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L.3. Microeconomic analysis of EU agricultural holdings

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NOTE TO THE FILE

Subject:Direct payments distribution in the EU-25
after implementation of the 2003 CAP reform based on FADN data

1. EXECUTIVE SUMMARY

The median EU direct payments (DP) per farm was 2 160 \in in the EU-25 according to FADN 2006 data. In terms of DP per ha, the median reached 160 \notin ha in 2006. The median level increased by 20% in comparison to 2004 especially because of the milk DP raise (parallel to the price support decrease) and the single area payment scheme (SAPS) level increase.

Per Member State (MS), the level of the median EU DP granted per farm is linked in particular to the structure of the farms (area) especially in the 8 MS applying SAPS because within each MS the same DP per ha is granted to all the farmers. In 2006, in the EU-15, 18% of the EU payments¹ were still coupled and a large share of the decoupled payments was granted based on historical references. Therefore, in the EU-15 the level of DP per farm was also strongly linked to the products the farmers were producing in 2006 (often the same as those they used to produce during the reference period used to calculate the single payment scheme (SPS) entitlements). For that reason the median EU-15 DP per farm varied from 0 for specialists horticulture and wine specialists to 12 490 €per farm for milk specialists.

In the EU-10 the dispersion around the median DP per ha is very limited because DP are granted through SAPS. It is not the case in the EU-15 where no regional model was implemented in 2006 (only hybrid or historical models). On the period 2004 to 2006, the dispersion around the median DP per ha decreased slightly in the EU-25. This evolution was more noticeable in some MS who implemented a hybrid model and in Spain and Italy. In Denmark and Finland who applied also a hybrid model the increase of the milk payments induced a wider dispersion.

¹ It is to be noted that the following note refers to the data available in FADN where only the farms with an economic size above a certain threshold are represented. Therefore the percentages and averages presented may differ from results based on the budget execution.

Commission européenne, B-1049 Bruxelles / Europese Commissie, B-1049 Brussel - Belgium. Telephone: (32-2) 299 11 11. Office: L130 / 132. Telephone: direct line (32-2) 29+32 2 296 1523.

In 2006, in the EU-25 the concentration of the DP (corresponding to a high share of DP received by a smaller share of farms) was high: 20% of the farms represented in FADN received 76% of the DP recorded in FADN. Between 2004 and 2006, the concentration of the DP in the EU-25 as a whole decreased very slightly. Different evolutions can be observed at MS level and in particular the concentration decreased noticeably in MS where the DP were already among the least concentrated.

2. INTRODUCTION

This note aims at studying the direct payments distribution in the EU-25 per Member State and type of farming based on FADN data. The situation in 2006 is compared to 2004 to analyse the impact on the DP distribution of the implementation of the 2003 common agricultural policy (CAP) reform.

The central element of the 2003 CAP reform is the introduction of the single payment scheme. In implementing the SPS, MS could opt for a historical model (payment entitlements based on individual historical reference amounts per farmer), a regional model (flat rate payment entitlements based on amounts received by farmers in a region in the reference period) or a hybrid model (mix of the two approaches, either in a static or in a dynamic manner). The MS who joined the EU since 2004 could choose to apply the single area payment scheme, a simplified area payment system, for a transitory period until end 2010 or to apply the same system as in the EU-15.

In 2006 the DP were coupled in Slovenia and Malta². The remaining 8 MS who joined in 2004 applied SAPS. In the EU-15, no MS implemented a regional model. Denmark, Germany, Luxembourg, Finland, Sweden, England and Northern Ireland applied a hybrid model. The remaining MS implemented the historical model. In 2006, milk payments were still 100% coupled in the Netherlands, Greece, Portugal, and Austria and partly coupled in Sweden.

3. METHODOLOGY

3.1. Description of FADN

The European Farm Accountancy Data Network (FADN) is a system of sample surveys that take place each year and collect structural and accountancy data on the farms, with the aim to monitor the income and business activities of agricultural holdings and to evaluate the impacts of the CAP measures.

The FADN field of survey covers only the farms exceeding a minimum economic size (threshold) in order to cover the most relevant part of the agricultural activity of the EU Member States, i.e. at least the 90% of the total Standard Gross Margin (SGM) covered in the Farm Structure Survey (FSS). The sample results are extrapolated. For 2006 data, the sample gathers approximately 75 000 holdings in

² Slovenia and Malta apply a regional model from 2007.

the EU-25, which represent 4 millions farms out of a total of about 10 millions farms (40%) included in the FSS.

In terms of direct payments, FADN data represents more than 95% of the EU-25 expenditure. The lowest coverage of the direct payments is in Latvia (around 70%). Nevertheless, as for the holdings, the FADN coverage in terms of beneficiaries is lower (around 50%).

This analysis is based on 2006 and 2004³ FADN data. It is to be noted that for 2006, German and Spanish data are provisional.

3.2. Description of the subsidies analysed

In this analysis the subsidies on investments are not covered. The payments analysed are the following:

- <u>EU DP</u>⁴: all direct payments granted on EU funds described in Regulation n°1782/2003 (generally referred to as Pillar I measures)
 - <u>EU coupled DP</u>: all EU DP coupled to the production of agricultural products (including article 69 measures⁵).
 - <u>EU decoupled DP</u>: single payment scheme (SPS), single area payment scheme (SAPS), additional aid (paid back after application of the franchise on modulation).
- <u>National DP</u>: aids granted to the farmers on national funds, including the complementary national direct payments (CNDP) granted in the EU-10.
- <u>Total DP</u>: EU direct payments and national aids.
- <u>Rural development (RD) measures (excluding those on investment)⁶</u>: subsidies granted in the framework of Regulation n°1698/2005 and n°1257/1999 excluding the subsidies on investment. Both EU and national funds are mixed.

³ For 2004, the first year of participation to FADN for the 10 MS who joined the EU in 2004, the Maltese data are not available. Moreover it is to be noted that Catalunia is missing from the 2004 Spanish data.

⁴ In FADN data, the EU DP and national DP may be mixed together. Therefore in this note, the additional payment for suckler cows is considered as an EU payment whether it is financed on EU or national funds. Moreover, for Slovenia and Malta, the EU DP are estimated and the remaining DP are considered as national DP.

⁵ The article 69 of Regulation n° 1782/2003 enables the MS to retain up to 10% of the component of their national DP ceilings per sector in order to grant additional payments to farmers for specific types of farming and quality production.

⁶ Mainly direct payments to agricultural production methods designed to protect the environment, maintain the countryside or improve animal welfare (56%) and compensatory allowances in less-favoured areas (41%).

• <u>Total subsidies (excluding those on investment)</u>: EU DP + National DP + RD measures + subsidies granted for other gainful activities of the holding, compensations for disasters...

The analysis will specifically focus on the distribution of the EU DP per farm and per hectare.

3.3. Description of the statistics used

For the DP distribution analysis quartiles, Gini coefficients and Lorentz curves are used:

- (a) **Quartile analysis**: the farms are ranked according to the ascending amount of DP (per ha, per farm or per annual working unit (AWU)) they receive. The percentile 5 (P5) indicates the maximum of DP received by 5% of the first farms in the rank (i.e. with the lowest DP). 50% of the farms receive more than the **median**. The quartile 1 (Q1 = P25) indicates the maximum DP received by 25% of the farms with the lowest DP. The interquartile range is the difference between the maximum DP received by 75% of the farms (P75 = Q3) and 25% of the farms (P25=Q1).
- (b) The **Gini coefficient** value is always between 0 and 1. A Gini coefficient at 0 means that the distribution of the DP is uniform (e.g. 50% of the DP are received by 50% of the beneficiaries). The Gini coefficient is moving to 1 with the increase of the DP concentration (i.e. a higher share of the DP received by a smaller share of farms).
- (c) The **Lorentz curve** is describing the share of cumulated DP received by the cumulated share of farmers. It illustrates for example which share of the DP are received by 80% of the farmers ranked according to the increasing amount of DP they receive.

In the EU-25, some farms receive very large amounts of DP per farm, therefore the average is often larger than the median. In Slovakia the average EU DP per farm in the FADN sample is 35 500 \in and the median is 10 400 \in i.e. 25 500 \in lower. It means that 50% of the Slovak FADN farms receive less than 10 400 \in and 50% more. In Annex I, the median and average EU DP per farm are displayed per MS.

4. DESCRIPTION OF THE SUBSIDIES RECEIVED BY THE FARMERS IN THE EU

In 2006, farmers of the EU-25 received in average 12 200 € of subsidies per farm. 72% of these subsidies were EU direct payments, 11% national aids and 16% RD measures (Table 1).

The average level of subsidies per farm was higher in the EU-15 (13 820 \oplus) than in the EU-10 (6 920 \oplus). In the EU-15 79% of the subsidies were EU direct payments, whereas this share was limited to 29% in the EU-10 (Annex II).

	Av	erage ∉ farr	n	Share	on total su	bsidies
	2004	2006	change	2004	2006	change
Total EU DP	7 500	8 780	1 280	73%	72%	-1%
Coupled	7 210	1 500	-5 710	70%	12%	-58%
Decoupled	300	7 280	6 980	3%	60%	57%
National DP	1 130	1 330	200	11%	11%	0%
RD measures	1 550	1 970	420	15%	16%	1%
Other	110	120	10	1%	1%	0%
Total Subsidies	10 290	12 200	1 910	100%	100%	0%

Table 1: Type of direct payments granted in the EU-25:evolution between 2004 and 2006

Source: DG AGRI EU FADN

It is to be noted that in the 10 MS who joined the EU in 2004, the level of EU DP is increasing yearly from 25% of the Community level in 2004 to a 100% from 2013. During this period these MS are allowed to grant CNDP to compensate the difference between SAPS level and the DP level in the Community. Therefore the share of national DP was high in the EU-10 in 2006 (48%).

On average in the EU-15, the level of national DP was limited to 5% in 2006. With 57% of national DP, Finland was an exception. In this MS, specific state aids have been allowed by the Commission in the Act of Accession (Articles 141 & 142) (Figure 1).





* Provisional data.

Source: DG AGRI EU FADN

Between 2004 and 2006, the average level of subsidies increased by 19%, i.e. of 1 910 €per farm (Table 1 and Figure 2). The main reasons for this evolution are the last step in the increase of the milk payment in 2006, the introduction of the sugar DP (within the SPS) and the increase of SAPS and CNDP levels. The RD payments increased also significantly in the EU-10.



Figure 2: Direct payments evolution between 2004 and 2006

During this period, the major change for the EU-15 was the introduction of the decoupled SPS. Nevertheless, in 2006, 18% of the EU direct payments were still coupled (Figure 3). This percentage reached 62% in the Netherlands and 48% in

Portugal where the milk payment was still coupled in 2006.

In Spain and France, the percentage of coupled payments was rather high in 2006 (32% and 29% respectively) because of the partial re-coupling of 25% of the area payments and of a large share of the beef and sheep DP. On the contrary, less than 5% of the EU DP were still coupled in 2006 in Ireland, Luxemburg, the UK, Germany and Denmark.



Figure 3: Share of coupled DP on total EU DP granted in 2006 in the non-SAPS MS

5. MEDIAN EU DIRECT PAYMENT

In the following part of the note only the EU DP are analysed. Moreover, the following analysis is focusing on the DP distribution and therefore the median is used and not the average DP.

^{*} Provisional data. Source: DG AGRI EU FADN

5.1. Analysis per MS

5.1.1. EU DP per farm

In the EU-25, the median EU direct payment per farm (2 160 \oplus) was far below the average level (8 780 \oplus) in 2006 (Annex I and Table 2). The level of the median is influenced by huge MS as Poland with numerous farmers and a low median. On the contrary the average is influenced by the large amount of DP received by a limited number of farms.

In the EU-15, the median EU DP per farm was 3 950 \in in 2006. In the EU-10, the median was almost five times lower (810 \oplus). Including the national aids, the median total DP per farm reached 2 320 \in in the EU-10 and 4 200 in the EU-15.

		Median					
		2004	2006	Change			
	EU-15	3 320	3 950	19%			
DP/farm	EU-10	490	810	65%			
	EU-25	1 810	2 160	20%			
	EU-15	230	260	13%			
DP/ha	EU-10	50	70	53%			
	EU-25	140	160	20%			
	EU-15	2 940	3 620	23%			
DP/AWU	EU-10	330	550	67%			
	EU-25	1 490	1 810	22%			
a							

Table 2: Median EU DP in the EU

Between 2004 and 2006, the median DP per farm increased by 20% in the EU-25. This improvement of the median level can be explained by the increase of the dairy payments and by SAPS amount.

In 2006, the level of the median DP per farm differed from $340 \notin \text{in Cyprus}^7$ to $26\,960 \notin \text{in the UK}$ (Annex III and IV). Luxembourg (19 660 \notin) was in second position in 2006 whereas in 2004 the median was much lower (13 040 \notin).

Considering both the EU and national DP the lowest median DP per farm was in Portugal (630 \oplus) and the highest was still in the UK (Annex V).

The level of the median DP per farm is influenced by the type of products the farms used to produce (and often still produce – refer to chapter 5.2) and by the structure of the farms: Czech Republic and Slovakia were the only 2 MS of the EU-10 with a higher median than the EU-25 median because of the huge size (area) of the farms

Source: DG AGRI EU FADN

⁷ The median was actually the lowest in Malta (10 €) but this information is to be taken into account cautiously because of the difficulty to separate EU DP from national aids (see footnote n°2). Considering both the EU DP and the national aids, the median DP per farm reached 2 740 in 2006 in Malta (Annex V).

in these MS⁸. The phenomenon is amplified in FADN where only the farms above a certain economic size are included⁹.

Portugal, Italy and Spain had a median DP per farm below the EU-25 median because of the numerous small farms in these MS and of the well spread production of fruits, vegetables and wine traditionally not subject to EU direct payments¹⁰.

Between 2004 and 2006, the median DP per farm increased in all MS except in Italy (-15%) and Spain (-12%). In Italy, the decrease may partly be explained by the drastic decrease of the durum wheat area, and therefore a decrease of the durum wheat coupled DP granted in Italy, and by the reference period used for the olive oil DP decoupling. Before the decoupling the level of the olive oil DP was adjusted each year in link with the production in order not to overpass the budget ceiling. The production was higher in 2004 than during the reference period and despite a higher level of DP retained as reference in total the level of DP received by the olive oil specialists decreased. This explanation applies also to Spain where in addition the subsidy level of the reference period is particularly low.

5.1.2. EU DP per ha

The DP per ha is calculated dividing the EU DP received per farm by the utilised agricultural area of the farm (UAA).

In 2006, the median DP per ha was 160 \in in the EU-25, 70 \in in the EU-10 and 260 \in in the EU-15 (Table 2). All the MS of the EU-10 had a median EU DP per ha below the EU-25 median. Including the national DP, the median reached 204 \notin ha in the EU-10, in comparison with 281 \notin ha in the EU-15.

The highest median EU DP per ha was reached in Greece (610 \oplus). Part of this high level can be explained by the widespread use of common land in this MS. Farmers may activate SPS entitlements on common land but these areas are not included in the farms UAA. Moreover Greece is an important producer of olive oil and tobacco for which the DP level per ha was high. Per farm, the median DP in Greece is close to the EU average.

Per hectare, excluding Greece, the differences of median DP between MS were much more limited than for the median DP per farm. The level of DP per ha is indeed not directly influenced by the farm size (area) contrary to the DP per farm level.

⁸ In 2006 in Slovakia, the median area was 158 ha and the median total labour was 3.6 AWU. In the EU-25, the median area was 12 ha and the median total labour 1.3 AWU.

⁹ The FADN data covers only 5% of the Slovak farms but gathers 90% of the Slovak SGM.

¹⁰ Tomatoes and certain types of fruits are currently benefiting from aids to the processing which are not considered as DP to the farmers. The fruit and vegetables common market organisation reform including the regime in the SPS will apply from 2008 and wine area will be eligible to SPS from 2009.

5.1.3. EU DP per AWU

Considering the DP per annual working unit, the hierarchy between the MS differs and reflects also the labour productivity. Therefore Denmark had in 2006 the highest median DP per AWU (20 170 €) followed by the UK and Sweden. However it is to be noted that the contract work is not included in the AWU. Therefore in the MS where the contract work is commonly used (for e.g. in the UK) the median DP per AWU would be smaller is the whole labour would be taken into account.

The Slovak median was slightly above the EU-25 median, whereas in terms of DP per farm the Slovak median was in 2006 almost 5 times higher than the EU-25 median. In Slovakia, the median total labour per farm was 3.6 AWU in 2006 i.e. 3 times more than the EU-25 median.

5.2. Analysis per type of farming

The analysis per type of farming is limited to the EU-15 because in the 8 MS where SAPS applies, the level of DP is influenced only by the size of the area and not by the type of farming. Slovenia and Malta were excluded from this analysis.

In the EU-15, the SPS was implemented in all MS in 2006. Nevertheless, in 5 MS the milk DP were not fully decoupled in 2006 and some MS applied partial recoupling¹¹. Moreover 9 MS and part of the UK implemented the SPS based on historical individual references. In addition a large share of the DP envelops was also attributed based on historical references in the MS who implemented a hybrid model¹². Farmers do not change orientation rapidly and in 2006 they were often producing the same products they were producing during the reference period (2000-2001-2002) used for the SPS entitlements calculation. Finally, in 2006 not all the fruit and vegetables area was eligible¹³ to SPS and the wine area was excluded from the scheme. Therefore in 2006, the level of DP per farm was strongly linked to the type of products produced on the farm and the median DP varied a lot per type of farming.

As a consequence the median DP per farm for horticulture and wine specialists was zero (Table 3). The milk specialists had the highest median DP per farm: $12\ 490 \in$ in 2006, increasing by 76% in comparison to 2004 with the increase of the milk DP parallel to the progressive decrease of the price support in the milk sector. Mixed producers had also a high median direct payment per farm in 2006 (10 200 \in), followed by the grazing livestock specialists (9 060 \in) and the fieldcrops specialists (6 340 \in). The other permanent crops specialists had a median DP per farm far below (1 000 \in) because this type of farming regroups SPS beneficiaries as olive

¹¹ In particular: 25% of area payments in France and Spain; 100% of suckler cow premium in Belgium, Spain, France, Portugal, Austria; 75% of special male bovine premium in Sweden, Finland, Denmark; 50% of sheep and goats payments in Denmark, Spain, France, Portugal, Finland; ... All details are available at <u>http://ec.europa.eu/agriculture/markets/sfp/process_fr.htm</u>

¹² For example: 85% of the DP in England were still attributed based on historical references in 2006, 100% of the milk payments in Germany, 85% of the milk DP in Luxembourg.

¹³ In 2006 area with nuts, orchards and wine was not eligible; in addition land cultivated with ware potatoes and vegetables was not eligible in the MS applying the historical model.

producers with non beneficiaries (orchards producers). Moreover, the median size of these farms (4.4 ha) is below the EU-15 median (12.8 ha) and almost ten times below the median size of milk specialists (38.9 ha).

The per hectare level of the median DP was very close for milk specialists, mixed producers, fieldcrops specialists and other grazing livestock producers, between 330 \clubsuit ha and 290 \clubsuit ha. Granivores specialists had a median DP per ha of 250 \clubsuit ha and the other permanent crops specialists of 210 \clubsuit ha. The major impact of the reform was the increase of the median DP per ha of milk specialists (+64%)¹⁴.

	EU	DP per fa	rm	E	U DP per h	na
	2004	2006	Change	2004	2006	Change
Fieldcrops	4 840	6 340	31%	280	300	7%
Horticulture	0	0		0	0	
Wine	0	0		0	0	
Other permanent crops	990	1 000	1%	220	210	-5%
Milk	7 110	12 490	76%	200	330	64%
Other grazing livestock	8 140	9 060	11%	280	290	3%
Granivores	2 600	3 080	18%	270	250	-7%
Mixed	8 820	10 200	16%	300	310	3%
EU15	3 320	3 950	19%	230	260	13%

Table 3: Median DP in the EU-15 per type of farming

Source: DG AGRI EU FADN

6. **DISTRIBUTION OF THE DIRECT PAYMENTS**

The distribution of the direct payments is analysed through the range around the median measured as the interquartile range¹⁵.

The structure of the farms and the way the CAP is implemented have a major influence on the DP distribution, therefore the analysis is split between the EU-10 and the EU-15.

6.1. EU-10

In the EU-10, the DP per ha received by the farmers in each MS are very close to the median which is equivalent to SAPS level per ha. Therefore the interquartile range is 0 (Table 4 and Figure 4). Slovenia and Malta do not apply SAPS but they are too small countries to influence the EU-10 results.

Only in a limited number of cases the DP per ha differs from SAPS level: a farmer may not ask SAPS payment for all its UAA when there are doubts on the ownership of the land or land not included in the UAA may be eligible to SAPS payment.

The range around the median is very limited for the DP per ha but it is not the case for the DP per farms: 50% of the farms receive less than 810 €but the interquartile

¹⁴ It is to be noted that the introduction and progressive increase of the milk DP was already foreseen in the Agenda 2000.

¹⁵ For the definition refer to chapter 3.3. (a).

range reached 920 € in 2006. At MS level depending on the farm structures the distribution is very different: in Malta, Cyprus and Poland the interquartile range was below 1 000 € on the opposite the interquartile range reached 41 680 € in Slovakia and 10 530 € in Czech Republic (Figure 5 and Annex IV). It means that in Slovakia there is more than 40 000 € difference between the maximum level of DP received by 25% of the farms and the maximum received by 75% of the farms.

Because of the increase of SAPS level between 2004 and 2006, the interquartile range increased also during this period.

			Median		Inte	rquartile ra	nge
		2004	2006	Change	2004	2006	Change
DP/farm	EU-15	3 320	3 950	19%	9 190	11 750	28%
	EU-10	490	810	65%	550	920	67%
	EU-25	1 810	2 160	20%	6 580	8 410	28%
	EU-15	230	260	13%	320	320	0%
DP/ha	EU-10	50	70	53%	0	0	
	EU-25	140	160	20%	290	280	-3%
	EU-15	2 940	3 620	23%	7 840	10 110	29%
DP/AWU	EU-10	330	550	67%	400	650	63%
	EU-25	1 490	1 810	22%	5 920	7 390	25%

Table 4: Me	edian DP and	l interquartile	range in the EU
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Source: DG AGRI EU FADN

6.2. EU-15

6.2.1. DP per ha

In the EU-15 as a whole the interquartile range of the DP per ha was $320 \notin$ ha. But this level differed a lot per MS. The larger interquartile range was in Greece (940 \notin) for the same reasons mentioned previously. In this MS, 5% of the farms received more than 2 940 \notin per ha of UAA. In Spain, Italy and the Netherlands the interquartile range is larger than 300 \notin On the opposite in Denmark, Germany, Luxembourg, Austria, Finland, Sweden and the UK the interquartile range is below 150 \notin per ha.

In the Netherlands the interquartile range was wide because the most represented types of farming are horticulture with a 0 median DP per ha and milk farms with a high median and a large distribution around the median (the level of DP per ha varies with the animal density which depends on the milk production system). In Italy, the major types of farming are the permanent crop specialists with a low median DP and at the opposite the fieldcrops specialists with a high median level.



Figure 4: Distribution of the EU DP per ha in 2006 in the EU (in €ha)

Note: Whiskers represent percentiles 5 and 95 / Box represents percentiles 25 and 75 / ____ represents median / + represents average / outliers are not represented. DE and ES: provisional data.

Figure 5: Distribution of the EU DP per farm in 2006 in the EU (in ∉farm)



Note: Whiskers represent percentiles 5 and 95 / Box represents percentiles 25 and 75 / ____ represents median / + represents average / outliers are not represented. DE and ES: provisional data. Source: DG AGRI EU FADN

With the implementation of the 2003 CAP reform, in the EU-15 considered as a whole, the interquartile range did not evolve (Table 4 and Annexe IV). However at MS level, opposite evolutions are noticeable: the interquartile range decreased significantly in many MS who implemented a hybrid model: Germany, Luxembourg, Sweden and the UK. It decreased also in Italy and Spain.

On the contrary, despite Denmark and Finland implemented a hybrid model, the interquartile range increased because of the milk predominant production. The rise of the milk DP can also explain the large augmentation of the interquartile range in the Netherlands (+ 52%) and in a more limited extent in Austria, Belgium and Portugal.

In France, Greece and Ireland the interquartile range remained quite stable.

It is to be noted that three of the MS with the highest interquartile range in terms of DP per ha (Greece, Italy and Spain) have among the lowest median DP per farm because of the small size of the farms in these MS.

6.2.2. DP per farm

The distribution of the direct payments per farm showed a completely different picture. In the EU-15 the interquartile range reached 11 750 \in per farm in 2006, increasing by 28% in comparison to 2004.

The highest interquartile range, i.e. the highest difference in the maximum DP received by 25% of the farmers and 75% of them, was reached in the UK (31 130 €), followed by Denmark (27 610 €) and France (25 370 €). On the opposite this difference was below 5 000 € in Portugal and Italy.

7. CONCENTRATION OF THE DIRECT PAYMENTS

The concentration of the DP can be illustrated by the Lorentz curve (refer to chapter 3.3.(c)). For example when 80% of the farms receive 20% of the DP it means that the remaining 20% farms are granted 80% of the DP.

The other measurement used is the Gini coefficient. A coefficient close to one indicates a high concentration of the DP in a few farms.

7.1. Concentration of the DP in 2006

In 2006 in the EU-25, 20% of the FADN farms received 76% of the DP recorded in FADN (Figure 6). This percentage is lower when considering the EU-10 and EU-15 separately with respectively 70% and 71% of the DP granted to 20% of the farms.

It is to be noted that around 15% of FADN farms do not benefit from any EU DP.

It is also to be reminded that these data are not directly comparable to the information obtained from the database on EU DP paid to EU beneficiaries¹⁶. In

¹⁶ Available on Europa web site, FADN 2006 accounting year corresponds to 2007 financial year: <u>http://ec.europa.eu/agriculture/funding/index_en.htm</u>

FADN only the farms above a certain threshold are included and therefore FADN covers more DP than beneficiaries.



Figure 6: Distribution of the EU DP in 2004 and 2006 in the EU-25 Lorentz curve

The concentration of the DP per farm varied widely among MS in 2006. In Luxembourg and Finland, 20% of the farms were granted respectively 40% and 43% of the EU DP. On the opposite in Malta, Czech Republic and Portugal more than 80% of the DP were received by 20% of the farms (Figure 7).

In the EU-15, it is noticeable that the DP are highly concentrated in Portugal, Italy and Spain the MS with the lowest median DP per farm and a large interquartile range.





Source: DG AGRI EU FADN

The concentration of the DP is lower when considering the total labour on the farm (total AWU). In 2006, 20% of the agricultural workers were granted 61% of the DP in the EU-10 (9% less than for the concentration of the DP per farm) and 65% in the EU-15 (6% less than for the DP per farm).

Source: DG AGRI EU FADN

Evolution of the DP concentration between 2004 and 2006 7.2.

With the implementation of the 2003 CAP the Gini coefficient decreased slightly, from 0.76 to 0.74. It means that in the EU-25 the DP concentration per farm decreased slightly. This evolution is equivalent in the EU-10 and in the EU-15 as a whole (Table 5). Nevertheless it is to be noted that the concentration of the DP in the EU-10 is a little smaller than the concentration in the EU-15.

	2004	2006	Change					
EU-15	0.71	0.70	-0.02					
EU-10	0.68	0.67	-0.01					
EU-25	0.76	0.74	-0.02					
Source: DG AGRI ELI FADN								

Table 5: Concentration of the EU DP per farm: Gini coefficient

Source: DG AGRI EU FADN

Per MS the evolutions are more contrasted. In the majority of the MS the concentration of the DP decreased especially in those MS where the concentration was already less important: in Luxembourg (- 0.08), Finland (-0.05) and Sweden (- 0.04). Moreover in Germany and in the UK where a hybrid model was implemented the concentration decreased too. However, Denmark implemented also a hybrid model and the Gini coefficient did not change.

On the contrary, the concentration of the DP increased significantly in Italy and in Lithuania (Annexes VI and VII).

8. CONCLUSION

In the EU-25, the median EU DP per farm was 2 160 € in 2006. The median level increased by 20% in comparison to 2004 especially because of the milk DP increase (parallel to the price support decrease) and the SAPS level increase.

Per Member State (MS), the level of the median EU DP granted per farm is linked in particular to the structure of the farms (area) especially in the 8 MS applying SAPS because within each MS the same DP per ha is granted to all the farmers.

In 2006, in the EU-15, 18% of the EU payments were still coupled and a large share of the decoupled payments was granted based on historical references. Therefore in the EU-15 the level of DP per farm was also strongly linked to the products the farmers were producing in 2006 (often the same as those they used to produce during the reference period used for calculation of the SPS entitlements). For that reason the median EU-15 DP per farm varied from 0 for specialists horticulture and wine specialists to 12 490 €per farm for milk specialists.

As a result of the combination of the two above mentioned factors, the median DP per farm varied from 590 €per farm in Portugal to 26 960 €in the UK.

In terms of DP per ha, the median DP in the EU-25 was 160 €ha in 2006. In the EU-10 (Malta excluded) it varied from 30 €ha in Latvia to 110 €ha in Cyprus. In the EU-15 it varied from 60 €ha in Portugal to the exceptional level of 610 €ha in Greece. All the remaining MS had a median DP per ha included between 160 €ha and 360 €ha.

In the EU-10 the dispersion around the median DP per ha is very limited because DP are granted though SAPS. It is not the case in the EU-15 where no regional model was implemented (only hybrid or historical models). In the latter, the difference between the maximum DP received by 25% of the farms with the lowest DP and the maximum DP received by 75% of them reached 320 \clubsuit ha and 11 750 \clubsuit per farm.

On the period 2004 to 2006, the dispersion around the median DP per ha decreased slightly in the EU-25. This evolution was more noticeable in some MS who implemented a hybrid model and in Spain and Italy. Nevertheless in Denmark and Finland who applied also a hybrid model the increase of the milk payments induced a wider dispersion.

In 2006, in the EU-25 considered as a whole, 20% of the farms represented in FADN received 76% of the DP recorded in FADN. In the EU-15, it is noticeable that the DP are highly concentrated in Portugal, Italy and Spain the MS with the lowest median DP per farm and a large interquartile range.

Between 2004 and 2006, the concentration of the DP in the EU-25 as a whole decreased very slightly. Different evolutions can be observed at MS level and in particular the concentration decreased noticeably in MS where the DP were already among the least concentrated.

	Total EU D	P in 2006
	Median	Average
BE	13 180	16 390
CY	340	860
CZ	4 250	21 310
DK	16 320	27 240
DE*	14 690	26 680
EL	3 410	5 430
ES*	1 970	5 650
EE	1 800	4 490
FR	17 580	23 030
HU	1 220	4 390
IE	8 580	12 270
IT	1 440	5 180
LT	1 350	2 720
LU	19 660	21 360
LV	780	1 710
MT	10	680
NL	7 370	13 200
AT	6 840	8 710
PL	770	1 240
PT	590	3 470
FI	9 630	12 360
SE	15 840	22 960
SK	10 420	35 490
SI	820	1 180
UK	26 960	37 860
EU-25	2 160	8 780

Annex I: Median and average EU DP received per farm in 2006

* Provisional data

Source: DG AGRI EU FADN

Annex II: Description of the average subsidies received per farm in the EU

		EU-25			EU-15			EU-10				
	2004	2006	change	2004	2006	change	2004	2006	change			
Average subsidies	Average subsidies per farm											
Total EU DP	7 500	8 780	1 270	9 460	10 850	1 390	1 270	2 010	750			
Coupled	7 2 1 0	1 500	-5 710	9 460	1 950	-7 520	30	50	20			
Decoupled	300	7 280	6 980	0	8 910	8 910	1 240	1 970	730			
National DP	1 130	1 330	200	830	720	-110	2 090	3 320	1 230			
RD measures	1 550	1 970	420	1 890	2 120	240	460	1 470	1 000			
Other	110	120	10	130	120	-10	20	120	100			
Total Subsidies	10 290	12 200	1 910	12 310	13 820	1 510	3 830	6 920	3 090			

Share by type of subsidies

Total EU DP	73%	72%	-1%	77%	79%	2%	33%	29%	-4%
Coupled	70%	12%	-58%	77%	14%	-63%	1%	1%	0%
Decoupled	3%	60%	57%	0%	64%	64%	32%	28%	-4%
National DP	11%	11%	0%	7%	5%	-2%	54%	48%	-6%
RD measures	15%	16%	1%	15%	15%	0%	12%	21%	9%
Other	1%	1%	0%	1%	1%	0%	0%	2%	1%
Total Subsidies	100%	100%	0%	100%	100%	0%	100%	100%	0%

Source: DG AGRI EU FADN



Annex III: Median EU DP in 2004 and 2006



(3) EU DP per AWU



* 2004: Missing data for MT and Catalunia; 2006: provisional data for ES and DE Source: DG AGRI EU FADN

) /	FÚ	DP per fa	rm	F	UDP per h	na 👘	FU	DP per AV	NU
	2004	2006	Change	2004	2006	Change	2004	2006	Change
BE	8 540	13 180	54%	260	360	38%	5 610	8 450	51%
CY	100	340	243%	60	110	82%	120	410	257%
CZ	2 290	4 250	86%	60	90	55%	1 390	2 460	77%
DK	13 850	16 320	18%	320	310	-3%	16 780	20 170	20%
DE*	11 590	14 690	27%	270	310	17%	8 050	10 110	26%
EL	2 460	3 410	39%	410	610	49%	2 050	3 180	55%
ES*	2 240	1 970	-12%	150	160	7%	1 680	1 560	-7%
EE	1 270	1 800	41%	30	40	53%	780	1 160	49%
FR	16 180	17 580	9%	280	300	7%	10 820	12 860	19%
HU	840	1 220	45%	60	90	43%	1 480	1 480	0%
IE	6 670	8 580	29%	240	280	19%	6 790	8 670	28%
IT	1 700	1 440	-15%	220	200	-10%	1 660	1 470	-12%
LT	950	1 350	41%	30	50	52%	610	830	38%
LU	13 040	19 660	51%	200	270	34%	9 280	14 060	51%
LV	520	780	51%	20	30	54%	320	490	52%
MT*		10			0			0	
NL	5 030	7 370	47%	190	280	53%	3 610	6 240	73%
AT	5 640	6 840	21%	230	290	23%	3 620	4 630	28%
PL	460	770	66%	50	70	53%	300	510	69%
PT	370	590	59%	50	60	31%	270	440	61%
FI	7 730	9 630	25%	200	240	18%	6 850	8 920	30%
SE	12 780	15 840	24%	220	240	7%	12 280	14 960	22%
SK	6 800	10 420	53%	40	70	50%	1 440	2 200	53%
SI	580	820	43%	60	100	74%	340	480	43%
UK	22 800	26 960	18%	250	290	13%	15 510	17 180	11%
EU-25	1 810	2 160	20%	140	160	20%	1 490	1 810	22%

Annex IV: Median EU DP and interquartile range in 2004 and 2006 per MS

(2)Interquartile range DP per MS

	EU	EU DP per farm			U DP per h	na	EU	DP per A	ΝU
	2004	2006	Change	2004	2006	Change	2004	2006	Change
BE	13 590	17 520	29%	220	240	9%	10 070	12 460	24%
CY	250	530	112%	0	0		240	900	272%
CZ	6 260	10 530	68%	0	0		1 930	2 930	52%
DK	24 880	27 610	11%	70	120	82%	12 210	13 110	7%
DE*	16 200	18 320	13%	160	130	-22%	9 820	10 450	6%
EL	4 310	6 050	40%	940	940	-1%	4 090	5 720	40%
ES*	5 750	6 120	6%	350	310	-12%	5 280	5 970	13%
EE	2 100	3 050	46%	0	10		990	1 630	64%
FR	24 960	25 370	2%	210	210	-1%	17 060	17 380	2%
HU	1 540	2 200	43%	0	0		3 730	3 470	-7%
IE	8 120	10 630	31%	190	190	-1%	7 380	8 840	20%
IT	4 030	4 180	4%	420	350	-16%	4 440	4 420	0%
LT	870	1 380	58%	0	0		600	830	40%
LU	15 990	16 960	6%	130	80	-40%	10 960	9 300	-15%
LV	640	1 010	59%	10	10		380	660	74%
MT*		90			20			70	
NL	10 280	19 210	87%	300	460	52%	7 690	13 300	73%
AT	6 350	7 590	19%	140	150	6%	4 750	5 810	22%
PL	450	770	73%	0	0		290	490	68%
PT	1 980	2 790	41%	180	200	13%	1 540	2 050	33%
FI	8 630	9 530	10%	70	90	34%	12 410	13 890	12%
SE	16 330	17 500	7%	100	90	-8%	16 320	14 200	-13%
SK	27 160	41 680	53%	0	0		1 860	2 600	40%
SI	760	1 050	38%	60	90	58%	520	670	30%
UK	30 080	31 130	3%	180	140	-22%	19 600	16 360	-17%
EU-25	6 580	8 410	28%	290	280	-1%	5 920	7 390	25%

* 2004: Missing data for MT and Catalunia; 2006: provisional data for ES and DE Source: DG AGRI EU FADN

	Total EU &	national DF	P per farm	Total EU	& national I	OP per ha
	2004	2006	Change	2004	2006	Change
PT	460	630	36%	70	70	9%
CY	980	1 380	41%	470	420	-11%
IT	1 740	1 490	-14%	220	200	-10%
ES*	2 300	2 000	-13%	150	160	4%
SI	1 690	2 020	20%	170	270	56%
HU	2 110	2 140	1%	140	140	1%
PL	1 200	2 320	93%	110	210	90%
LV	1 750	2 390	36%	60	80	27%
LT	2 130	2 730	28%	70	100	41%
MT*		2 740			840	
EU-25	2 460	3 280	34%	180	230	30%
EL	2 550	3 450	35%	440	620	41%
EE	2 550	4 140	62%	50	90	71%
AT	6 540	7 610	16%	270	310	14%
NL	5 250	8 310	58%	200	310	53%
IE	6 670	8 580	29%	240	280	18%
CZ	4 880	8 920	83%	110	180	69%
BE	9 700	14 240	47%	310	420	38%
DE*	13 750	15 960	16%	310	340	8%
SE	13 360	16 530	24%	230	250	8%
DK	14 590	16 880	16%	320	310	-2%
SK	16 020	18 570	16%	80	110	36%
FR	17 500	18 650	7%	300	320	7%
LU	16 560	21 030	27%	250	290	14%
FI	18 600	22 670	22%	420	550	31%
UK	23 240	27 280	17%	260	290	11%

Annex V: Median total DP (EU and national) in 2004 and 2006 per MS

* 2004: Missing data for MT and Catalunia; 2006: provisional data for ES and DE Source: DG AGRI EU FADN

	2004	2006	Change
LU	0.45	0.37	-0.08
FI	0.44	0.39	-0.05
AT	0.44	0.43	-0.01
SE	0.49	0.46	-0.04
IE	0.49	0.47	-0.02
UK	0.52	0.47	-0.04
PL	0.49	0.49	0.00
BE	0.55	0.50	-0.04
FR	0.52	0.51	-0.01
SI	0.51	0.52	0.01
DK	0.53	0.53	0.00
EL	0.57	0.55	-0.02
DE*	0.63	0.58	-0.04
LT	0.53	0.59	0.06
NL	0.61	0.61	0.00
LV	0.61	0.61	0.00
EE	0.65	0.67	0.01
CY	0.74	0.68	-0.06
SK	0.69	0.70	0.01
ES*	0.72	0.71	0.00
EU-25	0.76	0.74	-0.02
IT	0.74	0.77	0.03
HU	0.78	0.78	0.00
CZ	0.82	0.80	-0.02
PT	0.82	0.80	-0.02
MT*		0.91	

Annex VI: Evolution of the concentration of the EU DP per farm measured with the Gini coefficient

* 2004: Missing data for MT and Catalunia; 2006: provisional data for ES and DE Source: DG AGRI EU FADN



Annex VII: Distribution of the EU DP in 2004 and 2006 – Lorentz curves

(2) Luxembourg







Source: DG AGRI EU FADN