 255	3 232	3 472	3 694	5.1%
	Feed	1 823	1 742	1 906	2 313	2 233	2 022	2 154	1 975	1 954	2 014	2 418	2.9%
	Machinery & buildings	2 050	2 006	2 305	2 626	2 803	2 858	2 853	2 870	2 887	3 152	3 385	5.1%
	Energy	1 575	1 508	1 770	2 358	2 563	2 481	2 503	2 698	3 214	3 462	3 618	8.7%
	Contract work	1 567	1 612	1 799	2 075	2 249	2 412	2 366	2 421	2 443	2 712	2 873	6.2%
	Other	2 903	2 954	3 380	3 756	4 116	4 407	4 809	4 858	5 028	5 200	5 195	6.0%
	Depreciation	5 018	5 128	5 674	6 575	6 877	6 958	6 959	6 699	6 797	7 353	7 598	4.2%
	Farm taxes	439	452	504	555	622	637	648	694	645	678	637	3.8%
	Taxes on investment	159	155	163	159	152	124	190	116	110	115	157	-0.1%
	Wages	2 077	2 214	2 655	2 974	3 252	3 339	3 538	3 767	3 916	3 656	4 025	6.8%
	Rents	2 032	2 132	2 557	2 943	3 237	3 532	3 614	3 486	3 531	3 942	3 900	6.7%
	Costs own labour**	9 718	10 282	10 319	11 290	12 155	11 931	11 787	11 724	11 897	12 473	12 320	2.4%
	Costs own land**	2 344	2 557	2 924	3 368	4 323	3 800	4 231	3 990	3 621	3 718	3 842	5.1%
Costs capital**	2 292	1 937	2 057	2 221	1 935	1 860	1 555	1 669	1 179	1 455	1 783	-2.5%	
Indicators	FNVA	15 653	15 394	16 224	18 610	19 698	20 212	22 064	20 885	20 591	24 255	31 511	7.2%
	Economic profit	-2 848	-3 717	-4 342	-4 229	-5 136	-4 212	-2 707	-3 749	-3 544	-911	5 625	

* Includes national part of subsidies ** imputed costs

Source: DG AGRI EU-FADN

Table A.6: Revenue and costs per AWU of horticulture farms in the EU-15.

EU-15	Horticulture	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	∅ change
Structure	Economic size	21	21	21	21	23	24	25	26	26	29	27	2.6%
	UAA	1	1	1	1	1	1	1	1	1	2	2	2.0%
	Labour (per farm)	2.91	2.83	3.10	3.13	3.16	3.25	3.27	3.40	3.40	3.24	3.42	1.6%
Revenue	Output	43 442	45 680	44 353	46 476	51 348	52 552	54 827	53 743	53 135	61 661	61 580	3.6%
	PI payments*	430	431	347	400	401	493	444	407	506	659	684	4.8%
	PII payments*	70	71	59	71	94	86	102	65	61	67	81	1.6%
	Investment subsidies*	120	203	173	99	98	90	94	102	90	111	50	-8.4%
Costs	Intermediate consumption	20 016	21 464	20 952	21 635	24 904	24 913	26 230	24 956	25 726	30 158	31 161	4.5%
	Seeds	4 661	5 128	4 915	4 928	6 162	6 755	6 228	6 433	6 244	7 112	7 745	5.2%
	Fertilisers	1 674	1 750	1 728	1 669	1 554	1 603	1 855	1 688	1 563	1 600	1 723	0.3%
	Crop protection	1 051	1 106	1 325	1 352	1 354	1 351	1 387	1 390	1 272	1 307	1 369	2.7%
	Feed	28	11	14	42	32	27	42	68	74	78	49	6.0%
	Machinery & buildings	1 395	1 577	1 347	1 405	1 716	1 752	1 792	1 676	1 774	2 170	2 179	4.6%
	Energy	3 644	3 807	3 613	4 230	5 210	4 336	4 856	4 684	5 496	7 463	7 690	7.8%
	Contract work	821	949	1 076	1 100	1 009	1 022	1 226	1 027	1 018	1 214	1 339	5.0%
	Other	6 744	7 137	6 934	6 908	7 866	8 068	8 844	7 991	8 285	9 215	9 067	3.0%
	Depreciation	4 362	4 695	4 590	4 319	4 965	4 650	4 942	4 849	4 932	5 983	5 934	3.1%
	Farm taxes	240	266	289	242	358	348	362	371	344	399	427	5.9%
	Taxes on investment	56	93	77	68	58	70	74	40	56	56	61	0.9%
	Wages	7 322	7 643	8 233	8 334	9 573	9 893	10 005	10 238	10 406	11 246	11 029	4.2%
	Rents	413	440	432	444	545	582	536	600	666	723	748	6.1%
	Costs own labour**	7 500	8 190	6 809	7 158	7 617	6 764	6 865	6 938	6 975	7 133	7 102	-0.5%
	Costs own land**	1 450	1 584	1 781	1 491	1 201	1 115	1 082	1 033	1 046	1 005	1 358	-0.7%
Costs capital**	1 325	1 200	1 106	1 057	572	751	883	1 014	745	987	1 258	-0.5%	
Indicators	FNVA	19 323	19 757	18 928	20 751	21 617	23 221	23 839	24 038	22 700	25 847	24 825	2.5%
	Economic profit	1 375	809	662	2 297	2 149	4 136	4 487	4 278	2 895	4 809	3 319	9.2%

* Includes national part of subsidies ** imputed costs

Source: DG AGRI EU-FADN

Table A.7: Revenue and costs per AWU of wine farms in the EU-15.

EU-15	Wine	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	Ø change
Structure	Economic size	15	14	21	22	23	24	23	23	23	25	25	5.3%
	UAA	6	6	7	7	7	7	7	7	8	8	8	2.4%
	Labour (per farm)	1.58	1.59	1.62	1.59	1.60	1.70	1.71	1.67	1.65	1.67	1.72	0.9%
Revenue	Output	33 992	37 534	40 751	39 092	41 378	40 768	39 822	40 520	38 038	41 674	46 984	3.3%
	PI payments*	802	791	848	769	884	988	912	969	914	1 142	949	1.7%
	PII payments*	261	334	303	408	389	343	310	366	404	408	304	1.5%
	Investment subsidies*	210	234	314	209	356	456	485	323	396	372	290	3.3%
Costs	Intermediate consumption	10 220	10 657	11 702	12 864	14 046	13 792	13 593	13 289	12 814	14 329	14 563	3.6%
	Seeds	170	187	225	218	255	286	259	317	189	213	212	2.2%
	Fertilisers	667	667	704	716	771	738	749	798	747	790	810	2.0%
	Crop protection	1 532	1 494	1 640	1 925	1 909	1 824	1 707	1 652	1 607	1 660	1 848	1.9%
	Feed	70	46	62	72	60	48	61	70	69	69	61	-1.4%
	Machinery & buildings	1 559	1 568	1 680	1 822	1 974	1 969	1 825	1 817	1 809	1 957	2 016	2.6%
	Energy	720	689	735	891	1 007	839	830	935	1 061	1 210	1 183	5.1%
	Contract work	891	952	1 057	1 252	1 319	1 226	1 094	1 159	1 054	1 140	1 240	3.4%
	Other	4 611	5 053	5 600	5 967	6 750	6 862	7 069	6 541	6 278	7 291	7 193	4.5%
	Depreciation	4 432	4 553	4 573	4 889	5 500	5 354	5 406	5 375	5 293	5 750	6 587	4.0%
	Farm taxes	534	579	599	611	683	672	648	641	601	649	663	2.2%
	Taxes on investment	97	108	96	82	98	83	139	92	85	101	108	1.1%
	Wages	3 841	4 031	4 596	5 004	5 177	5 359	5 332	5 540	5 361	5 711	6 162	4.8%
	Rents	1 836	2 093	2 322	2 430	2 596	2 312	2 056	2 151	2 052	2 261	2 202	1.8%
	Costs own labour**	9 758	10 442	9 747	10 167	11 224	10 172	9 928	10 287	10 367	10 681	10 530	0.8%
	Costs own land**	2 105	2 377	2 454	2 270	2 237	1 923	2 042	1 951	2 015	2 012	1 850	-1.3%
Costs capital**	3 150	2 635	2 793	2 678	2 473	2 214	1 431	1 545	1 132	1 581	2 218	-3.5%	
Indicators	FNVA	19 869	22 870	25 027	21 905	22 423	22 281	21 396	22 549	20 648	22 495	26 423	2.9%
	Economic profit	-709	1 418	3 332	-515	-1 027	674	955	1 306	33	520	3 645	

* Includes national part of subsidies ** imputed costs

Source: DG AGRI EU-FADN

Table A.8: Revenue and costs per AWU of other permanent crops farms in the EU-15.

EU-15	Other permanent crops	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	Ø change
Structure	Economic size	9	9	10	11	12	13	13	14	14	15	15	5.1%
	UAA	6	5	5	6	6	7	6	6	6	6	7	1.6%
	Labour (per farm)	1.36	1.35	1.33	1.14	1.15	1.21	1.30	1.32	1.32	1.28	1.32	-0.3%
Revenue	Output	15 915	16 205	14 249	16 888	19 075	21 593	21 798	21 017	21 221	21 189	23 364	3.9%
	PI payments*	2 139	2 050	2 050	2 408	2 523	2 950	2 282	2 144	2 306	2 239	1 756	-2.0%
	PII payments*	103	134	153	249	251	270	226	184	228	236	221	7.9%
	Investment subsidies*	113	155	91	60	90	75	72	61	78	140	54	-7.1%
Costs	Intermediate consumption	4 740	4 774	4 274	4 998	5 874	6 755	7 008	6 752	6 886	7 004	7 337	4.5%
	Seeds	355	375	306	363	487	679	880	765	644	821	813	8.7%
	Fertilisers	615	610	533	630	728	764	779	845	871	856	873	3.6%
	Crop protection	693	721	686	769	830	942	938	944	954	961	952	3.2%
	Feed	140	123	150	139	182	130	126	103	122	137	153	0.9%
	Machinery & buildings	524	533	453	524	622	698	721	714	711	689	753	3.7%
	Energy	499	465	507	600	656	719	742	765	904	953	1 042	7.7%
	Contract work	337	382	337	389	420	461	479	470	475	434	484	3.7%
	Other	1 579	1 564	1 302	1 584	1 949	2 361	2 342	2 146	2 206	2 153	2 265	3.7%
	Depreciation	2 020	2 127	1 908	2 203	2 371	2 570	2 466	2 274	2 342	2 411	2 530	2.3%
	Farm taxes	166	176	175	197	220	231	236	253	231	225	236	3.6%
	Taxes on investment	34	36	39	43	50	37	103	121	61	52	80	8.9%
	Wages	2 561	2 764	2 422	2 617	2 817	3 536	3 344	3 256	3 294	3 276	3 484	3.1%
	Rents	166	189	241	233	268	341	338	319	339	326	329	7.1%
	Costs own labour**	6 523	6 804	7 046	7 440	8 380	8 062	8 000	8 372	8 684	9 057	9 247	3.6%
	Costs own land**	1 234	1 132	1 315	1 247	1 404	1 638	1 330	1 392	1 438	1 286	1 274	0.9%
Costs capital**	1 327	957	1 028	855	761	681	523	540	315	449	710	-6.1%	
Indicators	FNVA	11 232	11 311	10 095	12 146	13 384	15 256	14 596	14 066	14 296	14 023	15 239	3.1%
	Economic profit	-501	-416	-1 905	-227	-206	1 036	1 030	127	243	-283	170	

* Includes national part of subsidies ** imputed costs

Source: DG AGRI EU-FADN

Table A.9: Revenue and costs per AWU of milk farms in the EU-15.

EU-15	Milk	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	∅ change
Structure	Economic size	25	26	31	31	33	35	36	36	36	37	38	4.1%
	UAA	23	23	25	25	26	27	27	29	29	30	30	3.1%
	Labour (per farm)	1.75	1.72	1.76	1.74	1.73	1.75	1.77	1.78	1.80	1.82	1.82	0.4%
Revenue	Output	52 910	54 059	57 799	60 975	65 298	65 858	67 721	70 152	72 301	76 182	89 632	5.4%
	PI payments*	4 405	4 185	4 321	4 235	4 750	5 511	5 575	7 757	9 632	11 708	11 390	10.0%
	PII payments*	888	1 062	1 159	1 952	2 311	2 576	2 570	2 843	3 131	3 116	3 020	13.0%
	Investment subsidies*	350	350	375	405	538	389	406	346	481	577	552	4.7%
Costs	Intermediate consumption	29 097	29 427	31 683	33 721	36 851	38 129	39 943	41 788	43 085	47 192	52 526	6.1%
	Seeds	727	734	810	789	872	945	1 014	1 025	1 046	1 158	1 203	5.2%
	Fertilisers	2 069	1 892	2 003	2 017	2 160	2 190	2 132	2 198	2 284	2 533	2 773	3.0%
	Crop protection	501	514	570	578	591	673	664	725	743	825	874	5.7%
	Feed	11 745	11 612	12 343	13 264	14 890	15 177	16 825	16 826	16 697	18 554	21 672	6.3%
	Machinery & buildings	3 515	3 588	3 769	3 909	4 119	4 304	4 162	4 548	4 758	5 158	5 563	4.7%
	Energy	2 016	2 020	2 210	2 599	2 858	2 811	2 938	3 267	3 799	4 179	4 443	8.2%
	Contract work	2 293	2 473	2 756	2 968	3 149	3 405	3 361	3 706	3 827	4 192	4 595	7.2%
	Other	6 232	6 594	7 223	7 596	8 212	8 625	8 846	9 490	9 931	10 593	11 404	6.2%
	Depreciation	7 352	7 905	8 553	8 584	8 806	9 302	9 568	10 289	10 573	11 590	11 888	4.9%
	Farm taxes	429	539	560	549	642	609	623	661	613	604	645	4.2%
	Taxes on investment	436	471	517	470	464	517	580	561	584	654	845	6.8%
	Wages	1 595	1 565	1 684	1 695	1 986	2 145	2 306	2 333	2 512	2 821	2 976	6.4%
	Rents	2 285	2 425	2 761	2 720	2 815	3 158	3 174	3 216	3 129	3 431	3 510	4.4%
	Costs own labour**	15 075	15 702	16 399	16 823	17 547	17 074	16 892	17 333	17 168	17 518	17 764	1.7%
	Costs own land**	4 501	6 125	5 051	4 923	4 263	4 282	4 162	4 316	4 111	3 968	4 094	-0.9%
	Costs capital**	4 951	4 489	4 515	4 375	3 422	3 921	3 439	3 584	2 545	3 177	3 790	-2.6%
Indicators	FNVA	21 325	21 434	22 484	24 307	26 060	25 905	25 733	28 015	30 792	31 619	38 984	6.2%
	Economic profit	-7 168	-8 994	-8 068	-6 291	-3 899	-4 803	-4 414	-2 983	1 225	627	6 558	

* Includes national part of subsidies ** imputed costs

Source: DG AGRI EU-FADN

Table A.10: Revenue and costs per AWU of grazing livestock farms in the EU-15.

EU-15	Other grazing livestock	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	∅ change
Structure	Economic size	15	16	16	17	17	19	19	20	20	22	22	3.8%
	UAA	41	41	40	41	43	42	42	43	43	43	44	0.6%
	Labour (per farm)	1.45	1.42	1.40	1.36	1.37	1.40	1.39	1.39	1.37	1.39	1.40	-0.4%
Revenue	Output	27 546	27 151	26 494	28 148	29 515	31 742	33 335	35 135	35 709	40 163	41 766	4.3%
	PI payments*	8 056	8 409	8 170	7 800	8 594	10 579	10 749	10 958	11 183	11 471	11 309	3.4%
	PII payments*	756	1 135	1 096	2 365	2 953	3 341	3 364	3 360	3 756	3 919	3 947	18.0%
	Investment subsidies*	390	411	362	332	320	394	401	351	428	502	482	2.1%
Costs	Intermediate consumption	17 754	18 080	17 788	18 812	19 995	21 355	22 706	24 251	24 623	27 080	28 499	4.8%
	Seeds	455	460	427	434	465	485	515	531	543	620	643	3.5%
	Fertilisers	1 561	1 437	1 353	1 395	1 477	1 490	1 496	1 524	1 581	1 640	1 686	0.8%
	Crop protection	308	325	288	300	311	348	337	374	366	394	411	2.9%
	Feed	6 987	7 018	7 205	7 492	7 979	8 455	9 669	10 758	10 245	11 705	12 461	6.0%
	Machinery & buildings	2 192	2 185	2 107	2 256	2 379	2 578	2 566	2 635	2 787	2 964	3 000	3.2%
	Energy	1 168	1 149	1 142	1 393	1 488	1 436	1 476	1 680	2 014	2 270	2 354	7.3%
	Contract work	1 320	1 399	1 366	1 489	1 577	1 718	1 668	1 742	1 796	1 822	2 023	4.4%
	Other	3 763	4 109	3 900	4 053	4 318	4 846	4 981	5 008	5 292	5 666	5 922	4.6%
	Depreciation	4 208	4 492	4 276	4 802	5 017	5 281	5 352	5 832	6 057	6 913	7 069	5.3%
	Farm taxes	264	292	249	263	302	317	342	357	354	394	383	3.8%
	Taxes on investment	150	176	174	178	135	162	280	254	287	282	344	8.7%
	Wages	899	918	846	941	960	1 059	1 252	1 293	1 365	1 643	1 616	6.0%
	Rents	1 392	1 477	1 496	1 613	1 716	1 876	1 898	1 883	1 893	1 999	1 994	3.7%
	Costs own labour**	12 119	12 595	12 303	13 216	13 857	13 354	13 679	14 346	14 665	15 355	15 595	2.6%
	Costs own land**	2 307	2 400	2 530	2 699	2 562	2 614	2 630	2 800	2 811	2 549	2 598	1.2%
	Costs capital**	3 284	2 782	2 662	2 504	2 135	2 199	1 774	2 003	1 373	2 035	2 535	-2.6%
Indicators	FNVA	14 132	13 832	13 446	14 437	15 749	18 709	19 047	19 013	19 614	21 166	21 071	4.1%
	Economic profit	-5 627	-6 104	-6 203	-6 383	-5 295	-2 161	-2 065	-3 214	-2 352	-2 194	-3 129	-5.7%

* Includes national part of subsidies ** imputed costs

Source: DG AGRI EU-FADN

Table A.11: Revenue and costs per AWU of granivore farms in the EU-15.

EU-15	Granivores	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	∅ change
Structure	Economic size	40	43	49	48	49	58	61	75	73	75	75	6.5%
	UAA	10	11	11	12	12	14	13	13	13	15	14	3.6%
	Labour (per farm)	1.80	1.77	1.81	1.75	1.87	1.88	1.91	2.10	2.01	2.07	2.17	1.9%
Revenue	Output	137 772	114 623	120 108	144 246	158 397	138 302	142 608	151 496	159 472	165 148	161 342	1.6%
	PI payments*	3 888	3 964	5 095	4 331	4 272	4 538	5 155	4 562	4 467	4 909	4 370	1.2%
	PII payments*	470	470	370	644	672	633	667	669	788	684	634	3.0%
	Investment subsidies*	254	324	287	231	232	310	343	210	306	344	208	-2.0%
Costs	Intermediate consumption	93 904	93 794	88 824	94 205	105 117	97 959	97 721	103 209	103 347	106 484	114 911	2.0%
	Seeds	684	686	700	729	723	871	824	854	862	1 056	1 001	3.9%
	Fertilisers	746	678	622	706	735	906	836	913	870	1 037	1 202	4.9%
	Crop protection	661	720	748	843	765	1 003	916	941	919	1 130	1 105	5.3%
	Feed	70 641	70 299	64 598	68 192	75 718	69 151	68 711	72 895	70 805	71 121	80 206	1.3%
	Machinery & buildings	4 524	3 919	3 749	4 226	4 918	4 539	4 060	4 377	4 682	5 130	5 035	1.1%
	Energy	3 862	3 925	3 866	4 605	4 788	4 869	5 037	5 639	6 525	6 787	6 657	5.6%
	Contract work	2 068	2 140	2 420	2 640	3 034	3 076	2 957	2 854	2 833	3 137	3 181	4.4%
	Other	10 718	11 427	12 122	12 264	14 435	13 544	14 380	14 735	15 851	17 085	16 524	4.4%
	Depreciation	10 868	11 640	11 101	11 498	11 560	11 301	11 415	11 746	12 136	12 652	15 859	3.9%
	Farm taxes	504	573	575	608	776	734	676	874	944	776	729	3.7%
	Taxes on investment	1 118	857	558	548	440	446	459	280	397	447	466	-8.4%
	Wages	4 122	4 463	4 428	4 659	5 841	5 628	5 906	6 788	6 773	7 504	7 994	6.8%
	Rents	1 117	1 221	1 440	1 591	1 682	2 182	2 268	2 330	2 488	3 083	2 903	10.0%
	Costs own labour**	13 003	13 197	13 227	13 631	14 081	13 234	12 985	12 553	13 056	12 614	12 680	-0.3%
	Costs own land**	2 217	2 736	2 410	3 194	2 695	2 491	2 614	2 562	3 591	3 402	3 108	3.4%
Costs capital**	6 844	6 647	6 064	5 958	4 126	4 511	4 311	4 637	3 332	3 971	5 041	-3.0%	
Indicators	FNVA	36 853	13 049	25 072	42 910	45 888	33 479	38 618	40 899	48 300	50 830	34 848	-0.6%
	Economic profit	8 687	-15 746	-2 769	13 560	17 255	5 297	10 418	11 960	18 970	20 154	2 864	-10.5%

* Includes national part of subsidies ** imputed costs

Source: DG AGRI EU-FADN

Table A.12: Revenue and costs per AWU of mixed farms in the EU-15.

EU-15	Mixed	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	∅ change
Structure	Economic size	23	23	28	28	30	34	34	33	32	33	33	3.7%
	UAA	27	28	32	32	34	36	36	36	36	38	38	3.2%
	Labour (per farm)	1.75	1.72	1.76	1.71	1.70	1.75	1.80	1.73	1.73	1.72	1.72	-0.2%
Revenue	Output	51 014	47 030	52 155	59 425	61 875	61 845	61 947	63 688	62 658	66 890	74 594	3.9%
	PI payments*	7 167	7 191	8 179	8 301	9 256	10 834	11 179	11 220	11 085	12 079	11 932	5.2%
	PII payments*	606	672	780	1 180	1 457	1 504	1 576	1 672	1 756	1 841	1 741	11.1%
	Investment subsidies*	240	245	336	250	355	374	367	269	335	408	341	3.6%
Costs	Intermediate consumption	32 259	31 646	33 604	36 935	40 334	42 457	42 502	42 322	41 977	44 304	49 385	4.4%
	Seeds	1 378	1 395	1 524	1 542	1 668	1 842	1 882	1 792	1 650	1 949	2 094	4.3%
	Fertilisers	2 179	2 007	2 076	2 209	2 495	2 569	2 518	2 618	2 660	2 906	3 242	4.1%
	Crop protection	1 502	1 533	1 679	1 768	1 818	2 077	2 018	2 112	2 032	2 197	2 362	4.6%
	Feed	14 552	14 124	14 268	15 783	17 271	18 013	18 419	17 803	16 937	17 887	21 285	3.9%
	Machinery & buildings	3 085	2 917	3 197	3 473	3 785	3 874	3 729	3 783	3 801	4 055	4 264	3.3%
	Energy	2 203	2 125	2 399	2 895	3 126	3 105	3 161	3 479	3 954	4 113	4 381	7.1%
	Contract work	2 048	2 108	2 377	2 551	2 820	3 142	2 977	3 093	3 076	3 256	3 497	5.5%
	Other	5 311	5 438	6 085	6 714	7 351	7 835	7 797	7 642	7 865	7 940	8 262	4.5%
	Depreciation	6 856	7 092	7 638	8 123	8 693	8 982	9 102	9 118	8 948	9 849	9 984	3.8%
	Farm taxes	469	499	514	539	575	629	647	619	609	623	617	2.8%
	Taxes on investment	446	379	382	365	404	330	278	308	282	280	351	-2.4%
	Wages	2 696	2 516	2 979	2 985	2 989	3 591	3 613	3 645	3 708	3 819	3 940	3.9%
	Rents	2 225	2 288	2 673	2 826	3 055	3 509	3 526	3 475	3 450	3 700	3 707	5.2%
	Costs own labour**	11 574	12 223	12 073	12 716	13 707	12 950	12 698	12 928	13 060	13 503	13 791	1.8%
	Costs own land**	2 307	2 428	2 424	2 529	2 497	3 064	2 524	2 390	2 456	2 726	2 690	1.6%
Costs capital**	4 152	3 811	3 904	3 865	3 313	3 527	3 040	2 811	1 943	2 400	2 879	-3.6%	
Indicators	FNVA	19 203	15 656	19 359	23 308	22 985	22 114	22 451	24 521	23 966	26 033	28 280	3.9%
	Economic profit	-3 957	-7 745	-4 739	-1 729	-2 626	-4 483	-2 861	-765	-598	14	1 263	

* Includes national part of subsidies ** imputed costs

Source: DG AGRI EU-FADN

Table A.13: Revenue and costs per AWU of field crop farms in the EU-10.

EU-10	Fieldcrops	2004	2005	2006	2007	Ø change
Structure	Economic size	7	7	7	7	2.6%
	UAA	21	21	21	22	0.6%
	Labour (per farm)	1.98	1.99	1.96	1.90	-1.4%
Revenue	Output	15 982	15 724	16 111	21 282	10.0%
	PI payments*	2 547	2 737	3 208	3 534	11.5%
	PII payments*	286	561	810	912	47.3%
	Investment subsidies*	174	193	219	192	3.4%
Costs	Intermediate consumption	9 889	10 427	10 632	12 482	8.1%
	<i>Seeds</i>	1 137	1 148	1 213	1 486	9.3%
	<i>Fertilisers</i>	1 611	1 735	1 864	2 246	11.7%
	<i>Crop protection</i>	1 182	1 215	1 251	1 443	6.9%
	<i>Feed</i>	1 368	1 341	1 411	1 833	10.2%
	<i>Machinery & buildings</i>	823	925	967	1 213	13.8%
	<i>Energy</i>	1 597	1 896	1 974	2 146	10.4%
	<i>Contract work</i>	716	799	721	814	4.4%
	<i>Other</i>	1 455	1 368	1 229	1 301	-3.7%
	Depreciation	2 313	2 611	2 729	3 059	9.8%
	Farm taxes	252	256	237	269	2.2%
	Taxes on investment	74	112	116	130	
	Wages	1 542	1 699	1 731	1 965	8.4%
	Rents	505	521	529	636	8.0%
	Costs own labour**	2 153	2 609	2 774	3 364	16.1%
	Costs own land**	368	392	493	537	13.4%
Costs capital**	866	966	1 140	854	-0.5%	
Indicators	FNVA	6 360	5 728	6 531	9 917	16.0%
	Economic profit	1 025	-379	-32	2 622	36.8%

* Includes national part of subsidies ** imputed costs

Source: DG AGRI EU-FADN

Table A.14: Revenue and costs per AWU of horticulture farms in the EU-10.

EU-10	Horticulture	2004	2005	2006	2007	Ø change
Structure	Economic size	6	6	7	7	10.3%
	UAA	1	1	2	2	11.8%
	Labour (per farm)	3.55	3.26	3.16	2.94	-6.1%
Revenue	Output	15 225	17 984	19 499	21 215	11.7%
	PI payments*	136	161	236	259	24.2%
	PII payments*	13	57	86	104	97.4%
	Investment subsidies*	40	38	71	62	15.2%
Costs	Intermediate consumption	8 528	9 755	10 427	11 153	9.4%
	<i>Seeds</i>	1 749	2 140	2 153	2 125	6.7%
	<i>Fertilisers</i>	768	819	1 016	1 049	11.0%
	<i>Crop protection</i>	348	405	515	524	14.7%
	<i>Feed</i>	72	28	51	75	1.1%
	<i>Machinery & buildings</i>	483	578	799	788	17.7%
	<i>Energy</i>	2 281	3 012	3 299	3 612	16.6%
	<i>Contract work</i>	294	402	400	343	5.3%
	<i>Other</i>	2 534	2 370	2 195	2 638	1.4%
	Depreciation	1 887	2 198	2 085	2 345	7.5%
	Farm taxes	59	84	92	106	21.7%
	Taxes on investment	181	137	113	185	
	Wages	1 784	1 733	1 917	2 019	4.2%
	Rents	73	106	132	108	14.0%
	Costs own labour**	1 436	1 817	2 070	2 550	21.1%
	Costs own land**	42	81	107	215	73.1%
Costs capital**	993	1 017	1 227	977	-0.5%	
Indicators	FNVA	4 900	6 165	7 217	7 974	17.6%
	Economic profit	432	1 313	1 722	1 980	

* Includes national part of subsidies ** imputed costs

Source: DG AGRI EU-FADN

Table A.15: Revenue and costs per AWU of wine farms in the EU-10.

EU-10	Wine	2004	2005	2006	2007	Ø change
Structure	Economic size	5	6	7	8	15.7%
	UAA	4	4	5	5	6.6%
	Labour (per farm)	1.70	2.00	2.26	2.22	9.3%
Revenue	Output	15 734	13 537	13 895	17 841	4.3%
	PI payments*	988	764	842	979	-0.3%
	PII payments*	192	521	537	1 307	89.5%
	Investment subsidies*	687	195	103	305	-23.7%
Costs	Intermediate consumption	6 200	5 816	6 533	7 549	6.8%
	Seeds	119	136	136	294	35.1%
	Fertilisers	309	182	252	325	1.6%
	Crop protection	807	893	906	1 150	12.5%
	Feed	6	102	360	395	300.1%
	Machinery & buildings	1 065	824	746	1 137	2.2%
	Energy	735	797	862	930	8.2%
	Contract work	313	514	576	650	27.6%
	Other	2 846	2 370	2 695	2 669	-2.1%
	Depreciation	3 599	3 161	3 013	3 114	-4.7%
	Farm taxes	188	182	138	197	1.6%
	Taxes on investment	36	41	24	105	
	Wages	1 713	1 788	2 428	2 955	19.9%
	Rents	208	174	324	426	26.9%
	Costs own labour**	4 901	4 624	4 124	4 329	-4.1%
	Costs own land**	509	292	296	328	-13.6%
Costs capital**	1 246	1 399	1 237	243	-42.0%	
Indicators	FNVA	6 927	5 664	5 590	9 268	10.2%
	Economic profit	-999	-2 459	-2 740	1 188	-205.9%

* Includes national part of subsidies ** imputed costs

Source: DG AGRI EU-FADN

Table A.16: Revenue and costs per AWU other permanent crop farms in the EU-10.

EU-10	Other permanent crops	2004	2005	2006	2007	Ø change
Structure	Economic size	4	5	5	5	5.1%
	UAA	4	4	4	5	7.2%
	Labour (per farm)	1.83	1.64	1.91	1.78	-0.9%
Revenue	Output	8 639	10 105	11 019	12 975	14.5%
	PI payments*	590	575	530	746	8.1%
	PII payments*	55	259	304	458	102.4%
	Investment subsidies*	96	75	132	92	-1.6%
Costs	Intermediate consumption	3 716	3 977	4 172	4 715	8.3%
	Seeds	268	243	244	298	3.5%
	Fertilisers	420	457	441	525	7.8%
	Crop protection	845	847	873	992	5.5%
	Feed	41	56	33	128	45.9%
	Machinery & buildings	490	538	658	671	11.1%
	Energy	692	776	807	886	8.6%
	Contract work	199	232	233	225	4.2%
	Other	762	829	883	990	9.1%
	Depreciation	2 542	2 959	2 873	3 087	6.7%
	Farm taxes	68	83	77	90	9.9%
	Taxes on investment	156	169	150	219	
	Wages	1 046	1 035	1 310	1 587	14.9%
	Rents	44	42	49	72	18.4%
	Costs own labour**	2 485	2 770	2 514	3 001	6.5%
	Costs own land**	206	234	315	309	14.4%
Costs capital**	1 101	1 245	1 433	985	-3.6%	
Indicators	FNVA	2 958	3 920	4 731	6 287	28.6%
	Economic profit	-1 984	-1 501	-909	205	

* Includes national part of subsidies ** imputed costs

Source: DG AGRI EU-FADN

Table A.17: Revenue and costs per AWU of milk farms in the EU-10.

EU-10	Milk	2004	2005	2006	2007	Ø change
Structure	Economic size	6	6	7	7	5.6%
	UAA	14	14	15	15	3.6%
	Labour (per farm)	2.15	2.09	2.13	2.06	-1.4%
Revenue	Output	13 148	14 778	15 233	18 931	12.9%
	PI payments*	1 635	1 544	2 052	2 494	15.1%
	PII payments*	554	862	1 363	1 103	25.8%
	Investment subsidies*	332	244	348	378	4.5%
Costs	Intermediate consumption	8 156	8 501	9 084	10 970	10.4%
	Seeds	276	281	330	393	12.5%
	Fertilisers	509	549	666	774	15.0%
	Crop protection	150	191	207	233	15.8%
	Feed	3 800	3 729	3 874	5 179	10.9%
	Machinery & buildings	728	871	939	1 076	13.9%
	Energy	1 064	1 227	1 324	1 416	10.0%
	Contract work	379	380	363	430	4.3%
	Other	1 250	1 273	1 381	1 470	5.6%
	Depreciation	1 917	2 093	2 369	2 738	12.6%
	Farm taxes	89	96	92	99	3.5%
	Taxes on investment	111	173	286	283	
	Wages	967	973	1 037	1 160	6.2%
	Rents	148	162	186	219	13.8%
	Costs own labour**	2 521	3 035	3 158	3 823	14.9%
	Costs own land**	171	214	359	338	25.4%
Costs capital**	854	1 016	1 336	1 135	9.9%	
Indicators	FNVA	5 175	6 495	7 105	8 720	19.0%
	Economic profit	734	1 167	1 091	2 140	42.9%

* Includes national part of subsidies ** imputed costs

Source: DG AGRI EU-FADN

Table A.18: Revenue and costs per AWU of grazing livestock farms in the EU-10.

EU-10	Other grazing livestock	2004	2005	2006	2007	Ø change
Structure	Economic size	6	6	6	5	-6.4%
	UAA	14	15	16	15	3.7%
	Labour (per farm)	1.88	1.94	1.78	1.99	1.9%
Revenue	Output	11 009	12 347	11 074	15 929	13.1%
	PI payments*	1 700	1 667	2 239	2 437	12.7%
	PII payments*	671	1 267	2 241	1 911	41.8%
	Investment subsidies*	202	103	212	273	10.6%
Costs	Intermediate consumption	6 761	7 504	7 580	9 770	13.1%
	Seeds	269	279	260	280	1.3%
	Fertilisers	520	572	511	562	2.6%
	Crop protection	129	180	151	173	10.3%
	Feed	2 892	2 908	3 053	4 551	16.3%
	Machinery & buildings	667	829	941	1 118	18.8%
	Energy	887	1 126	1 133	1 369	15.6%
	Contract work	374	402	394	481	8.7%
	Other	1 023	1 208	1 137	1 238	6.6%
	Depreciation	1 863	2 151	2 435	2 575	11.4%
	Farm taxes	105	103	92	127	6.5%
	Taxes on investment	128	207	295	310	
	Wages	460	696	752	1 152	35.8%
	Rents	128	166	176	190	14.1%
	Costs own labour**	2 694	3 151	3 614	3 907	13.2%
	Costs own land**	194	269	258	308	16.8%
Costs capital**	974	1 155	1 308	1 066	3.0%	
Indicators	FNVA	4 650	5 523	5 448	7 805	18.8%
	Economic profit	275	-19	-744	1 144	60.9%

* Includes national part of subsidies ** imputed costs

Source: DG AGRI EU-FADN

Table A.19: Revenue and costs per AWU of granivore farms in the EU-10.

EU-10	Granivores	2004	2005	2006	2007	Ø change
Structure	Economic size	10	11	11	11	3.1%
	UAA	7	7	7	8	3.0%
	Labour (per farm)	2.08	2.01	2.05	1.95	-2.1%
Revenue	Output	39 372	36 707	36 781	42 862	2.9%
	PI payments*	1 069	1 055	1 430	1 582	13.9%
	PII payments*	97	290	654	434	64.9%
	Investment subsidies*	78	75	123	181	32.3%
Costs	Intermediate consumption	29 725	26 104	27 114	32 285	2.8%
	Seeds	245	244	250	339	11.4%
	Fertilisers	534	596	646	708	9.9%
	Crop protection	203	259	272	311	15.2%
	Feed	23 546	19 313	19 623	24 705	1.6%
	Machinery & buildings	766	976	984	976	8.4%
	Energy	1 659	1 888	2 072	2 096	8.1%
	Contract work	300	327	377	354	5.7%
	Other	2 471	2 501	2 891	2 796	4.2%
	Depreciation	2 388	2 605	2 745	3 010	8.0%
	Farm taxes	146	157	159	165	4.3%
	Taxes on investment	83	251	320	252	
	Wages	1 424	1 421	1 761	1 612	4.2%
	Rents	119	118	140	187	16.2%
	Costs own labour**	1 967	2 589	2 837	3 446	20.5%
	Costs own land**	177	203	260	338	23.9%
Costs capital**	1 650	1 621	2 030	1 525	-2.6%	
Indicators	FNVA	8 280	9 185	8 846	9 417	4.4%
	Economic profit	2 938	3 056	1 620	2 238	-8.7%

* Includes national part of subsidies ** imputed costs

Source: DG AGRI EU-FADN

Table A.20: Revenue and costs per AWU of mixed farms in the EU-10.

EU-10	Mixed	2004	2005	2006	2007	Ø change
Structure	Economic size	5	6	6	6	4.0%
	UAA	12	12	13	13	3.6%
	Labour (per farm)	1.84	1.83	1.80	1.80	-0.7%
Revenue	Output	10 742	11 473	12 364	15 212	12.3%
	PI payments*	1 398	1 474	1 921	2 262	17.4%
	PII payments*	250	504	897	911	54.0%
	Investment subsidies*	64	81	104	175	40.1%
Costs	Intermediate consumption	6 955	7 755	8 611	10 406	14.4%
	Seeds	421	430	479	620	13.8%
	Fertilisers	641	722	800	933	13.3%
	Crop protection	353	422	442	497	12.1%
	Feed	2 817	3 096	3 524	4 411	16.1%
	Machinery & buildings	551	668	729	849	15.5%
	Energy	908	1 133	1 254	1 337	13.8%
	Contract work	362	363	383	407	4.0%
	Other	902	920	1 000	1 352	14.4%
	Depreciation	1 547	1 786	1 925	2 098	10.7%
	Farm taxes	134	154	138	153	4.7%
	Taxes on investment	42	73	143	143	
	Wages	940	1 144	1 168	1 459	15.8%
	Rents	145	174	187	243	19.0%
	Costs own labour**	2 338	2 790	3 107	3 640	15.9%
	Costs own land**	180	212	262	318	20.9%
Costs capital**	762	883	1 129	895	5.5%	
Indicators	FNVA	3 754	3 756	4 507	5 729	15.1%
	Economic profit	-589	-1 439	-1 386	-796	10.6%

* Includes national part of subsidies ** imputed costs

Source: DG AGRI EU-FADN

Table A.21: Farm structure, revenue and share of input costs in farm output in the EU-15 by size class in 2007

EU-15		2007					
		Economic size class					
		I	II	III	IV	V	VI
Structure	Economic size (per farm)	3	6	12	27	65	223
	UAA (per farm)	7	8	16	36	68	136
	Labour (per farm)	0.93	1.00	1.13	1.43	1.91	3.89
Revenue	Output (per farm)	7 154	14 409	24 334	55 028	133 822	443 572
	share of output						
	PI payments*	26.0%	17.1%	18.1%	17.5%	15.0%	10.3%
	PII payments*	10.5%	2.9%	6.1%	5.5%	3.1%	1.0%
Costs	Intermediate consumption	46.5%	34.4%	45.8%	54.1%	56.8%	56.6%
	<i>Seeds</i>	3.0%	2.9%	3.4%	3.4%	3.4%	4.4%
	<i>Fertilisers</i>	5.6%	4.2%	4.9%	4.8%	4.7%	3.9%
	<i>Crop protection</i>	2.8%	2.3%	2.7%	2.9%	3.3%	3.6%
	<i>Feed</i>	9.5%	6.9%	10.2%	13.5%	17.3%	18.2%
	<i>Machinery & buildings</i>	4.9%	3.4%	5.3%	6.3%	5.7%	4.9%
	<i>Energy</i>	7.0%	5.7%	6.2%	6.2%	5.5%	6.1%
	<i>Contract work</i>	6.0%	3.2%	3.9%	4.4%	4.6%	3.7%
	<i>Other</i>	7.8%	5.8%	9.2%	12.6%	12.3%	11.9%
	Depreciation	16.2%	14.1%	17.1%	15.7%	14.2%	10.7%
	Farm taxes	0.7%	1.1%	1.0%	1.1%	0.9%	0.8%
	Taxes on investment	0.8%	0.3%	0.6%	0.7%	0.6%	0.3%
	Wages	4.6%	6.3%	5.7%	5.2%	5.7%	10.4%
	Rents	3.3%	1.5%	2.3%	3.6%	4.7%	4.8%
	Costs own labour**	125.2%	77.1%	56.9%	36.3%	20.6%	8.5%
	Costs own land**	12.0%	7.4%	8.3%	6.7%	4.8%	3.5%
	Costs capital**	4.0%	4.0%	5.2%	4.7%	3.9%	3.1%
Total costs	213.5%	146.3%	142.8%	128.0%	112.3%	98.8%	

* Includes national part of subsidies ** imputed costs

Source: DG AGRI EU-FADN

Table A.22: Farm structure, revenue and share of input costs in farm output in the EU-10 by size class in 2007

EU-10		2007					
		Economic size class					
		I	II	III	IV	V	VI
Structure	Economic size (per farm)	3	6	12	25	59	361
	UAA (per farm)	9	13	23	44	117	797
	Labour (per farm)	1.37	1.56	1.83	2.24	3.56	25.25
Revenue	Output (per farm)	11 075	16 239	30 577	62 415	155 168	1 061 166
	PI payments (per farm)*	1 327	2 068	3 702	7 383	19 751	148 734
	PII payments (per farm)*	1 075	1 048	1 266	2 099	6 489	40 029
Costs/Output	Intermediate consumption	59.2%	60.1%	58.4%	57.2%	60.0%	70.2%
	<i>Seeds</i>	3.7%	4.7%	3.9%	4.1%	4.9%	5.0%
	<i>Fertilisers</i>	4.7%	5.7%	5.9%	6.9%	7.6%	7.0%
	<i>Crop protection</i>	2.3%	3.0%	2.9%	3.3%	4.3%	5.4%
	<i>Feed</i>	23.8%	24.2%	24.7%	22.6%	20.6%	22.7%
	<i>Machinery & buildings</i>	6.2%	5.7%	5.1%	4.7%	4.4%	5.3%
	<i>Energy</i>	8.7%	8.3%	7.9%	8.2%	9.3%	10.0%
	<i>Contract work</i>	3.4%	2.9%	2.2%	1.7%	2.2%	3.4%
	<i>Other</i>	6.3%	5.8%	5.9%	5.7%	6.6%	11.4%
	Depreciation	18.5%	17.0%	14.5%	12.5%	12.1%	11.1%
	Farm taxes	1.0%	0.9%	0.8%	0.7%	0.7%	1.1%
	Taxes on investment	1.5%	1.4%	1.4%	1.6%	0.7%	0.0%
	Wages	3.6%	2.7%	2.5%	2.9%	6.3%	19.2%
	Rents	0.5%	0.6%	0.8%	1.3%	2.1%	3.2%
	Costs own labour**	50.0%	40.2%	25.6%	14.4%	6.5%	0.5%
	Costs own land**	3.2%	2.9%	2.6%	2.4%	2.0%	0.6%
	Costs capital**	8.0%	7.5%	6.3%	5.4%	3.7%	2.5%
Total costs	145.4%	133.4%	113.0%	98.4%	94.1%	108.6%	

* Includes national part of subsidies ** imputed costs

Source: DG AGRI EU-FADN

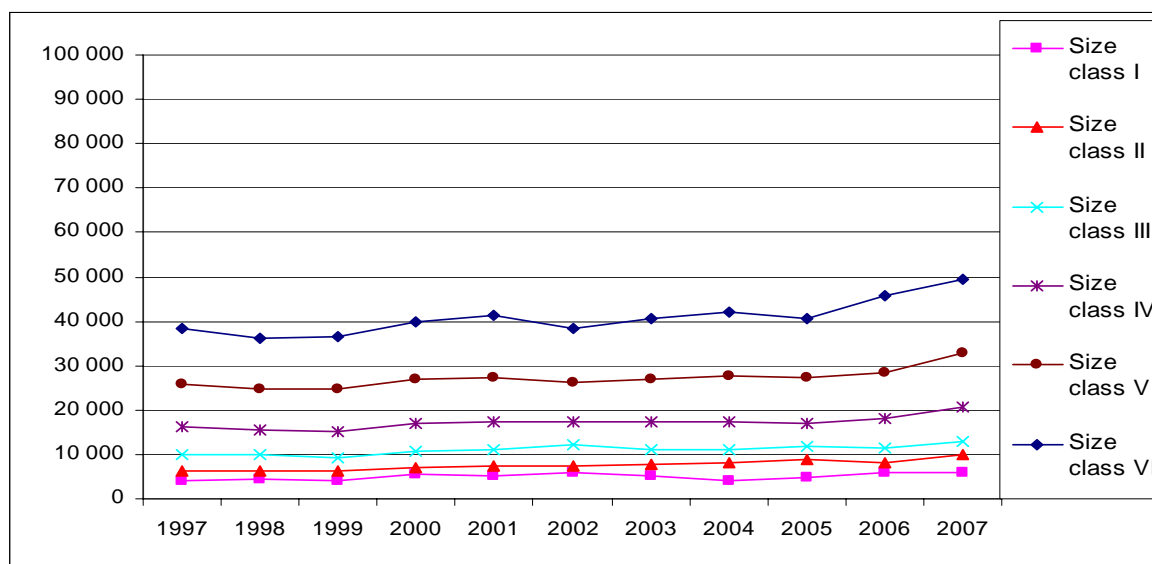
Table A.23: Farm structure, revenue and share of input costs in farm output in the EU-2 by size class in 2007

EU-2		2007					
		Economic size class					
		I	II	III	IV	V	VI
Structure	Economic size (per farm)	2	5	12	26	70	301
	UAA (per farm)	5	14	58	102	338	1069
	Labour (per farm)	1.81	3.55	5.07	5.53	10.42	34.74
Revenue	Output (per farm)	6 255	21 635	46 691	82 527	190 081	769 439
	PI payments (per farm)*	617	2 267	7 084	16 970	56 680	182 769
	PII payments (per farm)*	0	0	0	0	50	499
Costs/Output	Intermediate consumption	50.4%	54.1%	62.4%	78.6%	70.1%	67.6%
	<i>Seeds</i>	5.3%	4.8%	4.8%	7.6%	8.9%	6.2%
	<i>Fertilisers</i>	3.5%	5.0%	3.9%	7.1%	8.2%	6.7%
	<i>Crop protection</i>	2.3%	2.4%	2.7%	3.3%	4.8%	4.4%
	<i>Feed</i>	17.7%	16.9%	18.4%	16.9%	12.3%	19.1%
	<i>Machinery & buildings</i>	3.3%	5.5%	4.4%	3.6%	5.5%	3.9%
	<i>Energy</i>	7.1%	8.0%	10.8%	10.0%	12.7%	11.2%
	<i>Contract work</i>	5.4%	3.5%	4.3%	5.0%	6.4%	4.6%
	<i>Other</i>	5.9%	8.1%	13.1%	25.1%	11.3%	11.4%
	Depreciation	11.1%	9.2%	6.2%	9.9%	9.5%	9.1%
	Farm taxes	1.7%	3.5%	1.2%	1.1%	1.1%	1.1%
	Taxes on investment	0.0%	0.0%	0.1%	0.0%	0.0%	0.0%
	Wages	9.4%	14.1%	17.3%	14.1%	13.7%	13.5%
	Rents	1.0%	1.3%	4.4%	5.7%	9.5%	8.6%
	Costs own labour**	70.5%	27.7%	12.0%	3.7%	1.0%	0.2%
	Costs own land**	3.9%	2.2%	3.1%	1.3%	0.6%	0.5%
Costs capital**	4.8%	2.1%	1.9%	1.7%	1.9%	1.3%	
Total costs	152.7%	114.2%	108.6%	116.1%	107.4%	101.8%	

* Includes national part of subsidies ** imputed costs

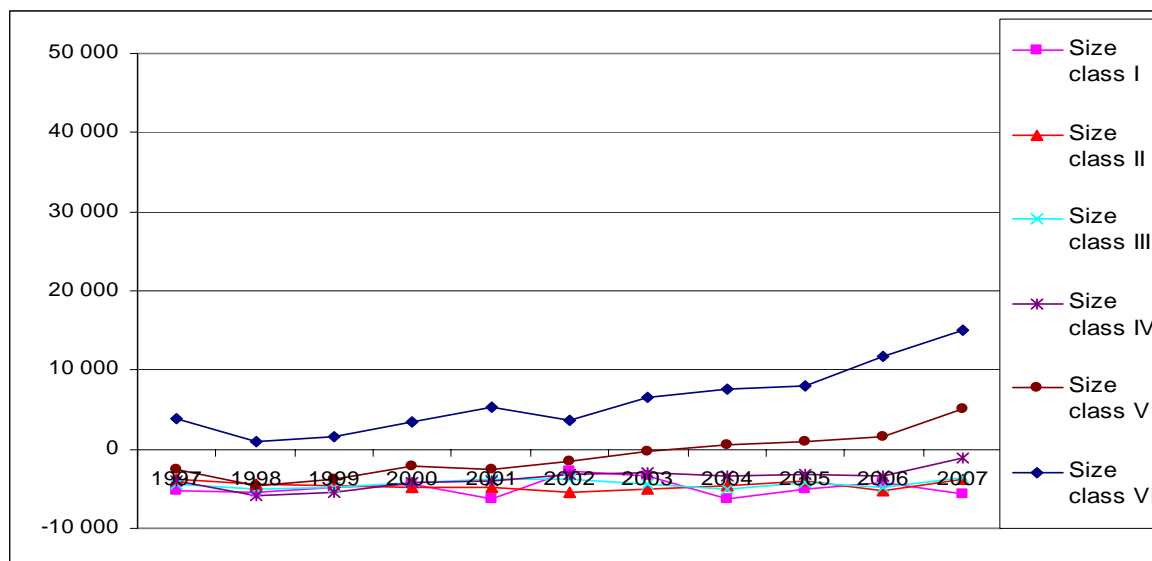
Source: DG AGRI EU-FADN

Graph A.1: Development of FNVA/AWU per size class in the EU-15.



Source: DG AGRI EU-FADN

Graph A.2: Development of the economic profit/AWU per size class in the EU-15.



Source: DG AGRI EU-FADN

Table A.24: Revenue and costs components of field crop farms

Field crops (Ø 04-06) EU-15		Economic size class					
		I	II	III	IV	V	VI
Structure	Economic size (per farm)	3	6	12	27	65	218
	UAA (per farm)	7	9	18	40	89	234
	Labour (per farm)	0.85	0.94	1.01	1.28	1.62	3.47
	Farms represented	150 359	768 229	564 009	616 538	383 946	220 182
	Share in output of the sector	1%	6%	7%	17%	24%	46%
Revenue	Output (per farm)	6 682	11 979	20 058	42 336	96 089	321 283
	share of output						
	PI payments (per farm)*	31%	23%	26%	27%	28%	23%
	PfII payments (per farm)*	13%	3%	6%	5%	3%	1%
Costs/Output	Intermediate consumption	46.3%	43.7%	54.7%	60.8%	62.7%	60.9%
	Seeds	5.2%	7.4%	6.6%	8.1%	7.1%	7.1%
	Fertilisers	7.9%	7.0%	7.9%	8.5%	9.7%	8.6%
	Crop protection	3.9%	3.6%	4.2%	5.6%	8.3%	9.3%
	Feed	3.7%	2.8%	4.3%	4.6%	4.9%	4.7%
	Machinery & buildings	4.1%	3.8%	6.2%	7.2%	7.4%	7.0%
	Energy	8.3%	7.1%	8.5%	8.1%	7.1%	6.7%
	Contract work	6.3%	5.6%	6.3%	6.7%	6.3%	5.2%
	Other	7.0%	6.4%	10.8%	11.9%	11.9%	12.3%
	Depreciation	24.6%	16.7%	20.3%	16.9%	17.0%	14.4%
	Farm taxes	0.8%	1.7%	1.7%	1.7%	1.7%	1.4%
	Taxes on investment	0.4%	0.1%	0.2%	0.4%	0.3%	0.2%
	Wages	3.7%	4.6%	5.5%	5.3%	6.0%	12.6%
	Rents	5.7%	3.3%	4.6%	6.8%	8.9%	10.2%
	Costs own labour**	96.5%	88.5%	64.6%	41.9%	24.5%	9.7%
Costs own land**	13.1%	11.1%	12.5%	11.0%	8.4%	7.1%	
Costs capital**	2.1%	2.6%	4.8%	4.1%	3.4%	2.9%	
Total costs	193.2%	172.2%	168.9%	148.8%	133.0%	119.3%	

* Includes national part of subsidies ** imputed costs

Source: DG AGRI EU-FADN

Table A.25: Revenue and costs components of horticulture farms

Horticulture (Ø 04-06) EU-15		Economic size class					
		I	II	III	IV	V	VI
Structure	Economic size (per farm)	3	6	12	27	65	349
	UAA (per farm)	1	1	1	3	5	14
	Labour (per farm)	1.37	1.30	1.56	2.28	3.39	8.02
	Farms represented	7 778	31 776	55 631	109 977	70 158	63 105
	Share in output of the sector	0%	1%	3%	13%	18%	65%
Revenue	Output (per farm)	12 573	22 466	35 261	74 516	161 851	652 197
	share of output						
	PI payments (per farm)*	3%	1%	1%	1%	1%	1%
	PII payments (per farm)*	0%	0%	0%	0%	0%	0%
Costs/Output	Intermediate consumption	37.2%	29.4%	37.2%	39.6%	46.7%	50.8%
	<i>Seeds</i>	11.1%	8.5%	8.8%	9.6%	12.1%	12.3%
	<i>Fertilisers</i>	4.7%	4.1%	5.4%	4.2%	3.5%	2.3%
	<i>Crop protection</i>	4.0%	3.1%	4.4%	3.0%	2.4%	2.1%
	<i>Feed</i>	0.0%	0.1%	0.0%	0.1%	0.4%	0.1%
	<i>Machinery & buildings</i>	2.6%	2.3%	2.6%	2.9%	3.4%	3.5%
	<i>Energy</i>	5.2%	4.1%	5.8%	5.6%	7.8%	12.4%
	<i>Contract work</i>	0.7%	1.1%	0.9%	1.1%	1.2%	2.4%
	<i>Other</i>	8.9%	6.1%	9.1%	13.1%	16.0%	15.8%
	Depreciation	12.0%	6.6%	9.5%	8.0%	8.6%	9.8%
	Farm taxes	0.4%	0.6%	0.7%	0.8%	0.8%	0.6%
	Taxes on investment	0.0%	0.1%	0.0%	0.1%	0.1%	0.1%
	Wages	2.0%	6.8%	11.1%	15.5%	17.4%	20.7%
	Rents	0.5%	0.4%	0.6%	0.8%	0.9%	1.4%
	Costs own labour**	85.0%	52.9%	41.7%	26.0%	17.3%	6.2%
	Costs own land**	1.2%	2.7%	2.8%	2.2%	1.9%	1.7%
	Costs capital**	1.0%	0.8%	1.1%	1.2%	1.5%	1.8%
	Total costs	139.4%	100.4%	104.8%	94.4%	95.2%	93.1%

* Includes national part of subsidies ** imputed costs

Source: DG AGRI EU-FADN

Table A.26: Revenue and costs components of wine farms

Wine (Ø 04-06) EU-15		Economic size class					
		I	II	III	IV	V	VI
Structure	Economic size (per farm)	3	7	12	27	66	201
	UAA (per farm)	3	5	7	12	23	38
	Labour (per farm)	1.10	0.98	1.17	1.48	2.30	4.57
	Farms represented	21 211	196 101	145 115	181 078	100 534	64 350
	Share in output of the sector	0%	5%	7%	18%	24%	46%
Revenue	Output (per farm)	7 359	12 361	21 186	47 079	114 409	334 031
	share of output						
	PI payments (per farm)*	2%	4%	5%	3%	3%	2%
	PII payments (per farm)*	11%	2%	2%	2%	2%	1%
Costs/Output	Intermediate consumption	25.7%	30.5%	28.1%	32.9%	35.6%	34.0%
	<i>Seeds</i>	0.5%	0.4%	0.7%	0.5%	0.9%	0.5%
	<i>Fertilisers</i>	3.9%	4.5%	3.5%	2.4%	1.8%	1.3%
	<i>Crop protection</i>	4.8%	4.8%	4.7%	4.6%	4.5%	3.5%
	<i>Feed</i>	0.2%	0.6%	0.2%	0.1%	0.1%	0.1%
	<i>Machinery & buildings</i>	2.1%	3.5%	3.5%	4.9%	5.1%	4.6%
	<i>Energy</i>	5.0%	5.6%	4.6%	3.7%	2.6%	1.6%
	<i>Contract work</i>	1.6%	1.9%	1.6%	2.1%	3.3%	3.1%
	<i>Other</i>	7.4%	9.0%	9.3%	14.4%	17.3%	19.3%
	Depreciation	32.5%	20.3%	18.1%	16.5%	13.7%	11.0%
	Farm taxes	0.1%	1.5%	1.5%	1.8%	1.6%	1.5%
	Taxes on investment	0.1%	0.0%	0.2%	0.4%	0.4%	0.1%
	Wages	20.5%	10.3%	10.1%	8.2%	12.5%	17.6%
	Rents	0.6%	0.2%	0.9%	2.0%	5.4%	8.0%
	Costs own labour**	92.5%	92.3%	66.1%	40.8%	21.1%	9.2%
	Costs own land**	5.2%	8.2%	9.5%	7.0%	5.6%	2.8%
	Costs capital**	4.0%	3.4%	3.5%	3.7%	3.5%	3.5%
	Total costs	181.2%	166.8%	138.0%	113.4%	99.3%	87.8%

* Includes national part of subsidies ** imputed costs

Source: DG AGRI EU-FADN

Table A.27: Revenue and costs components of other permanent crop farms

Other permanent crops (Ø 04-06) EU-15		Economic size class					
		I	II	III	IV	V	VI
Structure	Economic size (per farm)	3	6	12	26	62	242
	UAA (per farm)	3	4	7	13	24	65
	Labour (per farm)	0.94	1.04	1.16	1.52	2.40	5.62
	Farms represented	210 460	1 115 761	499 521	321 433	128 740	56 331
	Share in output of the sector	2%	20%	14%	18%	19%	27%
Revenue	Output (per farm)	6 509	11 715	17 813	36 306	95 474	303 486
		share of output					
	PI payments (per farm)*	21%	16%	13%	11%	7%	6%
	PII payments (per farm)*	4%	2%	2%	2%	1%	1%
Costs/Output	Intermediate consumption	33.2%	25.4%	27.5%	30.6%	34.4%	40.6%
	Seeds	0.5%	0.6%	1.0%	2.5%	4.5%	7.3%
	Fertilisers	9.2%	4.7%	4.9%	4.1%	3.4%	3.1%
	Crop protection	5.8%	3.8%	4.5%	4.5%	4.7%	4.8%
	Feed	0.7%	0.4%	0.5%	0.6%	0.7%	0.6%
	Machinery & buildings	2.3%	3.1%	2.7%	3.2%	3.6%	3.9%
	Energy	5.8%	4.7%	4.7%	4.5%	3.7%	3.4%
	Contract work	3.7%	2.6%	2.5%	1.7%	1.7%	2.1%
	Other	5.2%	5.5%	6.7%	9.4%	12.1%	15.4%
	Depreciation	17.4%	12.4%	12.7%	11.1%	10.4%	9.2%
	Farm taxes	1.2%	1.2%	1.3%	1.2%	1.1%	0.9%
	Taxes on investment	0.2%	0.8%	0.2%	0.2%	0.3%	0.3%
	Wages	6.0%	8.8%	11.1%	14.6%	17.3%	23.0%
	Rents	0.5%	0.7%	0.8%	1.0%	1.9%	2.8%
	Costs own labour**	120.7%	79.8%	61.8%	39.9%	21.7%	9.5%
	Costs own land**	8.1%	8.1%	7.3%	7.0%	6.4%	4.4%
	Costs capital**	2.3%	2.1%	2.4%	2.0%	1.9%	2.0%
Total costs	189.5%	139.3%	125.2%	107.6%	95.4%	92.6%	

* Includes national part of subsidies ** imputed costs

Source: DG AGRI EU-FADN

Table A.28: Revenue and costs components of milk farms

Milk (Ø 04-06) EU-15		Economic size class					
		I	II	III	IV	V	VI
Structure	Economic size (per farm)	4	7	13	29	65	172
	UAA (per farm)	4	11	17	30	57	109
	Labour (per farm)	1.95	1.20	1.36	1.47	1.76	2.85
	Farms represented	930	20 143	73 656	289 692	369 889	149 070
	Share in output of the sector		0%	2%	14%	40%	44%
Revenue	Output (per farm)		16 812	30 979	59 194	126 969	346 018
		share of output					
	PI payments (per farm)*		8%	10%	13%	14%	12%
	PII payments (per farm)*		8%	19%	12%	5%	2%
Costs/Output	Intermediate consumption		59.3%	57.0%	60.9%	61.1%	59.7%
	Seeds		0.6%	0.7%	1.1%	1.6%	1.5%
	Fertilisers		1.4%	1.3%	2.9%	3.7%	2.9%
	Crop protection		0.3%	0.2%	0.6%	1.2%	1.1%
	Feed		38.1%	26.1%	23.4%	22.2%	25.2%
	Machinery & buildings		4.4%	7.4%	8.0%	6.9%	5.9%
	Energy		5.3%	5.5%	5.9%	5.3%	4.7%
	Contract work		1.0%	2.6%	4.4%	6.0%	5.3%
	Other		8.1%	13.1%	14.6%	14.2%	13.1%
	Depreciation		17.3%	19.8%	17.9%	16.4%	12.2%
	Farm taxes		0.8%	0.7%	0.9%	0.9%	0.8%
	Taxes on investment		0.1%	2.3%	1.4%	0.8%	0.5%
	Wages		0.8%	0.6%	0.8%	1.8%	6.1%
	Rents		1.5%	1.3%	2.9%	5.0%	4.7%
	Costs own labour**		100.9%	64.0%	41.0%	25.8%	14.0%
	Costs own land**		6.1%	6.2%	6.0%	5.3%	5.9%
	Costs capital**		4.7%	6.7%	5.7%	4.2%	3.7%
Total costs		191.5%	158.6%	137.7%	121.4%	107.5%	

* Includes national part of subsidies ** imputed costs

Source: DG AGRI EU-FADN

Table A.29: Revenue and costs components of other grazing livestock farms

Other grazing livestock (Ø 04-06) EU-15		Economic size class					
		I	II	III	IV	V	VI
Structure	Economic size (per farm)	3	6	12	27	61	176
	UAA (per farm)	17	18	31	66	120	209
	Labour (per farm)	0.85	1.09	1.24	1.39	1.82	2.88
	Farms represented	80 963	267 194	256 542	400 115	204 078	45 247
	Share in output of the sector	1%	6%	10%	29%	33%	21%
Revenue	Output (per farm)	5 873	14 248	25 720	47 395	102 779	298 172
	share of output						
	PI payments (per farm)*	55%	29%	32%	35%	30%	22%
	PII payments (per farm)*	38%	16%	19%	12%	8%	4%
Costs/Output	Intermediate consumption	85.6%	64.4%	66.2%	70.4%	69.2%	65.9%
	Seeds	1.1%	0.9%	0.9%	1.4%	1.8%	1.8%
	Fertilisers	6.7%	3.4%	3.8%	4.6%	4.7%	3.5%
	Crop protection	0.6%	0.3%	0.4%	0.8%	1.3%	1.5%
	Feed	32.0%	35.9%	29.4%	27.4%	27.7%	33.3%
	Machinery & buildings	16.2%	6.5%	8.5%	9.1%	7.3%	5.1%
	Energy	7.2%	5.1%	5.4%	5.8%	5.5%	4.7%
	Contract work	6.9%	3.1%	5.3%	5.1%	5.3%	4.0%
	Other	14.9%	9.1%	12.6%	16.3%	15.7%	12.0%
	Depreciation	31.9%	14.1%	19.2%	19.2%	17.6%	11.9%
	Farm taxes	0.7%	0.7%	0.9%	1.2%	1.0%	0.9%
	Taxes on investment	2.2%	1.1%	1.5%	0.8%	0.5%	0.5%
	Wages	0.9%	1.0%	2.4%	3.1%	4.5%	5.7%
	Rents	3.9%	3.0%	3.1%	5.3%	6.2%	5.2%
	Costs own labour**	192.1%	99.3%	67.3%	46.0%	28.3%	13.9%
	Costs own land**	34.3%	13.5%	11.2%	9.2%	4.9%	3.8%
	Costs capital**	4.9%	3.2%	5.5%	6.0%	4.7%	3.8%
Total costs	356.7%	200.1%	177.2%	161.2%	136.9%	111.7%	

* Includes national part of subsidies ** imputed costs

Source: DG AGRI EU-FADN

Table A.30: Revenue and costs components of granivore farms

Granivores (Ø 04-06) EU-15		Economic size class					
		I	II	III	IV	V	VI
Structure	Economic size (per farm)	3	6	13	29	69	302
	UAA (per farm)	7	2	6	10	21	46
	Labour (per farm)	0.95	1.19	1.12	1.30	1.58	2.95
	Farms represented	718	3 495	9 683	35 234	58 556	75 758
	Share in output of the sector	0%	0%	1%	6%	19%	74%
Revenue	Output (per farm)	29 969	42 663	54 218	94 929	199 309	584 207
	share of output						
	PI payments (per farm)*	0%	0%	3%	3%	3%	3%
	PII payments (per farm)*	0%	0%	2%	1%	1%	0%
Costs/Output	Intermediate consumption	44.8%	63.3%	63.5%	65.9%	66.5%	65.6%
	Seeds	0.0%	0.1%	0.4%	0.6%	0.7%	0.6%
	Fertilisers	0.0%	0.1%	0.4%	0.6%	0.7%	0.6%
	Crop protection	0.0%	0.0%	0.2%	0.5%	0.7%	0.6%
	Feed	39.3%	52.3%	44.5%	43.2%	44.1%	45.5%
	Machinery & buildings	0.5%	2.6%	3.8%	4.1%	3.6%	2.7%
	Energy	1.4%	2.1%	4.2%	4.6%	4.5%	3.8%
	Contract work	0.1%	0.2%	1.8%	2.2%	2.1%	1.8%
	Other	3.6%	6.0%	8.2%	10.2%	10.1%	10.0%
	Depreciation	1.4%	4.8%	11.7%	10.3%	8.9%	7.1%
	Farm taxes	0.2%	0.2%	0.6%	0.6%	0.5%	0.5%
	Taxes on investment	0.2%	0.1%	0.2%	0.6%	0.5%	0.1%
	Wages	0.0%	1.9%	0.7%	1.5%	1.8%	5.4%
	Rents	0.0%	0.2%	0.5%	0.8%	1.4%	1.8%
	Costs own labour**	34.5%	28.5%	27.6%	21.2%	12.5%	5.5%
	Costs own land**	2.5%	0.5%	1.8%	2.2%	1.9%	2.0%
	Costs capital**	0.4%	1.1%	2.6%	3.0%	2.5%	2.5%
Total costs	84.0%	100.4%	109.3%	106.1%	96.7%	90.6%	

* Includes national part of subsidies ** imputed costs

Source: DG AGRI EU-FADN

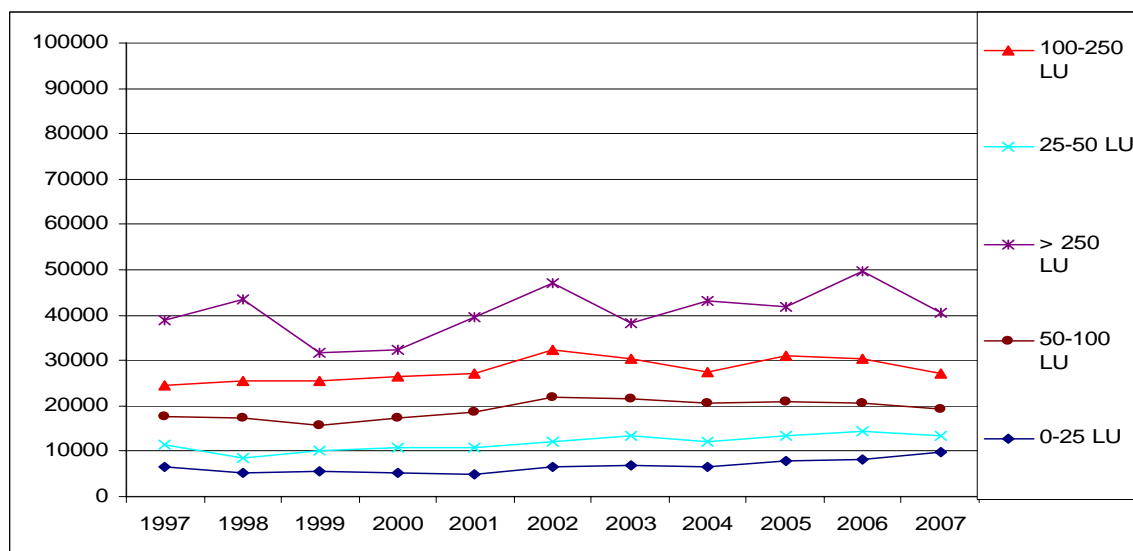
Table A.31: Revenue and costs components of mixed farms

Mixed (Ø 04-06) EU-15		Economic size class					
		I	II	III	IV	V	VI
Structure	Economic size (per farm)	3	6	12	28	67	197
	UAA (per farm)	7	12	20	41	79	188
	Labour (per farm)	1.28	1.22	1.24	1.42	1.69	3.41
	Farms represented	44 369	128 200	120 753	198 154	195 116	125 008
	Share in output of the sector	0%	2%	4%	12%	28%	54%
Revenue	Output (per farm)	9 210	15 333	28 104	53 519	129 555	388 315
	PI payments (per farm)*	share of output					
	PII payments (per farm)*	21%	16%	19%	22%	19%	16%
Costs/Output	Intermediate consumption	47.0%	49.9%	54.8%	67.4%	69.0%	66.8%
	Seeds	2.0%	1.9%	2.2%	2.9%	2.8%	2.9%
	Fertilisers	2.3%	2.8%	3.1%	4.4%	4.7%	4.1%
	Crop protection	1.2%	1.2%	1.2%	2.4%	3.3%	3.7%
	Feed	26.5%	24.9%	25.0%	25.7%	27.2%	27.9%
	Machinery & buildings	3.6%	3.6%	5.1%	7.3%	6.4%	5.7%
	Energy	5.0%	5.0%	5.6%	6.8%	6.2%	5.8%
	Contract work	2.0%	2.1%	4.0%	5.1%	5.6%	4.7%
	Other	4.4%	8.5%	8.7%	12.8%	12.9%	12.1%
	Depreciation	13.5%	12.2%	14.5%	17.2%	15.3%	13.5%
	Farm taxes	0.2%	0.5%	0.8%	1.2%	1.0%	0.9%
	Taxes on investment	0.3%	0.3%	0.5%	0.8%	0.6%	0.3%
	Wages	1.3%	2.0%	1.6%	2.4%	2.3%	8.8%
	Rents	1.4%	1.9%	2.5%	4.3%	5.6%	6.1%
	Costs own labour**	110.3%	81.0%	57.2%	39.6%	21.3%	10.0%
	Costs own land**	2.6%	3.8%	6.2%	6.4%	4.2%	3.1%
	Costs capital**	2.4%	2.1%	4.3%	4.8%	3.8%	3.4%
Total costs	179.0%	153.7%	142.4%	144.0%	123.1%	113.0%	

* Includes national part of subsidies ** imputed costs

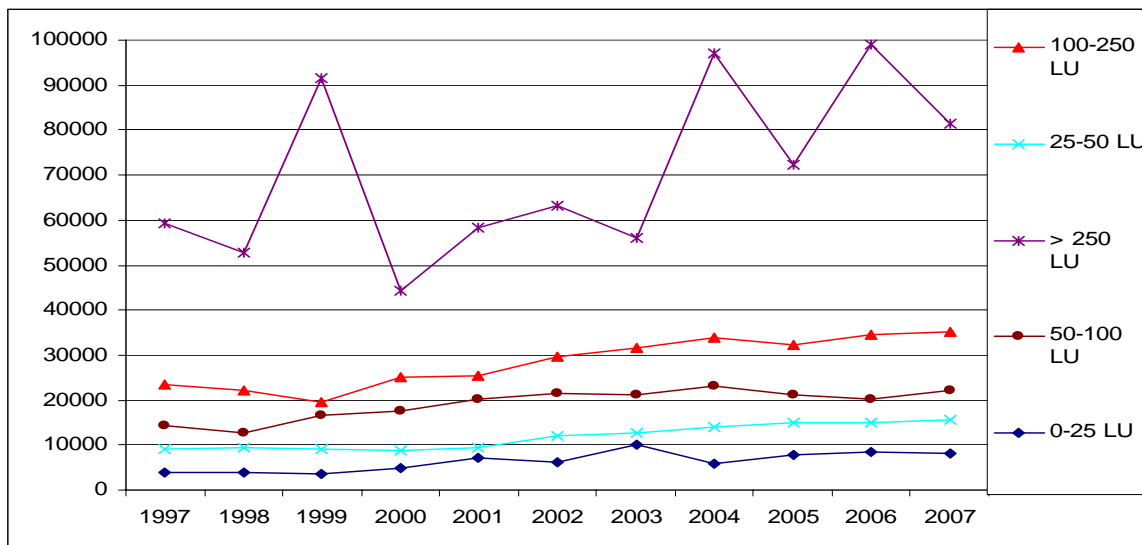
Source: DG AGRI EU-FADN

Graph A.3: FNVA /AWU of cattle rearing farms in the EU-15 by size class



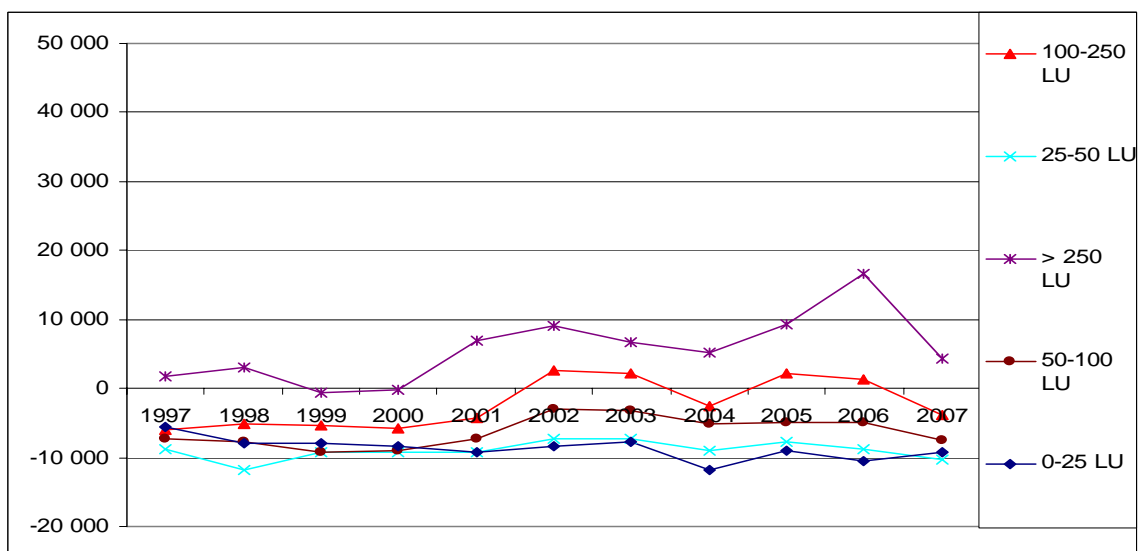
Source: DG AGRI EU-FADN

Graph A.4: FNVA /AWU of cattle fattening farms in the EU-15 by size class



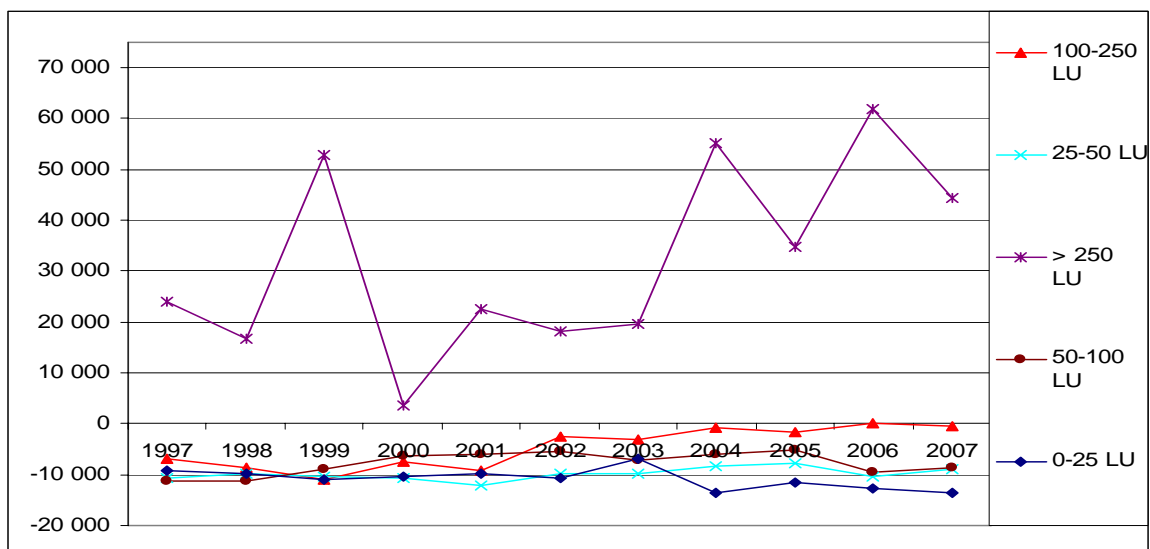
Source: DG AGRI EU-FADN

Graph A.5: economic profit /AWU of cattle rearing farms in the EU-15 by size class



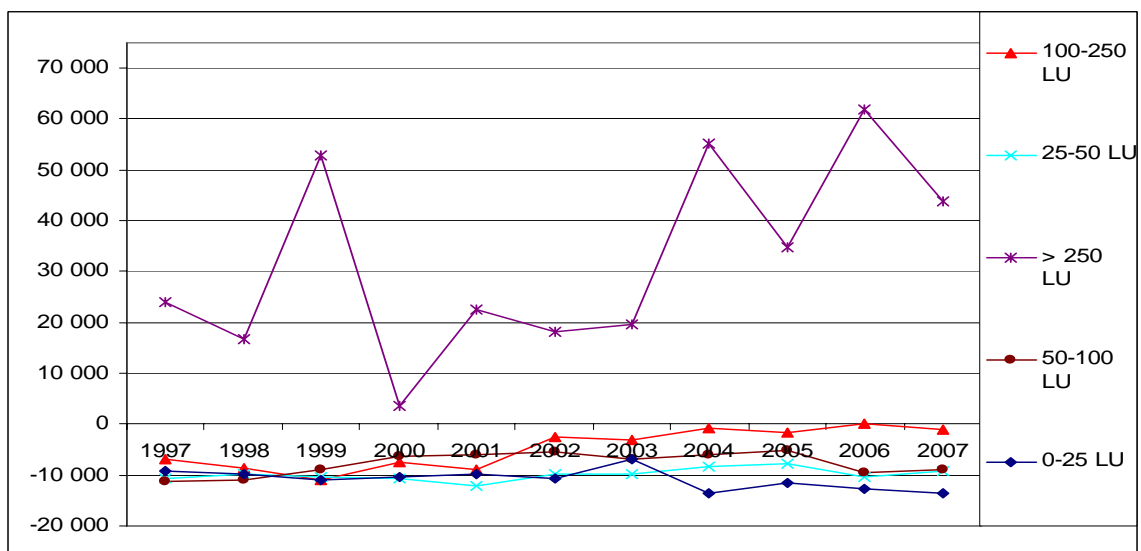
Source: DG AGRI EU-FADN

Graph A.6: economic profit /AWU of cattle fattening farms in the EU-15 by size class



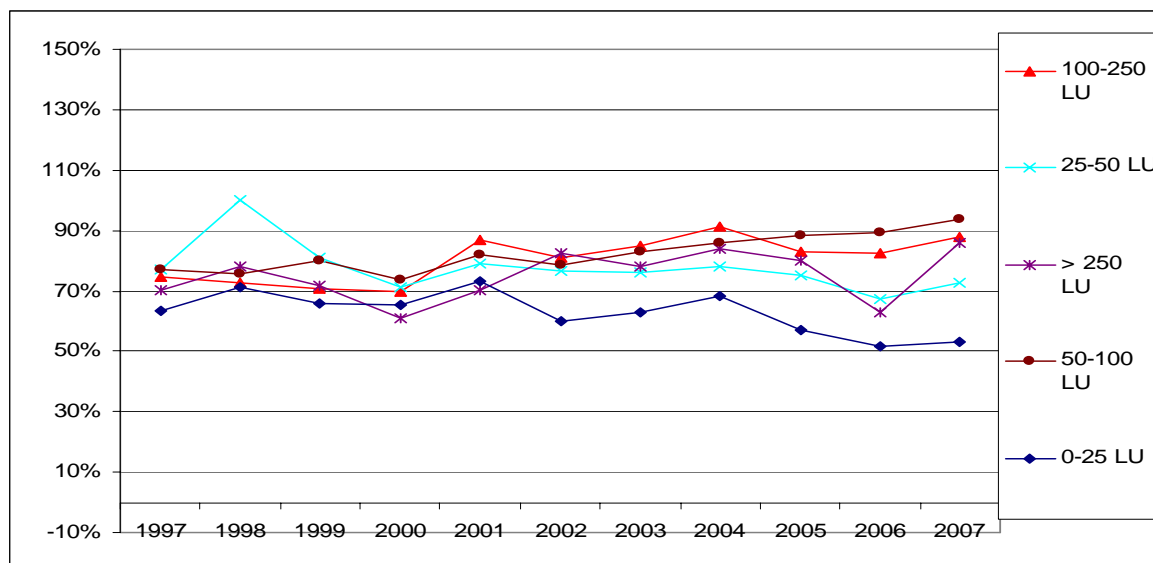
Source: DG AGRI EU-FADN

Graph A.7: Share of PI-type direct payments in the FNVA of cattle fatteners by size class



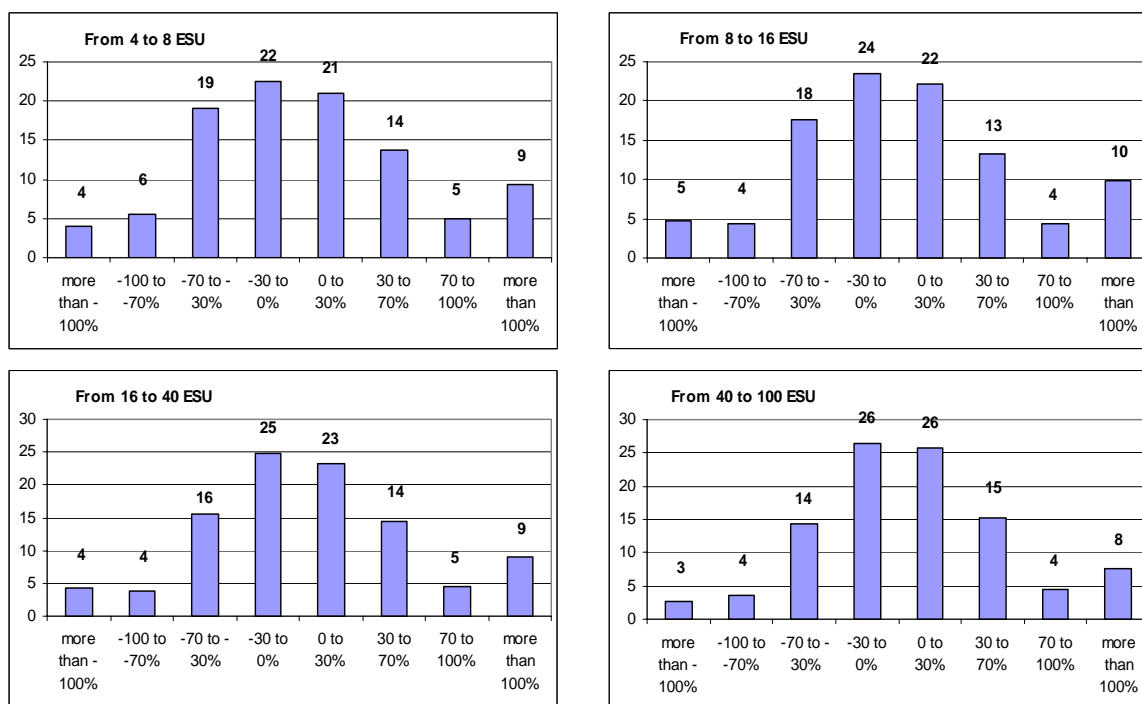
Source: DG AGRI EU-FADN

Graph A.8: Share of PI-type direct payments in the FNVA of cattle rearers by size class



Source: DG AGRI EU-FADN

Graph A.9: Histograms of the share of farms which FNVA changed compared to the average of previous 3 years. ES6 2-5



Source: DG AGRI EU-FADN