

# AGRICULTURAL SUPPORT: CONSEQUENCES OF THE EVENTUAL ACCESSION OF THE BALKAN COUNTRIES TO THE EU<sup>1</sup>

Sándor RICHTER<sup>2</sup>  
Vienna Institute for International  
Economic Studies, Vienna, Austria

Article\*  
UDC 338.43  
JEL F15, F36, F47, F59, H87

## *Abstract*

*The author estimates the potential impact of the accession of seven Balkan countries (Albania, Croatia, Bosnia and Herzegovina, Macedonia, Montenegro, Serbia and Turkey) to the EU on the agricultural direct payments and rural development expenditures disbursed from the EU budget. The estimation is based on the assumption that the agricultural support to GDP ratios are similar across member states at similar levels of development sharing a similar weight of agriculture in the economy. The results show that the annual additional burden for the 27 current EU members due to a Balkan enlargement would range between EUR 5 and 11.5 billion (in 2004 prices). The former figure reflects an agricultural support to GDP ratio corresponding to the average of the 12 new member states; the latter reflects the respective (average) ratio of Bulgaria and Romania. In relative terms the Balkan enlargement would necessitate a net increase of the pool of transfers for direct payments and rural development expenditures in the range of 10% to 23%.*

*Keywords: Common Agricultural Policy, Balkan, EU enlargement, EU budget, costs of EU enlargement*

---

\* Received: April 16, 2008

Accepted: June 10, 2008

<sup>1</sup> This text is part of a wiiw research project on the prospects of EU accession of the Balkan countries, and its impacts on Austrian farming. The project was financed by the Austrian Federal Ministry of Agriculture, Environment, Water Economy and Forestry. (Project No. 1402).

<sup>2</sup> The author is indebted to two anonymous referees of the Financial Theory and Practice, who suggested important revisions and inclusion of supplementary information to the original submission. The remaining errors are the author's exclusive responsibility.

## **Introduction**

Being relatively underdeveloped economies, each of the Balkan 7 countries<sup>3</sup> will, after accession, be a net recipient of EU funds. But estimating the future agricultural transfers from the EU budget to those countries is a complex task.

- The agricultural support scheme of the Common Agricultural Policy (CAP), together with the UK rebate, has been one of the most controversial issues of the EU budget. Its future after 2013 is uncertain. The direction of possible reforms is hard to predict.
- The possible accession date of all but two countries in the Balkan 7 group (Croatia and perhaps Macedonia) is beyond the time frame of the current financial perspective 2007-2013. Currently, at least three different waves of accession seem to be likely, with Croatia as the earliest, Turkey the latest and the other five countries somewhere in between. Even the group of those other five countries may be split up into smaller sub-groups. This means different 'phasing-in' periods across different financial perspectives and agricultural support schemes.<sup>4</sup>
- It is difficult to foresee the future structure of agricultural output in the economies of the Balkan 7, which may change in response to any modification of the EU support scheme there might be.

## **Methodology**

Taking account of these difficulties, the solution proposed constitutes a top-down assessment of the overall impact of the Balkan 7 accession on the EU budget in general and the agricultural section of the EU budget in particular. Consequently, the estimation was made without going into the details of the agricultural output in the individual countries.

Due to the practice of the ten-year phasing-in period<sup>5</sup> for direct payments, the proper impact on CAP expenditure can be felt only in the tenth year of the membership of any new member state. For the countries which joined in 2004 this will be the year 2013, for Bulgaria and Romania 2016, for the Balkan 7 well beyond 2016.

The relevant question is about the transfers in the post-phasing-in period. Here we make two assumptions: First, that all new members will be treated equally, and in the same way as the former (2004 and 2007) new members. Second, that agricultural support from the EU budget will have the same relative size in the Balkan 7 new member states as in the former new member states.

---

<sup>3</sup> The Balkan 7 group includes Albania, Croatia, Bosnia and Herzegovina, Macedonia, Montenegro, Serbia and Turkey. Serbian data *do not include* Kosovo. Due to the missing GDP and other important data for Kosovo, no estimation for the impact on the EU budget was made in the case of a future EU accession of this entity.

<sup>4</sup> Predicted accession dates in Gligorov (2007) partially revised in early 2008 are 2010-2011 for Croatia, 2013-2014 for Macedonia, 2017 for Albania, Bosnia-Herzegovina, Montenegro and Serbia and the period beyond 2015 for Turkey.

<sup>5</sup> New member states joining the EU in 2004 and 2007, respectively, received only 25% of the agricultural support they were entitled to in the first year of membership, but this will gradually increase to 100% by the end of a ten year phasing-in period. Most probably this practice will be applied in the Balkan-7 enlargement(s) as well.

In order to facilitate a comparison across all current member states and the future Balkan 7 members, a *hypothetical* EU-34 is considered, comprising Romania and Bulgaria as well as the Balkan 7 countries. The working assumption is that the 2004 enlargement included Bulgaria, Romania and the Balkan 7. In this hypothetical EU-34, EU-34(hyp) for short, the first year of full (post phasing-in) impact on CAP expenditures is *uniformly* 2013. The estimated impact in the EU-34(hyp) in 2013 should, under the condition that the current CAP scheme prevails, give a *rough approximation* of the real impact that could be exerted in that unknown year in the remote future when the phasing-in of the last acceding Balkan 7 member state will have been concluded. Compared to estimates for an EU in 2015 (with the beginning of the phasing-in period) or 2025 (full costs with completed phasing-in), the creation of the hypothetical EU-34 and the calculation of the relevant full costs for 2013 has the advantage that the necessary GDP estimations for the EU total and the individual member states, candidates and potential candidates cover a relatively short period (2008-2013) while GDP data for the first four years (2004-2007) of the ten-year period investigated are already available as facts. This way uncertainties through estimations for years in the remote future can be avoided.

The assessment of the impact is based on GDP data and GDP estimations of the economies concerned and further on the available components of the CAP scheme for the current EU members for the years 2007-2013: the national ceilings for agricultural direct payments in 2007-2013 (European Union 2006a; 2006b)<sup>6</sup>, and the EU support for rural development 2007-2013<sup>7</sup>. It is important to point out that CAP has a third, relatively small but by no means negligible component (market and price support) which will not be part of the present estimation due to the unpredictability of the item concerned. For this reason, instead of 'CAP expenditures', the expression 'Direct Payments and Rural Development expenditures' (D+R expenditures) will be used in the following. Direct Payments data used in the estimation constitute national *upper limits*; in real life they may be smaller, but in this case they reappear in the transfers for Rural Development and thus the D+R expenditures used in the estimation do not change.

Further on, the estimation is based on the assumption that the Balkan 7 joined the hypothetical EU in 2004 under the same conditions as the current 12 new members. Due to the similarities in the level of per capita GDP and the role of agriculture in the economy, the ratio of D+R expenditures to GDP in the 12 new EU member states (NMS-12) will be similar to the ratio of hypothetical D+R expenditures to GDP in the case of the Balkan 7.

In a first step we estimate the Balkan 7 GDP in 2013. Subsequently we calculate the Balkan 7 D+R expenditures in that year, relying on the estimated 2013 D+R expenditure/GDP ratios for the NMS-12. These hypothetical Balkan 7 D+R expenditures can then

---

<sup>6</sup> These are upper limits of possible transfers under this heading and will not necessarily be equal to actual payments. Payments in respect of calendar year (n) are in fact paid under the budget for year (n+1).

<sup>7</sup> Pre-allocated rural development funding under Heading 2, 'Natural Resources' of the Financial Framework. For Bulgaria and Romania: European Commission, <http://europa.eu>, for all other member states Official journal of the European Union L261/34 22.09.2006. The data include the money transferred from direct aid for farmers to Rural Development under the so-called 'Modulation'.

be compared to the total hypothetical EU-34 D+R expenditures and the total hypothetical EU-34 budget expenditures.

It is clear from Table 1 that the Balkan 7 GDP will be somewhat more than half the NMS-12 GDP in 2013. Within the Balkan 7 group, the five former Yugoslav republics plus Albania will have a smaller combined GDP in 2013 than Hungary, while Turkey will have a somewhat higher GDP than Poland. Within the Balkan 7 group, 80% of the combined GDP will be accounted for by Turkey.

Direct payments and rural development expenditures constitute a significant part of the total transfers to the member states from the EU budget, amounting to about 42% in the period 2007-2013.<sup>8</sup> Their significance for the recipient member states, measured by the ratio of these transfers to the GDP, differs quite considerably (see Table 2). In the group of the old member states that ratio is at 0.3% on average; only the ratio of Greece reaches close to 1%. In the group of the ten new (as of 2004) member states the average ratio is 1.1%, for the 12 new member states together 1.4%. The new members' significantly higher ratio (compared to the EU-15) reflects the relatively bigger importance of agriculture in the economies concerned and the lower level of economic development. Note especially that Bulgaria and Romania will have substantially higher ratios (3.2% and 2.5%, respectively) than any of the 2004 new members after phasing-in has been completed. (In that group Lithuania will have the highest ratio, 1.7% of its GDP.)

## **The results**

The D+R expenditures for the Balkan 7 are estimated in two scenarios (see Tables 3 and 4). In the first scenario we assume that the D+R expenditures to GDP ratio for the Balkan 7 is identical to the average support ratio (1.4%) in the 12 new member states. In the second scenario the assumption is that this ratio is identical with the average support to GDP ratio in Bulgaria and Romania (2.7%). The results of the first scenario show that in 2013 the D+R expenditures would be close to 15% higher in a hypothetical EU-34 than in an EU-27, namely in an EU without the Balkan 7. Estimated with the higher (Bulgarian–Romanian) average ratio of 2.7% the respective agricultural expenditures would be about 28% higher with the Balkan 7 than without them.

Turkey has certainly the dominant weight in the Balkan 7 group. Thus, omitting Turkey from the calculation yields a very different result: the D+R support for a hypothetical EU-33 without Turkey would only be somewhat more than 3.2% or 6.1%, respectively, higher than that for the EU-27.

Additional estimates were made for a case where the D+R support for Croatia was calculated with the NMS-12 support to GDP ratio, as Croatia with its substantially higher level of development fits better into that group than in the Romania–Bulgaria group. The other six countries in the Balkan 7 group were calculated with the higher, 2.7% support to GDP ratio (see Table 4). The main proportions would not change substantially in this case; the agricultural support for the EU-34 should be about 27% higher than for the EU without the Balkan 7.

---

<sup>8</sup> Overview of the Financial Perspective 2007-2013, <http://europa.eu>, and Rural Europe, No. 34, January 2006, p. 2.

*Table 1 GDP by member state in a hypothetical EU-34 in 2013 euro millions, in 2004 prices*

<b>Member State</b>	<b>in %</b>	
Austria	295,176	2.17
Belgium	354,077	2.60
Denmark	239,419	1.76
Finland	198,891	1.46
France	1,987,945	14.58
Germany	2,676,135	19.63
Greece	244,668	1.79
Ireland	204,564	1.50
Italy	1,625,697	11.92
Luxembourg	38,385	0.28
Netherlands	609,765	4.47
Portugal	170,550	1.25
Spain	1,080,206	7.92
Sweden	365,582	2.68
UK	2,151,725	15.78
15 OMS	12,242,785	89.80
Cyprus	18,273	0.13
Czech Republic	138,569	1.02
Estonia	16,842	0.12
Latvia	21,080	0.15
Lithuania	31,897	0.23
Hungary	113,590	0.83
Malta	6,212	0.05
Poland	315,307	2.31
Slovak Republic	60,176	0.44
Slovenia	40,547	0.30
10 NMS (2004)	762,492	5.59
Bulgaria	32,905	0.24
Romania	99,070	0.73
2 NMS (2007)	131,975	0.97
12 NMS	894,467	6.56
EU-27	13,137,253	96.36
Croatia	44,329	0.33
Albania	9,625	0.07
Bosnia and Herzegovina	12,723	0.09
Macedonia	6,739	0.05
Montenegro	2,789	0.02
Serbia	32,080	0.24
Turkey	387,647	2.84
Balkan 7	495,931	3.64
EU-34	13,633,184	100.00

*Source: For the calculation of the 2013 GDP level for individual member states and the EU-34(hyp), factual annual growth rates were used for the period 2004-2007. For the new members and the Balkan 7 countries wiw forecasts for individual countries were used for the period 2008-2010. For the period 2011-2013 an annual growth rate of 4.2% was calculated for each new member, 5.2% for Bulgaria and Romania and each of the Balkan 7 countries. For the old members Eurostat Database forecast was used for 2008-2009 and a unified 2.2% growth rate for the period 2010-2013.*

*Table 2 Direct payments and rural development expenditures in % of the estimated  
GDP in the EU-27<sup>a</sup> in 2013*

Austria	0.4
Belgium	0.2
Denmark	0.4
Finland	0.4
France	0.4
Germany	0.2
Greece	0.9
Ireland	0.7
Italy	0.3
Luxembourg	0.1
Netherlands	0.1
Portugal	0.6
Spain	0.4
Sweden	0.2
UK	0.2
15 OMS	0.3
Cyprus	0.3
Czech Republic	0.8
Estonia	1.1
Latvia	1.2
Lithuania	1.7
Hungary	1.4
Malta	0.2
Poland	1.3
Slovak Republic	1.0
Slovenia	0.5
10 NMS (2004)	1.1
Bulgaria	3.1
Romania	2.5
2 NMS (2007)	2.7
12 NMS	1.4
EU-27	0.4

<sup>a</sup>*Under the condition that Bulgaria and Romania complete phasing-in of direct payments by 2013 and not in 2016 as in real life.*

*Source: Own calculations based on European Union (2006a; 2006b).*

The enlargement of the EU by seven new members would also change the allocation across countries. In the EU-27 of 2013 three quarters of the D+R transfers would be allocated to old members, about 18% to the ten 2004 new members and 7.4% to the 2007 new members Romania and Bulgaria (see Table 4). In a hypothetical EU-34 in 2013, in which the Balkan 7 support to GDP ratio would correspond to the NMS-12 average (1.4%), the 27 current member states would receive 87.3% of the D+R support and the

*Table 3 Estimated direct payments and rural development expenditures for the Balkan 7 in a hypothetical EU-34 in 2013 EUR million*

Country	GDP	D+R expenditure, if the ratio to GDP is equal to:	
		1.4% (NMS 12)	2.7% (Bulgaria and Romania)
Croatia	44.329	621	1.197
Albania	9.625	135	260
Bosnia and Herzegovina	12.723	178	344
Macedonia	6.739	94	182
Montenegro	2.789	39	75
Serbia	32.080	449	866
Turkey	387.647	5.427	10.466
Balkan 7	495.931	6.943	13.390

*Source: Own calculations.*

Balkan 7 12.7%. In the scenario with the higher (2.7%) support to GDP ratio, the share of support allocated to the Balkan 7 would be close to 22% of the total. This share would be higher than that of the NMS-12 (less than 20%). The share of the old members would be less than 60%. Turkey's share alone would amount to over 17%, close to the share of support for the NMS 12.

*Table 4 Direct payments and rural development expenditures in a hypothetical EU-34 in 2013*

Member State	EU-27		EU-34 (1.4%)		EU-34 (2.7%)		EU-34 (Croatia 1.4%, all others 2.7%)	
	EUR mn	in %	EUR mn	in %	EUR mn	in %	EUR mn	in %
OMS-15	35,604	74.6	35.604	65.1	35,604	58.3	35,604	58.8
10 NMS (2004)	8,591	18.0	8.591	15.7	8,591	14.1	8,591	14.2
2 NMS (2007)	3,526	7.4	3.526	6.4	3,526	5.8	3,526	5.8
12 NMS	12,117	25.4	12.117	22.2	12,117	19.8	12,117	20.0
EU-27	47,721	100	47.721	87.3	47,721	78.1	47,721	78.8
Croatia			621	1.1	1,197	2.0	621	1.0
Albania			135	0.2	260	0.4	260	0.4
Bosnia and Herzegovina			178	0.3	344	0.6	344	0.6
Macedonia			94	0.2	182	0.3	182	0.3
Montenegro			39	0.1	75	0.1	75	0.1
Serbia			449	0.8	866	1.4	866	1.4
Turkey			5.427	9.9	10,466	17.1	10,466	17.3
Balkan 7			6.943	12.7	13,390	21.9	12,814	21.2
EU-34 (EU-27 + Balkan-7)			54.664	100	61,111	100	60,535	100

*Source: Own calculations.*

In all the above calculations the assumption prevailed that the D+R expenditures for the member states will increase when the Balkan 7 join the EU. This, however, will not be *necessarily* so and we therefore calculate a ‘meagre’ version of enlargement in which the D+R expenditures earmarked for the EU-27 do not increase after the EU accession of the Balkan 7. In that case, the resources allocated originally to the EU-27 will be reallocated among 34 members. Provided that each member state is treated equally and thus the reduction of R+D expenditures takes place at a uniform rate, the member states will lose 13% of their transfers if the 1.4% support/GDP ratio is applied and 22% if the higher 2.7% ratio is applied to the Balkan 7 (see Table 5). In a version omitting Turkey the loss for the individual member states will amount to 3% and 6%, respectively (see Table 6).

So far we have investigated the impact on *agricultural transfers* that an EU accession of the Balkan 7 would have. Next we attempt to assess the *overall* budgetary impact of the Balkan 7 accession in the field of agriculture (see Table 7). The estimated 2013 GDP data for the EU-27 and the hypothetical EU-34, respectively, allow a calculation of the rate of expansion of the EU aggregate GDP due to the increase in the number of member states from 27 to 34.

Since the Balkan 7 are relatively poor, the 2013 GDP of the EU-34(hyp) would only be 3.8% higher than that of the EU-27 (line C in Table 7). If agricultural expenditures were to increase at the same rate, by 3.8%, the enlargement from 27 to 34 members would have practically no impact.

These 3.8% higher agricultural expenditures may be regarded as the enlarged EU’s ‘supply’ of agricultural support at a scale which would not generate an additional burden for the EU-27 as a group. Nevertheless, the strongly agricultural economies of the Balkan 7 necessitate a more than 3.8% increase in D+R expenditures. Further above an estimation was made for two scenarios applying two different R+D expenditure to GDP ratios. This may be interpreted as the Balkan 7 ‘demand’ for EU agricultural support if they were to be treated roughly equally to the NMS-12 or Romania and Bulgaria, respectively. The difference between the impact-neutral EU-34 ‘supply’ and the EU-34 ‘demand’ amounts to EUR 5.1 billion or EUR 11.5 billion, respectively, depending on the NMS reference group selected (lines J and K in Table 7). Turkey’s *net impact* amounts to 78.2% of the above figures, EUR 4 billion and EUR 9 billion, respectively (calculation based on figures in Table 3).

In another approach, the EU accession of the Balkan 7, if they were treated equally to the NMS-12 or Romania and Bulgaria, would raise the D+R expenditures out of the EU budget by 10.3% or 23.3%, respectively (see lines L and M in Table 7). This can be interpreted as the *net impact* of the Balkan 7 accession on the *D+R expenditures*.

Finally, if we assume that in 2013 the budget of the hypothetical EU-34’s own resources (the revenue side of the EU budget) will amount to 1% of the EU-34 GDP<sup>9</sup>, we can estimate the emerging additional need for the overall financing of the EU budget due to the additional costs from R+D expenditures for the Balkan 7. Assuming that total EU bud-

---

<sup>9</sup> In the real life EU-27 own resources in 2013 will amount to 1% of the EU-27 GNI, in terms of payment appropriations.



Table 5 *Direct payments and rural development expenditures in a hypothetical EU-34 in 2013, the ‘meagre’ version*

Member State	EU-27		EU-34 (1.4%)			EU-34 (2.7%)		
	base line		base line	“meagre”		base line	“meagre”	
	EUR mn	in %	EUR mn	in %	EUR mn	in %		
OMS-15	35,604	74,6	35,604	31,082	65.1	35.604	27,803	58.3
10 NMS (2004)	8,591	18	8,591	7,500	15.7	8.591	6,709	14.1
2 NMS (2007)	3,526	7,4	3,526	3,078	6.5	3.526	2,753	5.8
12 NMS	12,117	25,4	12,117	10,578	22.2	12.117	9,462	19.8
EU-27	47,721	100	47,721	41,660	87.3	47.721	37,265	78.1
Croatia			621	542	1.1	1.197	935	2.0
Albania			135	118	0.2	260	203	0.4
Bosnia and Herzegovina			178	155	0.3	344	269	0.6
Macedonia			94	82	0.2	182	142	0.3
Montenegro			39	34	0.1	75	59	0.1
Serbia			449	392	0.8	866	676	1.4
Turkey			5,427	4738	9.9	10.466	8,173	17.1
Balkan-7			6,943	6,061	12.7	13.390	10,456	21.9
EU-34 (EU-27 + Balkan-7)			54,664	47,721	100.0	61.111	47,721	100.0
Ratio EU 34 ‘meagre’ to EU 34 baseline				0.87			0.78	

Source: own calculations

get revenues are equal to total EU budget expenditures,<sup>10</sup> the figures presented in Table 7 indicate that total budgetary expenditures of the EU-34(hyp) will be close to 4% or more than 8% higher than the total budgetary expenditures of the EU-27 if, in the field of agriculture, the Balkan 7 is treated in the same way as the NMS-12 or Bulgaria and Romania, respectively (see lines P and S in Table 7). Again, the lion’s share of these additional costs derives from Turkey’s accession. In a hypothetical EU-33 (EU 27+Balkan 7 without Turkey) the total budgetary expenditures would only be about 1% (1.4% R+D expenditures to GDP ratio) or close to 2% (2.7% R+D expenditures to GDP ratio) higher than in the EU-27 (see lines R and T in Table 7).

If we project these costs on the aggregate GDP of the hypothetical EU-34, the result indicates that instead of 1% of GDP transferred to the EU budget, the member states sho-

<sup>10</sup> In real life own resources are about 6% higher than expenditures due to expenditures spent in other than EU member states (pre-accession aid, international aid programmes, etc.).

Table 6 *Direct payments and rural development expenditures in a hypothetical EU-33 in 2013, the ‘meagre’ version without Turkey*

Member State	EU-27		EU-33 (1.4%)			EU-33 (2.7%)		
	base line		base linej	“meagre”		base line		“meagre”
	EUR mn	in %	EUR mn	in %		EUR mn	in %	
OMS-15	35,604	74.6	35,604	34,508	72.3	35,604	33,548	70.3
10 NMS (2004)	8,591	18.0	8,591	8,326	17.4	8,591	8,095	17.0
2 NMS (2007)	3,526	7.4	3,526	3,417	7.2	3,526	3,322	7.0
12 NMS	12,117	25.4	12,117	11,744	24.6	12,117	11,417	23.9
EU-27	47,721	100	47,721	46,252	96.9	47,721	44,966	94.2
Croatia			621	602	1.3	1,197	1,128	2.4
Albania			135	131	0.3	260	245	0.5
Bosnia and Herzegovina			178	173	0.4	344	324	0.7
Macedonia			94	91	0.2	182	171	0.4
Montenegro			39	38	0.1	75	71	0.1
Serbia			449	435	0.9	866	816	1.7
Balkan-6 (without Turkey)			1,516	1,469	3.1	2,924	2,755	5.8
EU-33 (EU-27 + Balkan-6)			49,237	47,721	100.0	50,645	47,721	100.0
Ratio EU 33 ‘meagre’ to EU 33 baseline				0.97			0.94	

uld transfer 1.037% or 1.081%, respectively, of their GDP to finance the increased EU budgetary outlays as a (partial, agricultural) consequence of Balkan 7 membership in the EU (see lines U and V in Table 7).

### Other estimations for Turkey

Turkey, the biggest and in many respects the most ‘difficult’ of the candidate and potential candidate countries for EU membership, has already been the subject of research concerning the budgetary implications of its EU accession in general and its integration in the current form of the CAP system in particular.

The European Commission’s estimation is €8.3 billion for the first and second pillar of CAP; deducting the market and price support (€0.7 billion) from the former item we arrive to the result €7.6 billion (in 2025, fully phased in, in 2004 prices).

*Table 7 Impact (only agriculture) of Balkan 7 EU membership n total EU budgetary expenditures in a hypothetical EU-34*

A	GDP (2013) EU-27 (euro million)	13,137,253
B	GDP (2013) EU-34 (euro million)	13,633,184
C	GDP Expansion EU-34/27 (A/B*100) (in %)	103.8
D	EU-27 D+R expenditures (euro million)	47,721
E	EU-34 D+R expenditures (impact neutral 'supply') (D*1.038) (EUR million)	49,534
F	Balkan 7 'demand' for D+R (1.4% of GDP) (euro million)	6,943
G	Balkan 7 'demand' for D+R (2.7% of GDP) (euro million)	13,390
H	EU-34 demand for D+R (1.4% of GDP) (D+F) (euro million)	54,664
I	EU-34 demand for D+R (2.7 % of GDP) (D+G) (euro million)	61,111
J	Difference EU-34 impact neutral supply and EU-34 demand (1.4%) (E-H) (euro million)	-5,082
K	Difference EU-34 impact neutral supply and EU-34 demand (2.7%) (E-I) (euro million)	-11,529
L	Proportion of EU-34 demand (1.4%) to impact neutral 'supply' (H/E)	1.103
M	Proportion of EU-34 demand (2.7%) to impact neutral 'supply' (I/E)	1.233
N	Share of preservation & management of Natural Resources in total expenditures in 2013 (in %)	40.4
O	Total EU-34 expenditure (1.00% of the EU GDP) (euro million)	136,332
P	Increase of total expenditures due to excessive demand for agricultural support (1.4%) (-1*J+O/O) (in %)	103.7
R	without Turkey (in %)	101.0
S	Increase in total expenditures due to excessive demand for agricultural support (2.7%) (-1*K+O/O) (in %)	108.1
T	without Turkey (in %)	101.9
U	Total budgetary expenditures in % of EU 34 GDP if agricultural support (1.4%) [(P/100)*O]/B	1.037
V	Total budgetary expenditures in % of EU 34 GDP if agricultural support (2.7%) [(S/100)*O]/B	1.081

*Source: Own calculations.*

Dervis et al (2004) made their estimation based on the estimated EU GDP growth, possible share of the CAP in EU budgetary expenditures and possible share of Turkey in the overall CAP expenditures and overall EU budgetary expenditures. Their result is €9 billion (maximum cost) in terms of CAP receipts for Turkey (in 2015, in case of full membership, at 2004 prices) .

Oskam et al (2004) elaborated a synthetic estimate from other available estimates. In this synthetic estimation the budgetary items comparable with those estimated in our study (first and second pillar of CAP) amounts to €7.5 billion (at 2004 prices, after phasing-in completed). The authors' (Oskam et al) own estimation based on a bottom-up methodology for direct payments (estimating direct payments one by one for individual products)

concludes in lower figures. The expenditures for pillar 1 and 2 amounts to €5.0 billion (at 2004 prices, after phasing-in completed).

Grethe (2005a) arrives in his estimation at €5.3 billion (2004 prices, 2015 membership, Turkey fully phased in) EU budgetary costs for direct payments and rural development for Turkey, based on a bottom up methodology.

Quaisser and Wood (2004) accept the European Commission's estimation.

All these results are within the two values estimated above for Turkey in terms of *net impact* (€4 billion and €9 billion, respectively depending on the D+R expenditure to GDP ratio selected).

## **Conclusions**

Any predictions concerning the agricultural transfers to the future EU members in the period after 2013 are made quite unreliable by a number of uncertainties; we therefore chose to estimate those transfers in the context of a hypothetical EU-34 in the year 2013.

The top-down estimation was based on the assumption that the agricultural support to GDP ratios are similar across member states at similar levels of development sharing a similar weight of agriculture in the economy. The results show that the annual additional burden, in terms of direct payments and rural development expenditures, for the 27 current EU members due to the EU membership of the seven Balkan countries would range between EUR 5 and 11.5 billion (in 2004 prices). The former figure reflects an agricultural support to GDP ratio corresponding to the average of the 12 new member states; the latter reflects the respective (average) ratio of Bulgaria and Romania. As the members of the Balkan 7 group, aside from Croatia, are in many respects more similar to Bulgaria and Romania than to the more developed new members of 2004, the additional burden will probably be closer to the higher than to the lower figure.

In relative terms the hypothetical accession of the Balkan 7 in 2004 would necessitate a net increase of the pool of transfers for direct payments and rural development expenditures in the range of 10% to 23%. Alternatively, if that pool were not to be expanded, present members would lose about 13% or 22%, respectively, of the transfers compared to those eligible for them in an EU without the Balkan 7.

Finally, it must be emphasized that the Balkan 7 group is far from being homogeneous in terms of additional expenditures generated by the EU accession of the individual members of the group. Close to 80% of the additional expenditures are accounted for by Turkey alone. While the integration of the former Yugoslav republics and Albania into the CAP seems likely to cause only a moderate increase of expenditures, the accession of Turkey may necessitate a new design of agricultural policies in the EU.

## LITERATURE

**Dervis, K. [et al.], 2004.** "Turkey and the EU budget. Prospects and Issues." *CEPS EU Turkey Working papers* No. 6.

**European Commission, 2004.** *Issues Arising from Turkey's membership perspective.* Commission Staff Working Document SEC (2004) 1202. Brussels. 6.10.

**European Union, 2006a.** *Official Journal of the European Union* L384/5 (29.12.2006).

**European Union, 2006b.** *Official Journal of the European Union* L261/34 (22.09.2006).

**Gligorov, V., 2007.** *Transition, Integration, and Development in Southeast Europe.* Final Report. A study commissioned by the Oesterreichische Nationalbank (OeNB). January. Vienna.

**Grethe, H., 2005a.** "Turkey's accession to the EU: what will the Common Agricultural Policy cost?" *Agrarwirtschaft*, 54 (2), 134.

**Grethe, H., 2005b.** "The CAP for Turkey? Potential Market Effects and Budgetary Implications." *EuroChoices*, 4 (2), 20-25.

**Oskam, A. [et al.], 2004.** "Turkey in the European Union. Consequences for Agriculture. Food. Rural Areas and Structural Policy." Final Report. Report Commissioned by the Dutch Ministry of Agriculture. Nature and Food Quality. Wageningen University.

**Quaisser, W. and Wood, S., 2004.** "EU member Turkey? Preconditions. Consequences and Integration Alternatives." *Forscht Arbeitspapier*, No. 25.