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## Article

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Ulrich Koester, Jens-Peter Loy

# EU Agricultural Policy Reform: Evaluating the EU's New Methodology for Direct Payments

The Common Agricultural Policy has changed significantly over time. Major changes are now introduced every seven years, with the last fundamental change agreed upon in 2013 for the period 2014-2020. Policymakers also agreed to a mid-term review in order to evaluate the performance of numerous new regulations. The Commission has elaborated a methodology for the evaluation and has already published some documents with initial results for past periods. This article reviews whether the methodology and database used by the Commission are in line with the highest standards for policy evaluation.

A recent publication by the OECD that examines the present method of evaluating impact assessments of policy regulations has put such evaluations back in the spotlight.<sup>1</sup> This review, which included 33 OECD countries and the EU, concluded that there was considerable room for improvement. A decade earlier, Lee and Kirkpatrick assessed specific EU measures and also reached primarily negative conclusions, which led them to “consider what lessons might be drawn from this experience and the measures that might be taken to strengthen future assessment practice”.<sup>2</sup> These two publications assessed the evaluation procedures of OECD countries and the EU based on data going back to 2003 in the EU case. It is of interest to investigate whether the EU has applied the recommendations of these publications.

According to new legislation from 2013, the European Commission (EC) is responsible for evaluating Pillar 1 measures of the Common Agricultural Policy (CAP), while Member States evaluate Pillar 2 measures.<sup>3</sup> Pillar 1

measures are of utmost importance for EU expenditures, amounting to about 40% of the EU budget. The commitment to evaluations is a significant step forward. In this paper, the focus is on one specific measure, direct payments, for two reasons. First, these payments make up more than 70% of the total CAP expenditure, and second, the EC has already published its evaluation results. The main aims of this article are twofold. First, it will explore whether the approach applied by the EC is in line with the state-of-the-art assessment approach generally accepted in professional economic policy evaluation. The second aim is to investigate whether the Farm Accountancy Data Network (FADN), the EC's CAP evaluation instrument, is appropriate for assessing the impact of specific CAP policy measures.

The structure of the article is as follows. First, we present a road map for policy evaluation and discuss the Commission's approach to evaluating specific policies based on the widely accepted procedure for policy evaluation.<sup>4</sup> The evaluation method applied by the EC as well as the data set used will be assessed on the basis of this road map. We then discuss the objectives of the CAP as presented in official EU documents, showing that policy assessments may not result in clear findings if there are multiple objectives that are not well-defined. Next, we investigate whether the EC's approach allows for a clear diagnosis for designing an efficient policy. Finally, we provide an assessment of the FADN data used for policy analysis,

- 1 OECD: OECD Regulatory Policy Outlook 2015, Paris 2015, OECD Publishing.
- 2 N. Lee, C. Kirkpatrick: Evidence-based policymaking in Europe: An evaluation of European Commission integrated impact assessments, in: *Impact Assessment and Project Appraisal*, Vol. 24, No. 1, 2006, p. 23.
- 3 Regulation (EU) No. 1306/2013 of the European Parliament and of the Council of 17 December 2013, *Official Journal of the European Union*, L 347/549, 20 December 2013.

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- 4 See OECD: OECD Framework for Regulatory Policy Evaluation, Paris 2014, OECD Publishing; J.J. Heckman: Building Bridges Between Structural and Program Evaluation Approaches to Evaluating Policy, in: *Journal of Economic Literature*, Vol. 48, No. 2, 2010, pp. 356-398; C. Coglianese: Measuring Regulatory Performance. Evaluating the Impact of Regulation and Regulatory Policy, OECD Expert Paper No. 1, 2012; and A. Camilla, S. Weiland: Policy assessment: The state of the art, in: *Impact Assessment and Project Appraisal*, Vol. 30, No. 1, 2012, pp. 25-33.

particularly for the evaluation of direct payments. We examine whether the data is representative with respect to the evaluation of specific policy interventions, especially regarding the effects of direct payments.

### A road map for policy analysis

The following are basic principles of a methodology for evaluating policy measures that are generally accepted and used by professional economists:

- Define the objectives and the measurement of changes. Changes in objective variables should be quantifiable, and the ranking of changes must be possible in either a cardinal or ordinal order.
- Compare the situation at present and in the future with the desired situation considering the desired achievement of objectives. This step in the evaluation method ascertains whether a policy intervention or change might be considered.
- Ascertain whether the chosen instruments contribute to reducing the gap between the situation with and without a policy intervention. The result indicates the effectiveness of the policy intervention.
- Specify the costs of the policy intervention. Economic costs show the value of resources that are reallocated from alternative uses. Costs also include by-product distortions, which may occur if side effects lead to distortions, and administrative costs. The result of this finding determines the efficiency of the policy measures.
- Identify measures that would most likely have been more efficient, but only if the need for further policy intervention is supported by the findings of the evaluation.

It should be noted that following these steps will not necessarily lead to clear findings. The adequacy of the data set is of utmost importance. Hence, we must appraise whether the FADN database, which provides the basic data for the evaluation of the instruments used by the CAP, is suitable for this purpose.

### Agricultural policy objectives

All policy evaluations are normative. Assessments must investigate whether the policy measures contributed to the achievement of the stated policy objectives and whether the economic costs incurred have been smaller

than the benefits. Ideally, it should be possible to measure the benefits and costs in monetary terms. As will be illustrated, this may not always be possible; however, as a first step, the assessment should prove that the specific policy measures under consideration have contributed to a positive change in the objectives. Hence, the following analysis begins with the discussion of the policy objectives, which might be taken as given for the assessment.

The agricultural policy objectives that are still relevant for the EU were established in 1957 in the Treaty of Rome. Numerous changes in the number of EU Member States and changes to the EU treaties have not led to a change in the official agricultural policy objectives, which remain:

- (a) to increase agricultural productivity
- (b) to ensure a fair standard of living for the agricultural community
- (c) to stabilise markets
- (d) to assure the availability of supplies
- (e) to ensure that supplies reach consumers at reasonable prices.<sup>5</sup>

The objective that appears to be most important for EU policymakers is (b), ensuring a fair standard of living for the agricultural community.<sup>6</sup> However, it should be noted that the order of the objectives clearly indicates that this objective should be achieved as a consequence of objective (a), increased agricultural productivity. Thus, an evaluator must first determine whether any policy intervention affects objective (a); if the intervention is focused on achieving objective (b) directly, the indirect effects on objective (a) are of importance.

Because the focus was on policy measures intended to create positive income effects for farmers, objective (b), and to a lesser extent (a), were applied to the investigation of FADN data for the analysis of EU agricultural policies.

Apart from the official objectives in the Treaty and the following revisions, the Commission has defined a broader and more specific set of policy objectives:

- Contributing to a viable, market-oriented production of safe and secure food throughout the EU;

<sup>5</sup> Official Journal of the European Union, C115, 9 May 2008, p. 62.

<sup>6</sup> There is no official document which ranks the objectives. However, from the very beginning of the CAP, the discussion in the Council and the final decisions have always been focused on the income of farmers.

- Ensuring the sustainable management of natural resources and the provision of environmental public goods;
- Contributing to the balanced territorial development and thriving rural areas throughout the EU.<sup>7</sup>

The most recent interpretation of the agricultural policy objectives by the European Parliament and the Council also reaffirms these goals:

The performance of the CAP measures... shall be measured in relation to the following objectives:

- (a) viable food production with a focus on agricultural income, agricultural productivity and price stability;
- (b) sustainable management of natural resources and climate action with a focus on greenhouse gas emissions, biodiversity, soil and water;
- (c) balanced territorial development with a focus on rural employment, growth and poverty in rural areas.<sup>8</sup>

It is important to note that the wording of these objectives avoids the terms “fair standard of living” and “agricultural community”. This implies that legislators seem to be disinterested in those who secure “viable food production”; hence, family farms are no longer the focus of the policy. Food can also be produced in a viable way by legal corporations, partnerships and part-time farmers. The critical aspect seems to be viability. Furthermore, the wording of the objectives leads to the conclusion that agricultural income should be the focus of the information produced, but it does not indicate the purpose of this information in the policy process. It certainly does not state that specific income comparisons should be primary determinants of policy decisions.

The Commission’s objectives are much broader than the official objectives. In the document that discusses the impact of direct payments, the Commission accepted the following objectives:

- A more equitable distribution of decoupled payments among Member States and among farmers in order to enhance direct payments’ effectiveness in supporting farmers’ income and contributing to the provision of basic public goods;

- Better targeting of direct payments to the provision of public goods;
- Better targeting of direct payments to needs for income support.<sup>9</sup>

It might be of interest to compare the objectives defined by the Commission with those invoked by legislators and with those set forth in the Treaty. The Commission’s catalogue of objectives does not match those in the Treaty, which are still officially accepted, or those defined by legislators. The Commission seems to be more affected by the present policy debate among policy makers at the EU level than by the official legislation. The focus of the Commission was evidently on responding to political forces, and thus the official objectives were neglected.

For example, consider the first objective, which states that “more equitable distribution of decoupled payments among Member States” should be the aim. It is not supported by economic reasoning that a more equitable distribution of direct payments across countries would be in line with either the productivity objective or the income objective. The incomes of farmers in the new Member States might be lower or higher than of comparable groups within a specific country. If the CAP plans to equalise farmers’ incomes within the EU, it is likely not in line with the corresponding interpretation of the Treaty’s income objective. Empirical data show that agricultural income in the new Member States did increase significantly in the years after accession, and it is not evident that higher governmental support is needed to equalise farmers’ incomes with non-farmers’ incomes.

If the Commission implicitly assumes that the adjustment of payments across the Member States will contribute to the productivity objective, it must be proven rather than assumed that smaller payments per hectare in the old Member States and higher payments per hectare in the new Member States would increase overall agricultural productivity in the EU and also contribute to the “fair standard of living” of the agricultural community – both in the countries that benefit from higher payments as well as in the countries that forego some part of payments. However, to simply state that direct payments must be adjusted is not in line with the official objectives of the CAP.

The same line of reasoning holds for the Commission’s goals regarding the provision of public goods. It is not proven and is not supported by economic reasoning that all farmers in the EU must receive the same payment per

<sup>7</sup> European Commission: Common Agricultural Policy towards 2020, Impact Assessment, (COM(2011) 625 final), 2011.

<sup>8</sup> Regulation 1306, 2013.

<sup>9</sup> European Commission: CAP Towards 2020 Impact Assessment, Annexes 3A-D: Direct Payments, (COM(2011) 625 final), 2011.

hectare for the provision of public goods. Public goods are not directly fixed to a highly heterogeneous quality of land; moreover, the costs of providing public goods and the demand for them differ among regions and countries. In addition, the public demand for a specific public good depends on the willingness to pay of potential users and their preferences, as well as on the availability of public goods without state intervention. As these determinants differ across regions, it is not economically efficient to compensate farmers equally for producing public goods. These considerations regarding objectives and direct payments lead to the first important conclusion, namely that this policy intervention cannot be efficient because it does not target the achievement of specific objectives. Nevertheless, this policy intervention can still be effective.

In summary, the EC's evaluation of agricultural policy measures in the EU lacks a clear definition of policy objectives, a coherent set of policy objectives and quantification of the objectives. Consequently, the EC is not prepared to produce a state-of-the-art evaluation of direct payments, because the benefits of the policy intervention cannot be assessed. Nevertheless, the methodology of the EC might be useful if at least a positive causal relationship between the costs of the policy and the benefits could be evidenced.

### Provision of a diagnosis

A clear diagnosis plays an important role in any policy analysis. First, the evaluator must determine whether there is a need for a policy intervention. Second, one must determine whether a specific intervention is likely to contribute to the desired change in the policy objectives. Both tasks require identifying the specific impact of the policy intervention, which is necessary to compare situations with and without a policy intervention.

The EC has not followed such a state-of-the-art approach. The need to identify the specific impact of direct payments has been neglected. Instead, the EC has used impact indicators to support the need for the specific policy intervention and to highlight the impact.

### The use of policy indicators for policy evaluation

EU legislation recommends that the EC use impact indicators to assess the CAP.<sup>10</sup> The EC has listed numerous indicators that it has classified as impact indicators, result indicators and output indicators.<sup>11</sup>

<sup>10</sup> Regulation (EU)...., op. cit., Art. 110.

<sup>11</sup> Commission Implementing Regulation (EU) No. 834/2014 of 22 July 2014 laying down rules for the application of the common monitoring and evaluation framework of the common agricultural policy, Official Journal of the European Union, L 230/1, 1 August 2014.

The EC proposes using the following impact indicators to evaluate the impact of direct payments for the objective “viable production”:<sup>12</sup>

- agricultural entrepreneurial income
- agricultural factor income
- agricultural productivity
- EU commodity price variability

These indicators are calculated for consecutive years. A positive change over time is interpreted as evidence of a positive impact of policy interventions towards achieving the policy objective.

The problem with these and all other indicators is two-fold. First, they do not identify a causal relationship; they express a specific relationship between two statistical variables. While these indicators may have value in informing on a specific situation or relationship, they cannot be used to quantify a causal relationship. This main drawback inherent in all four of these indicators will be highlighted through analysing the use of these impact indicators in evaluating the effects of direct payments on the objective “viable production”. The second problem with these indicators is that individual indicators may not mirror the value of policy variables adequately.

Due to space limitations, we only discuss the calculation of the first impact indicator – which is most closely related to the objective “viable production” – and the use of these variables for evaluation purposes. Nevertheless, examining a limited number of these impact indicators may allow for the broader identification of the main problems with their utilisation for policy evaluations.

### Agricultural entrepreneurial income

While the method used for calculating this variable is well-described,<sup>13</sup> the question of how this variable can be used in the evaluation process remains open. Agricultural entrepreneurial income is equal to the portion of farm income that is available for the remuneration of unpaid labour for the farm family and the capital owned by the farm family. Notably, this income includes either a partial or the total amount received by direct payments, depending on whether the farmer cultivates rented land and has to pass

<sup>12</sup> European Commission: Impact Assessment. Common Agricultural Policy towards 2020, Annex 3, SEC(2011) 1153 final/2, Commission Staff Working Paper, 20 October 2011.

<sup>13</sup> Ibid.

over a portion of the direct payments to the landowner. Consequently, the assumption that agricultural entrepreneurial income would be reduced by the same amount as a decrease in the amount of direct payments received by the farmers is highly misleading. A significant difference exists between the recipient of the payments and the beneficiaries. The transfer efficiency is significantly smaller than 1. Hence, this indicator cannot be used to explain the performance of the CAP. The indicator does not show what the performance of the CAP might have been without direct payments.

The EC also uses this variable to describe the present state of agriculture concerning the income situation. Agricultural entrepreneurial income is divided by agricultural work units; the result is family farm income from unpaid farm labour. This derived variable is compared with “an average of the gross wages and salaries in the whole economy at current prices in cash and in kind”.<sup>14</sup> Figure 1 presents the results of the EC’s comparison.

The EC interpreted Figure 1 as follows:

While the EU agricultural sector has displayed a rapid increase in farm size and a significant improvement of productivity, many farms still depend heavily on direct payments due to the low profitability of agricultural activities. Direct payments represented on average 29% of agricultural income in the period 2007-2009 (with total subsidies coming close to 40% of agricultural income).<sup>15</sup>

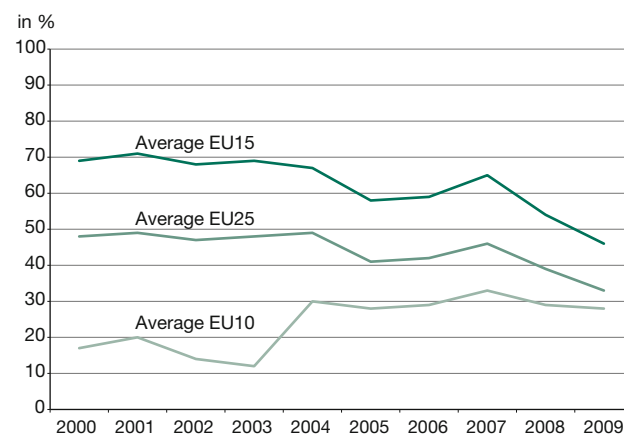
This interpretation is highly questionable for several reasons. First, the income comparison is misleading. The data were taken from Eurostat Economic Accounts for Agriculture, Agricultural Labour Input Statistics and National Accounts. So-called farm family income does not refer to a specific section of farmers but includes the entrepreneurial income earned by the entire agricultural sector. Hence, this includes income generated by the agricultural activities of part-time farmers, hobby farmers, family farms and legal entities.

Thus, it is not at all obvious how the variable “family farm income” relates to “viable production”. Moreover, this variable does not include farmers’ incomes from non-farm activities, such as remuneration from off-farm work and capital owned but invested in the non-farm sector.

<sup>14</sup> Ibid.

<sup>15</sup> European Commission: CAP Towards..., op. cit., p. 11.

**Figure 1**  
**Evolution of agricultural income as a percentage of total average income**



Notes: The figures in the graph reflect the agricultural entrepreneurial income per annual work unit as a percentage of wages and salaries per annual work unit in the total economy. Note that these figures should be interpreted with care owing to conceptual differences between the measurement of farmers’ income from agricultural activities and average wages in the economy, and that, due to the lack of reliable data on full-time equivalent labour statistics for the total economy for some Member States, only some of them have been considered to calculate the averages (EU15: EL, ES, FR, IT, NL, AT, PT; EU10: CZ, EE, HU, PL, SK; EU25 = EU15 + EU10 countries).

Source: European Commission: Commission Staff Working Paper. Impact Assessment Common Agricultural Policy towards 2020 Annex 3, 2009.

Second, as noted by the EC, the data based on agricultural work units were only rough estimates and were not available for all EU Member States.

Third, the occupational qualifications of farm labour and non-farm salary and wage earners are different; they are likely much higher for the latter on average.

Fourth, entrepreneurial income does not include non-monetary income from the ownership of houses or savings from renting apartments or houses. Several wage and salary earners spend up to 30% of their net income on housing. If this difference were taken into account, the presented income gap would vanish in most years for the EU15.

Fifth, it is misleading to compare gross income if taxation for farmers differs from that of non-farmers. This is the case for some countries, such as Germany.

Sixth, a comparison of average incomes of a large group of individuals with huge differences in income cannot be used for income policies, such as direct payments linked



to land endowment. It is well known that direct payments increase income disparity among farmers, and moreover, recipients are not always beneficiaries. The EC's statement that "direct payments represented on average 29% of agricultural income in the period 2007–2009 (with total subsidies coming close to 40% of agricultural income)"<sup>16</sup> is highly misleading, as it completely neglects the transfer of these payments from the recipient to the landowners. Those who transfer part of the payments directly reduce their income by the same amount, because payments for rental land are expenses.

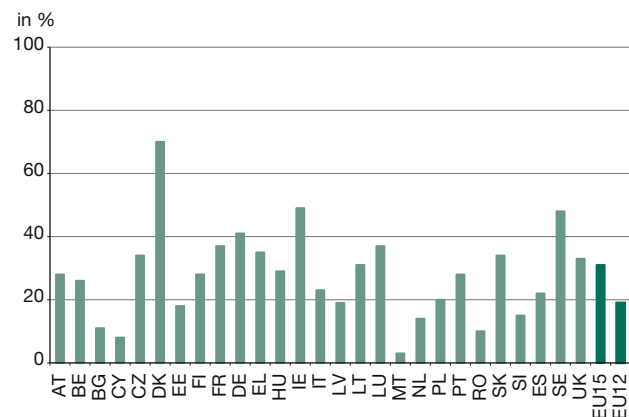
The EC used the variable agricultural entrepreneurial income for another income comparison. According to the Treaty of Rome and the following amendments, one objective of the agricultural policy is to contribute to a fair standard of living for the agricultural community. The EC assumes that agricultural entrepreneurial income ("family farm income") is an indicator of the standard of living of the self-employed in agriculture that can be used to assess the impact of changes in the level of public support, i.e. direct payments, on the standard of living/purchasing power of farmers. Based on the qualifications presented regarding the entrepreneurial income, this assumption must be rejected.

Moreover, the data provided by the Commission (see Figure 2) does not support its conclusion that direct payments have positively contributed to the achievement of the objective "viable production". Figure 2 overestimates the importance of direct payments for agricultural income because, as mentioned above, a share of these payments is transferred to landowners who might not be farmers. Moreover, the beneficiaries of the payments are often part-time or even subsistence farmers. Thus, the contribution of these types of farmers to the "viable production" objective is unclear. Figure 2 assumes implicitly that the structure of the agricultural sector with respect to farm sizes and productivity would be very different without direct payments.

It can be concluded that the EU's approach does not clarify whether there is a need for policy actions to improve contributions to the "viable production" objective or whether policy interventions have contributed to a positive change in this policy variable. Moreover, it should be noted that the EC did not use the data set derived from the Farm Accountancy Data Network, despite the fact that EU legislation specifies that the FADN data set should be the main source of data used for policy evaluations. However, there may have been good reasons for not using it.

<sup>16</sup> Ibid.

**Figure 2**  
**Share of direct payments (expenditure) in**  
**agricultural factor income (average 2007–2008)**



Sources: DG AGRI; Eurostat.

### The use of FADN data for evaluating the impact of direct payments

Launched in 1965, the FADN is the basis for evaluating the income of agricultural holdings in the EU, based on annual surveys for each Member State. Currently, the annual sample covers approximately 80,000 agricultural holdings, selected according to a plan that allows the sample to be representative of the approximately 5 million total EU farms. This farm population covers approximately 90% of the total utilised agricultural area (UAA) and accounts for about 90% of total agricultural production. A national liaison agency is responsible for data collection in each Member State. FADN results are calculated from the farm returns that are periodically produced and published. Costs for collecting this data are reimbursed by the Commission based on successfully completed farm returns. The Member States are free to use various organisational structures to collect FADN data. In Germany, for example, the German Federal Ministry of Agriculture defines the selection plan, which takes region, farm type and farm size into account. The Commission validates and approves the data.

Whether or not a sample provides statistically reliable information depends on the specifics of the associated population. No single sample will allow for the assessment of all policy measures' impacts. A reasonable definition of the population should consider the objectives of the policies. The population and sample should allow the researcher to verify the impact of specific policy measures with respect to the achievement of policy objectives. Therefore, an examination of the representativeness of the FADN data must begin with the policy objectives and

an investigation of whether the defined population and sample are related to the policy objectives.

The selection of farms in the FADN is based on a specific definition of a farm holding. According to a 1965 regulation, the FADN should report on commercial farms.<sup>17</sup> A commercial farm is defined as a farm that is large enough to provide a main (income) activity for the farmer and a level of income sufficient to support his or her family. In practice, to be classified as commercial, a farm must exceed a minimum economic size. The minimum size differs across Member States because the income needed to support a family depends on the economic environment, including the incomes of the non-farming population. The definition of a commercial farm also indicates that the FADN was established to report on the economic situations of family farms.

When FADN began in 1965, agricultural production units were family farms in the EU with few exceptions. Over the years, other types of production units, such as corporations and partnerships, have emerged in the EU, mainly due to EU enlargement. These entities are by no means family farms, yet confusion reigns as to whether they ought to be included. For example, Poland attempts to include them but has difficulties obtaining the necessary information; the same holds for Romania. Germany includes legal entities located in former East Germany in the data set but not those from the former West.

A special issue involves how to treat activities related to agricultural production that are set up as a separate legal entity. In some countries, these activities are included (e.g. Romania, Poland); in others, they may be included if they are a part of the farm and not a separate legal entity (e.g. Germany). The importance of these activities significantly differs across EU countries. Thus, it can be concluded that the criteria for the definition of a farm population, which should be the basis for collecting data for the FADN, is not uniform across countries.

The criteria for selecting farms for FADN purposes do not match the criteria defined for selecting farms that are entitled to direct payments. The selection criterion for FADN purposes is standard output (SO), but for most direct payments, it is the farm size measured in hectares. Unfortunately, it is not possible to define a linear relationship between farm size measured in SO and farm size measured in hectares. Romania serves as an illustration of the prob-

lem. The minimum farm size included in the FADN data set is €2,000 based on SO. The minimum farm size entitled to direct payments is one hectare. The data on SO per hectare for alternative agricultural products reveals that there are only three products that result in an SO of at least €2,000 per hectare: mushrooms, some permanent crops and laying hens. The majority of farms must cultivate significantly more than one hectare to produce an output of at least €2,000.

This mismatch between the definition of farms that are included in the FADN data set and farms that are entitled to direct payments has significant implications for the use of the data set to assess the impact of direct payments. Moreover, the mismatch in the selection of farms distorts cross-country comparisons of the impacts of direct payments. Results based on FADN data for the aggregate of all EU member countries do not allow reasonable policy conclusions to be drawn. Most importantly, FADN data does not illustrate the costs of policy interventions.

The randomness of a sample is an important indicator of quality, particularly for evaluating and testing hypotheses about the underlying population by using sample information. There is almost no doubt that FADN samples are non-random. Even in cases in which an attempt is made to select them randomly, the response rates are very low, which likely leads to problems with self-selection biases. While self-selection biases may be limited for variables such as region, farm type and farm size by the use of stratification schemes, such problems could still occur for the main variable of interest, farm income.

Income parameters are the main purpose of FADN sampling; however, the design of the FADN sample does not optimise the efficiency of income parameters. The various countries that were investigated (Germany, France, the Netherlands, Poland, Spain and Romania) showed different strategies for the stratification schemes; however, the general structure of classes for farm size, farm type and region were similar. It appears that these strata are mainly used to argue that the sample fits the population in some respects. In some cases, the number of strata could be too high, which could reinforce effects caused by the movement of farms between strata over time. Moreover, the population surveys used for the sample design are not updated each year; thus, the population information has a definite time lag.

The FADN data represents family farms better than it does commercial farms, partnerships and legal entities, which are often underrepresented in the sample. Consequently, their income measures are misleading to some extent. Furthermore, in all of the Member States investi-

17 European Council: Regulation No. 79/65/EEC of the Council of 15 June 1965 setting up a network for the collection of accountancy data on the incomes and business operation of agricultural holdings in the European Economic Community, Official Journal of the European Communities, 1859/65, 23 June 1965.



gated, the reporting of agricultural working units appears to be a critical factor. These units are highly relevant to the EU's income analysis, and the reporting is very likely significantly biased.

The comparability of FADN data over time is not ensured. Additional calculations or analyses must be performed to ensure comparability over time. The cross-sectional comparisons need to be adjusted based on the purpose. For example, income comparisons over cross sections that do not take measures of the cost of living into account are illogical.

## Summary

The EU's approach to assessing the impact of its agricultural policy relies on the quantification of impact indicators. These indicators do not clarify whether there is a need for policy actions to improve contributions to policy objectives. The change of an impact indicator over time does not identify the determinants of the change. All indicators can change due to numerous exogenous variables, not only (or mainly) due to policy intervention. Thus, the most difficult tasks in policy evaluation are identifying the effect of all determinants of change in a policy objective and specifying the pure effect of policy intervention. The EC has completely neglected these important steps in its policy analysis.

The EC has also failed to investigate the costs of direct payments or to compare benefits with costs. The quantification of costs requires the quantification of what could have been produced in the entire economy in monetary terms without direct payments to farmers. The comparison must take into account the impact of payments on the structural change of the agricultural sector as well as governance costs, including administrative costs and compliance costs for farms. The comparison would most likely show that the costs would be significantly higher than the benefits, and eliminating them would not negatively affect the "viable production" objective.

The quality of policy evaluations depends to a large extent on the selection of an adequate database. The European Commission must base policy evaluations on the Farm Accountancy Data Network. Farms included in the network are by definition not entitled to receive direct payments. Moreover, the criteria for the selection of farms differ somewhat across Member States. Data for employment is most likely biased upwards and does not show the actual contribution of direct payments. The EC uses data from Eurostat in addition to the FADN data. This data is not adequate for the evaluation of the impact of direct payments, as it does not indicate what the effect on family farm income or viable production would have been without policy intervention.