



European
Commission

EU Farm Economics Overview

Based on
2018 FADN data



Agriculture
and rural
development



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EU FARM ECONOMICS OVERVIEW FADN 2018

EXECUTIVE SUMMARY

This report provides an overview of key economic developments in European agricultural holdings up to 2018, the latest available final data in the Farm Accountancy Data Network (FADN). The FADN survey covers farms that account for the vast majority of EU agricultural production. The results presented in this report refer to the European Union composed of 27 Member States and are in current prices.¹

Main findings

Over the analysed period (2007-2018), the average farm net value added registered a growing trend. In 2018, it reached EUR 35 300 per farm and EUR 22 500 per annual working unit.

Significant income differences can be observed across EU regions and types of farming. The highest income per AWU was registered in the North-Western part of the EU, whereas the lowest was in the Eastern part. The income per AWU of farms specialising in granivores, wine, horticulture and dairy was above the EU average in 2018.

Income differences are also observed based on the sex, age and level of training of farm holders and managers: farms run by women, young farmers or non-trained managers earned on average less than other farms.

¹ All data and figures are based on FADN data, unless otherwise specified.

Farm income

Over the analysed period (2007-2018), the farm income, expressed as average farm net value added, registered a growing trend, with the exception of 2009 and 2013. The income per farm growth from EUR 28 800 in 2007 to EUR 35 300 in 2018.

Output

This farm income increase was due to an increase in the value of agricultural output, for both crop and livestock production, +34 % and +36 % respectively.

Input costs

Considering the cost side, the average farm expenses totalled EUR 73 900 in 2018 but, taking into account also the estimated remuneration of own factors (opportunity costs), expenses slightly exceeded receipts and totalled EUR 97 100. The total input costs (including own factors) increased by 6.7 % from 2017 to 2018 in the EU. The highest percentage increase concerned intermediate consumption (+8.2 %), which represents more than half of total expenses.

Income per labour unit

The highest average income per labour unit (measured in farm net value added per annual work unit, or FNVA/AWU) was registered in 2018 (EUR 22 500), slightly above 2017 (+0.3 %) and 41% higher than in 2007 in nominal terms. This is due to the combined effect of the increase in farm income and the decrease in labour input.

Significant income differences can be observed across European regions and types of farming. *The highest income per AWU was registered in the North-Western part of the EU, whereas the lowest was in the Eastern part. The income per AWU of farms specialising in granivores, wine, horticulture and dairy was above the EU average in 2018. It remained below average for permanent crop farms (other than farms producing wine), farms specialising in grazing livestock (other than dairy) and mixed farms.*

Income by sex, age and level of training of farm holders and managers

Besides the economic data, FADN collects information on some social aspects of farming. In particular, this edition of the report analyses farm income by the sex, age and level of training of holder-managers.

Based on this analysis, farms run by women have on average a lower FNVA per AWU (38 % lower than the income of farms run by men), with only small variations over time. It has to be taken into account that differences depend also on the type of farming and the economic size. The share of farms run by women varies greatly depending on these variables. According to Eurostat data, the share of farms run by women in the EU is particularly high in poultry (38%

in 2016)². Women run on average smaller farms, both in physical terms and in standard output. When analysing the FNVA per AWU by sex and economic size classes, farms run by men have the highest income. However, there are some exceptions, most notably in Hungary, where farms run by women have higher income in each economic size class. The income gap by gender concerns all types of farming. The biggest gap is observed in dairy and fieldcrop farms, where farms run by man have almost double the FNVA per AWU of farms run by women.

At EU level, farms run by 40-year old managers or younger have the lowest income on average, followed by farms run by managers above 60. However, when analysing data at national level, it appears that in the vast majority of Member States, the lowest income is registered in farms run by managers above 60. The discrepancy between the EU overall picture and the national results is due to the fact that the majority of the EU young farmers are in countries with lower than average income levels (47% of the young farmers represented in the FADN are located in Poland and Romania). Therefore, this has a strong influence on the EU average results.

Farms run by managers with basic or full agricultural training have higher FNVA per AWU than farms whose managers have only practical agricultural experience (+59 %), in almost all Member States and for all types of farming and size classes at EU level. However, at national level there are some exceptions.

Distribution of income

As for the distribution of FNVA per AWU, a high proportion of farms had a relatively low income level per worker, while a small proportion of holdings had a very high income level per worker. The average FNVA per AWU in the EU stood at around EUR 22 500 in 2018. However, while 5 % of farms had an FNVA per AWU of more than EUR 70 000, 50 % had an FNVA per AWU below EUR 10 000.

Role of direct payments

In 2018, direct payments on average accounted for 28 % of FNVA in the EU, the same percentage as in 2017. The proportion of direct payments to FNVA was highest in Lithuania (70 %), followed by Finland and Estonia (67 % and 66 % respectively). By contrast, direct payments accounted for only 9 % of FNVA in the Netherlands.

The proportion of direct payments to FNVA also varies markedly depending on the type of farming. In particular, direct payments represent a substantial share of FNVA (40-54%) in farms specialised in grazing livestock (other than dairy cows), mixed farms and field-crop farms.

² Source: Eurostat (online data code: EF_M_FARMANG)

On the other hand, direct payments play only a limited role in sustaining income within the wine and horticulture sectors (5% and 2% respectively), which had incomes above the EU average FNVA in 2018. By contrast, the share of direct payments in FNVA was high for types of farming with low incomes. This compensates to some extent the income gap compared to the EU average.

Characteristics of farms

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

- **Asset value.** *On average, Dutch and Danish farms held the highest amounts of assets (around EUR 3 118 000 and EUR 2 689 000, respectively). This reflects the very high land prices and the large share in these countries of types of farming that typically need considerable investment, such as dairy, granivores and horticulture. In contrast, farms in Romania had the lowest total asset values (EUR 55 000) as they are characterised by less capital-intensive types of farming, their farms have a smaller average economic size and lower land prices. But a positive trend should also be highlighted: Bulgaria more than doubled the asset value of its farms from 2007 to 2018.*
- **Labour input.** *In the FADN survey, the average number of workers employed per farm in the EU stood at 1.6 AWU in 2018. However the average labour input varied considerably across countries, ranging from 10.6 AWU per farm in Slovakia to 1 AWU in Greece. The average number of workers per farm was fairly close to the average in all sectors except for horticulture (where labour input was more than twice as high) and for granivore farms (where the AWU per farm was 44 % higher than the average). Traditionally, a significant part of the labour force employed in agriculture is family labour (unpaid labour). The percentage of family labour hours was 74 % of the total labour hours in the EU, and was the most prevalent form of labour in most Member States (except for Slovakia, Czechia, Bulgaria, Hungary, Estonia and Denmark). The average hourly wage of farm workers stood at EUR 8.70 in the EU in 2018, which represents an increase by 75 % since 2007. Changes in the nominal wage more than compensated for price increases over the analysed period.*
- **Land use.** *The average size of farms covered by the FADN survey was 37 ha³ in 2018. However, this average sizes varied considerably across Member States, ranging from 445 ha per farm in Slovakia to 3 ha per farm in Malta. More than half of the agricultural area used in the EU was rented (56 %) in 2018. In 2018, land rent prices were*

³ The FADN does not survey all agricultural holdings in the EU, only those of a certain minimum size (as specified in Council Regulation (EC) No 1217/2009). Based on this criterion many small farms have been excluded from the field of survey. Accordingly, it should be emphasised that the average farm size mentioned in the report does not correspond to the average farm size of the total agricultural population. See the annex on the methodology for more information.

particularly high in the Canary Islands (EUR 2 000), the Netherlands (EUR 1 170) and in Denmark (EUR 800). On the other hand, rents were particularly low in Latvia and Estonia (EUR 44 and 54 per ha respectively) and in many regions with unfavourable conditions for intensive agricultural production, such as dry and mountainous areas. Land rents also varied markedly across types of farming: the level of rent per hectare in horticulture and the wine sector was more than eight times higher than the rental price paid by grazing livestock farms.

The **Farm Accountancy Data Network (FADN)** is a European system of sample surveys that are run each year to collect structural and accountancy data from 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. It thus represents the largest possible proportion of agricultural output, agricultural area and farm labour of holdings run with a market orientation⁴. The sample for 2018 consisted of approximately 80 400 holdings in the EU, which represent more than 3.9 million of the almost 10.3 million farms included in the Farm Structure Survey (FSS) 2016, i.e. (38 %)⁵.

The results presented in this report refer to the European Union composed of 27 Member States, with the exception of the period before 2013 when Croatia was not yet part of the EU.

Due to change in the minimum threshold occurred in Romania in 2018, historical data do not take into account farms with a standard output below 4 000 EUR, for comparability. Other changes in the national thresholds occurred during the analysed period and are described in Annex 4. However, due to their limited impact on the overall results, they did not required recalculations or adjustments.

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

The most recent FADN data available for this report are for the 2018 accounting year, due to the time needed for data collection, control and processing.

For further information please see Annex 1 ‘Farm Accountancy Data Network in the context of the Farm Structure Survey – Methodology’.

⁴ Please find an explanation for market oriented farms on page 58.

⁵ Farm Structure Survey (FSS) is carried out every 3 or 4 years as a sample survey and once every 10 years as a census by all Member States. Its purpose is to obtain reliable data on the structure of agricultural holdings in the EU, in particular on land use, livestock and the labour force. Eurostat data and analysis on agriculture are available in the Agriculture, forestry and fishery statistics ([link](#)).

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1. ECONOMIC SITUATION OF FARMS

This chapter reviews the economic situation of farms across the EU, focusing predominantly on the level, development and distribution of farm income. It also discusses the various farm income components and the return farmers receive on their investment.

1.1. Farm income

For the purpose of this report, the income of agricultural holdings is measured using **farm net value added, family net income and family farm income**.

***Farm net value added (FNVA)** is equal to gross farm income minus depreciation costs. It is used to remunerate the fixed factors of production (labour, land and capital), whether they be external or family factors. As a result, agricultural holdings can be compared regardless of whether family or non-family factors of production used.*

***FNVA** = output + Pillar I and annual 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) to take into account the differences in the scale of farms and to obtain a better measure of the productivity of the agricultural workforce.

***Farm net income (FNI):** comprises the remuneration of family labour, own land and own capital. It is calculated by deducting the external factors of production⁶ from the FNVA and by adding the balance of subsidies and taxes on investments.*

***FNI** = FNVA – total external factors + balance of subsidies and taxes on investments.*

***Family farm income (FFI):** expressed per family labour unit. This income indicator takes into account differences in the family labour force to be remunerated per holding. The value is calculated as FNI per family work unit (FWU). Only farms that use unpaid labour (which in most cases means family members) are included in the calculation.*

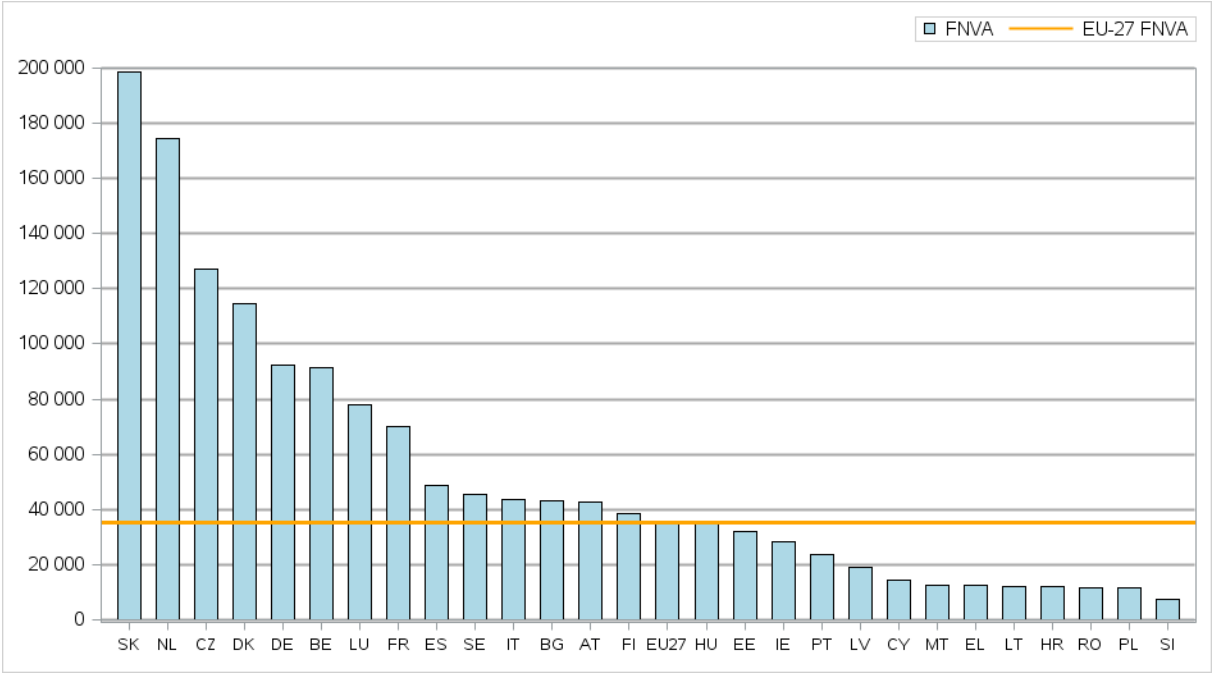
***Remuneration of family labour:** In the agricultural sector, the bulk of the workforce consists of family members who do not receive a salary but have to be remunerated from farm income. As the FNVA is required to finance not only family labour but all fixed production factors, remuneration of family labour is another way of estimating income. It is calculated as follows:*

Remuneration of family labour = FNVA + balance of subsidies and taxes on investments — total external production factors — opportunity costs of own land — opportunity costs of own capital. Or starting from the previous indicator: farm net income — opportunity cost of own land — opportunity cost of own capital.

⁶ External factors of production are the remuneration of inputs such as work, land and capital which are not the property of the holder (e.g. wages, rent, interest paid).

The average **FNVA per farm** differed significantly among the Member States. It was highest in Slovakia, at EUR 198 500 per farm in 2018. This is more than 26 times higher than in Slovenia, the country with the lowest FNVA. The Netherlands, Czechia and Denmark were also in the top countries in terms of income. The EU average was around EUR 35 300.

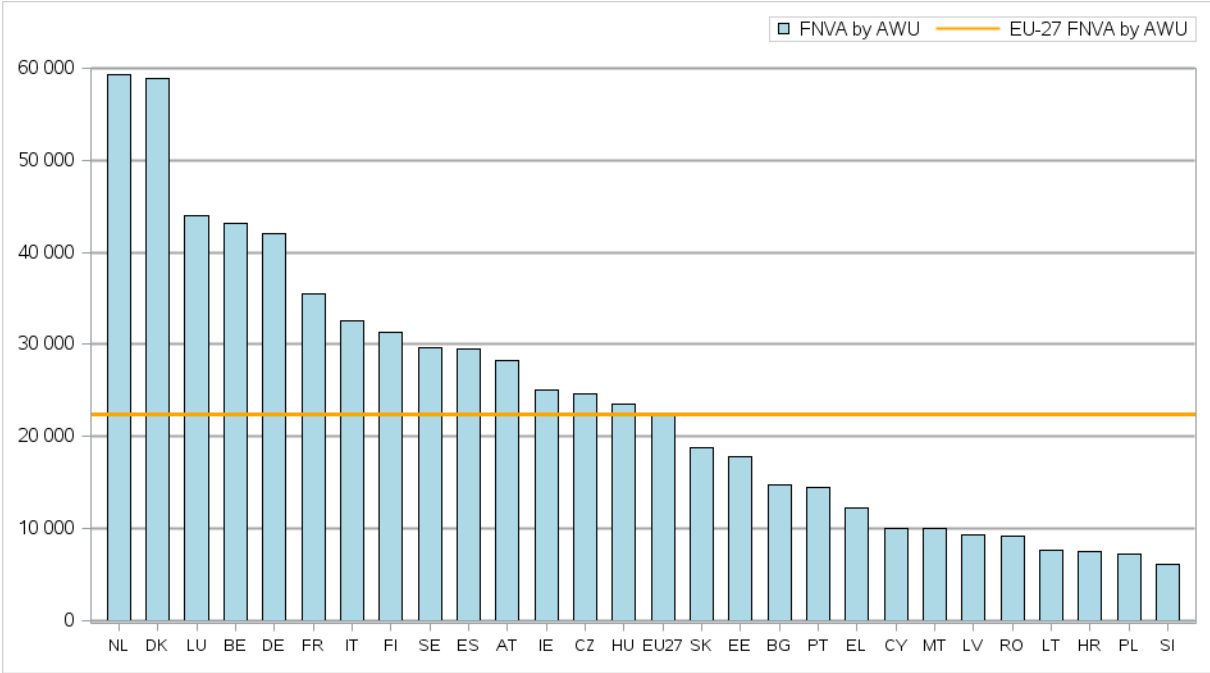
Figure 1.1: Farm net value added by Member State in 2018
(average per farm in EUR)



The main advantage of a measure such as average FNVA per farm lies in its relative simplicity. But this measure fails to reveal the differences in farm size, type of farming or structural decreases in the labour force employed in agriculture. To overcome this, FNVA is usually expressed per annual work unit (AWU), which can be seen as a measure of labour productivity.

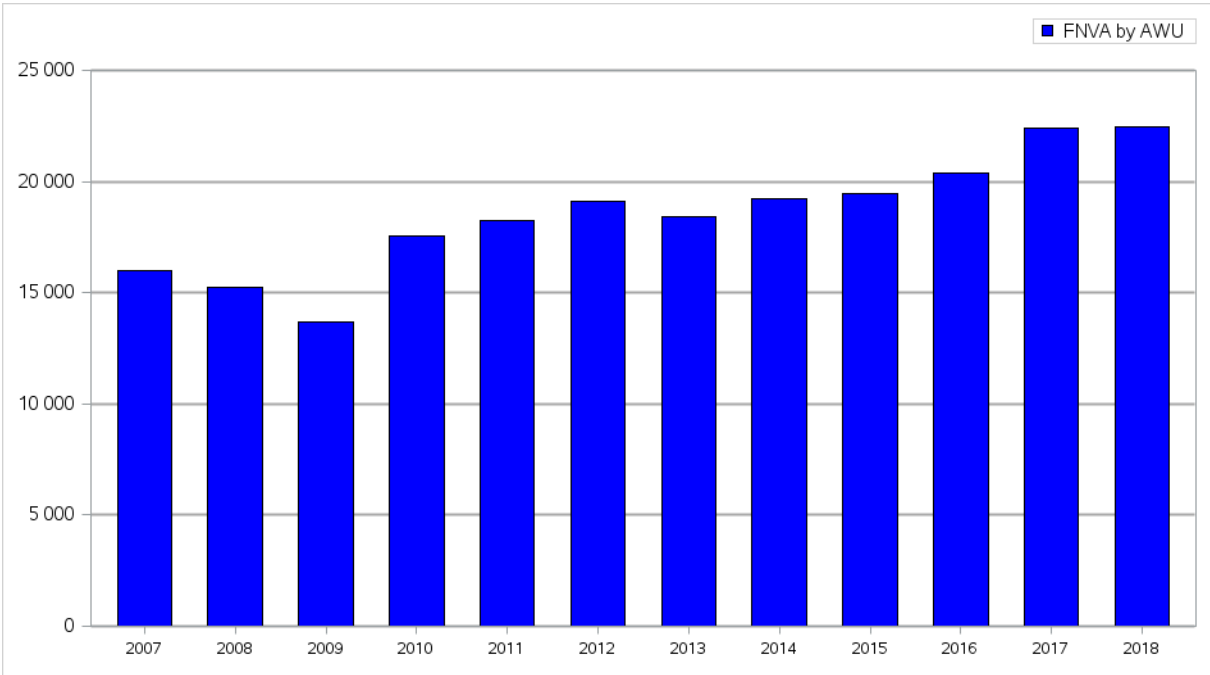
Even when **FNVA is expressed per AWU**, the general picture of income variability within the EU remains unaffected, although the difference between the highest and lowest income levels of Member States decreases. The Netherlands, Denmark and Luxembourg registered the highest FNVA per AWU in 2018, at EUR 59 400, EUR 58 900 and EUR 43 900 respectively. This means that the FNVA per AWU in the Netherlands is 2.6 times the value of the average FNVA per AWU for the EU (EUR 22 500), and is approximately 10 times higher than the lowest average income achieved per labour unit in Slovenia. At the other end of the spectrum, Croatia, Poland and Slovenia had the lowest FNVA per AWU (EUR 7 600, EUR 7 300 and EUR 6 200 respectively). This is because their agriculture is largely oriented towards less intensive and less productive types of farming, namely mixed farming and other grazing livestock.

Figure 1.2: Farm net value added per AWU by Member State in 2018
(average in EUR)



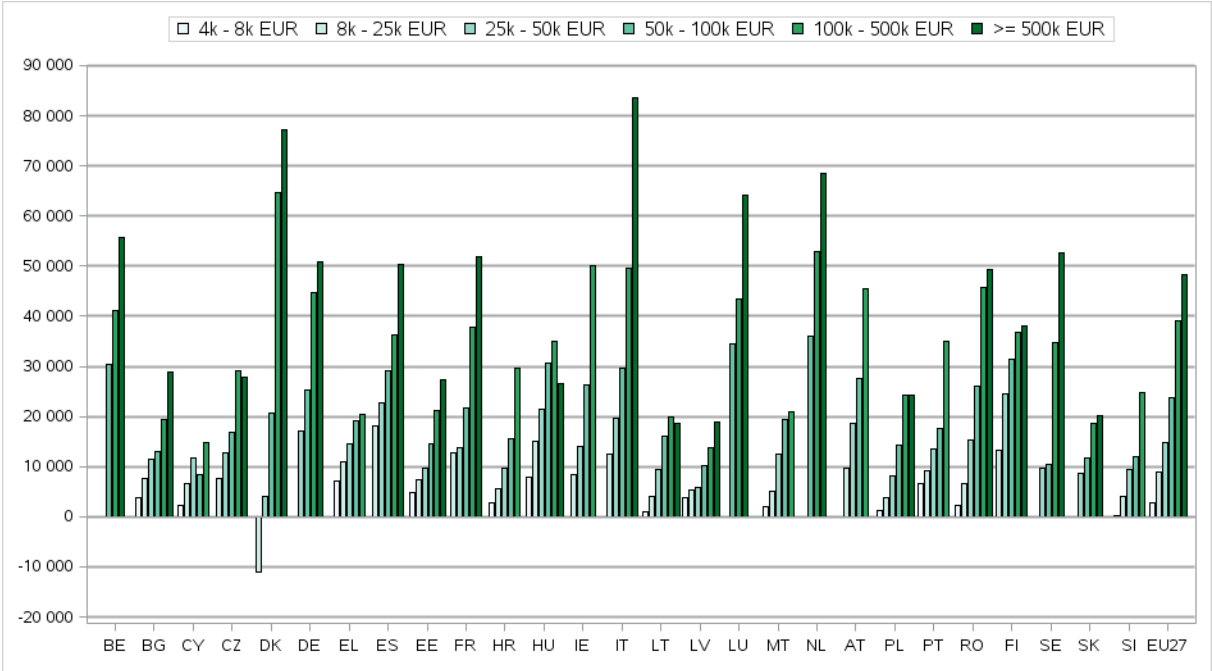
Looking at the trends in FNVA per AWU from 2007 to 2018, a growing trend started in 2013 and led to a maximum value in 2018 (in nominal values) in terms of average farm income. The worst years for income were between 2007 and 2009, but 2009 was both a year of economic crisis in Europe and a year of changes in the FADN methodology (a switch from Standard Gross Margin to Standard Output for measuring a farm’s overall economic size expressed in euro, please see footnote 34).

Figure 1.3: Long-term developments in FNVA per AWU in the EU
(average per AWU in EUR)



In 2018 there was an eighteen-fold difference between the average farm income per labour unit achieved in the highest (standard output is more than EUR 500 000) and the lowest (SO is between EUR 4 000 and EUR 8 000, see footnote 38) economic-size classes in the EU. The largest income level difference in a single country between the size-class extremes was in Slovenia (where the difference in income was 87 times). The figure below also shows that the highest average FNVA per AWU in the highest economic-size class was achieved in Italy (EUR 83 500), while the smallest average FNVA per AWU in the largest economic-size class was recorded in Lithuania (EUR 18 700). In the smallest economic-size class (which is included in the FADN sample of 13 MS), Slovenian farms recorded the lowest FNVA per AWU (EUR 290), whereas Hungary recorded the highest income per labour unit (EUR 7 900).

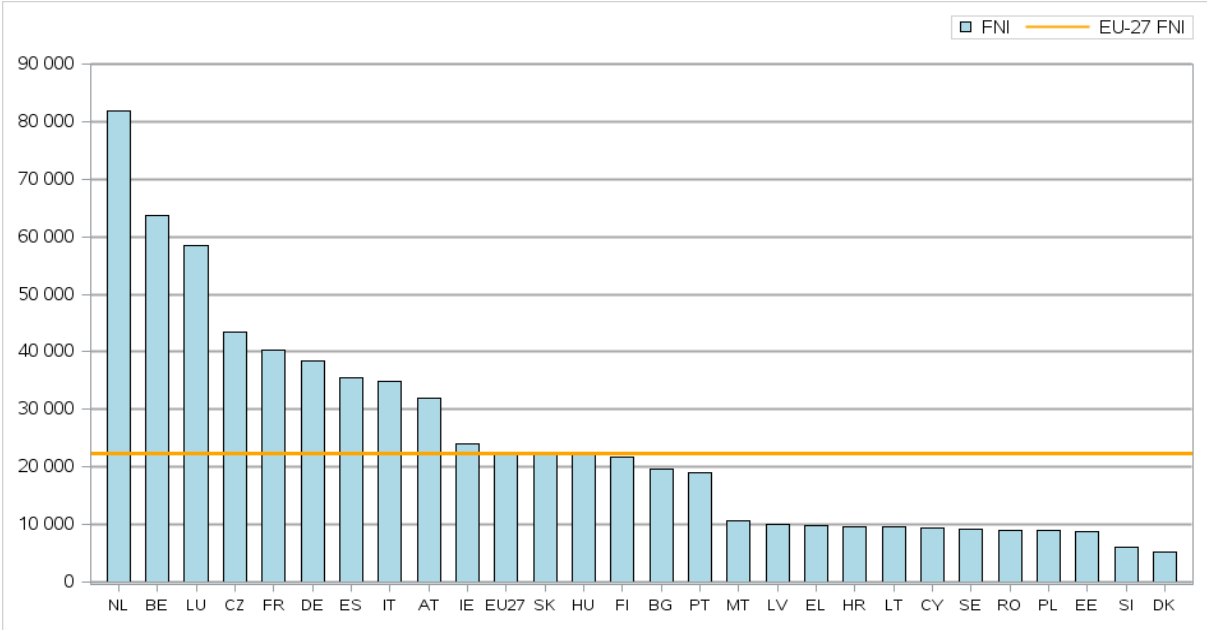
Figure 1.4: Farm net value added per AWU by Member State and by economic-size classes in 2018
(average per AWU in EUR)



By deducting the external factors of production from the FNVA and by adding the balance of subsidies and taxes on investments, we arrive to the **Farm net income (FNI)**. Using this indicator changes the picture of agricultural profitability of family factors in the Member States.

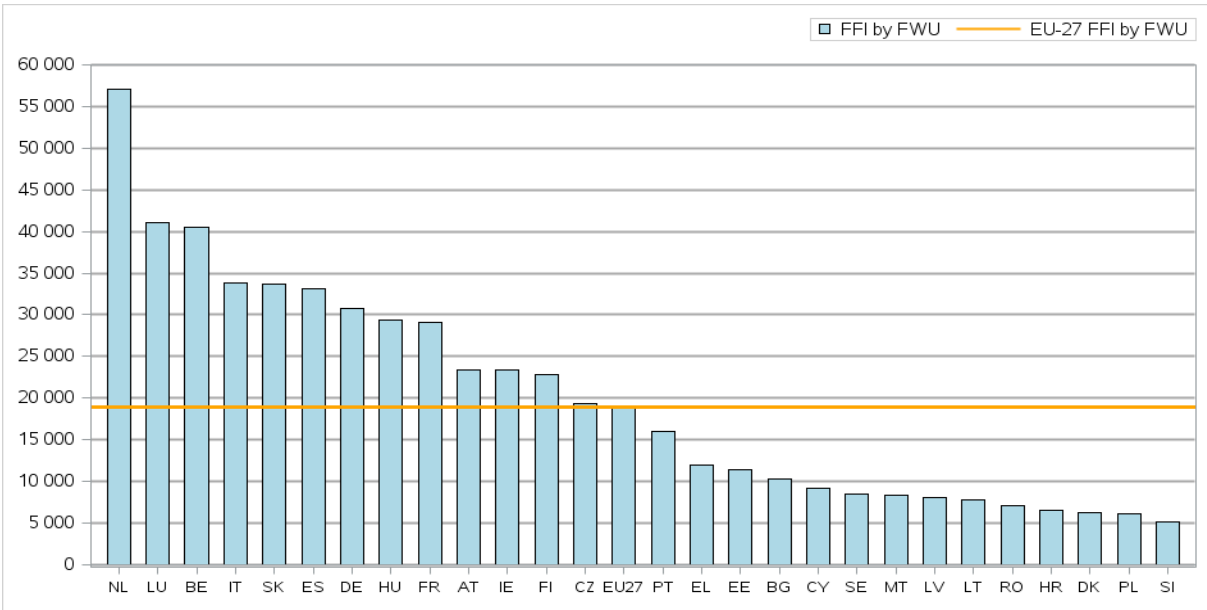
It is noteworthy that Denmark’s FNI per farm was the lowest out of all countries in 2018, while its FNVA was among the highest. Danish farms have relatively large debts compared to other EU countries and therefore they pay large amounts of interests. The Danish agriculture is based mainly on large-scale holdings cultivated by paid labour. Small family farms make up a very small proportion of total agricultural land in Denmark.

Figure 1.5: Farm net income by Member State in 2018
(average per farm in EUR)



An alternative measure of agricultural income is **Family farm income (FFI)**, as a high proportion of work in the agricultural sector is carried out by family members. FFI is expressed per family work unit (FWU) and it is calculated by dividing the Farm net income by the Family work units (for the farms which have family labour). At EU level, the average FFI per FWU stood at EUR 19 000 in 2018 (-1.1 % compared to 2017). In 2018, the Netherlands achieved the highest FFI per FWU (EUR 57 100), followed by Luxembourg (EUR 41 100) and Belgium (EUR 40 400). The gap between FNVA/AWU and FFI/FWU is the widest in Denmark and Sweden. The average family income per FWU in 2018 was the lowest in Slovenia (EUR 5 100).

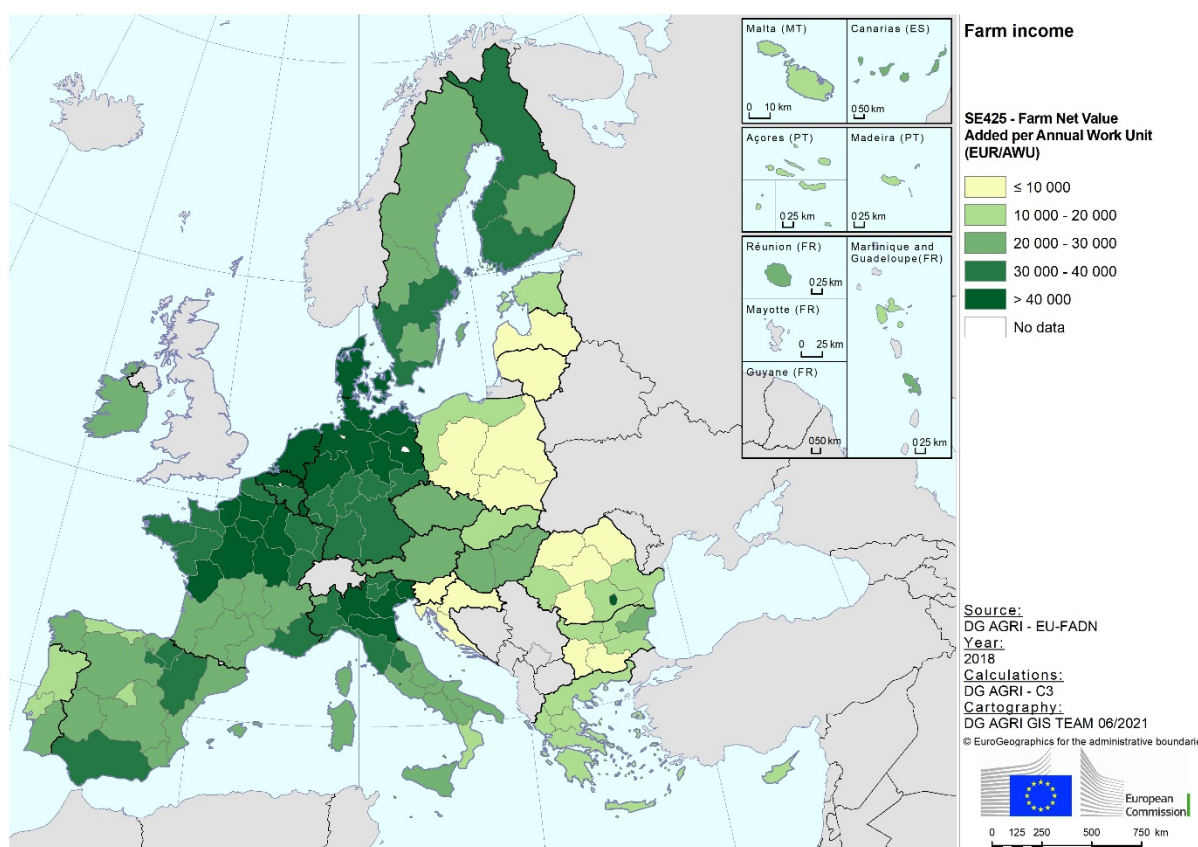
Figure 1.6: Family farm income per Family work unit by Member State in 2018
(average per FWU in EUR)



Regional differences

Map 1.1 shows the regional⁷ differences in FNVA per AWU in the EU in 2018. Agricultural holdings with the highest income per working unit were mainly located in northern France (Champagne-Ardenne, Picardie), the Netherlands, Denmark and northern Italy (Lombardy). In these regions, there is a high percentage of highly intensive granivore production, horticulture and dairy farms. On the other hand, regions with very low farm income (below EUR 10 000 per AWU) were mostly situated in Romania and other MS that joined the EU in 2004 or after. The lowest average FNVA/AWU per farm was in the Małopolska and Pogórze region in Poland. There is a 14-fold difference between the highest income per AWU (Champagne-Ardenne) and the lowest (Małopolska and Pogórze).

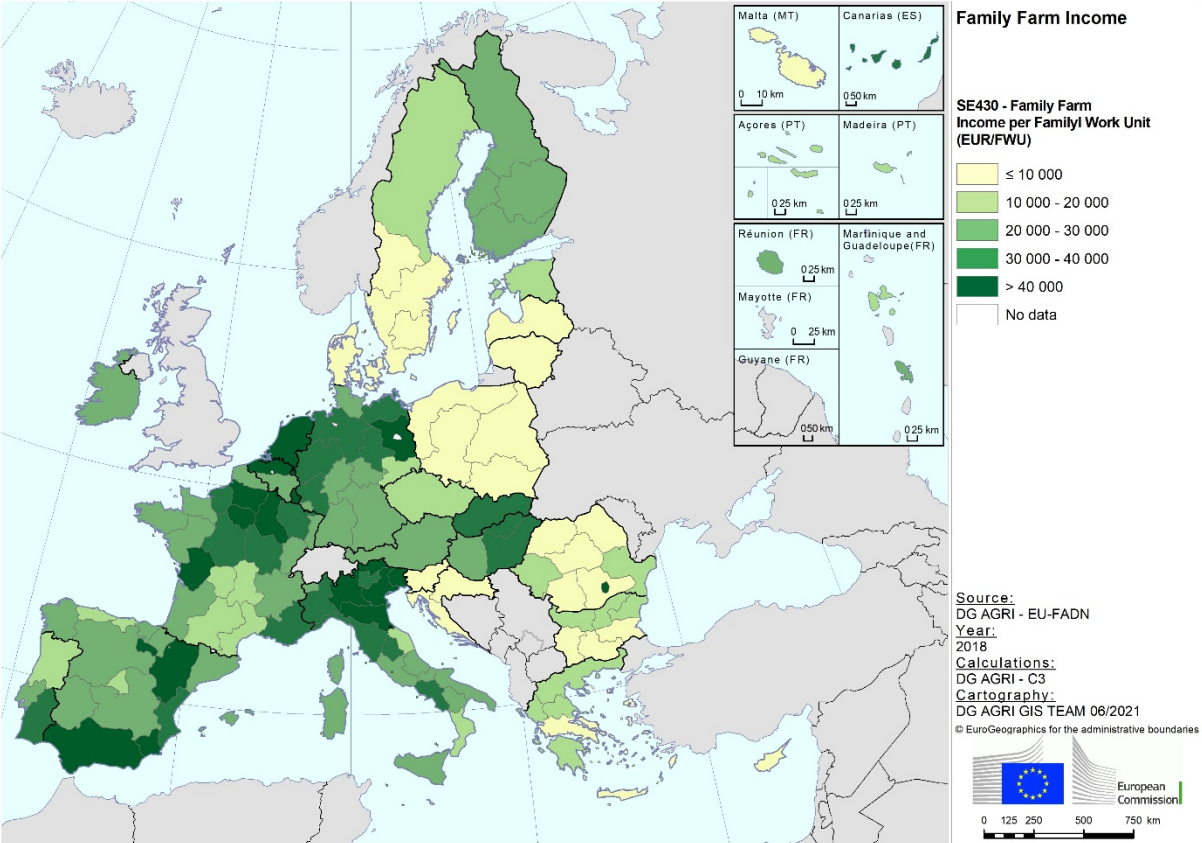
Map 1.1: Farm net value added per AWU by FADN region in 2018



Looking at the FFI per FWU (Map 1.2), the lowest values are in Romania, Poland, Slovenia and Croatia. The South-western region of Romania and the Małopolska and Pogórze region of Poland have particularly low levels of FFI per FWU (below EUR 5 000). However, Romania is also at the top of the scale, in the region of the capital (EUR 69 200). Denmark lost its first position due to the high average value of external factors. The difference between the lowest and highest FFI per FWU values is even bigger (20 fold) than in the case of FNVA per AWU.

⁷ All the regions presented in this report are FADN regions.

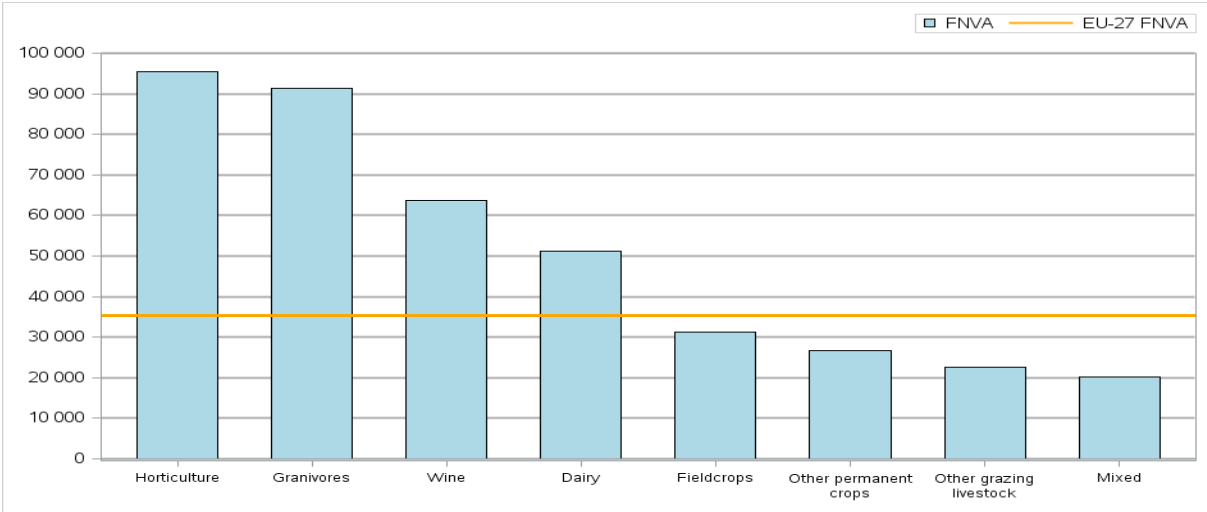
Map 1.2: Family farm income per Family work unit by FADN region in 2018



Results by type of farming

Figure 1.7 shows significant differences in **average FNVA** across different types of farming. In particular, average farm income was approximately five times higher in the horticulture sector than in the mixed crops and livestock sectors. One explanation for the relatively low income of mixed farms is that many of them are very small. The high income levels of farms specialised in horticulture can be explained by the higher added-value production in this sector.

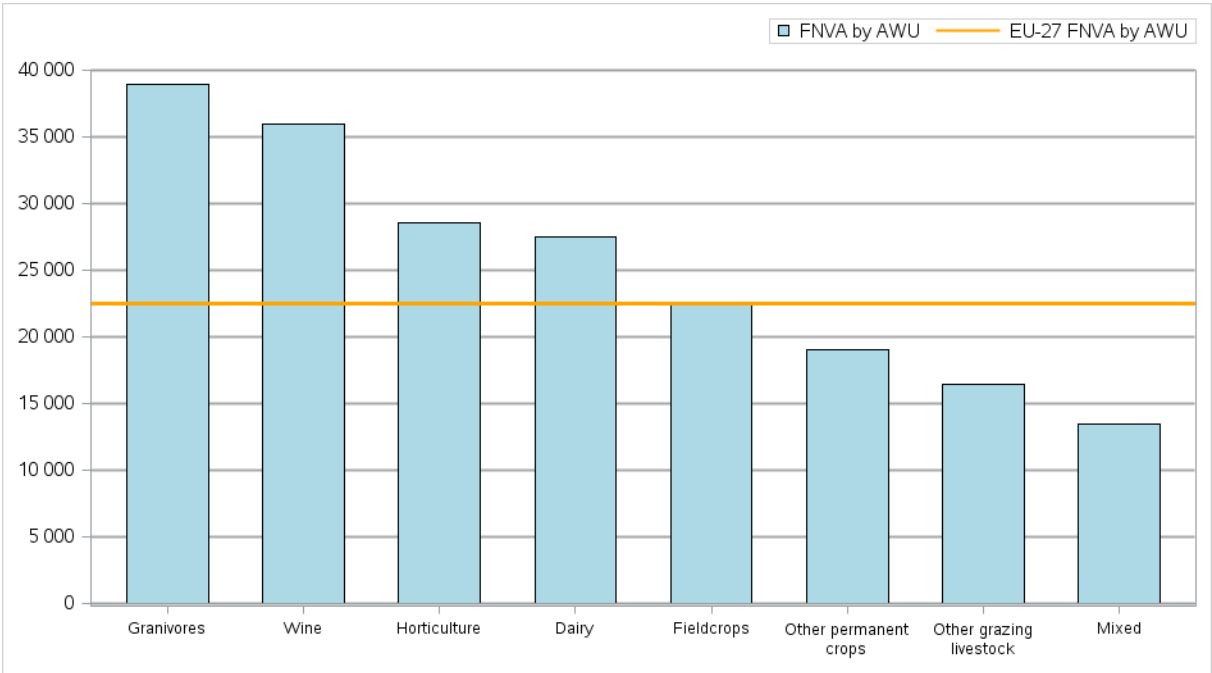
Figure 1.7: Farm net value added per farm by type of farming in the EU in 2018 (average per farm in EUR)



When measured by **FNVA per AWU**, the general picture of income distribution by type of farming changes. Farms specialised in horticulture lose their first position, mainly due to the labour intensity associated with this type of farming. Farms specialising in pigs and poultry (granivores) had the highest FNVA per AWU in 2018 (EUR 38 900), and most of these farms are large in terms of economic size. Farms engaged in viticulture had the second-highest FNVA per AWU out of all types of farming (EUR 35 900).

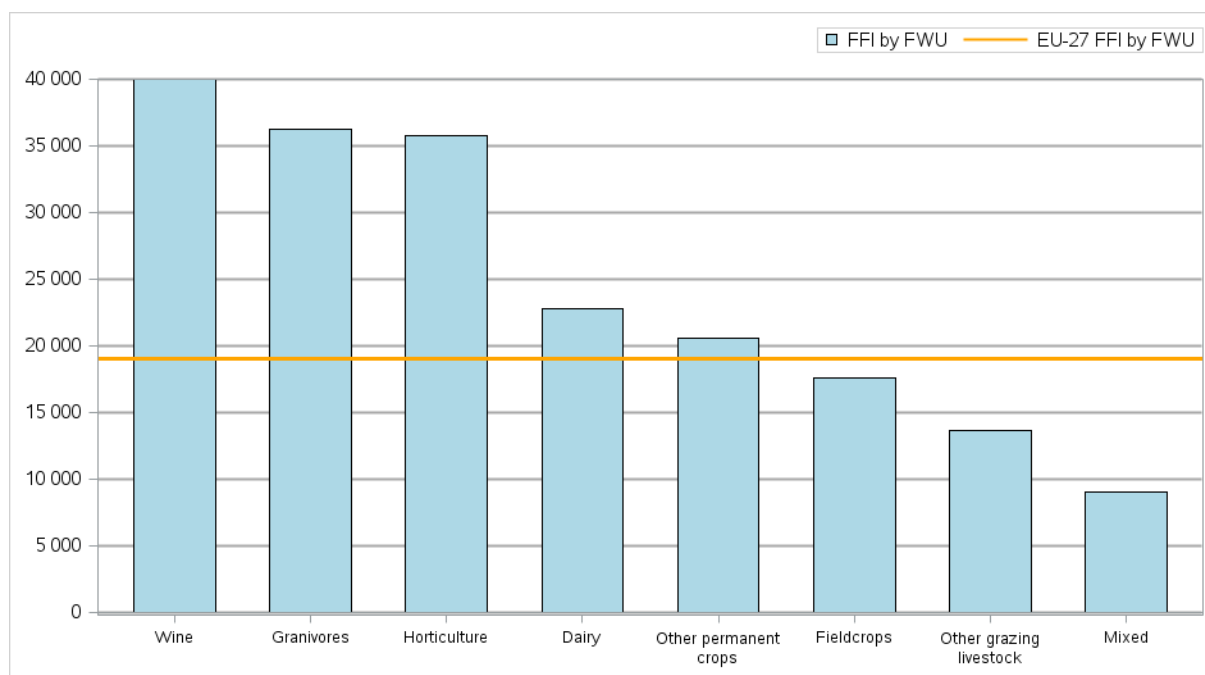
The FNVA per AWU of farms specialising in granivores, wine, horticulture and dairy was above the EU average (EUR 22 500) in 2018. It remained below average for permanent-crop farms (other than wine), farms specialising in grazing livestock (other than dairy) and mixed farms. The latter two types of farm had the lowest FNVA per AWU (EUR 16 400 and EUR 13 500 respectively).

Figure 1.8: Farm net value added per AWU by type of farming in the EU in 2018
(in EUR per AWU)



The Family farm income per FWU slightly alters the picture of relative productivity differences across the various types of farming. Holdings specialised in wine were at the top of the ranking, followed by farms specialised in granivores and horticulture. Other permanent-crop farms performed better than farms specialising in fieldcrops in terms of remunerating family labour.

Figure 1.9: Family farm income per FWU by type of farming in the EU in 2018
(in EUR per FWU)



Results by organisational form

From an organisational point of view, holdings in the FADN are divided into four groups from the accounting year 2014. A description of these four groups follows below.

(1) *Family farms* — These are farms where the holding uses the labour and capital of the holder/manager and his/her family, and they are beneficiaries of the economic activity. This category represents 87 % of the farms covered by the FADN survey and it is predominant in all the Member States (except in the Netherlands).

(2) *Partnership* — In these farms, the production factors are provided by several partners, at least some of whom participate in the work of the farm as unpaid labour. The benefits go to the partnership. This category includes 7 % of the EU farms. Partnerships are the predominant organisational form in the Netherlands (61 %) and have a high share in France (44 %).

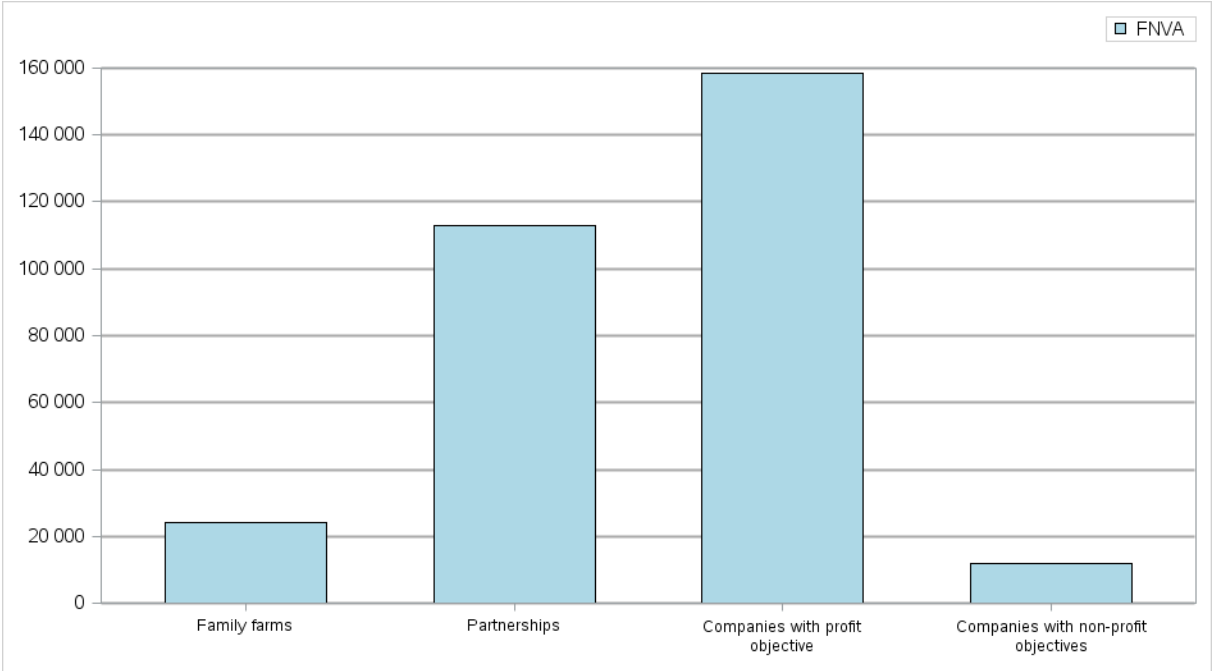
(3) *Company with profit objective* — This is where the benefits are used to remunerate shareholders with dividends/profits. The holding is owned by the company. This category includes 4 % of the EU farms. In Slovakia and Estonia, more than 30 % of farms are farms with profit objective.

(4) *Company with non-profit objective* — This is where the benefits are used primarily to maintain employment or to promote a similar social objective. The holding is owned by the company. In the farming population covered by the FADN survey, this type represents only 2.4 % of farms and it is concentrated in Romania (98 % of the EU companies with non-profit objective).

Figure 1.10 shows that, on average, non-family farms generate higher FNVA than family farms (this can be observed in all Member States and all types of farming). In particular, the

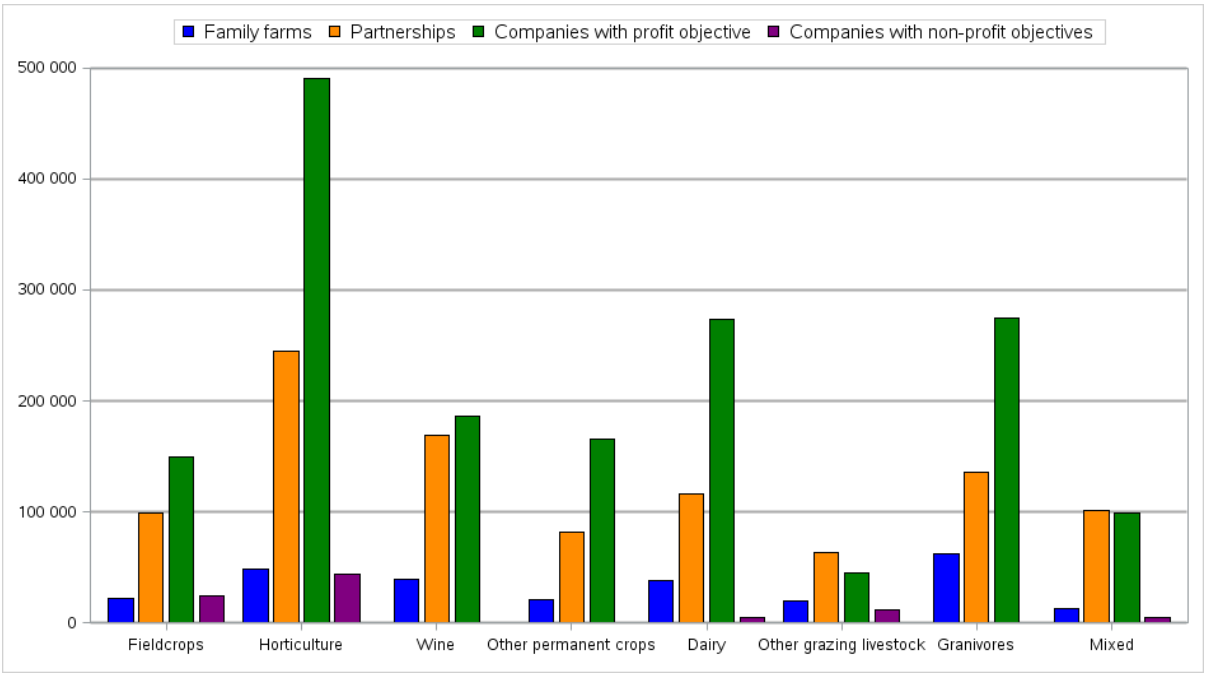
income generated by companies with profit objectives is almost 7 times bigger than the income of family farms. This disparity reflects differences in farm size.

Figure 1.10: Farm net value added per farm by organisational form in the EU in 2018
(average per farm in EUR)



On average, family farms had lower FNVA levels than partnerships and companies with profit objective in the Europe Union, all Member States and types of farming.

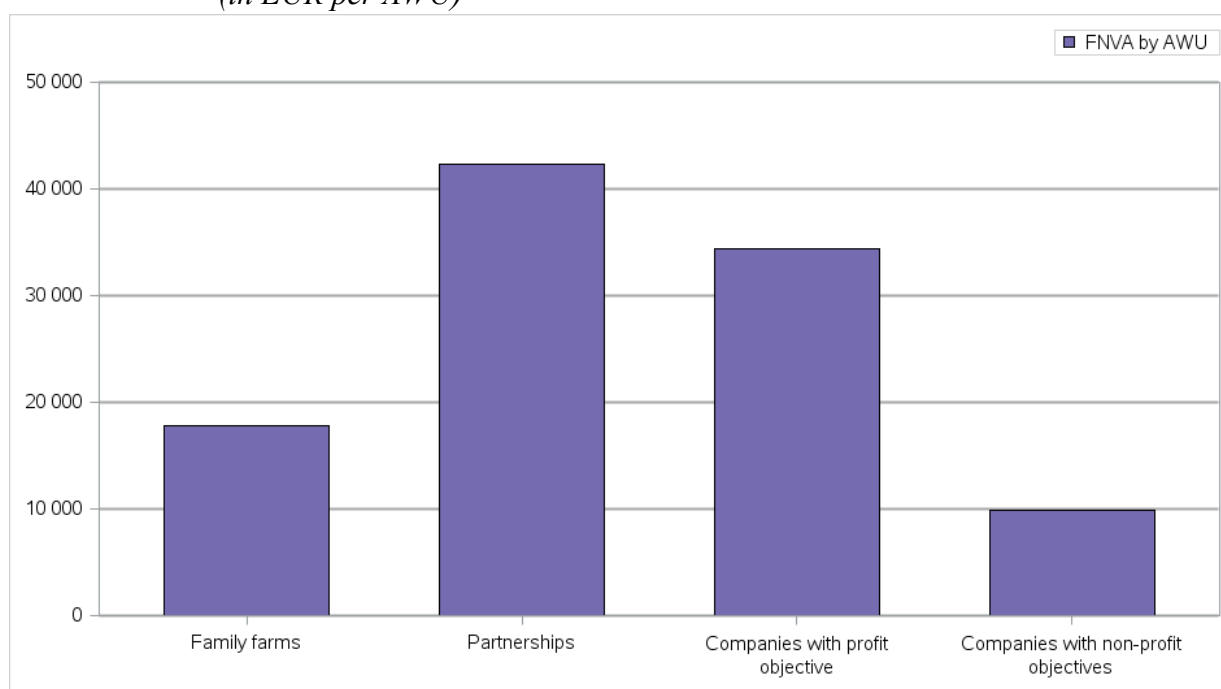
Figure 1.11: Farm net value added per farm by organisational form and by type of farming in the EU in 2018
(average per farm in EUR)



When FNVA is calculated by AWU, the income of non-family farms still tends to be higher than that of family farms. However, i

n this case partnership farms show higher values than the company with profit objectives (i.e. legal entities).

Figure 1.12: Farm net value added per AWU by organisational form of the holding in the EU in 2018
(in EUR per AWU)



Results by the sex of the holder-managers

The average income per AWU shows big differences according to the social characteristics of the managers who run the holdings.

Farms run by women⁸ have on average a lower FNVA/AWU than farms run by men (- 38 %), with the exception of Austria and Latvia. It has to be taken into account that differences depend also on the type of farming and the economic size. According to Eurostat data, the share of farms run by women in EU is particularly high in poultry (38% in 2016).⁹ Women run on average smaller farms, both in physical terms and in standard output.

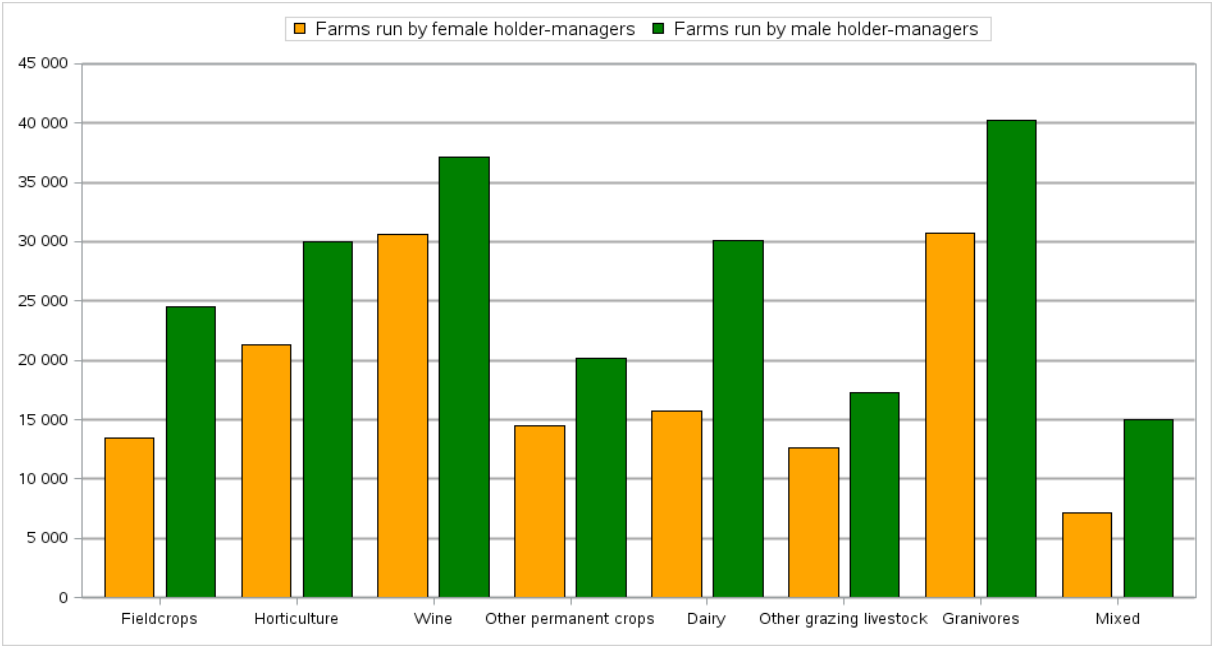
At EU level, the income gap by gender concerns all types of farming and farm sizes. The biggest gap is observed in dairy and fieldcrop farms, where farms run by men have almost twice the FNVA/AWU of farms run by women.

At national level, there are cases where farms run by women have higher income than men, in some types of farming or size classes, in particular in granivores, horticulture and mixed farms.

⁸ Farms run by women are farms where the majority of holder-managers are women (or the majority of managers, when the holder-managers are missing).

⁹ Online data code: EF_M_FARMANG.

Figure 1.13: Farm net value added per AWU by type of farming and sex of the holder-managers in the EU in 2018 (in EUR per AWU)

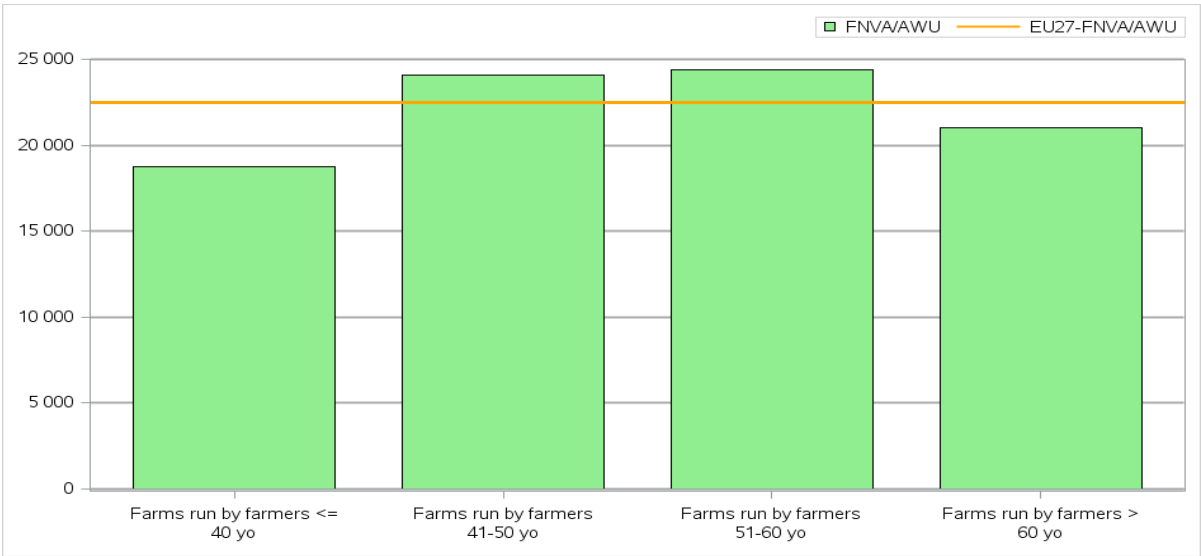


Results by the age of the holder-managers

At EU level, farms run by 40-year old managers or younger have the lowest income on average, followed by farms run by managers above 60. However, when analysing data at national level, it appears that **in all MS (except for Bulgaria, Hungary, Lithuania and Poland), the lowest income is registered in farms run by managers above 60.** In nine MS (Cyprus, Czechia, Germany, Denmark, Finland, France, Croatia, the Netherlands and Slovakia) farms run by young farmers have the highest income.

The discrepancy between the EU overall picture and the national results is due to the fact that the majority of the EU young farmers are in countries with lower than average income levels (47% of the young farmers represented in the FADN are located in Poland and Romania). Therefore, this has a strong influence on the EU average results.

Figure 1.14: Farm net value added per AWU by the age of the holder-managers in the EU in 2018 (average per AWU in EUR)



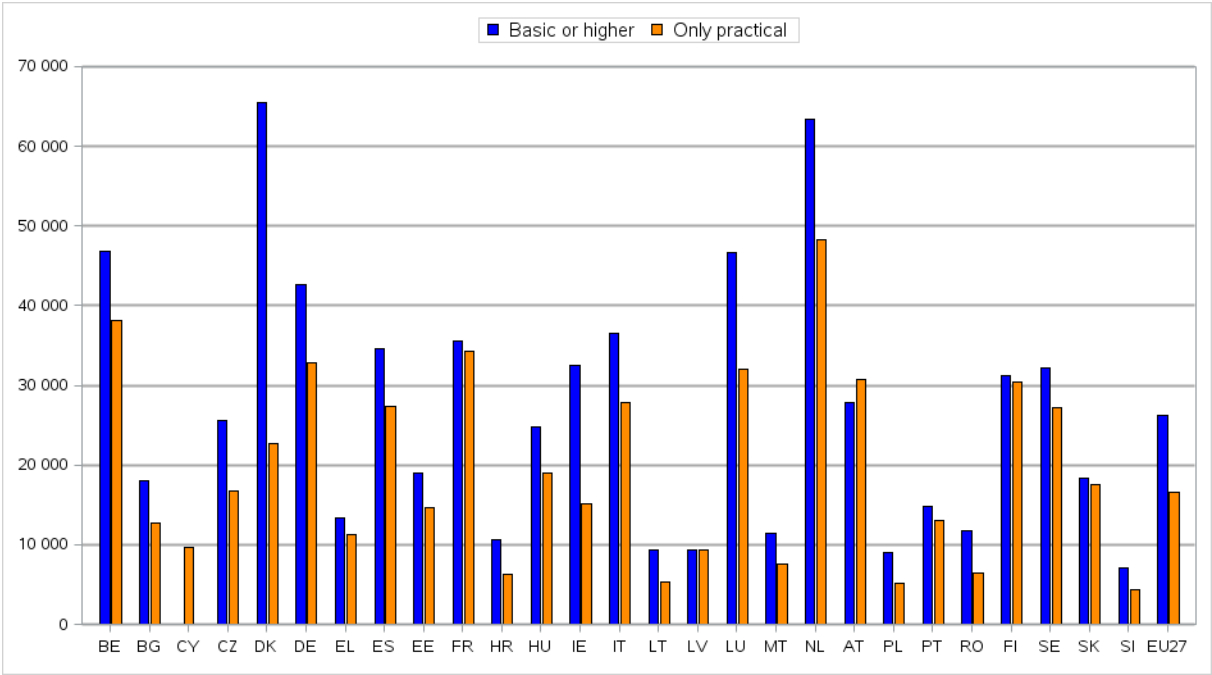
Results by the level of agricultural training of the managers

In more than half of the EU farms (52 %), all managers have at least a basic agricultural training. In the other (almost) half of the EU farms (47 %), managers only have practical agricultural experience.

At EU level, farms with an intermediate situation (meaning that some managers have only practical experience whereas other managers have at least a basic agricultural training) are less than 1 % and are observed only in some Member States. By consequence, they are excluded from this analysis.

Farms run by managers with basic or full agricultural training have higher FNVA per AWU than farms whose managers have only practical agricultural experience (+59 %), in all Member States (with the exception of Austria and Latvia) and for all types of farming and size classes at EU level. However, at national level there are some exceptions by type of farming and the picture is not conclusive by size classes.

Figure 1.15: Farm net value added per AWU by level of training of farm managers by Member State in 2018
(average per AWU in EUR)



1.2. Distribution of income across farms

Agricultural income varies considerably across farms as depicted by the ‘box-plots’¹⁰ in Figure 1.16. The general pattern shows that a high proportion of farms have a relatively low income level per worker, while a small proportion of holdings have a very high income level per worker. The average FNVA per AWU in the EU stood at around EUR 22 500 in 2018.

¹⁰ In the box plots, the inter-quartile range (between 25 % and 75 % of farms) is indicated by the yellow box; the limits of 5 % of farms and 95 % of farms correspond to the end of lines (whiskers); the median (50 % of farms) is the line crossing the yellow boxes, and the mean is shown by the ‘+’ sign.

However, while 5 % of farms had an FNVA per AWU of more than EUR 70 000, 50 % had an FNVA per AWU below EUR 10 000.

The Netherlands and Denmark are the Member States with the highest average FNVA per AWU and at the same time, the largest gap between the lower and the upper 5% of farms.

The lowest gaps are in the Member States that joined the EU in 2004 or after, with few exceptions, such as Hungary, Slovakia and Estonia.

Figure 1.16: Distribution of FNVA per AWU by Member State in 2018
(in EUR/AWU)

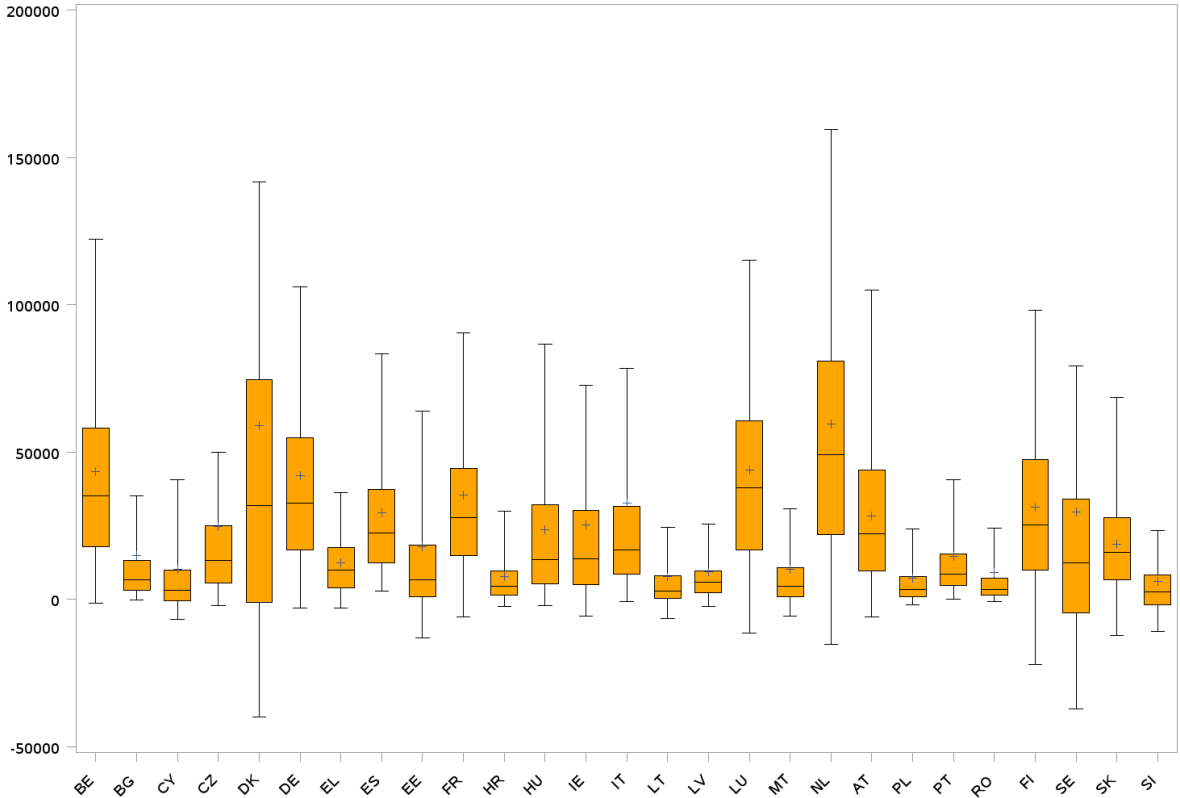


Figure 1.17 shows developments in income distribution for the EU as a whole in the period 2007-2018. Note that 2007 was an exceptionally good agricultural year. From 2007 to 2009, the average level of income decreased due to the economic crisis. The following years show an increase in average FNVA per AWU and medians.

The impact of the sizeable drop in agricultural output prices is visible in the 2009 data (see Figure 1.17), and explains the significant narrowing of the distribution of income per AWU in the European farms. After 2009, an upward tendency can be seen, leading once again to a wider distribution of average income per worker in 2010, 2011 and in 2012. In 2013, the average income per worker again fell (-3.5 %), with the top whisker of the box-plot showing that the top 5 % of farms recorded less income (on average per farm) than in 2012. In 2014 and 2015, income inequality has not changed significantly in the EU. After the big increase in 2017 (+10.1 % versus 2016), the average FNVA per AWU stabilised in 2018.

Figure 1.17: Distribution of FNVA per AWU in the EU by year
(in EUR/AWU)

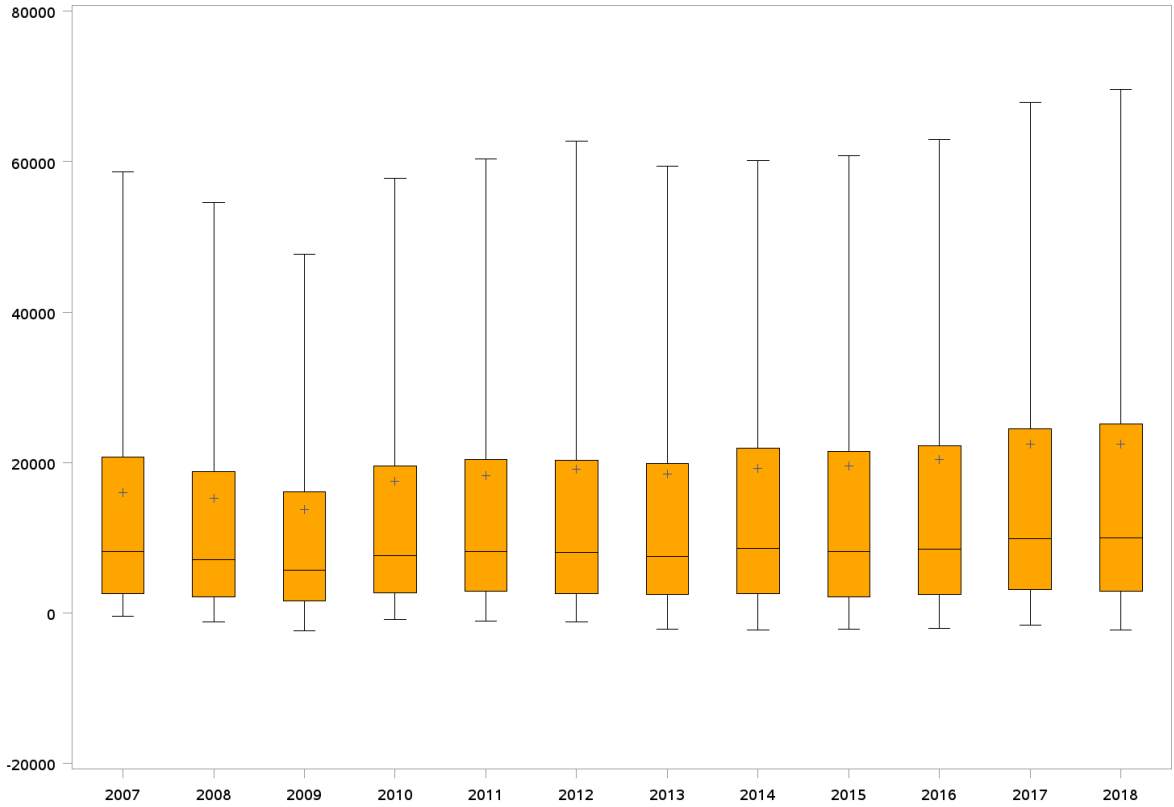
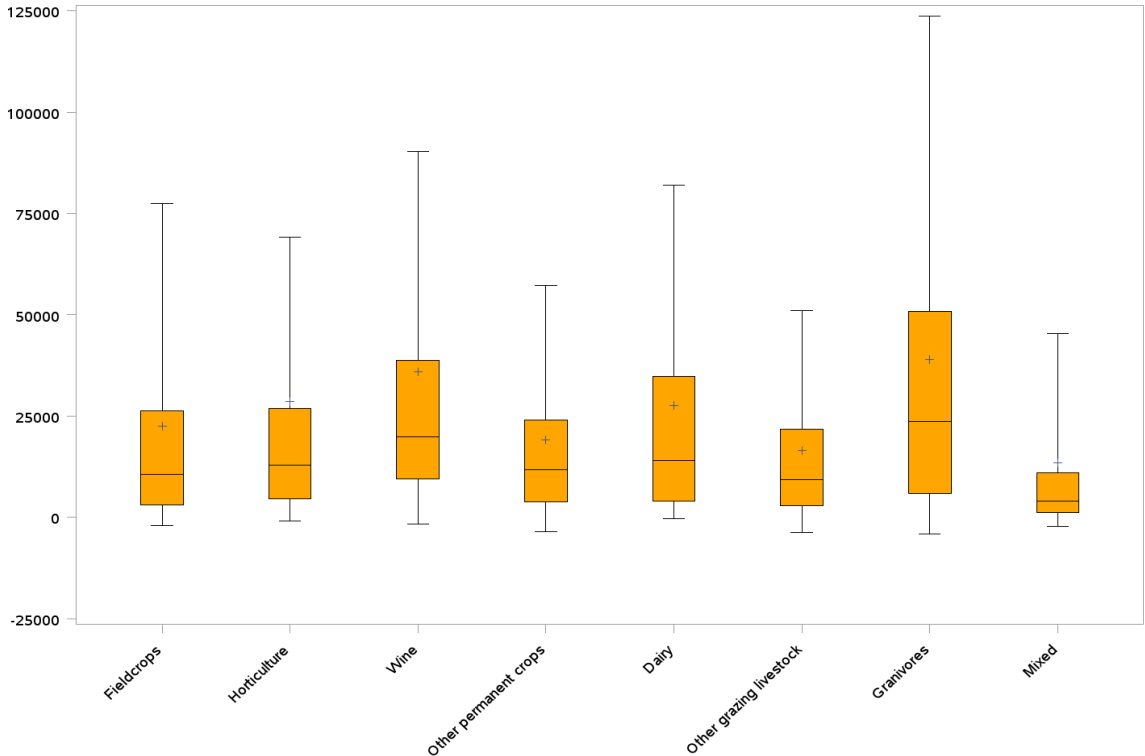


Figure 1.18 shows the distribution of FNVA/AWU by type of farm in the EU in 2018. The income distribution is ‘asymmetrical’ in each of the eight sectors represented in the FADN, i.e. a small proportion of farms have very high income and a large proportion of farms have a low income¹¹. The extent of these differences varies greatly across the different types of farming. Farms specialised in granivores have the most pronounced differences between their mean and median values of FNVA/AWU. The distribution of FNVA/AWU is also highly uneven for wine and dairy farms. The distribution of income is skewed for horticultural and mixed farms, where the best-performing 25 % of farms have a larger impact on the average than the remaining 75 % (the mean value is outside the box).

¹¹ Within a given sample, a single outlier will affect the average but will have no impact on the median.

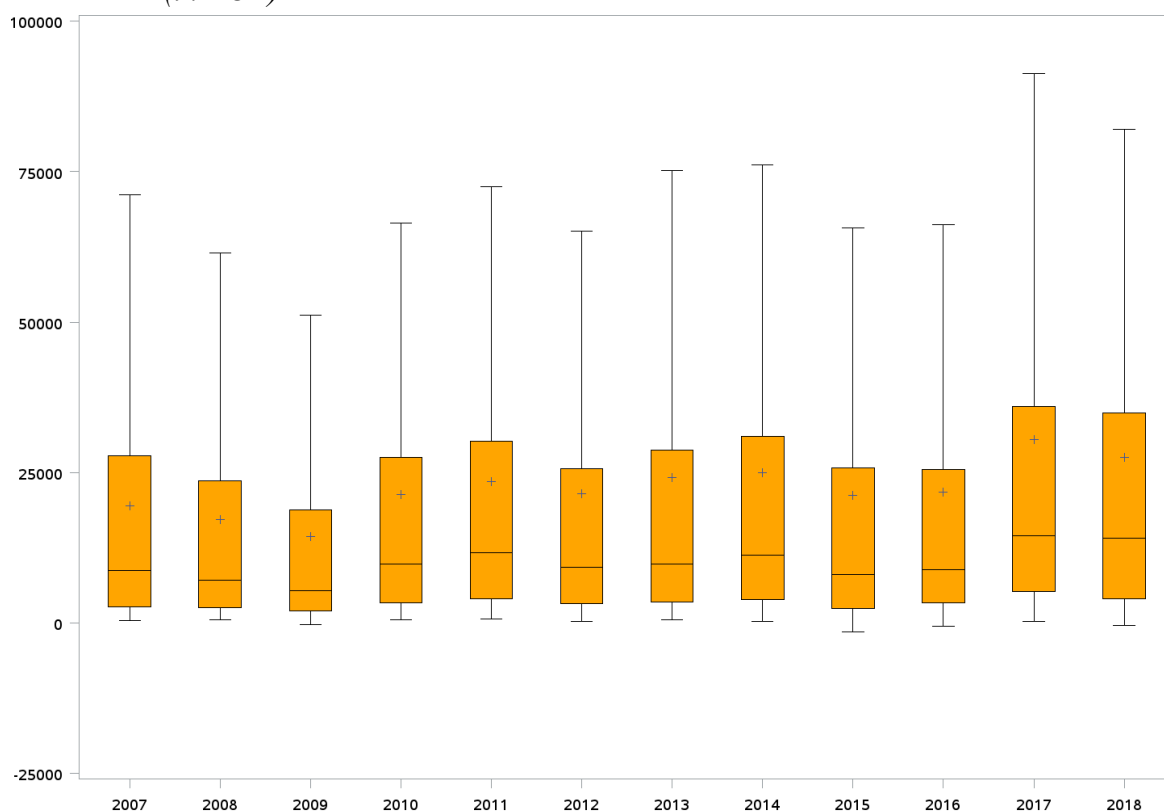
Figure 1.18: Distribution of FNVA per AWU by type of farming in the EU in 2018
(average in EUR/AWU)



The trend in the distribution of FNVA/AWU over time varies from sector to sector. Hereafter, the analysis for dairy farms is provided as an example.

Figure 1.19 shows the distribution of FNVA/AWU for specialised **dairy** farms. In the period from 2007 to 2018, dairy farms experienced three notable milk price drops: in 2009, in 2012 and from 2014 till mid-2016 which led to squeezing of incomes per worker. All of these periods were followed by a milk price recovery and thus also incomes recovery. In the 2007-2009 period, income discrepancies were accompanied by a significant decrease in mean and median levels. These developments were predominantly driven by increasing input prices in 2008 and the 2009 decrease in milk prices. From 2010 to 2011, FNVA/AWU increased, and mean income per worker exceeded its 2007 level due to a significant recovery in prices and output during this period. In 2013, the income gap between the top and bottom 5% of farms increased again, and even the mean value increased, again reaching the 2011 level. 2014 showed roughly the same picture in terms of income as 2013, although the top 5% of farms recorded a slightly lower average farm income than in 2011. The median income value was lower in 2015 than in 2014 and the mean value also decreased in 2015. This was the result of the milk price deterioration following the global milk production expansion in 2014 and worsening of global import demand, mainly from China and Russia. This was the longest lasting crisis recently which ended up in the middle of 2016, when incomes were still pressed. The incomes of dairy farms follow the dynamics of a global milk market which changed again in 2017 due to mainly decline in volume of milk production and growing demands for dairy fats, mainly butter and cheese. As a results, dairy farmers saw a steady increase of milk price by +20% which lead to a remarkable improvements in milk margins and thus incomes as well. Incomes by worker were by far the highest in 2017. In 2018, the situation on the global milk market was more stable, compared to large demand growth in the previous period. Therefore, also incomes slightly declined year on year, however they were still at the higher level than before 2017.

Figure 1.19: Distribution of FNVA/AWU of dairy farms in the EU by year
(in EUR)



1.3. Distribution of income in labour force

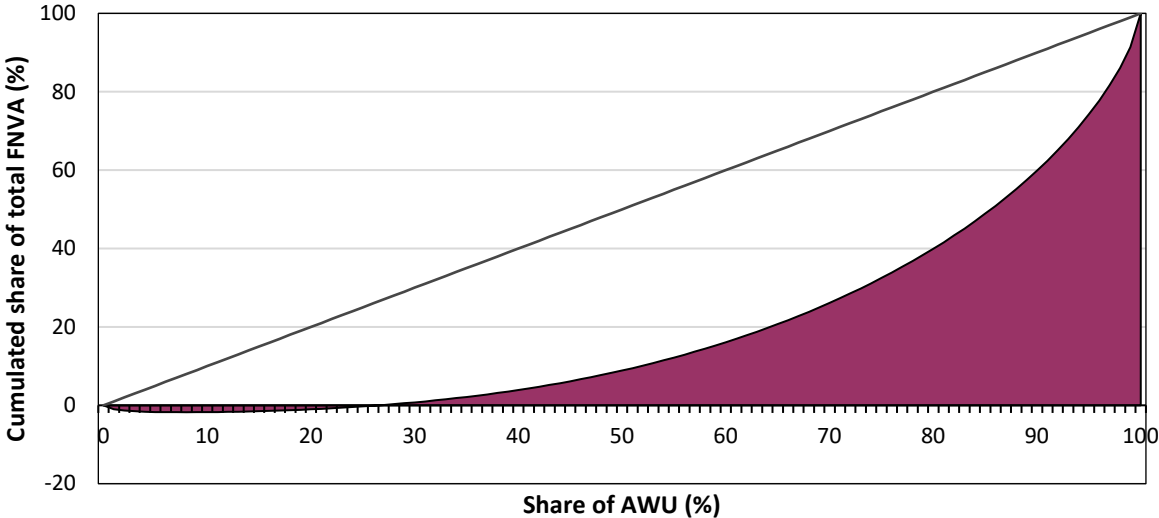
Figure 1.20 shows the distribution of income (FNVA) in the labour force (AWU) in the EU in 2018 using a Lorenz curve¹². In 2018, almost 8 % of the farm labour force had a negative proportion of income.

The Lorenz curve shows that income is unevenly distributed in the labour force¹³: 80 % of the labour force generated approximately 40 % of the farm income recorded in the FADN. The remaining 20 % of the labour force therefore generated approximately 60 % of FNVA.

¹² In drawing the Lorenz curve, the income estimates are sorted in ascending order. Each observation is weighted according to the weighting factor of the farm and the number of workers employed.

¹³ If income were equally distributed among the labour force, the Lorenz curve would become a straight line linking the origin to the top right corner of the figure.

Figure 1.20: Lorenz curve of the distribution of FNVA/AWU in the EU in 2018



An alternative measure of the statistical distribution of income is the Gini index¹⁴, which can be between 0 and 1. A coefficient of 0 expresses perfect equality of income in the labour force, while a coefficient of 1 reflects maximum concentration or inequality (with one work unit capturing all the income in a sector).

Table 1.1 shows the development of the coefficient over time. The highest level of disparities was registered in 2009 (0.71). After a decreasing trend in the recent year, the coefficient has increased in 2018 (0.66).

Table 1.1: Development of the Gini coefficient of FNVA per AWU

2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
0.65	0.68	0.71	0.66	0.65	0.67	0.68	0.67	0.68	0.68	0.65	0.66

1.4. Income components

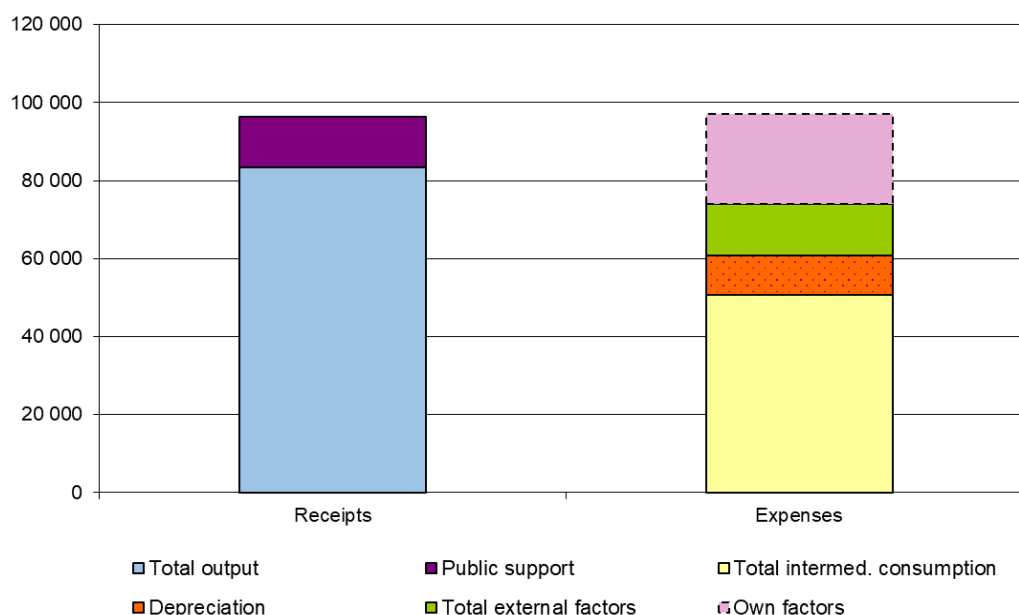
Figure 1.21 shows the composition of farm receipts and expenses in 2018. In our calculation, total receipts represent the income received from the total output and from the balance of subsidies (current operations and investments) and taxes. When calculating expenses, the estimated remuneration of own production factors are also taken into account, which means that by comparing farm receipts with expenses (including the cost of own resources), we can arrive at the profit made by farms on top of average alternative use of farm resources. In the previous chapters, the cost of own production factors was not taken into account.

On the income side, average receipts per farm in the EU stood at EUR 96 300, of which total output represented EUR 83 300 (86 %) and subsidies¹⁵ EUR 13 000 (14 %).

¹⁴ The Gini coefficient is usually 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.

¹⁵ Subsidies include the sum of net current and investment subsidies. They include EU coupled and decoupled payments, areas of natural and other constraints (ANC) payments, rural development payments and national

Figure 1.21: Income components per farm in the EU in 2018
(average per farm in EUR)



These aggregated figures hide large differences between the Member States, both in absolute and relative terms: the highest average farm receipt was in Slovakia (EUR 748 000), around 30 times bigger than in Romania (EUR 25 100). In relative terms, subsidies accounted for more than a quarter of the average farm receipts in the Finland (32 %) and Lithuania (27 %) whereas in the Netherlands they were below 3 %.

On the cost side, average farm expenses totalled EUR 73 900 in 2018 but, taking into account also the estimated remuneration of own factors, expenses slightly exceeded receipts and totalled EUR 97 100.

Intermediate consumption¹⁶ represented 52 % of total expenses (calculated including own factors), ranging from 42 % Greece in to 63% in Hungary. Depreciation and expenses for external factors¹⁷ accounted for approximately 10-13 % respectively. The remaining 24 % was accounted for by the opportunity costs of own factors (family labour, own land and own capital).

Results by type of farming

In 2018, farms specialised in horticulture, viticulture, other permanent crops and granivores on average showed a positive balance of receipts and expenses, as shown in Figure 1.22. The expenses and receipts of dairy farms were approximately equal. Farms specialised in granivores had by far the highest average output of all farm types in the EU (EUR 387 400).

aid. 'Net' means the balance of current subsidies and taxes plus the balance of subsidies and taxes on investment.

¹⁶ Intermediate consumption includes specific costs (including inputs produced on the holding) and overheads arising from production in the accounting year. Specific costs can include seeds, seedlings, fertilisers, crop protection products, feed for grazing stock and granivores, etc.

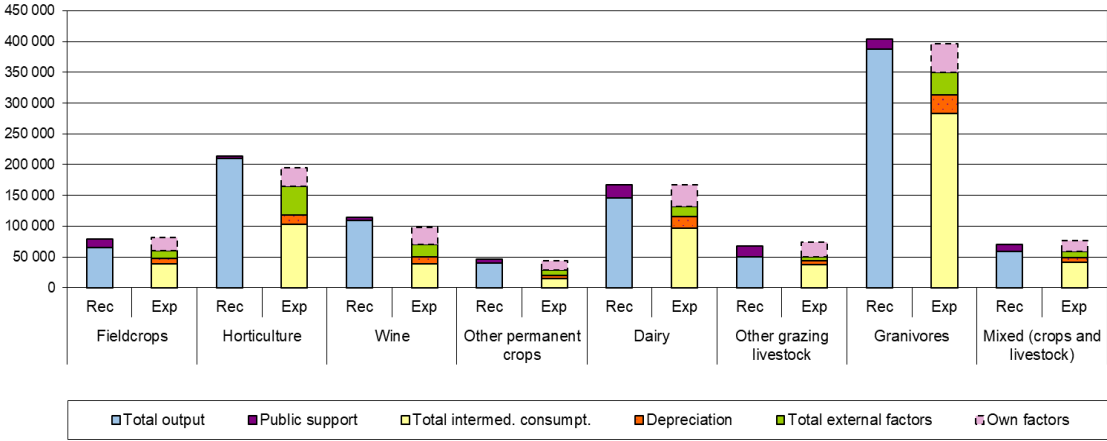
¹⁷ Expenses for external factors include wages, rent and interest paid.

On the other end of the spectrum, farms specialised in permanent crops other than wine generated the lowest output (EUR 40 400).

In terms of average subsidies per holding, dairy farms benefited most from subsidies¹⁸ (EUR 20 500 per farm), followed by other grazing-livestock farms and farms specialised in granivores (EUR 17 200 and EUR 17 000 per farm, respectively). On the other hand, the horticulture sector received the lowest amount of subsidies on average (EUR 3 700 per farm). It is also noteworthy that horticultural farms had the second-highest receipts after farms specialised in granivores. Horticultural farms might therefore be less reliant on public support.

It should also be underlined that an average field-crop farm is much larger than a horticultural farm. The subsidies mentioned above were calculated per farm and not per hectare.

Figure 1.22: Income components per farm by type of farming in the EU in 2018
(average per farm in EUR)



Note: Receipts (Rec), Expenses (Exp)

Cost structure varies markedly between farming sectors, reflecting differences in farm size, technological processes and input prices.

Granivore farms (typically large in economic size, with technological processes involving a high turnover of animals) had the highest costs for intermediate consumption in 2018. This is due to feed costs (driven by higher prices for feeding stuffs)¹⁹, both in absolute and in relative terms (EUR 186 500 per farm annually or almost half of the total expenses). On the other hand, intermediate consumption on average totalled EUR 14 800 (or less than 34 % of total costs) for other permanent-crop farms.

Looking at the costs of depreciation, farms specialised in field-crops, other permanent crops and wine spent proportionally the most (11.4 % of total expenses), while pig and poultry farms (granivores) spent the least (7.5 %).

¹⁸ In total, subsidies include both current subsidies (arising from the current activity of the accounting year) and investment subsidies. The latter also includes premiums for the cessation of dairy farming.

¹⁹ Eurostat online data code: aact_eaa01

The proportion of external factors (wages, rent and interest paid) of total costs was particularly high in the horticulture and wine sectors (above 20 %), mainly due to the high cost of external labour. On the other hand, grazing-livestock farms had the lowest proportion of expenditure on external factors (7.8 %). In absolute terms, horticulture holdings had the highest external factor costs (EUR 47 000), while farms specialised in other grazing livestock had the lowest (less than EUR 5 700). Finally, the estimated costs of own production factors (family labour, own land and own capital) as a proportion of total costs were highest for other permanent crops farms (36 %) and lowest for granivores farms (11.7 %).

1.5. Return on assets

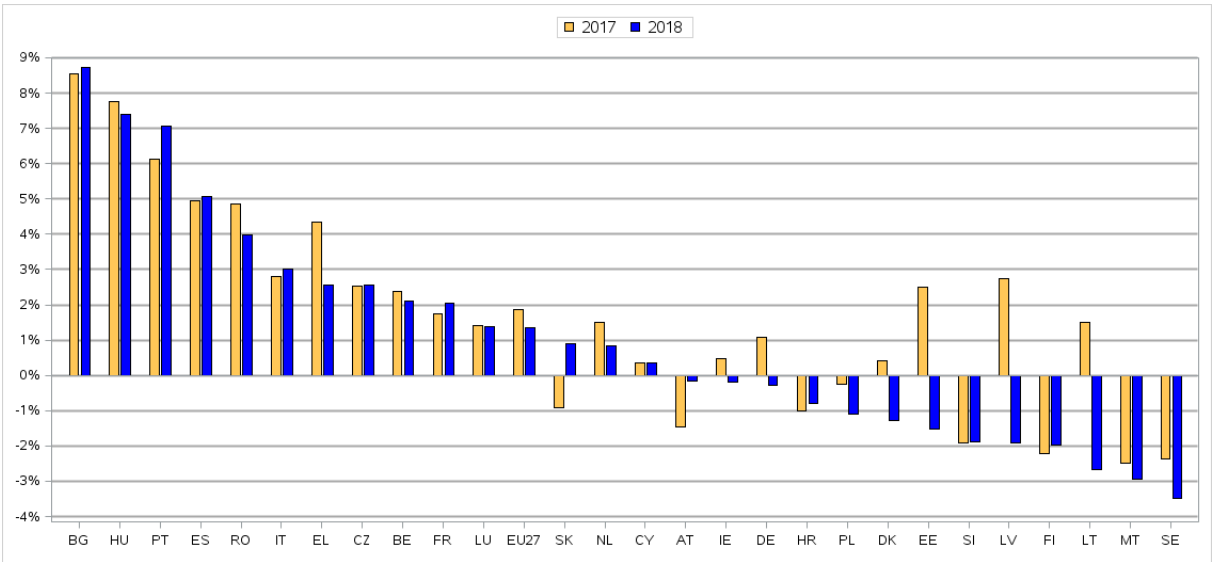
Return on assets (ROA) measures the effectiveness of a company’s assets in generating income. It is defined as the ratio of net income over total assets, where the net income is defined as the sum of FNVA and investment subsidies minus wage costs, rent paid, interests paid (farm net income) and the opportunity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

$$ROA = \frac{FNI - \text{Opportunity costs of family labour}}{\text{Total assets}}$$

Results by Member State

The ROA of an average farm in the EU in 2018 was 1.3 % (1.9 % in 2017). Holdings in Bulgaria (8.7 % ROA), Hungary (7.4 % ROA) and Portugal (7.1 % ROA) had the highest ROAs. In 2018, 13 Member States registered a negative ROA, with the lowest value recorded in Sweden (-3.5 %). (See Annex 8 for more details).

Figure 1.23: Rate of return on assets by Member State in 2017 and 2018
(average per farm in %)

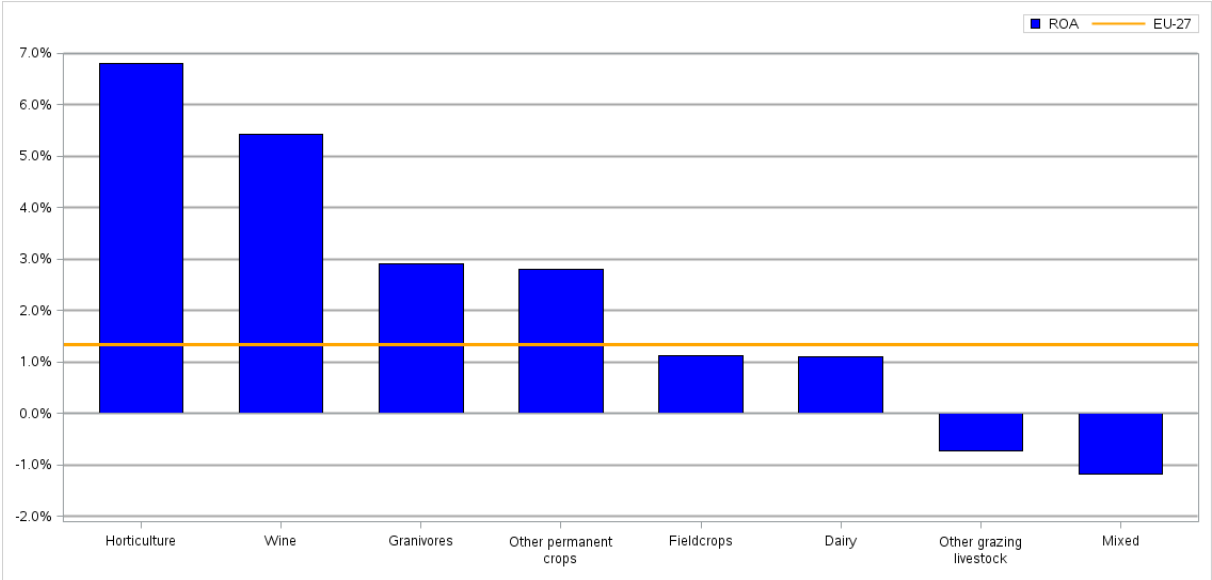


Results by type of farming

Farms specialised in horticulture recorded the highest ROA in 2018 (6.8 %), which shows that they were the most efficient at generating income from their assets, followed by farms specialised in wine (5.4 %). Farms specialised in other grazing livestock and mixed crop and

livestock farms had a negative ROA, which shows that they invested substantial capital into their production while simultaneously losing money (i.e. receiving negative income) (see Figure 1.24).

Figure 1.24: ROA by type of farming in the EU in 2018
(average per farm in EUR)



2. IMPORTANCE OF DIRECT PAYMENTS FOR FARM INCOME

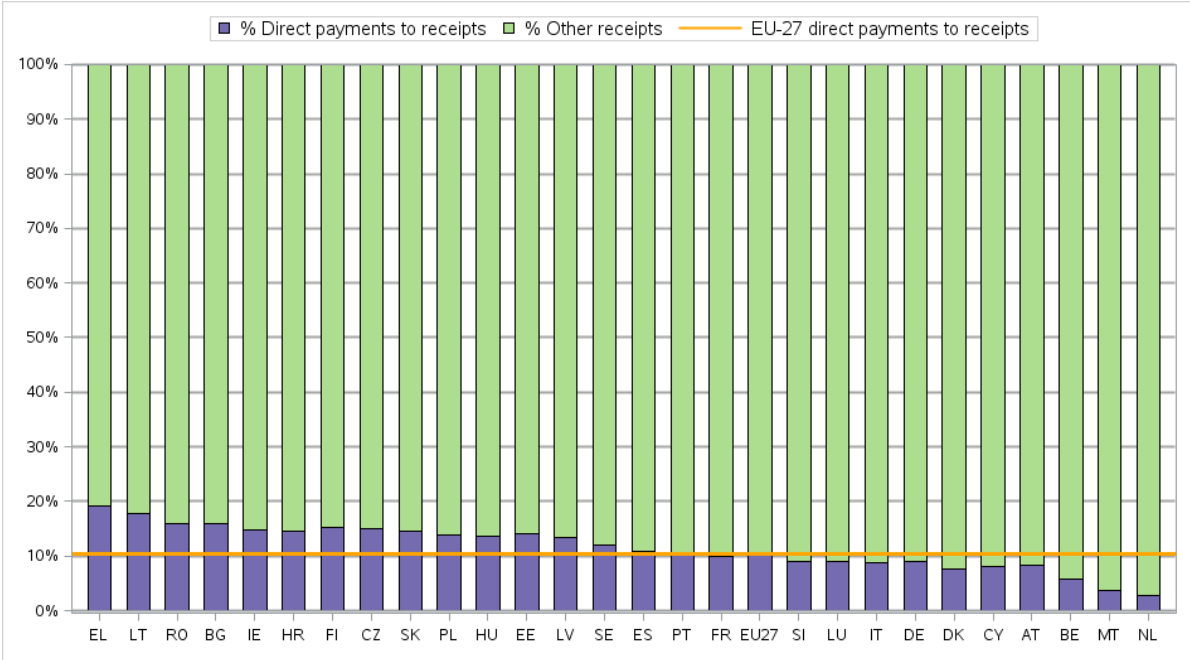
This chapter analyses the impact of direct payments on the income of European farmers. Two economic indicators are used to express income: farm receipts and farm net value added (FNVA). In our calculations, direct payments include decoupled payments and total subsidies for operations linked to the production of crops and livestock. Direct payments do not include rural development subsidies. Farm receipts include the total output and the balance of subsidies and taxes arising from the current activity of the farm in the accounting year.

2.1. Proportion of direct payments to total receipts

Results by Member State

The average amount of direct payments received per holding in 2018 was EUR 10 000. The proportion of direct payments to total receipts (output plus subsidies arising from current production in the accounting year) in the EU stood at 10 %. This proportion varies among Member States (Figure 2.1). The total receipts of Greek and Lithuanian farms are proportionately the most dependent on subsidies (which represent 18-19 % of these farms’ total receipts). Direct payments account for the lowest proportion of total receipts in the Netherlands (3 %), where sectors with a lower proportion of direct payments to total receipts, such as horticulture (higher value-added crops) and pig and poultry production (more intensive livestock farming), are a significant part of total agricultural output.

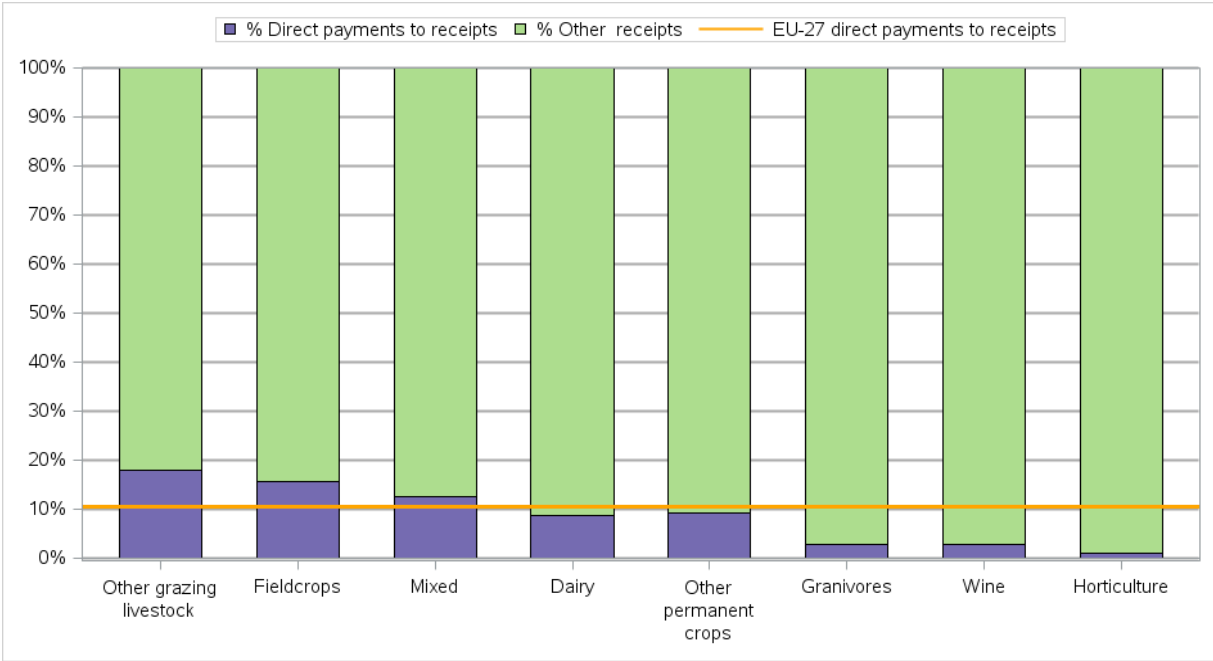
Figure 2.1: Proportion of direct payments in relation to total receipts by Member State in 2018
(average per farm in EUR)



Results by type of farming

As discussed above, the proportion of direct payments to farm receipts varies markedly across types of farming, mainly reflecting the different approaches taken to different types of farming in the CAP. In addition, the CAP was historically characterised by asymmetrical direct support across sectors — a feature which has gradually been reduced following the 2003 reform. Figure 2.2 shows that direct payments account for the highest proportion of total receipts in grazing-livestock farms (other than dairy cows) (18 %) and fieldcrop farms (16 %). On the other hand, they represent only a very limited share of total receipts in the wine and horticulture sectors (3 % and 1 %, respectively).

Figure 2.2: Proportion of direct payments in relation to total receipts by type of farming in 2018
(average per farm in EUR)



2.2. Proportion of direct payments to FNVA

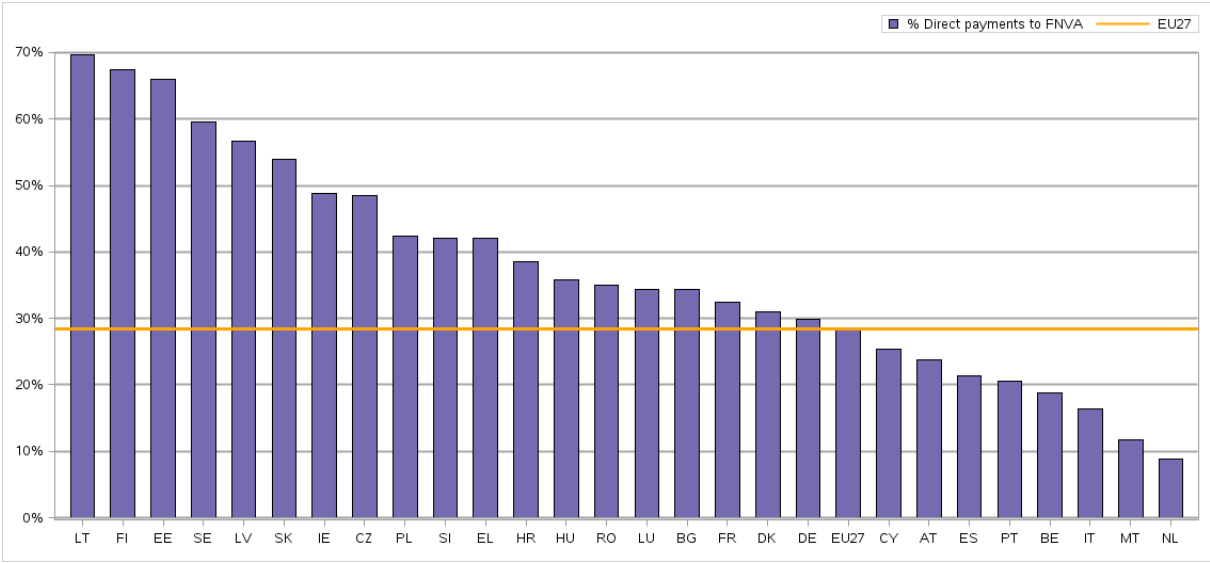
The role of direct payments²⁰ in sustaining farm incomes becomes even more evident when we look at them in relation to FNVA (see Annex 3). Consequently, if all other factors remain equal, changes in direct payments have a much greater impact on FNVA than on total farm receipts.

Results by Member State

In 2018, direct payments on average accounted for 28 % of FNVA in the EU, the same percentage as in 2017. The proportion of direct payments to FNVA was highest in Lithuania (70 %), followed by Finland and Estonia (67 % and 66 % respectively). By contrast, direct payments accounted for only 9 % of FNVA in the Netherlands, where the production is more focused on highly profitable and less subsidised sectors, such as pig and poultry and horticulture.

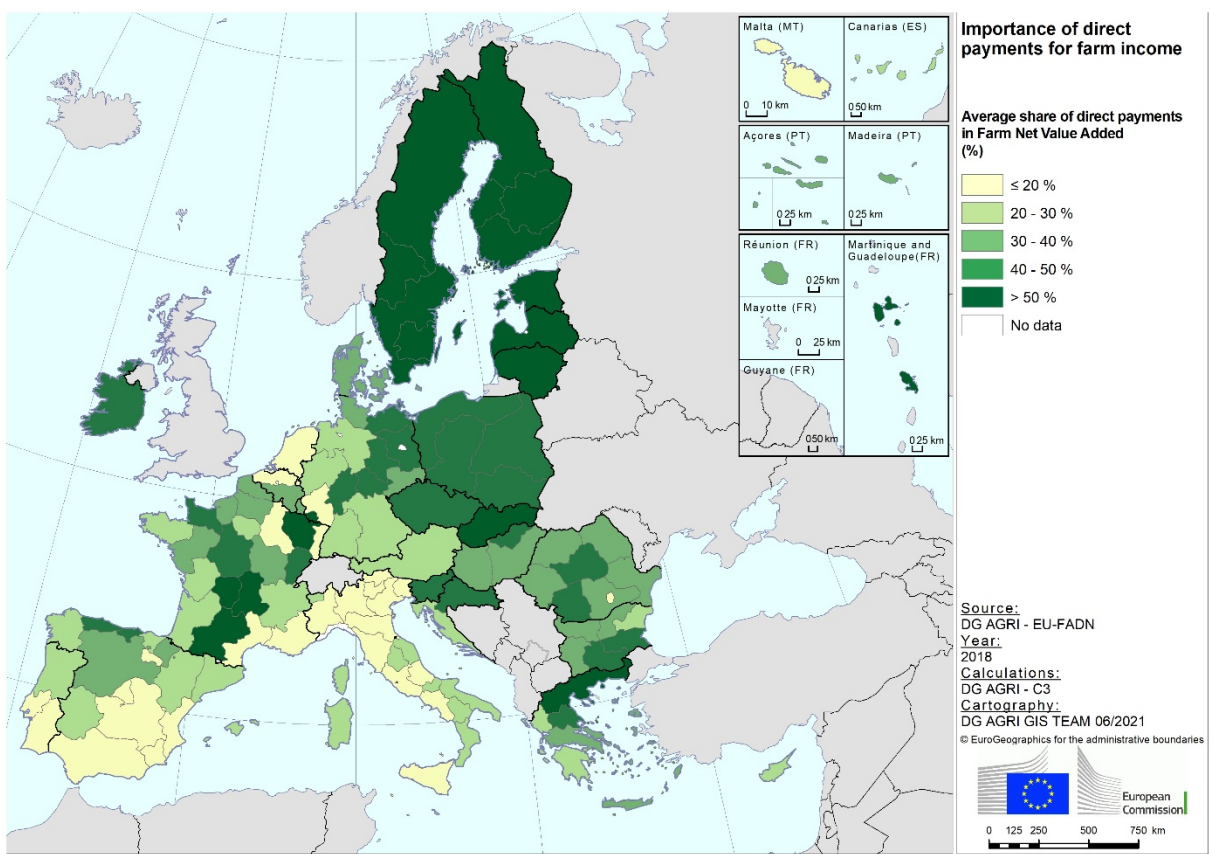
²⁰ Including both EU and national support.

Figure 2.3: Proportion of direct payments to FNVA by Member State in 2018
(average per farm)



Map 2.1 shows the regional differences in the proportion of direct payments to FNVA. The lowest figures were seen in the Italian regions of Liguria (3 %), Trentino (4 %) and Alto-Adige (6%), and in Murcia (7 %), in Spain. On the other side of the spectrum, the French region Guadeloupe had the highest share (96%), followed by Pohjois-Suomi in Finland (95%) and Limousin in France (90%).

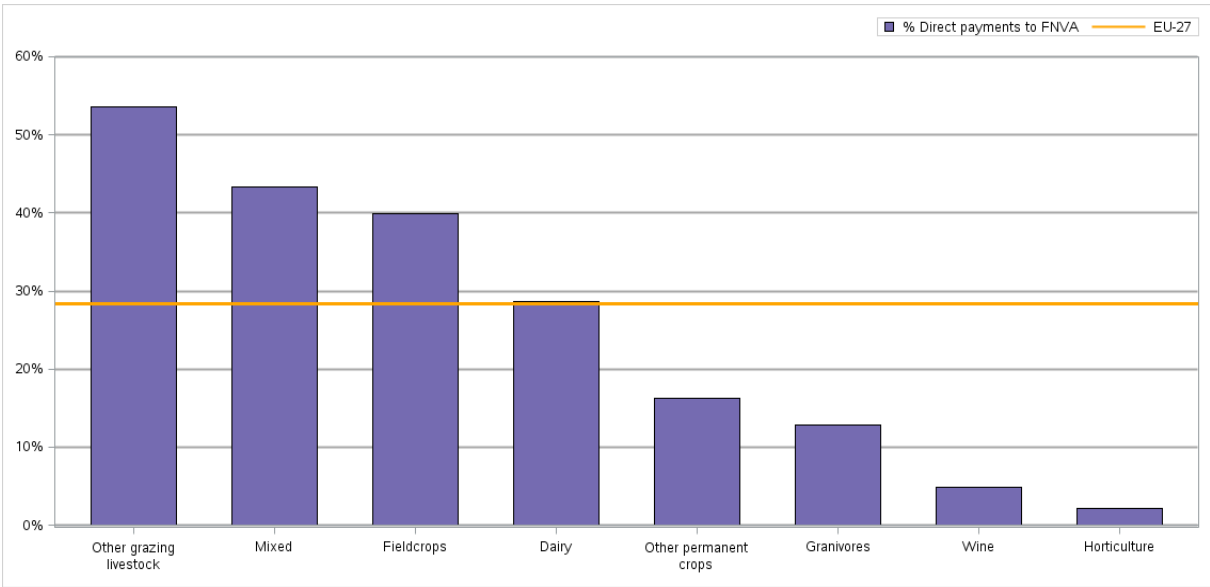
Map 2.1: Proportion of direct payments to FNVA by FADN region in 2018



Results by type of farming

The proportion of direct payments to FNVA also varies markedly depending on the type of farming. In particular, direct payments represent a substantial share of FNVA (40-54%) in farms specialised in grazing livestock (other than dairy cows), mixed farms and field-crop farms. On the other hand, direct payments play only a limited role in sustaining income within the wine and horticulture sectors (5% and 2% respectively), which had incomes above the EU average FNVA in 2018. The graph also shows that the share of direct payments in FNVA is high for types of farming with low incomes. This is to compensate to some extent for the income gap compared to the EU average.

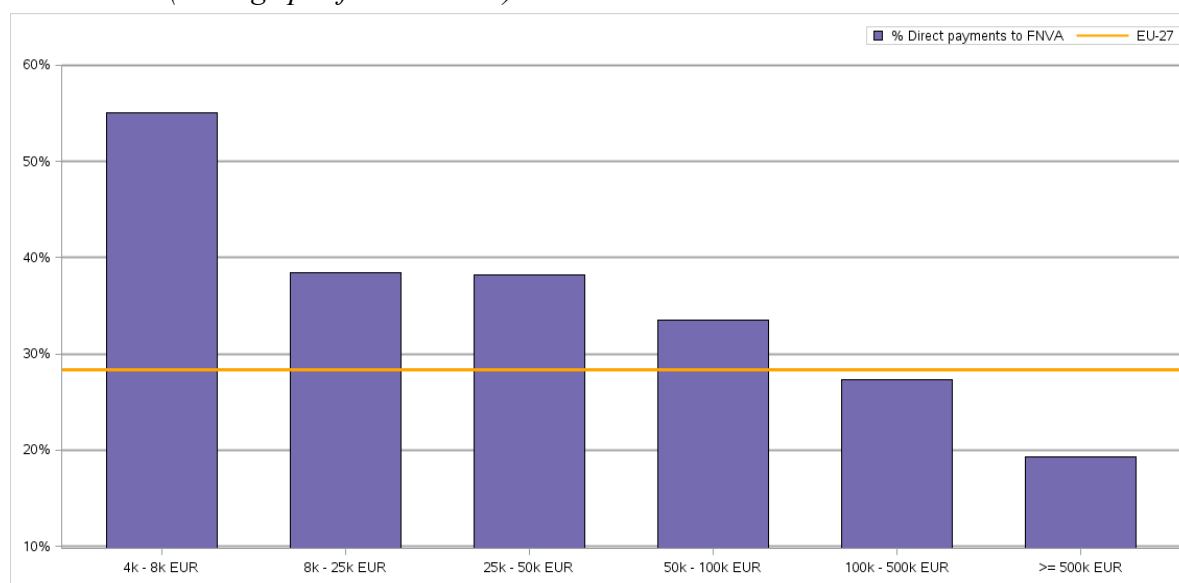
Figure 2.4: Proportion of direct payments to FNVA by farm type in the EU in 2018
(average per farm in EUR)



Results by economic size

The proportion of direct payments to FNVA shows is inversely proportional to the economic size: the smaller the farms in terms of standard output, the bigger the proportion of direct payments. This pattern applies to almost all the Member States.

Figure 2.5: Proportion of direct payments to FNVA by economic size in the EU in 2018
(average per farm in EUR)



3. CHARACTERISTICS OF ANALYSED FARMS

3.1. Financial structure

This chapter analyses the financial structure of agricultural holdings within the FADN field of survey on two main dimensions (country and type of farming), and using several financial indicators derived from farm balance sheets.

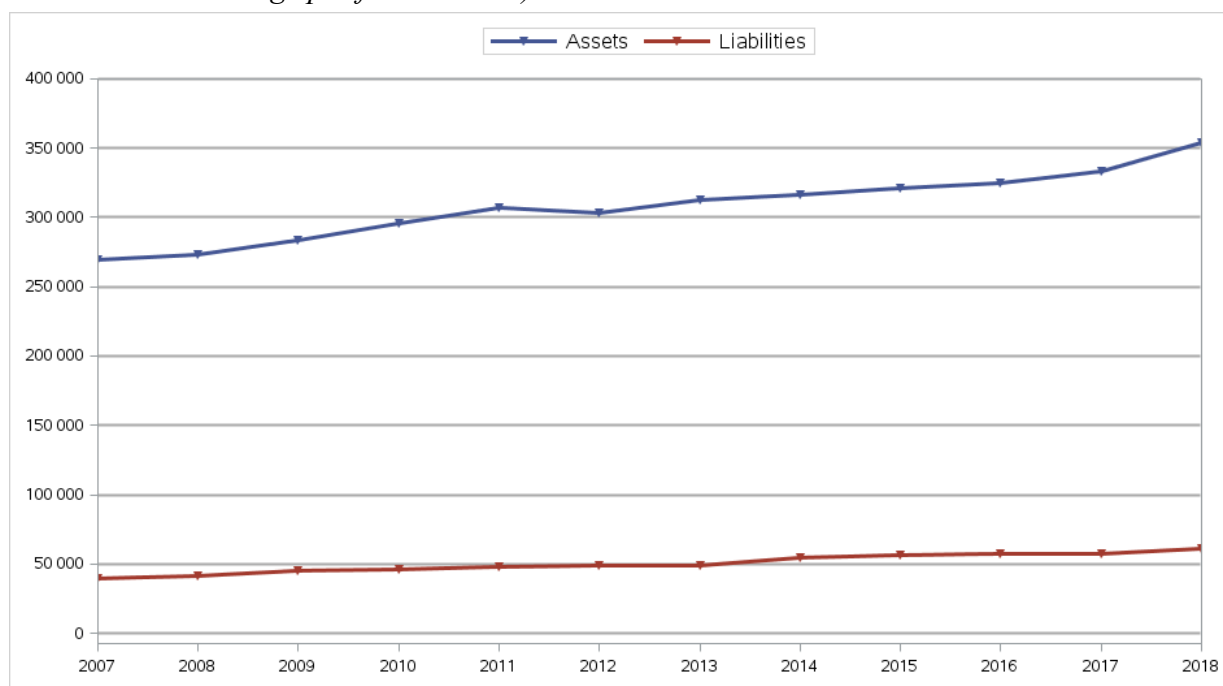
3.1.1. Total asset value

Total assets are the property of the agricultural holding, and comprise current and fixed assets. Current assets in the FADN include non-breeding livestock, stocks of agricultural products, stocks of other circulating capital, holdings of agricultural shares, and amounts receivable in the short term (or cash balances in hand or in the bank). Fixed assets are agricultural land, permanent crops, farms and other buildings, forest capital, machinery and equipment, and breeding livestock.

Long-term developments by EU group

Figure 3.1 shows that the value of total assets and total liabilities has been increasing. In the EU, the average value of total assets rose by 32 % in the period 2007-2018 (+6 % in the last year). Total liabilities registered the same growth compared to 2017 (+6 %) and +57 % compared to 2007.

Figure 3.1: Long-term developments in the value of total assets and total liabilities²¹ (average per farm in EUR)



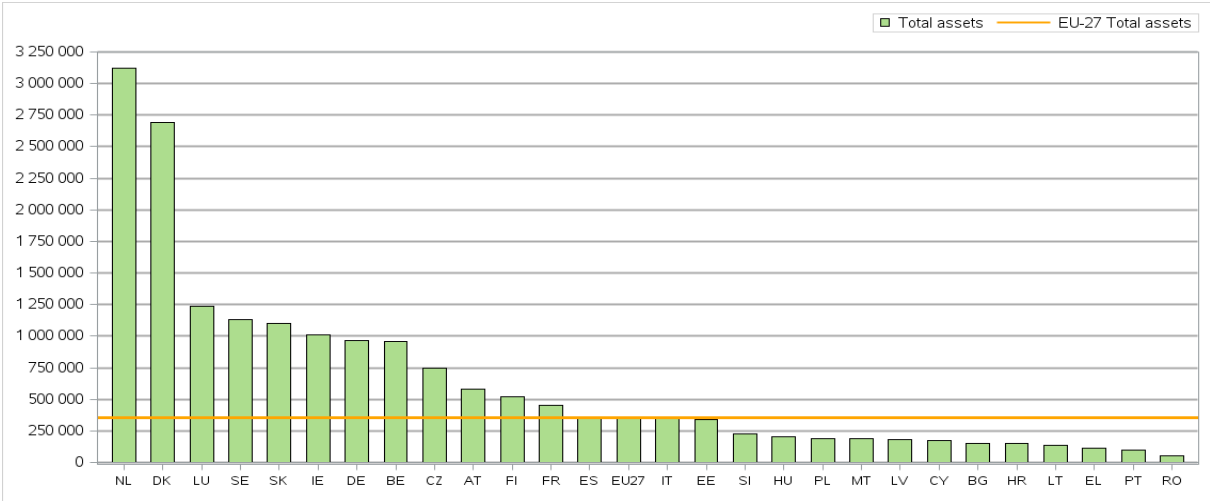
Results by Member State

As shown in Figure 3.2, the value of the total assets of an average farm in the EU stood at EUR 354 000 in 2018. However, this average masks sizeable variations across Member States, reflecting differences in the structure of national agricultural sectors.

On average, Dutch and Danish farms held the highest amounts of assets (around EUR 3 118 000 and EUR 2 689 000, respectively). This reflects the very high land prices and the large share in these countries of types of farming that typically need considerable investment, such as dairy, granivores and horticulture. In contrast, farms in Romania had the lowest total asset values (EUR 55 000) as they are characterised by less capital-intensive types of farming, their farms have a smaller average economic size and lower land prices.

²¹ The concept of total liabilities will be discussed in section 3.1.2.

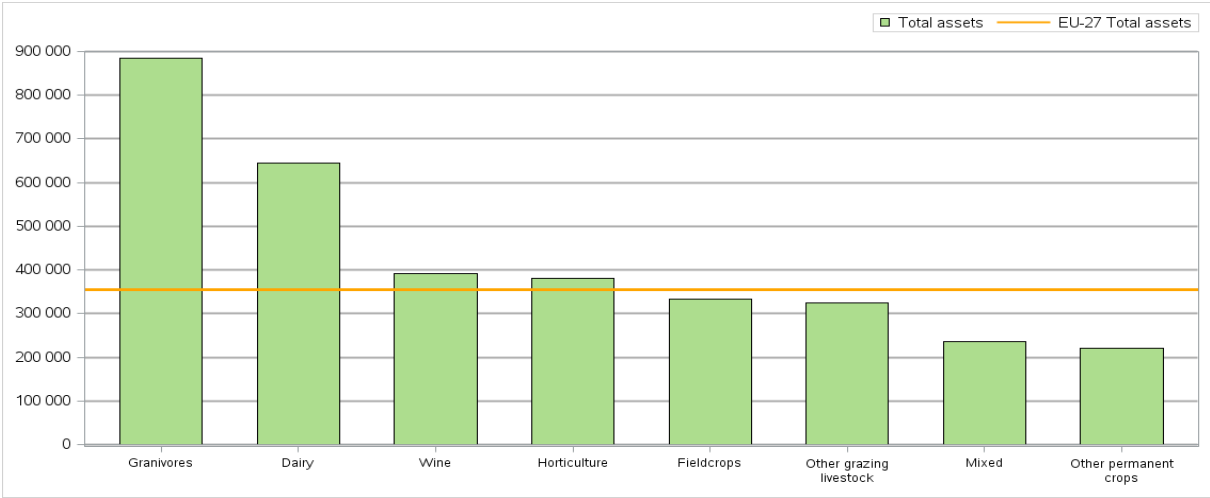
Figure 3.2: Average total asset value per farm by Member State in 2018
(average per farm in EUR)



Results by type of farming

Granivores farms have typically held the highest amounts of total assets — four times the asset value of farms specialised in other permanent crops, which had the lowest values. These disparities are partly due to differences in capital intensity across sectors.

Figure 3.3: Average total asset value by type of farming in the EU in 2018
(average per farm in EUR)



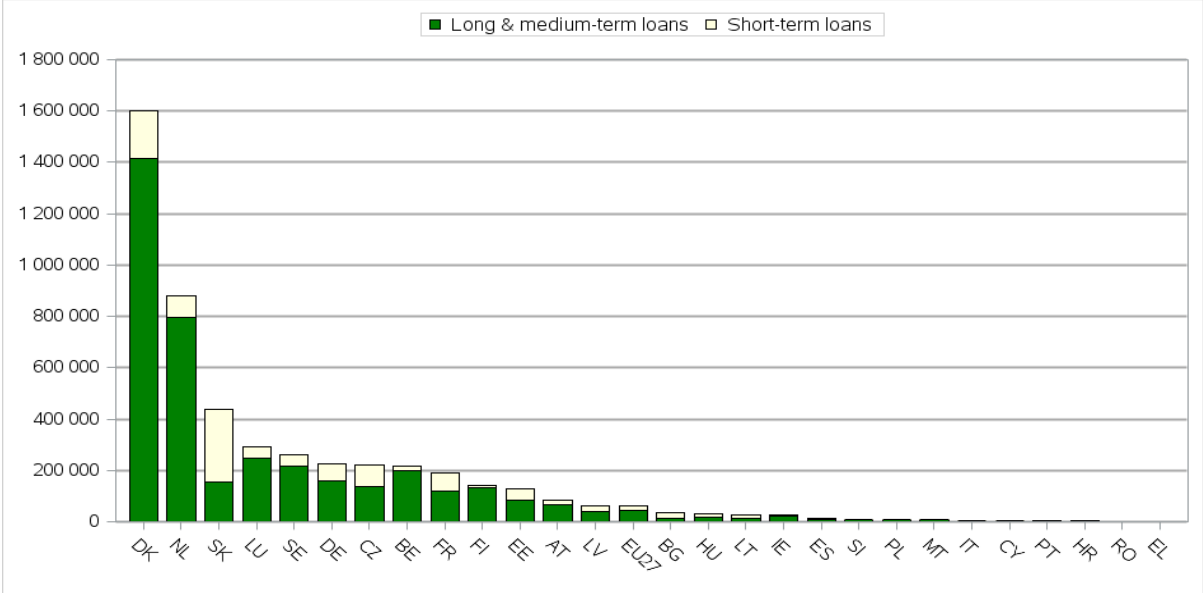
3.1.2. Total liabilities

Results by Member State

In line with the general trend for total asset values, total liabilities have also increased at current prices. In the EU, average liabilities per agricultural holding rose to EUR 61 000 in 2018, up from EUR 52 000 in the previous year. As illustrated in Figure 3.4, both the total amount of liabilities and their composition show wide variations across Member States. In absolute terms, 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 and Romania, which may reflect difficulties farmers faced in accessing credit markets in these countries. However, these very low levels could also have resulted from different

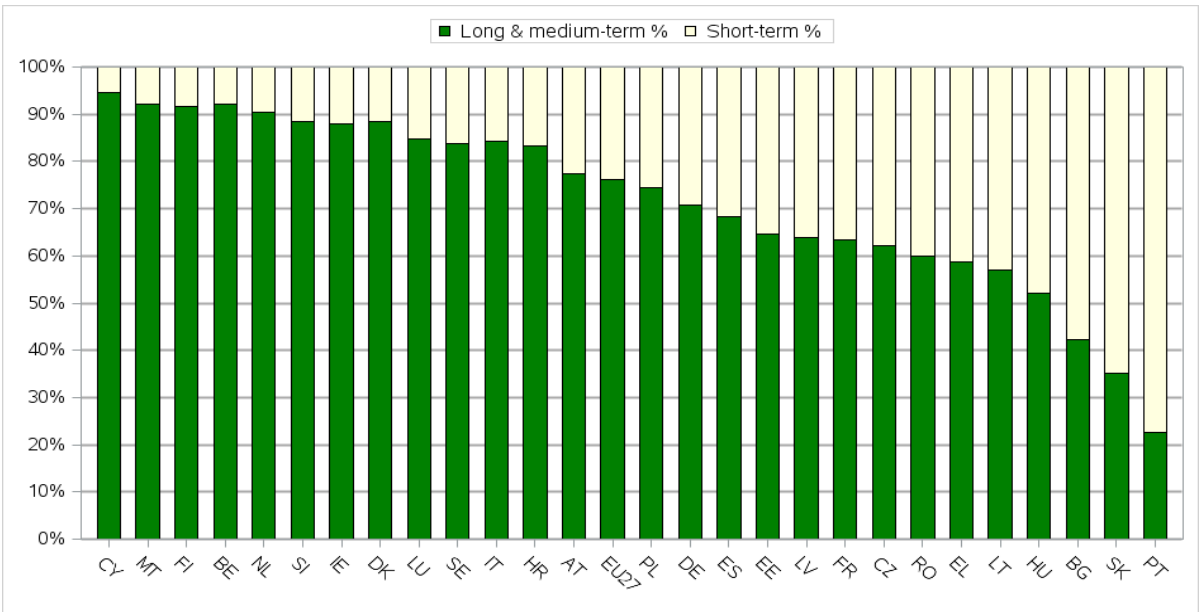
accounting practices, where liabilities are typically included in farmers' private accounts rather than in farm accounts.

Figure 3.4: Composition of liabilities per farm by MS and by level of debt in 2018
(average per farm in EUR)



In relative terms, agricultural holdings relied mostly on medium- and long-term loans in almost all EU Member States. At EU level, long-term loans represented 76 % of total liabilities, and more than 90 % in Cyprus, Belgium, Finland, Malta and the Netherlands. Short-term loans to finance agricultural activities were prevalent only in Portugal (77 % of total liabilities), Slovakia (65 %) and Bulgaria (58 %).

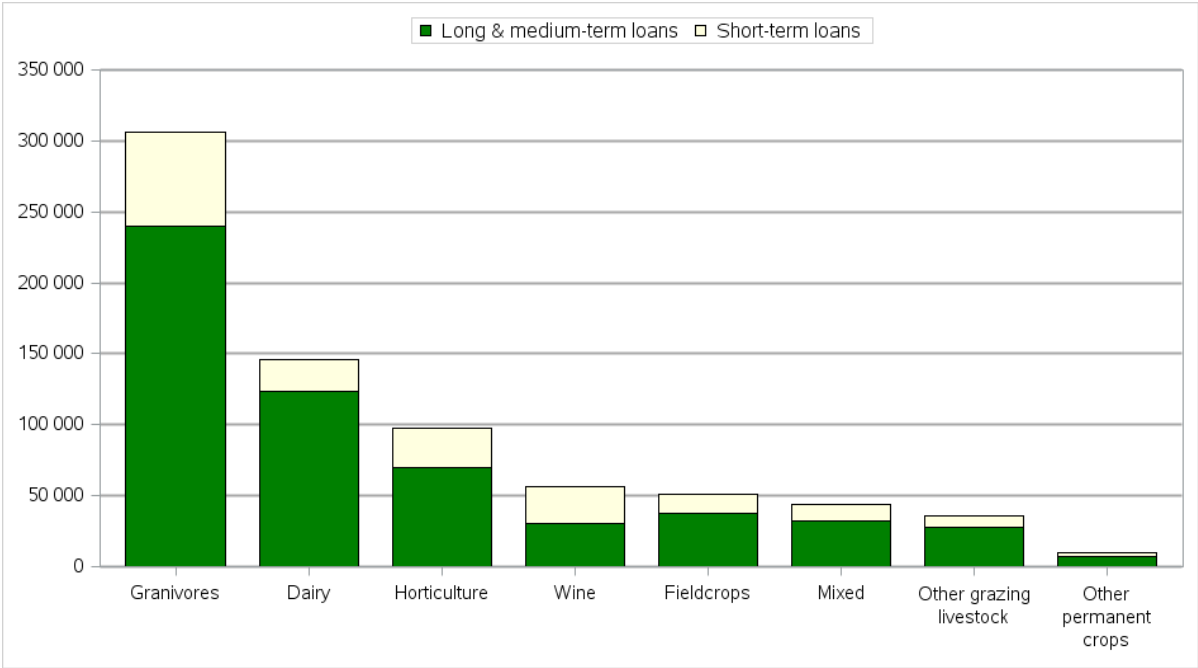
Figure 3.5: Proportion of long- and short-term loans per farm by MS in 2018
(average per farm in EUR)



Results by type of farming

As shown in Figure 3.6, farms specialised in granivores and dairy farms had the highest total liabilities on average in 2018 (EUR 306 000 and EUR 146 000, respectively). Permanent-crop farms recorded the lowest liabilities in 2018 (EUR 9 600), Medium- and long-term loans were the main type of liability for all farm types. Short-term loans played a significant role only in wine holdings, where they accounted for around 45 % of total liabilities.

Figure 3.6: Composition of liabilities per farm by type of farming in the EU in 2018 (average per farm in EUR)



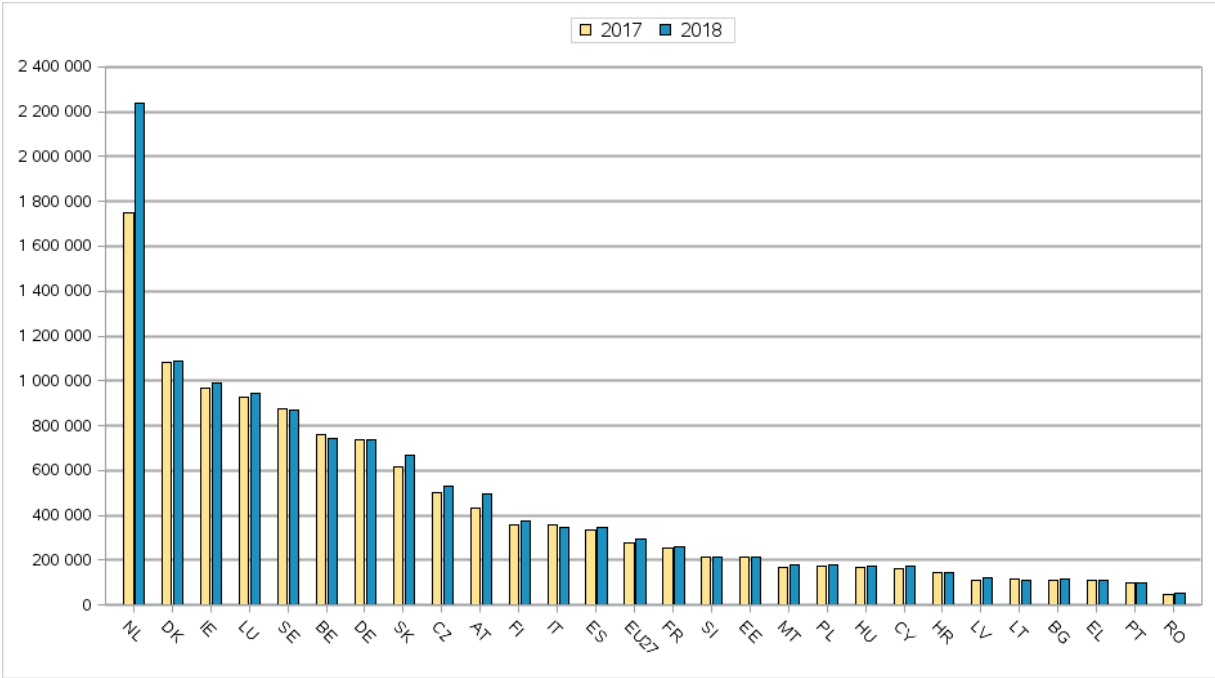
3.1.3. Development of farm net worth

Results by Member State

Farm net worth is defined as the difference between total assets and total liabilities at the end of the accounting year. In 2018, the average farm net worth stood at approximately EUR 293 000 in the EU (+ 6% compared to 2017). The average net worth per agricultural holding was highest in the Netherlands (EUR 2 240 000). This shows the importance of the dairy farms in this country, which are characterised by above-average net worth values per farm (Figure 3.8). Not only had the Netherlands the highest value, but also the biggest increase compared to 2017. This is in large part due to the phosphate rights that were introduced on January 1, 2018.²² Farms in Romania (EUR 53 000) and Portugal (EUR 98 000) had the lowest average net worth.

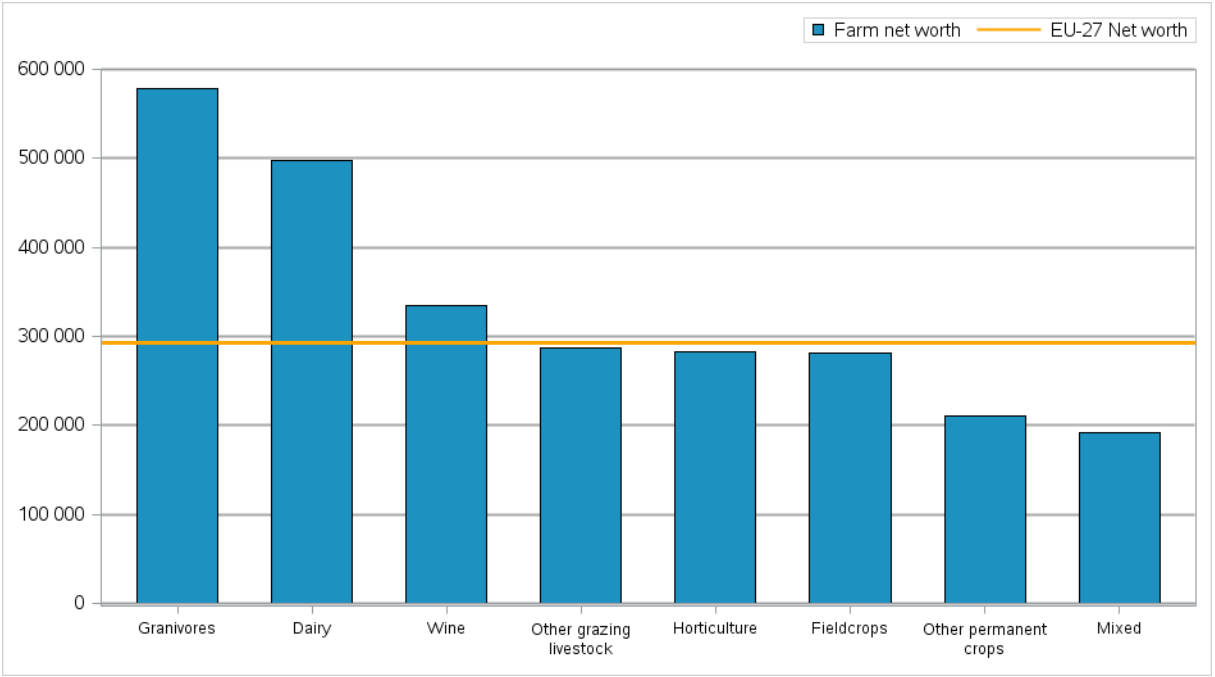
²² https://ec.europa.eu/commission/presscorner/detail/en/IP_17_5362

Figure 3.7: Farm net worth by and Member State in 2017 and 2018
(average per farm in EUR)



Mixed farms (crops and livestock) had the lowest net worth. Their net worth remains significantly below the EU average, reflecting the low asset value of these farms in comparison with other sectors.

Figure 3.8: Farm net worth by type of farming in the EU in 2018
(average per farm in EUR)



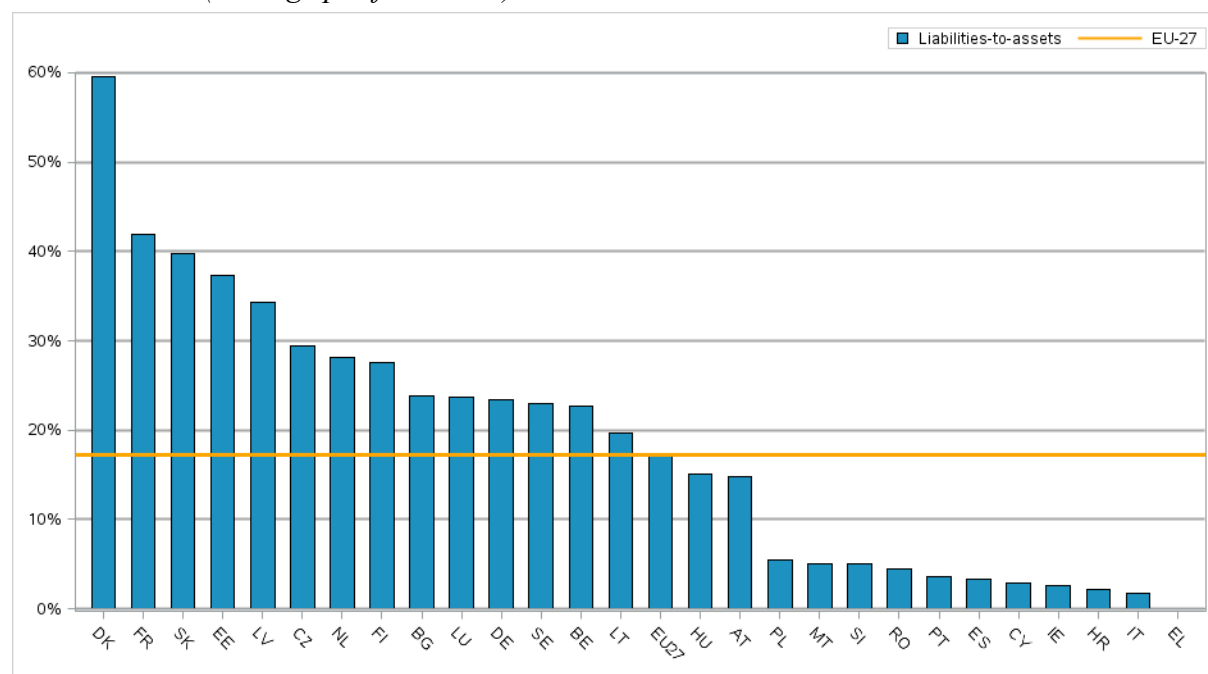
3.1.4. Solvency

In this analysis, solvency is measured using the liabilities-to-assets ratio, which shows the percentage of an agricultural holding's assets that are financed through debt. This gives an indication of a farm's ability to meet its obligations in the long term (or its capacity to repay liabilities if all assets are sold). The results should be interpreted with caution, as a high liabilities-to-assets ratio is not necessarily a sign of a financially vulnerable position. In fact, a high ratio could also be an indication of a farm's economic viability (i.e. its ability to access outside financing). It should be noted that the depreciation method has also an impact on the net asset values. However, there is certainly a threshold beyond which indebtedness will compromise a farm's financial health.

A high liabilities-to-assets ratio typically reflects heavy recourse to outside financing (i.e. taking out loans). Higher leverage (the amount of debt used to finance assets) helps a farm to invest, and typically increases its profitability. However, this comes at a greater risk, because leveraging magnifies both gains (when investment generates the expected return) and losses (when investment fails to be profitable for the investor²³).

As is the case for other financial indicators used, the liabilities-to-assets ratio varies significantly across Member States. In some cases, this ratio even varies within Member States, as shown on Map 3.1. Farms in Denmark, France and Slovakia had the highest liabilities-to-assets ratio in 2018 (at 60 %, 42 % and 40 %, respectively). The lowest average ratios were in many of the Mediterranean Member States and in Ireland (below 4 %).

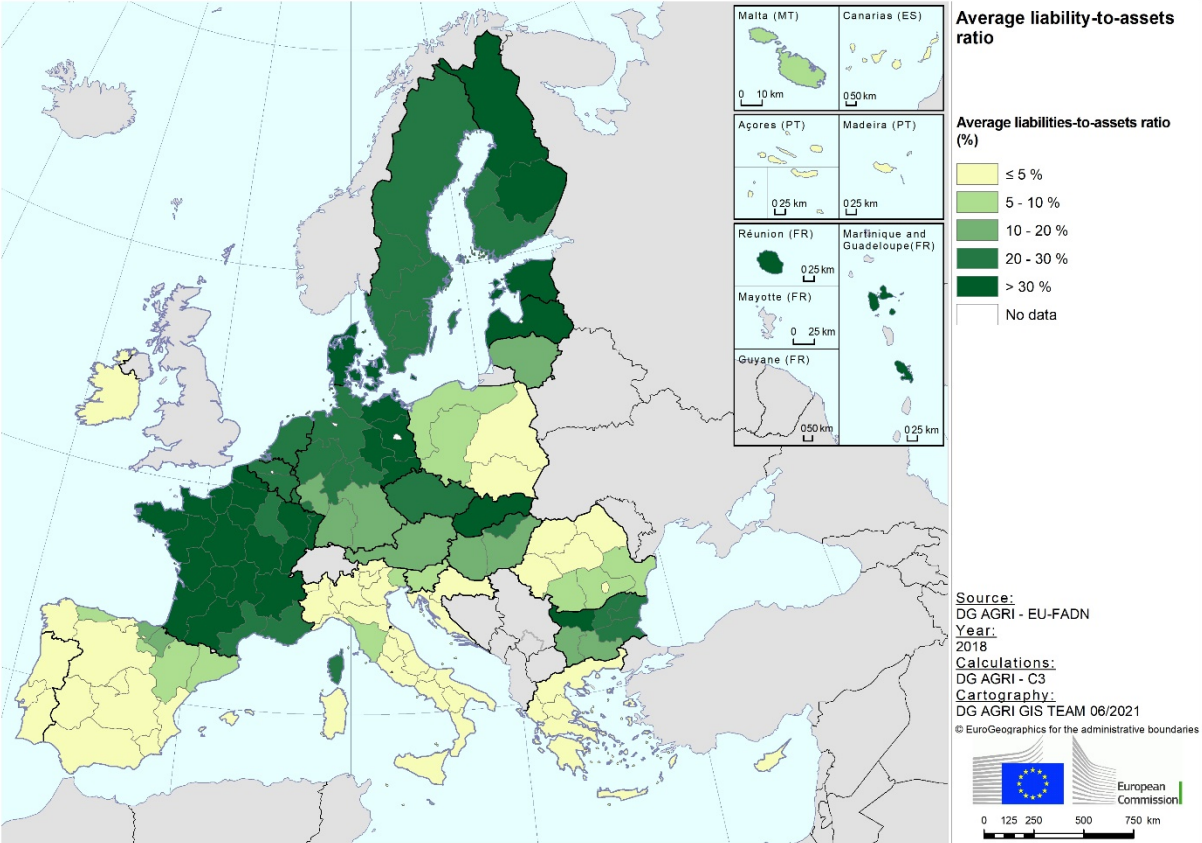
Figure 3.9: Farm liabilities to assets ratio by Member State in 2018
(average per farm in %)



In the case of Ireland, the low liabilities-to-assets ratio mainly reflects relatively high asset values when compared to low liabilities.

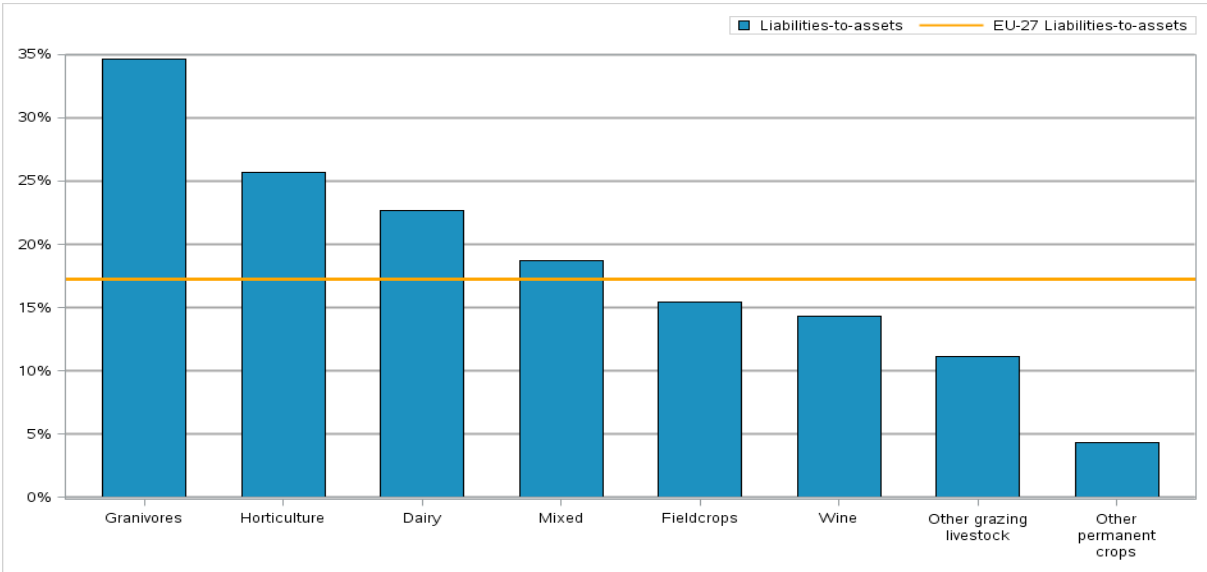
²³ For example due to unfavourable weather conditions or outbreaks of animal diseases.

Map 3.1: Average liabilities-to-assets ratio per farm by FADN region in 2018



As shown in Figure 3.10, the level of solvency also varies markedly across farm types, with farms specialised in granivores, horticulture, and dairy production having the highest liabilities-to-assets ratios.

Figure 3.10: Farm liabilities to assets ratio by type of farming in the EU in 2018
(average per farm in EUR)

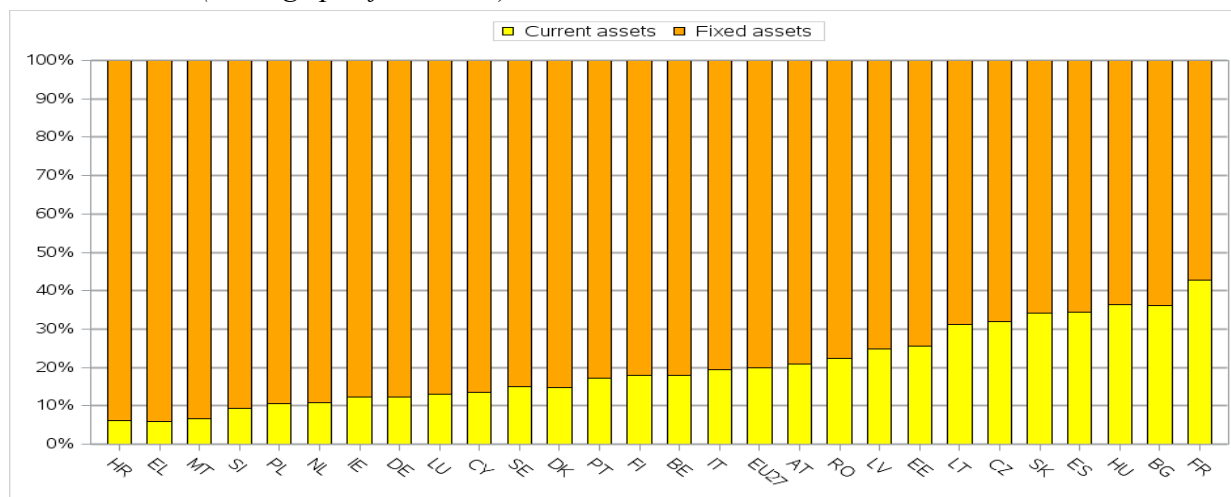


3.1.5. Current and fixed assets

Results by Member State

Fixed assets²⁴ account for the largest proportion of total assets in all Member States. In particular, total farm assets in Croatia, Greece, Malta, and Slovenia consist almost exclusively of fixed assets (more than 90 %). The proportion of fixed assets to total assets was lowest in France (57 %).

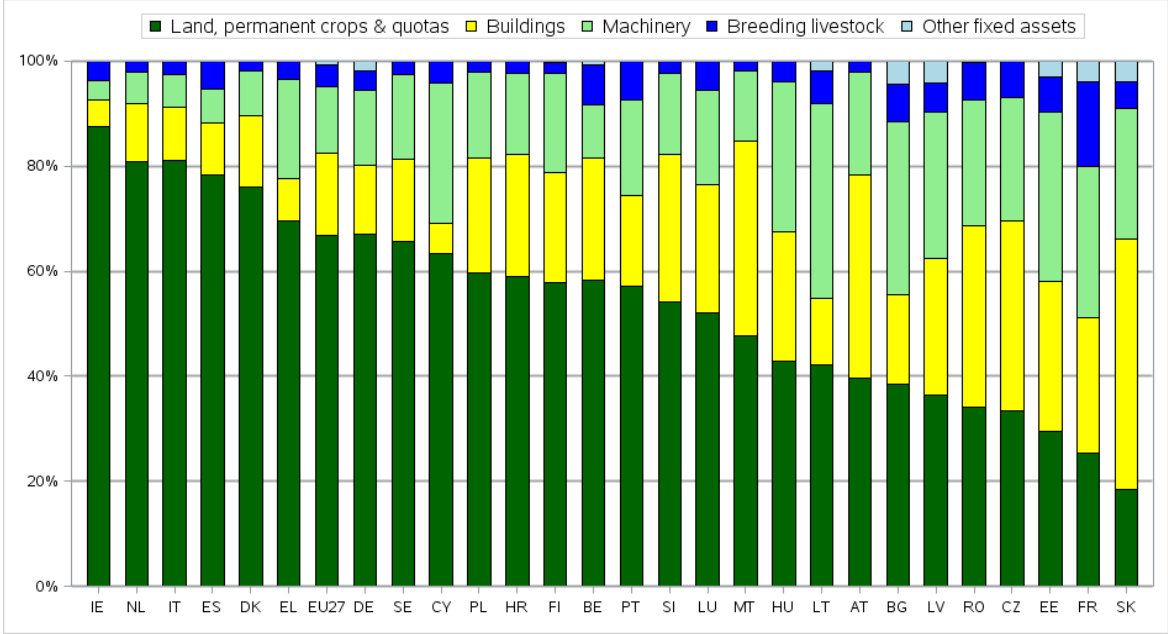
Figure 3. 11: Composition of assets by Member State in 2018
(average per farm in %)



The composition of fixed assets across Member States depends on the structure of its agricultural sector. As shown in Figure 3.12, ‘land, permanent crops and quotas’ was the largest component in the fixed assets of most Member State farms in 2018. This category made up more than 80 % of fixed assets in Ireland, the Netherlands and Italy. On the other hand, ‘buildings’ were of major significance in Slovakia (48%), Austria (39 %), Malta (37 %) and Czechia (36 %). Almost half of fixed assets were buildings in Slovakian farms. ‘Machinery’ accounted for the largest proportion of fixed assets in Lithuania (37 %), Bulgaria (33 %) and Estonia (32 %). Finally, ‘breeding livestock’ was the smallest component of fixed assets in all Member States (ranging from 16 % in France to 1.7 % in Denmark), after the residual ‘other’ which includes intangible assets non-tradable, and other non-current assets.

²⁴ Fixed assets include agricultural land, farm and other buildings, forest capital, machinery and equipment, breeding livestock, intangible assets non-tradable, and other non-current assets.

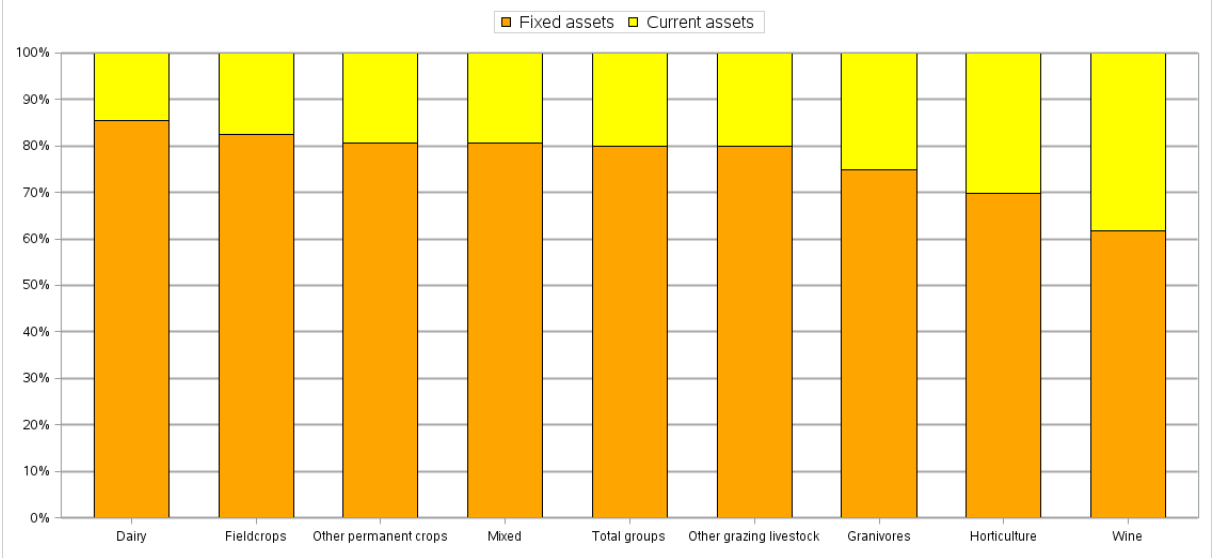
Figure 3. 9: Composition of fixed assets by Member State in 2018
(average per farm in %)



Results by type of farming

As shown in Figure 3.13, fixed assets accounted for about 80 % of total assets on average per farm in the EU in 2018. This proportion varied slightly among types of farming, ranging from 85 % in dairy farms to 62 % in wine holdings. Wine holdings seem to rely more on current assets which facilitate day-to-day operational expenses and investments. These type of assets are ‘liquid’, meaning that they can be readily converted into cash. Wine farms have also the highest share of short term liabilities (Figure 3.6).

Figure 3.10: Composition of assets by type of farming in 2018
(average per farm in %)

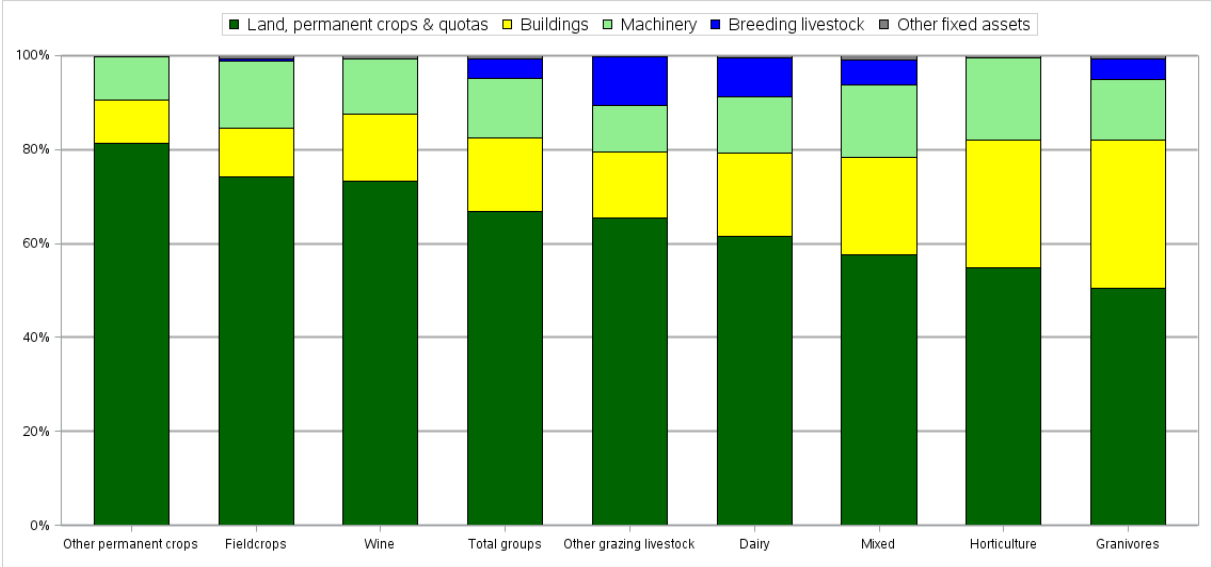


For the composition of fixed assets, Figure 3.14 shows that ‘land, permanent crops and quotas’ was the largest component in all farm types in 2018. However, the proportion varied from more than 81 % of fixed assets in farms growing other permanent crops to 50 % in

granivore farms. On the other hand, granivore farms had the largest proportion of ‘buildings’ (32 %), while farms with the lowest proportion of their fixed assets in buildings were farms growing other permanent crops and farms specialised in field-crops (9 %).

Farms specialised in horticulture recorded the largest proportion of ‘machinery’ in their fixed assets (17 %), while this figure was only around 9 % for farms specialised in other permanent crops. Not surprisingly, ‘breeding livestock’ accounted for the highest proportion of total assets in grazing livestock and dairy farms (broadly 10 % and 8%).

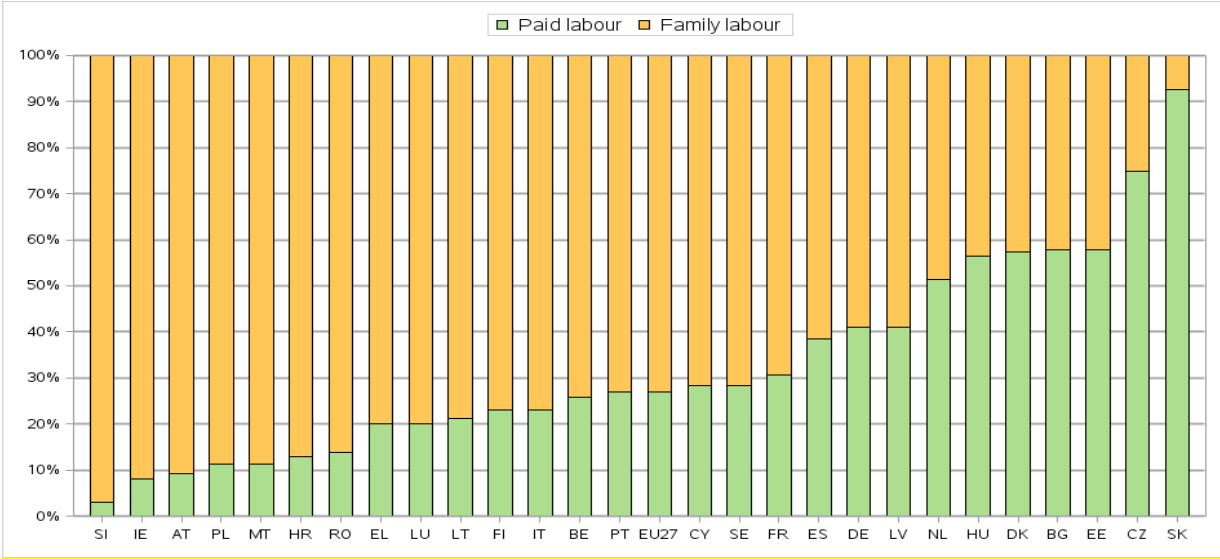
Figure 3.14: Composition of fixed assets by type of farming in 2018
(average per farm in %)



3.2. Labour

This section analyses the structure of the labour force employed by EU farms covered by FADN, focusing on the average size of the labour force employed per farm, its composition and the wages paid. The results show that the proportion of non-family labour (i.e. paid labour) in the total workforce is on average 27 %. However, this proportion varies largely among Member States: in Slovenia, Ireland and Austria, the paid labour accounts for less than 10 %, whereas in Slovakia and Czechia, it constitutes the vast majority (respectively 93 % and 75 %), due to the presence of very large farms, which are often organised as legal entities.

Figure 3.11: Share of family and paid labour in total labour by Member State in the EU in 2018 (in % of AWU)

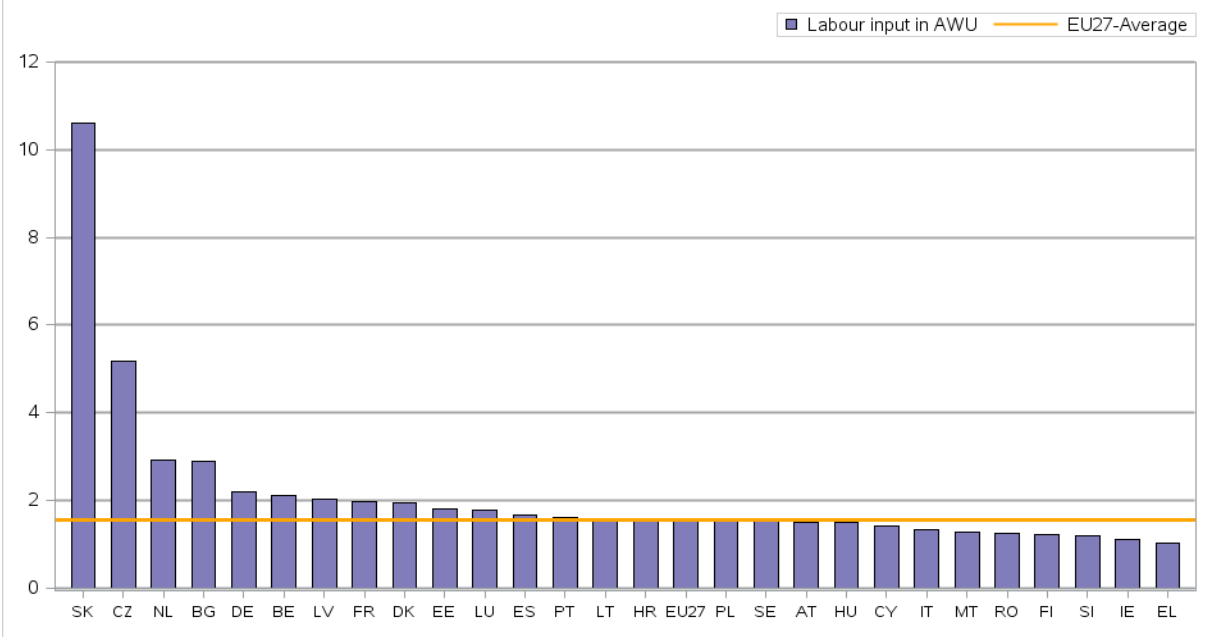


3.2.1. Labour force

Results by Member State

In 2018, the average total labour input of agricultural holdings stood at 1.6 AWU in the EU. As shown in Figure 3.16, the average labour input varied considerably across countries, ranging from 10.6 AWU per farm in Slovakia to 1 AWU in Greece. Labour input on Slovak and Czech (5.2 AWU) farms was significantly higher than on farms in the remainder of the EU, reflecting the predominance of very large non-family agricultural holdings in their agricultural output. Over the period 2007-2018, the biggest decrease in labour input per farm was registered in the Member States that joined the EU in 2004 or after. In particular, labour input per farm decreased by 50 % in Romania and by 41% in Slovakia.

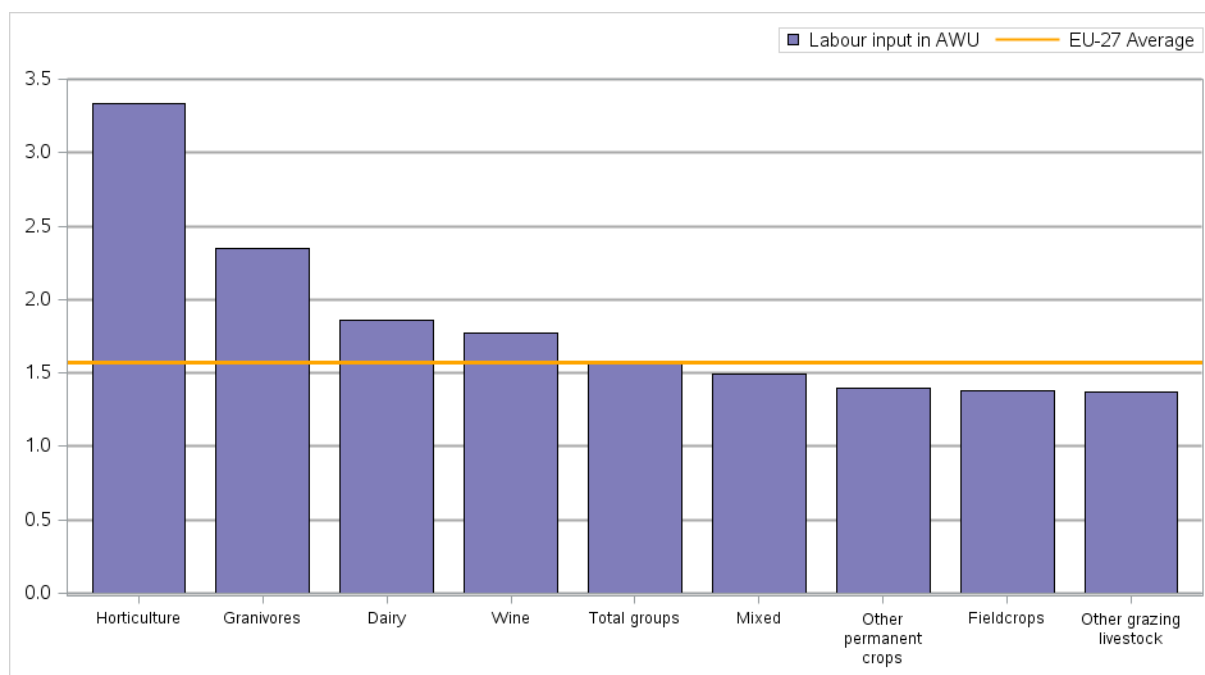
Figure 3. 12: Labour input per farm by Member State in the EU in 2018 (in AWU)



Results by type of farming

Figure 3.17 shows that labour input by type of farming was fairly close to the average of 1.6 AWU per farm in all sectors except for horticulture (where labour input was more than twice as high) and for granivore farms (where the AWU per farm was 44 % higher than the average).

Figure 3. 13: Labour input per farm by type of farming in the EU in 2018
(in AWU)

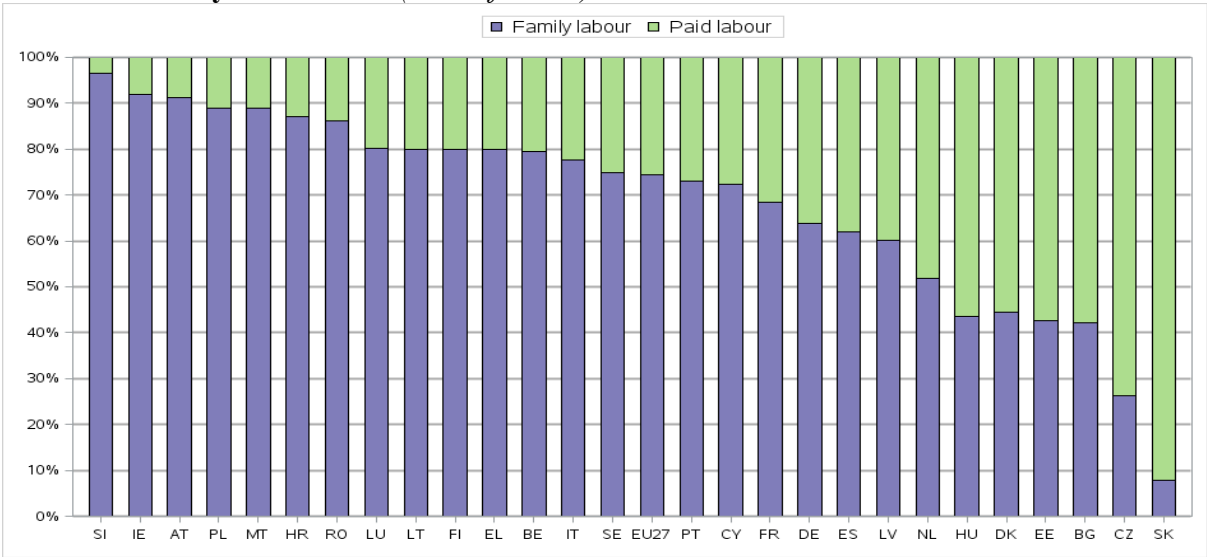


Results by Member State

Traditionally, a significant part of the labour force employed in agriculture has been family labour (unpaid labour). Family labour accounts for the largest share of the agricultural labour force²⁵ in most Member States, with the exception of Slovakia (8 %), Czechia (26 %), Bulgaria (42 %), Estonia (43 %), Denmark (44 %) and Hungary (44 %).

²⁵ The proportion is expressed as follows: time worked in hours by unpaid labour input (generally family) in the holding divided by the time worked in hours by the total labour input in the holding.

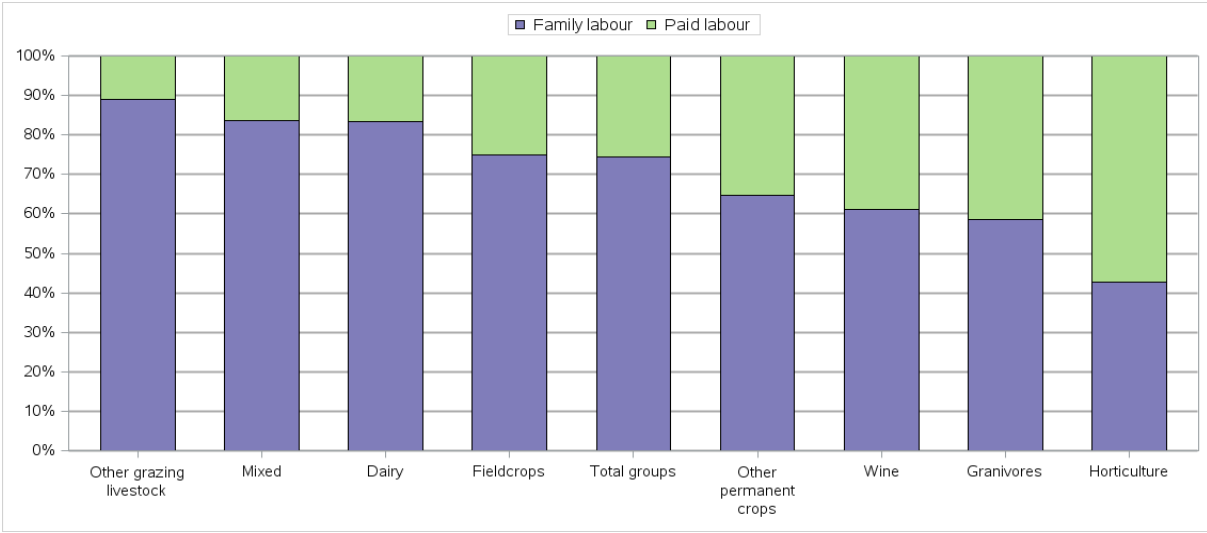
Figure 3.14: Proportion of working hours of paid and family (unpaid) labour on farms by MS in 2018 (in % of hours)



Results by type of farming

The proportion of paid labour is highest in horticulture holdings (57 %), reflecting the horticulture sector’s typical recourse to seasonal workers. The proportion of paid labour is typically lowest in grazing livestock, mixed (crops and livestock), and dairy farms (respectively 11 %, 16% and 17 %).

Figure 3.15: Proportion of working hours of paid and unpaid labour by type of farming in the EU in 2018 (in % of hours)

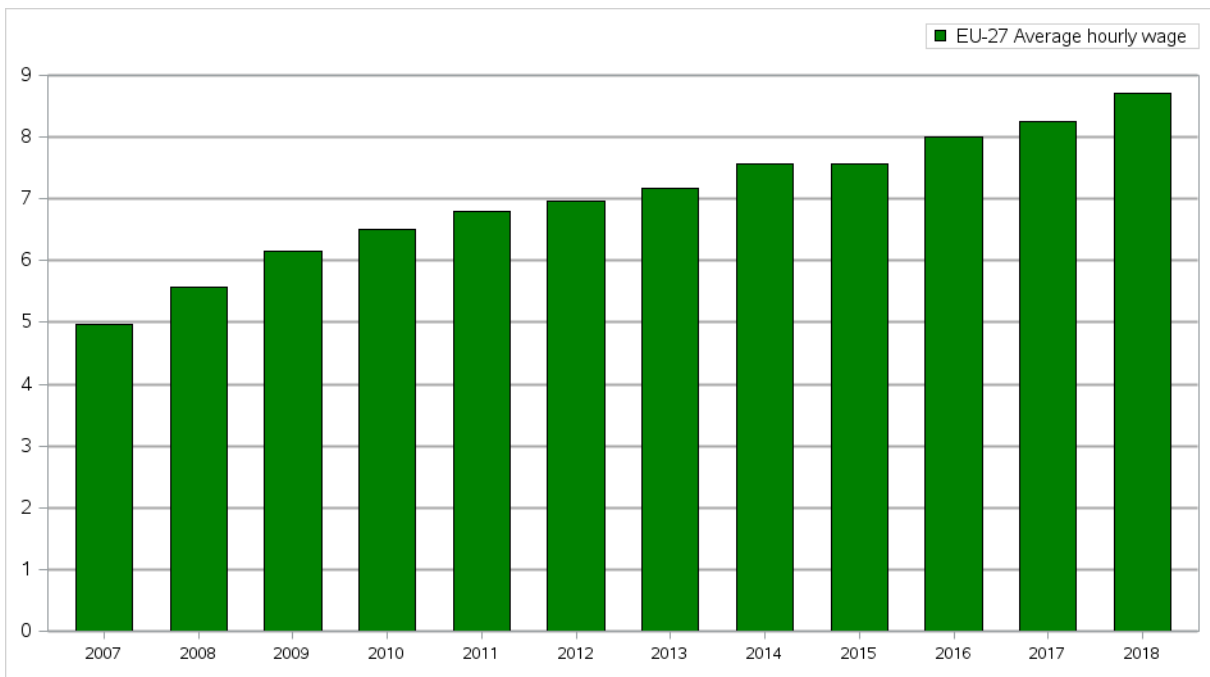


3.2.2. Remuneration of farm workers

As shown in Figure 3.20, the nominal gross hourly wage²⁶ for paid labour in agriculture has increased since 2007 by 75 %, from EUR 5.0 to EUR 8.70.

Changes in the nominal wage more than compensated for price increases over the course of the analysed period (the EU HICP inflation was around 16 % percentage points higher in 2018 compared to 2007)²⁷.

Figure 3.16: Long-term developments in average nominal wages in the EU (EUR/hour)



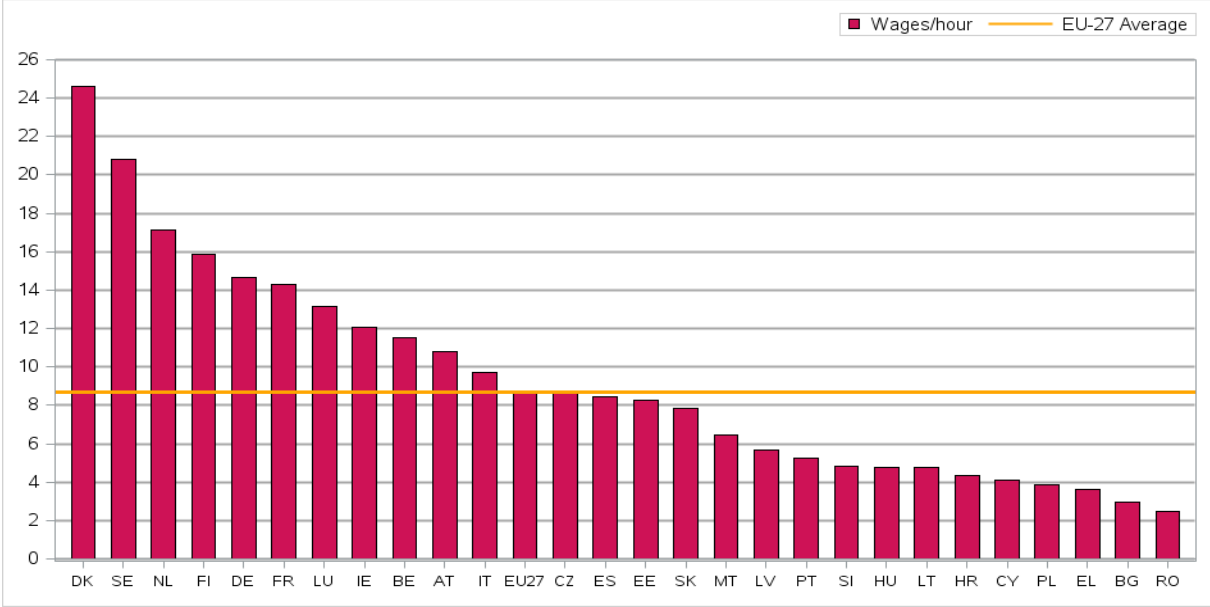
Results by Member State

As Figure 3.21 shows, the average hourly nominal wage varies widely across the EU. In 2018, it was highest in Denmark (EUR 24.60) and lowest in Romania (EUR 2.50). Note that all MS that entered the EU in 2004 or after have a wage below the EU average (EUR 8.70). The lowest wage in a Member State that joined the EU before is in Greece (EUR 3.60).

²⁶ Wages and social security charges (and insurance) of wages earners, per hour.

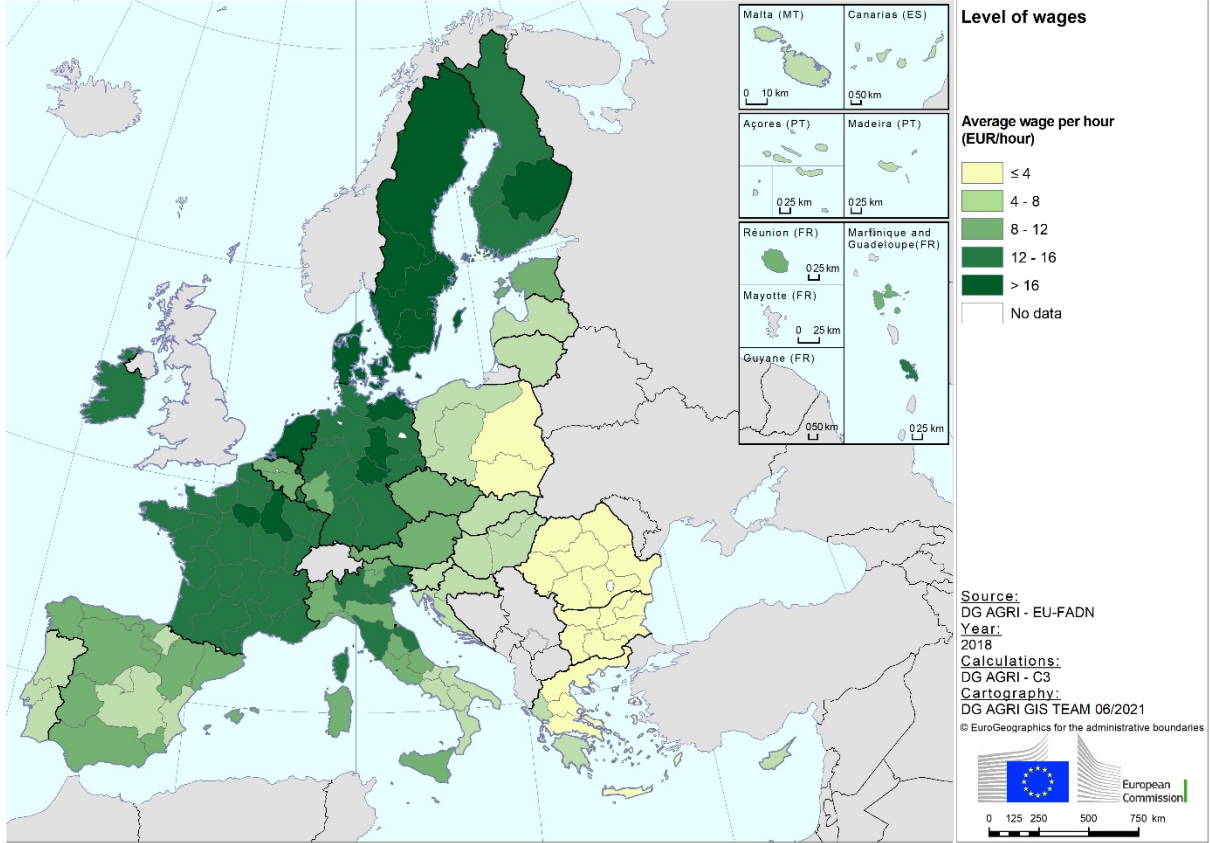
²⁷ Source: Eurostat online data code: prc_hicp_aind.

Figure 3. 17: Average nominal wages of paid labour by Member State in 2018 (EUR/hour)



Map 3.2 shows that wages were highest in north-western Europe in places like Denmark (EUR 24.60), Sweden (EUR 20.70-21.90), the French Ile-de-France and Champagne-Ardenne region (EUR 19.20 and EUR 17.50 respectively) and the Netherlands (EUR 17.10). At the other end of the scale were Romania and Bulgaria, which had the lowest average wages per hour (EUR 2.00 to EUR 3.350 depending on the region).

Map 3.2: Average nominal wage by FADN region in 2018



3.3. Land

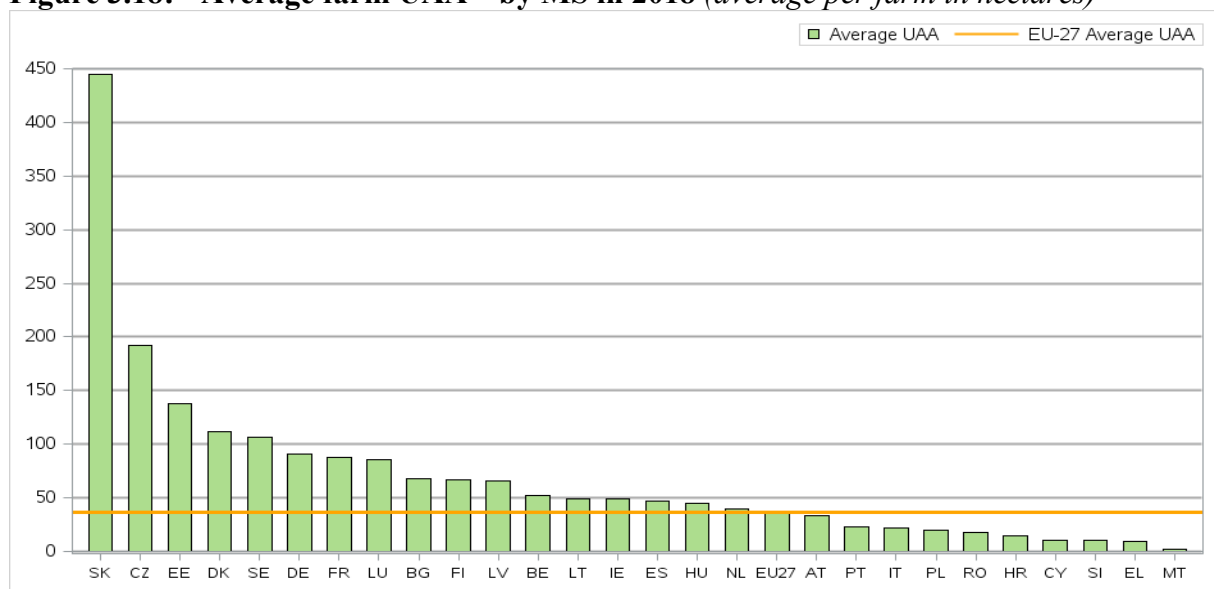
Access to agricultural land is a precondition for farm economic activity. This subsection analyses the amount of agricultural land available per farm, trends in the ownership of land and the cost of renting land.

3.3.1. Farm size

Before analysing the data on the structural characteristics of the farms, it must be noted that the FADN database cannot provide a representative picture of farm structures. This is due to limitations in the FADN system. One of these limitations is the fact that the FADN's field of survey does not cover all agricultural holdings in the EU. It only covers those holdings which, due to their size, can be considered as market-oriented. The FADN also applies thresholds and these thresholds for inclusion in the survey vary among countries (see the methodology chapter for more information). In other words, certain farms are excluded from the field of observation. In the light of the above, in this chapter we will examine the physical and economic size of the farms surveyed by FADN.²⁸

The structure of farms shows huge differences across Member States. One of the most telling indicators of these differences is the physical size of farms, measured by the average amount of agricultural land per farm. Farms represented in the FADN are on average largest in Slovakia (445 ha), followed by Czechia (192 ha) and Estonia (138 ha). Farms are smallest in Malta (3 ha), Greece (10 ha) and Cyprus (10 ha). The EU average was 37 ha in 2018, whereas in 2017 it was 35 ha. The average farm size was mostly below the EU average in some Mediterranean countries (Malta, Greece, Cyprus, Italy) and Slovenia, Croatia, Romania, Poland, Portugal and Austria.

Figure 3.18: Average farm UAA²⁹ by MS in 2018 (average per farm in hectares)

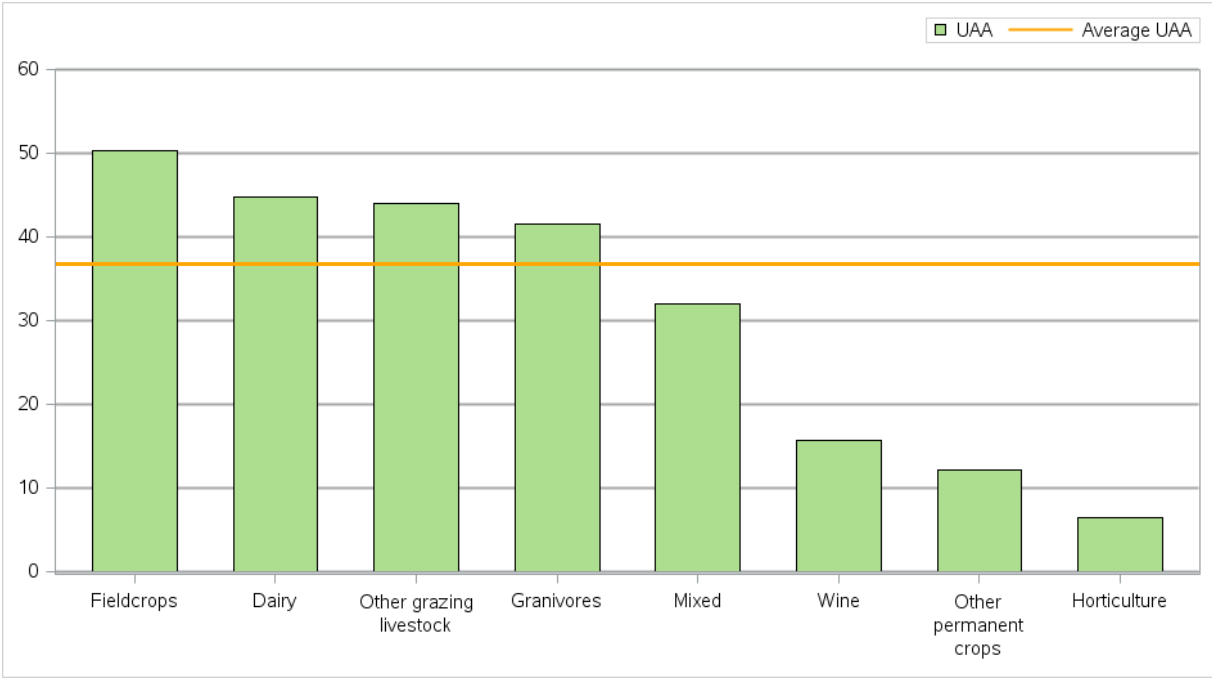


²⁸ Structural data on the total farming population are available in the Eurostat Farm Structure Survey.

²⁹ Utilised agricultural area (UAA) is the area used for farming.

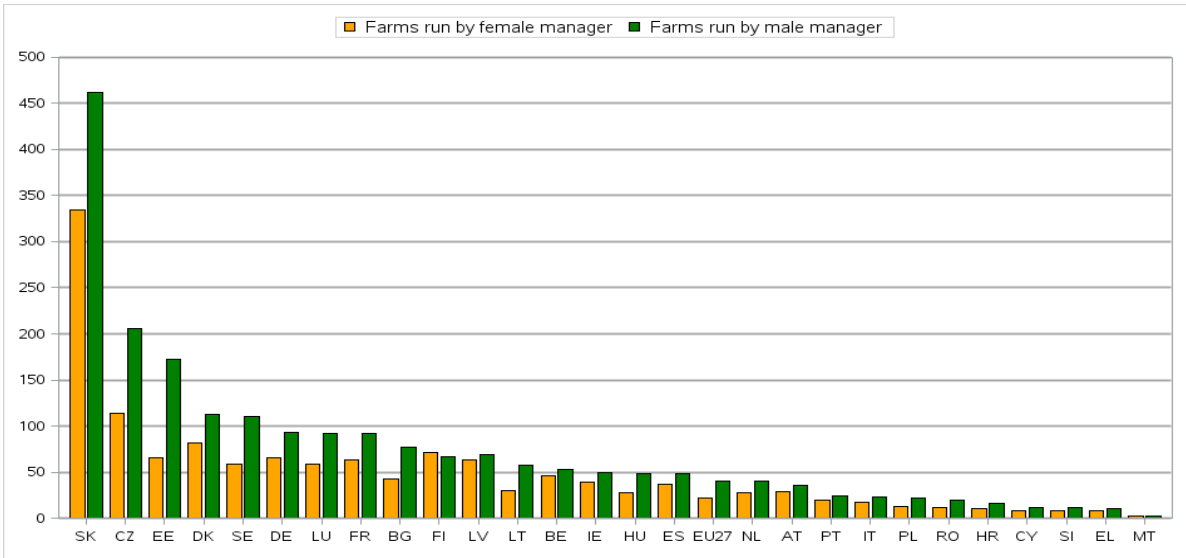
In 2018, the average utilised agricultural area (UAA) was largest in field-crop farms (50 ha), followed by dairy (45 ha) and grazing-livestock farms (44 ha). Farms specialised in granivores had also a size above the average (42 ha), due to the fact that some of them produce their own feed. Horticultural farms were the smallest, with 6 ha. The average field-crop farm eight times larger than the average horticultural farm in 2018. However, it is important to stress that horticultural farms operate at a much higher intensity, meaning that land is a less important determinant of their level of production.

Figure 3.19: Average UAA of farms by type of farming in the EU in 2018
(average per farm in hectares)



The size of farms run by women is half in comparison to farms run by men. The biggest gender gap in terms of farm size is observed in Estonia, Lithuania and Sweden. Finland is the only Member State where farms run by women are on average bigger than farms run by men.

Figure 3.24: Average UAA per farm by Member State and sex of the farm holder-manager(s) in 2018 (in EUR)

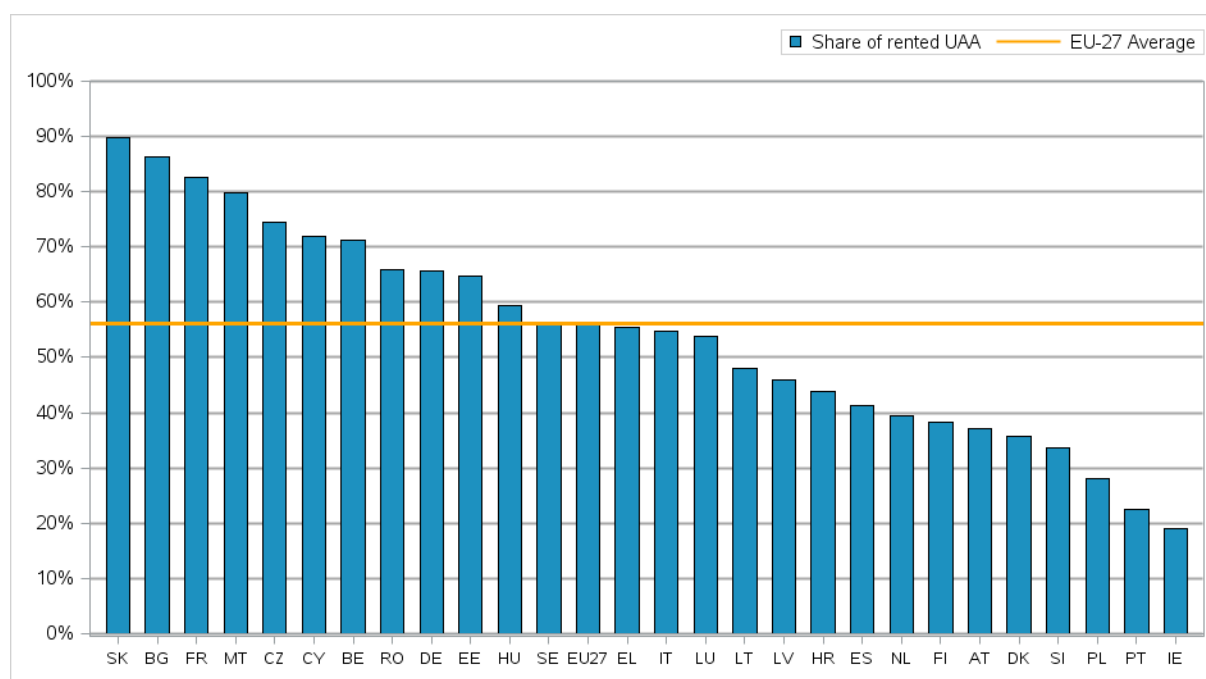


3.3.2. Importance of rented land

Structural change is occurring in the agricultural sector, as reflected by the steadily decreasing number of farms. As a result, the remaining active farms tend to get larger as they buy or rent the land previously used by farms that have ceased farming.

More than half of the agricultural area used in the EU is rented (56 %). This result mask considerable differences among the Member States: in Slovakia, Bulgaria, France and Malta, more than 80% of the land is rented whereas in Ireland and Portugal, the rented land is less than a quarter.

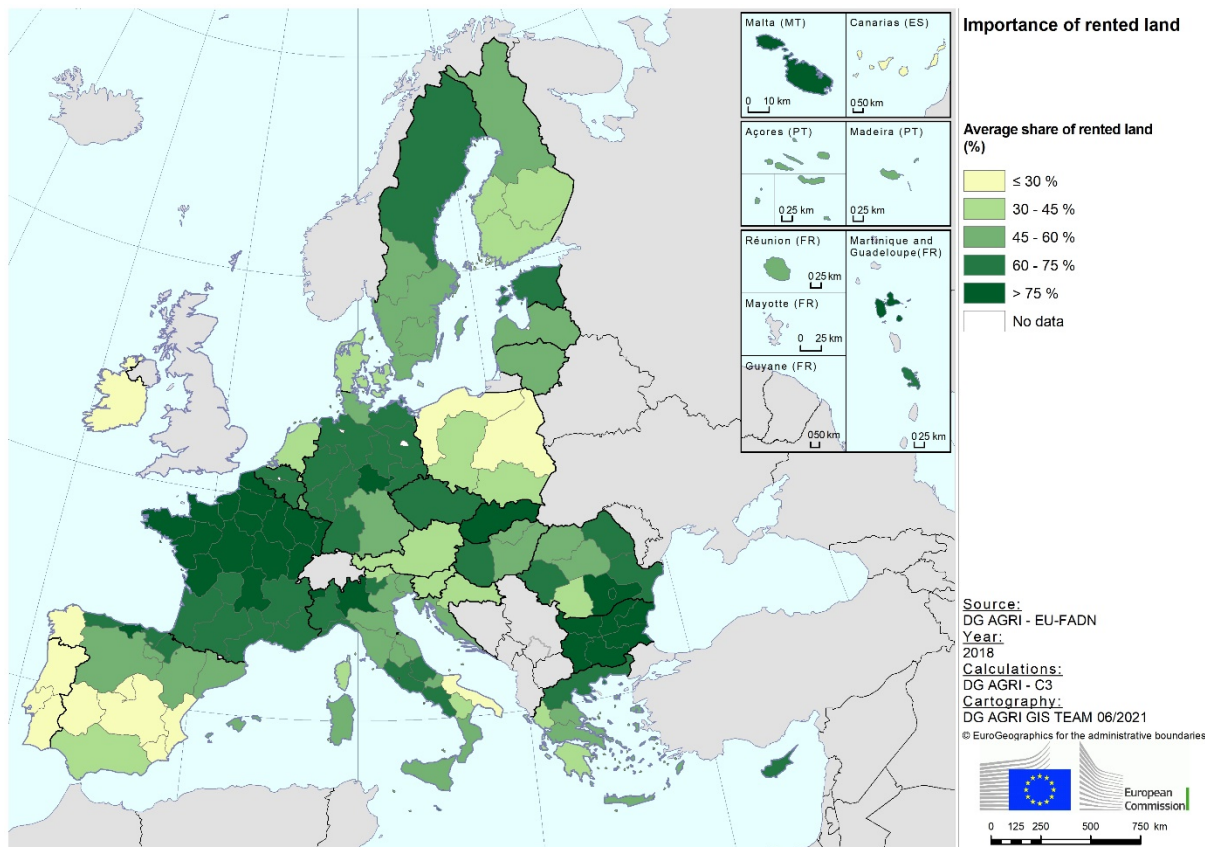
Figure 3.25: Rented land as a proportion of total UAA by Member State in 2018
(average per farm in %)



Regional disparities are shown on Map 3.3. Rented land as a proportion of total UAA is very high in some regions of France (Picardie: 95 %; Nord-Pas-de-Calais, Haute-Normandie and Bourgogne: 92 %, Île-de-France: 91 %), Bulgaria (Yugozapaden: 91 %, Yugoiztochen: 89 %) and Slovakia (90 %³⁰). Conversely, rented land as a proportion of total UAA is below 20 % in many southern European regions such as Murcia in Spain (13 %); Ribatejo e Oeste (19%) and Norte e Centro (15 %) in Portugal; and in Ireland (19 %).

³⁰ This very high proportion of rented land of total UAA reflects the business structure of Slovak and Bulgarian agricultural holdings (i.e. cooperatives renting land from their members).

Map 3.3: Rented land as a proportion of total UAA by FADN region in 2018

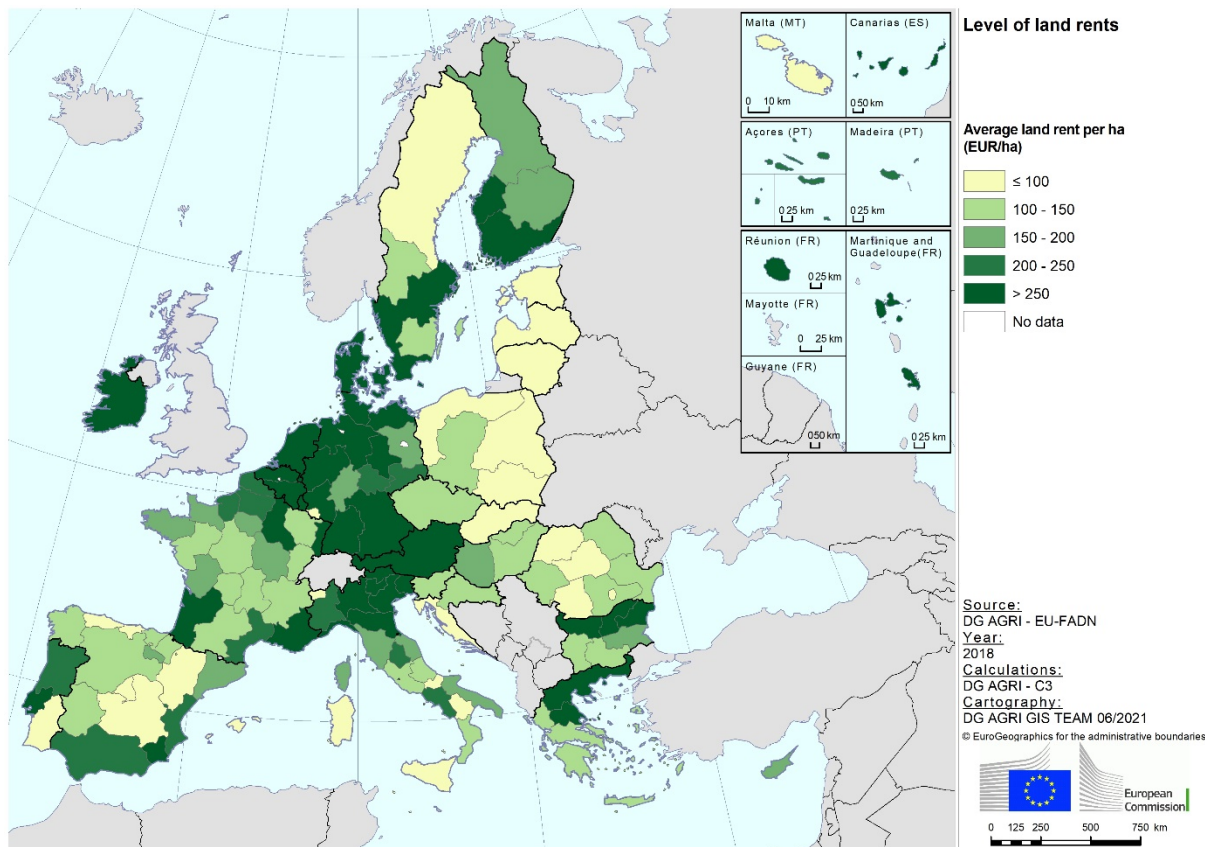


3.3.3. Level of land rents

The price of owning land is often influenced by factors originating outside the agricultural sector. For this reason, the annual rent farmers have to pay for one hectare of land is typically considered the best proxy for the cost of land. Map 3.4 shows that the level of land rent varies markedly across EU regions. In 2018, the highest average land rent per ha was in the Canary Islands (EUR 2 000), the Netherlands (EUR 1 170), Denmark (EUR 800). On the other hand, rents were particularly low in Latvia and Estonia (EUR 44 and 54 per ha respectively) and in many regions with unfavourable conditions for intensive agricultural production, such as dry and mountainous areas.

Insofar as the rental value of land reflects land scarcity, it can be used as an indicator of the risk of land abandonment. For instance, if land rents are high, it can be assumed that farming is profitable and that there are enough farmers willing to use the land. However, low land rents indicate that there is little potential for making economically profitable use of the land. Hence, adverse changes in the economic environment are highly likely to result in land abandonment.

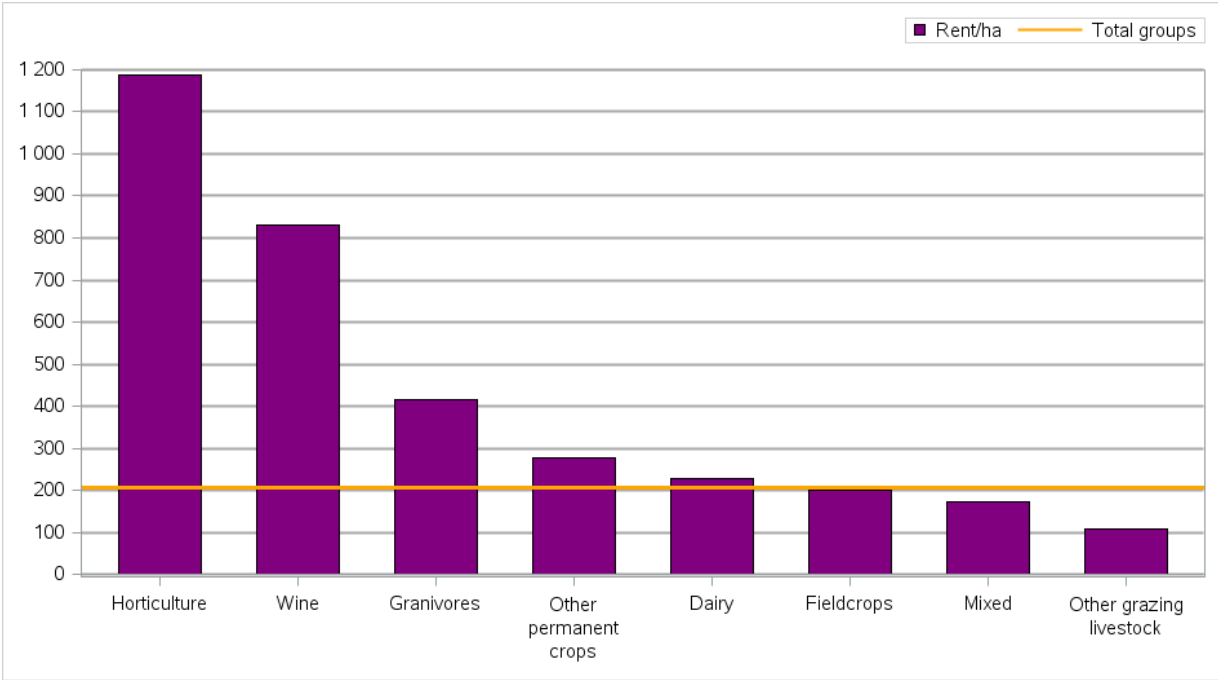
Map 3.4: Average land rent price in the FADN regions in 2018



Results by farm type

The level of land rent depends on several factors, such as the scarcity of land, the degree of competition between farmers in the local land market, and the strength of demand for land in different sectors. In areas with significant horticulture or wine production, suitable land is scarce and land rents are much higher than, for example, in areas with extensive grassland. Similarly, in areas with intensive livestock production, land prices tend to be higher because additional land is often a precondition for expanding production. Of course, factors such as the profitability of production, production structures and the institutional setting of land markets must also be taken into account, as they also influence the levels of land rent. These differences in land rents by type of farming can be seen in Figure 3.26.

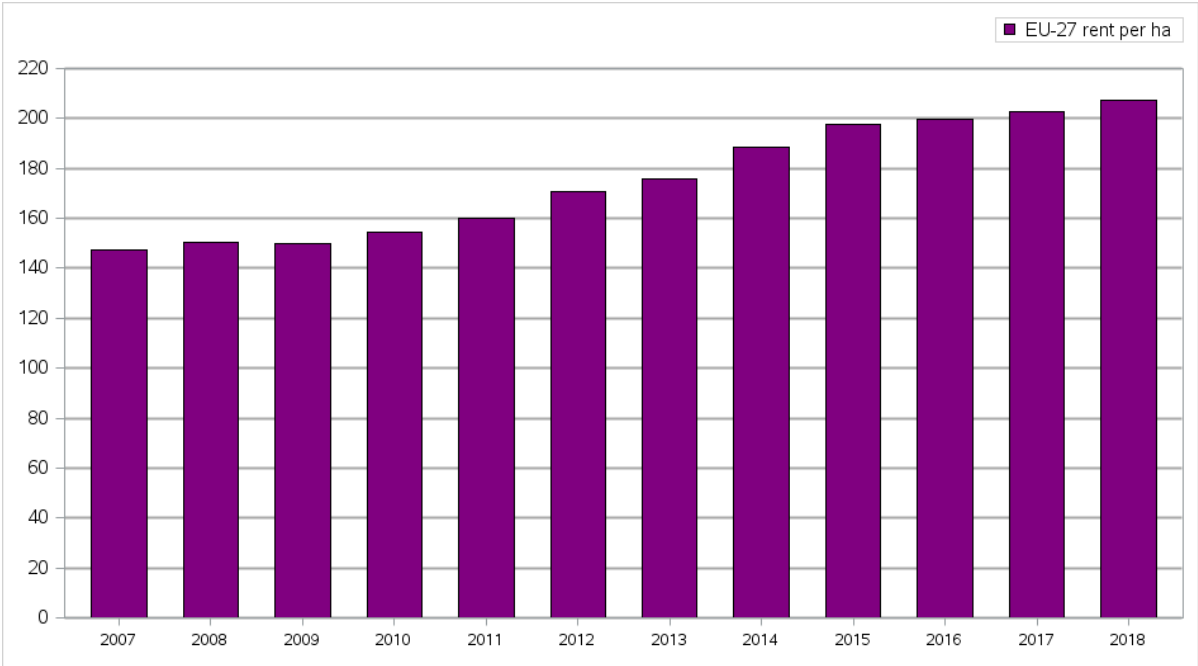
Figure 3.20: Average land rent by type of farming in the EU in 2018
(in EUR per hectare)



Development in land rent over time

Land rent prices in the EU grew by 41% over the period 2007-2018 and reached their highest level in 2018. However, the pace has slowed down.

Figure 3.21: Long-term development in land rent levels in the EU
(in EUR per hectare)



ANNEX INDEX

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Annex 1: Farm Accountancy Data Network in the context of the Farm Structure Survey — Methodology

The **Farm Accountancy Data Network (FADN)** is a European system of sample surveys that are run each year to collect structural and accountancy data from 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 FADN is the only harmonised source of microeconomic data, which means that its accounting principles are the same in all EU Member States.

The FADN is closely linked to the Farm Structure Survey (FSS)³¹ managed by Eurostat, since the field of survey in the FADN is based on the FSS farms population. The FSS is carried out in all Member States in a harmonised manner based on European legislation. This means that comparable data are available for all countries in each survey.

The FSS population consists of all agricultural holdings in the EU of at least one hectare³². From 2010 onwards, following the entry into force of Regulation (EC) No 1166/2008, the minimum requirements for survey coverage from the 2009/2010 FSS onwards have been changed. Countries which used a survey threshold above one hectare of UAA were allowed to fix their threshold at a level that excludes only the smallest agricultural holdings which together contribute 2 % or less to the total UAA excluding common land and 2 % or less to the total number of farm livestock units. Although the threshold for inclusion in the survey varies among countries, the FSS covers at least 98 % of the total utilised agricultural area excluding common land and 98 % of the total number of farm livestock units.

To ensure that the FADN sample provides representative data on the agricultural population and reflects the diversity of farming in the European Union, the sample of farms is set up on the basis of the typology classification in line with the FSS. Farms are selected in the FADN sample on the basis of an official selection plan prepared by each Member State. The selection plan is drawn up either on the basis of the most recent statistical data from the agricultural census carried out every 10 years, or from the FSS carried out between censuses. As a result, the field of survey in the FADN is a subset of the FSS³³.

The selection plan sets out the number of farms to be selected by region, type of farming and economic-size class. It specifies the detailed rules to be applied for selecting the holdings. The three-way stratification of the population of farms (i.e. the total number of farms in the EU) based on the common typology classification allows it to be represented as a three-dimensional matrix of cells. The number of farms in each cell is derived from the FSS. Each cell corresponds to a specific category of farms.

³¹ From the reference year 2020: Integrated Farm Statistics (IFS).

³² Member States can use thresholds other than one hectare, as long as they follow the coverage requirements specified in Regulation (EC) No 1166/2008 of 19 November 2008 on farm structure surveys and the survey on production methods.

³³ Note that there are also methodological differences in data collection for the FSS and FADN. For example, information on animals is requested in June for the FSS, and an average of the number of animals over the year is used in the FADN. The FSS requests information on other gainful activities in the form of a template, while in the FADN this information is calculated on the basis of accounts.

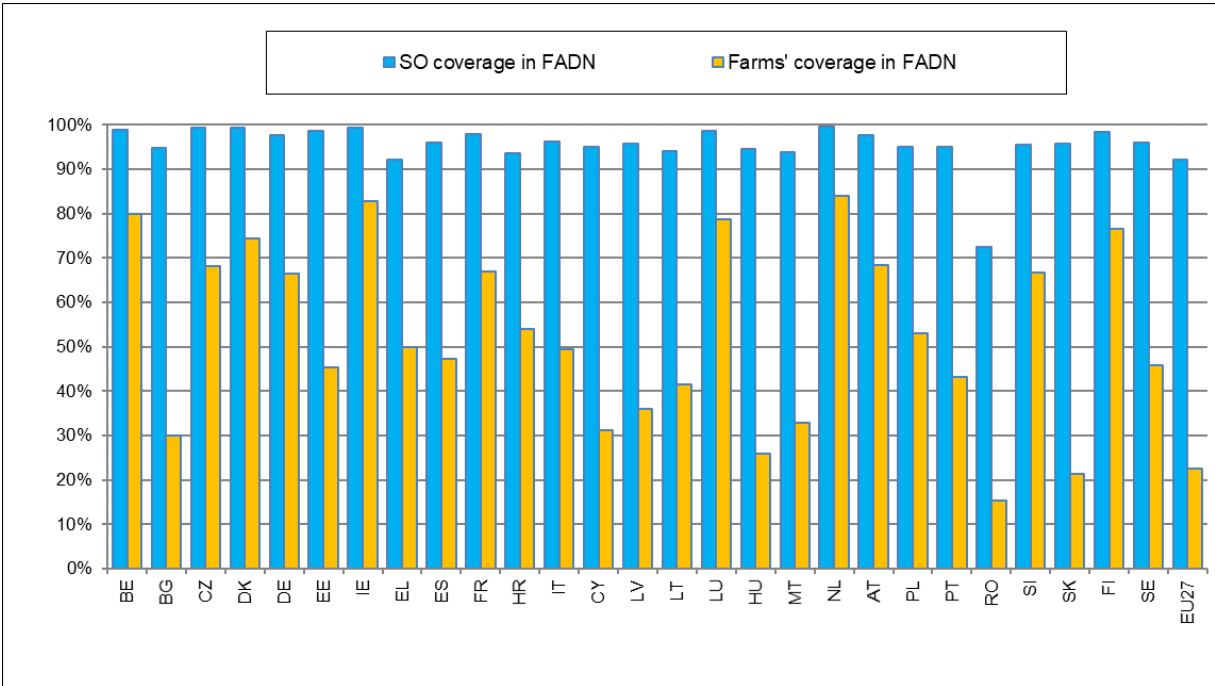
An individual weighting is applied to each farm in the sample. This weighting corresponds to the number of farms in the three-way stratification cell of the field of observation (or the FSS farms in a given cell) divided by the number of farms in the corresponding cell in the sample (or the FADN farms in a given cell). This weighting system is then used in calculating the FADN aggregated results used in this report.

Table 1.2: **Characteristics of the FSS and FADN**

	FSS	FADN
Type of data	Full population	Sample of market-oriented farms Extrapolation to the represented population based on weighting factors
Thresholds	Alternative thresholds (minimum coverage should be guaranteed)	Based on Standard Output (formerly SGM); separate thresholds for each Member State
Sampling frequency	3-4 year interval	Annual
Spatial resolution	Local Administrative Unit	FADN regions
Information	Structural	Financial and structural

The FADN aims to cover EU’s agricultural holdings as fully as possible in order to represent the largest possible proportion of total agricultural output, area and farm labour represented in the FSS.

Figure 3.28 **Farm and Standard Output coverage of the FADN 2018 compared to the FSS 2016**

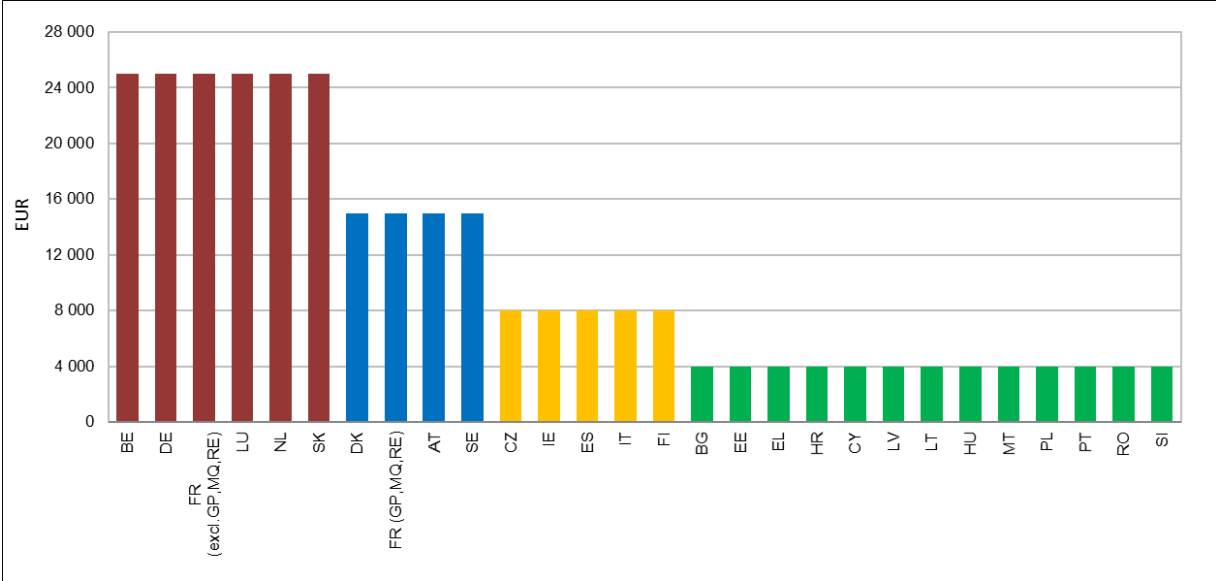


Note that the FADN’s field of survey does not cover all agricultural holdings in the EU but only those which, due to their size, can be considered as market-oriented.

Market-oriented farms must exceed a minimum economic-size threshold measured in Standard Output³⁴.

Because of the different farm structures in the European Union, each Member State specifies their own thresholds. The threshold should ideally ensure high overall FADN coverage of the FSS population in terms of Standard Output, but also of utilised agricultural area and livestock units at country level. The economic-size thresholds range from as low as EUR 4 000 in most of the countries that joined the EU in 2004 or afterwards, to as high as EUR 25 000 in Belgium, Germany, France, Luxembourg, the Netherlands and Slovakia.

Figure 3.29 FADN thresholds in Member States in 2018 (in EUR of Standard Output)



The FADN is primarily designed to evaluate income and financial indicators. It is not suitable for providing data on the farm structure of all farms, because it applies thresholds and does not include the whole agricultural population. Furthermore, the FADN does not focus on production totals but on average values per farm.

The FADN data used in this report refers to 2018. That year, the sample consisted of approximately 80 300 holdings in the EU, which represents nearly 3.9 million farms (38 %) out of the total of 10.3 million farms included in the FSS 2016.

Data for the United Kingdom are not included in this edition of the report, for any year to offer a picture of the EU as it is now. However, FADN results for the UK are available in the [FADN public database online](#).

³⁴ **Standard Output (SO)** is the average monetary value of the agricultural output at the farm-gate price of each agricultural product (crop or livestock) in a given region. The SO is calculated by Member States per hectare or per head of livestock, by using basic data for a reference period of 5 successive years. The SO of the holding is calculated as the sum of the SO of each agricultural product present in the holding multiplied by the holding’s number of hectares or heads of livestock. The SO coefficients are expressed in euros and the economic size of the holding is measured as the total standard output of the holding expressed in euros. Previously, using rules set by Decision 85/377/EEC, the economic size was measured as the total Standard Gross Margin (SGM) of the holding expressed in European Size Unit (ESU) instead.

Annex 2: Definitions and their interpretations

Farm receipts recorded in the FADN accounts

Output: This includes crops and livestock production, as well as other output if it is directly linked to a farm's activity, e.g. farm tourism, forestry, renewable energy, etc. It does not include a household's non-farm income.

Direct payments: In the context of this analysis, direct payments refer to all farm subsidies on crops, livestock and livestock products linked to production. They also include the basic payment scheme (BPS) and single area payment scheme (SAPS).

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

Costs items recorded in the FADN accounts

Intermediate consumption: This is the total of the specific costs and overheads arising from production in the accounting year. For example, intermediate consumption includes the costs of feed, fertilisers, crop protection and energy.

Depreciation: This is the depreciation of capital assets estimated at their replacement value.

(Net) Farm taxes: These are farm taxes, less VAT, plus other taxes on land and buildings. Subsidies on taxes are deducted. Personal income taxes are not taken into account.

(Net) Taxes on investment: These are taxes not arising from current productive activity in the accounting year, net of subsidies.

Wages: This covers wages and social security charges.

Rent: This covers rent paid for farm land and buildings and rental charges.

Estimation of the imputed unpaid family factor costs

Family-labour cost: This cost is estimated on the basis of wages which farm owners would have to pay if they were to hire employees to do the work carried out by family members.

It is estimated as the average regional wage per hour based on FADN data³⁵ multiplied by the number of hours worked by family workers on the farm. It is commonly acknowledged that the number of hours worked by family workers can be overestimated. Thus, a ceiling of 3 000 hours per AWU is applied (this is the equivalent of 8.2 hours a day, 365 days a year)³⁶.

The use of hours makes it possible to give managers more remuneration than employees, if they work more hours.

³⁵ If there are not enough farms (fewer than 20) with paid labour at regional level, the national average is used.

³⁶ One limitation of this estimation method is that if a farmer were to receive a salary he would probably work less.

Reliable family-labour cost estimates are difficult to obtain as records of hours worked on the farm might be overestimated and it is not easy to determine what an appropriate remuneration for family labour is. Farmers may agree to be remunerated at a below-average wage if they consider farming as a way of life or have other sources of income for their household (e.g. other gainful activities, spouse working outside the farm, etc.).

Own-capital cost

- **Own-land cost:** This cost is estimated on the basis of the rent that farm owners would have to pay if they were to rent the land they are using. It is estimated as the owned area multiplied by the rent paid per hectare on the same farm or, if there is no rented land on the farm, multiplied by the average rent paid per hectare in the same region and for the same type of farming³⁷.
- **Cost of own capital (except land):** The cost of own capital (permanent crops, buildings, machinery and equipment, forest land, livestock and crop stocks) is estimated as its opportunity cost (i.e. how much money the farmer could earn if he were to invest the equivalent of its capital value in ‘safe’ financial assets).

The interest paid on capital is not known, as this information is optional in the FADN farm return. Nevertheless, in order to take into account the actual interest rate paid on a farm, a ‘weighted’ interest rate is calculated as the weighted average of this interest rate for liabilities and the long-term interest rate obtained from Eurostat. Note that if the ‘weighted’ interest rate is lower than the long-term interest rate (which means that the calculated rate of interest paid is lower than the long-term interest rate), the long-term interest rate is used instead of the ‘weighted’ interest rate.

Own-capital value (excluding land and land improvement) is estimated as the average value of the assets (closing valuation plus opening valuation divided by two) multiplied by the real interest rate³⁸. The correction is made by subtracting the inflation rate³⁹ from the nominal interest rate.

The value of total circulating capital is not taken into account in the estimation process as data in some Member States are not sufficiently reliable. However, the crop stocks value is included.

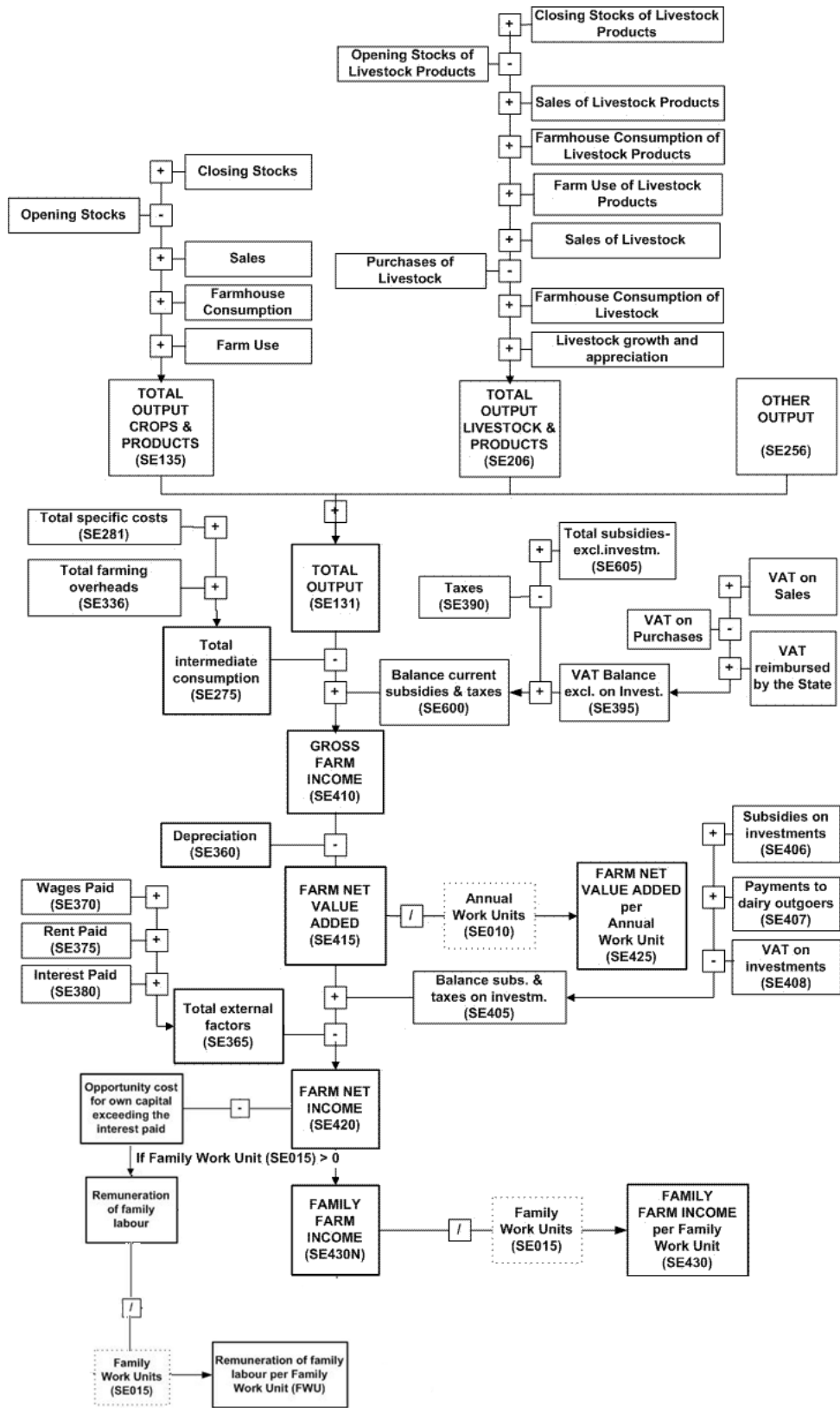
³⁷ If there are not enough farms (fewer than 20) in a given region for a given type of farming, the national rent per hectare for this type of farming is used (based on the TF8 classification).

³⁸ Any increase in the value of assets is excluded from income calculations. For example, land appreciates in value over time, which is one of the reasons why investors invest in land. This gain is not included in the income; therefore it would not be consistent to include it in the cost of capital affecting the income.

³⁹ The inflation rate is based on the Eurostat annual average rate of change in the Harmonised Indices of Consumer Prices (HICPs), available from 1997. Inflation rates based on a GDP deflator and on a deflator of gross fixed capital consumption have been tested, but were found to lead to very high negative costs for capital, mainly in the EU-N13. An inflation rate calculated on the basis of price indices for gross fixed capital consumption has been tested, as it seemed to be more closely related to assets. However, this rate has fluctuated widely over the years for certain Member States. In addition, land is one of the most important assets which does not depreciate. It follows that the inflation rate of gross fixed capital consumption may not be more closely linked to the change in price of agricultural assets than to the consumer price indices.

To calculate unpaid capital costs, the interest paid is deducted from the sum of the own-land cost and the cost of own capital except land (to avoid double counting). The total capital cost must be at least equal to the interest paid. Imputed unpaid capital costs = Max (interest paid; own-land cost + estimated cost for own capital except land – interest paid).

Annex 3: Income calculation



Source: DG AGRI EU-FADN.

Annex 4: Threshold by EU Member State in 2018 (SO: Standard Output)

Member State	Threshold (in SO 1 000 EUR)
Belgium	25
Bulgaria ⁴⁰	4
Cyprus	4
Czechia	8
Denmark	15
Germany	25
Greece	4
Spain ⁴¹	8
Estonia	4
France	25
— France (Guadeloupe)	15
— France (Martinique)	15
— France (Réunion)	15
Croatia	4
Hungary	4
Ireland	8
Italy ⁴²	8
Lithuania	4
Luxembourg	25
Latvia	4
Malta	4
Netherlands	25
Austria ⁴³	15
Poland	4
Portugal	4
Finland	8
Sweden	15
Slovakia	25
Slovenia	4
Romania ⁴⁴	4

⁴⁰ Change of threshold in accounting year 2017

⁴¹ Change of threshold in accounting year 2015.

⁴² Change of threshold in accounting year 2014.

⁴³ Change of threshold in accounting year 2017.

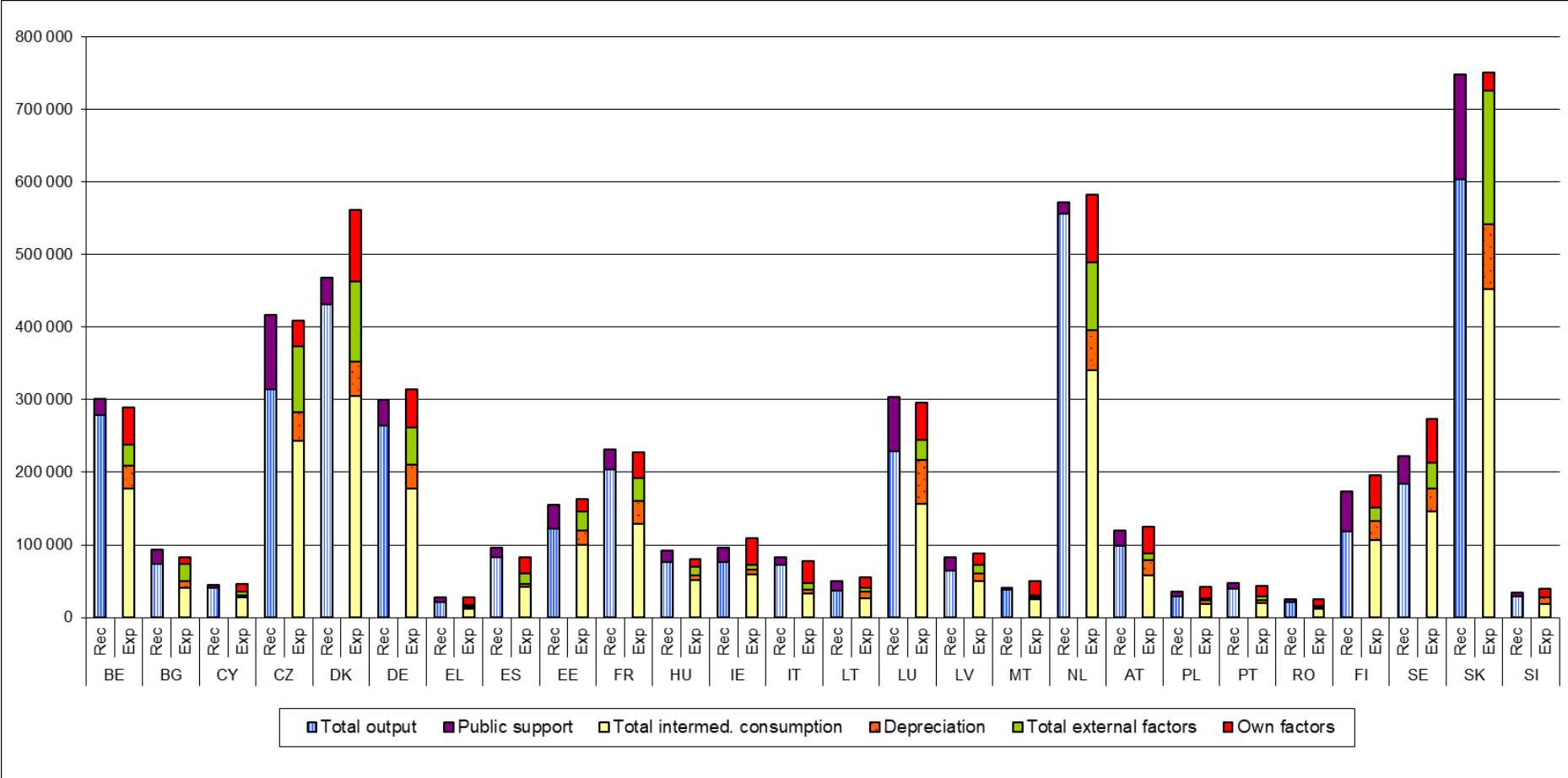
⁴⁴ Change of threshold in accounting year 2018.

Annex 5: Number of farms by type of farming in the EU in 2018

Type of farming	Farms represented	Sample farms
Fieldcrops	1 232 515	25 380
Horticulture	137 618	4 190
Wine	223 968	4 545
Other permanent crops	529 317	6 788
Dairy	426 655	12 902
Other grazing livestock	637 357	11 297
Granivores	107 229	4 895
Mixed (crops and livestock)	637 969	10 377
Total groups	3 932 628	80 374

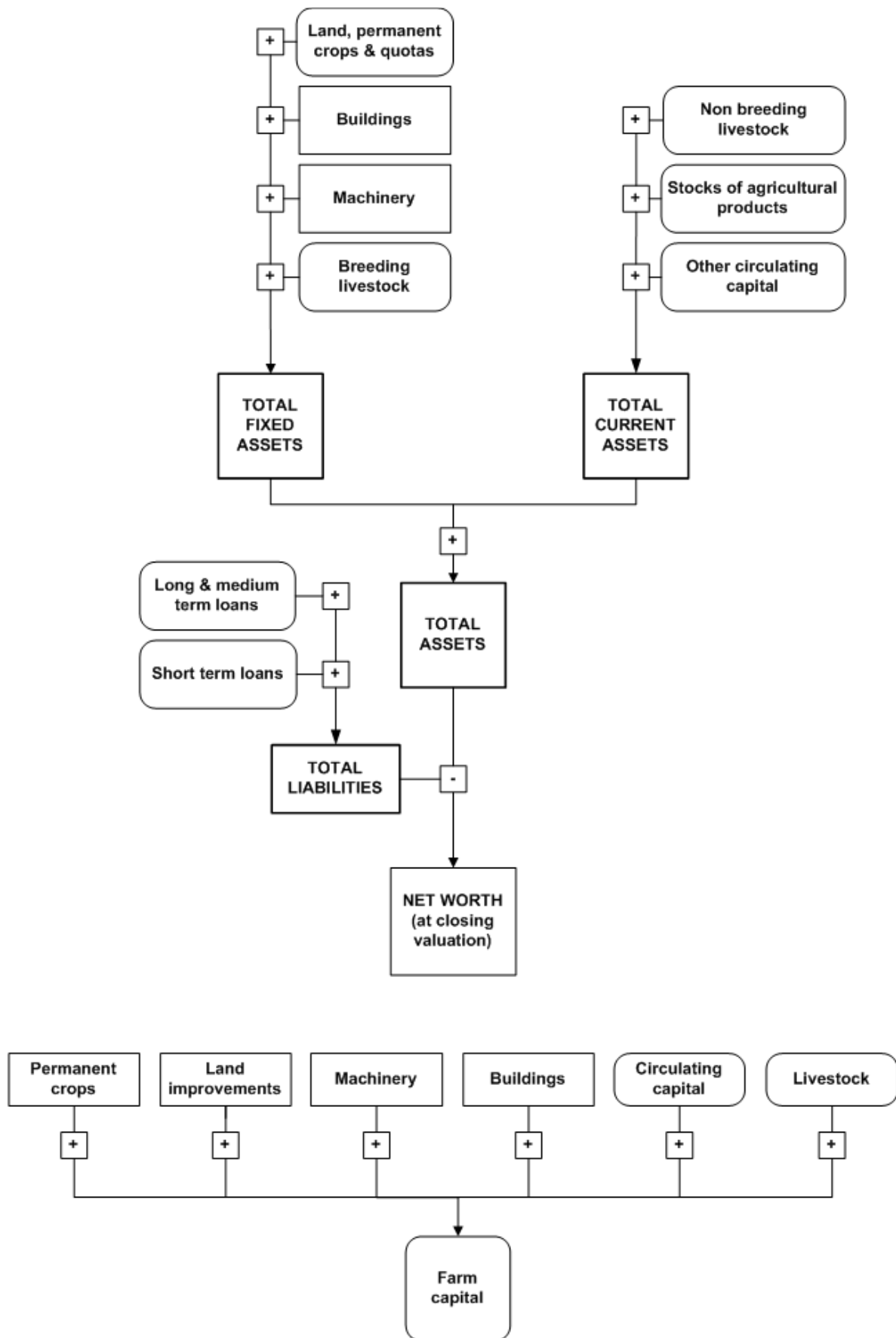
Source: DG AGRI EU-FADN

Annex 6: Breakdown of farm receipts and costs of EU farms in 2018
(average per farm in EUR)



Source: DG AGRI EU-FADN.
 Note: Receipts (Rec), Expenses (Exp).

Annex 7: Balance sheet components in the FADN



Source: DG AGRI EU-FADN

Annex 8: Indicators by Member State in 2018

Member State	FNVA	FNVA per AWU	FFI per FWU	Return on assets	Share DP in revenue	Share DP in FNVA	Average asset value	Average liabilities	Net worth	Paid labour input	Unpaid labour input	Wages / hour	Average UAA	Share of rented land	Level of rents
	€	€/AWU	€/FWU	%	%	%	€	€	€	%	%	€/hour	ha	%	€/ha
BE	91 499	43 202	40 439	2.1%	6%	19%	959 639	217 498	742 141	26%	74%	11.5	52	71%	323
BG	42 977	14 826	10 260	8.7%	16%	34%	150 378	35 885	114 493	58%	42%	3.0	68	86%	227
CY	14 211	10 040	9 227	0.3%	8%	25%	176 472	5 121	171 351	28%	72%	4.1	11	72%	159
CZ	127 136	24 613	19 322	2.5%	15%	48%	747 344	219 993	527 351	75%	25%	8.7	192	74%	122
DK	114 814	58 934	6 240	-1.3%	8%	31%	2 688 656	1 600 476	1 088 180	57%	43%	24.6	111	36%	797
DE	92 170	42 007	30 833	-0.3%	9%	30%	964 551	225 103	739 448	41%	59%	14.7	91	66%	346
EL	12 568	12 274	11 939	2.6%	19%	42%	112 574	49	112 525	20%	80%	3.6	10	55%	211
ES	48 871	29 450	33 105	5.1%	11%	21%	355 284	11 854	343 430	38%	62%	8.4	47	41%	135
EE	32 133	17 791	11 422	-1.5%	14%	66%	343 391	128 314	215 077	58%	42%	8.3	138	65%	54
FR	70 179	35 438	29 153	2.1%	10%	32%	450 417	188 499	261 918	31%	69%	14.3	88	82%	182
HR	12 013	7 586	6 488	-0.8%	15%	39%	147 722	3 111	144 611	13%	87%	4.4	15	44%	111
HU	35 080	23 465	29 384	7.4%	14%	36%	206 566	31 069	175 497	56%	44%	4.8	45	59%	146
IE	28 222	25 098	23 379	-0.2%	15%	49%	1 013 738	26 077	987 661	8%	92%	12.1	49	19%	315
IT	43 511	32 579	33 854	3.0%	9%	16%	350 245	5 846	344 399	23%	77%	9.7	22	55%	220
LT	12 226	7 640	7 810	-2.7%	18%	70%	134 179	26 421	107 758	21%	79%	4.8	50	48%	64
LV	18 998	9 329	8 085	-1.9%	13%	57%	183 226	62 885	120 341	41%	59%	5.7	66	46%	44
LU	77 928	43 918	41 102	1.4%	9%	34%	1 239 375	293 089	946 286	20%	80%	13.2	86	54%	264
MT	12 730	10 016	8 402	-2.9%	4%	12%	186 980	9 438	177 541	11%	89%	6.5	3	80%	93
NL	174 297	59 347	57 075	0.8%	3%	9%	3 118 089	878 436	2 239 653	51%	49%	17.1	39	39%	1 174
AT	42 522	28 256	23 418	-0.2%	8%	24%	580 870	85 920	494 951	9%	91%	10.8	33	37%	273
PL	11 406	7 268	6 184	-1.1%	14%	42%	187 180	10 257	176 922	11%	89%	3.9	20	28%	98
PT	23 468	14 466	16 010	7.1%	10%	21%	101 870	3 739	98 131	27%	73%	5.2	23	23%	148
RO	11 469	9 191	7 133	4.0%	16%	35%	55 492	2 477	53 015	14%	86%	2.5	18	66%	107
FI	38 681	31 333	22 853	-2.0%	15%	67%	519 812	143 167	376 644	23%	77%	15.9	67	38%	269
SE	45 268	29 622	8 498	-3.5%	12%	60%	1 127 985	259 635	868 350	28%	72%	20.8	106	56%	224
SK	198 490	18 733	33 722	0.9%	14%	54%	1 104 374	438 532	665 842	93%	7%	7.8	445	90%	70
SI	7 456	6 164	5 133	-1.9%	9%	42%	226 580	11 353	215 226	3%	97%	4.8	11	34%	137
EU-27	35 284	22 481	19 001	1.3%	10%	28%	354 393	61 252	293 141	27%	73%	8.7	37	56%	207

European Commission

EU Farm Economics

based on 2018 FADN data

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This report provides an overview of key economic developments in the European agricultural sector based on the latest data available in the Farm Accountancy Data Network (FADN) which are from 2018.

European Commission
Directorate-General for Agriculture and Rural Development

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