

Agrosynergie

Groupement Européen d'Intérêt Economique

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Evaluation of CAP measures concerning sectors subject to past or
present direct support – Lot 1: Horizontal issues

Evaluation of income effects of direct support

Synthetic Summary



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1. SCOPE

One of the five objectives assigned to the Common Agricultural Policy (CAP) by the EC Treaty is to guarantee the agricultural community a fair standard of living, in particular by increasing the individual earnings of people engaged in agriculture.

This evaluation examined the effects of the direct support schemes laid down in Council Regulation (EC) No 1782/03 (later Council Regulation (EC) No 73/09) on the income of farmers. The effects of direct payments related to other CAP objectives, such as enhancing the competitiveness of the agricultural sector or ensuring sufficient and secure food supply, were not taken into account in the evaluation.

Regulation No 1782/2003 introduced a new system of direct support, known as the Single Payment Scheme, under which aid is no longer linked to production (decoupling). The decoupled support is calculated by multiplying the number of eligible hectares and the single payment entitlement. The Member States could choose from three basic SPS models on how to calculate the reference amount for an individual farm: decoupling based on historical farm data (historic model), decoupling based on regional historical data (regional model) and hybrid systems. New Member States have the possibility, during a transitional period, to apply a Single Area Payment Scheme (SAPS).

The evaluation examined the effectiveness and efficiency of the implementation of direct support with respect to achieving the income objective. The evaluation also examined the coherence of direct payments with measures under the Single Market Organisation (Single CMO) and rural development measures with respect to this objective.

The evaluation covered the 27 Member States of the European Union (EU27). The coverage was regional and the examination period started on the 1st January 2005. For analytical reasons, data going back to 2001 were used.

2. METHODOLOGY

The analysis was carried out at macro-economic level, based on statistics from Eurostat at regional level (NUTS II). The analysis was also carried out at micro-economic level, based on farm data from the FADN database (Source: EU FADN - DG AGRI) across 55 Community macro-regions. At the micro-economic level, the analysis distinguish among different farm types according to the following classification criteria: seven types of farming (field crops; horticulture; other permanent crops except wine; milk; other grazing livestock: beef, sheep and goats; granivores; mixed farms, i.e. various crops and livestock combined), economic farm size, farm location and type of farm organisation.

The following table provides a synthesis of the main issues covered by the evaluation and the tools used for addressing them:

Issues	Tools								
	Statistical analysis	Update of FADN data	Estimate of the effects of CMO measures	Regression models	Probit model	Gini coefficient	Quantile regressions	Review of the literature	Expert survey
Role of direct support in enhancing the farm business income of farmers	✓	✓	✓	✓					✓
Role of direct support in stabilising the income of farmers	✓				✓				✓
Role of direct support in improving the standard of living	✓	✓							
Role of direct support on the farm household total income								✓	✓
Contribution to the economic viability of farms	✓	✓							✓
Targeting efficiency	✓	✓				✓	✓		✓
Relative income transfer efficiency			✓	✓					
Coherence between direct support and other CAP measures	✓		✓	✓					
Coherence between direct support and LFA compensatory allowance	✓	✓							

3. MAIN CONCLUSIONS

Before illustrating the main findings, it is important to recall that the evaluation examined the effects of direct payments on the income of farmers. The effects of direct payments related to other CAP objectives were not considered.

Moreover, the evaluation focused on **farm business income**, for which available statistical data were able to satisfy the analytical requirements. The farm household total income was analysed in a qualitative way through a review of available studies and statistics.

It is important to note that the results of the analysis may be influenced by changes in the structure (average number of annual work units per farm and per hectare) and economic situation of farms (in most regions, the gap between costs and revenues becomes narrower; the growth of wages is lower than the growth of revenues).

Such factors may well play a role in addition to direct payments' effects on FNVA/AWU:

- for equal levels of FNVA, income per AWU is structurally lower in the EU12 Member States compared to the EU15 (on average);
- in the EU15 the total number of AWU has decreased after the 2003 CAP reform. Therefore, for equal levels of FNVA, after the reform income per AWU becomes higher;
- changes of FNVA/AWU over time are influenced by changes in some of its components (total output/AWU; intermediate consumption/AWU; paid wages/paid AWU; number of AWU).

EQ 1a: To what extent have the direct payments contributed to achieving a fair standard of living for the agricultural community, by stabilising and enhancing the income of farmers?

In terms of enhancing farmers' income, direct payments:

- Have contributed to enhancing the income of farmers. The results of the calculations made by deducting direct payments from the weighted average of the farm income for the period 2004-2007 indicate that the removal of direct payments would have led to a 27% fall in farm income value.
- Have played a particularly important role in generating farm income in grazing livestock farms (beef, sheep and goats), field crops, mixed farms and dairy farms: direct support represents about 50% of the income of grazing livestock farms (beef, sheep and goats), over 40% of the income of field crop farms and of mixed farms (various crops and livestock combined) and over 30% of the income of dairy farms. In the two sectors for which the share of direct payments is lowest, i.e. horticulture and permanent crops, the average incomes are lower than the average income in the farm sector overall.
- Have also played a role in strengthening the cohesion between regions, in particular in the sectors of field crops, milk, grazing livestock and mixed farms.
- Have allowed a reduction of the existing gap between the average farm income per labour unit of small and large farms. The analysis indicates that farms of the small economic size class (which are mostly family farms) have in general the lowest average income per labour unit. In the simulated situation (without direct payments) the gap between large and small farms would have increased.

In terms of stabilizing farmers' income, direct payments:

- Have made a positive and robust contribution to the stability of the income of farmers. The largest effect on income stability is shown in the sectors which are the most supported by direct payments (field crop, grazing livestock and mixed farms).
- Have played a larger role in farmers' income stability in the smaller size farms (small compared to medium and large size farms and medium compared to large size farms).

In terms of ensuring a fair standard of living of the agricultural community¹:

- Direct payments have helped reduce the gap between average farmers' income and Gross Domestic Product (GDP) per employee. In 60.5% of regions, average farm income per labour unit (including direct payments) for the analysed period is lower than half of the regional GDP per employee. In the simulated situation, without direct payments, 84% of regions would have not reach the threshold of half of the GDP/employee.
- In all four most supported sectors (field crops, dairy farms, grazing livestock farms and mixed farms), the absence of direct payments would have caused a further widening of the gap, in a large number of regions for the period 2004-2007. In the same four sectors and in a large number of regions, farm income per family unit would have fall below the remuneration level of paid employment in the reference region, suggesting a fragile situation in which either family labour or capital is under-remunerated.

EQ 1b: Analysis of the differentiated role of direct payments on farmers' income according to farm location and type of organisational form of holding

- Direct payments have reduced the existing differences between farmers' income in non LFA areas and in LFA areas and the subgroup of mountain LFA areas.
- Direct payments have had larger effects on farmers' income stability in LFA areas in comparison to non-LFA areas.
- Direct payments have contributed to reducing the gap between average farmers' income in farms located in LFA area and in the subgroup of mountain LFA areas and the regional GDP per employee.
- Direct payments appear to have had a larger income stabilizing effect in individual farms and farms organised as partnerships compared to farms having other types of organisational form.
- In the EU15 regions (on average), in the simulated situation, without direct payments, the loss of farm income per labour unit is greater in individual farms and lower in farms having other types of organisational form.
- In EU12 regions (on average), the situation appears to be the exact opposite: the loss of farm income per unit of labour following the simulated removal of direct payments would have been greater in farms having other types of organisational form compared to individual farms and partnerships.

EQ 2: To what extent have the direct payments contributed to supporting economic viability of farms?

A farm can be considered viable when it is able to guarantee a "sufficient remuneration" of family labour and farm capital. Two aspects have been taken into account: a) the economic viability: the ability to guarantee remuneration of family labour at least equal to its opportunity cost, and a positive remuneration of farm capital; b) the economic and financial viability (considered together): the ability to guarantee, besides the remuneration of family labour, the remuneration of farm capital at least equal to the average interest rate applied to medium-term loans.

- Direct payments have been crucial in ensuring the economic viability of farms, in particular those specialised in field crops, grazing livestock (beef, sheep and goats), mixed farming and, partly, in

¹ It is important to note that the European Community has never defined the concepts of 'agricultural community' and 'fair standard of living' as they appear in Article 39 of the Treaty on the Functioning of the European Union. There are therefore still no clear concepts or criteria which can be applied to measure these variables. In this context, to assess the contribution of direct payments to the income objective, the farmers' income was compared to the Gross Domestic Product (GDP) per employee at current market prices, provided by Eurostat in the Regional Economic Accounts. The ratio was computed in the real and simulated situation (without direct payments) for the period 2004-2007.

the milk sector.

- In the analysed period, farms in which the paid labour component is high (FWU/AWU<30%) are the most efficient in the EU15 and the least efficient in the EU12. This suggests that the strategic goals in this class of farms might be completely different: more targeted to economic results in the EU15 and more focused on social aspects in the EU12. In other words, maximisation of profit in the first case, and maximisation of employment in the second case.
- In the EU15 the hybrid SPS model has probably contributed to a stronger growth of the return on investments (ROI) and of the return on assets (ROA) .

EQ 3: To what extent have the direct payments been efficient with respect to achieving their objectives?

- In the years analysed (2004, 2006 and 2007), at global level the efficiency of direct payments in terms of directing income support to farmers whose income is lower than the benchmark is quite high. However the results show remarkable differences across the regions.
- Direct payments have contributed to reducing disparities among farmers' incomes in the EU regions, but uneven income distribution persists in most types of farming and in most geographical areas.
- Direct payments have borne a larger positive effect on farmers' income equity in the regions applying the hybrid and the regional SPS models than in the regions applying the historic SPS model.
- Coupled payments have not been efficient with respect to the objective of reducing farmer's income disparities between income classes. Regarding decoupled payments, the results of the modelling at macro-economic and at micro-economic level are not completely similar. While the results of the regressions at macro-economic level allow us to conclude that this type of payments contribute to decreasing farmers' income disparities, the results of the regressions at micro-economic level are less clear-cut.

EQ 4: To what extent have the direct payments been coherent with other CAP measures: measures under the Single CMO and rural development measures?

- Direct payments have been coherent with the other measures in relation to the objective of enhancing farmers' income: the three types of support measures complement each other as they substitute each other over time in order to maintain the overall level of support approximately constant.
- Direct payments have been coherent with the measures under the Single CMO as farm income support tools. Concerning the rural development measures, the results of the regression estimates are less clear-cut.
- The three types of policy instruments have been coherent with respect to contributing to more stable incomes of farmers. Coherence between direct payments and CMO support appears to be higher than between direct payments and rural development measures in most types of farming.
- Direct payments (at EU level considering all regions and all types of farming, for the period 2004-2007) have been coherent with the compensatory allowance given to specific farms in a certain LFA area, because the income of these farmers is lower or equal to the income of farmers not located in LFA areas and to the income of farmers located in LFA areas but not receiving the compensatory allowance. However, the analysis by type of farming and by groups of regions according to the SPS model indicates that there are also cases where farmers receiving both the compensatory allowance and direct payments have an income higher than other farmers (i.e. farmers not located in LFA areas and farmers located in LFA areas but not receiving the compensatory allowance).
- After the reform, in the groups of regions implementing the SPS hybrid model (with a prevalent regional component) and of regions implementing the regional model, the degree of coherence between direct payments and compensatory allowance have increased.

4. RECOMMENDATIONS

On the basis of the evaluation results and the conclusions, the evaluator suggests the following recommendations:

1. The comparative analysis across the seven analysed types of farming shows that some of the lowest farm income levels per labour unit are found in the two sectors benefitting to a very limited extent or not at all from direct support, namely horticulture and permanent crops (except wine). In the EU15 Member States, the average farm income per labour unit of these sectors (post-reform period) is about 22% lower than the EU15 average income in the farm sector overall. Furthermore, these two sectors show the highest risk in terms of farm viability (in 37% and 21% of the regions, respectively for the horticultural and the other permanent crops sectors, average returns on assets are negative).

In the light of these results, and given the positive effect of direct payments on farm income and viability confirmed by the evaluation, the evaluators recommend to extend direct payments to include farms operating in these sectors. It is noted that this possibility was already introduced by Regulation (EC) No 1182/2007 of 26 September 2007 laying down specific rules as regards the fruit and vegetable sector.

2. The analysis has revealed that in many regions the farm income of most farmers does not reach the reference benchmark (regional GDP per employee). This means that direct payments are basically granted to farmers who need them, and, therefore, the efficiency of direct payments in terms of directing income support to group of farmers that need it can be considered as good. However, the analysis has also revealed that there are cases where direct payments are granted to farmers whose farm income is above the benchmark, especially in certain sectors (i.e. in the field crops sector) and in certain regions.

Therefore, it seems reasonable to recommend the identification of adequate assignment criteria and appropriate instruments able to redistribute at least part of the amounts that go to farmers whose income is above the benchmark to farmers who are most in need (i.e. for whom the current level of direct payments does not allow reaching the benchmark), regardless of the sector.

3. It was not possible to evaluate the role played by direct payments in farm household total income, in spite of noticeable interest in this matter. The analysis of the existing literature (studies and statistics) reveals the existence of heterogeneous definitions of agricultural households and, thus, of a variety of measurement criteria and data collection instruments (where they exist). In essence, therefore, the high heterogeneity of definitions and methods makes a combined reading of the existing information impossible. Consequently, it is recommended that a common definition of *farm household* and *farm household total income* be developed and that harmonised statistics be developed with respect to both the official national and EU statistics and the FADN, provided that the policy makers are sufficiently interested in this matter.