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A tool for uniform classification and analyses of budgetary support to agriculture for the EU accession countries

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Abstract

Allowing for the comparison of agricultural policies among countries and supporting the European integration process, a methodological tool was developed called the APM (Agri-Policy Measures tool). The tool enables the cross country qualitative and quantitative analysis of budgetary support to agriculture using uniform classification and systemization template primarily based on the current EU concept of the policy pillars. All agricultural policy measures are grounded on three main pillars: market and direct producer support measures, structural and rural development measures and general measures related to agriculture. Total budgetary support to agriculture should represent the sum of all transfers related to agriculture from all sources, but without administrative costs and transfers to non-agricultural sectors. The tool was applied for the analysis and comparison of agricultural policies in the Western Balkan countries and it proved to be useful for policy analysis in relation to the EU accession process.

Keywords: *agricultural policy, budgetary transfers, an assessment tool, Western Balkan, European Union enlargement*

JEL: *Q18*

1. Introduction

The form, type and scope of budgetary transfers to agriculture, as well as their development over time, are important for agricultural policy analysis. A consistent and reliable policy measure database is the necessary foundation for effective agricultural policy-making based on a policy cycle. The main problem of quantitative analyses of budgetary transfers to agriculture is that a great variety of measures are applied by individual countries. One cannot obtain an overall picture based on the analysis of each individual measure; measures must be merged into larger groups with similar content. The merging of the measures can be done based on very different criteria which is often the case.

Due to the differences in agricultural policy concept and measures, the European Union (EU) accession is a economic and political challenge for every acceding country. By the date of accession, a country needs to be prepared for the Common Agricultural

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Policy (CAP), its complex administration and instruments. After the accession, a new model of supports is introduced, which is usually significantly different from the existing policy in terms of the amount of support and the content of measures (Erjavec 2007). The efficient implementation of needed policy reforms requests a solid data base about the pre-accession agricultural policy measures in comparison with the CAP instruments.

In the EU, the agricultural policy measures are grouped according to the policy field and the source of financing, which are both closely related to Common Agricultural Policy (CAP) regulations in a specific programming period. Taking into account the fund from which measures are financed, CAP is currently divided into two main pillars that are also recognized in the agricultural-economic literature (Gay et al, 2005). The first pillar is financed by the European Agricultural Guarantee Fund (EAGF) and consists of a series of measures relating mostly to interventions in agricultural markets and direct payments to farmers set down within the framework of a common organization of the markets and other market-related regulations, although some measures of a more general character can also be found here (veterinary and plant-health issues; promotion of agricultural products; issues related to genetic resources; agricultural accounting information systems - FADN; agricultural survey systems; fisheries markets) (European Council, 2005). For the measures financed by EAGF, there is a uniform accounting classification (EC, 2009) which enables the monitoring of budgetary expenditures by sub-categories and measures.

The second pillar is financed by the European Agricultural Fund for Rural Development (EAFRD) and consists of measures within the framework of rural development programs of the Member States implemented in the current programming period. The classification of measures financed by EAFRD depends on current rural development regulations and is not directly comparable with previous (and future) programming periods.

Apart from the two main pillars, which both consist only of CAP measures financed or co-financed by the Community budget, a third group of measures can be recognized. This is a very heterogeneous group in which all measures financed entirely by the national budgets of Member States are gathered. Most of the measures are categorized as state aid that have to be approved by the European Commission and are comprised of very diverse measures - from direct payments to producers and input subsidies, to rural development and general agriculture support measures.

There is no existing complete EU data source bringing all information about the agricultural policy measures used at multi-national and national level together. As the only source presenting the EU agricultural policy measures as a whole can be found in OECD Producer Support Estimate (PSE) database (2010). The measures are grouped according to the OECD PSE concept which is the most used and in the literature recognized tool for comparison of different agricultural policy measures. The new OECD classification of total transfers associated with agricultural policies (TSE) groups policy measures into three main categories: transfers to producers individually (PSE), transfers to consumers individually (CSE), and transfers to general services to agriculture collectively (GSSE) (OECD, 2008). Transfers to producers (PSE) are composed of market price support (MPS), which is calculated mainly as a price gap between domestic and border prices, and budgetary transfers to producers (including revenue forgone). The

classification of budgetary transfers to producers in PSE is based on implementation criteria, and the main categories differ depending on the basis of support (output, input, production factors, non-commodity criteria), whether the basis is current or historical (fixed), and whether the production is required or not. Other criteria such as policy area, objectives or effects are not taken into account. This classification is primary based on the beneficiary and implementation criteria and classifies the measures mostly in terms of the degree of market distortion.

PSE data base is more or less complete information on EU budgetary support to agriculture and has a broad analytical value. However, OECD concept is due to its main focus and structures less appropriate for direct use in the policy reform process for EU acceding countries. The main objective of the paper is to present a methodological tool called the APM (Agri-Policy Measures tool), which was developed to enable the comparison of agricultural policies in the countries preparing for the EU accession with the CAP. A uniform classification of agricultural budgetary support was created using the current EU concept based on the policy pillars as a basic starting point, combined with the OECD classification. The EU program aspect (pillars, axes) has been applied at higher levels of aggregation, whilst setting forth the OECD criteria for the formation of groups or subgroups under individual pillars and particularly for defining the lowest level of classification (basic headings). Thus, the APM allows for a rough analysis of budgetary transfers to agriculture also according to the OECD PSE classification and vice-versa.

The APM could help to understand the evolution and situation of agricultural policy in individual country and through comparison within the region and with the EU could improve the analytical capacity in the accession process of the region.

This paper presents this uniform classification of agricultural policy measures and the creation of APM database which was applied for the analysis of agricultural budgetary support in the Western Balkan (WB) countries and some EU New Member States (NMS).

The introduction is followed by the presentation of the AMP methodology. First, the essential concept of APM and the APM classification scheme are elaborated. The process of APM database creation is then explained upon. The next part describes the use of the APM database for agricultural policy analysis on the example of APM databases for some WBs in comparison with the EU, established in the framework of AgriPolicy project (2010). The paper concludes with a discussion on the advantages and disadvantages of using the APM for agricultural policy analysis.

2. The APM classification scheme

APM classification is based on the current EU concept of policy pillars, but with several adaptations. The key principle behind the classification is the homogeneity of groups. We strived for the groups to be as homogenous as possible at a higher level in terms of the EU program group, objectives, beneficiary and the method of implementation. At higher levels we attempted to apply, to the greatest possible extent, the EU program aspect (pillars, axes), whilst setting forth the beneficiary criteria as the main criterion for the formation of groups or subgroups under individual pillars. The beneficiary

criteria also serve as the key criteria for the OECD when classifying a measure in the PSE, CSE or GSSE group. The APM classification is, therefore a combination of the EU program classification of measures and the OECD classification. One of the goals was that the APM allows for a rough analysis of budgetary transfers to agriculture also using the OECD PSE classification.

Furthermore, a requirement was made that the APM also meets the classification criteria defined in the methodology of the Economic Accounts for Agriculture (EAA) (Eurostat, 2005). The EAA is a compulsory statistical information system for all EU Member States. Countries in the process of EU integration must also meet these demands. As budgetary supports are relatively inadequately covered by statistics, such information obtained from the APM could be very useful.

Technically, the APM classification is based on a 5-digit code system, with the first digit of the code defining the section (pillar) of agricultural policy, the second digit the division (axis), and each subsequent digit a sub category of the previous one (group – subgroup – basic heading). The schematic presentation in this paper shows the classification scheme up to the third (group) and in some cases the fourth digit (Subgroup) level, while the entire nomenclature is presented in Annex 1.

The main framework of the APM classification of budgetary support to agriculture is composed of three pillars: (1) *Market and direct producer support measures*, (2) *Structural and rural development measures*, and (3) *General measures related to agriculture*.

Figure 1: Breakdown of Total budgetary support to agriculture by pillars

Total budgetary support to agriculture		
1 st pillar: MARKET AND DIRECT PRODUCER SUPPORT MEASURES (10000)	2 nd pillar: STRUCTURAL AND RURAL DEVELOPMENT MEASURES (20000)	3 rd pillar: GENERAL MEASURES RELATED TO AGRICULTURE (30000)

In addition to these three pillars, the classification also includes the section *Miscellaneous transfers to agriculture*. Some similar ‘miscellaneous’ groups also exist at lower levels of classification for items for which there is not enough information available to allocate them to the appropriate categories.

The first pillar of APM - *Market and direct producer support measures* - includes only those measures which contribute to higher incomes of agricultural producers - either through market measures or in the form of direct supports (on the input or output sides) - and are not related to specific restrictions regarding the choice of production techniques and farm location. The first pillar comprises most, but not all, of the measures which in the EU are financed from the CAP first pillar. Due to the principle of substance homogeneity of the groups, a part of the measures within the framework of a EU Single common market organization, such as budgetary transfers for promotion, producer organizations, and restructuring of vineyards were not included in the first pillar but rather in the second, and the measures of a general nature, such as veterinary and phyto-sanitary measures and support for FADN farm accountancy system were included in the third pillar of the APM. Moreover, the first pillar also includes all measures of similar substance, which in the EU are implemented as state aid fully financed from national funds having farm income support character.

At the next level, the APM measures of the first pillar are further divided into two groups: *Market support measures* and *Direct producer support measures*.

Figure 2: Breakdown of Market and direct producer support measures (1st pillar)

MARKET AND DIRECT PRODUCER SUPPORT MEASURES (10000)		
Market support measures (11000)	Direct producer support measures (12000)	
<i>Export subsidies (11010)</i>	Direct payments and variable input subsidies (12100)	Disaster payments and other compensations to producers (12200)
<i>Market intervention (11020)</i>		
<i>Operational costs for public stockholding (11030)</i>	Direct payments to producers (12110) Variable input subsidies (12120)	
<i>Consumer support (11040)</i>		

Market support measures incorporate the measures by which the policy influences the supply and demand on the domestic market, and thereby indirectly influences the prices of agricultural products. The budgetary expenditures related to these measures are divided into three groups: *export subsidies*, *market interventions* and *consumer support*³. *Market interventions* are further disaggregated to intervention buying-in (including withdrawals from the market), private storage aid and food aid to third countries. *Consumer support* comprises measures related to the purchase, marketing, processing or consumption of agricultural products provided to the food industry (payments to processors and similar measures) or the domestic population (domestic food aid and similar measures).

Direct producer support measures are further divided into two larger groups⁴. The first group - *Direct payments and variable input subsidies* - contains all forms of regular *direct payments to producers*, which are further disaggregated according to implementation criteria (on output, current area/animal, fixed criteria, other criteria) and *variable input subsidies*, which are further disaggregated according to the type of input (seeds, fuel, fertilizers, insurance, etc.).

The second group - *Disaster payments and other compensation to producers* - comprises the payments for which producers are entitled to apply only in the event of specific circumstances. One of the main reasons these payments were included in a separate group is that they are exceptional payments granted mostly on an ex-post basis, while the first group of measures is planned in advance and granted on a regular basis. These are mostly payments that compensate producers in the case of unexpected events, for example natural disaster payments, compensation payments related to animal and plant

³ Budgetary measures related to *export subsidies* and *market interventions* according to the OECD criteria affect market prices received by producers, creating a price gap that is captured by market price support (MPS) and therefore does not form a part of PSE /GSSE budgetary transfers. This is similar to *consumer support*, which according to OECD methodology is classified under CSE. The operational costs of public stockholding are recorded separately, as they are the only ones in this group that represent general costs, which by OECD criteria are classified into a separate GSSE sub-category.

⁴ All measures in the group of direct support to producers can be ranked into one of the PSE categories according to OECD criteria.

disease eradication, and income- or revenue-loss related payments. Such payments are further disaggregated similarly to other direct payments, i.e. by implementation criteria. Moreover, compensatory payments related to resource retirement (temporary or permanent abandonment of production) are also included in this group.

The second APM pillar is related to *structural and rural development measures* and is structured in three main axes: *Improving the competitiveness of the agricultural sector*, *Improving the environment and countryside*, and *Supporting the rural economy and population*⁵. The axes more or less follow the structure of the 2007-2013 EU rural development policy system, though in a broader sense regarding the substance of measures and with quite a few modifications. Thus, the second pillar includes all measures that in the EU are financed from the CAP second pillar fund, as well as a part of the measures of common market organization and direct aids that in the EU are financed from the CAP first pillar, but in substance belong to this framework, as well as some measures of a similar character that in the EU are financed exclusively from national sources. The third axis also includes the Leader, which in the EU rural development programs forms a separate axis.

Figure 3: Breakdown of Structural and rural development measures (2nd pillar)

STRUCTURAL AND RURAL DEVELOPMENT MEASURES (20000)		
Improving the competitiveness of the agricultural sector (21000)	Improving the environment and countryside (22000)	Supporting rural economy and population (23000)

The first axis – *Improving the competitiveness of the agricultural sector* – is divided into three groups of measures in the first step, with the main criterion of division being for whom the supports are intended⁶. The group *on-farm restructuring support* merges the measures whose beneficiaries are individual agricultural holdings. The *agri-food restructuring support* group refers to the agricultural sector in a broader sense, whereas the third group contains the measures that support the restructuring of the *forestry* sector related to rural development.

Figure 4: Breakdown of improving the competitiveness of the agricultural sector (2nd pillar, 1st Axis)

Improving the competitiveness of the agricultural sector (21000)		
On-farm restructuring support (21100)	Agri-food restructuring support (21200)	Forestry support (21300)
<i>On-farm investment support (21110)</i>	<i>General support to agricultural sector (21210)</i>	
<i>Other on-farm restructuring support (21120)</i>	<i>Food processing, marketing and promotion(21220)</i>	

⁵ The measures grouped into axes are quite heterogeneous in substance, which is why the combined axes cannot be ranked into one of the OECD groups.

⁶ According to OECD criteria, the first group is ranked into one of the PSE categories, the second group is ranked into one of the GSSE categories, and the third group does not count as support to agriculture.

On-farm restructuring support is composed of two sub-groups: *on-farm investment support* including investments in vineyards, orchards, olive tree plantations and hops gardens, irrigation, drainage and other long-term land improvement investments on the farm, and *other on-farm restructuring support*, which includes measures to facilitate structural adjustments of agricultural holdings, granted mostly in the form of flat rate payments (setting up young farmers, adapting to demanding standards, participation of farmers in food quality schemes, exceptional assistance). *Agri-food restructuring support* is divided into the sub-group that includes the measures supporting the restructuring of agriculture in general (agricultural infrastructure, early retirement, semi-subsistence farms, etc.) and into the sub-group with measures supporting food processing, marketing and promotion (including producer groups and organizations).

The second axis gathers measures aimed at *improving the environment and countryside*. The first subgroup of this axis - *Environment and landscape targeted payments to producers* - is composed of payments granted to agricultural producers to compensate for higher costs or lower revenue due to less favorable natural conditions for agricultural production (subgroup *Payments to farmers in areas with natural handicaps*), due to environmental restrictions (sub-group *Payments to farmers in protected areas*) and due to a voluntary agri-environmental commitment that goes beyond the mandatory standards (subgroup *Agri-environment and animal welfare payments to farmers*). At the next level, these sub-groups are divided by implementation criteria (on output, area, animal numbers, non-commodity criteria)⁷. The second group of this axis – *Environmental payments not directly linked to agriculture* – includes payments with environmental or countryside objectives that are not directly related to agricultural producers, such as environmental payments to forestry⁸.

Figure 5: Breakdown of Improving the environment and countryside (2nd pillar, 2nd Axis)

Improving the environment and countryside (22000)	
Environmental- and landscape-targeted payments to producers (22100)	Environmental payments not directly linked to agriculture (22200)
<i>Payments to farmers in areas with handicaps (22110)</i>	<i>Environmental payments to forestry (22210)</i>
<i>Payments to farmers in protected areas (22120)</i>	<i>Other payments with environmental objectives (22220)</i>
<i>Agri-environmental and animal welfare payments to farmers (22130)</i>	

The third axis comprises the measures *supporting rural economy and population*. This axis is composed of three groups, of which the first one - *Support to rural population directly linked to farms* - includes measures such as support for on-farm diversifica-

⁷ Since the whole group of measures represents support to individual agricultural producers, all the measures can be ranked into one of the PSE categories.

⁸ According to OECD criteria payments to forest owners do not represent support to agriculture.

tion into non-agricultural activities⁹. The second group - *General support to rural economy and population* - includes measures such as business creation, rural infrastructure and services, village renewal and similar measures, and the third group - *Building local capacity (LEADER)* through skills-acquisition, animation, preparation and the implementation of local development strategies.

Figure 6: Breakdown of Supporting rural economy and population (2nd pillar, 3rd Axis)

Supporting rural economy and population (23000)		
Support to rural population directly linked to farms (23100)	General support to rural economy and population (23200)	Building local capacity (LEADER) (23300)
Support to on-farm diversification into non-agricultural activities (23110) On-farm support to rural population – other (23120)	Business creation and development (23210) Rural infrastructure and village development (23220) Other measures to support rural areas (23230)	

The third APM pillar - *General measures related to agriculture* - covers measures which are aimed at supporting public services related to agriculture such as research, development, advisory and expert services, food safety and quality control (veterinary and phyto-sanitary measures, quality policy, etc.), technical assistance and other similar measures provided to agriculture collectively¹⁰.

Figure 7: Breakdown of General measures related to agriculture (3rd pillar)

GENERAL MEASURES RELATED TO AGRICULTURE (30000)		
Research, development, advisory and expert services (31000)	Food safety and quality control (32000)	Other general support measures (33000)

In the EU these measures are mostly financed from national budgets. This pillar also includes some measures of a general character, which in the EU are financed from the CAP first pillar financing system.

⁹ According to OECD criteria only the first group is regarded as support to agriculture (GSSE), while measures of other groups are not treated as being directly related to agriculture, and thus not included in GSSE.

¹⁰ All measures in this group are ranked into the GSSE according to OECD criteria.

3. APM database creation and standard analytical output

For countries with no publicly-accessible and systematic system for monitoring budgetary spending by individual agricultural policy measure, data collection for APM database creation is a demanding process. In these cases, a number of possible sources must be examined, such as governmental budgetary plans, policy programs and regulations, reports on the implementation of agricultural policy measures from various ministries, etc.

When collecting data, there is always a danger of incomplete coverage. It is therefore crucial to also obtain aggregate budgetary data. Usually, the ministry of finance is the primary source of data on the total budget of the state ministries and other (administrative) state bodies. Often, funds for agriculture are also provided by local communities, international donors and perhaps from other sources. All these transfers must be taken into account to be able to cover total funds (line ministry budget and budgetary transfers to agriculture from other sources).

In the first step, there is a need to make a distinction between the measures which represent budgetary support to agriculture in the broadest sense and those which do not. The criteria defining whether a measure is a budgetary support to agriculture and what form of support it is were in principle taken from the OECD methodology. Measure is considered to be support to agriculture if agricultural producer individually or agricultural sector collectively is the only, or the major, beneficiary of the policy (OECD, 2008). Budgetary transfers associated with the administration of policies (design, implementation and evaluation) are not viewed as support to agriculture.

It is important to have detailed information about each implemented measure. In addition to the amount of the transfer, other information have to be collected, such as the rationale and objective of the measure, beneficiary, commodity, implementation criteria, specific requests, etc. When collecting data on a particular measure, it is useful to thoroughly consider all these attributes. Based on its individual characteristics, a measure is then allocated to the APM classification system. A special decision tree was devised to ease the process of allocation and ensure the most uniform approach possible. As presented in Annex 2, the decision tree functions by asking questions regarding the substance of a measure. The answers to the questions (only 'yes' or 'no') in most cases lead to allocation up to the level one step before the final allocation, i.e. the basic headings.

The final steps in the allocation process must be made directly in the APM input template. Other criteria are used in that stage. In some cases, mostly within *rural development* and *general support measures*, the final allocation can be made by following the name of measure group on the next level. In many other cases the type of payment is the main criteria (implementation criteria). In all groups of measures, which according to OECD criteria belong to the PSE, the classification foresees the possibility of further division by the PSE classification. In the APM template for each basic heading, the PSE category or subcategory is already predefined. In these cases the final allocation is thus made based on PSE criteria.

Another label, which is also predefined in the APM template, is the EAA group of subsidies. Analysis by this criterion can be useful for assessing the impact of individual groups of measures on income from agriculture.

Additionally, in the APM tool there are two more labels which are useful for analyti-

cal purposes (see Annex 1). The measures can also be classified by the beneficiary and commodity. For basic headings those group labels are also predefined. Comparing all predefined labels with characteristics of the specific measure should help allocate it correctly. For some basic headings, such as 'other measures', it is impossible to predefine labels. Given the degree of disaggregation of the APM classification, there should not be many cases like this. In these cases it is up to the user to define the labels. Carefully checking the consistency of all labels is necessary.

A part of the APM tool is predefined to prepare data for substantive analysis. Analytical tables and figures are prepared for time series, both by the APM and PSE classification systems. Tables and figures are pre-prepared by hierarchical principle, which enables the generation of aggregate tables by various levels of data grouping. The most aggregate level of the APM analytical presentation (total budgetary expenditure by pillars) provides information on the evolution of total budgetary expenditures related to agriculture over time, as well as the first relatively broad picture on the priorities of the agricultural policy and their changes. To enable a more detailed analysis of the agricultural policy measures, lower levels of presentations need to be examined.

The APM tool and its standard analytical output have been tested by analyzing the evolution and features of WBs agricultural policies in comparison with some EU New Member States.

4. Some results of agricultural policy analysis in WBs using APM tool

In the WBs, agricultural support through budgetary funds has gained in importance, especially in recent years.

Table 1: Total budgetary support to agriculture (EUR million)

	2000	2001	2002	2003	2004	2005	2006	2007	2008
Albania (AL) ¹	54.5	43.9	50.8	53.0	53.6	34.6	46.9	43.2	47.1
Bosnia Herzegovina (BA)	7.0	14.2	15.4	18.6	24.7	33.1	46.4	69.9	86.1
Croatia (HR)	:	201.4	240.5	278.3	:	:	371.4	431.4	:
Kosovo (UNSCR 1244/99-XK) ¹	:	:	:	2.6	3.3	5.0	5.9	6.4	:
FYR Macedonia (MK)	:	:	2.5	2.5	8.6	8.4	17.5	17.2	44.7
Montenegro (MN)	:	6.2	4.2	5.3	5.8	5.7	7.8	9.7	12.7
Serbia (RS)	:	:	:	:	188.1	135.0	165.5	176.4	265.8

Notes: ¹ Total line ministry budget

Source: APM DATABASES (2010)

According to relative indicators, budgetary support to agriculture in the WBs is relatively low compared to the EU 27. The exception is Croatia, which in 2007 already recorded a much higher level of support to agriculture per inhabitant and per area than some EU Member States (the Baltic States, Romania and Bulgaria).

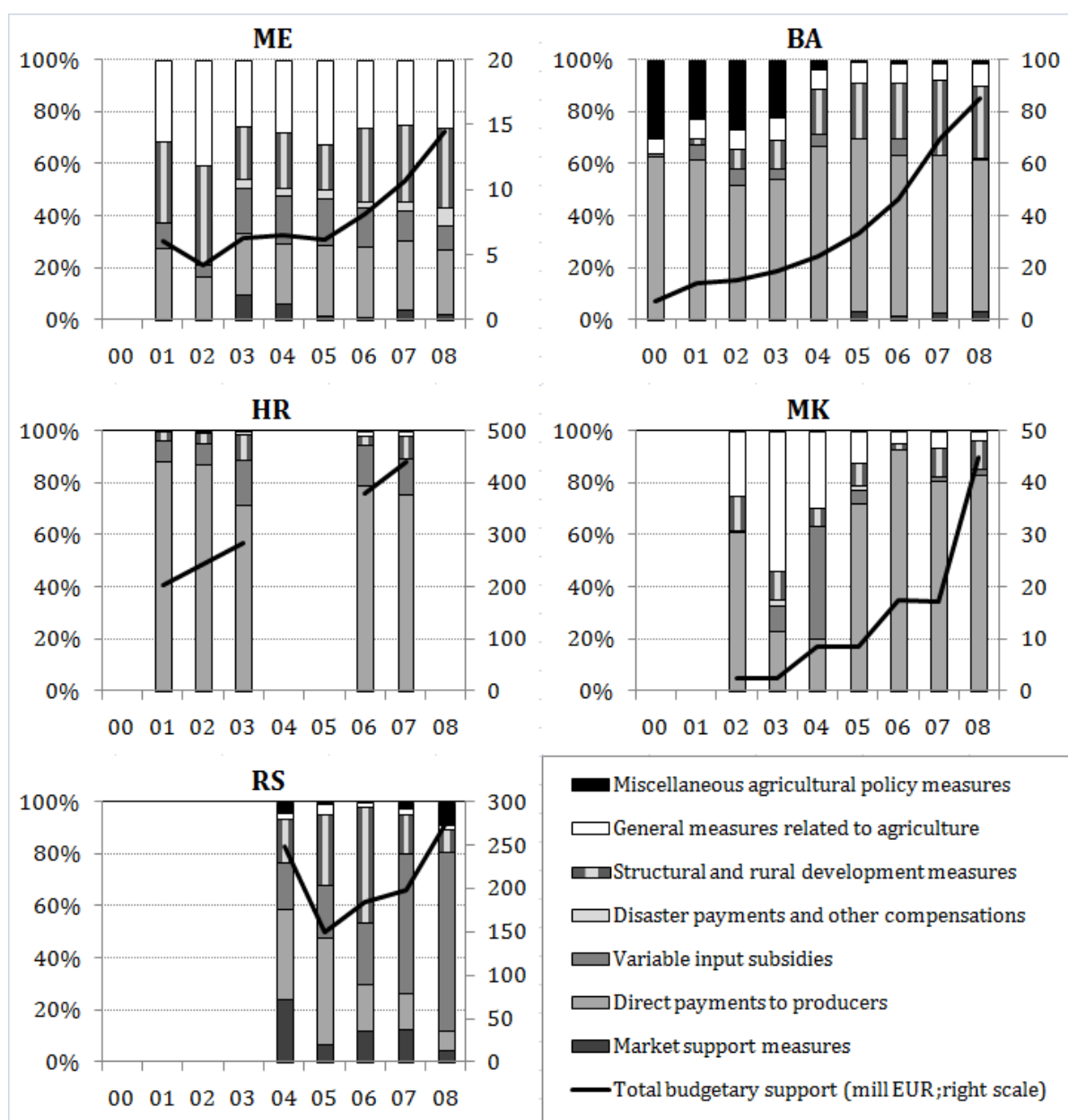
Table 2: Total budgetary support to agriculture per unit, 2007

	AL ¹	BA	HR	XK ¹	MK	ME	RS	LV	BG	CZ	EE	HU	SI	EU 27
EUR/capita	11	18	99	3	8	16	27	141	37	135	162	233	155	156
EUR/ha AA ²	31	32	364	11	16	20	40	175	55	329	239	402	626	448

Notes: ¹ Total line ministry budget; ² agricultural areas;

Source: APM DATABASES (2011), OECD DATABASE (2010)

When comparing the evolution of total funds and the evolution of their structure, three different patterns can be found (figure7). In Bosnia Herzegovina, and after 2003,

Figure 7: Breakdown of total budgetary support to agriculture (%), 2000-2007

Source: APM DATABASES (2010)

also in Montenegro, along with the growth of total support, its composition is also changing. The share of funds related to rural development measures increases on account of the decrease in direct producer support funds. This is not the case in Croatia and FYR Macedonia, where the structure has been quite rigid and the share of direct producer support has remained very high. Serbia is a special case. In addition to a substantial drop in total support in 2005, dramatic change in the structure of direct producer support can be seen in 2007 – a switch from direct payments to input subsidies.

The structure of budgetary support to agriculture in the WBs is significantly different from that of NMS, although it is also true that differences between NMS are large. In particular, the share of the budget for direct producer support is significantly higher in most WBs. On the other hand, the proportion of rural development support measures is lower, as is the proportion of funding for general services¹¹.

Direct producer support in the form of direct payments is the main element of agricultural budgetary transfers in most WBs, and is also the major factor of growth in budgetary funds.

The composition of direct payments is very different compared to the EU Member States. There are also many differences between the WBs. In Serbia, the prevailing direct producer support form is input subsidies, whereas in Bosnia and Herzegovina it is

Table 3: Breakdown of total budgetary support to agriculture (%), 2007

	BA	HR	MK	ME	RS	LV	BG	CZ	EE	HU	SI
Market support	2.6	0.7	0.0	4.0	12.3	1.1	0.0	2.7	1.9	35.6	0.8
Direct producer support	61.1	88.5	82.7	37.4	66.8	35.9	15.0	53.6	40.4	37.9	45.5
Structural and rural development Measures	28.4	9.1	10.6	31.3	16.1	44.1	8.1	27.6	35.5	19.5	43.0
General measures related to Agriculture	6.8	1.6	6.7	27.3	2.1	18.9	76.9	16.1	22.2	7.0	10.8
Miscellaneous	1.1				2.7						

Source: APM DATABASES (2010)

Table 4: Breakdown of direct producer support (%), 2007

	BA	HR	MK	ME	RS	LV	BG	CZ	EE	HU	SI
Payments based on output	57.6	22.0	0.0	22.0	20.2	0.6	5.3	0.0	0.0	0.0	0.0
Payments based on current area/animal	41.6	62.5	97.7	39.0	0.9	23.1	15.7	0.0	46.2	69.5	9.7
Decoupled payments	0.0	0.0	0.0	0.0	0.0	56.4	33.0	92.9	51.6	27.8	67.2
Variable input subsidies	0.7	15.5	2.3	29.3	78.9	19.9	0.6	0.0	1.7	0.0	7.5
Other direct payments	0.0	0.0	0.0	9.8	0.0	0.0	45.3	7.1	0.5	2.7	15.6

Source: APM DATABASES (2010)

¹¹ Some experts reported that general services are also funded from other sources, but data for this is not available (not included in APM database) (Volk, 2010).

Table 5: Breakdown of rural development support (%), 2007

	BA	HR	MK	ME	RS	LV	BG	CZ	EE	HU	SI
Improving the competitiveness of the agricultural sector	79.3	96.8	100.0	67.7	68.2	56.2	100.0	17.2	31.7	37.4	33.8
Improving the environment and the countryside	3.5	0.0	0.0	0.0	2.0	39.9	0.0	71.1	52.1	50.1	64.5
Supporting rural economy and population	17.2	3.2	0.0	32.3	29.7	4.0	0.0	11.7	16.2	12.5	1.7

Source: APM DATABASES (2010)

direct payments based on output, and in Croatia and FYR Macedonia direct payments per animal and area.

Rural development policy is generally subordinate to direct producer supports, and mainly includes measures for restructuring agriculture, which have been gaining importance as accession preparations have increased¹².

In the WB countries for which data was available, investment support and other measures aimed at improving the competitiveness of the agricultural sector represent the highest share of funds for rural development, ranging from about 70% in Montenegro and Serbia, to 100% in FYR Macedonia (2007).

Budgetary support earmarked for the development of rural areas including the rural economy and rural infrastructure, represent rather important shares only in Montenegro and Serbia (about 30%), but total funds for these measures are still very limited. Even less was spent for measures related to improving the environment and the countryside (2nd axis of rural development policy), although preparation activities for the implementation of such measures are underway in most WBs.

5. Discussion and conclusions

The main purpose of APM tool is to provide a uniform analytical basis for agricultural policy analyses to be used in EU accession countries. The results based on more or less complete APM databases established under the AgriPolicy project (2010) for five Western Balkan countries and six EU New Member States proved that APM tool enables the rational classification of very different forms of support to agriculture in quite homogeneous groups and therefore relatively uniform approach to the analysis of agricultural policies.

However, the use of APM revealed some problems and dilemmas which still have to be resolved. One of them is a terminology problem, as it is very difficult to clearly define individual groups of measures, bearing in mind that the term should be concise and should not resemble any of the established terms which carry a different meaning.

Another problem of APM classification is that in some areas, using the EU's program approach to form aggregates proved to be less appropriate for the overall analysis

¹² There are also several donor projects, which in some countries represent an important share of the funds for this policy pillar, but data for this was not available.

of agricultural policy. The aggregates at the pillar level, as well as some groups (axes) merge measures that are too diverse to adequately reveal the characteristics of agricultural policy without more detailed disaggregation. Besides, the EU program approach, which served as a basis for the APM classification, is constantly changing because it is tailored only to a certain programming period. The expected CAP reforms may significantly change the current program concept. This, of course, may also ruin the established system of APM classification at higher levels of aggregation.

Probably there is no ideal standard aggregation of agricultural policy measures. The form of aggregation has to be adapted to certain analytical goals. Important in this context, however, is to what extent this is allowed by a basic classification. Work on the development and use of the APM classification revealed that the APM tool enables easy adaptation and thereby great flexibility of analytical approaches. As in the APM classification at least at the lowest level, individual measures are merged into substantively homogeneous groups, it is relatively easy to form various larger groups, which can be adapted to individual analytical needs. The very flexibility of analytical approaches which APM classification enables is most likely its greatest advantage.

The main disadvantage is that the data on budgetary supports had to be collected at very detail level to enable allocating individual measure to the relevant APM group according to specific criteria. The APM database is thus very comprehensive and requires a great deal of information to create.

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Annexes

Annex 1: APM classification and corresponding labels

<i>APM code</i>	<i>Description</i>	<i>Beneficiary</i>	<i>Commodity</i>	<i>OECD category</i>	<i>EAA group</i>
10000	MARKET AND DIRECT PRODUCER SUPPORT MEASURES				
11000	Market support measures				
11010	Export subsidies		S;G		
11020	Market intervention				
11021	Intervention buying-in		S;G		
11022	Private storage aid		S;G		
11023	Food aid to third countries		S;G		
11030	Operational costs for public stockholding		nr	M	
11040	Consumers support	CO	S;G	Q	
11090	Other and miscellaneous market support measures				
12000	Direct producer support measures				
12100	Direct payments and variable input subsidies				
12110	Direct payments to producers				
12111	Direct payments based on output (price aids)	APi	S	A2	10
12112	Direct payments based on current area/animal	APi	S;G	C	30
12113	Direct payments based on fixed criteria (decoupled)	APi	nr	E	30
12114	Other direct payments	APi		PSE	30
12120	Variable input subsidies				
12121	Subsidies for seeds and seedlings	APi	S;G	B1	20
12122	Subsidies for (breeding) animals	APi	S;G	B1	10
12123	Fuel subsidies; fuel tax rebates	APi	S;G	B1	20;30
12124	Fertilizer and pesticides subsidies	APi	S;G	B1	20;30
12125	Interests concessions for short run loans for agricultural production	APi	S;G	B1	30
12126	Insurance subsidies	APi	S;G	B1	30
12127	Other variable input subsidies	APi	S;G	B1	20;30
12128	Subsidies for on-farm services	APi	S;G	B3	20;30
12200	Disaster payments and other compensations to producers				
12201	Compensatory payments based on output	APi	S	A2	30
12202	Compensatory payments based on area/animal	APi	S;G	C	30
12203	Compensatory payments based on resource retirement	APi	nr	F1	50
12204	Compensatory payments for input purchase	APi	S;G	B1	30
12205	Other compensatory payments	APi	S;G	PSE	30
19000	Miscellaneous - market and direct producers support				

<i>APM code</i>	<i>Description</i>	<i>Beneficiary</i>	<i>Commodity</i>	<i>OECD category</i>	<i>EAA group</i>
20000	STRUCTURAL AND RURAL DEVELOPMENT MEASURES				
21000	Improving the competitiveness of the agricultural sector				
21100	On-farm restructuring support				
21110	On-farm investment support				
21111	Modernization of agricultural holdings	APi	S;G	B2	40
21112	Restructuring of permanent crops plantations (per hectare)	APi	S;G	C	40
21113	Land improvement; irrigation; land consolidation	APi	S;G	B2; B3	40
21114	Restoring agricultural production potential damaged by disasters	APi	S;G	B2	40
21120	Other on-farm restructuring support				
21121	Setting up young farmers	APi	S;G	B2	50
21122	Adapting to demanding standards	APi	S;G	B2; C	30
21123	Participating of farmers in food quality schemes	APi	S;G	C	30
21124	Other on-farm support	APi		PSE	50
21200	Agri-food restructuring support				
21210	General support to agricultural sector				
21211	Improving infrastructure related to agriculture	APg	nr	K	
21212	Early retirement	APg	nr	K	
21213	Other support to agriculture	APg	nr	GSSE	
21220	Food processing support, marketing and promotion				
21221	Investments in food processing	AFS	nr	L	
21222	Marketing and promotion	AFS	nr	L	
21223	Supporting producer groups	AFS	nr	L	
21224	Other support to agri-food industry	AFS	nr	L	
21300	Forestry support		nr		
21900	Miscellaneous (competitiveness)				
22000	Improving the environment and the countryside				
22100	Environment and landscape targeted payments to producers				
22110	Payments to farmers in areas with handicaps (LFA)				
22111	LFA payments based on output	APi	S	A2	30
22112	LFA payments based on area	APi	S;G	C	30
22113	LFA payments based on animal numbers	APi	S;G	C	30
22114	Other LFA payments	APi		PSE	30
22120	Payments to farmers in protected areas (PA)				
22121	PA payments based on output	APi	S	A2	30
22122	PA payments based on area/animal	APi	S;G	C	30
22123	Other PA payments	APi		PSE	30

<i>APM code</i>	<i>Description</i>	<i>Beneficiary</i>	<i>Commodity</i>	<i>OECD category</i>	<i>EAA group</i>
22130	Agri-environmental and animal welfare payments to farmers (AE)				
22131	AE payments based on output	APi	S	A2	30
22132	AE payments based on area/animal	APi	S;G	C	30
22133	AE payments based on non commodity criteria	APi	nr	F2	30
22134	Other AE payments	APi		PSE	
22135	First forestation of agricultural land	APi	nr	F1	50
22200	Environmental payments not directly linked to agriculture				
22210	Environmental payments to forestry		nr		
22220	Other payments with environmental objectives		nr		
23000	Supporting rural economy and population				
23100	Support to rural population directly linked to farms				
23110	Support to on-farm diversification into non-agricultural activities	APg	nr	K	
23120	On-farm support to rural population – other	APg	nr	K	
23200	General support to rural economy and population				
23210	Business creation and development		nr		
23220	Rural infrastructure and village development				
23221	Basic infrastructure and services for rural population		nr		
23222	Village renewal and development		nr		
23230	Other measures to support rural areas		nr		
23300	Building local capacity (LEADER)		nr		
29000	Miscellaneous rural development measures				
30000	GENERAL MEASURES RELATED TO AGRICULTURE				
31000	Research, development, advisory and expert services				
31100	Research and development projects	SP	nr	H	
31200	Extension and advisory service	SP	nr	I	
31300	Infrastructure related to vocational training	SP	nr	I	
31400	Expert services	SP	nr	H	
32000	Food safety and quality control				
32100	Veterinary control	SP	nr	J	
32200	Plant health control	SP	nr	J	
32300	Quality control	SP	nr	J	
33000	Other general support measures				
33100	Farmer and other non-governmental organisation support	SP	nr	L	
33200	Information systems	SP	nr	K	
33300	Technical assistance	SP	nr	K	
33400	Other	SP	nr	N	

<i>APM code</i>	<i>Description</i>	<i>Beneficiary</i>	<i>Commodity</i>	<i>OECD category</i>	<i>EAA group</i>
40000	MISCELLANEOUS AGRICULTURAL POLICY MEASURES				
50000	OTHER TRANSFERS (not to agriculture)				
51000	Social transfers to agricultural sector		nr		
52000	Budgetary transfers to other sectors		nr		
53000	Administrative and other costs		nr		
59000	Unspecified non-agricultural budgetary transfers		nr		

Notes:

Beneficiary:

APi Agricultural Producers individually
 CO Consumers
 APg Agricultural Producers generally
 AFS Agri-Food Sector
 SP Service Providers

EAA group

10 Subsidies on product
 20 Subsidies on input
 30 Subsidies on production
 40 Investment grants
 50 Other transfers

Commodity

S Single commodity - EAA codes
 G Group commodities - OECD codes for EU

All labels

nr Not relevant

OECD category:

Producer budgetary support estimate (PSEb)

A2 Payments based on output
 Payments based on input use
B1 Variable input use
B2 Fixed capital formation
B3 On-farm services
 C Payments based on current A/An/R/I, production required
 D Payments based on non-current A/An/R/I, production required
 E Payments based on non-current A/An/R/I, production not required
 Payments based on non-commodity criteria
F1 Long-term resource retirement
F2 Specific non-commodity output
F3 Other non-commodity criteria
 G Miscellaneous payments

General Services Support Estimate (GSSE)

H Research and development
 I Agricultural schools
 J Inspection services
 K Infrastructure
 L Marketing and promotion
 M Public stockholding
 N Miscellaneous

Consumer Support Estimate (CSE)

Q Transfers to consumers from taxpayers

Annex 2: Decision tree for measure allocation

