# POST-ACCESSION INCOME SITUATION OF AGRICULTURAL HOUSEHOLDS IN SLOVENIA UNDER DIFFERENT DIRECT PAYMENTS POLICY OPTIONS POPRISTOPNI DOHODKOVNI POLOŽAJ KMEČKIH GOSPODARSTEV V SLOVENIJI IN RAZLIČNE SHEME NEPOSREDNIH PLAČIL

\*Maja KOŽAR¹, Stane KAVČIȹ, Emil ERJAVEC¹

1University of Ljubljana, Biotechnical Faculty, Zootechnical Department, Chair for agricultural economics, policy and law, Groblje 3, SI-1230 Domžale, Slovenia;

\*Corresponding author: Tel.:+386 (0)1 7217 839; Fax:+386 (0)1 7241 005; e-mail: maja.kozar@bfro.uni-lj.si

Manuscript received: May 12, 2006; Reviewed: October 11, 2006; Accepted for publication: November 29, 2006

#### **ABSTRACT**

This rapid communication presents main results of the analysis of the income impacts of different direct payment policy options after the accession of Slovenia to the EU at the level of agricultural households. By applying static deterministic total income model, different post-accession direct payments policy options were investigated, with special attention given to the 2003 Common agricultural policy (CAP) reform provisions. The main conclusions based on model results are: i) the improved post-accession income situation of analyzed households under all post-accession policy scenarios, ii) standard direct payments scheme estimated as income most beneficial, followed by basic flat-rate area payment option (entirely decoupled) and iii) detection of possible redistributive impacts of 2003 CAP reform in favour of agricultural households engaged in extensive agricultural production.

KEY WORDS: agricultural households, EU enlargement, CAP reform, income impacts, Slovenia

# **IZVLEČEK**

Kratki znanstveni prispevek predstavlja pomembnejše rezultate raziskave o dohodkovnih učinkih različnih shem neposrednih plačil po pristopu Slovenije k Evropski uniji na ravni posameznih kmečkih gospodarstev. Z uporabo statičnega determinističnega modela za oceno skupnega dohodka kmečkih gospodarstev smo preverili različne popristopne sheme neposrednih plačil, poseben poudarek pa je bil dan reformi Skupne kmetijske politike (SKP) iz leta 2003. Poglavitne ugotovitve na podlagi modelnih rezultatov so: i) izboljšano dohodkovno stanje analiziranih kmečkih gospodarstev po pristopu k EU v primeru vseh popristopnih scenarijev ii) standardna shema neposrednih plačil ocenjena kot dohodkovno najugodnejša shema (v celoti proizvodno nevezana čista regionalna shema ocenjena kot druga dohodkovno najugodnejša shema) ter iii) ocena, da bi reforma SKP iz leta 2003 lahko imela ugodnejše dohodkovne učinke za proizvodno ekstenzivnejša kmečka gospodarstva (možnost prerazdelitve sredstev za neposredna plačila).

KLJUČNE BESEDE: kmečka gospodarstva, širitev EU, reforma SKP, dohodkovni učinki, Slovenija



# Maja KOŽAR, Stane KAVČIČ, Emil ERJAVEC

#### INTRODUCTION

The European Union (EU) accession process of Central and Eastern European countries (CEEC-10) coincided with the latest reform process of Common agricultural policy (CAP) of the EU. Gradual decoupling of support from production is one of the main features of the 2003 CAP reform in terms of direct payments (DP) [5]. In order to mitigate short-term income redistribution effects, the Member States were enabled to use various alternatives of retaining these supports partially production coupled. In the immediate post-accession period (2004-2006) Slovenia as one of the New Member States (NMS) could decide on implementing either standard (productioncoupled) DP scheme (CAP accepted for the EU-15 Member States in period 2000-2006), or "simplified" DP scheme ("Simplified area payment scheme" or "SAPS"), a production decoupled area payment [14]. Besides Malta, Slovenia was the only NMS to opt for the standard DP scheme in the immediate post-accession period.

In the period when 2003 CAP reform provisions should be implemented (in 2007 at the latest), NMS are obliged to implement "regional flat-rate payment" (based on the regional reference quantities), with an option to retain certain elements of standard DP scheme [5 and 1].

The aim of this rapid communication is to allude to the possible income impacts of different reform policy options in the field of DP at the level of agricultural households in Slovenia [8]. The presented results could be of interest to other NMS as well as to the South-Eastern European candidate countries in terms of possible comparison of the income impacts of the latest CAP reform or accession impacts.

## **MATERIALS AND METHODS**

Results were obtained by applying static deterministic total income model for rural households in Slovenia TIM ([2], [9] and [7]), which enables rough estimations of incomes by different sources (income from agriculture, income from off-farm activities, income from self-employment activities and income from other sources) as well as estimation of labour allocation at the household level.

Data consist of income survey data for 120 agricultural households, carried out in year 2001, and of selected secondary data [11 and 13]. Details on data collection, sampling procedure and sample features are described in [2] and [9].

Basic model assumptions:

- Years 2001 and 2006 are considered as base year and as simulated post-accession year, respectively.

- Only policy changes in agricultural sector based on the accession agreements for Slovenia were considered [14 and 4].
- Prices of agricultural products in year 2006 were set according to the expert opinion about the expected 5% decrease of overall price level [6] (price decrease the same in all post-accession scenarios).
- Income impacts are presented in terms of real prices.
- Sample households were assumed to be eligible for the entire set of CAP aids in years 2001 and 2006 within their production limitations and natural conditions for agricultural production in year 2001.
- Analyzed scenarios are described in Table 1.

# **RESULTS AND DISCUSSION**

- 1. Post-accession income situation of analyzed households was estimated to improve in case of all DP policy scenarios at the aggregated sample level as well as considered by employment types or by income groups, in which households were ordered according to their total income in 2001 (detailed results in [8]). Improved income situation is reflected in the increased income from agriculture and total income (Table 2.).
- 2. Standard DP policy scheme (2001) was estimated to be more income beneficial and thus more politically acceptable than simplified scheme (SAPS) in the immediate post-accession period (2004 to 2006). This was corroborated with Slovenia's choice to further apply standard DP scheme in that particular period.
- 3. In case of CAP reform policy options (FLAT0, FLAT1) direct payments funds could reallocate to households less intensive in terms of production and factor use (parttime farms, lower income groups). Reasons for that could partially lie in the sample characteristics. Sample households were on average production and factor more intensive compared to national average [12 and 13]. Compared to national average, they also differed in the structure of production (higher share of milk and beef production) and land use (lower share of permanent grassland).
- 4. In respect of CAP reform implementation, transition from standard DP scheme to flat-rate hectarage payment options (FLAT0 or FLAT1) was estimated potentially riskful in terms of redistributing DP funds among the households. Considering that Slovenia implemented CAP oriented DP policy prior to EU accession, this switch could deteriorate income situation of the core part of Slovenian agricultural households (intensive, prevailing beef and milk production). At the time of submitting this rapid communication, Slovenia's final decision on CAP reform DP policy scheme was not made yet, however

Table 1. Scenario description Preglednica 1. Opis scenarijev

Scenario – long name	Scenario – short name	Short description			
Base year scenario	2001	Estimate of (pre-accession) base year (2001) income			
		situation of sample households.			
Standard DP scheme	EUo	Standard CAP scheme in period 2000-2006; different types			
		of area and headage DP			
Simplified area	SAPS	Decoupled area payment - entire utilized agricultural area			
payment scheme		(UAA) eligible. Value estimated:			
		• 237 EUR per hectare (ha) of UAA.			
Basic	FLAT0	Regionalized decoupled flat-rate area payment, different for			
flat-rate		arable land (area under potato, vegetables and perennial			
area payment scheme		crops excluded) and for permanent grassland. Values			
		estimated:			
		• 289 EUR/ha of arable land,			
		• 243 EUR/ha of permanent grassland.			
Supplemented	FLAT1	Regionalized decoupled flat-rate area payment, different for			
flat-rate		arable land (estimated 235 EUR/ha) and for permanent			
area payment scheme		grassland (estimated 198 EUR/ha), supplemented by coupled			
		standard DP scheme measures:			
		• 100% suckler cow premium and			
		• 40% of slaughter premium.			
1 [4] [11] 1[2]		·			

Sources: [4], [11] and [3] Viri: [4], [11] in [3]

Table 2. Income impacts of alternative DP schemes (whole sample of agricultural households)
Preglednica 2. Učinki različnih shem neposrednih plačil na dohodkovni položaj kmečkih
gospodarstev (celotni vzorec)

		Scenario					
	Unit	2001	EUo	SAPS	FLAT0	FLAT1	
Budgetary support (BS)	1000 EUR	2.2	4.6	4.1	4.2	4.0	
<i>Index 2001 =100*</i>	%	100	210.8	186.2	192.6	180.4	
Income from agriculture (IA)	1000 EUR	7.4	8.7	8.1	8.2	8.0	
Index 2001=100*	%	100	117.5	110.2	112.1	108.5	
Share of BS in IA*	%	29.8	53.5	50.4	51.3	49.6	
Total income of agricultural household (TI)	1000 EUR	19.8	21.1	20.5	20.7	20.4	
Index 2001=100*	%	100	106.5	103.8	104.5	103.2	
Share of IA in TI*	%	37.3	41.1	39.6	40.0	39.2	

<sup>\*</sup> Percentage values were calculated before rounding values in EUR.

different supplemented flat-rate hectarage payment schemes were being analyzed.

5. Due to methodological limitations of the model, presented results allude only to the general directions of possible income impacts of analyzed DP policy options at the level of agricultural households. Hopefully the results provide useful information, particularly in terms of presenting the income impacts of a rather wide range of conceptually different reform DP schemes. Results could be further upgraded, particularly in terms of possible

redistribution of the DP funds to unintended beneficiaries [10].

## **REFERENCES**

- [1] Council Regulation (EC) No 1782/2003, Official Journal of the European Union (2003) 46: L 270, 1-69.
- [2] Erjavec E., Juvančič L., Oblak O., Kožar M., Moljk B., Kolarek P., Kavčič, S., Economic diversification and labour adjustment in the rural households in

<sup>\*</sup> Odstotne vrednosti so bile izračunane pred zaokrožanjem vrednosti, izraženih v evrih.

# Maja KOŽAR, Stane KAVČIČ, Emil ERJAVEC

- Slovenia, Working paper for Project EC-PHARE ACE No. P98-1090-R, University of Ljubljana, Biotehnical Faculty, Chair for agricultural economics, policy and law, Domžale, 2002, 83 p.
- [3] Erjavec E., Rednak M., Volk T., Kavčič S., Uvedba reforme SKP na področju neposrednih plačil v Sloveniji (Implementation of the CAP reform direct payments scheme in Slovenia), in: Tajnšek A. (Ed.), Novi izzivi v poljedelstvu 2004: zbornik simpozija (New challenges in field crop production 2004: proceedings of symposium), Čatež ob Savi, 2004-12-13/14, Slovenian Society for Agronomy, Ljubljana, 2004, pp. 12-19.
- [4] EU and enlargement, Agra Focus, (2003) 83, 1-8.
- [5] EU News CAP reform, Agra Focus, (2003) 89, 1-27.
- [6] Kavčič S., Erjavec E., Ocena dohodkovnega položaja slovenskega kmetijstva po pristopu k Evropski uniji, in: Kavčič S., Erjavec E., Kuhar A. (Eds.), Slovensko kmetijstvo in Evropska unija, 1<sup>st</sup> ed., Slovenian Society of Agricultural Economists DAES, Ljubljana, 2003, pp. 37-52.
- [7] Kožar M., Kavčič S., Erjavec E., Ocena učinkov pristopa Slovenije k Evropski uniji na dohodkovni položaj kmečkih gospodinjstev, in: Kavčič S., Erjavec E., Kuhar A. (Eds.), Slovensko kmetijstvo in Evropska unija, 1<sup>st</sup> ed.,

- Slovenian Society of Agricultural Economists DAES, Ljubljana, 2003, pp. 289-303.
- [8] Kožar M., Kavčič S., Erjavec E., Income situation of agricultural households in Slovenia after EU accession: impacts of different direct payments policy options, Acta agriculturae Slovenica, (2005) 86:1, 39-47.
- [9] Oblak O., An estimate of total income on agricultural households in Slovenia, M. Sc. Thesis, University of Ljubljana, Biotechnical faculty, Department of agronomy, Ljubljana, 2002, 110 p.
- [10] OECD, Farm household income, Issues and policy responses, OECD (Organisation for economic cooperation and development), Paris, 2003, 83 p.
- [11] Rednak M., A development of agricultural policy information systems in Slovenia, Doctoral Thesis, Faculty of Agriculture, University of Maribor, Maribor, 2003, 191 p.
- [12] SORS, Agricultural Census 2000, Research results, No.777, Statistical Office of the Republic of Slovenia, Ljubljana, Slovenia, 2002, 256 p.
- [13] Statistical yearbook, Agriculture and fishing, Statistical Office of the Republic of Slovenia, Ljubljana, 2002, 286-304.
- [14] Treaty of Accession, Treaty, Official Journal of the European Union (2003) 46: L 236, 17-31.