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Ida Terluin and David Verhoog

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During this study, an analysis was conducted of the distribution of direct payments from the first pillar of the Common Agricultural Policy (CAP) to farmers in the EU28. This distribution has been shown to be uneven: in 2015, 81% of EU farmers received 20% of the payments. Farms that receive few payments are usually smaller than those that receive higher payments. The uneven distribution of direct payments is caused by the fact that the group of farmers with small farms in the EU28 is much larger than the group with large farms.

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Preface

In its communication “The Future of Food and Farming” (COM(2017) 713 def), the European Commission outlined the fulfilment of the Common Agricultural Policy (CAP) after 2020. In this communication, the European Commission states that it considers direct payments to be an essential component. These payments will partially serve to bridge the gap between income in the agricultural sector and incomes in other economic sectors. In this way, they form an important income safety net which contributes to farmers everywhere in the EU being able to conduct agricultural activities, even in areas with natural constraints. The importance that is placed on stimulating reasonable incomes in the agricultural sector in the EU was also established in the Treaty of Lisbon.

Each year, the European Commission publishes a report on the distribution of direct payments to farmers in the EU from the first pillar of the CAP. This has shown that the distribution is uneven: roughly 80% of farmers receive 20% of the payments. That means that the remaining 20% of farmers receive a considerable share: 80% of the payments. The uneven distribution raises the question of whether, according to the current way of implementation, the direct payments are actually being received by the farms that need them in order to achieve a reasonable income from agricultural activities. To properly support the standpoints in the EU-wide discussion of the future of CAP Pillar 1 payments, the Dutch Ministry of Agriculture, Nature, and Food Quality requires insight into the distribution of current direct payments to farmers in EU member countries. For this reason, the Dutch Ministry of Agriculture, Nature, and Food Quality has commissioned Wageningen Economic Research to conduct an analysis of the distribution of direct payments to farmers in the EU28 in 2015 — the year for which the most recent data is available — and to check what differences exist between the member countries and what the structural characteristics are of farmsfarms that receive more/fewer payments.

The study was conducted by Dr I.J. Terluin (project manager) and Mr A.D. Verhoog of Wageningen Economic Research. Wageningen Economic Research gratefully acknowledges the support and collaboration of Dr R.P. Baayen, Dr J.L.M. Boogerd, Mr L.J.T.C. Lantain, Mr H.J.A. Ruissen, and Mr F. Vroegop from the Dutch Ministry of Agriculture, Nature, and Food Quality.

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Summary

S.1 In 2015, 81% of the farmers in the EU28 received 20% of the direct payments. The group of farmers that received 20% of the direct payments ranged from 54% in Luxembourg to 93% in Slovakia

The distribution of CAP Pillar 1 payments was shown to be uneven: in 2015 (the year for which the most recent data are available), 81% of the farmers in the EU28 received 20% of the direct payments. Therefore, there is a large group of farmers in the EU28 who receive a significantly small amount of direct payments and a small group of farmers who receive a large amount of payments. The size of the group of farmers who receive 20% of the direct payments varies substantially between member countries: this group is smallest in Luxembourg (54%) and largest in Slovakia (93%) (Figure S.1). This means that the distribution in Luxembourg is less uneven than the EU28 average, while in Slovakia, it is more uneven. See Section 3.2.

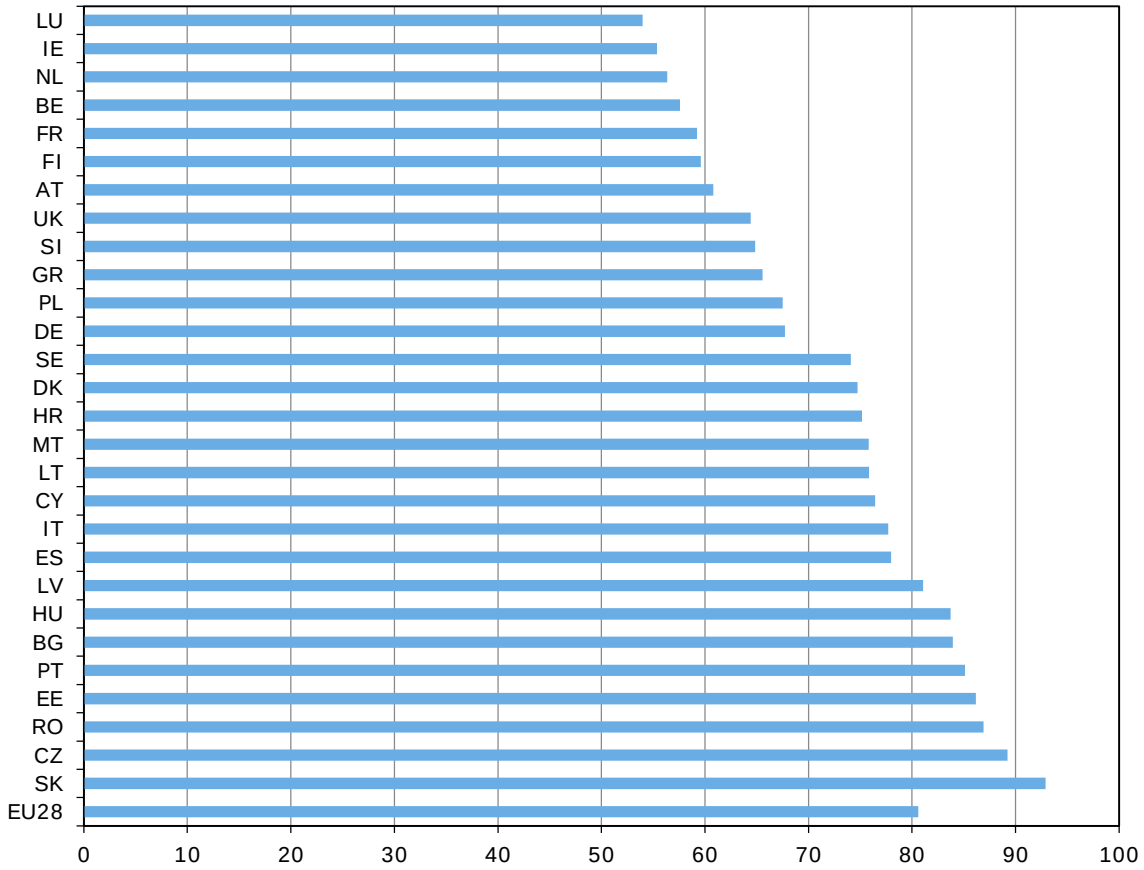

Figure S.1 *The percentage of farmers in each EU member country that receives 20% of CAP Pillar 1 payments, 2015 (% of total number of farmers)*
Source: EC (2017b); adaptation by Wageningen Economic Research.

Uneven distribution of payments is partially related to country-specific elements and a difference in farm size

The direct payments are partly based on the number of hectares per farm and partly based on country-specific elements such as historical references and coupled payments. As long as the CAP offers different options to member countries for the way in which payments are granted, it can be expected that there will be differences between member countries in the distribution of the payments to farmers due to the use of specific options. However, an unequal distribution of payments to farmers would also result if member countries are only permitted to grant them as a uniform hectare payment. If that were the case, then roughly 86% of farmers in the EU28 would receive 20% of the payments, which is an even more uneven distribution than was the actual case in 2015. This uneven distribution is related to the fact that the group of farmers in the EU28 with small farms is much larger than those with large farms. An equal distribution of payments to farmers can only occur under a uniform hectare payment if every farm in the EU28 had the same number of hectares. The current distribution of farms in the size classes by hectares deviates strongly from that situation. See Section 3.2.

S.2 Most farmers receive less than €5,000 in payments

Roughly three quarters of farmers in the EU28 received less than €5,000 of direct payments in 2015. Among those farmers, one quarter received less than €500, one quarter received between €500 and €1,250, and one quarter received between €1,250 and €5,000. Roughly 16,000 farmers in the EU (0.2% of the total number of farmers) received more than €150,000 in 2015. See Section 3.2.

The direct payments as a percentage of agricultural income varies widely

The direct payments as a share of family farm income per family work unit in the EU28 is significant and varies from a third for the lower income classes to the half in the higher income classes. Therefore, as farm income increases, the farmers receive higher direct payments on average. The direct payments as a share of income for the different farming types varies substantially from the EU average. In 2015, the direct payments as a percentage of family farm income per family work unit at specialist cattle farms and farms specialising in cereals, oilseed, and protein crops were over 100%, the percentage for farms producing other field crops, dairy farms, and sheep/goat farms was around 70%, and the percentage for intensive livestock farms stood at roughly 30%. Since agricultural incomes can fluctuate significantly from year to year, the direct payments as a percentage of agricultural income differ annually as well. See Section 3.4.

S.3 Research Design

Within the context of the first pillar of the CAP, farmers receive direct payments. These are meant to generate reasonable incomes in the agricultural sector. In this study, it was examined how direct payments were distributed to farmers in 2015 and what differences were present between the member countries. See Chapter 1.

The study is based on calculations using data from three sources: the European Commission (EC) regarding the number of beneficiaries of payments from the first pillar, the Farm Accountancy Data Network (FADN), and the Farm Structure Survey (FSS). See Chapter 2.

1 Introduction

In the discussion on modernisation and simplification of the Common Agricultural Policy (CAP), supporting family farms plays an important role. The Treaty of Lisbon (Art. 39) requires the EU and its member states to provide a reasonable income for agricultural workers, in order to partially bridge the gap between agricultural income and incomes in other economic sectors. In its initial stages, the CAP was primarily implemented through price support. Beginning in the 1990s, the price support was progressively replaced by direct payments. In the 2014-2020 period, payments per hectare and coupled payments for specific products went into use in the CAP to achieve the goal of reasonable incomes for agricultural workers. These direct payments and coupled payments are made through the first pillar of the CAP.

In the EU-wide discussion regarding the future of CAP income support, the intended target group is the family farm. The question is whether the direct payments are actually ending up in the hands of that group in practice, because the distribution of first-pillar payments to farms has been shown to be uneven (EC, 2016 and 2017b; Matthews, 2016): 20% of businesses in the EU28 receive roughly 80% of the payments. Since the payments are partially based on the number of hectares per farm, farms with many hectares receive more payments than those with fewer. By definition, this leads to an uneven distribution of payments to businesses. Another issue with the current direct payment scheme is that it has an upwards pressure on the land price. Since some of the landowners are not from the agricultural sector, this leads to an outflow of capital from the agricultural sector.

The uneven distribution raises the question of whether, according to the current way of implementation, the direct payments are actually being received by farmers that need them in order to achieve a reasonable income from the agricultural sector. To properly support the standpoints in the EU-wide discussion of the future of direct payments in the first pillar of the CAP, the Dutch Ministry of Agriculture, Nature, and Food Quality requires insight into the distribution of current payments to farms in EU member countries from the first pillar of the CAP and the differences in distribution between member countries.

Research questions

In this study the following questions are addressed:

- How are CAP Pillar 1 payments distributed to farmers in 2015 and what differences exist between countries?
- How do the differences in the distribution of direct payments between member countries come about?
- What are the structural characteristics of businesses that receive few/many payments?
- What is the percentage of farms in each member country that receive no payments at all?
- What is the amount of payments as a percentage of income per worker by farm size and type for each EU member country?

Structure of this study

The structure of this study is as follows. Chapter 2 describes the approach to the research. Chapter 3 discusses the results. In it, we first discuss the distribution of direct payments to farmers by the amount of the payments received and by economic size class of the farms. Afterwards, we shift our focus to the direct payments as a percentage of agricultural income. In the last chapter, we draw several conclusions.

2 Approach

We used data from three sources for our approach to the study: the European Commission (EC) regarding the number of beneficiaries of payments from the first pillar, the Farm Accountancy Data Network (FADN), and the Farm Structure Survey (FSS). We also indicate which calculations we performed to determine the distribution of payments to farmers by the economic size class of the farms and the fictitious distribution of payments based on a uniform hectare payment in the EU.

EC data: the distribution of payments to farmers by payment category
Each year, the EC publishes a report on the number of recipients ('beneficiaries') of payments from the first pillar, in which they divide the recipients according to the category of the payments received. They are divided into 15 classes, the lowest being €0-500 and the largest being more than €500,000. The most recent data available is for the 2016 financial year1 (EC, 2017b). This concerns the payments from the first pillar during the 2015 calendar year, in which the new way of implementation of the direct payments of the 2014-2020 CAP was first applied. Using EC data for the 2016 financial year, the following things can be calculated: the number of farmers who received 20% of the direct payments in 2015, how many farmers received no payments at all, and how many farmers received more than €150,000 in payments.

FADN: distribution of payments to farmers the economic size class of the farm
Matthews (2016) applied an approach to the distribution of direct payments from the first pillar to farms in which he divided the farms up into economic size classes. Using this method, the direct payments as a percentage of agricultural income can be calculated. Since EC data does not contain any information on economic size class, the EC data was linked to the data from the FADN. Matthews performed his calculations for the 2013 calendar year, so he used data for the direct payments from the 2014 financial year (EC, 2015) and FADN data for the 2013 calendar year. We performed the same calculations as Matthews, but we used the direct payments from the 2016 financial year (EC, 2017b) and the FADN for the 2015 calendar year. Since the FADN has data for 4.7 million commercial farms in the EU and the EC (EC, 2017b) data is based on 6.7 million payment recipients, linking the two data series required several assumptions. Just as Matthews (2016) did, we performed a calculation of the distribution of direct payments from the first pillar by economic size class for the 2015 calendar year using the following steps and assumptions:

1. We assumed that the 2 million farmers who were present in EC data, but not in FADN data were small farms that received few direct payments. The group of farmers that received less than €500 according to the EC data (1.8 million farmers) is a bit smaller than the figure of 2 million.
2. The FADN distinguishes the following six economic size classes: (1) €2,000-8,000; (2) €8,000-25,000; (3) € 5,000-50,000; (4) €50,000-100,000; (5) €100,000-500,000; (6) >= €500,000. We added a economic size class of <€2,000 to this set and assumed that it contained the 1.8 million farmers from the EC data who received less than €500.
3. For the average farm in each of the economic classes, the FADN provides information on the amount of payments received from the first pillar and the income of the farm. It turned out that the direct payments in the economic size class €2,000-8,000 amounts to roughly one third of the income from the business. We superimposed this relationship onto the economic size class <€2,000.
4. According to the EC data, 1.8 million farmers (who received less than €500 each) received a combined total of €558 million. If the payments amount to one third of agricultural income (step 3), then the combined total income of the economic size class <€2,000 comes to €1.675 million (3 x €558 million). For each of those 1.8 million farms in that class, this amounts to an agricultural income of €936 and an average amount of €312 in received payments from the first pillar.
5. In order to draw a comparison with the distribution of direct payments from the first pillar based on the EC data, we converted both the 15 recipient categories from the EC data (2107b) and the

[1] Direct payments for calendar year N are paid out in fiscal year N+1. Fiscal year N+1 begins on 16 October of year N and ends on 15 October in year N+1. Therefore, the 2016 fiscal year concerns the payments from 2015.

7 economic size classes from the FADN data into 10 income deciles. In this way, it was easy to read how large the payments were in each decile.

FSS: fictitious distribution of direct payments based on an average hectare payment
Using the Farm Structure Survey (FSS) as a basis, an analysis was conducted of farms according to farm size in hectares for each member country. This enabled the distribution of farms across the size classes in hectares to be visualised. The most recent FSS for which data is available was conducted in 2013. We used the number of 2013 farms as a proxy for the number in 2015. Next, we created a fictitious distribution of direct payments to farms in 2015 by assuming an average direct payment per hectare for each member country. We calculated the average direct payment per hectare by dividing the 2015 national envelope for each member country by the number of hectares of agricultural area of that member country. The fictitious distribution is only equal to the actual distribution if all farms in a member country were to receive a uniform payment for all hectares. In practice, the fictitious distribution generally approaches reality, because member countries use a portion of the national envelope to make additional payments to young farmers, payments to areas with natural constraints, coupled payments, etc. and several member countries provide direct payments based on a historical reference.

3 Results

3.1 Introduction

In Section 3.2, we discuss the distribution of direct payments to farmers based on the payment amount received. We also talk about how that distribution would change if a uniform hectare payment were to be used. Attention is also given to the number of farmers that receive a small or large amount of direct payments. In Sections 3.3 and 3.4, we link the payments received with the agricultural incomes. In Section 3.3, we examine the distribution of payments to farmers ranked by income and in Section 3.4, ranked by the direct payments as a percentage of the agricultural income by farming type.

3.2 Distribution of direct payments to farmers by payment amount

In the field of economics, the Lorenz curve is used to show the income distribution of the population. The horizontal axis displays the cumulative percentage of the population size and the vertical axis displays the cumulative percentage of the income of that population. The points at the bottom-left and top-right of the Lorenz curve are fixed. These are points at which the cumulative population size and cumulative incomes are both 0% and 100% respectively. The line between these points indicates how even or uneven the income has been distributed. If the line is straight, the distribution is even, if not, then the distribution is unequal. We used the concept of the Lorenz curve to display the distribution of direct payments from the first pillar to farmers in the EU28 in 2015 (Figure 3.1). It turns out that the distribution of direct payments is rather uneven: roughly 80% of farmers in the EU28 received 20% of the total direct payments in 2015. The remaining 20% of farmers — the group between 80% and 100% on the horizontal axis — received roughly 80% of the payments. Therefore, there is a large group of farmers in the EU28 who receive a significantly small amount of payments and a small group of farmers who receive a large amount of payments.

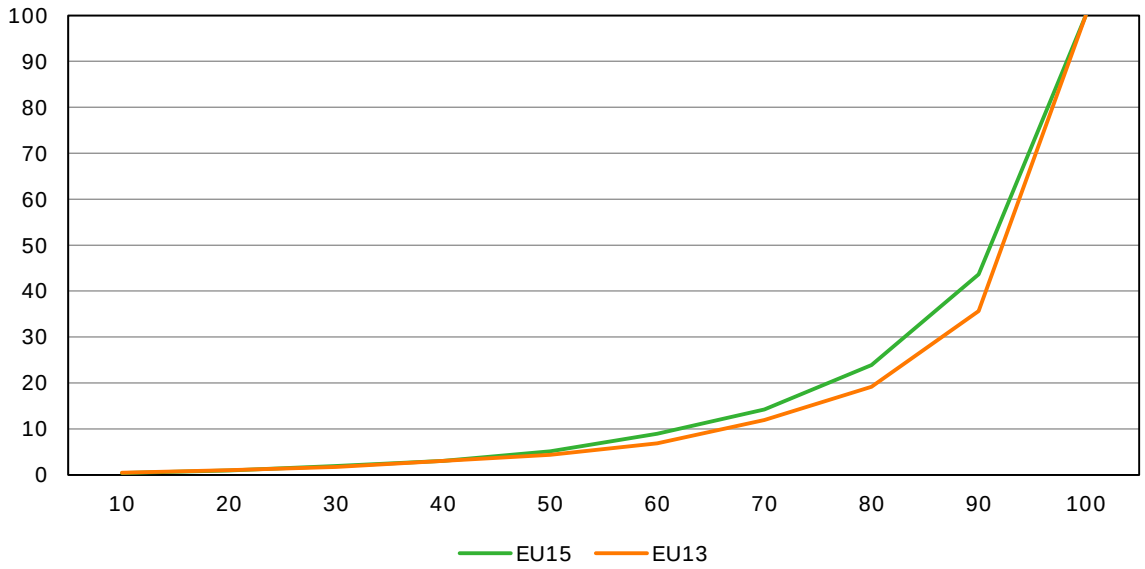

Figure 3.1 *Distribution of direct payments from the first pillar to farmers in the EU28, 2015 (%) a)*
a) With regard to the 2016 financial year
Source: EC (2017b); adaptation by Wageningen Economic Research.

Inequality of direct payment distribution to farmers varies between member countries
The size of the group of farmers who receive 20% of the direct payments varies substantially between member countries: it is relatively the smallest group in Luxembourg (54%) and the largest in Slovakia (93%) (Figure 3.2). Therefore, in Luxembourg, the distribution of payments is less uneven than the EU28 average, while in Slovakia, it is more uneven. Ireland, the Netherlands, Belgium, France, Finland, and Austria also show a less uneven distribution of direct payments to farmers in comparison to other EU countries (Table B3.1).

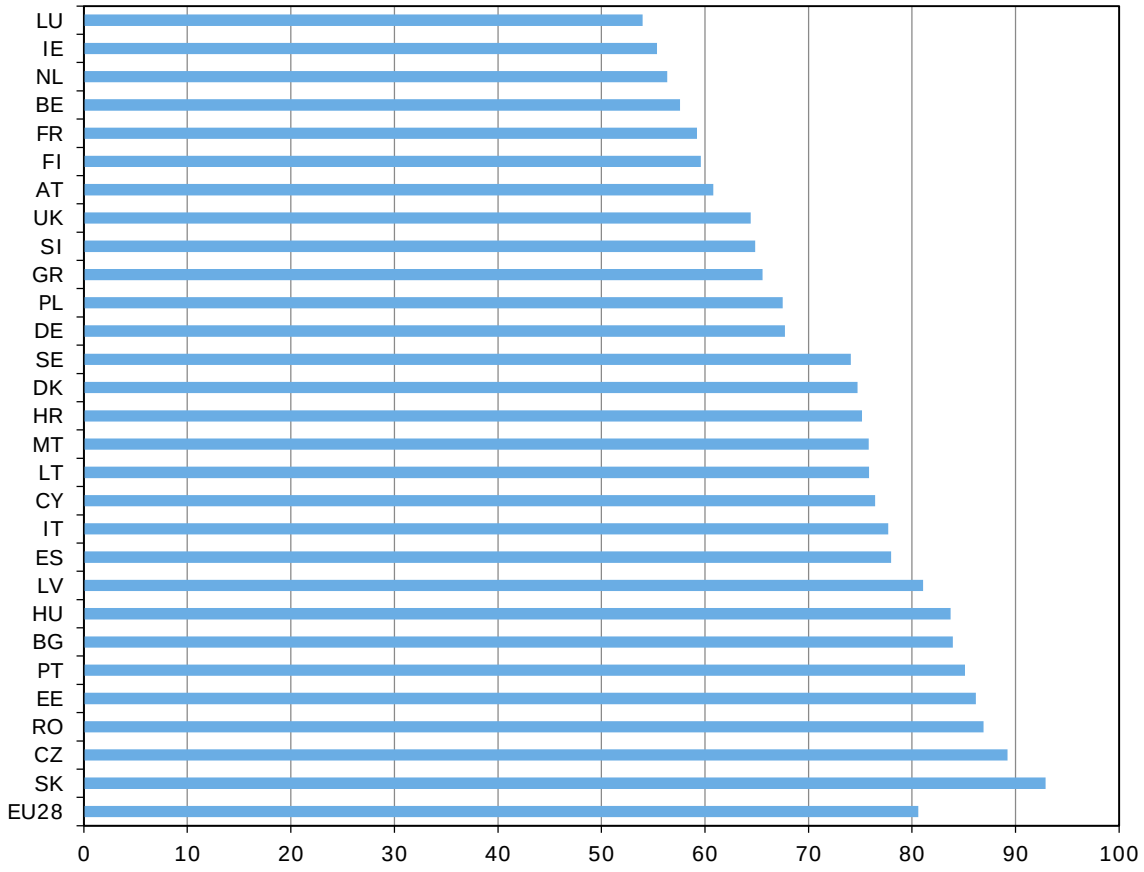

Figure 3.2 *The percentage of farmers in each EU member country that receives 20% of CAP Pillar 1 payments, 2015 (% of total number of farmers)*
Source: EC (2017b); adaptation by Wageningen Economic Research.

Direct payment distribution to farms is related to the scale of the agricultural structure
The distribution of payments to farmers shown in the Lorenz curve is related to the fact that not all farmers receive the same payment. The payment per farmer depends on the way of implementation at which the member country determines direct payments (historical reference, uniform hectare payment, coupled payments to production, granting optional payments as compensation for natural constraints, additional support for the first hectares, etc.). In spite of the differences in the implementation of the payments, member countries are required to abide by rules requiring the payments to converge at the average payment per hectare in their country. This results in a trend where farmers at farms with more hectares receive more payments than farmers at farms with fewer hectares. There are large differences in the size of the businesses between member states. For example, Malta, Bulgaria, Cyprus and Romania have very small-scale agricultural structures, where more than three quarters of the farms are smaller than 2 hectares (Table 3.1). In another group of member countries — Denmark, France, Luxembourg, the Czech Republic and the UK — roughly one fifth of the farms are larger than 100 hectares. Between these two extremes, there are two other

groups of member countries: a group with a small-scale agricultural structure, where more than 70% of the farms are smaller than 20 hectares, and a group of member countries with a fairly even distribution of farms into size classes. The distribution of farms across the size classes impacts the distribution of payments to farmers. With a few exceptions, such as Greece, Poland and the Czech Republic, it turns out that the member countries with an even distribution of farms across the size classes and member countries with a relatively large number of farms over 100 hectares generally have a more equal distribution of payments to farmers than member countries with a (very) small-scale agricultural structure.

Table 3.1 *Distribution of farms across size classes by hectare in EU member countries, 2013*

			Distribution of farms by size class (% of total)							
	Total number of farms (*1,000)	Total number of farms as % EU total	<2 ha	2 to 4.9 ha	5 to 9.9 ha	10 to 19.9 ha	20 to 29.9 ha	30 to 49.9 ha	50 to 99.9 ha	>100 ha
Member states with a very small-scale agricultural structure (more than three quarters of the farms < 2 ha)										
Malta	9.4	0.1	85	12	3	0	0	0	0	0
Bulgaria	254.4	2	76	11	4	3	1	1	1	2
Hungary	491.3	5	76	9	5	4	2	2	1	2
Cyprus	35.4	0.3	75	15	5	3	1	1	1	0
Romania	3,629.7	33	73	19	5	1	0	0	0	0
Member states with a small-scale agricultural structure (more than 70% of the farms < 20 ha)										
Greece	709.5	7	51	25	12	6	2	2	1	0
Portugal	264.4	2	46	26	12	7	3	2	2	2
Croatia	157.4	1	39	31	16	8	2	2	2	1
Slovakia	23.56	0.2	32	27	12	9	3	3	3	10
Spain	965	9	28	24	15	11	5	6	5	5
Italy	1,010.3	9	28	31	17	11	4	4	3	1
Slovenia	72.4	1	26	34	24	11	3	1	1	0
Poland	1,429.01	13	23	31	22	15	4	3	1	1
Latvia	81.8	1	23	20	20	19	7	5	3	4
Lithuania	171.8	2	14	39	22	12	4	3	3	3
Austria	140.4	1	11	20	17	22	12	10	6	2
Member states with an even distribution of farms across size classes										
Ireland	139.6	1	2	5	11	24	18	22	15	3
The Netherlands	67.5	1	13	15	14	15	10	16	14	4
Belgium	37.8	0.3	5	9	13	18	13	18	17	6
Finland	54.4	1	2	3	11	20	15	20	19	8
Estonia	19.2	0	11	22	21	17	7	6	6	9
Sweden	67.2	1	2	10	23	20	10	11	12	12
Germany	285	3	5	3	16	21	10	15	18	12
Member states with a relatively high number of large farms (> 100 ha)										
Czech Republic	26.3	0.2	11	7	19	18	9	9	9	18
Denmark	38.3	0.4	3	2	20	18	10	11	14	21
France	472.2	4	13	12	9	9	7	10	20	21
Luxembourg	2.1	0.0	10	7	9	8	6	10	29	22
United Kingdom	183	2	2	5	15	16	10	13	18	22
EU28	10,838.3	100	45	21	12	8	3	4	4	3

Source: Eurostat Farm Structure Survey (FSS); adaptation by Wageningen Economic Research.

Distribution will also be uneven with a uniform hectare payment

Given the agreements on the implementation of the 2014-2020 CAP, the direct payments per hectare from the first pillar must converge internally at the average hectare payment in a member country or be equal to it. In the latter case, there is a uniform hectare payment, which results in farmers receiving the same payment for every hectare. In order to check whether the distribution of direct payments changes when a uniform hectare payment is granted, we created a fictitious distribution. In

this fictitious distribution, the farms are ranked by size in hectares: farmers in the lowest percentiles have few hectares per farm and farmers in the highest percentiles have many (Table 3.2). By multiplying the number of hectares in each percentile by the uniform hectare payment (Figure 3.3), we can calculate the payments received in each percentile. By definition, this fictitious distribution leads to an uneven distribution of payments: farmers in the lowest percentiles with few hectares per farm receive few payments and farmers in the highest percentages with many hectares per farm receive many more payments. From the fictitious distribution, we see that when a uniform hectare payment is granted, 20% of farmers in the EU28 receive 86% of the payments (Table B3.1). This fictitious distribution shows that a uniform hectare payment for the EU as a whole would lead to a more uneven distribution of payments to farmers than the actual 2015 distribution, where 20% of farmers received 81% of the payments. An equal distribution of payments to farmers can only occur under a uniform hectare payment if every farm in the EU28 had the same number of hectares. The current distribution of farms in the size classes by hectare deviates strongly from that situation.

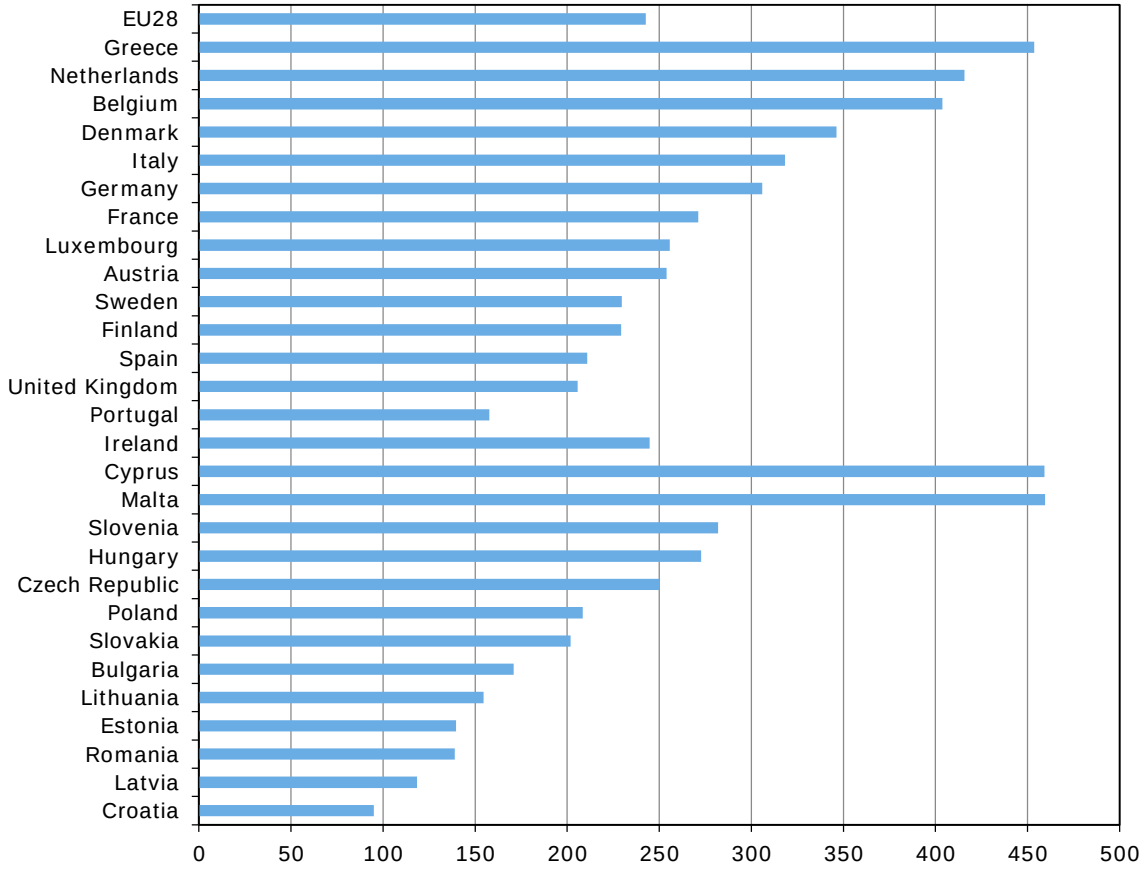

Figure 3.3 *Average payment per hectare in the EU member countries, 2015*
Source: EC (2013) and Eurostat Farm Structure Survey (FSS); adaptation by Wageningen Economic Research.

Fictitious distribution of payments to farmers in the member countries based on a uniform hectare payment

In the same way that was done for the EU28, we also created a fictitious distribution of uniform hectare payments to farms for each member country (Appendix B.1). If we compare the distribution based on uniform hectare payments with the distribution of the payments granted in 2015 (EC, 2017b), it turns out that several member countries (Denmark, Finland, Ireland, Italy, Latvia, Malta, Poland, Romania, Slovenia, Slovakia, Czech Republic and Sweden) see decreases in the inequality of distribution, while other countries (Bulgaria, Cyprus, France, Greece, Hungary, Croatia, Luxembourg, the Netherlands, Portugal, Spain and the UK) see the distribution become more unequal (Table B3.1). There is also a group of member countries in which the distribution would remain unchanged

(Belgium, Germany, Estonia, Lithuania and Austria). The reason why some member countries have lower equality in distribution and others more equality has not been shown to be related to the distribution of farms across size classes by hectare (Table 3.1). Apparently, country-specific factors, such as historical references for determining the payments, play a role in the direction of the shift in distribution.

Table 3.2 *Fictitious distribution of a uniform hectare payment to farmers in the EU28, 2015 a)*

Decile no.	Number of farmers in decile (million)	Average farm size (ha)	Fictitiously received payments based on a uniform hectare payment in decile (€ million)	Decile percentage in total fictitious payments (%)	Cumulative number of farmers (million)	Cumulative number of hectares (million)	Cumulative receipt of fictitious payments (€ million)
	(1)	(2)	(3)	(4)	(5)	(6)	(7)
1	1.1	0.6	169	0.4	1.1	0.7	169
2	1.1	0.8	200	0.5	2.2	1.5	369
3	1.1	0.8	200	0.5	3.3	2.3	0
4	1.1	0.8	200	0.5	4.3	3.2	769
5	1.1	2.0	518	1	5.4	5.3	1,287
6	1.1	3.2	835	2	6.5	8.7	2,122
7	1.1	4.6	1,209	3	7.6	13.7	3,331
8	1.1	8.4	2,199	5	8.7	22.8	5,530
9	1.1	18.3	4,808	11	9.8	42.5	10,338
10	1.1	121.9	32,094	76	10.8	174.6	42,431

a) Column (3): calculated as the number of farmers in decile * number of hectares per farmer* uniform hectare payment of €243;

Column (4): calculated as column (3) divided by the total number of payments in the EU28 (€4,2431; last number in column (7));

Column (6): calculated as column (1) * column (2); the total of the preceding deciles was then added together.

Source: EC (2013) and Eurostat Farm Structure Survey (FSS); adaptation by Wageningen Economic Research.

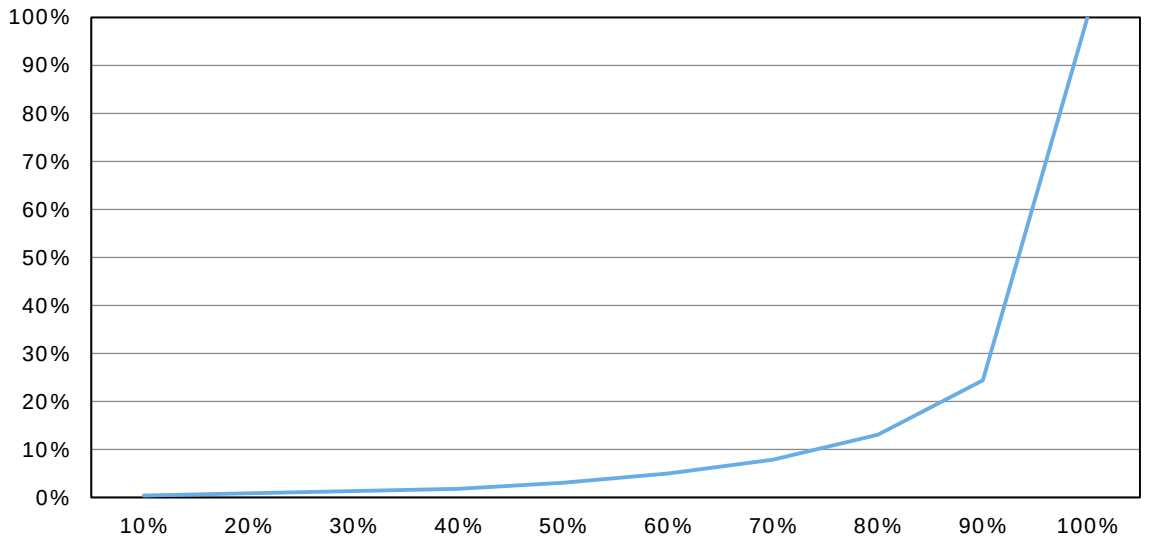

Figure 3.4 *Fictitious distribution of payments to farms in EU member countries based on a uniform hectare payment, 2015*
Source: EC (2013) and Eurostat Farm Structure Survey (FSS); adaptation by Wageningen Economic Research.

Farms with a small or large amount of direct payments

In 2015, 27% of the farmers in the EU28 that were eligible for direct payments from the first pillar of the CAP received payments of less than €500 (Table 3.3). This percentage varied from less than half a percent in Denmark and the Netherlands to 72% in Malta. It turns out that there are few farmers who were entitled to direct payments, but did not receive them: in the EU28, it was about 2,307 farmers, primarily from Italy, Croatia, and Lithuania (Table B3.2). Apparently, the small farmers scheme provides a fairly simple way for farmers with small farms to apply for direct payments. Less than 16,000 farmers in the EU28 received more than €150,000 in payments in 2015. Most of them are farms in Germany (around 3,300); Italy, Spain, Czech Republic and the UK (1,500-1,600); and Bulgaria, Denmark, France, Hungary, Poland, Romania and Slovakia (600-1,100) (Figure 3.5). As a percentage of the total number of beneficiaries, this group of big beneficiaries is very small: in the EU28, this concerns 0.2% of the recipients. The percentage was only larger in Slovakia and the Czech Republic, at around 5%. The percentage of the payments to this group of big recipients in the total payments was 11% in the EU28 in 2015. This percentage varies substantially between member countries, from zero in Greece and Malta to 69% in Slovakia (Figure 3.6).

Three quarters of farmers in the EU28 received less than €5,000 of payments in 2015

Roughly three quarters of farmers in the EU28 received less than €5,000 of payments in 2015 (Table B3.3). Among those farmers, one quarter received less than €500, one quarter received between €500 and €1,250, and one quarter received between €1,250 and €5,000.

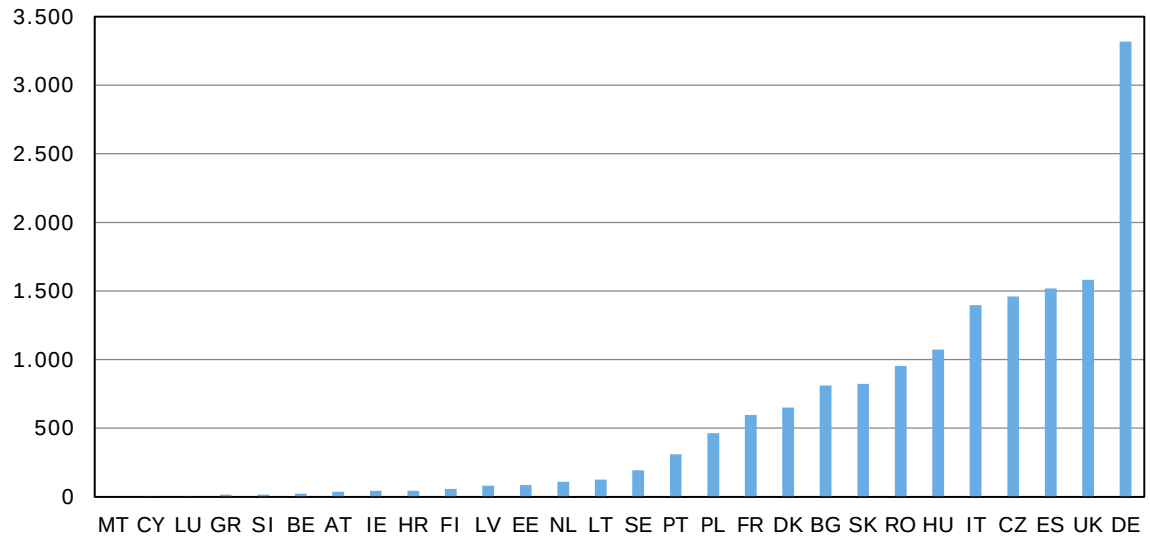

Figure 3.5 *Number of farmers that received more than €150,000 of direct payments in the EU member countries, 2015*

Source: EC (2017b); adaptation by Wageningen Economic Research.

Table 3.3 *Farmers who received few/many payments in the EU member countries, 2015 (% total number of farmers)*

	Few payments		Many payments
	% farmers that received no payments	% farmers that received €0-500 in payments	% farmers that received more than €150,000 in payments
CZ	0.0	10.3	5.0
SK	0.0	22.8	4.5
DK	0.2	0.3	1.6
BG	0.0	12.2	1.2
UK	0.0	0.8	1.1
DE	0.0	4.4	1.0
HU	0.1	4.8	0.6
EE	0.0	26.5	0.5
SE	0.0	0.9	0.3
NL	0.0	0.4	0.2
ES	0.0	24.2	0.2
PT	0.0	52.4	0.2
FR	0.0	4.9	0.2
IT	0.1	23.3	0.2
LV	0.0	18.0	0.1
FI	0.0	1.7	0.1
LU	0.0	4.4	0.1
RO	0.0	64.6	0.1
LT	0.4	31.7	0.1
BE	0.0	1.9	0.1
HR	0.4	43.2	0.0
IE	0.0	4.0	0.0
PL	0.0	28.7	0.0
AT	0.0	10.8	0.0
SI	0.0	25.2	0.0
CY	0.1	55.9	0.0
GR	0.0	20.2	0.0
MT	0.0	72.0	0.0
EU28	0.0	26.7	0.2

Source: EC (2017b); adaptation by Wageningen Economic Research.

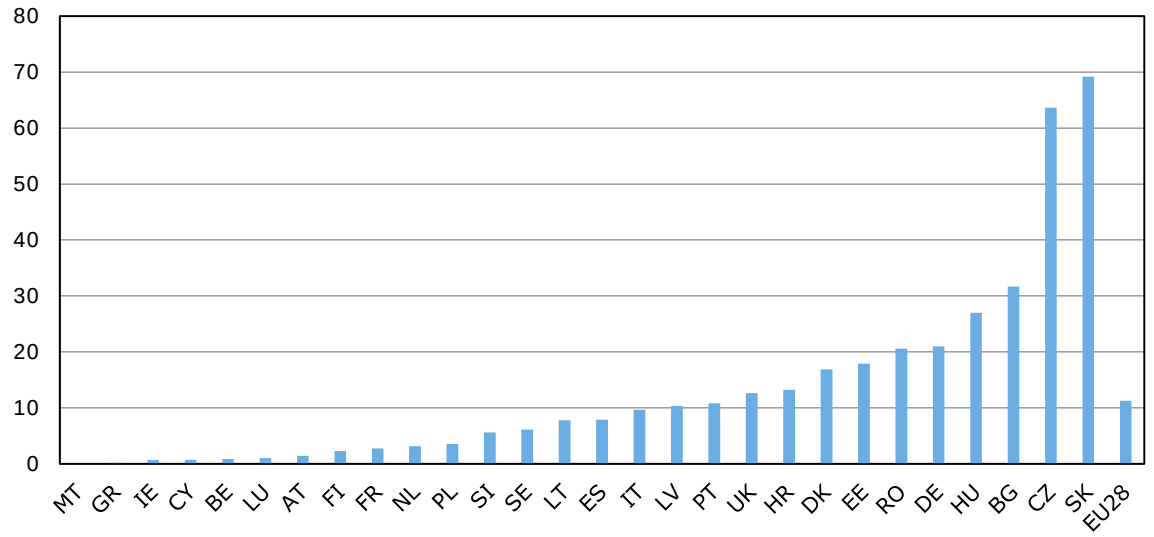

Figure 3.6 *Percentage of farmers that received more than €150,000 in total payments in the EU member countries, 2015 (% of the total number of payments)*
Source: EC (2017b); adaptation by Wageningen Economic Research.

3.3 Distribution of direct payments to farmers by economic size class

In the previous section, we discussed the distribution of payments to farms and farmers and we also paid attention to the size of the farms in hectares. However, the contribution of the direct payments to agricultural income was not discussed in that section. We will do that in this section using data from the Farm Accountancy Data Network (FADN). With this data, we can divide farms into so-called economic classes that reflect the standardised annual earning capacity of the farms in each class. The greater the earning capacity of a class, the higher the average agricultural income of the farms in that group. Since FADN only focused on commercial farms, some of the — primarily small — farms that were in the EC data on the distribution of direct payments to farmers were not included in FADN data. In order to estimate the contribution of the payments to the agricultural income of all farms, we have linked EC data with FADN data according to the assumptions described in Chapter 2. Through this link, it is possible to include roughly 96% of all beneficiaries as well as the total direct payments from the EC data in the calculations in this section.

Payment distribution ranked by farm income is somewhat less uneven

The distribution of payments to farmers ranked by income shows that the group of 80% of the farmers with the lowest incomes in the EU28 received 25% of the payments (Figure 3.7). This picture deviates somewhat from the 80%-20% distribution of farmers across the payment-based classes (Figure 3.1). On the one hand, this deviation is related to farms that have a low income, but receive many payments; on the other hand it is connected to farms that have a high income, but receive relatively few payments (Matthews, 2016). The first group includes farms such as extensive sheep farms, while the second group includes horticultural farms.

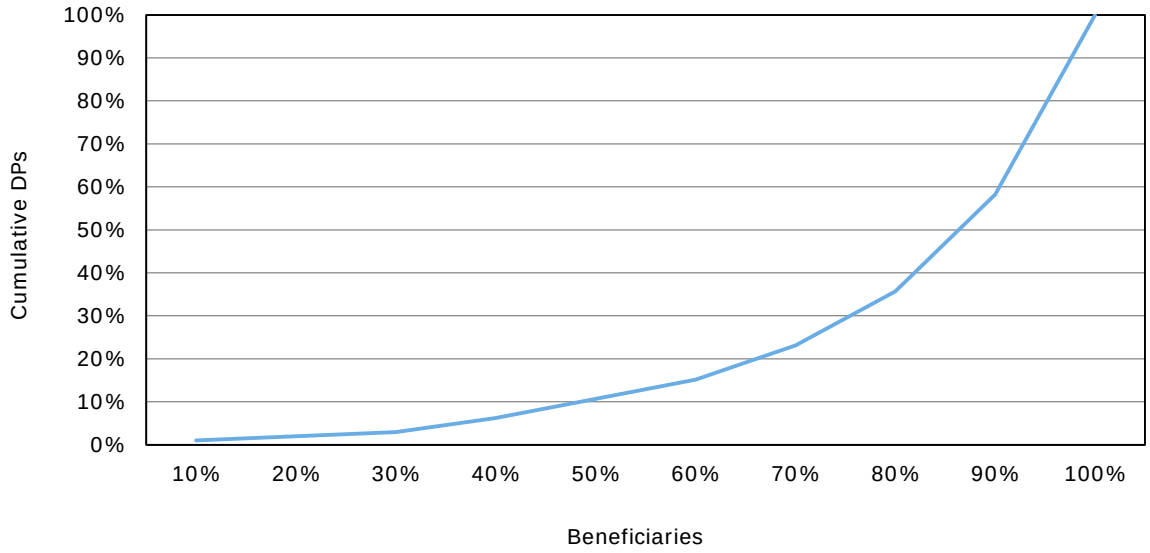

Figure 3.7 *Distribution of payments to farmers ranked by income in the EU28, 2015*
Source: FADN and EC (2017b); adaptation by Wageningen Economic Research.

Farmers in the highest income decile received roughly 50% of the payments

The average agricultural incomes including payments in the EU28 vary widely in the income deciles: from less than €1,000 in the first decile to more than €65,000 in the last decile (Table 3.4). The payments as a percentage of income in the EU28 is substantial and varies from one third to one half. The 50% of farmers with the lowest incomes (deciles 1-5) received 4% of the total payments in 2015, while the 10% of farmers in the highest decile received 53% of the total payments. Therefore, as agricultural income increases, farmers receive higher direct payments on average. This observation is nothing new and has regularly led to commentary in the literature on the inefficacy of the CAP as an income policy and that social policy would be a more appropriate instrument to support agricultural

incomes (Matthews, 2016). An example of this would be a person-based payment related to the regional minimum income (Vogelzang et al., 2016). The agricultural income at many farms is also supplemented by incomes from non-agricultural activities, benefits, and pensions. Data on the total household income at farms is largely lacking and was not included in the FADN data (Strijker, 2017). If we take the supplementary incomes into account, the agricultural incomes can be viewed in a different light. In many instances, then there would be a reasonable income for a family farm. In the EU28, roughly a third of the total number of farms acquired income from non-agricultural activities (Terluin et al., 2017). This percentage shows significant differences between the member countries: in Sweden, it only involves 6% of farms, but in Bulgaria, Finland, and Slovenia 70-80% of farms accumulate non-agricultural income.

Table 3.4 *Income and payments per farm in income deciles in the EU28, 2015*

Decile no.	Cumulative number of farms (in thousands) (1)	Average payment per farm(€) (2)	Total payments per decile (€million). (646,000) * (2)	Average income a) per farm(€) (3)	Total income per decile (€million) (646,000) *(3)	Average payment as % of average income (2)/(3)	Total payments per decile as % of total payments (646,000) * (2) / €40,091 million	Total income per decile as % of the total income (646,000) * (3) / €83,451 million
1	646	312	201	936	604	33	0.5	0.5
2	1,291	312	201	936	604	33	0.5	0.5
3	1,937	431	278	1,198	773	36	0.7	0.7
4	2,583	834	539	2,084	1,346	40	1.3	1.3
5	3,229	834	539	2,084	1,346	40	1.3	1.3
6	3,874	3,233	2,087	7,468	4,822	43	5.2	5.2
7	4,520	3,766	2,432	8,665	5,595	43	6.1	6.1
8	5,166	6,642	4,289	13,713	8,855	48	10.7	10.7
9	5,811	12,770	8,246	25,436	16,424	50	20.6	20.6
10	6,457	32,956	21,280	66,720	43,082	49	53.1	53.1
Total	6,457	-	40,091	-	83,451	-	-	-

a) Family farm income (FADN variable SE420).

Source: FADN; adaptation by Wageningen Economic Research.

3.4 Direct payments as a percentage of the agricultural income per farming type

FADN subdivides farms into a number of farming types: specialised farms with cereals, oilseed and protein crops; specialised farms with other field crops; specialised milk farms; specialised sheep/goat farms; specialised cattle farms; and specialised granivores. This makes it possible to map out the differences in the payments received and the amount of agricultural income per farming type. Using FADN data, it is also possible for us to calculate the payments as a percentage of the income per farming type. Since agricultural incomes can fluctuate significantly from year to year, the payments as a percentage of agricultural income may differ annually as well (Van der Meulen et al., 2017). In this section's analysis, we address the agricultural income using the family farm income per family work unit.

On average, the payments as a percentage of the family farm income per family work unit was between roughly 50%-70% at farms with other field crops, dairy farms, and sheep/goat farms in the EU28 during the 2004-2015 period (Figure 3.8). The percentage at the cattle farms was over 100%:

that means that these farms would be in the red without the payments. At farms with cereals, oilseed and protein crops, the payments as a percentage of income was around 100%. The payments as a percentage of the incomes at intensive livestock farms is relatively low: this is due to the limited agricultural area at these farms and they do not have a tradition of receiving much CAP support.

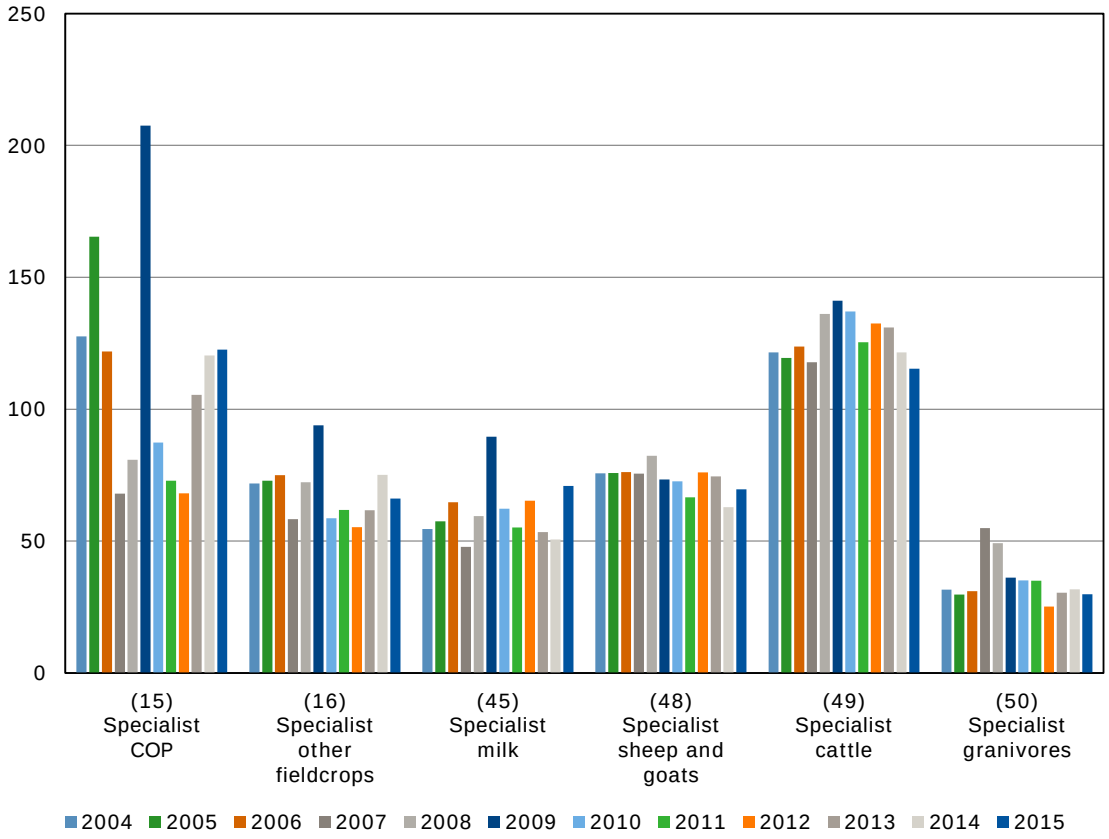

Figure 3.8 *Payments from the first pillar of the CAP as a percentage of the family farm income per family work unit by farming type in the EU28, 2004-2015*
Farming type (15) specialist COP are farms that specialise in cereals, oilseed and protein crops.
Source: FADN; adaptation by Wageningen Economic Research.

Family farm incomes are often below GDP per capita

By comparing the income at farms with a yardstick for the average income in a region or member country, we can determine whether the family farm income per family work unit is relatively high or low. We used the gross domestic product (GDP) per capita as a reference income. Although this income is fairly low because it also contains the incomes of non-active persons such as children and retirees, this also has the significant advantage over other income references that EU GDP data has been harmonised and is available for all member countries. In most of the member countries, family farm income per family work unit is below the GDP per capita (Table B3.5). However, in Belgium, Bulgaria, Germany, France, Greece, Latvia, Lithuania, the Netherlands, Romania and the UK, one or two farming types exist for which the income per family working unit is above the GDP per capita. In contrast, in Hungary, Italy, Spain, Slovakia and the Czech Republic, family farm incomes are above the GDP per capita for most farming types. When interpreting these figures, it must be considered that on a significant number of farms, supplementary incomes are generated from non-agricultural activities, pensions and benefits (see also Section 3.3).

The payments from the first pillar per family work unit at the various farming types in the EU member countries had a maximum average of €47,000, with the exception of Slovakia and, to a lesser degree, the Czech Republic, where the average payments were significantly higher (€65,000-178,000) (Table B3.6). All member countries, with the exception of Belgium, Italy, Malta, Portugal, Romania

and Spain, have one or more farming types for which the direct payments make up more than 100% of the income (Figure B2.1-22; Table B3.7). Without payments, the family farm incomes per family work unit would be in the red at these farming types (Table B3.8). A negative agricultural income indicates that the costs associated with agricultural production are higher than its revenues.

4 Conclusions

Within the context of the first pillar of the CAP, farmers receive direct payments. These are meant to generate reasonable incomes in the agricultural sector. In this study, it was examined how direct payments were distributed to farmers in 2015 and what differences were present between the member countries.

In 2015, 81% of the farmers in the EU28 received 20% of the direct payments
The distribution of direct payments from the first pillar of the CAP were shown to be uneven: in 2015, 81% of the farmers in the EU28 received 20% of the direct payments. Therefore, there is a large group of farmers in the EU28 who receive a relatively small amount of direct payments and a small group of farmers who receive a relatively large amount of payments. The size of the group of farmers who receive 20% of the direct payments varies substantially between member countries: it is relatively the smallest in Luxembourg (54%) and the largest in Slovakia (93%) (Figure 3.2). Therefore, in Luxembourg, the distribution of payments is less uneven than the EU28 average, while in Slovakia, it is more uneven.

Uneven distribution of payments is partially related to a difference in farm size
The direct payments are partly based on the number of hectares per farm and partly based on country-specific elements such as historical references and coupled payments. As long as the CAP offers different options to member countries for the way in which payments are granted, it can be expected that there will be differences between member countries in the distribution of the payments to farmers due to the use of specific options. However, an unequal distribution of payments to farmers would also result if member countries are only permitted to grant them as a uniform hectare payment. A fictitious distribution of payments based on a uniform hectare payment to farmers shows that this is an even more uneven distribution than was the actual distribution in 2015: in that case, roughly 86% of farmers in the EU28 would receive 20% of the payments. In that fictitious distribution, small farmers receive a relatively small amount of payments and large farmers receive a relatively large amount. The group of small farmers is much larger than the group of large farmers: in 2013, 45% of the farms in the EU28 had less than 2 hectares, 41% had between 2 and 20 hectares, 11% had between 20 and 100 hectares, and 3% had more than 100 hectares. The distribution of farms across size classes by hectares in individual member countries fluctuates substantially from the EU average. An equal distribution of payments to farmers can only occur under a uniform hectare payment if every farm in the EU28 has the same number of hectares. The current distribution of farms over size classes deviates strongly from that situation.

Structural characteristics of businesses that receive many or few payments
The amount of the payments received varies widely: in 2015, over a quarter of farmers in the EU28 received a payment of less than €500 and 0.2% received a payment of more than €150,000. Only a limited number of farmers (about 2,300 farmers in the EU28) who were eligible for payments in 2015 did not receive them. Since the EC data (2017b) on the distribution of payments to farmers is not paired with data about other farm characteristics, we can only estimate the structural characteristics of farms with a small or a large amount of payments by linking EC data to other databases. This led to the following observations:

- farms with a small amount of payments had fewer hectares on average than those with a large amount of payments;
- as farm incomes get higher, the amount of the payments received often increases as well;
- specialised cattle farms and farms with cereals, oilseed and protein crops received the highest average payments in the EU28 and intensive livestock farms received the lowest. Farms with other field crops, dairy farms, and sheep/goat farms occupied the middle position.

It must be considered that these three observations are based on EU averages and that the situation on individual farms may vary.

The direct payments as a percentage of agricultural income varies widely

The 50% of farmers with the lowest incomes in the EU28 received 4% of the total payments in 2015, while the 10% of farmers with the highest incomes received 53% of the total payments. The payments as a percentage of family farm income per family work unit in the EU28 is significant and varies from a third for the lower income classes to half in the higher income classes. Therefore, as farm income increases, farmers receive higher direct payments on average. The payments as a percentage of farm income for the different farming types varies substantially from the EU average: in 2015, the payments as a percentage of family farm income per family work unit at cattle farms and farms specialising in cereals, oilseed and protein crops were over 100%, the percentage for farms producing other field crops, dairy farms, and sheep/goat farms was around 70%, and the percentage for intensive livestock farms stood at roughly 30%. Since agricultural incomes can fluctuate significantly from year to year, the payments as a percentage of agricultural income differ annually as well.

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Appendix 1 Fictitious distribution of direct payments to farms in EU member countries based on a uniform hectare payment

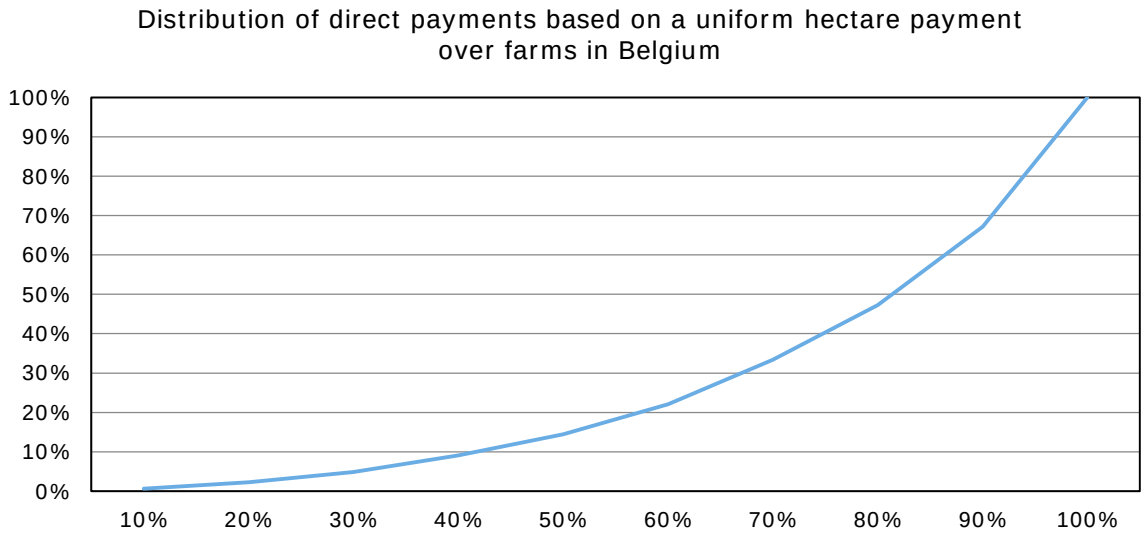

Figure B1.1 *Fictitious distribution of payments to farms in Belgium based on a uniform hectare payment, 2015*
Source: EC (2013) and the Eurostat Farm Structure Survey (FSS); adaptation by Wageningen Economic Research.

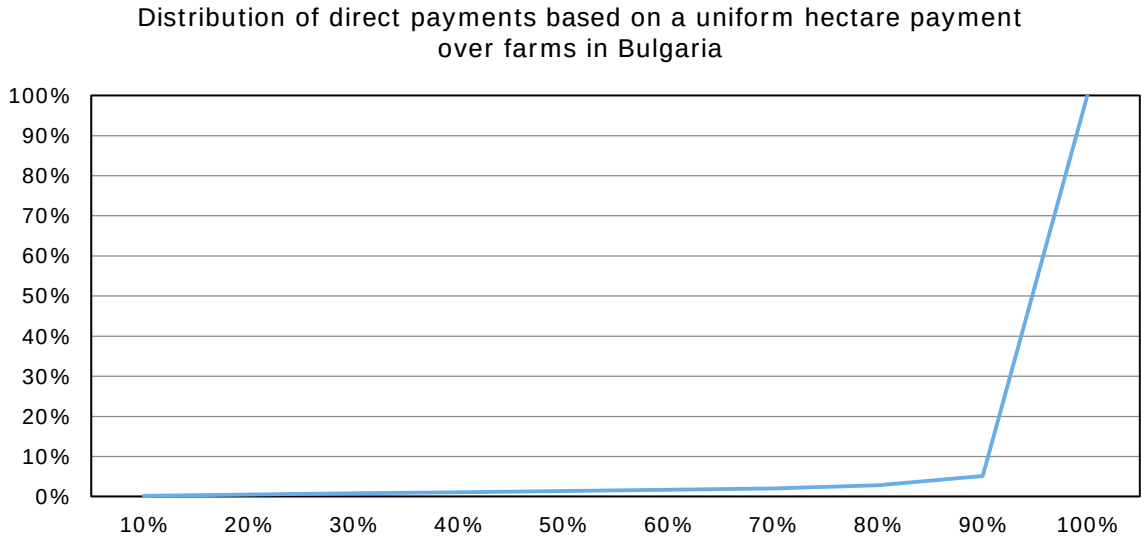

Figure B1.2 *Fictitious distribution of payments to farms in Bulgaria based on a uniform hectare payment, 2015*
Source: EC (2013) and the Eurostat Farm Structure Survey (FSS); adaptation by Wageningen Economic Research.

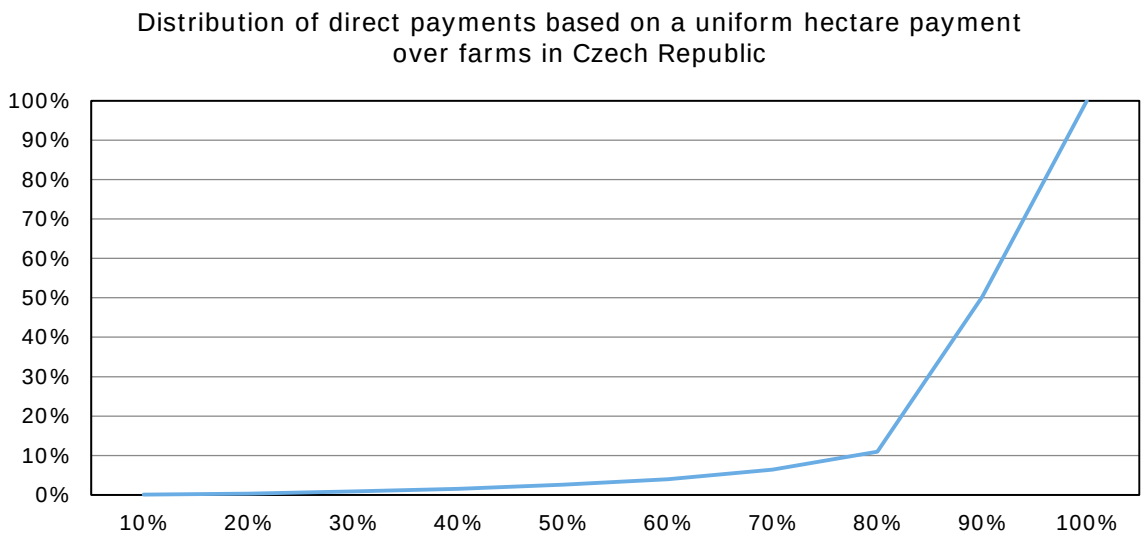

Figure B1.3 *Fictitious distribution of payments to farms in the Czech Republic based on a uniform hectare payment, 2015*
Source: EC (2013) and the Eurostat Farm Structure Survey (FSS); adaptation by Wageningen Economic Research.

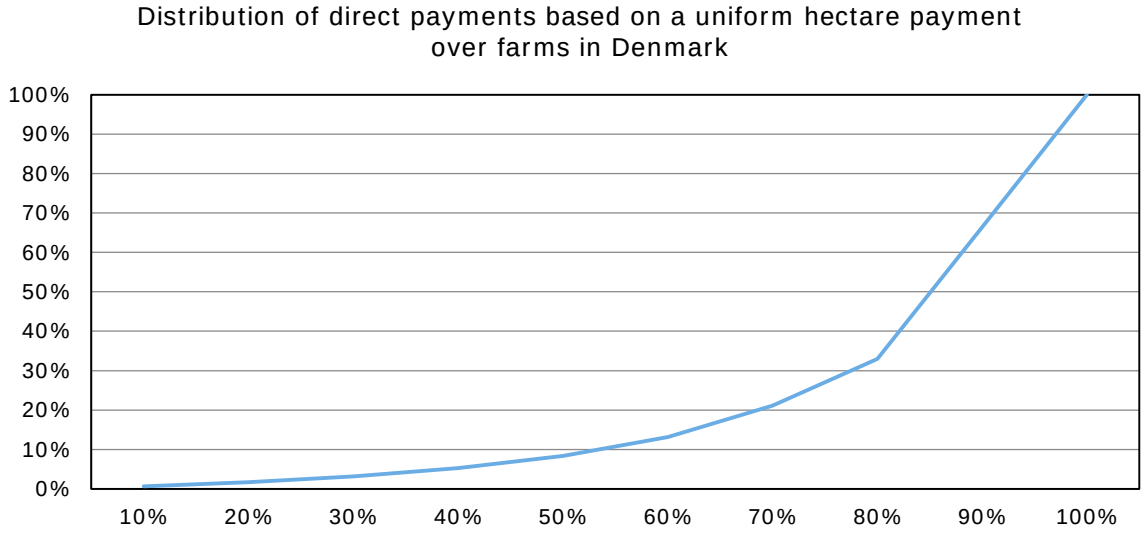

Figure B1.4 *Fictitious distribution of payments to farms in Denmark based on a uniform hectare payment, 2015*
Source: EC (2013) and the Eurostat Farm Structure Survey (FSS); adaptation by Wageningen Economic Research.

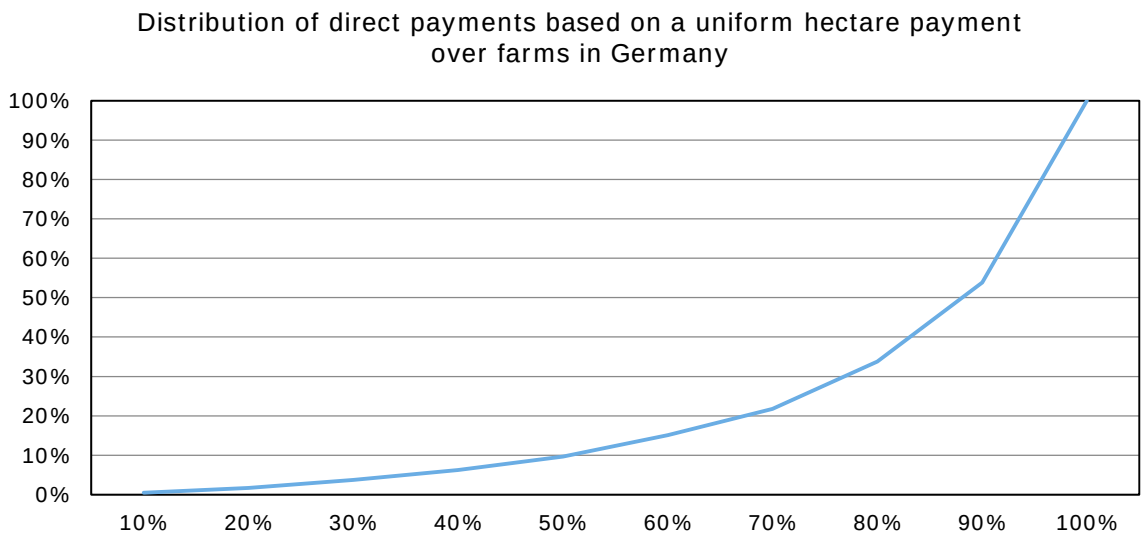

Figure B1.5 *Fictitious distribution of payments to farms in Germany based on a uniform hectare payment, 2015*
Source: EC (2013) and the Eurostat Farm Structure Survey (FSS); adaptation by Wageningen Economic Research.

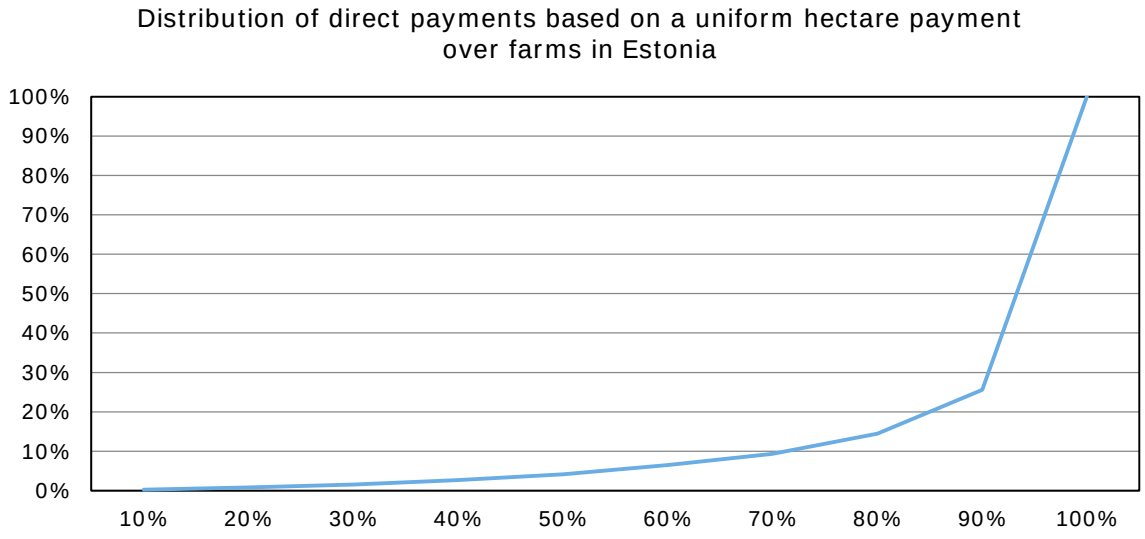

Figure B1.6 *Fictitious distribution of payments to farms in Estonia based on a uniform hectare payment, 2015*
Source: EC (2013) and the Eurostat Farm Structure Survey (FSS); adaptation by Wageningen Economic Research.

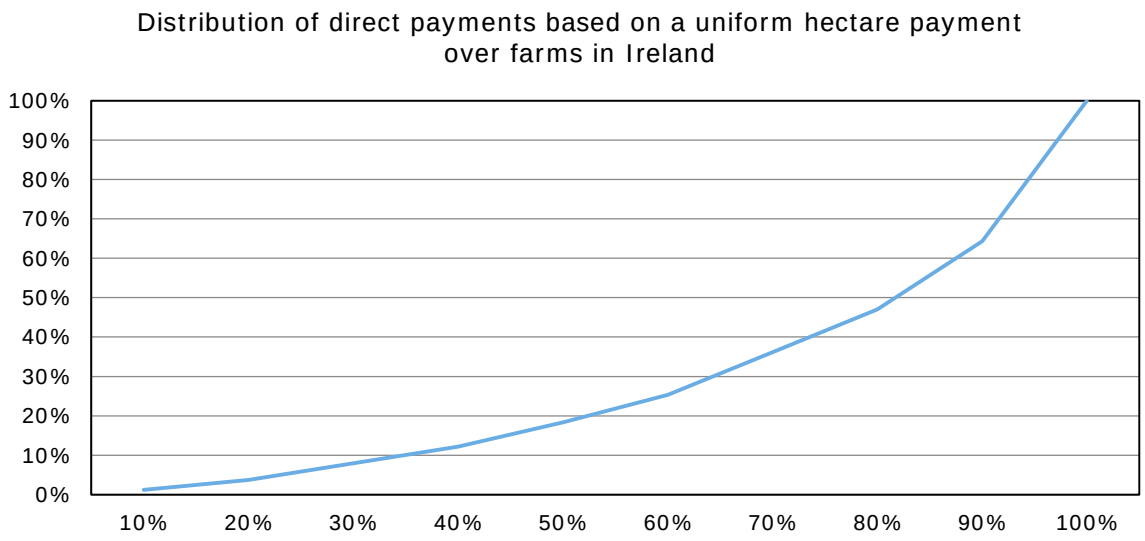

Figure B1.7 *Fictitious distribution of payments to farms in Ireland based on a uniform hectare payment, 2015*
Source: EC (2013) and the Eurostat Farm Structure Survey (FSS); adaptation by Wageningen Economic Research.

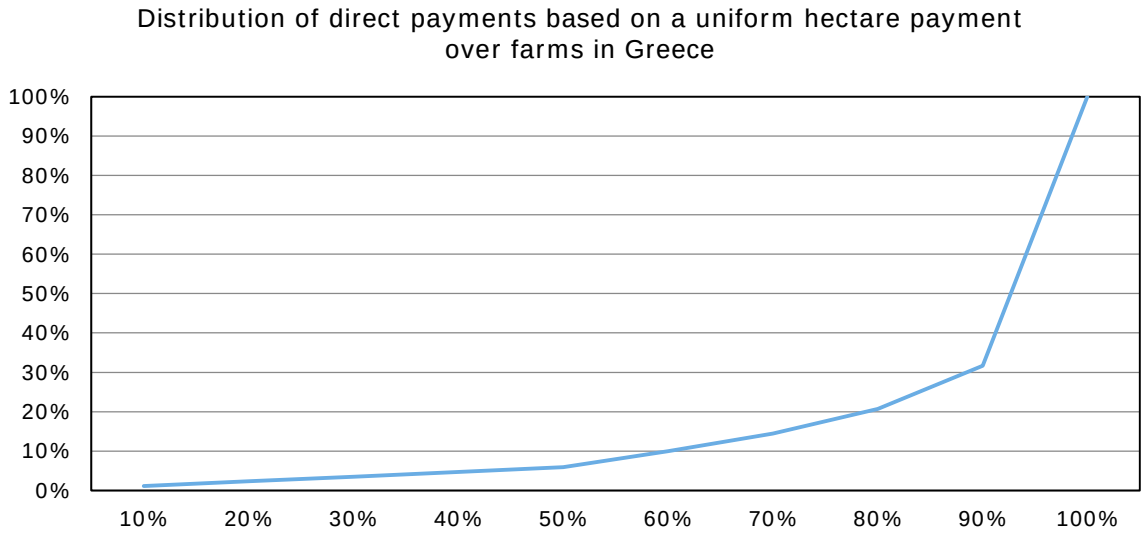

Figure B1.8 *Fictitious distribution of payments to farms in Greece based on a uniform hectare payment, 2015*
Source: EC (2013) and the Eurostat Farm Structure Survey (FSS); adaptation by Wageningen Economic Research.

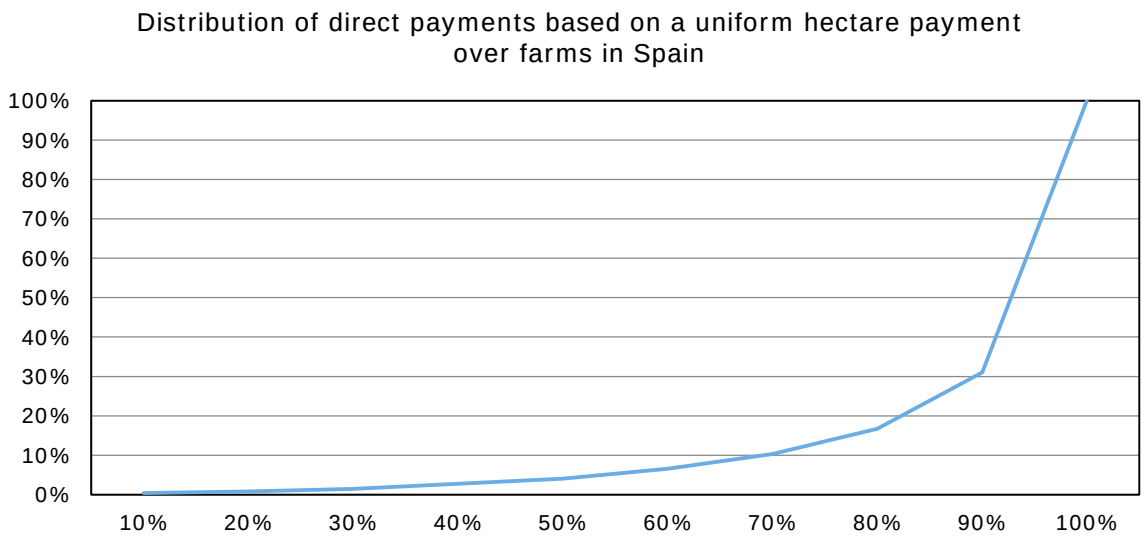

Figure B1.9 *Fictitious distribution of payments to farms in Spain based on a uniform hectare payment, 2015*
Source: EC (2013) and the Eurostat Farm Structure Survey (FSS); adaptation by Wageningen Economic Research.

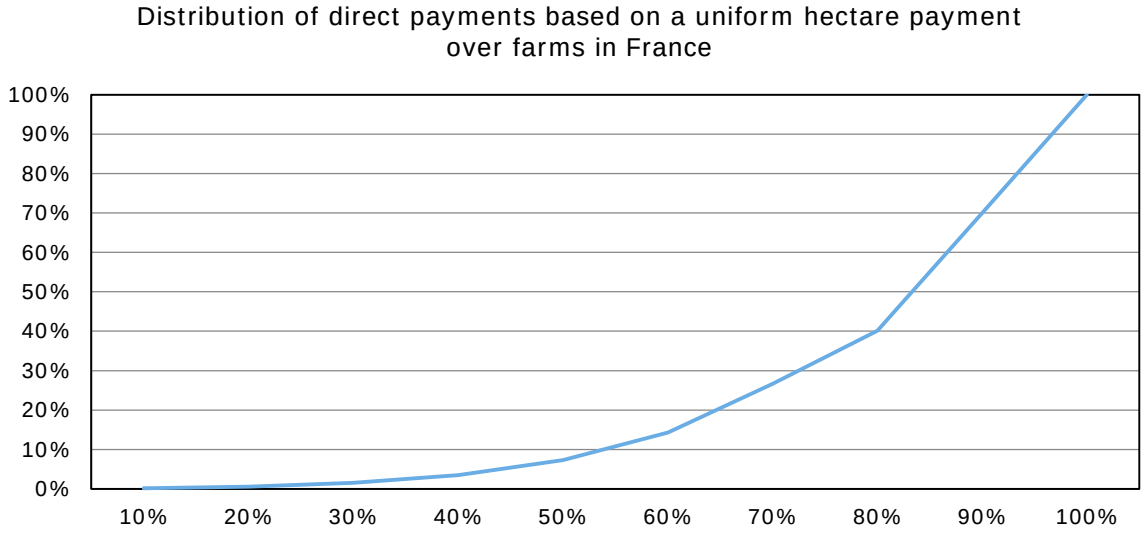

Figure B1.10 *Fictitious distribution of payments to farms in France based on a uniform hectare payment, 2015*
Source: EC (2013) and the Eurostat Farm Structure Survey (FSS); adaptation by Wageningen Economic Research.

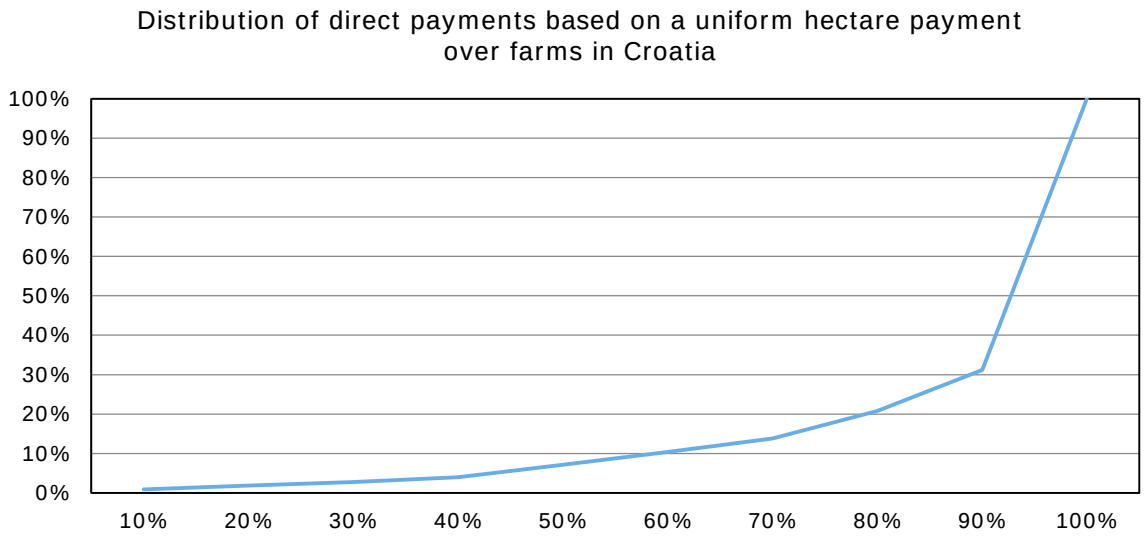

Figure B1.11 *Fictitious distribution of payments to farms in Croatia based on a uniform hectare payment, 2015*
Source: EC (2013) and the Eurostat Farm Structure Survey (FSS); adaptation by Wageningen Economic Research.

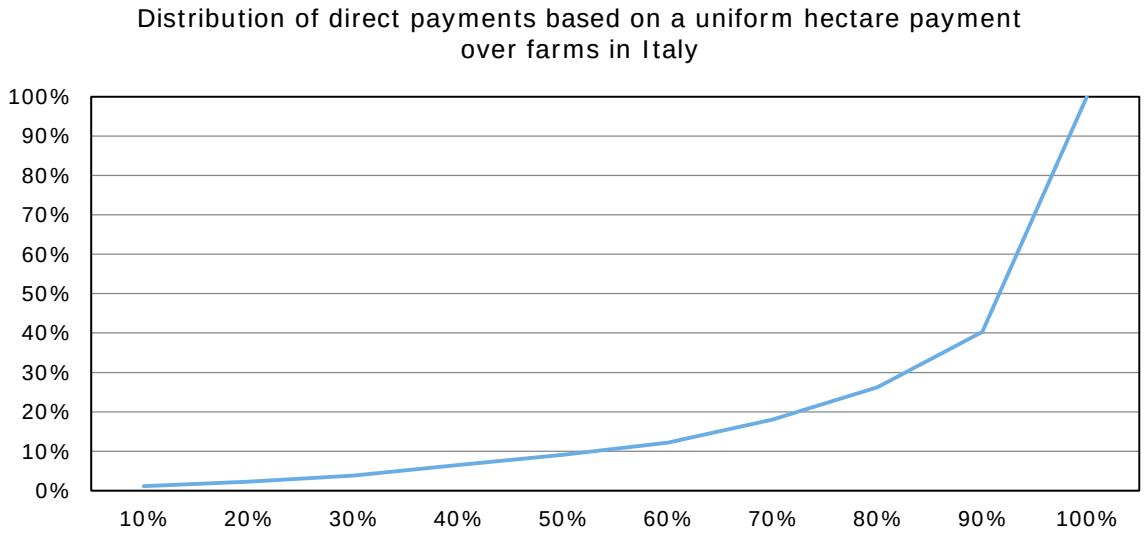

Figure B1.12 *Fictitious distribution of payments to farms in Italy based on a uniform hectare payment, 2015*
Source: EC (2013) and the Eurostat Farm Structure Survey (FSS); adaptation by Wageningen Economic Research.

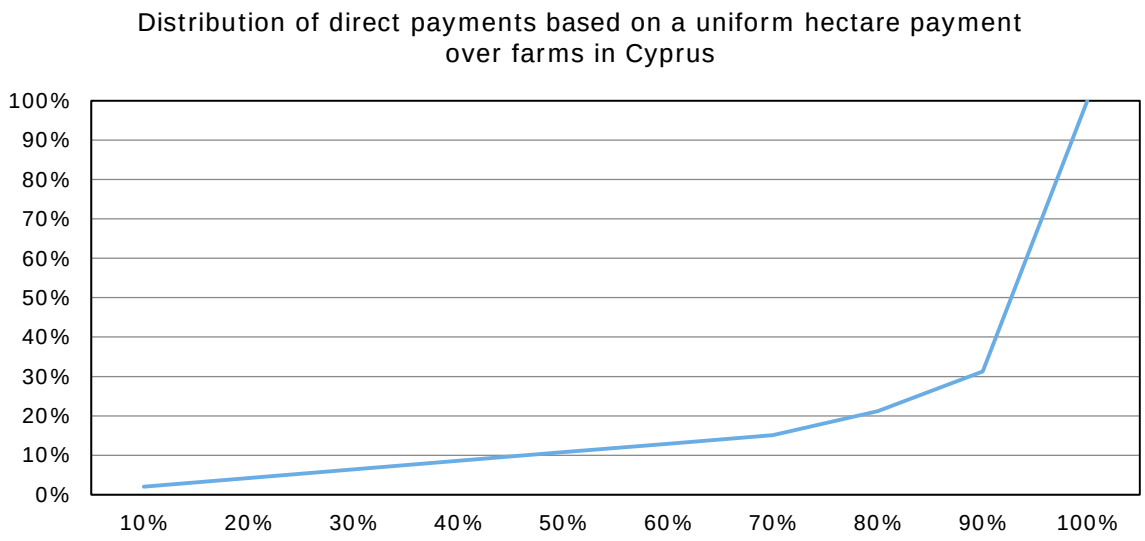

Figure B1.13 *Fictitious distribution of payments to farms in Cyprus based on a uniform hectare payment, 2015*
Source: EC (2013) and the Eurostat Farm Structure Survey (FSS); adaptation by Wageningen Economic Research.

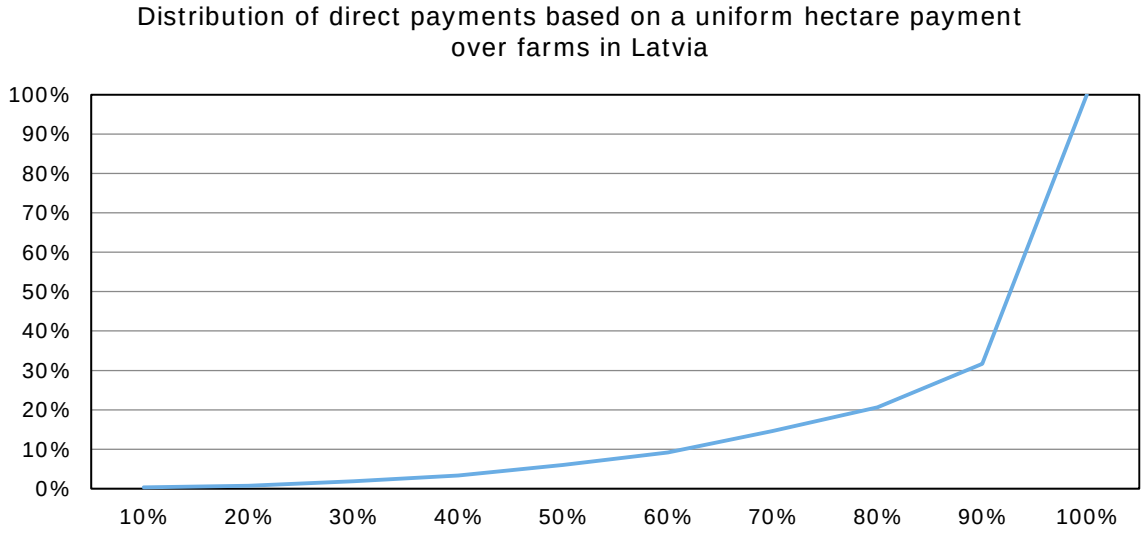

Figure B1.14 *Fictitious distribution of payments to farms in Latvia based on a uniform hectare payment, 2015*
Source: EC (2013) and the Eurostat Farm Structure Survey (FSS); adaptation by Wageningen Economic Research.

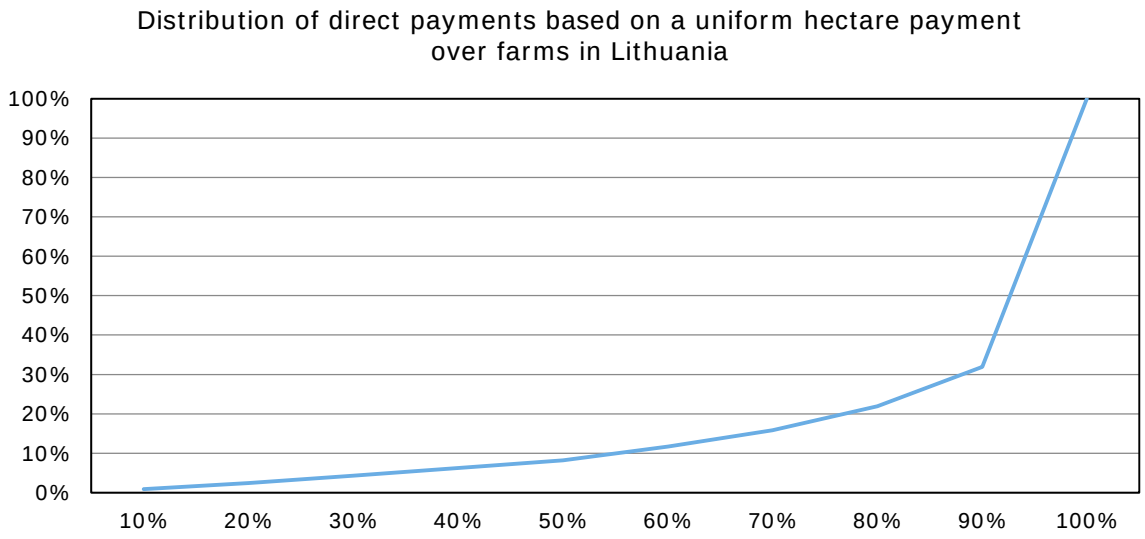

Figure B1.15 *Fictitious distribution of payments to farms in Lithuania based on a uniform hectare payment, 2015*
Source: EC (2013) and the Eurostat Farm Structure Survey (FSS); adaptation by Wageningen Economic Research.

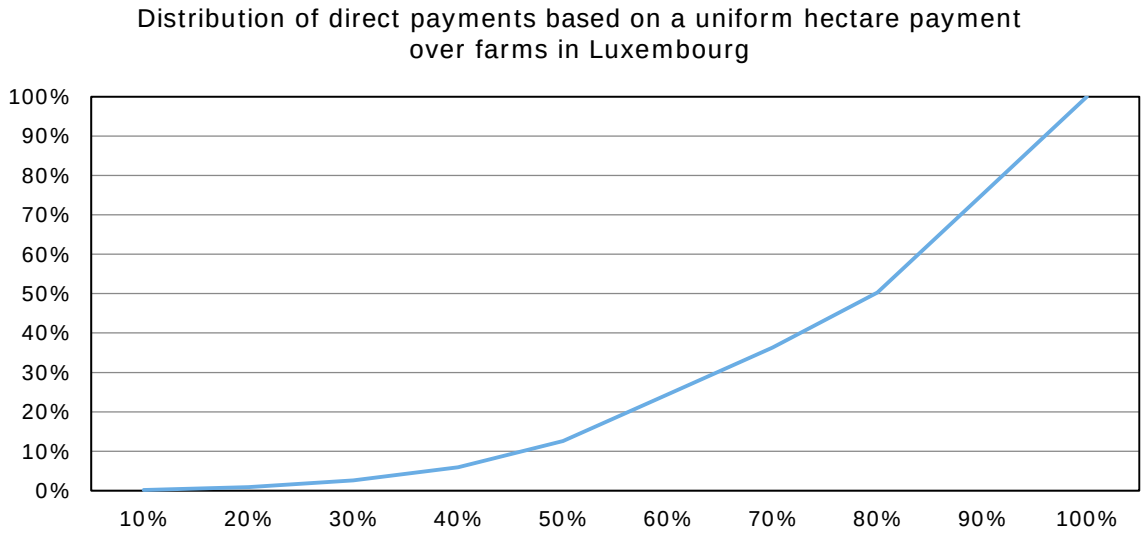

Figure B1.16 *Fictitious distribution of payments to farms in Luxembourg based on a uniform hectare payment, 2015*
Source: EC (2013) and the Eurostat Farm Structure Survey (FSS); adaptation by Wageningen Economic Research.

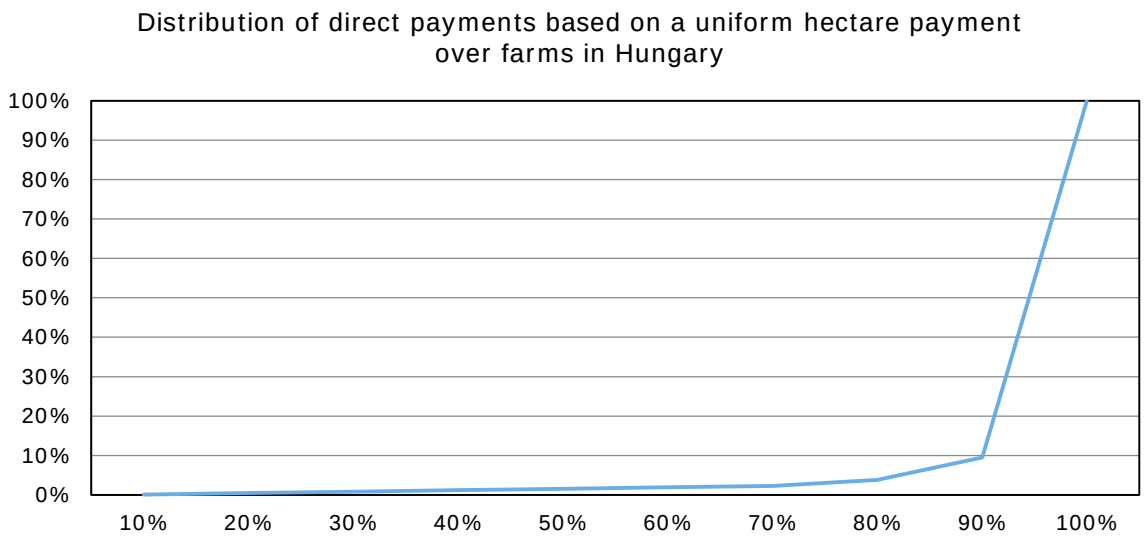

Figure B1.17 *Fictitious distribution of payments to farms in Hungary based on a uniform hectare payment, 2015*
Source: EC (2013) and the Eurostat Farm Structure Survey (FSS); adaptation by Wageningen Economic Research.

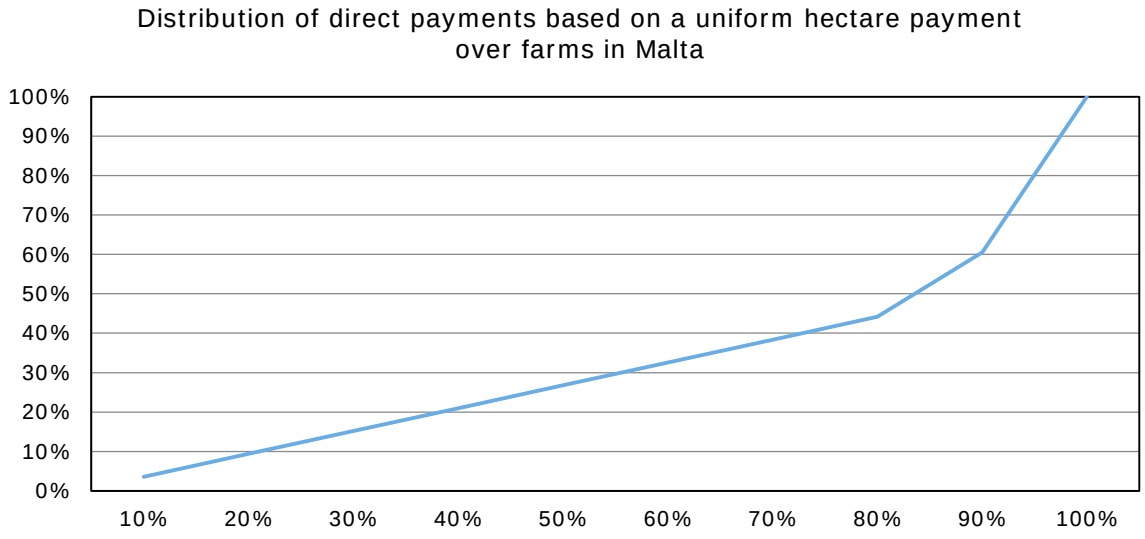

Figure B1.18 *Fictitious distribution of payments to farms in Malta based on a uniform hectare payment, 2015*
Source: EC (2013) and the Eurostat Farm Structure Survey (FSS); adaptation by Wageningen Economic Research.

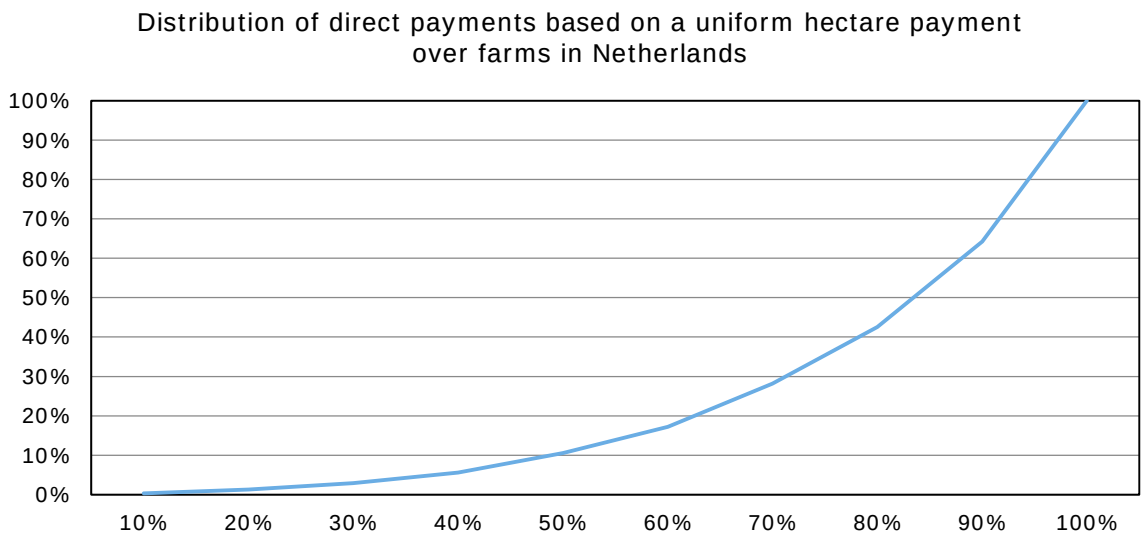

Figure B1.19 *Fictitious distribution of payments to farms in the Netherlands based on a uniform hectare payment, 2015*
Source: EC (2013) and the Eurostat Farm Structure Survey (FSS); adaptation by Wageningen Economic Research.

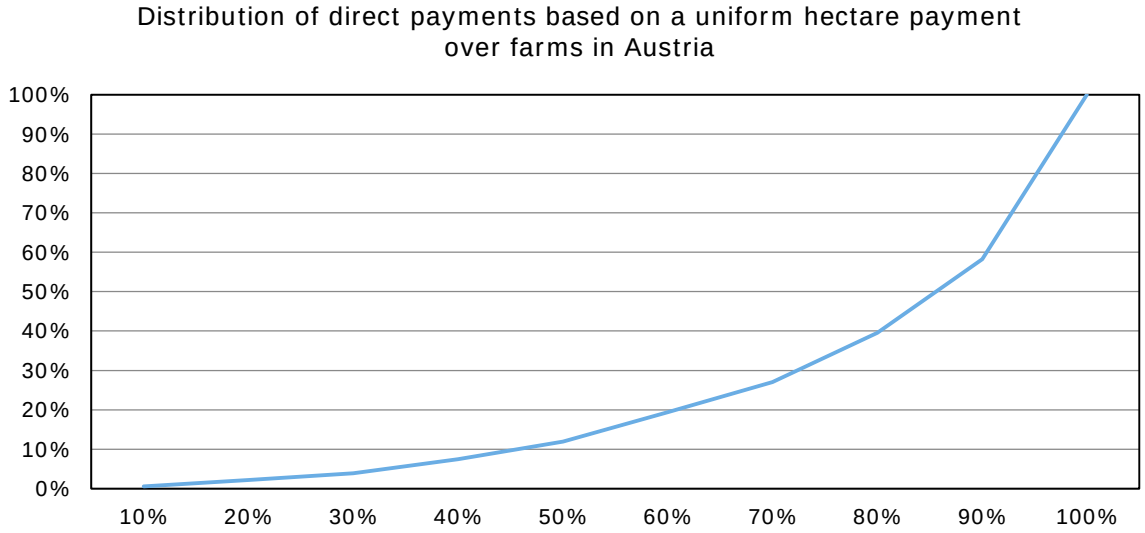

Figure B1.20 *Fictitious distribution of payments to farms in Austria based on a uniform hectare payment, 2015*
Source: EC (2013) and the Eurostat Farm Structure Survey (FSS); adaptation by Wageningen Economic Research.

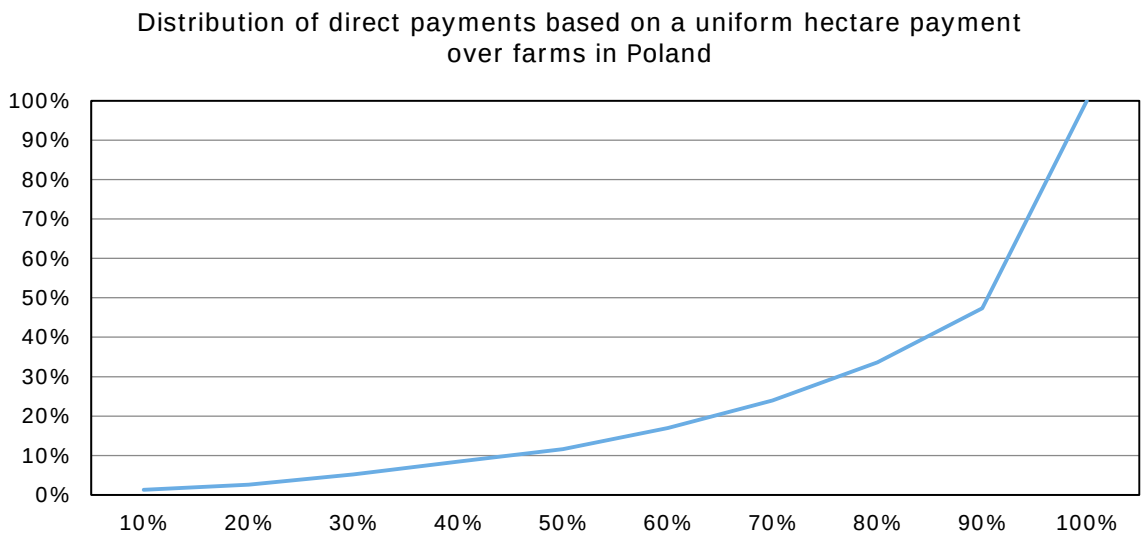

Figure B1.21 *Fictitious distribution of payments to farms in Poland based on a uniform hectare payment, 2015*
Source: EC (2013) and the Eurostat Farm Structure Survey (FSS); adaptation by Wageningen Economic Research.

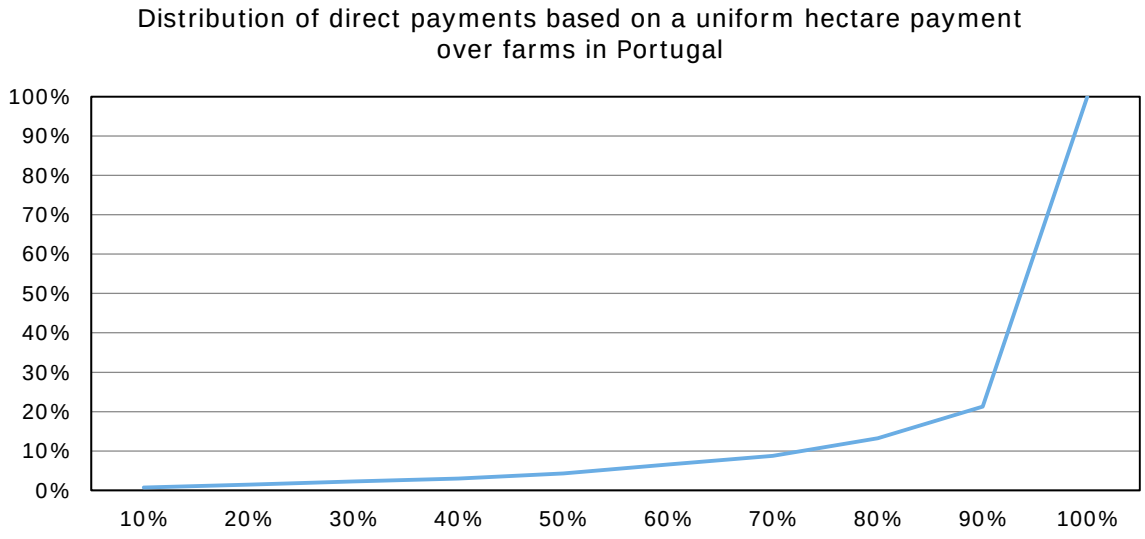

Figure B1.22 *Fictitious distribution of payments to farms in Portugal based on a uniform hectare payment, 2015*
Source: EC (2013) and the Eurostat Farm Structure Survey (FSS); adaptation by Wageningen Economic Research.

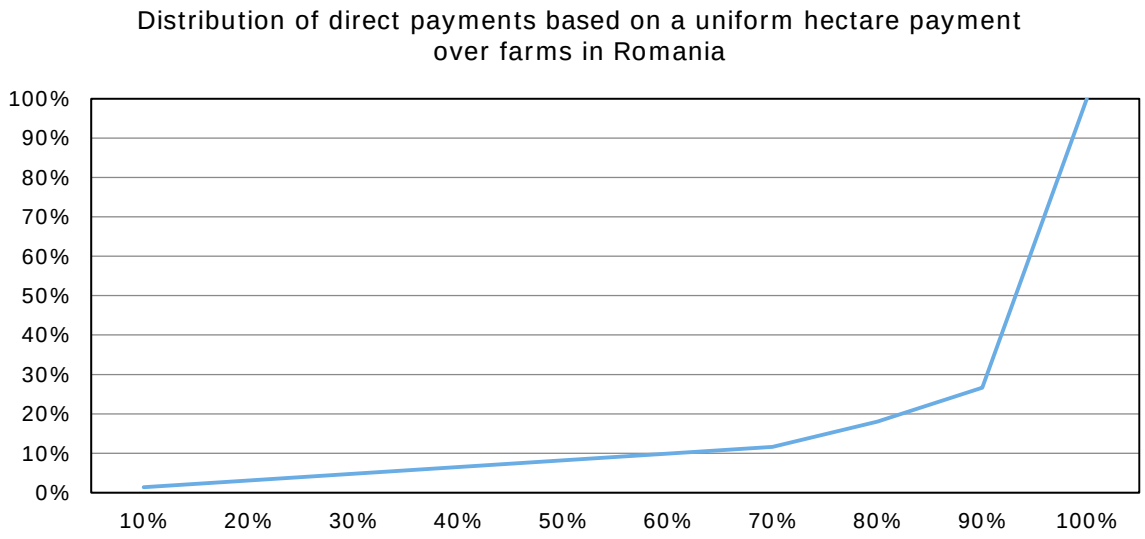

Figure B1.23 *Fictitious distribution of payments to farms in Romania based on a uniform hectare payment, 2015*
Source: EC (2013) and the Eurostat Farm Structure Survey (FSS); adaptation by Wageningen Economic Research.

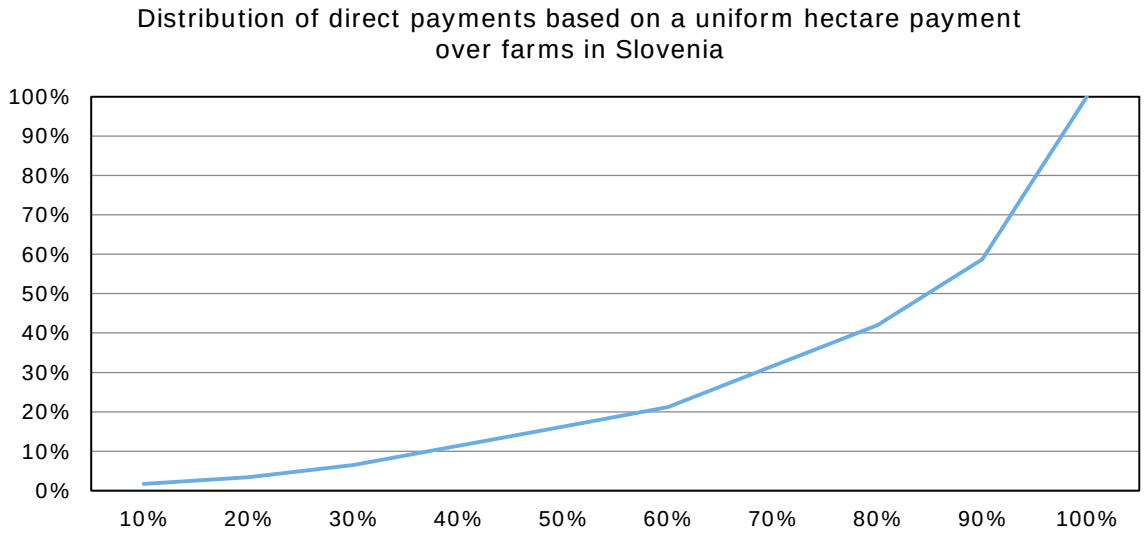

Figure B1.24 *Fictitious distribution of payments to farms in Slovenia based on a uniform hectare payment, 2015*
Source: EC (2013) and the Eurostat Farm Structure Survey (FSS); adaptation by Wageningen Economic Research.

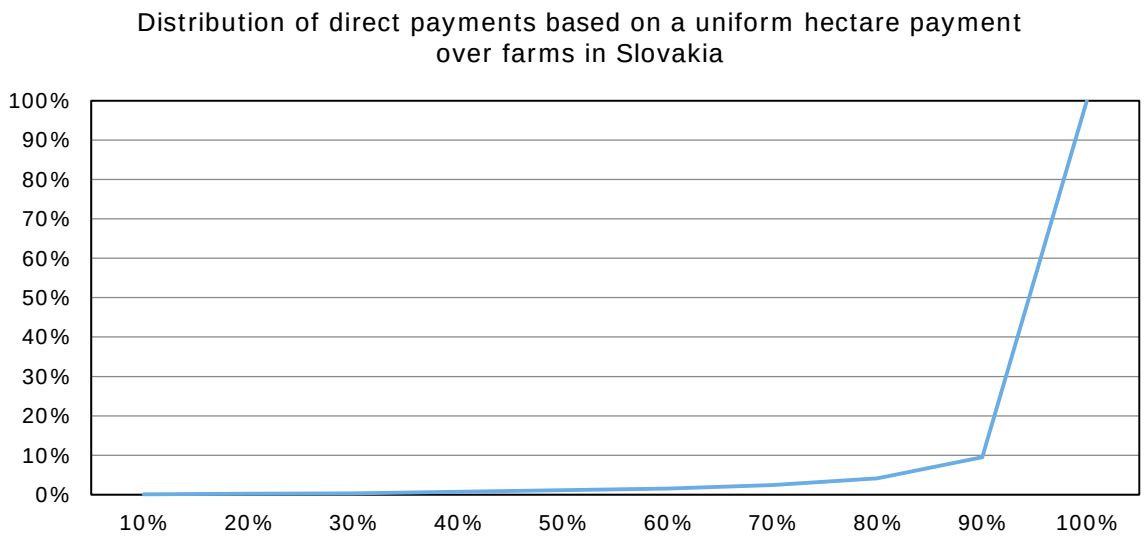

Figure B1.25 *Fictitious distribution of payments to farms in Slovakia based on a uniform hectare payment, 2015*
Source: EC (2013) and the Eurostat Farm Structure Survey (FSS); adaptation by Wageningen Economic Research.

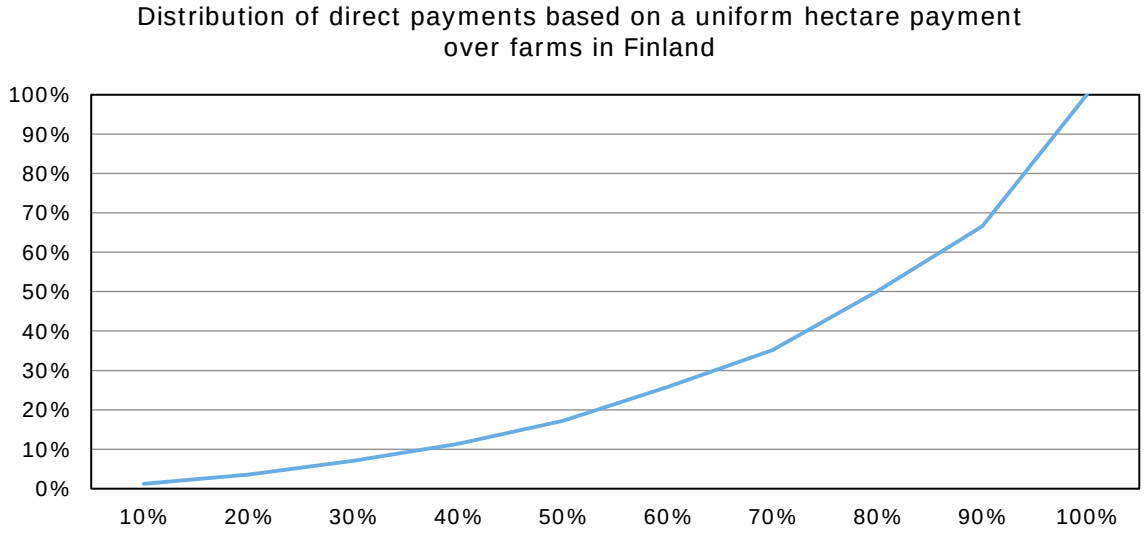

Figure B1.26 *Fictitious distribution of payments to farms in Finland based on a uniform hectare payment, 2015*
Source: EC (2013) and the Eurostat Farm Structure Survey (FSS); adaptation by Wageningen Economic Research.

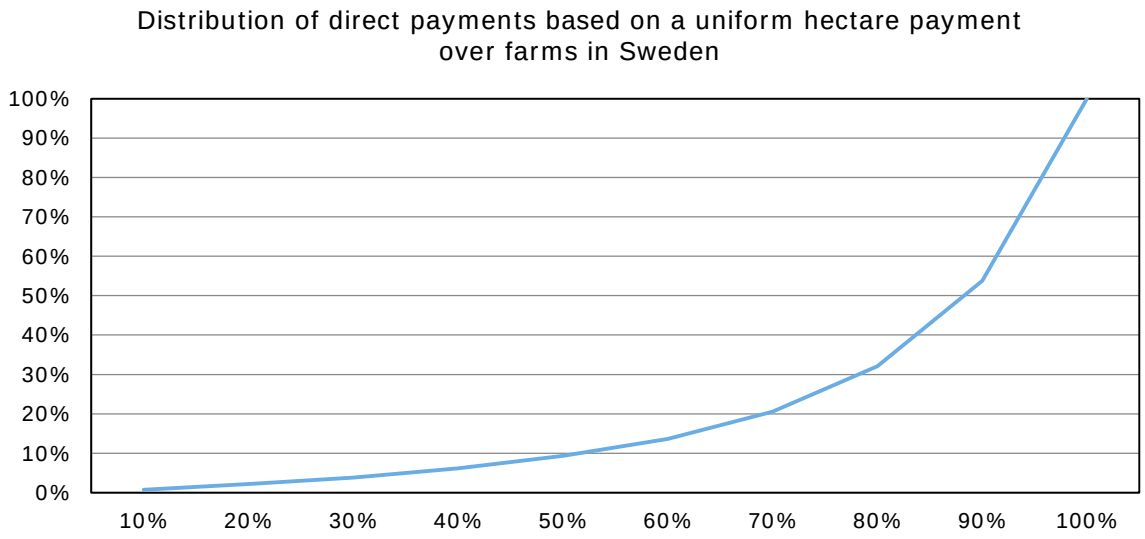

Figure B1.27 *Fictitious distribution of payments to farms in Sweden based on a uniform hectare payment, 2015*
Source: EC (2013) and the Eurostat Farm Structure Survey (FSS); adaptation by Wageningen Economic Research.

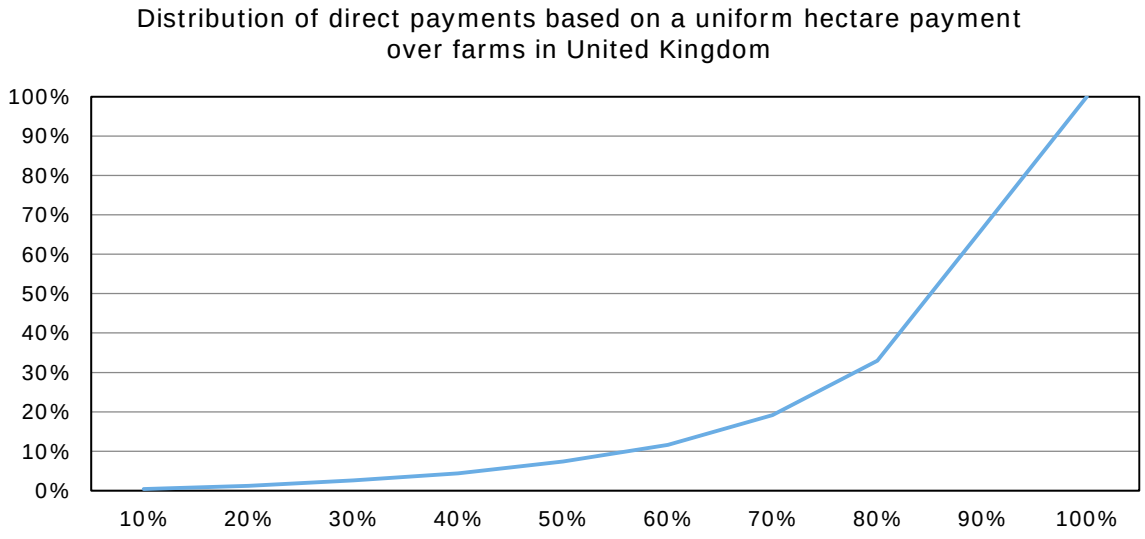

Figure B1.28 *Fictitious distribution of payments to farms in the UK based on a uniform hectare payment, 2015*
Source: EC (2013) and the Eurostat Farm Structure Survey (FSS); adaptation by Wageningen Economic Research.

Appendix 2 Direct payments from the first pillar of the CAP as a percentage of income per farming type in EU member countries, 2015

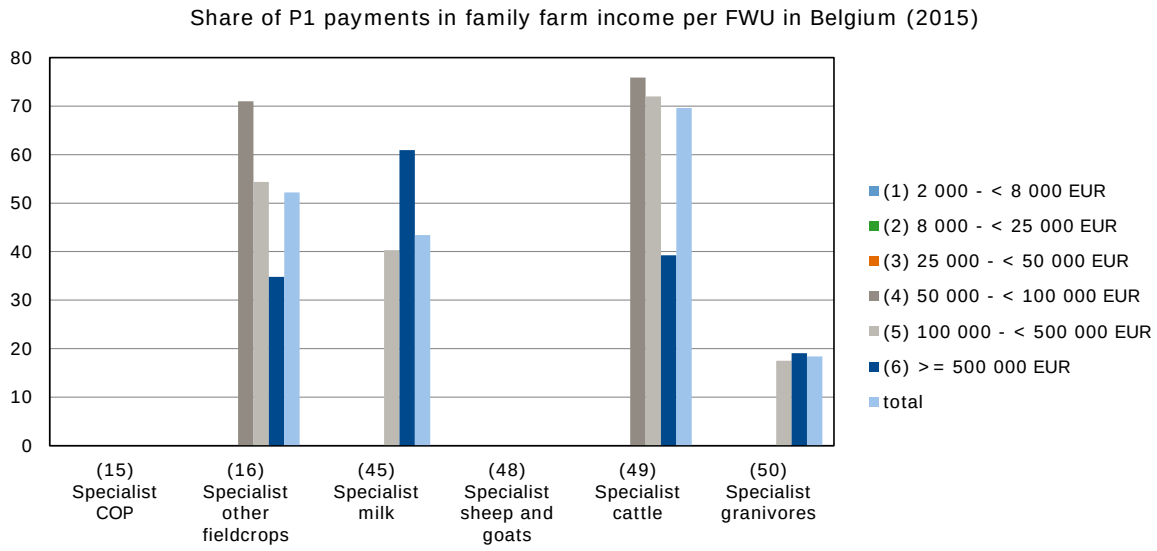

Figure B2.1 *Direct payments from the first pillar of the CAP as a percentage of family farm income per family work unit for different farming types in Belgium, 2015*
A missing bar indicates that no information for the relevant group can be shown due to insufficient observations. Business type (15) COP specialists are businesses that specialise in cereals, oilseed, and protein crops.
Source: FADN; adaptation by Wageningen Economic Research.

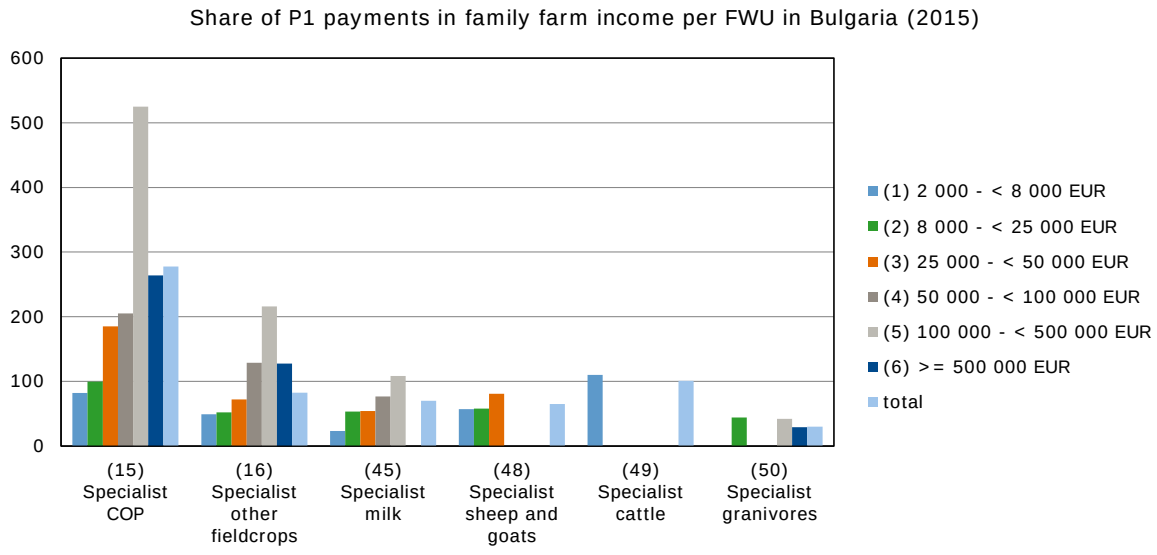

Figure B2.2 *Direct payments from the first pillar of the CAP as a percentage of family farm income per family work unit for different farming types in Bulgaria, 2015*
Source and explanation: see Figure B2.1.

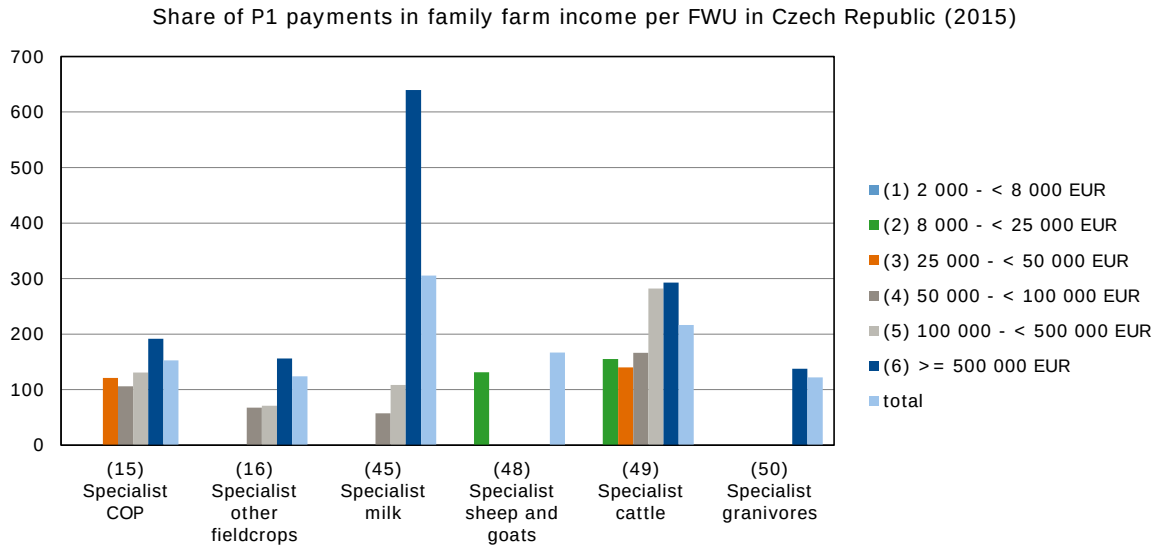

Figure B2.3 *Direct payments from the first pillar of the CAP as a percentage of family farm income per family work unit for different farming types in the Czech Republic, 2015*
Source and explanation: see Figure B2.1.

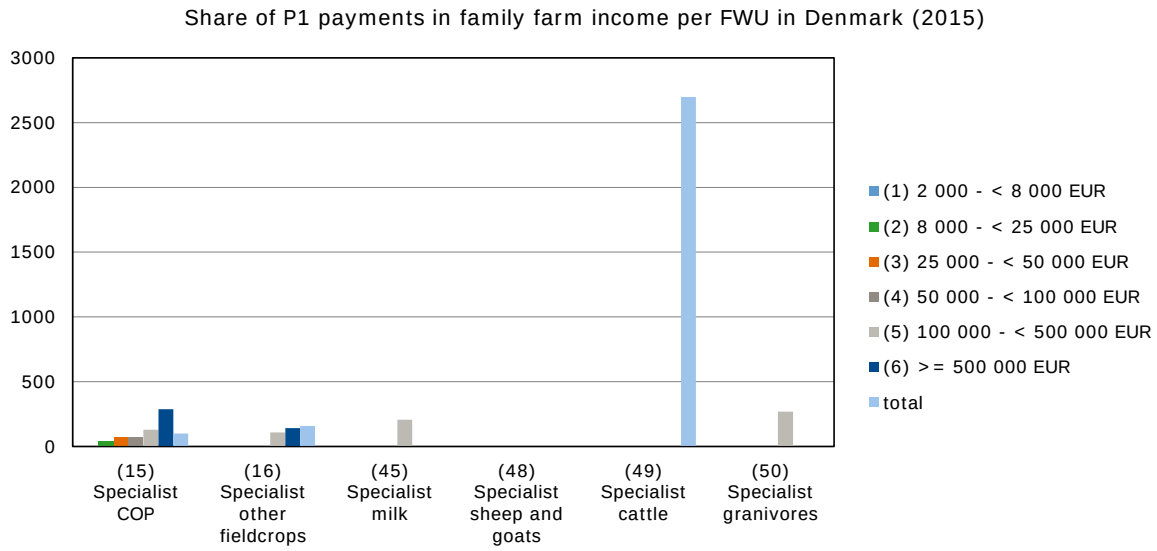

Figure B2.4 *Direct payments from the first pillar of the CAP as a percentage of family farm income per family work unit for different farming types in Denmark, 2015*
Source and explanation: see Figure B2.1.

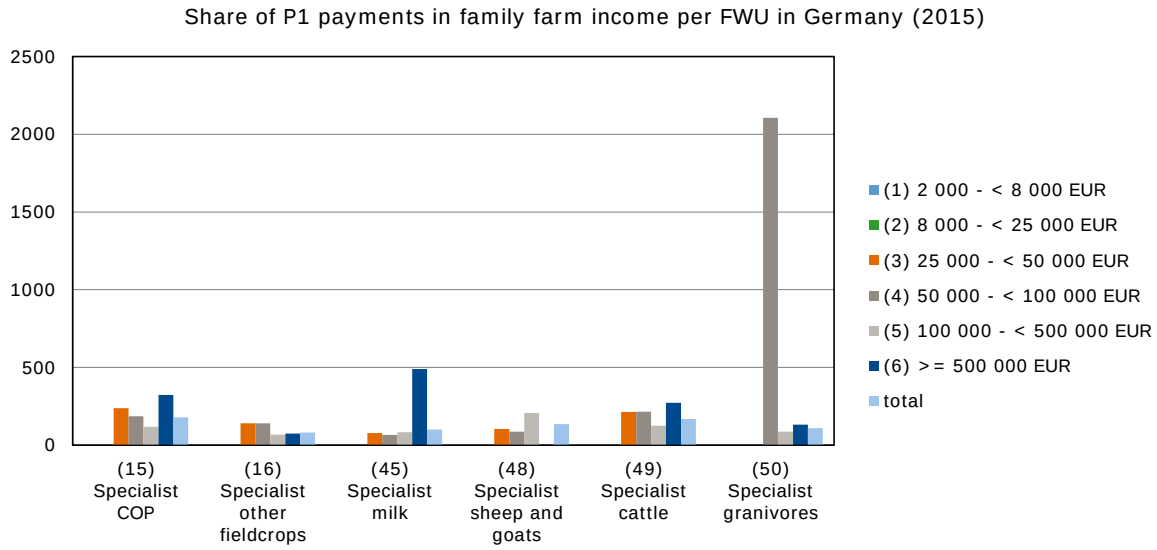

Figure B2.5 *Direct payments from the first pillar of the CAP as a percentage of family farm income per family work unit for different farming types in Germany, 2015*
Source and explanation: see Figure B2.1.

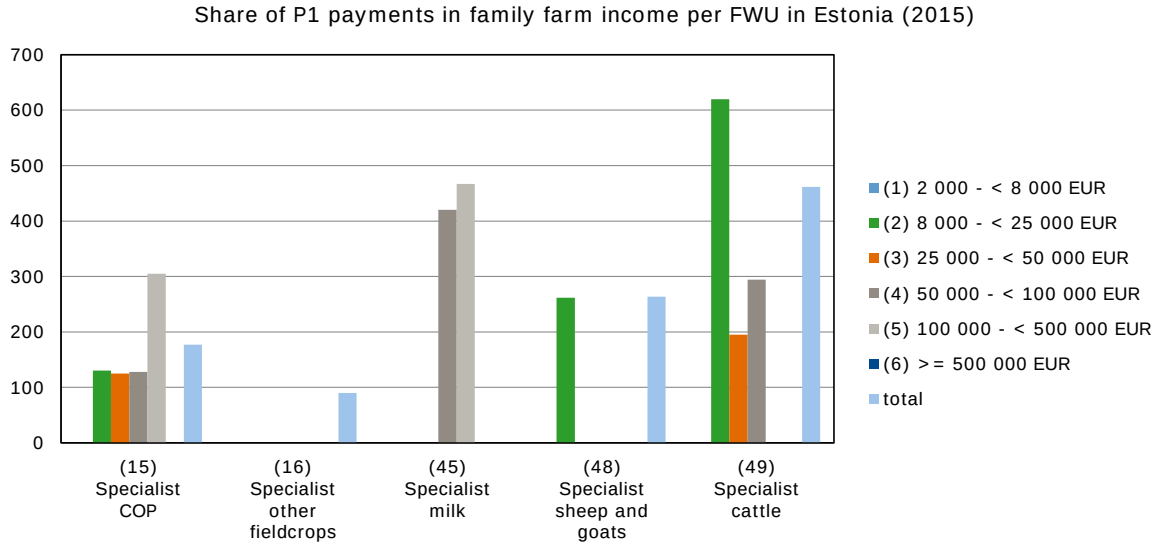

Figure B2.6 *Direct payments from the first pillar of the CAP as a percentage of family farm income per family work unit for different farming types in Estonia, 2015*
Source and explanation: see Figure B2.1.

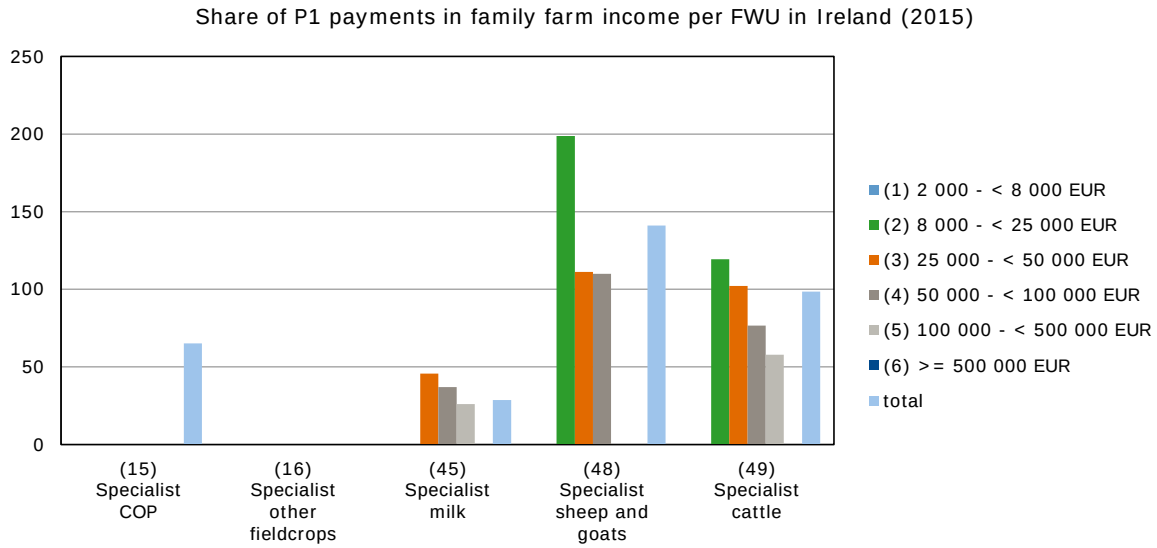

Figure B2.7 *Direct payments from the first pillar of the CAP as a percentage of family farm income per family work unit for different farming types in Ireland, 2015*
Source and explanation: see Figure B2.1.

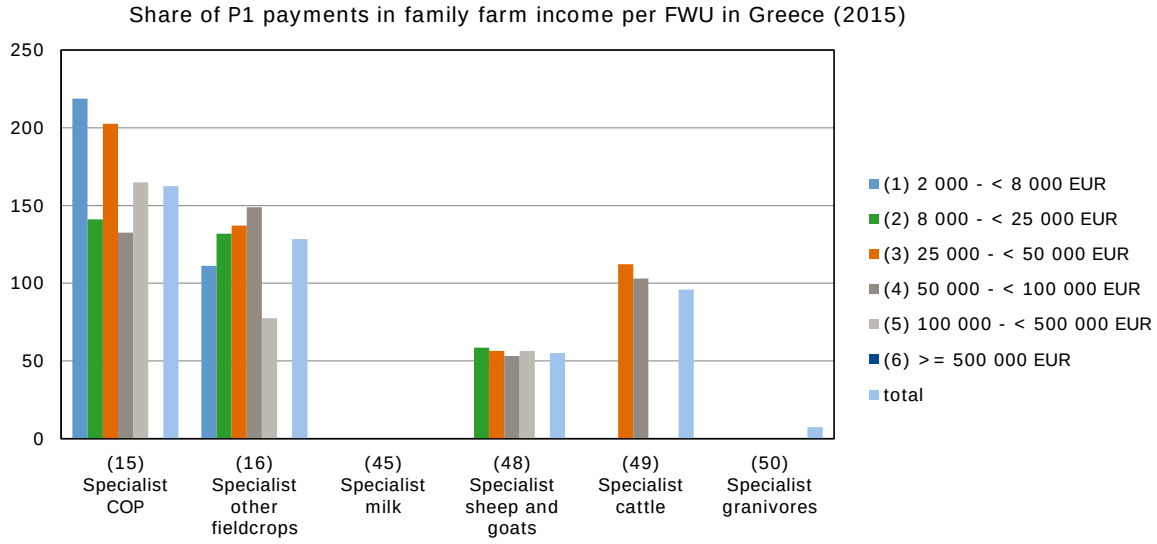

Figure B2.8 *Direct payments from the first pillar of the CAP as a percentage of family farm income per family work unit for different farming types in Greece, 2015*
Source and explanation: see Figure B2.1.

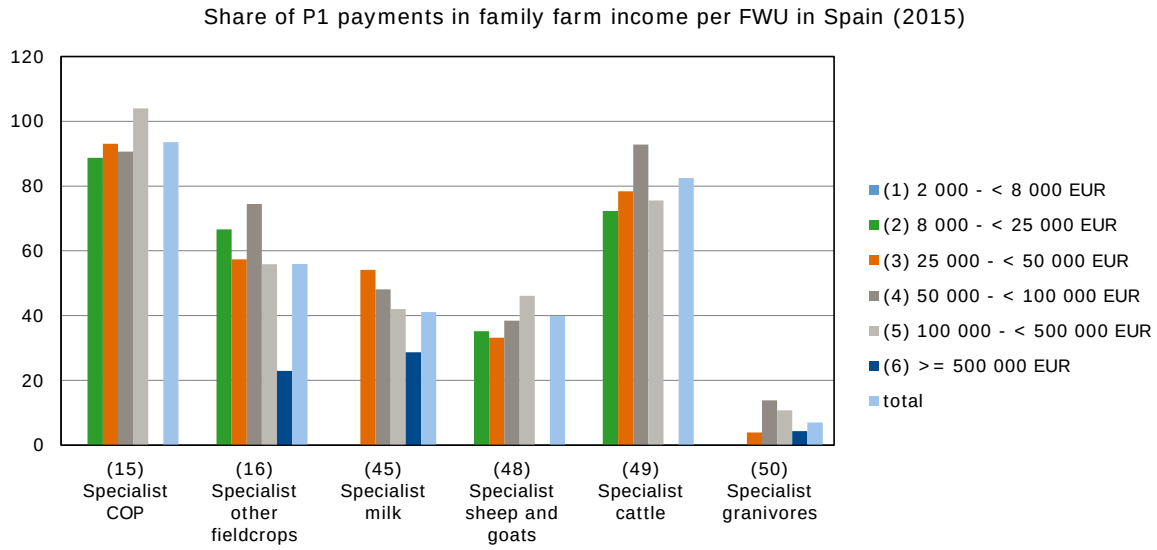

Figure B2.9 *Direct payments from the first pillar of the CAP as a percentage of family farm income per family work unit for different farming types in Spain, 2015*
Source and explanation: see Figure B2.1.

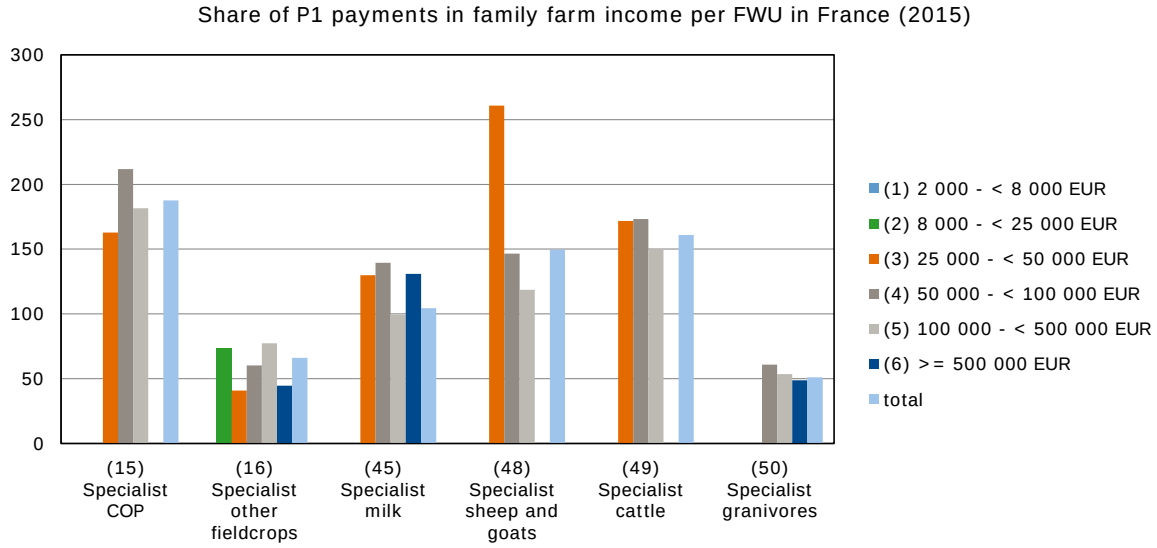

Figure B2.10 *Direct payments from the first pillar of the CAP as a percentage of family farm income per family work unit for different farming types in France, 2015*
Source and explanation: see Figure B2.1.

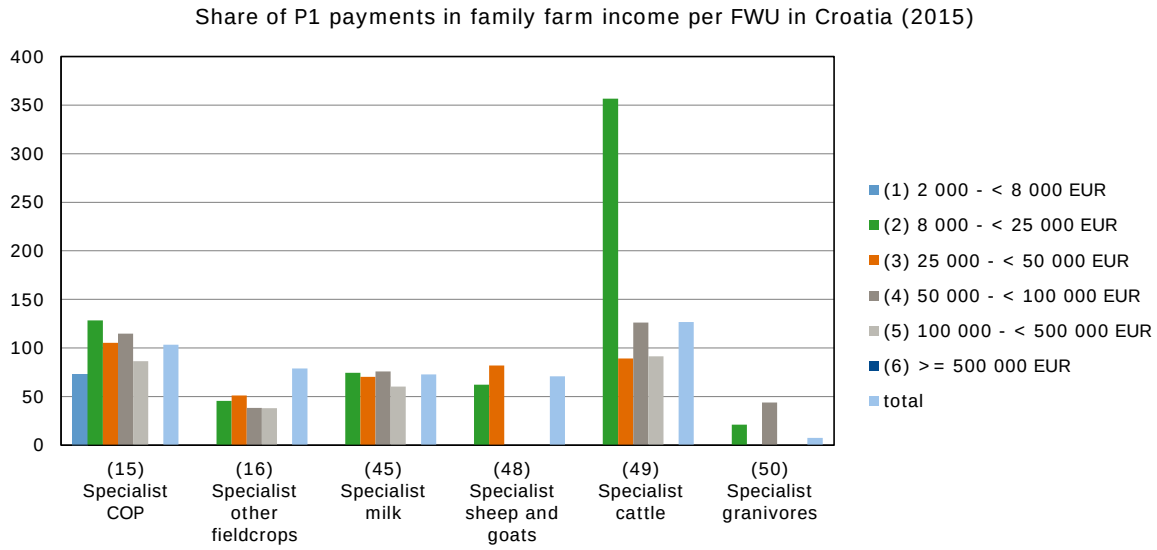

Figure B2.11 *Direct payments from the first pillar of the CAP as a percentage of family farm income per family work unit for different farming types in Croatia, 2015*
Source and explanation: see Figure B2.1.

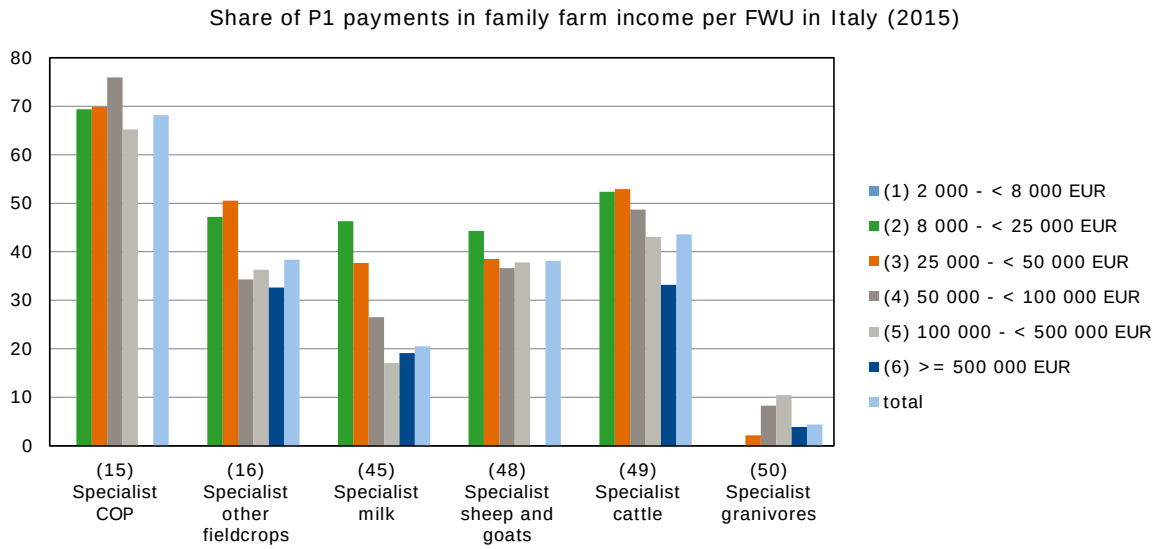

Figure B2.12 *Direct payments from the first pillar of the CAP as a percentage of family farm income per family work unit for different farming types in Italy, 2015*
Source and explanation: see Figure B2.1.

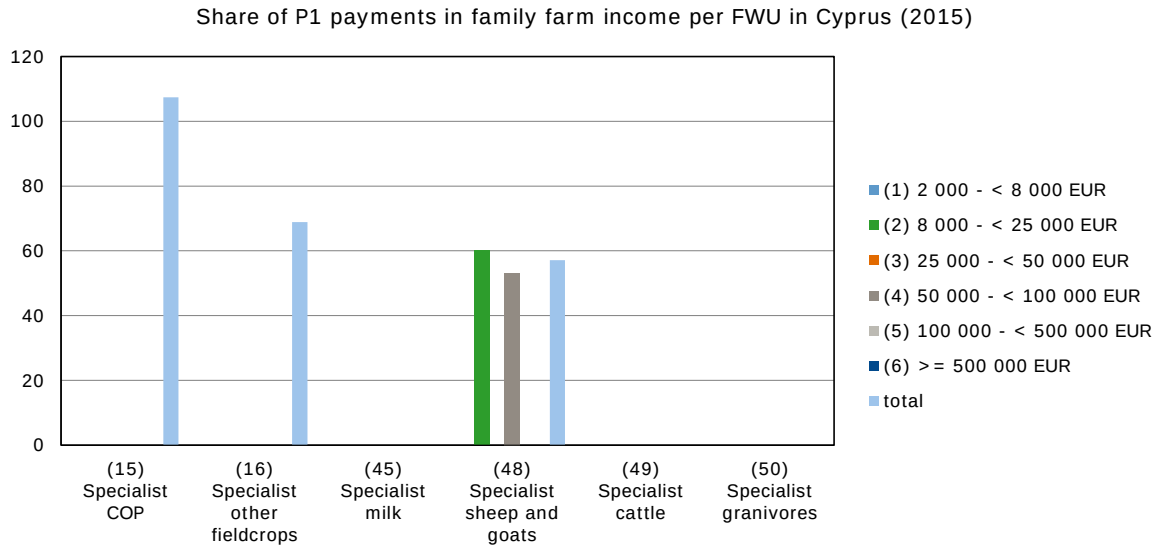

Figure B2.13 *Direct payments from the first pillar of the CAP as a percentage of family farm income per family work unit for different farming types in Cyprus, 2015*
Source and explanation: see Figure B2.1.

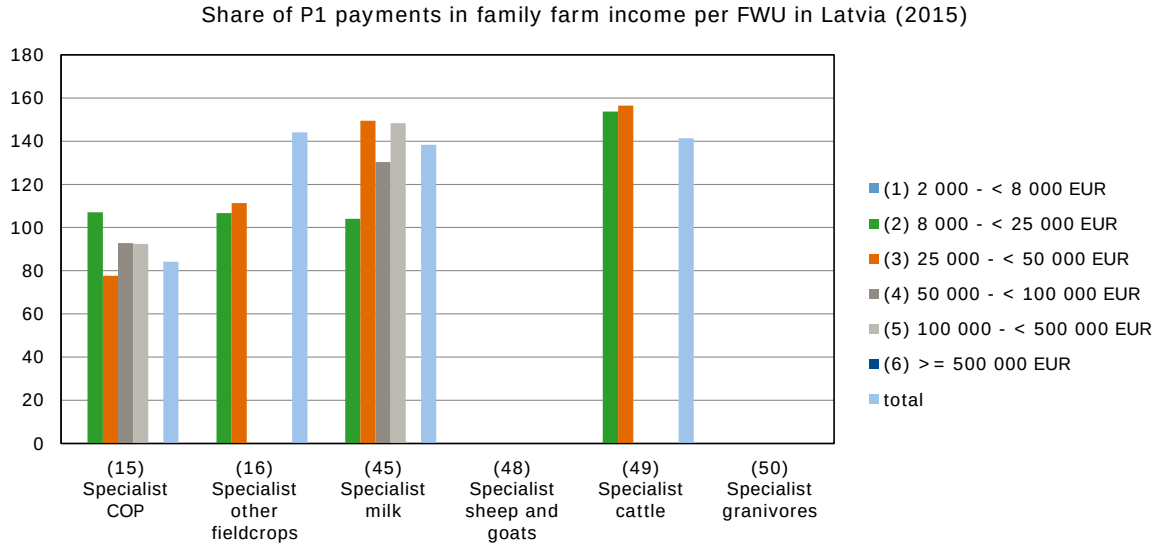

Figure B2.14 *Direct payments from the first pillar of the CAP as a percentage of family farm income per family work unit for different farming types in Latvia, 2015*
Source and explanation: see Figure B2.1.

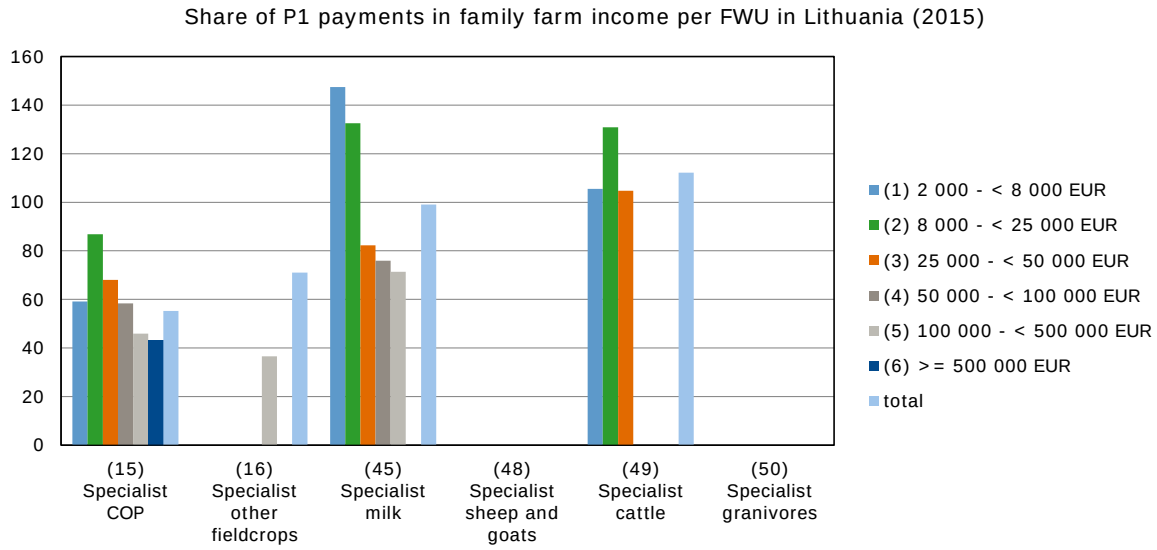

Figure B2.15 *Direct payments from the first pillar of the CAP as a percentage of family farm income per family work unit for different farming types in Lithuania, 2015*
Source and explanation: see Figure B2.1.

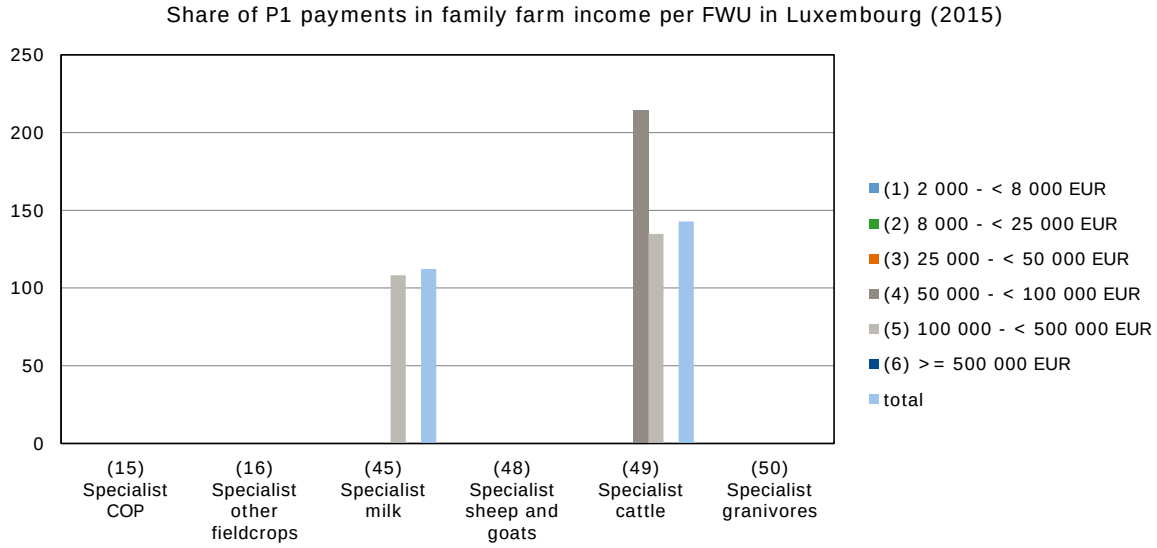

Figure B2.16 *Direct payments from the first pillar of the CAP as a percentage of family farm income per family work unit for different farming types in Luxembourg, 2015*
Source and explanation: see Figure B2.1.

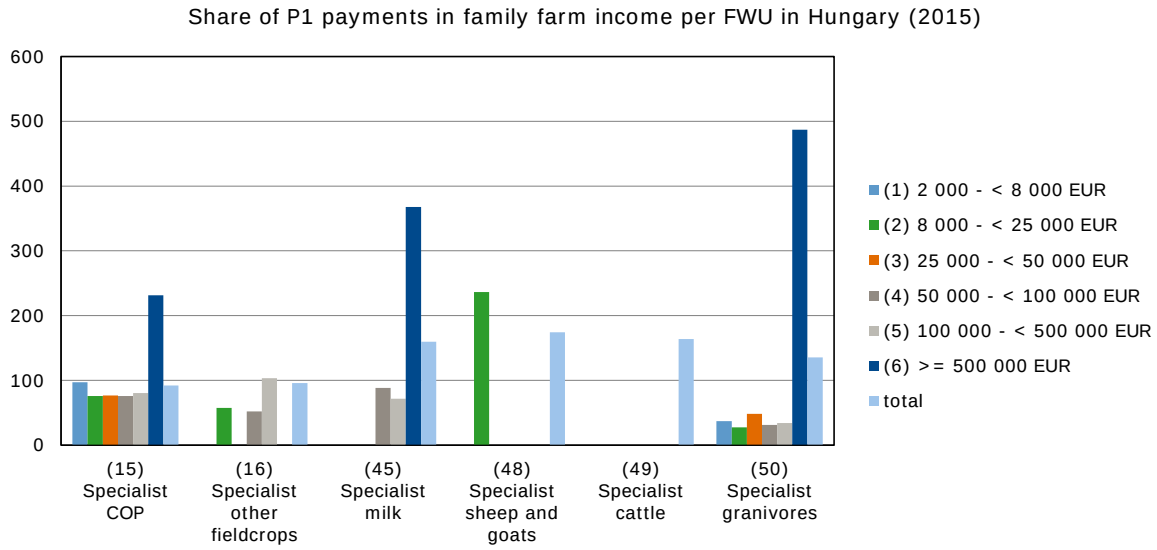

Figure B2.17 *Direct payments from the first pillar of the CAP as a percentage of family farm income per family work unit for different farming types in Hungary, 2015*
Source and explanation: see Figure B2.1.

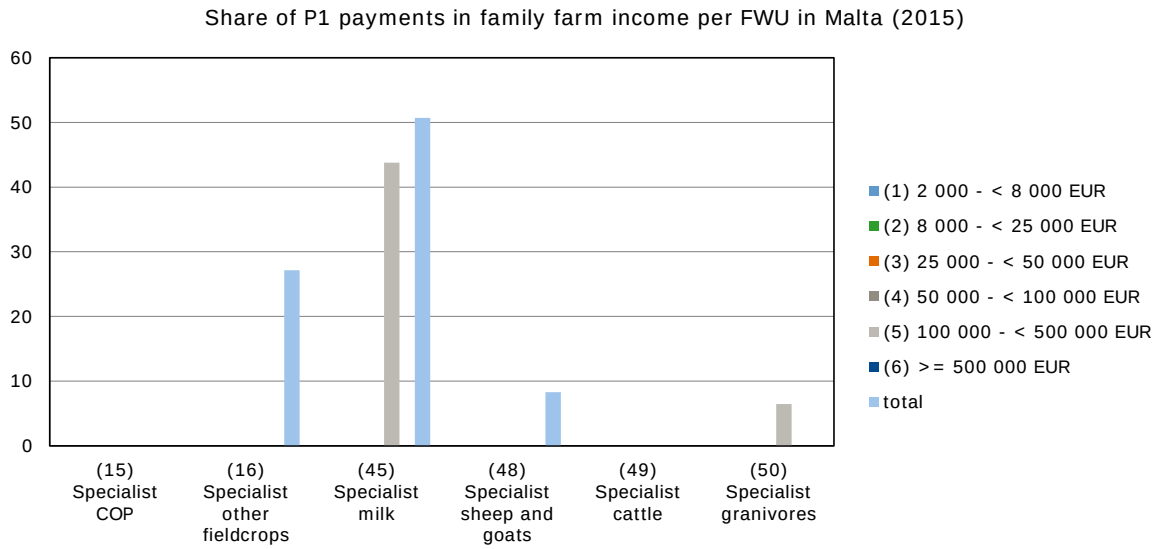

Figure B2.18 *Direct payments from the first pillar of the CAP as a percentage of family farm income per family work unit for different farming types in Malta, 2015*
Source and explanation: see Figure B2.1.

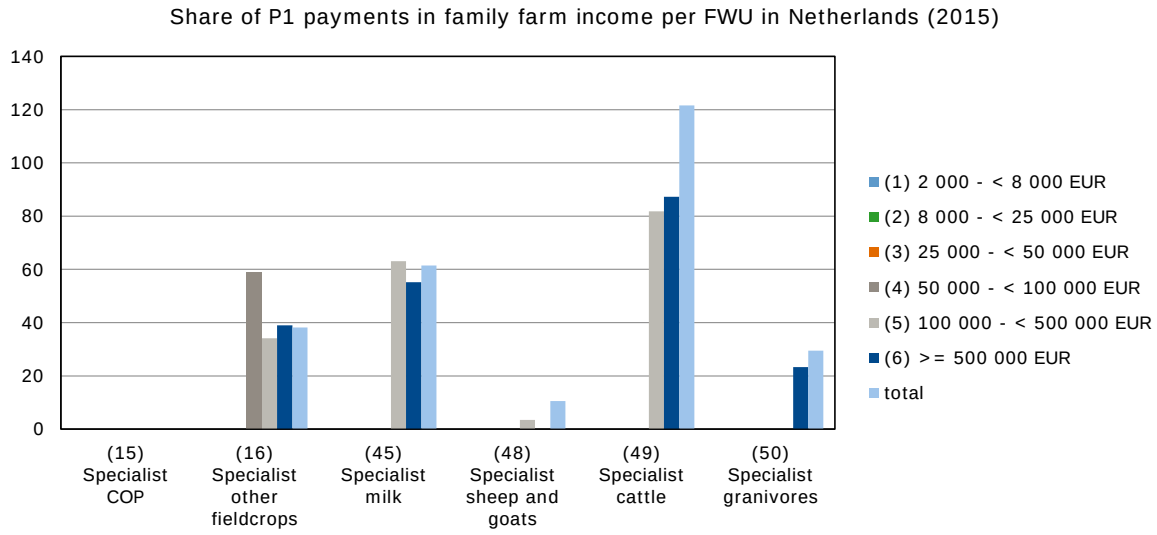

Figure B2.19 *Direct payments from the first pillar of the CAP as a percentage of family farm income per family work unit for different farming types in the Netherlands, 2015*
Source and explanation: see Figure B2.1.

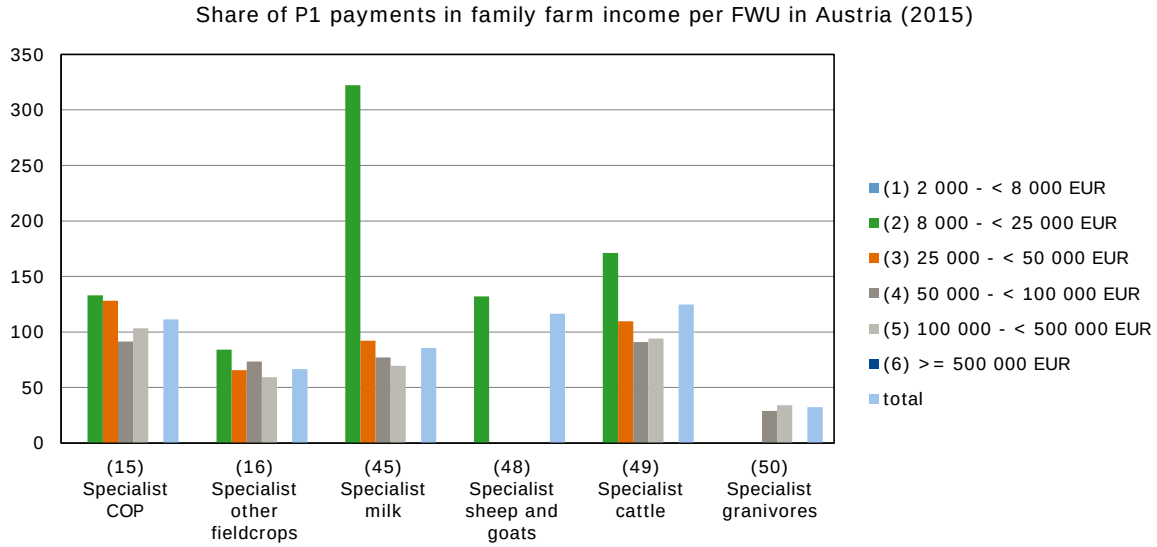

Figure B2.20 *Direct payments from the first pillar of the CAP as a percentage of family farm income per family work unit for different farming types in Austria, 2015*
Source and explanation: see Figure B2.1.

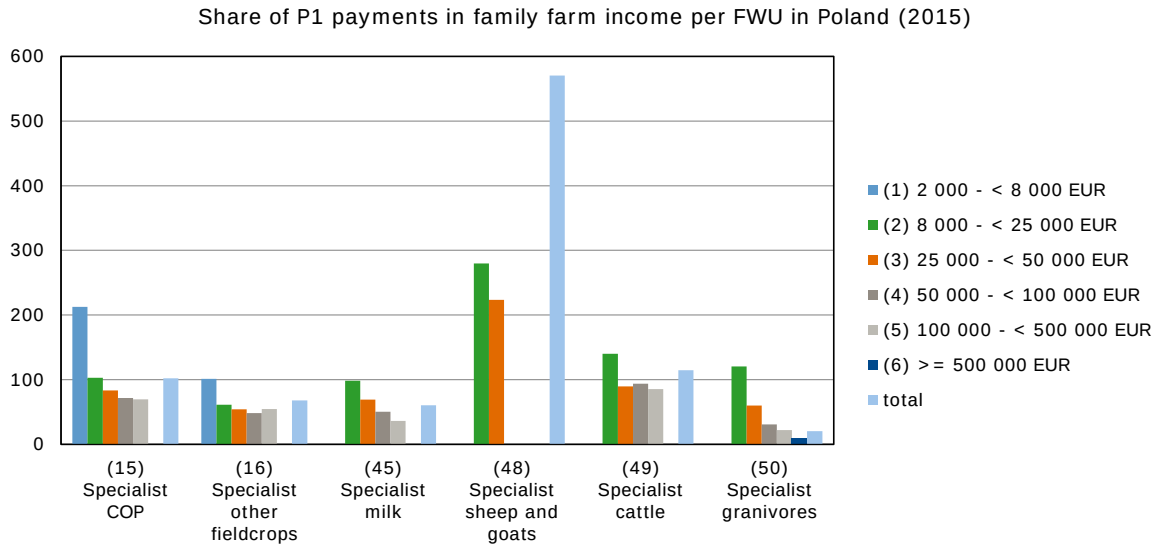

Figure B2.21 *Direct payments from the first pillar of the CAP as a percentage of family farm income per family work unit for different farming types in Poland, 2015*
Source and explanation: see Figure B2.1.

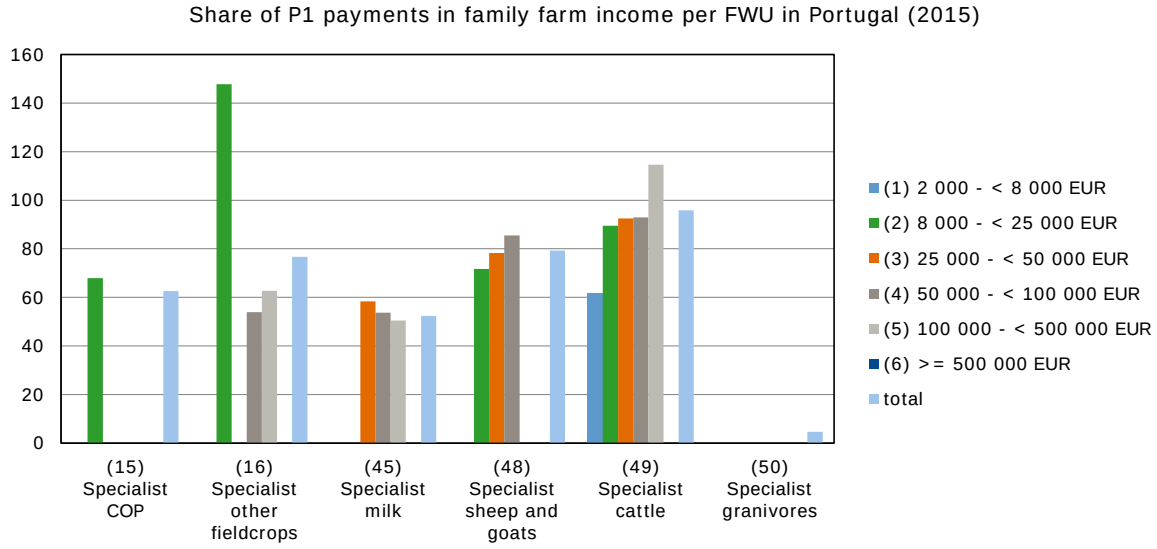

Figure B2.22 *Direct payments from the first pillar of the CAP as a percentage of family farm income per family work unit for different farming types in Portugal, 2015*
Source and explanation: see Figure B2.1.

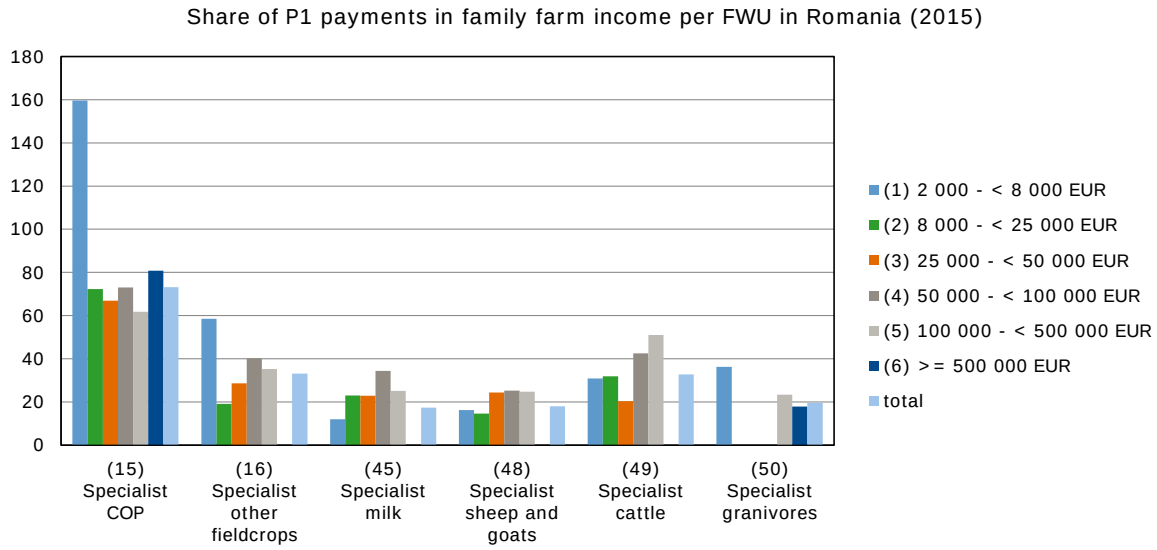

Figure B2.23 *Direct payments from the first pillar of the CAP as a percentage of family farm income per family work unit for different farming types in Romania, 2015*
Source and explanation: see Figure B2.1.

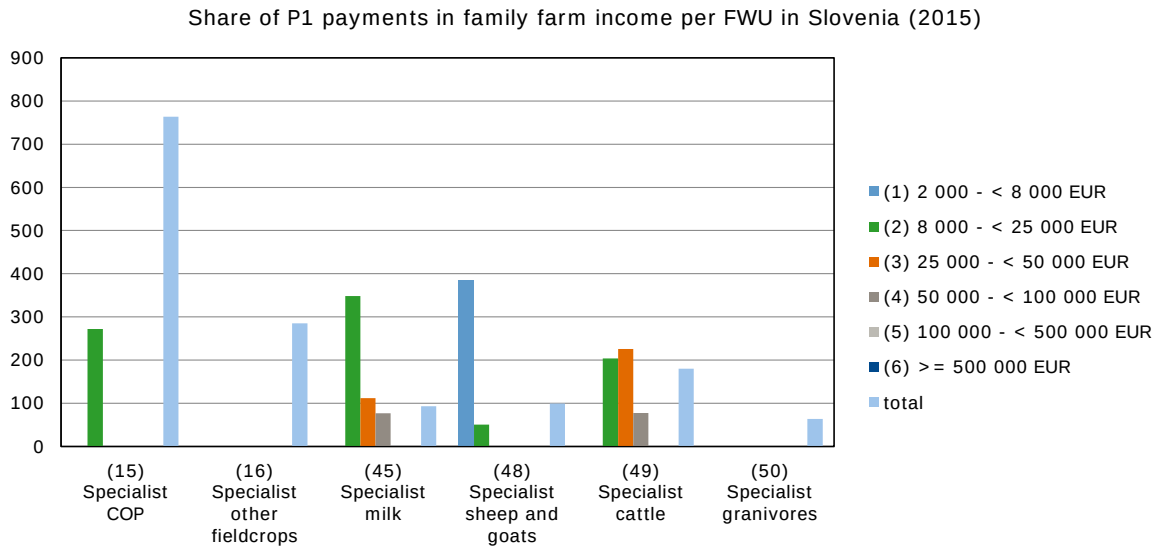

Figure B2.24 *Direct payments from the first pillar of the CAP as a percentage of family farm income per family work unit for different farming types in Slovenia, 2015*
Source and explanation: see Figure B2.1.

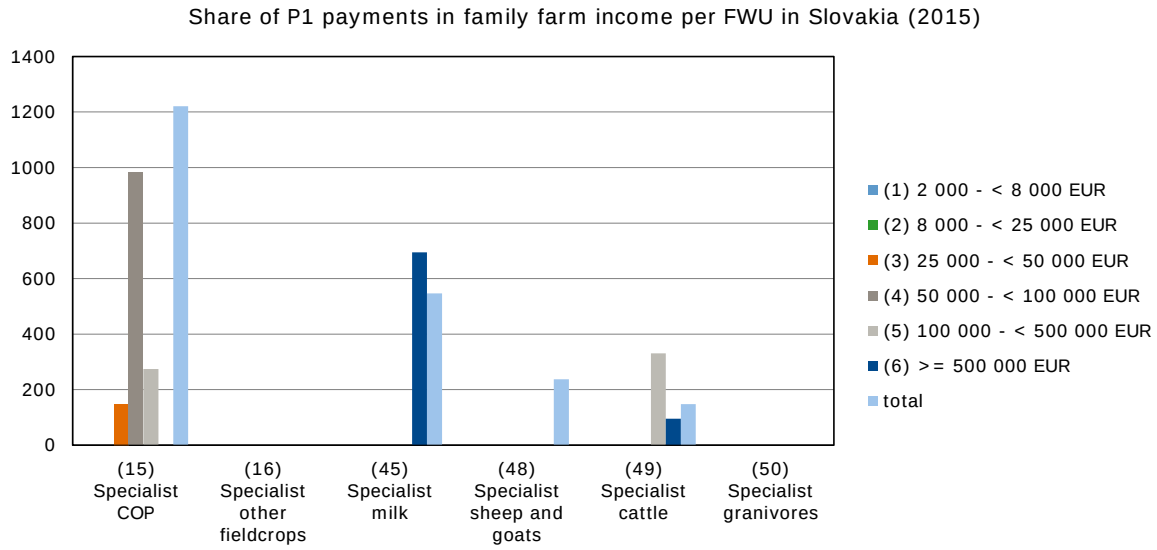

Figure B2.25 *Direct payments from the first pillar of the CAP as a percentage of family farm income per family work unit for different farming types in Slovakia, 2015*
Source and explanation: see Figure B2.1.

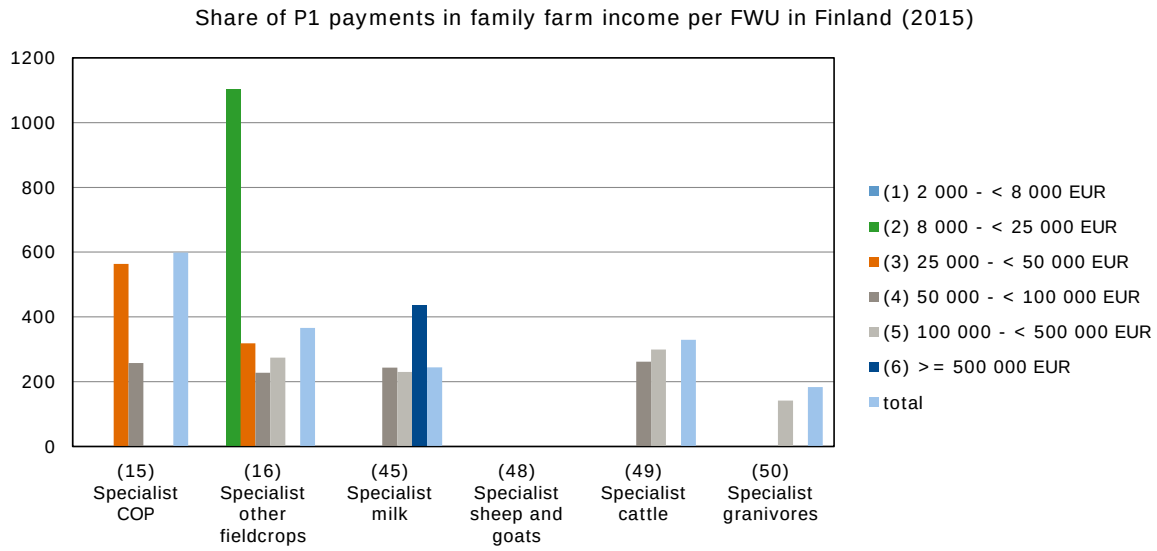

Figure B2.26 *Direct payments from the first pillar of the CAP as a percentage of family farm income per family work unit for different farming types in Finland, 2015*
Source and explanation: see Figure B2.1.

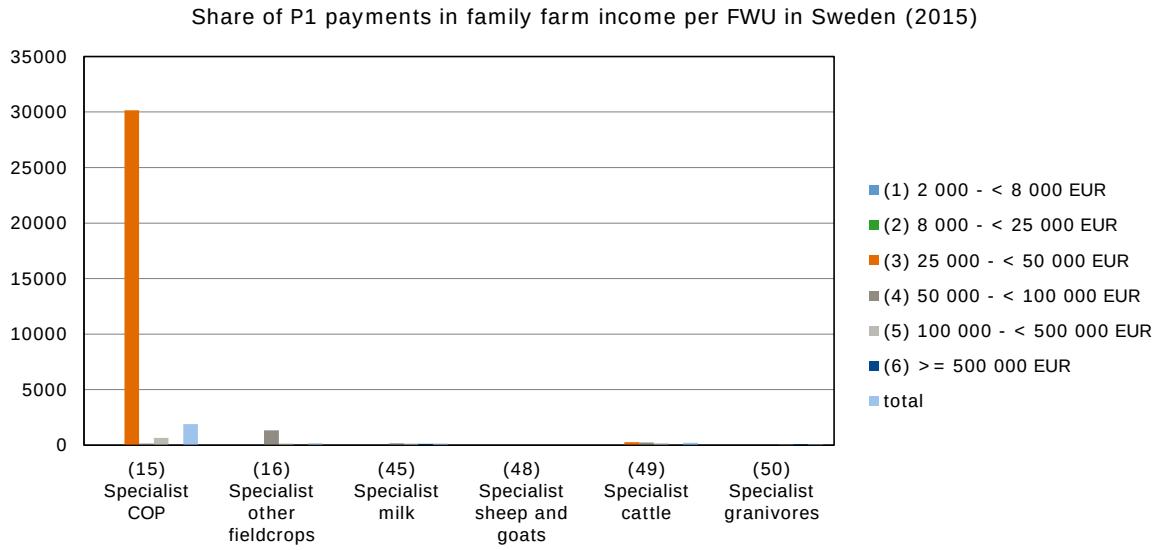

Figure B2.27 *Direct payments from the first pillar of the CAP as a percentage of family farm income per family work unit for different farming types in Sweden, 2015*
Source and explanation: see Figure B2.1.

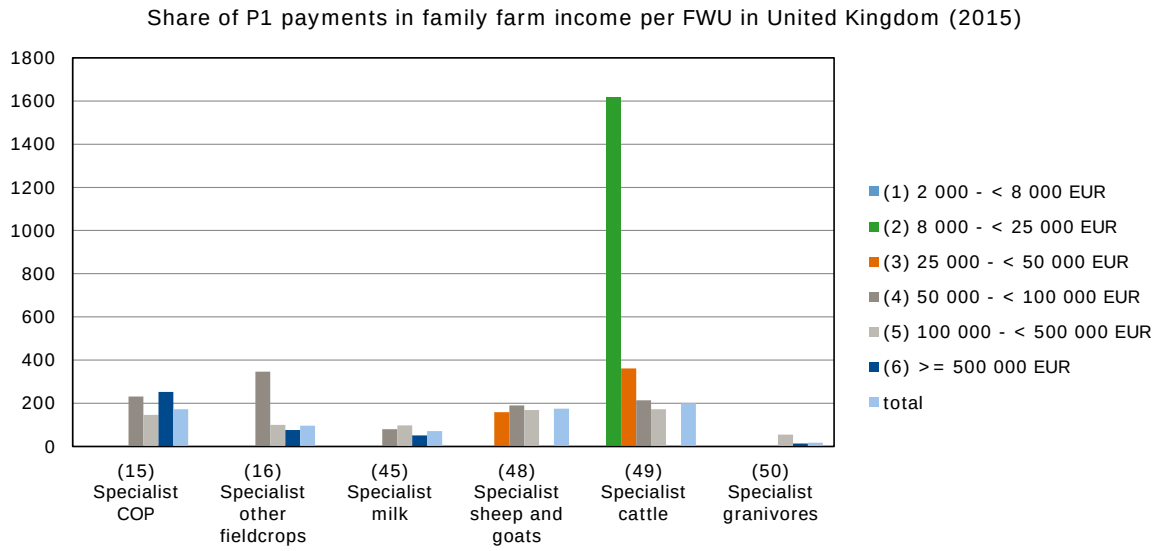

Figure B2.28 *Direct payments from the first pillar of the CAP as a percentage of family farm income per family work unit for different farming types in the UK, 2015*
Source and explanation: see Figure B2.1.

Appendix 3 Tables

Table B3.1 *Percentage of farmers that received 20% of payments in the EU member countries (% of the total number of farmers)*

	Percentage based on actual distribution in 2015	Calculated uniform hectare payment in 2015 (€)	Percentage based on the fictitious distribution (calculated with a uniform hectare payment)	Difference between the 2015 distribution and the fictitious distribution
	(1)	(2)	(3)	(1)-(3)
Luxembourg	54	256	56	-2
Ireland	55	245	52	3
The Netherlands	56	416	63	-6
Belgium	58	404	57	0.3
France	59	271	65	-5
Finland	60	229	53	6
Austria	61	254	61	0.0
United Kingdom	64	206	71	-6
Slovenia	65	282	58	7
Greece	66	454	79	-13
Poland	68	209	64	3
Germany	68	306	67	0.3
Sweden	74	230	69	5
Denmark	75	346	69	6
Croatia	75	95	79	-4
Malta	76	460	38	37
Lithuania	76	155	77	-1
Cyprus	76	459	78	-2
Italy	78	318	72	5
Spain	78	211	82	-4
Latvia	81	118	79	2
Hungary	84	273	91	-7
Bulgaria	84	171	92	-8
Portugal	85	158	88	-3
Estonia	86	140	85	1
Romania	87	139	82	5
Czech Republic	89	250	82	7
Slovakia	93	202	91	2
EU28	81	243	86	-6

Source: EC (2017b) and Eurostat Farm Structure Survey (FSS); adaptation by Wageningen Economic Research.

Table B3.2 *Number of farmers receiving few and many payments in EU member countries, 2015*

	Payments received (€)									All beneficiaries
	none	≥ 0 and < 0.5K	≥ 0.5K and < 150K	More than ≥ 150K						
				≥ 150K and < 200K	≥ 200K and < 250K	≥ 250K and < 300K	≥ 300K and < 500K	≥ 500 K	Total no. of beneficiaries ≥ 150 K	
BE	5	651	33,583	16	6		1	-	23	34,262
BG	1	8,203	58,343	343	182	91	145	51	812	67,359
CZ	-	2,973	24,508	43	243	190	413	274	1,459	28,940
DK	89	111	40,114	328	181	63	70	8	650	40,964
DE	34	14,286	303,684	949	710	471	806	382	3,318	321,322
EE	-	4,558	12,548	42	16	13	13	1	85	17,191
IE	16	5.166	122,502	30	14	-	-	-	44	127,728
GR	56	134,021	528,748	15	1	-	-	-	16	662,841
ES	43	194,210	606,463	714	324	171	220	89	1,518	802,234
FR	136	16,708	322,958	74	87	35	48	72	596	340,398
HR	206	41,437	54,073	9	9	9	6	11	44	95,925
IT	571	202,078	663,406	653	303	156	204	80	1,396	867,451
CY	33	18,426	14,504	2	-	-	-	-	2	32,965
LV	-	11,025	49,979	38	24	7	7	4	80	61,084
LT	537	43,669	93,327	46	39	14	22	5	126	137,659
LU	-	81	1,744	2	-	-	-	-	2	1,827
HU	203	8,457	166,107	286	197	192	284	114	1,073	175,840
MT	-	3,837	1,492	-	-	-	-	-	0	5,329
NL	-	170	45,546	78	15	7	8	2	110	45,851
AT	-	11,885	98,286	17	5	8	3	3	36	110,207
PL	16	386,948	962,429	200	102	76	65	21	464	1,349,857
PT	56	91,717	82,942	162	60	30	27	9	309	175,024
RO	73	567,837	310,362	163	185	122	83	116	953	879,225
SI	-	14,549	43,129	5	-	1	5	5	16	57,694
SK	-	4,163	13,282	180	142	119	243	140	824	18,269
FI	-	900	51,842	36	10	10	2	-	58	52,800
SE	1	533	59,392	125	29	22	14	4	194	60,120
UK	66	1,164	142,433	802	357	176	19	62	1,581	145,244
EU28	2307	1,789,788	4,907,726	6,158	3,241	1,983	2,954	1,453	15,789	6,715,610

-: no data.

Source: EC (2017b).

Table B3.3 *Percentage of farmers for each category of payments received out of the total number of farmers in EU member countries, 2015 (% of the total number of farmers)*

	Payments received (€)													
	< 0.5	≥ 0.5K and < 1.25K	≥ 1.25K and < 2K	≥ 2K and < 5K	≥ 5K and < 10K	≥ 10K and < 20K	≥ 20K and < 50K	≥ 50K and < 100K	≥ 100K and < 150K	≥ 150K and < 200K	≥ 200K and < 250K	≥ 250K and < 300K	≥ 300K and < 500K	≥ 500 K
BE	2	9	7	16	16	23	23	4	0	0	0	0	0	0
BG	12	26	12	20	13	8	5	2	1	1	0	0	0	0
CZ	10	17	11	21	12	10	8	3	2	1	1	1	1	1
DK	0	15	11	21	13	12	14	9	2	1	0	0	0	0
DE	4	12	9	19	18	19	15	3	1	0	0	0	0	0
EE	27	28	12	14	7	5	5	2	1	0	0	0	0	0
IE	4	7	7	26	25	19	10	1	0	0	0	0	0	0
GR	20	28	13	21	10	5	2	0	0	0	0	0	0	0
ES	24	22	11	18	10	8	6	1	0	0	0	0	0	0
FR	5	9	5	11	11	19	32	8	1	0	0	0	0	0
HR	43	31	9	10	4	2	1	0	0	0	0	0	0	0
IT	23	31	12	17	8	5	3	1	0	0	0	0	0	0
CY	56	23	7	8	3	2	1	0	0	0	0	0	0	0
LV	18	53	9	11	4	3	2	0	0	0	0	0	0	0
LT	32	30	12	14	6	4	2	0	0	0	0	0	0	0
LU	4	6	5	12	12	22	34	5	0	0	0	0	0	0
HU	5	42	13	20	9	5	4	2	0	0	0	0	0	0
MT	72	18	4	3	1	1	1	0	0	0	0	0	0	0
NL	0	8	7	17	15	24	24	3	0	0	0	0	0	0
AT	11	14	10	26	21	14	5	0	0	0	0	0	0	0
PL	29	28	13	19	8	3	1	0	0	0	0	0	0	0
PT	52	18	7	10	5	4	2	1	0	0	0	0	0	0
RO	65	22	5	4	2	1	1	0	0	0	0	0	0	0
SI	25	29	15	20	7	3	1	0	0	0	0	0	0	0
SK	23	26	11	16	7	5	5	3	1	1	1	1	1	1
FI	2	10	10	26	22	18	10	2	0	0	0	0	0	0
SE	1	23	14	22	13	11	11	4	1	0	0	0	0	0
UK	1	3	9	20	17	19	21	7	2	1	0	0	0	0
EU28	27	24	10	16	9	7	5	1	0	0	0	0	0	0

Source: EC (2017b); adaptation by Wageningen Economic Research.

Table B3.4 *Percentage of each category of payments received out of the total payments in the EU member countries, 2015 (% of total payments)*

	Payments received (€)													
	< 0.5	≥ 0.5K and < 1.25K	≥ 1.25K and < 2K	≥ 2K and < 5K	≥ 5K and < 10K	≥ 10K and < 20K	≥ 20K and < 50K	≥ 50K and < 100K	≥ 100K and < 150K	≥ 150K and < 200K	≥ 200K and < 250K	≥ 250K and < 300K	≥ 300K and < 500K	≥ 500 K
BE	0.0	0	1	4	8	22	45	17	2	1	0	0	0	0
BG	0.3	2	2	6	9	10	13	15	11	8	6	4	7	7
CZ	0.1	1	1	2	3	5	9	9	7	7	7	6	19	25
DK	-0.1	1	1	3	5	8	22	29	14	7	5	2	3	1
DE	0.1	1	1	4	8	18	30	12	5	3	3	3	6	5
EE	1.1	4	3	7	7	11	21	17	12	7	3	3	5	1
IE	0.1	1	1	10	19	29	30	8	2	0	0	0	0	0
GR	2.1	7	7	22	23	20	15	3	0	0	0	0	0	0
ES	1.1	3	3	9	11	18	29	13	5	2	1	1	2	2
FR	0.1	0	0	2	4	14	48	25	4	1	0	0	0	1
HR	6.6	13	7	16	16	13	9	4	2	1	1	1	1	9
IT	1.8	6	4	12	13	15	20	13	5	3	2	1	2	2
CY	9.4	12	7	17	13	15	17	6	2	1	0	0	0	0
LV	1.9	12	5	11	10	13	19	12	6	4	3	1	1	1
LT	3.4	8	6	15	15	16	18	8	3	2	2	1	2	1
LU	0.1	0	0	2	5	18	55	16	2	1	0	0	0	0
HU	0.2	4	3	8	8	11	18	14	6	4	3	4	8	7
MT	17.0	14	6	11	10	14	22	5	0	0	0	0	0	0
NL	0.0	0	1	4	7	23	45	14	3	2	0	0	0	0
AT	0.5	2	2	14	24	30	21	3	1	0	0	0	0	0
PL	3.7	9	9	24	22	15	8	4	2	1	1	1	1	0
PT	6.5	4	3	9	10	14	20	16	8	5	2	1	2	1
RO	10.3	10	4	8	8	9	13	11	7	4	3	2	4	7
SI	2.9	10	10	27	20	14	9	2	0	1	0	0	2	3
SK	0.3	1	1	2	2	3	7	8	7	7	7	8	22	25
FI	0.0	1	2	9	16	25	31	11	3	1	0	1	0	0
SE	0.0	2	2	6	8	14	32	22	7	3	1	1	1	0
UK	0.0	0	1	3	6	13	31	23	9	5	3	2	2	2
EU28	1.4	3	3	8	11	16	27	15	5	3	2	1	3	3

Source: EC (2017b); adaptation by Wageningen Economic Research.

Table B3.5 *Family farm income (including direct CAP payments) per family work unit a) in EU member countries, 2015 (% GDP per capita)*

	(15) Farms specialised in cereals, oilseed and protein crops	(16) Farms specialised in potatoes, beets, row crops, tobacco, and cotton	(45) Farms specialised in dairy	(48) Farms specialised in sheep and goats	(45) Farms specialised in beef cattle	(50) Farms specialised in granivores	GDP per capita (€)
Belgium	. b)	112	79	.	66	134	36,500
Cyprus	66	109	.	51	.	.	20,900
Czech Republic	130	122	134	78	106	153	16,000
Denmark	85	76	-5 c)	.	3	-27	47,800
Germany	75	104	59	69	40	59	37,300
Greece	56	63	.	99	129	133	16,300
Spain	79	103	117	121	65	253	23,300
Estonia	147	64	23	24	32	137	15,500
France	44	121	58	53	60	70	33,000
Hungary	292	207	173	88	163	191	11,300
Ireland	84	.	92	18	28	.	56,400
Italy	79	107	210	102	121	484	27,200
Lithuania	161	66	39	.	71	31	12,900
Luxembourg	.	.	45	.	37	.	91,500
Latvia	170	29	59	.	103	.	12,300
Malta	.	26	3	62	.	38	21,500
The Netherlands	.	83	68	121	36	35	40,400
Austria	52	84	29	18	23	64	39,900
Poland	49	49	63	6	27	173	11,200
Portugal	121	83	125	64	97	167	17,400
Finland	25	41	45	.	63	80	38,200
Sweden	4	42	74	-38	33	106	45,800
Slovakia	70	-69	208	459	822	.	14,600
Slovenia	7	12	31	27	14	90	18,800
United Kingdom	60	122	65	49	31	158	40,000
Bulgaria	273	151	89	79	52	34	6,300
Romania	117	42	39	56	28	64	8,100
Croatia	59	69	57	47	31	65	10,600
EU28	51	58	51	42	45	112	29,000

a) FADN variable SE430: Family farm income per family work unit; b) A dot in a cell indicates that, due to insufficient observations, no information for the relevant group can be shown; c) A negative agricultural income indicates that the costs associated with agricultural production are higher than its revenues.

Source: FADN and Eurostat; adaptation by Wageningen Economic Research.

Table B3.6 *Direct CAP payments for each family work unit in EU member countries, 2015 (€)*

	(15) Farms specialised in cereals, oilseed and protein crops	(16) Farms specialised in potatoes, beets, row crops, tobacco and cotton	(45) Farms specialised in dairy	(48) Farms specialised in sheep and goats	(45) Farms specialised in beef cattle	(50) Farms specialised in granivores
Belgium	.	21,310	12,460	.	16,741	8,998
Cyprus	14,806	15,692	.	6,097	.	.
Czech Republic	31,795	24,272	65,303	20,805	36,583	29,945
Denmark	40,287	57,324	.	.	40,121	.
Germany	49,954	31,482	22,019	34,841	25,407	24,108
Greece	14,824	13,126	.	8,894	20,233	1,610
Spain	17,132	13,413	11,241	11,213	12,505	4,104
Estonia	40,227	8,920	.	9,706	22,579	.
France	27,384	26,297	19,933	26,063	31,705	11,830
Hungary	30,467	22,445	31,266	17,347	30,053	29,136
Ireland	30,716	.	14,830	14,263	15,417	.
Italy	14,591	11,114	11,736	10,539	14,320	5,755
Lithuania	11,447	6,014	4,933	.	10,271	.
Luxembourg	.	.	45,837	.	48,247	.
Latvia	20,156	5,220	9,985	.	17,983	.
Malta	.	1,498	372	1,107	.	.
The Netherlands	.	25,266	16,770	5,164	17,815	4,124
Austria	23,125	22,396	9,817	8,361	11,625	8,267
Poland	5,613	3,695	4,243	3,889	3,437	3,929
Portugal	13,239	11,085	11,391	8,775	16,199	1,365
Finland	57,270	57,032	42,156	.	79,721	56,115
Sweden	33,413	33,602	45,910	.	33,859	40,384
Slovakia	124,134	.	166,123	159,061	177,887	.
Slovenia	9,748	6,670	5,390	5,020	4,622	10,783
United Kingdom	41,252	47,120	18,404	34,551	24,958	11,392
Bulgaria	47,691	7,822	3,919	3,246	3,307	636
Romania	6,933	1,120	542	821	743	1,020
Croatia	6,437	5,802	4,387	3,505	4,184	511
EU28	18,024	11,152	10,507	8,448	15,088	9,674

A dot in a cell indicates that no information for the relevant group can be shown due to insufficient observations.

Source: FADN; adaptation by Wageningen Economic Research.

Table B3.7 *Direct CAP payments as a percentage of family farm income per family work unit in EU member countries, 2015 (€)*

	(15) Farms specialised in cereals, oilseed and protein crops	(16) Farms specialised in potatoes, beets, row crops, tobacco and cotton	(45) Farms specialised in dairy	(48) Farms specialised in sheep and goats	(45) Farms specialised in beef cattle	(50) Farms specialised in granivores
Belgium	.	52	43	.	70	18
Cyprus	107	69	.	57	.	.
Czech Republic	153	124	305	167	216	122
Denmark	99	158	.	.	2,697	.
Germany	178	81	100	136	169	109
Greece	182	128		55	96	7
Spain	94	56	41	40	82	7
Estonia	177	90	.	263	462	.
France	188	66	104	150	161	51
Hungary	92	96	160	174	164	135
Ireland	65		29	141	98	
Italy	68	38	21	38	44	4
Lithuania	55	71	99	.	112	.
Luxembourg	.	.	112		143	.
Latvia	84	144	138	.	141	.
Malta	.	27	51	8		.
The Netherlands	.	38	61	11	122	30
Austria	111	67	86	116	125	32
Poland	102	68	60	570	115	20
Portugal	63	77	52	79	96	5
Finland	598	366	244		329	183
Sweden	1,886	173	136		224	83
Slovakia	1,220	.	547	237	148	.
Slovenia	764	285	93	99	180	64
United Kingdom	173	96	71	175	200	18
Bulgaria	278	82	70	65	101	30
Romania	73	33	17	18	33	20
Croatia	103	79	73	71	127	7
EU28	123	66	71	70	115	30

A dot in a cell indicates that no information for the relevant group can be shown due to insufficient observations.

Source: FADN; adaptation by Wageningen Economic Research.

Table B3.8 *Family farm income (excluding direct CAP payments) per family work unit by business type in EU member countries, 2015 (% GDP per capita)*

	(15) Farms specialised in cereals, oilseed and protein crops	(16) Farms specialised in potatoes, beets, row crops, tobacco and cotton	(45) Farms specialised in dairy	(48) Farms specialised in sheep and goats	(45) Farms specialised in beef cattle	(50) Farms specialised in granivores	GDP per capita (€)
Belgium	.	54	45	.	20	109	36,500
Cyprus	-5	34	.	22		.	20,900
Czech Republic	-69	-29	-274	-52	-123	-34	16,000
Denmark		-44	.	0	-81	.	47,800
Germany	-59	19	.	-25	-28	-6	37,300
Greece	-35	-18	.	44	5	123	16,300
Spain	5	45	69	73	11	235	23,300
Estonia	-113	6		-39	-114		15,500
France	-39	41	-3	-26	-36	34	33,000
Hungary	23	9	-103	-65	-103	-67	11,300
Ireland	29	.	65	-7	.		56,400
Italy	25	66	167	63	68	463	27,200
Lithuania	72	19	.	.	-9	.	12,900
Luxembourg	.	.	-5	.	-16	.	91,500
Latvia	31	-13	-23	.	-43	.	12,300
Malta	.	19	2	57	.	.	21,500
The Netherlands	.	101	26	109	-8	24	40,400
Austria	-6	28	4	-3	-6	44	39,900
Poland	-1	16	25	-29	-4	138	11,200
Portugal	45	19	60	13	4	159	17,400
Finland	-125	-109	-65	.	-145	-67	38,200
Sweden	-69	-31	-27	.	-41	18	45,800
Slovakia	-781	.	-930	-630	-396	0	14,600
Slovenia	-45	-23	2	.	-11	33	18,800
United Kingdom	-44	5	19	-37	-31	130	40,000
Bulgaria	-484	27	27	28		24	6,300
Romania	31	28	32	46	19	51	8,100
Croatia	-2	14	15	14	-8	60	10,600
EU28	-11	20	15	13	-7	78	29,000

A dot in a cell indicates that no information for the relevant group can be shown due to insufficient observations.

A negative agricultural income indicates that the expenses associated with agricultural production are higher than its yields.

Source: FADN and Eurostat; adaptation by Wageningen Economic Research.

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The mission of Wageningen University and Research is "To explore the potential of nature to improve the quality of life". Under the banner Wageningen University & Research, Wageningen University and the specialised research institutes of the Wageningen Research Foundation have joined forces in contributing to finding solutions to important questions in the domain of healthy food and living environment. With its roughly 30 branches, 5,000 employees and 10,000 students, Wageningen University & Research is one of the leading organisations in its domain. The unique Wageningen approach lies in its integrated approach to issues and the collaboration between different disciplines.