# DISTRIBUTIONAL EFFECTS OF REFORMED DIRECT PAYMENTS POLICY ON SLOVENIAN AGRICULTURE

## Miroslav REDNAK<sup>1</sup>, Emil ERJAVEC<sup>1</sup>, Tina VOLK<sup>1</sup>, Maja KOŽAR<sup>2</sup>, Stane KAVČIČ<sup>2</sup>

<sup>1</sup>Agricultural Institute of Slovenia, Dept. for Agricultural Economics, Hacquetova 17, SI-1000 Ljubljana, Slovenia <sup>2</sup>University of Ljubljana, Biotechnical Faculty, Dept. of Animal Science, Chair for Agricultural Economics, Policy and Law, Groblje 3, SI-1230 Domžale, Slovenia

## ABSTRACT

The paper attempts to estimate the redistribution of direct payments under different alternatives of the 2003 reform of the EU Common Agricultural Policy (CAP) among the agricultural holdings in Slovenia. The scenario analysis is based on a static deterministic model of agricultural holdings and includes 57,204 agricultural holdings which applied for direct payments in 2004. The distribution of direct payments under different alternatives of CAP reform was compared against the distribution of standard scheme with 100 % EU level of payments. Introduction of a net regional scheme with a defined single area payment would result in a drop in budgetary transfers to 12,425 holdings (22 %) in comparison with the standard scheme. These holdings receive a bulk of direct payments (44 %) under the current standard scheme. Estimated impacts by sectors reveal that the negative distributive effects occur mainly in the beef and milk sectors. Slovenia (and most of the old Member States) has decided not to introduce a net regional scheme, but hybrid reform scheme combined with historical payments and certain coupled payments. The policy makers were seeking for minimizing the redistribution effects of the reform. The question is, if in this case the objectives of policy changes are fulfilled and new public concerns about agriculture are met satisfactorily.

Key words: CAP reform, direct payments, redistributive effects, agricultural holdings, Slovenia

## **1 INTRODUCTION**

Modern agricultural policy has mainly hidden agenda to gain the political power trough reaching the income objectives of the specific farming interest groups [8]. The policy reforms could lead to income redistribution and therefore the policy makers are seeking for minimizing the policy reform changes. The issue is not satisfactory covered by the economic literature due to policy dimensions of such analysis, however is gaining on the importance [10]. The paper is aiming to discuss the issue on the case of 2003 European Union Common Agricultural Policy reform on the case of Slovene agriculture.

The most significant novelty of the 2003 reform of the Common Agricultural Policy (CAP) is the introduction of decoupled payments in the form of a single farm payment (SFP) [1] which can be paid either on the basis of past entitlements of the individual holding or as a single area payment equal for all producers in a certain area ("regionalisation" of SFP or regional payment scheme). The SFP can be combined with certain coupled payments of the pre-reform policy [5; 1].

The Council of Ministers imposed on the new Member States to introduce a regional version of the SFP, with certain elements allowed to remain production-coupled [6]. The 2003 CAP reform raised expectations about mitigating the income/agricultural support distribution skewed towards the largest, high-income farm units [1;10]. However, the recurrent question to what extent a certain (agricultural) policy successfully tackles this problem of income inequality (in terms of distributive justice) remains open [10]. Namely, recent studies for different EU Member states (for review see [11]) report that the 2003 CAP reform will have only minor income distributional effects due to the retained proportionality of agricultural supports with current or past level of production named as historical rights option of the reform [3;10]. Contrary to the expectations the 2003 CAP reform along with the inherent differences in the natural and structural characteristics between agricultural holdings at least preserves in not adds to the income inequality among agricultural holdings [10]. Nevertheless, it should be considered also that the distribution of agricultural policy transfers can to some extent reflect political goals other then income support, such as environmental, sustainability or rural development goals [3; 4]. The another extreme option of the reform is the introduction of flat-rate payments (named also as single area payment or net regional scheme) which is a compulsory basis for the implementation of the reform for the new Member States, but in the pure form only rarely used in the old Member States (England and Germany after the long transitional period [2]). The aim of the presented paper is to estimate the potential redistribution of direct payments in case of introduction of net regional scheme of the 2003 CAP reform in Slovenia by applying static deterministic model of agricultural holdings.

## 2 METHOD OF WORK AND DATA

To accomplish the analysis a static deterministic model of agricultural holdings was developed based on the IACS data of the Agency of the Republic of Slovenia for Agricultural Markets and Rural Development for all agricultural holdings which applied for direct payments in 2004. The model input data include physical indicators on areas, livestock, milk production and received CAP like direct payments in the reference year 2004. The model allows calculation of various levels and types of direct payments and formation of the categories of farms by type of received payments, size (area and stocks) as well as classification by location in the less-favoured areas. All in all, 57,204 agricultural holdings were included in the comparative analysis. For each analysed



Volume 7 (2006) No. 3

#### 1st International Conference on Agriculture and Rural Development, Topusko, Croatia, November 23-25 2006

agricultural holding the value of direct payments by type of payments under the existing (standard) CAP measures presents 100 % level of payments and is compared to the results of various scenario schemes under the CAP reform.

The scenario analysis is based on two reference scenarios. The first, ("SS"), represents the distribution of direct payments under the standard scheme, taking into account the 100 % level of payments, hence it can be considered as "non-reform" scenario. The second reference scenario ("R" - net regional scheme) represents an implementation of SFP in form of a single payment per hectare of arable land and grasslands.

The redistribution effects of the 2003 CAP reform are represented with the distribution of agricultural holdings and direct payments by production types and by classes of redistribution effects and with the comparison of the levels of direct payments before (standard scheme) and after the implementation of the reform. Altogether, seven classes of redistribution effect were formed. The classes -3 and +3 include agricultural holdings which lose or gain more than 50 % of the total value of direct payments compared to scenario "SS", respectively. The classes -2 and +2 include the holdings with the change in total payments ranging from 30 to 50 %, the classes -1 and +1 include the holdings with the change from 10 to 30 % and the class 0 includes the holdings where the payments changed by up to 10 %.

The production types were formed according to the proportion of the values of the individual type (or group) of payments under standard scheme in the total value of direct payments received by the holding. A holding is ranked into a certain production type if the specific payment for this type represents more than 50 % of the total value of direct payments. If none of the payments exceed 50 %, the holding is ranked in the group called "mixed" ("Mix"). Other production types are: arable crops ("Crop"), cattle fattening, where bull premiums represent most of the supports ("Bulls"), and by the analogy cattle-suckler cows ("Suck."), milk production ("Milk") and sheep breeding ("Sheep"). The results for the whole sample are presented with "SUM".

### **3 RESULTS AND DISCUSSION**

Model results suggest that net regional scheme could have significant redistribution effects (Table 1) compared to the pre-reform (standard scheme) policy, as the payments would go down in 12,425 agricultural holdings (22 %). Expressed in the value of the standard scheme payments, these "losing" holdings account for 44 % of payments. On average, the "losing" holdings would in the event of the net regional scheme realize 68 % of the payments of the standard scheme. All in all, 1,167 holdings (2 %) would lose more than 50 % of payments.

|                         | Classes of redistribution effects |      |      |       |       |       |       | - Total  | Lose  | Cain  |
|-------------------------|-----------------------------------|------|------|-------|-------|-------|-------|----------|-------|-------|
|                         | -3                                | -2   | -1   | 0     | 1     | 2     | 3     | - I Utal | LUSC  | Gaill |
| Number of holdings (AH) | 1167                              | 4163 | 7095 | 10352 | 7037  | 5265  | 22125 | 57204    | 12425 | 34427 |
| % of AH                 | 2,0                               | 7,3  | 12,4 | 18,1  | 12,3  | 9,2   | 38,7  | 100,0    | 21,7  | 60,2  |
| % of payments under SS  | 5,7                               | 16,9 | 21,2 | 22,3  | 11,2  | 7,2   | 15,6  | 100,0    | 43,7  | 34,0  |
| Payments index (SS=100) | 41,1                              | 60,7 | 79,9 | 99,2  | 118,9 | 139,7 | 257,4 | 115,2    | 67,5  | 187,1 |

Table 1: Redistribution effects in case of implementing the net regional scheme

On the other hand, the introduction of net regional scheme would bring about a rise in payments for a significant part of the holdings (60 %). Compared to the standard scheme, 22,125 holdings (39 %), ranked in class 3, and would be allocated more than 50 % higher payments by the net regional scheme compared to the standard scheme. On the whole, more holdings would gain than lose by introduction of the net regional scheme. Only for 18 % of holdings (received 22 % of total standard scheme payments founds), the level of payments would not be affected by the change of the scheme markedly.

The comparison by agricultural sectors shows that the redistribution effects would be the most negative in beef ("Bulls") and milk production (Figure 1). As these sectors also take up an important share in the "mixed" type, the effects are extremely negative also for this production type. More than 35 % of the holdings of the type "Bulls" (68 % of payments) would be ranked in the losing groups, receiving less than 60 % of payments according to the standard scheme. Under the standard scheme this production type is relatively strongly supported and the stocking density is high which has lead to the higher level of direct payments per ha. In crop production, the changes would be relatively small. However, the sectors with production largely connected to grasslands would gain substantially as the stocking density in these sectors is lower (suckler cows, sheep).

As introduction of the CAP reform by applying regional option of single payment scheme would result in considerable redistribution of direct payments funds among individual agricultural holdings, Slovenia was seeking for solutions to mitigate the redistribution effects and avoid possible market distortions. More than 20 additional possibilities (scenarios) for the implementation of CAP reform were evaluated using the presented model. After long discussions and negotiations with Commission Slovenia finally decided to implement hybrid direct payment scheme [2; 9], which comprises regional flat-rate payment, different for arable land and grasslands, payments on the base of historical rights (milk, beef, sugar), most of production-coupled payments (special beef premium, sheep premium) and specific additional payment for female cattle animals breed for calf production.

Hybrid reform scheme which Slovenia has decided for is close to the schemes introduced in the majority of old Member States.

Slovenia, as other Member States, tried to minimize redistribution of direct payments among agricultural holdings caused by the reform implementation (Figure 2).

#### **3 CONCLUSIONS**

Based on the presented results it can be concluded that the introduction of the net regional payments under the 2003 CAP reform would result in a significant redistribution of direct payments among agricultural holdings in Slovenia compared to the pre-reform situation. This could be detrimental to a significant number and production types of the analysed agricultural holdings, especially those in beef production.

The redistribution is an important politically sensitive side-effect of the analysed reform which could significantly affect the economic attractiveness of individual production types and thus lead to different competitive positions of producers in different EU regions. Redistribution effects may be alleviated by various forms of specific compensatory payments, as well as by enabling gradual adjustment to changes. This is all to a large extent considered in the decision about the 2003 CAP reform policy option, accepted in June 2006 [2; 9].

The analysis clearly shows how the income objectives, here clearly expressed as the minimizing the redistribution effect, determine the policy decisions. On this way one of the key characteristics of the modern agricultural policy, this is that the subsidies are mainly located to the specific farm groups (in Slovene case bigger beef and dairy farms), which could be evaluated as problem from the equity, fairness and welfare perspective [8] is not touched, oppositely related concerns lead to the final decisions in Slovenia and in the majority of the developed countries. The other important public policy issues related to agriculture and agricultural policy, like the environment, food safety and animal welfare, are normally not tackled in the discussion about many times where technical



Figure 1: Redistribution effects (% of payments under SS) in case of implementing the net regional scheme by classes of redistribution effects and production types.



Figure 2: Redistribution effects (% of payments under SS) in case of implementing net regional scheme ("R") and hybrid scheme ("H") by classes of redistribution effects and production types.

#### 1st International Conference on Agriculture and Rural Development, Topusko, Croatia, November 23-25 2006

and complex issues. The legitimacy of such policy decision is questionable and will gain on the importance in the future.

#### **4 REFERENCES**

[1] Agra Focus. 2003/2005. (Various sources)

[2] Agra/Facts. 2006. No. 68-06

[3] Allanson P. 2004. CAP Reform and the Distribution of Farming Income in Scotland. Working Paper No. 147. Dundee, Department of Economic Studies, University of Dundee: 31 p.

[4] Allanson P. 2005. Impact of Farm Income Support on Absolute Inequality. Working Paper No. 178. Dundee, Department of Economic Studies, University of Dundee: 18 p.

[5] Council Regulation 1782/03. 2003. Council Regulation (EC) No 1782/2003 of 29 September 2003 establishing common rules for direct support schemes under the common agricultural policy and establishing certain support schemes for farmers and amending Regulations (EEC) No 2019/93, (EC) No 1452/2001, (EC) No 1453/2001, (EC) No 1454/2001, (EC) 1868/94, (EC) No 1251/1999, (EC) No 1254/1999, (EC) No 1673/2000, (EEC) No 2358/71 and (EC) No 2529/2001.Official Journal of the European Union, 46, L 270: 1-69.

[6] Council Regulation 583/04. 2004. Council Regulation (EC) No 583/2004 of 22 March 2004 amending Regulations (EC) No 1782/2003 establishing common rules for direct support schemes under the common agricultural policy and establishing certain support schemes for farmers, (EC) No 1786/2003 on the common organization of the market in dried fodder and (EC) No 1257/1999 on support for rural development from the European Agricultural Guidance and Guarantee Fund (EAGGF) by reason of the accession of the Czech Republic, Estonia, Cyprus, Latvia, Lithuania, Hungary, Malta, Poland, Slovenia and Slovakia to the European Union. Official Journal of the European Union, 47, L 91: 1-14.

[7] Council Regulation 864/04. 2004. Council Regulation (EC) No 864/2004 of 29 April 2004 amending Regulation (EC) No 1782/2003 establishing common rules for direct support schemes under the common agricultural policy and establishing certain support schemes for farmers, and adapting it by reason of the accession of the Czech Republic, Estonia, Cyprus, Latvia, Lithuania, Hungary, Malta, Poland, Slovenia and Slovakia to the European Union. Official Journal of the European Union, 47, L 161: 48-96.

[8] Pasour E. C., Rucker R.R. 2005. Plowshares and pork barrels: the political economy of agriculture. Oakland, California, Independent Institute: 384 p.

[9] Official source: Reforma DP v Sloveniji. MKGP, Jun 2006.

[10] Schmid E., Hofreither M.F., Sinabell F. 2006a. Impacts of CAP Instruments on the Distribution of Farm Incomes – Results for Austria. Diskussionspapier DP-13-2006.Wien, Universiät für Bodenkultur Wien, Department für Wirtschafts- und Sozialwissenschaften, Institut für nachhaltige Wirtschaftsentwicklung: 14 pg.

[11] Schmid E., Sinabell F., Hofreither M.F. 2006b. Distributional effects of CAP instruments on farm household incomes. Selected Paper prepared for presentation at the American Agricultural Economics Association Annual Meeting, Long Beach, California, July 23-26, 2006: 22 p.