This brief summarizes farm economic developments in the European agricultural sector based on 2012 data, the latest available in the Farm Accountancy Data Network (FADN). A more detailed report is available at http://ec.europa.eu/agriculture/ricaprod/publications_en.cfm#EB01.

After the sharp decline in farm income in 2009, recovery started in 2010 and continued in 2011 and 2012. Overall, the income slightly increased due to higher agricultural producer prices, leading to an increase in the value of agricultural output.

However, there were significant income differences across European regions as well as across different types of farming. Despite high input prices such as the cost of animal feed and energy in 2012, farms specialised in granivores (pigs and poultry) and field crop farms generated the highest income per person. From 2011 to 2012 income per person increased for farms specialised in field crops, granivores, horticulture, other permanent crops and mixed farms (mainly due to higher producer prices and volumes in animal and crop production in 2012), while it decreased for farms specialised in wine, grazing livestock and for dairy farms.

The average income per worker in those countries that joined the EU in 2004 or later remained significantly below the EU-15 level.

Finally, the proportion of direct payments in Farm Net Value Added in the EU-27 decreased from 32% in 2011 to 31% in 2012.
1. Income developments

Average farm income (measured by farm net value added (FNVA))¹ in the EU-27 increased by 2.7% from 2011 to 2012, mostly due to increases in agricultural output (especially in the value of animal output) and prices. Compared to 2009, FNVA was 32% higher in 2012. Average FNVA per annual work unit (FNVA/AWU) increased by around 4%, from EUR 18,200 in 2011 to EUR 19,000 in 2012.

This growth was driven by the increase in FNVA, with labour input remaining stable. It was primarily influenced by an increase in agricultural real prices, reflecting the continued recovery of commodity markets in 2012 after the low point in 2009.

However, the average income increase masks substantial differences across Member States, regions and types of farming. Holdings in Denmark, the UK (England), north-western Germany and northern France generated the highest FNVA/AWU in 2012. The regions with low FNVA/AWU (i.e. below EUR 10,000) were mostly situated in the EU-N10. Only one region in the EU-15, namely Norte e Centro (Portugal) had an average FNVA/AWU below EUR 10,000.

On average, farms specialised in granivores, field crops, wine, milk and horticulture had the highest FNVA/AWU, while the FNVA/AWU of farms specialised in other permanent crops, grazing livestock (other than milk) and mixed activities remained below the EU-27 average. In 2012, FNVA/AWU increased for farms specialised in granivores, horticulture, other permanent crops and mixed farms (crops and livestock), and decreased for farms specialised in field crops, wine, milk and other grazing livestock. The increase was mainly due to the higher producer prices and to a lesser extent to the volume of output in 2012.

Looking at the distribution of FNVA/AWU in the EU-N10 and EU-2², the average income per worker in these countries remained significantly below the EU-15 level. In more than 96% of farms in the EU-2 and around 92% of farms in the EU-N10, FNVA/AWU was below the EU-15 average. In the EU-N10, average FNVA/AWU stood at around EUR 9,500, but was under EUR 4,200 in more than 50% of farms. FNVA/AWU was less than EUR 2,500 in 50% of farms in the EU-2.

¹ See methodological notes at the end of this brief.

² EU-N10 refers to the 10 countries that joined the EU in 2004, while EU-2 refers to Bulgaria and Romania.
An alternative measure of agricultural income is the remuneration of family labour, as a high proportion of work in the agricultural sector is carried out by family members. This is expressed per family work unit (FWU) and is calculated by deducting from FNVA the costs of wages, rent and interest paid, as well as the opportunity costs of own land and capital.

Remuneration per FWU stood at around EUR 12 900 in 2012, up from EUR 12 700 in 2011.

The Member States with the highest remuneration of family labour per FWU were Denmark (EUR 79 900), the Netherlands (EUR 50 600) and France (EUR 33 800). The gap between the FNVA/AWU and remuneration of family labour/FWU is widest in Slovenia, Ireland and in Sweden. This is at least partly due to the large amount of interest paid by Swedish farmers, or in the case of Slovenia to the high opportunity cost of own capital (72 % of family farm income). The lowest remuneration of family labour was received by Slovenian farmers (EUR 590).

**FNVA per AWU and remuneration of family labour per FWU, by Member State in 2012**

<table>
<thead>
<tr>
<th>Country</th>
<th>FNVA/AWU (EUR)</th>
<th>Remuneration of family labour/FWU (EUR)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Denmark</td>
<td>79 900</td>
<td>12 900</td>
</tr>
<tr>
<td>Netherlands</td>
<td>50 600</td>
<td>12 700</td>
</tr>
<tr>
<td>France</td>
<td>33 800</td>
<td>12 300</td>
</tr>
</tbody>
</table>

Source: DG AGRI EU-FADN

**FNVA per AWU and remuneration of family labour per FWU by type of farming in 2012**

<table>
<thead>
<tr>
<th>Type of Farming</th>
<th>FNVA/AWU (EUR)</th>
<th>Remuneration of family labour/FWU (EUR)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Grains</td>
<td>35 000</td>
<td>11 500</td>
</tr>
<tr>
<td>Field crops</td>
<td>30 000</td>
<td>10 500</td>
</tr>
<tr>
<td>Wine</td>
<td>20 000</td>
<td>8 000</td>
</tr>
<tr>
<td>Horticulture</td>
<td>15 000</td>
<td>6 500</td>
</tr>
<tr>
<td>Milk</td>
<td>10 000</td>
<td>4 000</td>
</tr>
</tbody>
</table>

Source: DG AGRI EU-FADN
2. Role of direct payments

Direct payments help to even out the variability in EU farm income. The average amount of direct payments received in 2012 was EUR 9 140 per farm. The proportion of direct payments in total revenue (output value plus subsidies minus taxes) in the EU-27 decreased from 11.9 % in 2011 to 11.2 % in 2012 as total farm receipts increased. Irish, Greek and Finnish farms’ total receipts were proportionately most dependent on subsidies (which represent nearly 20 % of total receipts in these countries). On the other hand, direct payments represented only 3.5 % of total receipts in the Netherlands, showing that Dutch agriculture is focussed on sectors that are less dependent on direct payments, such as horticulture and pig and poultry production. The role that direct payments play in sustaining farm income becomes even more apparent when we look at their comparison with FNVA. In 2012, on average, direct payments accounted for nearly 31 % of FNVA in the EU-27. The proportion of direct payments in agricultural income fluctuates markedly with the type of farming. In particular, direct payments represent a substantial part compared to FNVA in grazing livestock, mixed and field crop farms (37-55%). On the other hand, subsidies account for only a very limited part compared to FNVA in wine and horticulture holdings (3-8 %).

Proportion of direct payments in total receipts by Member State in 2012
(average per farm in EUR)

![Graph showing the proportion of direct payments in total receipts by Member State in 2012](image)

Source: DG AGRI EU-FADN

Proportion of direct payments to FNVA by type of farming in 2012
(average per farm in EUR)

![Graph showing the proportion of direct payments to FNVA by type of farming in 2012](image)

Source: DG AGRI EU-FADN
3. Characteristics of farms represented by FADN

The structure of European farms covered by FADN varies markedly in several ways:

**Asset value** The average farm size in terms of asset value was highest in Denmark and in the Netherlands (EUR 2,500,000 and EUR 2,200,000, respectively), reflecting very high land prices and the predominance of sectors which typically need considerable investment (such as milk, granivores and horticulture). In contrast, farms in Romania had the lowest total asset values (below EUR 40,000) due to low land prices, small farm sizes and less capital-intensive types of farming.

**Return on assets (ROA)** measures the effectiveness of a company’s assets in generating revenue. It is defined as the ratio of net income over total assets, where the net income is defined as the sum of FNVA and investment subsidies minus wage costs, rent paid and the opportunity costs of own labour.

The ROA of an average farm in the EU-27 remained similar to the previous year, at 2.0% in 2012 and up from 1.8% in 2010 (and only 0.4% in 2009). Holdings in Hungary, Lithuania and Estonia had the highest ROAs, mainly due to relatively low levels of opportunity costs and fixed asset values (such as land and quotas). In 2012, six Member States registered a negative ROA, with the lowest value recorded in Sweden (-2.6%). In 2012, Sweden, Slovenia, Malta, Slovakia, Finland and Ireland had the lowest ROAs in the EU.

Granivore, horticulture and field crop farms had ROAs above 2.0%, but this figure dropped below 1% for mixed crop-livestock holdings. Farms specialised in grazing livestock had a negative ROA, which shows that they invested a high amount of capital into their production while simultaneously receiving little income. This result could be linked to the slight decrease in production volume and producer prices for some animal products.

ROA fluctuated across EU groups and also over time for each group. It decreased drastically for all countries in 2007-09 (except Bulgaria and Romania) and from 2010 started to recover for all EU groups, albeit with varying intensity.

In the EU-15, all growth took place between 2009 and 2010, and ROA remained at its 2010 level even in 2012. In the EU-N10, the recovery process continued in 2011, reaching its highest value in that year (3%). In the EU-N10, ROA decreased again in 2012 due to the decrease in net income (-4%) and the increase in asset value. In the EU-2, after an increase in 2010, the average ROA marginally decreased in 2011 and reached its highest value (3.5%) in 2012.

**Return on assets by Member State in 2011-2012**

(average per farm in EUR)

<table>
<thead>
<tr>
<th>Member State</th>
<th>2011</th>
<th>2012</th>
<th>2012 Average EU27</th>
</tr>
</thead>
</table>
| **Return on assets by Member State in 2011-2012**
(average per farm in EUR)

Source: DG AGRI EU-FADN
Farm net worth is defined as the difference between total assets and total liabilities at the end of the accounting year. In 2012, the average farm net worth stood at approximately EUR 268,600 in the EU-27 (+1% compared to 2011). The average net worth per agricultural holding was highest in the UK, in the Netherlands and Denmark, reflecting the importance of the granivore and milk sectors, which are characterised by above-average net worth values per farm. Romanian and Bulgarian farms had the lowest values.

Source: DG AGRI EU-FADN
Liabilities. In the EU-27, total liabilities on average account for a small proportion of a farm's funding sources. While the 2004 and 2007 enlargements have affected the average level of total liabilities per farm, the impact has been substantially smaller than on total assets per farm. In line with the general trend for total asset values, total liabilities have also increased. Both in the EU-15 and in the EU-N10, the average value of total liabilities increased by approximately 50% over the period 2004-12. In the EU-27, average liabilities per agricultural holding just slightly rose to EUR 47 461 in 2012, up from EUR 47 863 in the previous year. Both the total amount and composition of liabilities show wide variations across Member States. In absolute terms, the Danish and Dutch farms had, on average, the highest total liabilities within the EU. In contrast, total liabilities per farm remained very low in many Mediterranean Member States, which may reflect difficulties farmers have in accessing credit markets in these countries. However, these very low observed levels could also have resulted from different accounting practices, where liabilities are typically included in farmers’ private rather than farm accounts.

In relative terms, agricultural holdings relied mostly on medium- and long-term loans, which represented more than 90% of total liabilities in Belgium, Italy, Cyprus, Denmark, Finland and Slovenia. Short-term loans to finance agricultural activities were prominent in Hungary (70%), Slovakia (60%), Lithuania (56%) and Portugal (52%).

Farms specialised in granivores, dairy and horticulture had, on average, the highest total liabilities (EUR 206 500, EUR 96 700 and EUR 91 300, respectively), which mirrors the high total asset values observed in these farm types. Permanent crop holdings recorded the lowest liabilities in 2012 (EUR 7 500), but at the same time they had the second lowest asset value as well. Medium- and long-term loans were the dominant kind of liability for all farm types. Short-term loans only played a significant role in wine holdings, where they accounted for around 45% of total liabilities.

Long-term developments in the value of assets (TA) and total liabilities (TL) (average per farm in EUR)

![Graph showing long-term developments in the value of assets (TA) and total liabilities (TL)](source: DG AGRI EU-FADN)

Composition of liabilities per farm by Member State in 2012 (average per farm in EUR)

![Graph showing composition of liabilities per farm by Member State in 2012](source: DG AGRI EU-FADN)
Methodological notes

Measuring farm income

For the purpose of this brief, the income of agricultural holdings is measured using farm net value added and the remuneration of family labour.

Farm net value added (FNVA) is equal to gross farm income minus costs of depreciation. It is used to remunerate the fixed factors of production (labour, land and capital), whether they are external or family factors. As a result, agricultural holdings can be compared regardless of the family/non-family nature of the factors of production used. FNVA = output + Pillar I and Pillar II payments + any national subsidies + VAT balance - intermediate consumption - farm taxes (income taxes are not included) - depreciation. The value is calculated per annual work unit (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.

Remuneration of family labour: In the agricultural sector, the bulk of the workforce consists of family members who do not receive a salary but have to be remunerated from the farms' income. As the FNVA is required to finance not only family labour but all fixed production factors, another way of estimating income (the remuneration of family labour) is calculated as follows: Remuneration of family labour = FNVA + balance of investment subsidies and taxes - total external factors - opportunity costs of own land - opportunity costs of own capital. The value is calculated per family work unit (FWU). Only farms that use unpaid labour (which in most cases means family members) are included in the calculation.

The Farm Accountancy Data Network (FADN) is a European system of sample surveys that are run each year to collect structural and accountancy data of farms; its aim is to monitor the income and business activities of agricultural holdings and to evaluate the impacts of the Common Agricultural Policy (CAP).

The scope of the FADN survey covers only farms whose size exceeds a minimum threshold so as to represent the largest possible proportion of agricultural output, agricultural area and farm labour, of holdings run with a market orientation. For 2012, the sample consisted of approximately 83 000 holdings in the EU-27, which represent nearly 5.0 million farms (40%) out of a total of 12.2 million farms included in the Farm Structure Survey.

The rules applied seek to provide representative data for three criteria: region, economic size and type of farming. The FADN is the only harmonised source of micro-economic data, which means that the accounting principles are the same in all EU Member States.

The most recent FADN data available for this report are for the 2012 accounting year, due to time lags stemming from data collection, control and processing.

For further information see: http://ec.europa.eu/agriculture/ricaprod/index.cfm

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Contact: DG Agriculture and Rural Development, Unit Economic Analysis of EU Agriculture
Tel: +32-2-29 91111 / E-mail: Agri-E3@ec.europa.eu
http://ec.europa.eu/agriculture/rural-area-economics/index_en.htm

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