

Operating subsidies (both direct payments and rural development except investment support)

8 March 2018

This contribution gives an overview of the share of "operating subsidies" in farm income by different dimensions. The operating subsidies cover not only direct payments but also all rural developments measures which are not investments supports (Less Favoured Areas/Areas facing Natural Constraints, environmental measures and other measures which are not support to investments). The operating subsidies cover also the possible national aids and top-ups.

The statistics presented in this section are mainly based on 2013-2015 data, i.e. before the implementation of the previous reform.

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Farm income, wages in the whole economy and share of operating subsidies

- Figure 1 and Figure 2 compare farm income with the average wage in the economy by Member State and show the share of operating subsidies* in farming income in 2013-2015.
- They present the same information but from different sources:
 - The first one is based on the **Economic Accounts for Agriculture**, which consider the EU **farm sector as a single operator**;
 - The second one is based on the **Farm Accountancy Data Network** based on a **sample of real farms** representing farms above a certain economic size, which can be restrictive (SK and HU).
- The exact results differ due to the different methodologies, however both converge to confirm that **farming income is significantly below the average wage in the economy in the big majority of Member States**.
- Operating subsidies* allow to compensate partially or totally this gap (possibly even more for certain cases).
- The subsidies* seem crucial in LU, IE, AT, EE, SK, LV, BG, SE, SI and FI. But the analysis does not take into account possible adjustments that farmers may make in case of reduction in support. Subsidies appear relatively less important for NL, IT and CY.

*Operating subsidies cover not only direct payments but also all rural developments measures which are not investments supports, as well as possible State aids and national top-ups.

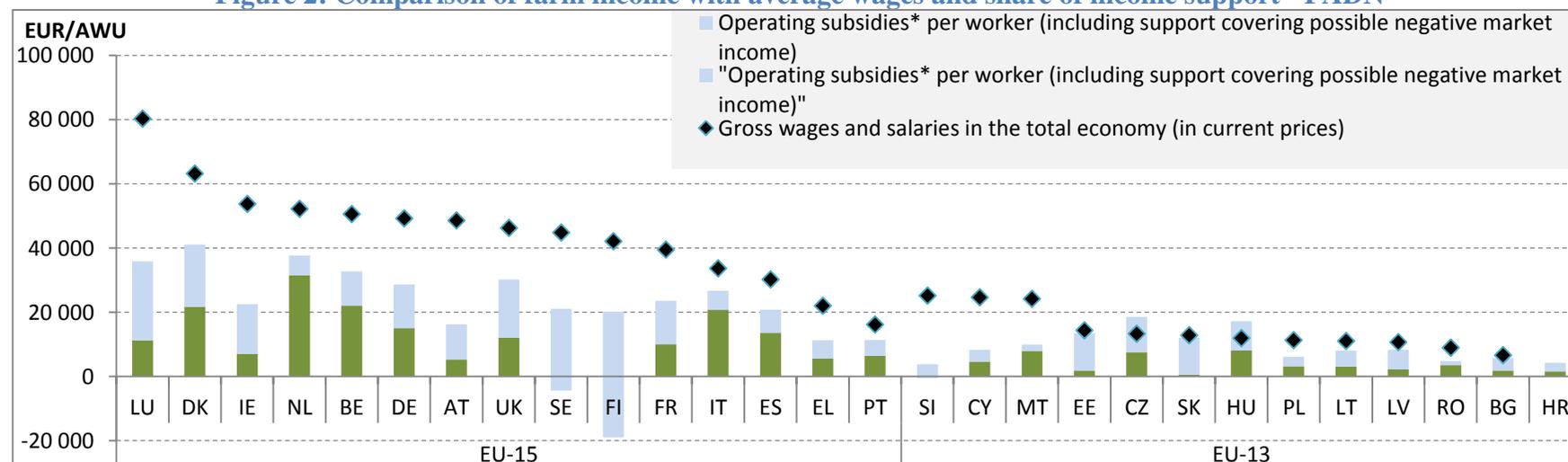
Figure 1: Comparison of farm income with average wages and share of income support - EUROSTAT



NB: Income indicator=Entrepreneurial income plus compensation of employees by total annual work units.

Source: EAA, ESTAT 2013-2015, EU FADN for number of hours worked

Figure 2: Comparison of farm income with average wages and share of income support - FADN



NB: Income indicator = Farm Net Income plus wages by total annual work units, i.e. amount remaining for remunerating all labour (paid and family labour).

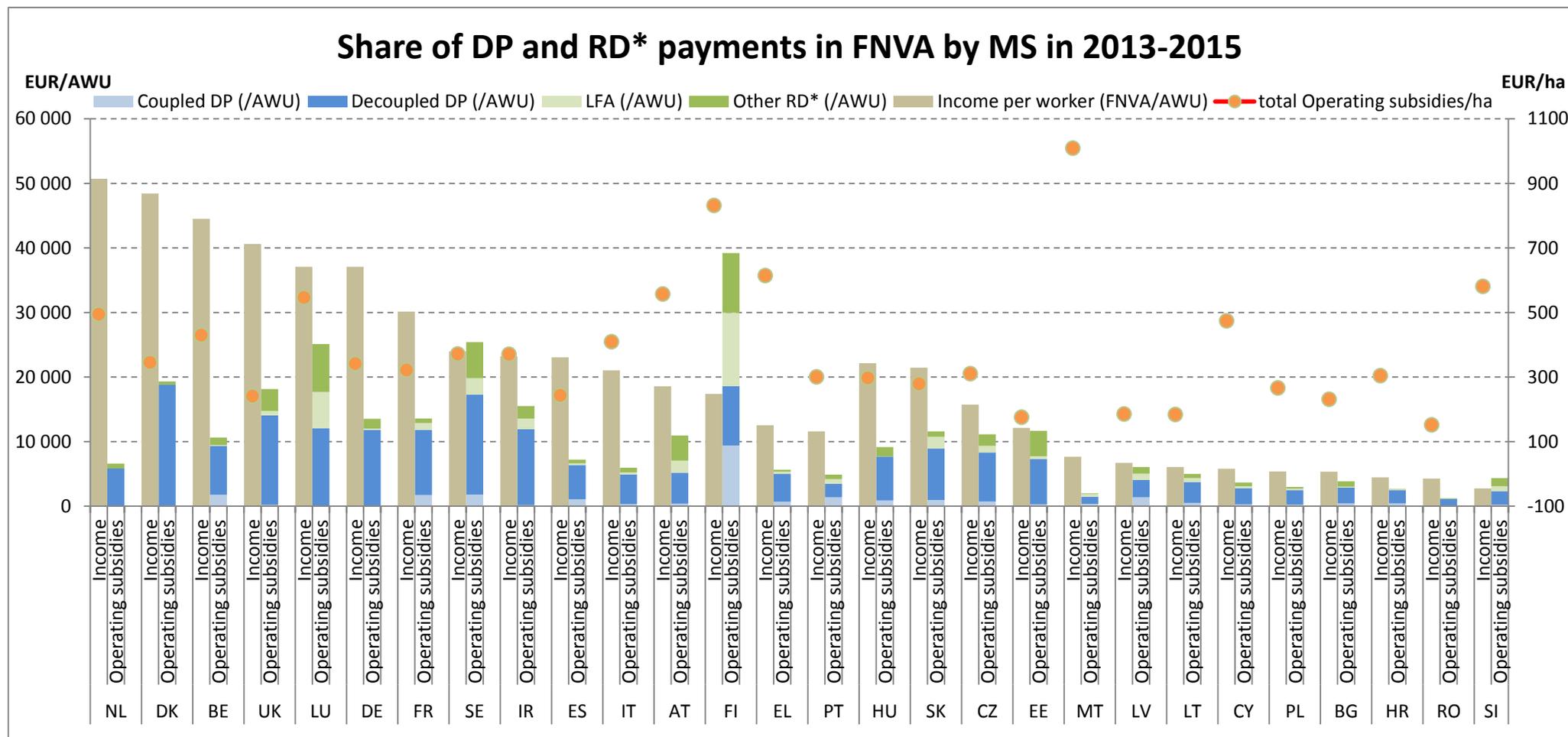
Source: FADN 2013-2015 for farms' information and ESTAT for the wages in the whole economy.

Income and share of the different operating subsidies by Member State

- Direct Payments have a function of income support as it is their first objective.
- However other operating subsidies also support income from an accountancy point of view:
 - Rural Development payments granted as "cost incurred income foregone" (RD except investments support¹);
 - Possible national top-ups and State aids.
- Figure 3 shows that farm income is **heavily dependent on operating subsidies** especially in **FI, SI, SK, SE and EE** (here another indicator is used, see note below the graph). On the contrary, the average share of operating subsidies in income is low in **NL, MT , RO, BE and DK**.
- We can also derive the relative importance of the different supports in income:
 - In DK, NL, DE and RO, decoupled direct payments are predominant in support.
 - Coupled direct payments represent a relative big share in operating subsidies in FI, LV and PT in particular.
 - The support to Less Favoured Areas (LFAs) plays a very important role in farm income especially in FI, LU and MT.
 - Other rural development measures (environmental measures and also national top-ups) make up a relative big share of support in AT, EE, LU and SI.
- It is also important to note that, because of very different farms structures and income, **high operating subsidies per hectare do not necessarily mean a high share of support in income and vice versa**.

¹ Investments may of course contribute to income indirectly at a later stage, but investments supports are not considered in the FNVA.

Figure 3: Farm income and operating subsidies by Member State in 2013-2015



NB: The income indicator used here is the Farm Net Value Added per Annual Work Unit (FNVA/AWU). It is the amount available to remunerate all factors of production (land, labour and capital, both external and own factors). It is thus higher than the income indicator used in the previous page, which is the remaining amount for all labour.

LFA: support to farms in Less Favoured Areas.

*Other RD: RD measures other than LFA, including national top-ups, but excluding investments supports.

Source: FADN 2013-2015.

Income and share of the different operating subsidies by farm size

- Farm size can be measured by physical size (utilised agricultural area) or by economic size (standard output). The two enclosed graphs show average income and share of operating subsidies according to those two dimensions.

- Whatever the dimension, **the higher the farm size, the higher the average income** (with the exception of the class above 500 hectares of UAA).

- Figure 4 shows that the average **operating subsidies per hectare decrease with farm size**, which illustrates the actual degressivity of operating subsidies by physical size. However the **share of subsidies in income tends to increase with physical farm size**.

- Figure 5 does not show any obvious pattern in terms of operating subsidies per hectare and share of subsidies in income. The share of subsidies increases up to the middle economic size class and then decreases again for bigger farms.

- Farms below 5 hectares are essentially located in RO, IT and EL. They are often mixed farms or specialists sheep and goats and specialist milk.

- Farms above 500 hectares are often located in the UK, DE and also RO. They are very often specialist Cereals Oilseeds and Protein crops, and also mixed farms. There is a high concentration of these big farms in EE, CZ, and SK.

NB: UAA: Utilised Agricultural Area. LFA: support to farms in Less Favoured Areas. FNVA/AWU: Farm Net Value Added per Annual Work Unit, = amount available to remunerate all factors of production (land, labour and capital, both external and own factors).

*Other RD: RD measures other than LFA, including national top-ups, but excluding investments supports. Source: FADN 2013-2015.

Figure 4: Farm income and operating subsidies by physical size class in 2013-2015

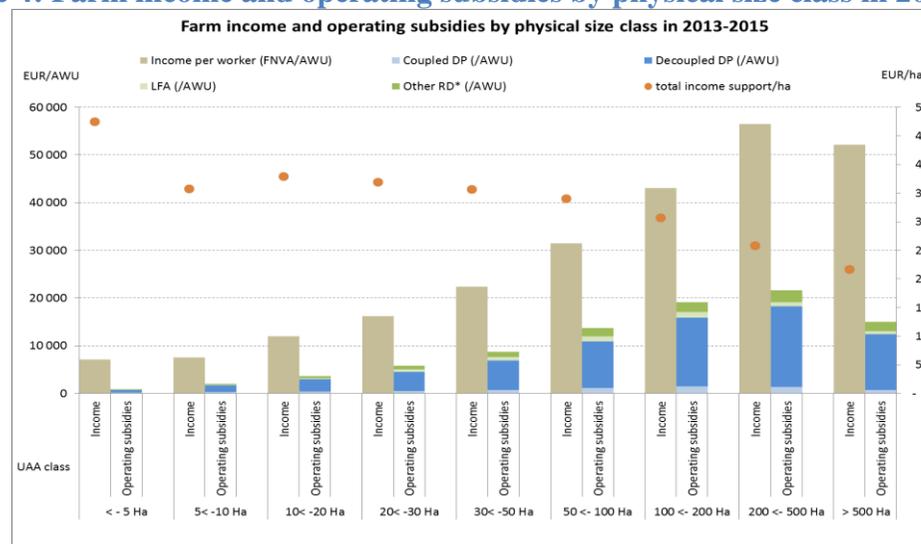
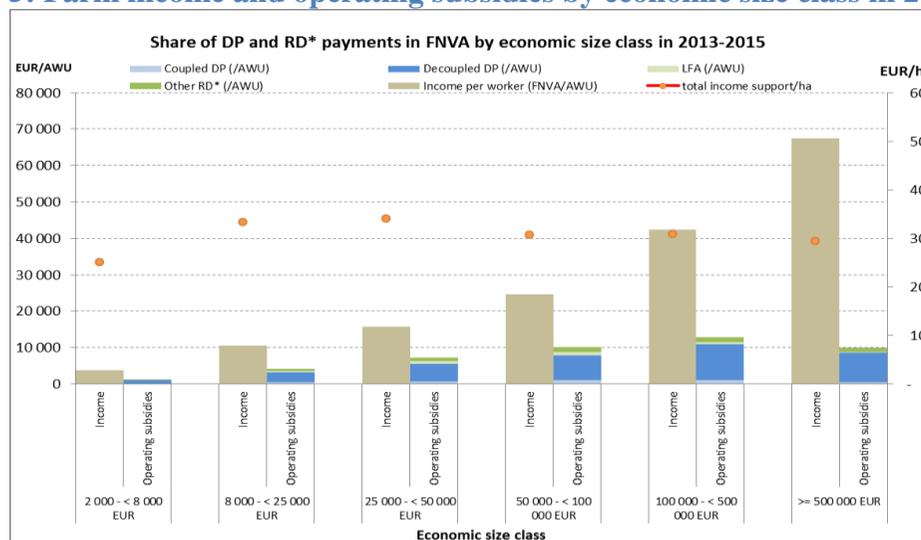


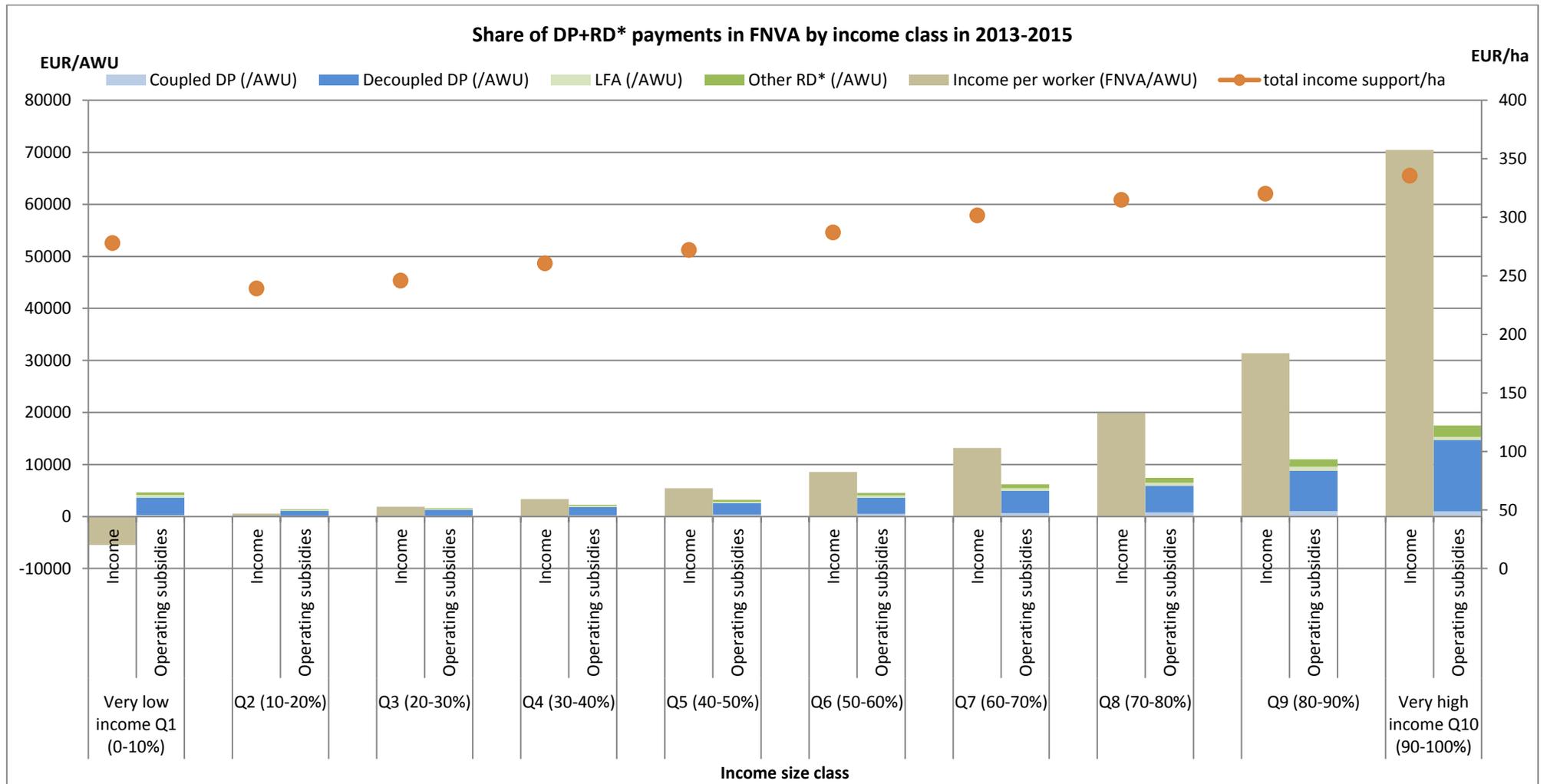
Figure 5: Farm income and operating subsidies by economic size class in 2013-2015



Income and share of the different operating subsidies by income class

- Figure 6 presents income and operating subsidies by quantile of income: farms are ranked according to increasing income and separated into groups of similar size (here 10 groups).
- It shows that, except for the 10% of farms with the lowest income in the EU, the **higher the income, the higher the operating subsidies per hectare, but the lower the share of operating subsidies in income.**
- For the 10% of farms with the lowest income, income is negative despite the high operating subsidies per worker and per hectare. Many of those farms are located in IT, PL and RO. But there is also a high concentration of those very low income farms in SI, CY and DK. They are often mixed and specialist Cereals, Oilseeds and Protein crops and specialist cattle farms.
- They are characterised by an important debt and intermediate consumption higher than their total output. It means that they cannot even pay the specific costs and farming overheads with their production (at least for a year).
- The 10% farms with the highest income receive the highest operating subsidies per hectare. However operating subsidies represent only 25% of their income (lowest share among the income classes). They are mostly also specialists Cereals, Oilseeds and Protein crops, but also specialists milk and specialists of other fieldcrops
- Those farms are often located in FR, ES, DE and IT. But there is a high concentration of these very high income farms in DK, NL, BE and LU.

Figure 6: Farm income and operating subsidies by income class in 2013-2015



NB: LFA: support to farms in Less Favoured Areas. FNVA/AWU: Farm Net Value Added per Annual Work Unit = amount available to remunerate all factors of production (land, labour and capital, both external and own factors).

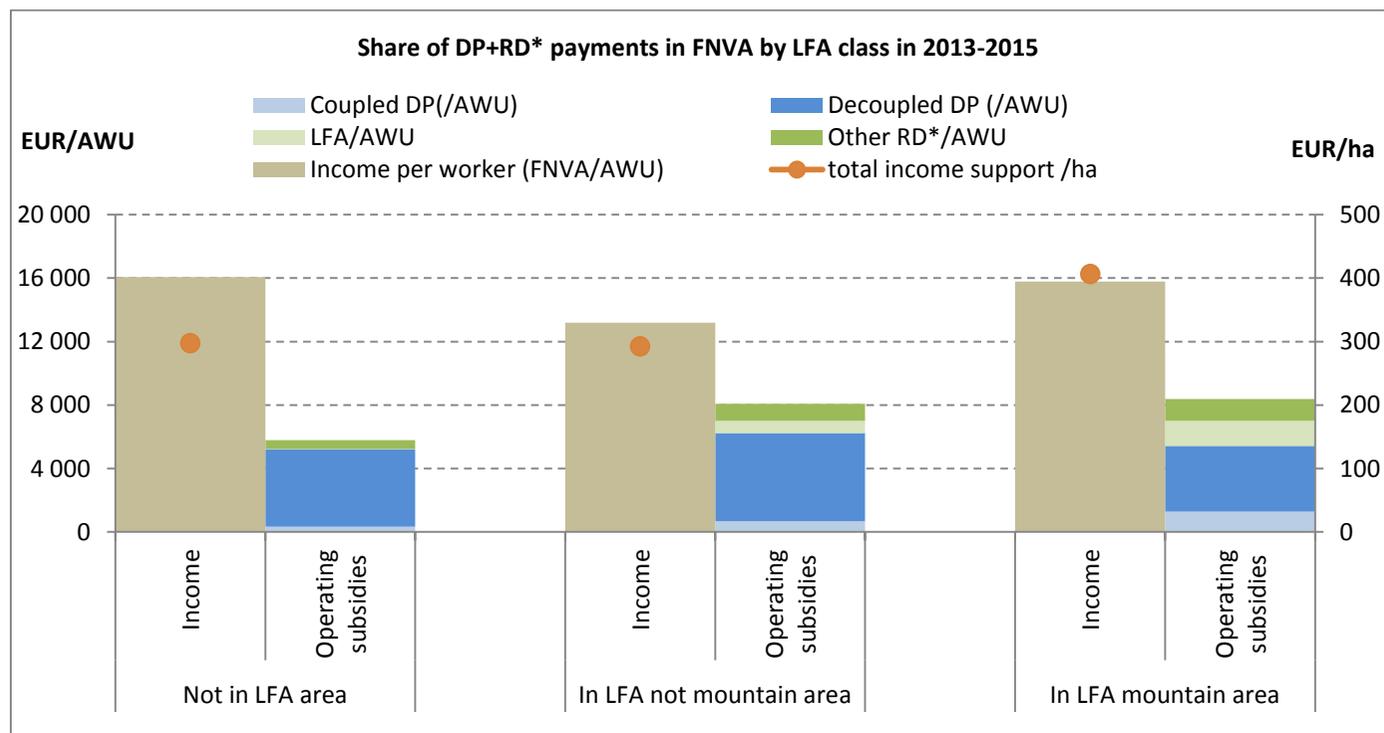
*Other RD: RD measures other than LFA, including national top-ups, but excluding investments supports.

Source: FADN 2013-2015.

Income and share of the different operating subsidies by type of less favoured areas (LFA)

- Figure 7 shows that on average for the EU, farm income is lower in less favoured areas (LFA) than in non-LFA. The income situation is worse in LFA other than mountain than in mountains.
- The operating subsidies per hectare are significantly higher in mountains, but there is no significant difference between other LFA and non-LFA.
- On the other hand, operating subsidies represent around half of income in LFA, while it corresponds only to one third in non-LFA.
- The LFA support plays of course an important role for farm income in mountains, but also other rural development measures and decoupled direct payments.
- However it should be underlined that this average EU situation hides big differences of situation between Member States: see below.

Figure 7: Farm income and operating subsidies by LFA in 2013-2015



NB: LFA: support to farms in Less Favoured Areas. FNVA/AWU: Farm Net Value Added per Annual Work Unit = amount available to remunerate all factors of production (land, labour and capital, both external and own factors).

*Other RD: RD measures other than LFA, including national top-ups, but excluding investments supports. Source: FADN 2013-2015.

- Figure 8 and Figure 9 compare the income situation in LFA (bars) compared to non-LFA (dots). They also illustrate the share of direct payments and LFA (or ANC) support in income.
- For **mountains**, the compensation of the income gap seems total in CZ and EL, while it remains very low in AT, SE, BG, CY, DE, SI, SK and PL. However this might arise because of differences in main productions between mountains and non-LFA (predominance of Cattle, Sheep and Goat and Olive farms in mountains). It can also be noted that in the Southern Member States (IT, ES, EL and PT) where the difference in income between mountains and non-LFA is in general not high, the share of LFA support in income is normally low.
- For **other LFA**, in many cases, the income is lower than in non-LFA. But it is not always true (NL, HU, LT). NL has actually ceased paying LFA in the next period. The share of LFA payments in income in other ANC is indeed generally low (except in FI and LT), notably compared to this share in mountains.

This illustrates the **very different national approaches** to the LFA/ANC scheme.

NB: LFA: Less Favoured Areas. ANC: Areas under Natural Constraint. Income indicator: Farm Net Value Added per Annual Work Unit = amount available to remunerate all factors of production (land, labour and capital, both external and own factors).

Source: FADN - DG AGRI. Based on 2012 data, with estimated 2019 direct payments (DP) (but no change of farms structures and price environment)

Figure 8: Share of direct payments and LFA/ANC in income in ANC-Mountain by Member State

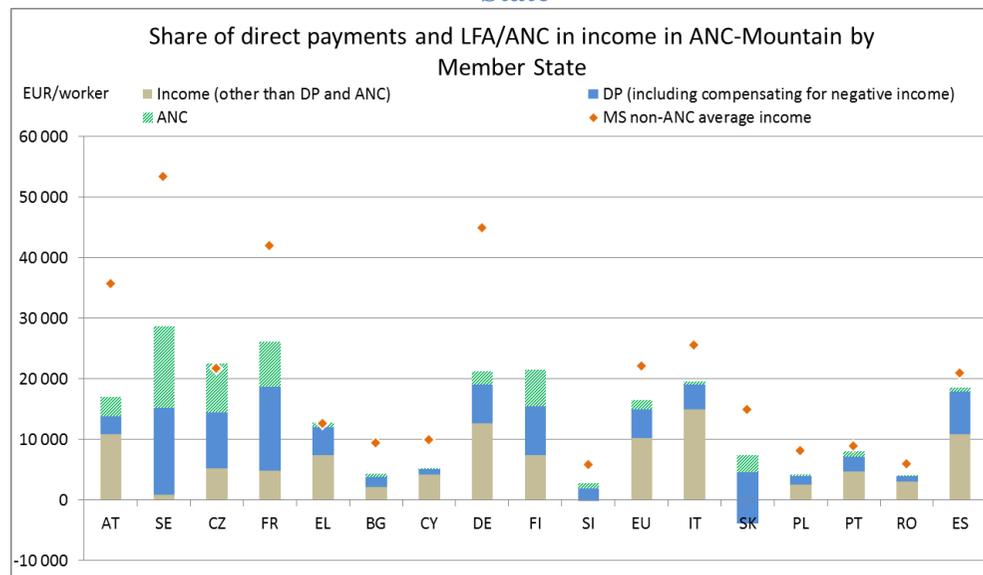
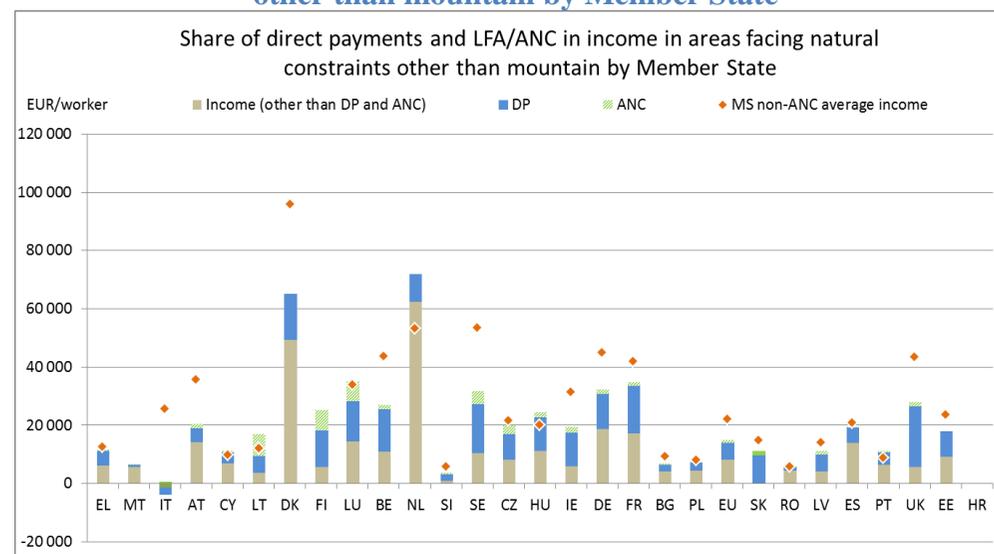


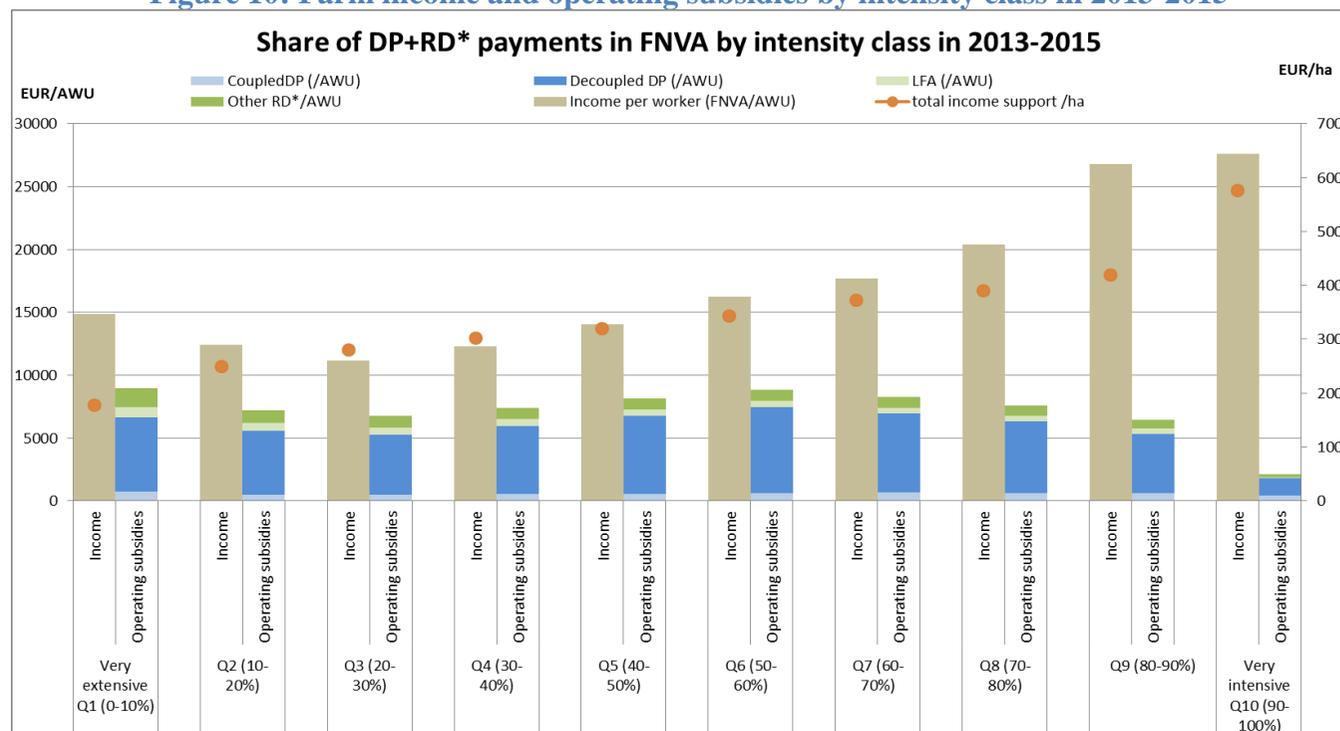
Figure 9: Share of direct payments and LFA/ANC in income in areas facing natural constraints other than mountain by Member State



Income and share of the different operating subsidies by class of intensification

- Figure 10 presents income and subsidies by quantile of intensity: farms are ranked according to increasing intensity and separated into 10 groups of similar size.
- Intensity has been measured as the ratio between the intermediate consumption (specific costs like fertilisers, pesticides and farming overheads e.g. water, electricity...) and the utilised agricultural area. This has been identified as the best possible method to compare all farms.
- **Extensive** classes have on average **lower income** than intensive classes, but up to a certain limit and with certain nuances. The most extensive class has a higher income than the next four classes.
- The **more intensive** the farm, the **higher the operating subsidies per hectare**.
- It is interesting to note that the level of subsidies per worker is relatively stable (but lower for the most intensives).
- However the **share of direct payments and rural development in income is higher for the extensive** classes than in very intensives classes:
 - Direct payments represent some 45% of income for the most extensive farms and 7% for the most intensive.
 - Rural development measures (other than for investments) represent 16% of income for most extensive and 1% for the most intensive.
- There is a high share of very extensive farms in the Baltic States and PT. Specialists in cereals, oilseeds and protein crops (COP), specialists olives, permanent crops combined, specialists sheep and goats, mixed crops and specialists cattle have higher shares of very extensive farms.
- In NL, MT, BG, BE and CY there is a high concentration of very intensive farms. Specialists horticulture and pigs and poultry are often very intensive.
- Finally it is interesting to note that BG, HU, ES, IT, PO and RO have both high share of very extensive and very intensive farms, illustrating the diversity of farming systems.

Figure 10: Farm income and operating subsidies by intensity class in 2013-2015



NB: LFA: support to farms in Less Favoured Areas. FNVA/AWU: Farm Net Value Added per Annual Work Unit = amount available to remunerate all factors of production (land, labour and capital, both external and own factors).

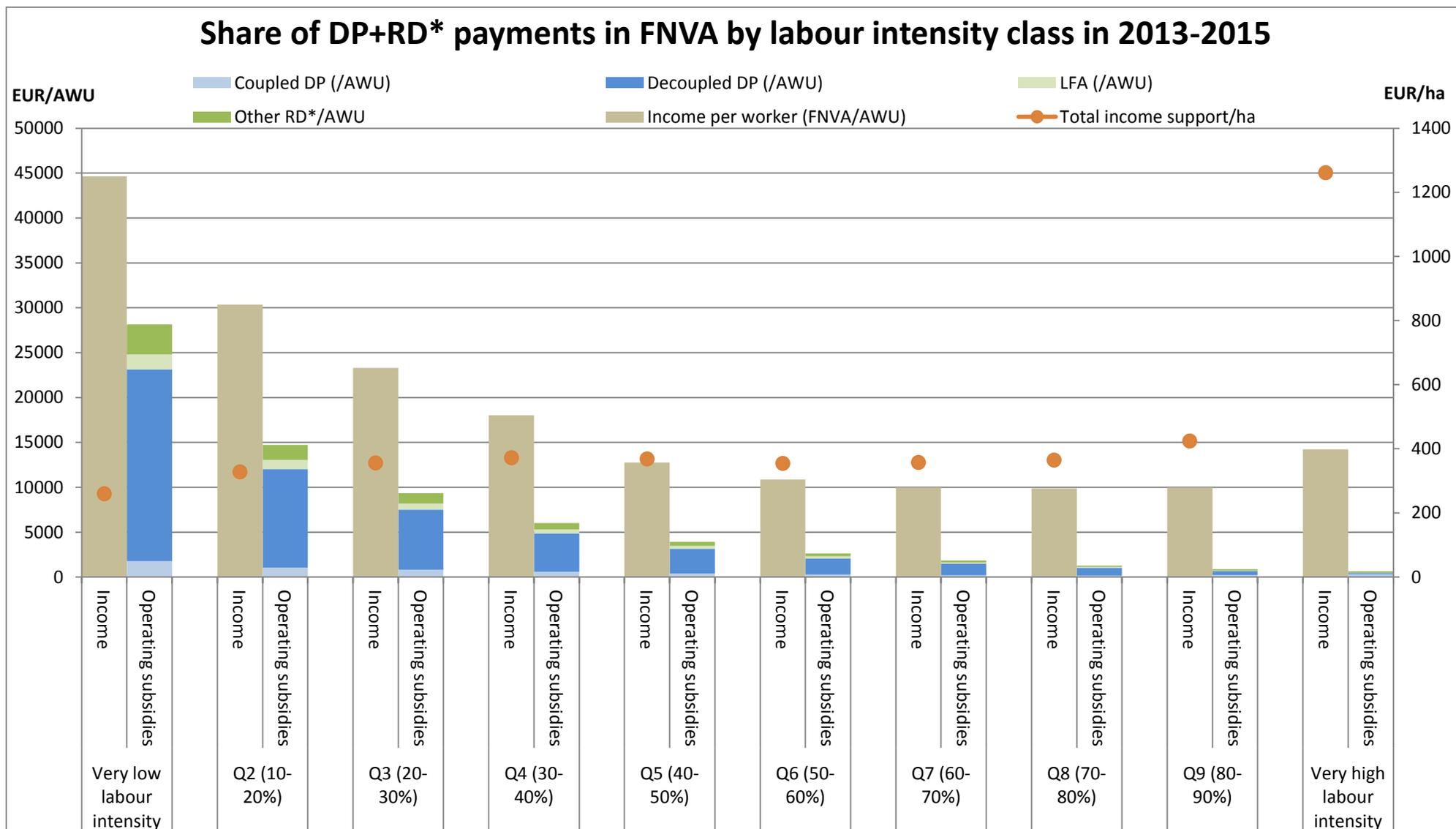
*Other RD: RD measures other than LFA, including national top-ups, but excluding investments supports. Source: FADN 2013-2015.

Income and share of the different operating subsidies by class of labour intensity

- Figure 11 presents income and operating subsidies by decile of labour intensity: farms are ranked according to increasing labour intensity and separated into 10 groups of similar size.
- Labour intensity is evaluated by the ratio between the total annual work units and the utilised agricultural area.
- **The higher the labour intensity, the lower the average income up to a certain level of income intensity.** Above 0.16 annual work unit per hectare, the average income does not change much with higher labour intensity.
- **The operating subsidies per hectare do not change much according to labour intensity, except for the two marginal classes:** support per hectare is lower for the lowest labour intensive and very high for the most labour intensive.
- The **share of subsidies** (both direct payments and rural development measures) **in income is constantly decreasing with increasing labour intensity.**
- Many farms with the lowest labour intensity are located in FR, ES and UK. They are mostly specialised in the production of cereals, oilseeds and protein crops (COP) or of cattle. In DK, FI, SE, UK, there is a high concentration of those farms (but their total absolute number is lower than in the above-mentioned Member States).
- The most labour intensive farms are located in RO. They are often also specialised in the production of cereals, oilseeds and protein crops (COP) but also in milk production or in cattle. In BG, MT and CY there is a high concentration of those farms.

NB: LFA: support to farms in Less Favoured Areas. FNVA/AWU: Farm Net Value Added per Annual Work Unit = amount available to remunerate all factors of production (land, labour and capital, both external and own factors).

Figure 11: Farm income and operating subsidies by labour intensity class in 2013-2015



* Other RD: RD measures other than LFA, including national top-ups, but excluding investments supports.

Source: FADN 2013-2015

Trend in income and operating subsidies by type of farming 2007-2015

- The following 10 graphs show the diversity of income levels, income variability and share of subsidies in income by type of farming.
- For specialists **Cereals, Oilseeds and Protein crops (COP)**, income level is high but varies significantly over years. Operating subsidies, especially decoupled direct payments play a role of "cushion". Subsidies represent about half of the income.
- For **other fieldcrops and dairy**, the pattern is similar, but with lower levels (lower income, lower share of support in income and lower variability).
- **Cattle** farms have a low income but depend at about 90% on support for their income.
- **Sheep and goats** farms have very low income, depending also for more than a half on subsidies.
- **Pigs and poultry** farms have the highest average income, it is constantly increasing over the period studied. Operating subsidies still represent about 20% of their income but this share is decreasing over time.
- **Horticulture, fruits and wines farms** do not depend on operating subsidies and have on average an intermediate level of income.
- **Olives farms** have on average low income and depend on subsidies for approximately a third of their income.

NB: mixed farms are not addressed here (see the relevant section in direct payments for more information).

Figure 12: Cereals, oilseeds and protein crops

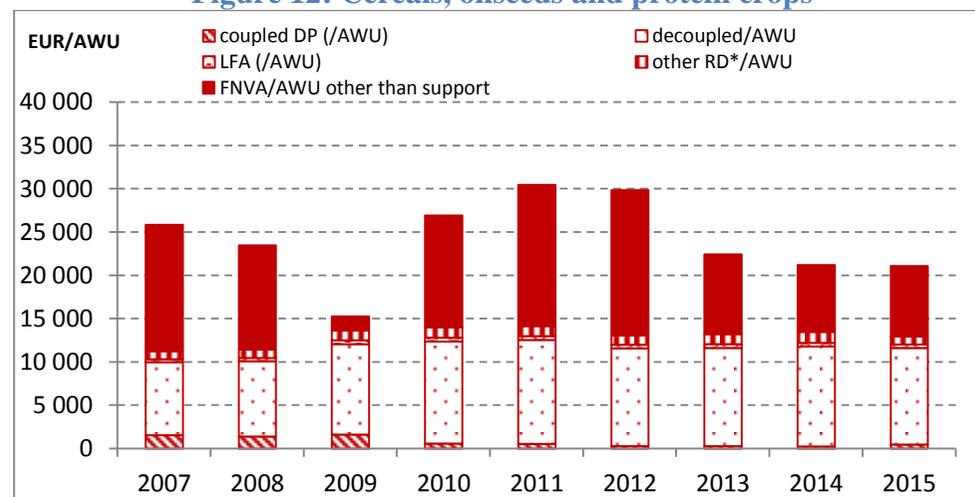


Figure 13: Other fieldcrops

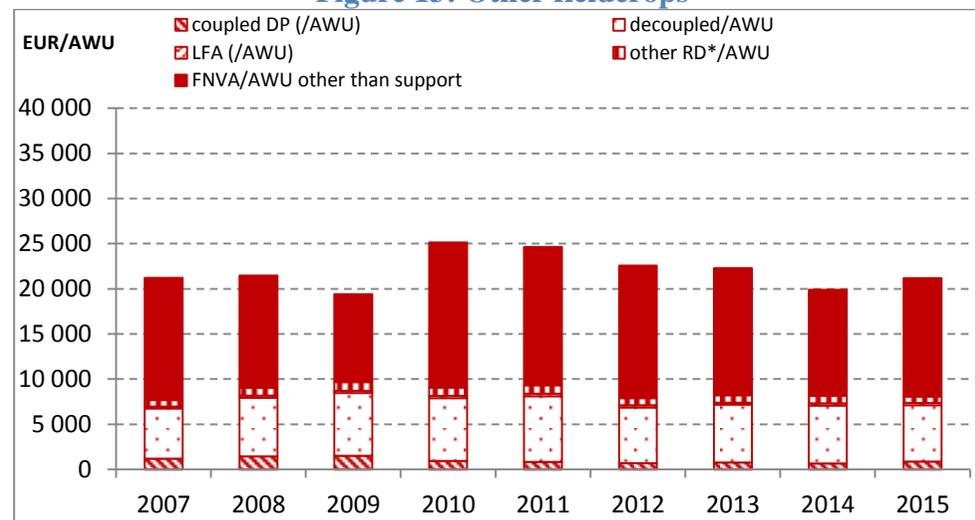


Figure 14: Dairy

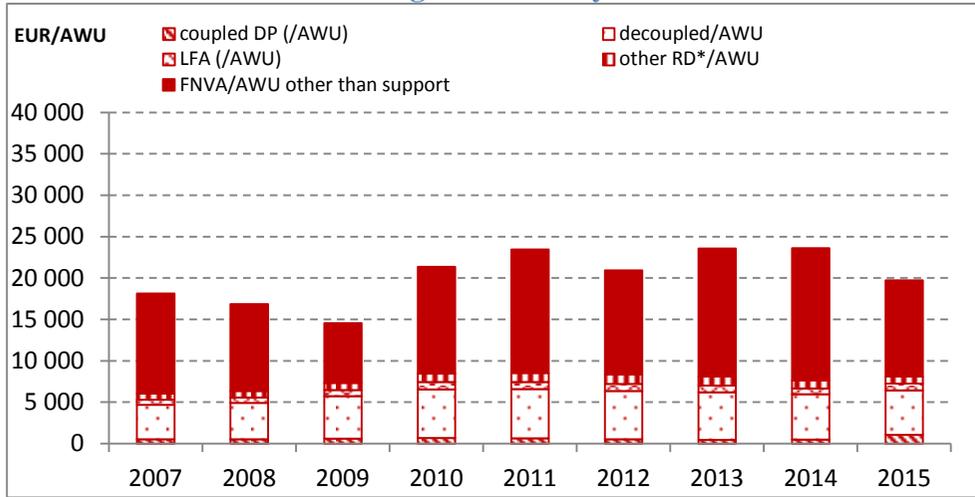


Figure 16: Sheep and goats

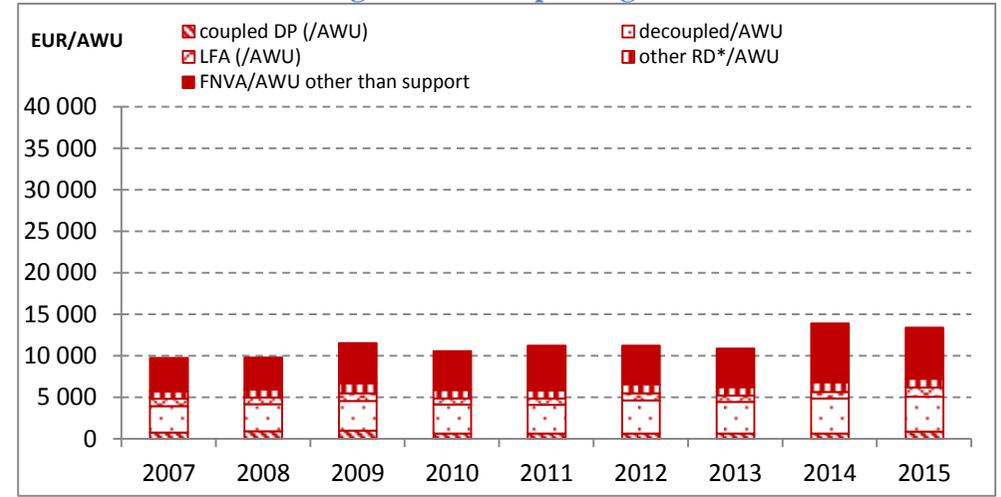


Figure 15: Cattle

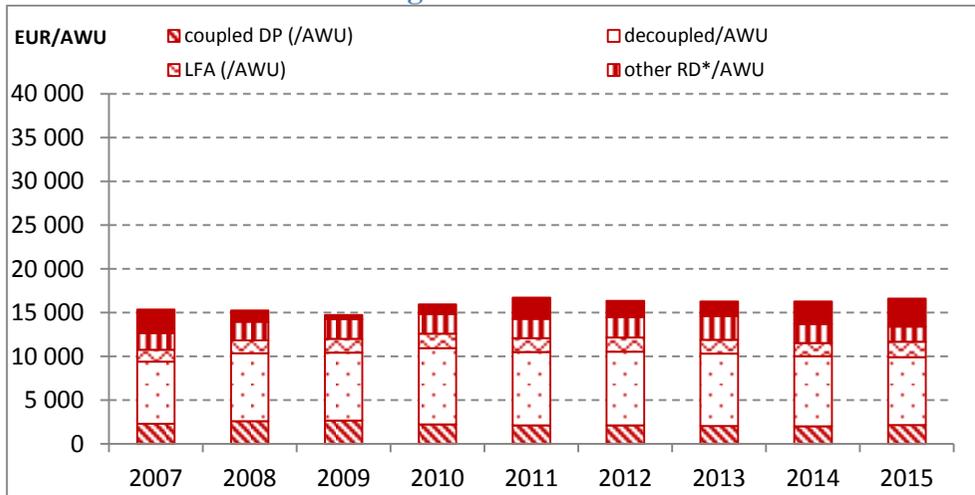


Figure 17: Pigs and poultry

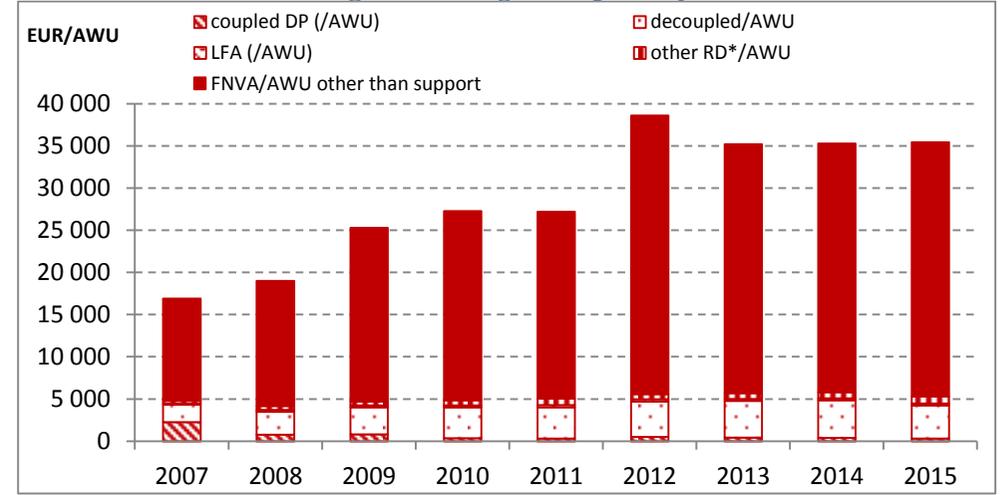


Figure 18: Horticulture

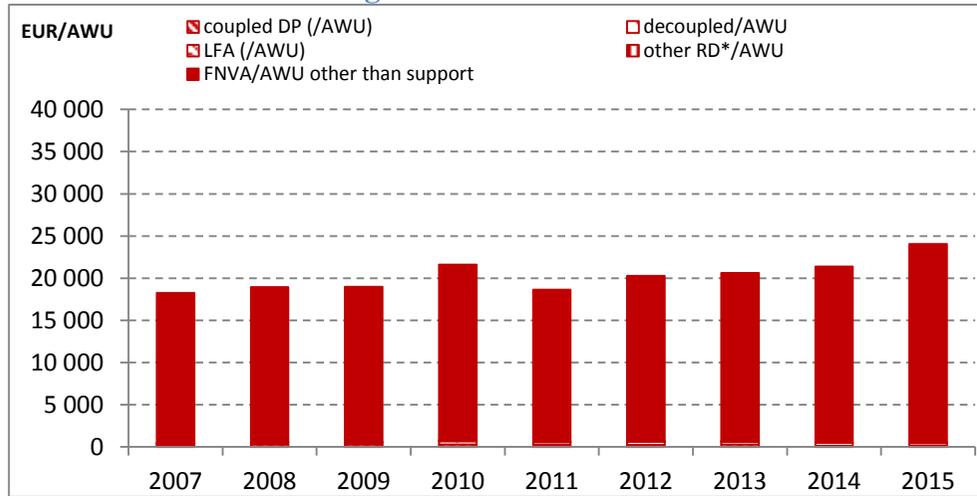


Figure 20: Wine

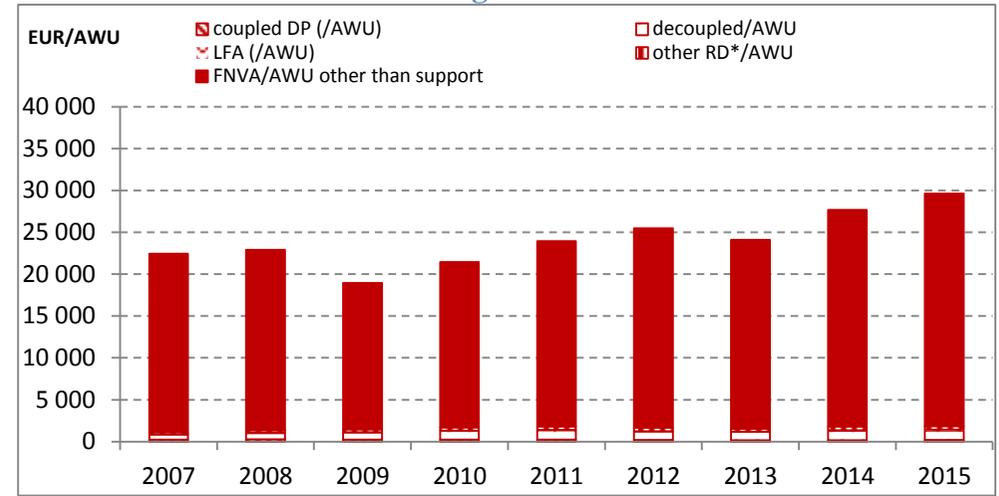


Figure 19: Fruits

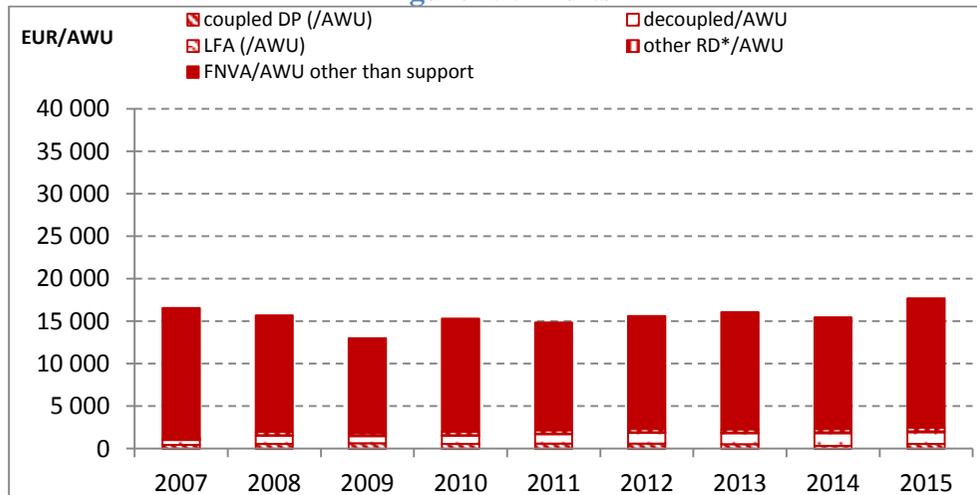
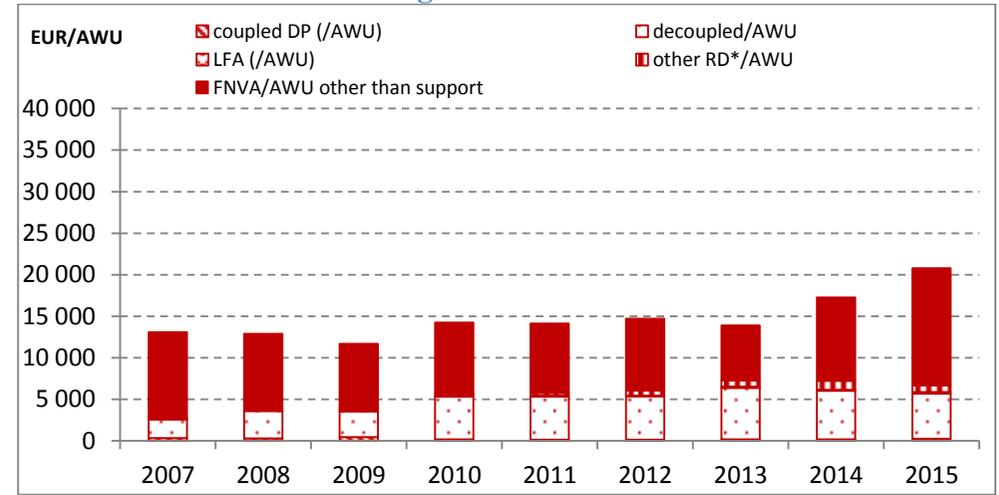


Figure 21: Olives



NB: LFA: support to farms in Less Favoured Areas. FNVA/AWU: Farm Net Value Added per Annual Work Unit = amount available to remunerate all factors of production (land, labour and capital, both external and own factors).

*Other RD: RD measures other than LFA, including national top-ups, but excluding investments supports. Source: FADN 2007-2015.