

# The distribution of Direct Payments of the Common Agricultural Policy

Die Verteilung der Direktzahlungen der Gemeinsamen Agrarpolitik

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## Zusammenfassung

Direktzahlungen sind mittlerweile die wichtigste Ausgabenkategorie der Gemeinsamen Agrarpolitik, sie umfassen etwa zwei Drittel des Agrarbudgets 2006. Zu einem großen Teil werden sie in Form von entkoppelten Direktzahlungen gewährt. Die EU beabsichtigt eine weitere Kürzung der Direktzahlungen für Pflanzenbau und Tierhaltung zugunsten einer Ausweitung der entkoppelten Prämien, die als allokativ neutral gelten. Damit werden die verteilungspolitischen Aspekte der GAP Ausgaben zunehmend wichtiger. Dieser Beitrag bietet eine deskriptive Analyse dieses Problembereichs anhand verschiedener Konzentrationsmaße, die auf statistischen Daten über die Empfänger von Direktzahlungen in den Jahren 2000 und 2006 beruhen. Die Ergebnisse zeigen, dass Direktzahlungen auf eine kleine Zahl von Großbetrieben in einigen Mitgliedsländern konzentriert sind und diese Situation im Zeitablauf konstant ist.

**Schlagerworte:** Direktzahlungen, Verteilung, Gemeinsame Agrarpolitik

## Summary

Direct payments are the most important expenditure of the Common Agricultural Policy (CAP), equivalent to more than two thirds of the EU farm policy budget in 2006. They are mostly spent for decoupled direct payments (DDPs). The EU plans to further reduce direct payments for plant and animal products and to expand the volume of DDPs which are intended to be allocatively neutral. Such a move im-

plies that distributive aspects of CAP expenditures will become more important. This contribution looks at this issue by calculating various measures of concentration based on statistics on recipients of direct payments covering a period of 2000 to 2006. The results show that direct payments are skewed towards a small number of very large holdings in a few member states and that this situation has not changed over time.

**Keywords:** Direct Payments, distribution, Common Agricultural Policy.

## 1. Introduction

Until 1992, trade restrictions, market price support and supply management policies were the major tools of the CAP. To mitigate the well known weaknesses of this policy conception a process of 'decoupling' was initiated with the Mac-Sharry reform of 1992. Direct aids were granted to producers of arable crops, beef and veal, sheep meat and goat meat as a compensation for lower administrative prices. In the Agenda 2000 reform, this process continued by including the milk sector and by establishing the program for rural development (the "second pillar" of the CAP). Since the 2003 CAP-reform fully or at least partially decoupled "single farm payments" (SFP) try to mitigate the negative effects of price policy as well as payments based on historical areas and heads of livestock after 1992 (OECD, 2006a and b).

During the last 15 years direct payments have become the most important fiscal policy tool in the EU. In 2006, direct payments amounted to EUR 33.1 billion, which was equivalent to 31% of the EU's total operating expenditure (EUR 106.58 billion). Decoupled direct payments (DDPs) subdivide into Single Farm Payments (SFPs, EUR 14.2 billion), and Single Area Payments (SAPs, EUR 1.7 billion). Output linked direct payments are granted for plants (EUR 12 billion) and livestock products (EUR 5.7 billion). According to the Economic Accounts of Agriculture, the share of direct payments in the factor income of agriculture amounts to 26.5% in 2006.

Within DPs the share of decoupled payments has increased recently, because the milk quota premiums had been fully decoupled by 2007, and due to the phasing in of area payments for member states that entered the EU in 2004. The share of DDPs will likely further increase be-

cause the Commission pledged to further reduce trade distorting internal support measures (see EU offer at the G4-summit in Potsdam, 2007).

Fully decoupled payments are considered to have no allocative effects, which renders them elements of a distributive policy.

Usually, the political rationale of distributive policies is to improve the income distribution by transferring money from richer to poorer households in order to correct market outcomes according to politically determined equity objectives. For a long time, agricultural economists (e.g. KOESTER and TANGERMANN, 1976) have advocated the introduction of decoupled direct payments as an important step to mitigate the negative effects of market price support, including the mitigation of the regressive distribution effects of output linked support.

According to Article 33 of the Treaty, one goal of the CAP is "to ensure a fair standard of living for the agricultural community, in particular by increasing the individual earnings of persons engaged in agriculture" while simultaneously guaranteeing adequate consumer prices. This vaguely seems to point in the direction of a fair distribution of support across farming units.

In this paper the overall distributive effect of direct payments is addressed. The next section provides a brief description of the relevant literature regarding the distributive consequences of the CAP on farm household incomes and their spatial implications as well as the relevant data sources. Then we compare the distribution of direct payments for farm holdings *across* EU member states in the period 2000 to 2006. Using various distributional measures, among them concentration ratios and Lorenz curves, we also look at the distribution *within* EU member states. A short summary as well as an outlook, embedded in the overall framework of the CAP, concludes this contribution.

## 2. Literature and data sources

### 2.1 Selected studies on distributional aspects in agriculture

Over the last years, OECD has repeatedly looked at the various dimensions of the distribution of agricultural incomes. OECD (1999) analyses the distributional effects of agricultural policies in the mid-90s by comparing the distribution of support in relation to output and income in

OECD countries. The report concludes that the distribution of market price support is very similar to the one of output and that differences across regions are less than those across farm types or size classes. Moreover, the distributional patterns have shown little change over the last ten years. KURASHIGE and HWAN CHO (2001) examine the incidence of low income as well as the impact of social security policies of OECD countries in agriculture. Based on various indicators they find out that "low income" is higher among farm households than among non-farm households and despite generous support in many OECD countries the income distribution of farm households shows a higher degree of inequality than of non-farm households.

The territorial dimension of CAP expenditures has been analyzed by SHUCKSMITH et al. (2005). Looking at the regional distribution of CAP payments and their contribution to cohesion objectives, the authors found that CAP payments do not support territorial cohesion, because more prosperous regions get higher levels of CAP transfers. This holds not only for market based support, but also – although somewhat less pronounced – for support through rural development programs. At a similar result with respect to the distribution of farm support between continental and mediterranean agriculture arrive MORA and SAN JUAN (2004).

With hardly any exceptions, studies looking at distributional effects of the CAP reveal that the current instruments of the CAP do not prevent a substantial part of farmers from being among the poorest citizens of EU member states. At the same time, direct payments to high-income farm units and regions contribute to pronounced income inequalities in this sector. This survey also shows that a cross country comparison of direct payments before and after the 2003 CAP reform has not yet been made.

## 2.2 Data sources and methods

Aggregated data on the distribution of direct payments across EU member states have been published regularly since they were introduced and can therefore be set in relation to other variables of interest like the number of farms or persons engaged in farming. The most up-to-date figures on the distribution of direct payments across farm holdings were published by EUROSTAT in 2008. In 2006, EU expenditures for the Common Agricultural Policy amounted to EUR 49.9 billion

(47% of the total budget). Direct payments (EUR 34 billion) had the largest share, followed by market related expenditures (EUR 8 billion) and payments for the rural development program (EUR 7.7 billion). Both, the volume and share of direct payments have increased since the CAP reform in 1992. In the year 2000 direct payments amounted to EUR 24.1 billion and EUR 32.5 billion in 2005. Given that farm payments have been increasing and that structural change has taken place at an average annual rate close to 2%, payments per annual working unit (AWU) have been increasing until the entry of ten new member states in 2004.

In the year 2000, the average payments per recipient were below EUR 2,000 in Portugal and Italy and were highest in Denmark (EUR 10,585) and the UK (EUR 19,272). The EU-15 average was EUR 6,331 (ranging from EUR 1,747 in Greece and EUR 21,429 in the United Kingdom) five years later. Direct payments per holding were considerably lower in the new member states that entered the EU in 2004 (on average EUR 723 – from EUR 232 in Cyprus to EUR 11,397 in Czech Republic). Therefore the mean of direct payments per holding in the EU dropped from EUR 5,017 per holding to EUR 4,682 between 2000 and 2006.

In preparing the 2003 CAP reform, EU Commissioner Franz Fischler released for the first time fairly detailed data about the distribution of direct payments to foster a political climate to curb the size of high-end CAP payments. EUROSTAT publishes the number of recipients and the volume of transfers aggregated in 12 classes. Comparing the holdings getting less than EUR 5,000 with those getting more can be used to show that a small number of recipients got a relatively large share of all direct payments in 2000: 953,000 holdings received more than EUR 5,000, totalling EUR 15.5 billion. 21% of holdings getting such support received 82% of all direct payments. Until 2006 the distribution has become more unequal: 1.3 million farms (18% of the 7.3 million recipients) got EUR 27.9 billion (84% of direct payments).

### **3. Methods and results**

The distribution of direct payments is quite different in the EU member states. In order to depict the distribution of DPs within EU member states and thus being able to compare between countries we use mean,

median and quintile ratios (see Table 1). Using the method described in BLEYMÜLLER et al., (1991, 15), the median payments per member state were calculated. A high ratio between mean and median of payments is a simple indicator of an unequal distribution.

*Tab. 1: Descriptive statistics and distribution indicators of direct payments (DP) and decoupled direct payments (DDP) in EU member states 2000 and 2006*

	mean / holding		median / holding		quintile ratio	
	DP 2000	DP 2006	DP 2000	DP 2006	DP 2000	DP 2006
BE	5,624	10,895	3,678	5,988	28	52
CZ	–	12,665	–	1,675	–	> 5,000
DK	10,585	13,135	6,417	4,548	36	363
DE	9,982	13,387	3,714	4,843	62	78
EE	–	1,445	–	386	–	1,544
GR	n.a.	1,863	n.a.	608	–	131
ES	3,884	4,982	1,144	1,225	318	388
FR	3,884	17,964	3,724	10,694	412	64
IE	9,737	9,294	2,601	5,498	83	32
IT	4,664	2,190	857	454	247	732
CY	–	358	–	291	–	93
LV	–	489	–	302	–	65
LT	–	455	–	296	–	51
LU	1,794	16,161	5,577	13,929	18	22
HU	–	1,812	–	419	–	859
MT	–	194	–	264	–	> 5,000
NL	7,312	6,365	1,642	1,450	24	868
AT	2,640	5,003	1,548	2,693	49	39
PL	–	551	–	348	–	16
PT	3,101	2,250	746	437	1,830	2,950
SI	–	570	–	375	–	15
SK	–	7,402	–	401	–	> 5,000
FI	1,510	7,701	2,558	5,238	23	21
SE	3,706	8,065	3,841	2,492	77	193
UK	7,873	18,201	6,054	5,149	354	459
EU10	–	824	–	347	–	94
EU15	5,017	6,029	1,162	1,123	602	1,068
EU25	–	4,524	–	537	–	3,594

Source: European Commission, Financing the CAP, Indicative figures on the distribution of aid, by size-class of aid, received in the context of direct aid paid to the producers to Reg. (EC) No 1782/2003 and Reg. No 1259/99 for the financial year 2000, 2006. European Com-

mission, Budget online (<http://eur-lex.europa.eu/budget/www/index-en.htm>), DP and DDP 2006. Eurostat, Database NewCronos, structural data 2000 and 2005, data access March 2008; own results. Note: EU-15 in 2000 without Greece

A more sophisticated measure of (in)equality is the quintile ratio. It has the similar interpretation as the Gini-Coefficient, but it is calculated in simpler manner. High levels of quintile ratios indicate that a small number of recipients get a large amount of payments while a low quintile ratio indicates a more equal distribution.

Fig. 1 shows the three measures: The horizontal axis indicates the mean (indicated by x) and median (|) payment per holding in the EU 25 member states in 2006. The vertical axis showing the quintile ratio is used to rank them according to the concentration of payments within the countries. The overview shows that even if the difference between median and mean is very large in absolute terms (like in the United Kingdom or in Germany), the quintile ratio may be relatively moderate compared to other countries (like Malta, Slovakia or Czech Republic). Given that the quintile ratio is relatively high in the member states that have entered the EU in 2004, it is evident that the quintile ratio in the EU has increased between 2000 and 2006.

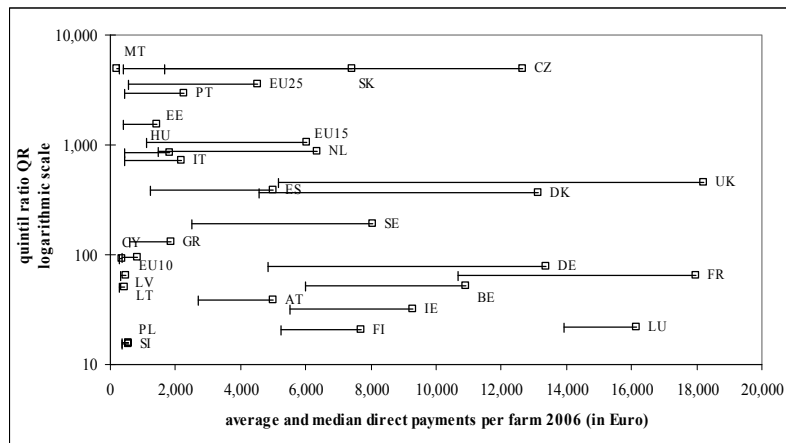


Fig. 1. Quintile Ratios (QR), medians (|) and means (x) of direct payments in 2006

Source: own estimates

#### 4. Discussion

The comparison of quintile ratios between the years 2000 and 2006 shows, that (1) the CAP reform 2003 has not improved the distribution of DDPs and (2) that there is no uniform pattern of change. The quintile ratio of EU-15 member states were comparably low in both years. The ratios are very high in a number of new member states, including the Austrian neighbour countries Slovakia and Czech Republic. Given that the Single Farm Payment was introduced only recently it is too early to draw conclusions on the distributive effects of the historical versus the area based scheme.

Admittedly, CAP payments, among them direct payments, are hardly motivated by distributive considerations alone. Currently they are justified to ease the process of integration for the agricultural community of member states that have recently entered the EU. Another purpose is to facilitate structural adjustment of farms that are exposed to freer market conditions after decades of CAP interventions. Moreover, as direct payments are only granted if standards of good agricultural and environmental condition ("cross compliance") are met, such payments have an environmental facet as well. The current debate about strengthened modulation or abandoning the historical model provides possibilities to improve the distribution of DP. At the same time, taking into account the principle of "fiscal equivalence" (OLSON, 1969) could give guidance for the question which of the issues currently addressed by direct payments should be addressed at EU level or at the level of member states.

#### References

- BLEYMÜLLER, J., GEHLERT, G. and GÜLICHER, H. (1991): Statistik für Wirtschaftswissenschaftler. München: Franz Vahlen.
- EUROSTAT (2002): Income of the agricultural households sector, Report 2001, EUROSTAT, Luxembourg.
- KOESTER, U. and TANGERMANN, S. (1976): Alternativen der Agrarpolitik. Eine Kosten-Nutzen-Analyse im Auftrag des Bundesministeriums für Ernährung, Landwirtschaft und Forsten, Landwirtschaft - Angewandte Wissenschaft, Heft 182, Münster-Hiltrup.
- KURASHIGE, Y. and HWAN CHO, B. (2001): Low Incomes in Agriculture in OECD countries.
- MORA, R. and SAN JUAN, C. (2004): Farmers Income Distribution and Subsidies: Product Discrimination in Direct Payment Policies for Continental and Mediter-



- ranean Agriculture. Dpto. Economía, Universidad Carlos III de Madrid, available at <http://www.uc3m.es/uc3m/dpto/CJM/farmersincome.pdf>.
- OECD (1999): *Distributional Effects of Agricultural Support in Selected Countries*, AGR/CA(99)8/FINAL, OECD, Paris.
- OECD (2006a): *Decoupling: Policy Implications*. OECD, Paris.
- OECD (2006b): *Special Issue on Decoupling Agricultural Support*, OECD Papers Vol 5, No.11, OECD, Paris.
- OLSON, M. (1969): *The Principle of Fiscal Equivalence: The Division of Responsibilities among Different Levels of Government*, *American Economic Review*, Papers and Proceedings, 59(2), 479-487.
- SHUCKSMITH, M., THOMSON, K. J. and ROBERTS, D. (eds.) (2005): *The CAP and the Regions: the Territorial Impact of the Common Agricultural Policy*. Oxfordshire, Cambridge: CAB International.

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