STATISTICAL MODEL FOR EVALUATING DECISIONS IN THE CONTEXT OF THE COMMON AGRICULTURAL POLICY

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Abstract

Enlargement of European Union (EU) and Common Agricultural Policy (CAP) reform has raised a chain of important decisions, which should be evaluated and taken by the new Member States. According to the Act of Accession the new Member States may decide to apply a single area payment scheme until the end of 2006, in some cases even until the end of 2008.

At the same time there are still ongoing discussions in the EU on the CAP reform, which foresees substantial changes in agricultural policy. As a result of the reform, there is other option - to implement a single payment scheme starting from 2005 or the latest until 2007.

In order to come to the optimal decision, policy-makers should answer: which of the schemes is the most beneficial for the new Member State; in which year it is best to implement the chosen scheme; and what terms are optimal and should be set by the new Member State.

The objective of the paper is to develop a statistical model to find answers to the above-mentioned questions and to choose the optimal set of decisions. The model is based on statistical decision making theory and developed for the case of Latvia. The framework of this model could be applied for other new Member States adapting the model for specific state conditions.

Introduction

Due to Common Agricultural Policy (CAP) reform the new Member States should take decision which of payment scheme to implement in future. According of the Act of Accession, the new Member States had to take decision, which scheme to implement in 2004: a single area payment scheme or standard scheme (scheme, which is in force in the EU on 30 April 2004). The majority of the new Member States have decided to implement the single area payment scheme in 2004, which is special scheme for the new Member States. According to the Act of Accession and EU legislation the new Member States may decide to continue a single area payment scheme until the end of 2006, in some cases even until the end of 2008.

At the same time there are still ongoing discussions in the EU on the CAP reform, which foresees substantial changes in agricultural policy. As a result of the reform, both the Member States and the new Member States should take decision: in which year should they implement a single payment scheme, which is similar with the single area payment scheme in basic principles nevertheless this scheme has other terms and conditions. The choice – to apply the single payment scheme should be done until 2005 or the latest until 2007.

The new Member States should answer: which of the schemes is the most beneficial for them; in which year it is best to implement the chosen scheme; and what terms are optimal and should be set by the new Member State. They have choice between two direct payment schemes: the single area payment scheme or the single payment of CAP reform. But these choices are linked with other choices, for example, implementation year.

Due to different options and scenarios the new Member States have to think how to take decision and how to evaluate possible consequences of decision. And each of them is trying to find optimal choice using different approaches: like statistical models, evaluation of administrative capacity etc. One of solutions is to develop a statistical model to answer unclear questions – because this decision can be crucial for future development of agricultural sectors and it is decision for long-term policy. The statistical model will not give perfect answers but it will show tendencies and possible consequences in result of decision or set of decisions.

Therefore the objective of this paper is to develop such statistical model, which could be as tool for policy-makers to evaluate critical decisions. The paper describes the basic problem for decision makers in context of common agricultural policy, development of statistical model including input, processing and output parts, as well as highlights main conclusions. This statistical model is based on terms of the EU legislation and Act of Accession in the EU and developed for the case of Latvia. The framework of the statistical model could be applied for other new Member States adapting the model for specific state conditions.

1. Formulation of the problem

According the Act of Accession the new Member States may decide to implement a single area payment starting 2004 instead of the standard scheme. For any new Member State the single area payment shall be available for a period of application until the end of 2006 with the possibility of renewal twice by one year at the new Member State's request. The new Member States may decide to terminate the application of this scheme at the end of the first or second year of application with a view to applying the single payment scheme. New Member States shall notify the Commission of their intention to terminate. Before the end of application of the single area payment scheme, the Commission shall assess the state preparedness of the new Member State concerned to apply fully the direct payments as constituted on 30 April 2004. The Commission can decide to extend application of the single area payment by the new Member State for period estimated necessary to allow for the necessary management and control procedures to be fully in place and function properly. Maximum period of application of the single area payment scheme is until the end of 2008.

The new Member States can decide to terminate the single area payment and to introduce the single payment scheme of CAP reform in 2005 or as it is fixed in EU legislation, the Member States and also new Member States may decide to apply the single area payment scheme after transitional period which shall expire either on 31 December 2005 or on 31 December 2006.

Taking into account above mentioned application periods of both schemes we can show graphically all possible implementation (application) choices of the new Member States starting from 2005.

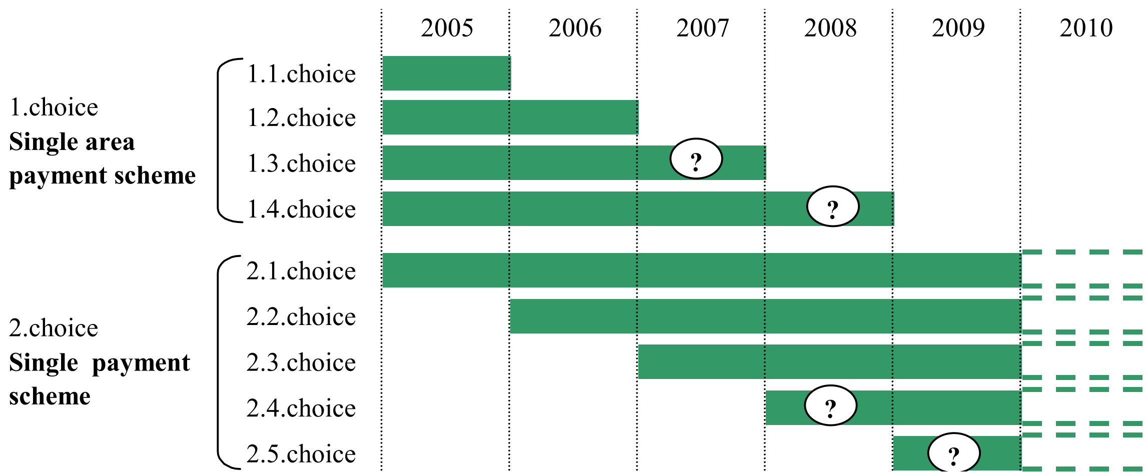

Figure 1 The choices of implementation and application of the payment schemes.

For example as it is shown in Figure 1, the new Member States can decide to continue the single area payment scheme in 2005 (1.1.choice) and then in 2006 to implement the single payment scheme (2.2.choice). The choices – 1.3., 1.4., 2.4. and 2.5. have small probability because they depend on other factors, for example, administrative capacity of new Member State and Commission decision. There is smaller probability that the Commission will allow to extend the single area payment scheme in 2007. There could be many aspects why probability is small, for example, the Member States are obliged to apply the single payment scheme and if the single area payment scheme in new Member States is more favourable than in Member States and it could arises market and competition distortion, then the Commission could not accept the extension of the single area payment scheme.

In order to find answer - what decision should be taken regarding year of implementation or application, the first, the new Member States should compare these two schemes but it is complicated task because each of schemes linked with set of decisions (choices) and there are possible different scenarios.

1.2. Description of the single area payment scheme

The first choice: the single area payment scheme. The Commission proposed this scheme for the new Member States. The single area payment is payment per eligible hectare, which shall be made once a year. It shall be calculated by dividing the annual financial envelope by the agricultural area of each new Member State. The agricultural area of new Member States under the single area payment scheme shall be part of its utilised agricultural area which has been maintained in good agricultural condition at 30 June 2003, whether in production or not at that date.

Financial envelope for the single area payment is set according the following conditions: in the new Member States direct payments shall be introduced in accordance with the schedule of increments expressed as a percentage of then applicable level of such payments in the Community as constituted on 30 April 2004, for example, 25% in 2004, 30% in 2005, 35% in 2006, 40% in 2007. It means that 25% of all envelopes of sector direct payments such as arable crops, seeds payments, and suckler cows, slaughter premium and other payments should be allocated to the single area payment in 2004.

In addition the new Member States have to possibility to provide the complimentary national direct payment like as payment per animal, per tone of milk etc.

They have possibility of complementing any of direct payment, for example, up to 55% of the level of direct payments in the Community as constituted on 30 April 2004 in 2004, 60% in 2005, and 65% in 2006. In other words: the first part of the direct payment up to 25% level in 2004 allocated to single area payment and it is financed by EU budget but other part up to 55% in 2004 should be financed by national budget and there is possibility to allocate finance from EU budget for rural development measures. If new Member States had CAP-like national schemes (any national direct payment scheme applicable prior to the date of accession of the new Member States under which was the support granted to farmers in respect of production covered by one of the direct payments) then they can total level of direct support the farmer would have be entitled to receive in the calendar year 2003 under CAP-like national scheme increased by the 10 percentage points. For Lithuania and Slovenia there are fixed a little different terms in legislation. These terms should be adapted in case if the framework would be used for these States.

In 2004 the principles for allocation of complimentary national direct payments (CNDP) are different as it will be from 2005. According EU legislation, in 2005 the new Member States shall retain the right to apply sector specific financial envelopes as complimentary national direct payments, provided that such a sector specific envelop may only relate to: directs payments combined to the single payment scheme, and/or one or more of the direct payments that are excluded or may be excluded from the single payment scheme. It means that new Member State may decide what direct payment to apply as complimentary national direct payment: arable crops payments, suckler cows premium, slaughter premium for calves or for other animals than calves, dairy premium, seeds payments, sheep and goat payments. It is choice of new Member State what payments, what level of payment to apply but not higher than it is allowed in following year.

1.1. Description of the single payment scheme

The second choice of the schemes is the single payment of CAP reform. In the first moment it could seem that this scheme is similar the single area payment. But there are different sub-choices in this scheme and main principles are different for the single payment. The CAP reform foresees that all direct payments are transferred to single payment, which means that all farmers whose holdings are located in a given region shall receive entitlements, whose unit value is calculated by dividing the regional ceiling by the number of eligible hectares at regional level. The Member States can choose the historical or regional approach, but new Member States shall choose regional approach because they do not have historical past of the EU direct payments.

There are several important differences in this scheme for example, regional ceilings and entitlements. Each new Member State shall subdivide its national ceiling between the regions according to objective criteria. New Member States with less than three million eligible hectares may be considered as one single region. This is so called regional approach. Other difference of this scheme is that all farmers whose holdings are located in a given region shall receive entitlements, whose unit value is calculated by dividing the regional ceiling by the number eligible hectares at regional level. Eligible hectares, according legislation, means any agricultural area of the holding taken up by arable land and permanent pasture except areas under permanent crops, forests or used for non agricultural activities. The number of entitlements per farmer shall be equal to the number of hectares he declared the first year of application of the single payment scheme. Entitlements of payment may be transferred by sale or any other definitive transfer with or without land. Entitlements may only be transferred within same region or between regions where the entitlements per hectare are the same.

Each new Member State shall proceed to a linear reduction of its national ceiling in order to constitute a national reserve. This reduction shall not be higher than 3 %. After this reduction the new Member States shall subdivide national ceiling between regions. The new Member States shall use the national reserve for the purpose allocating payments entitlements to farmers finding themselves in a special situation according objective criteria. During the first year of application of the single payment scheme, the new Member States may use the national reserve for the purpose of allocating payment entitlements, according objective criteria, to farmers in specific sectors, finding themselves in a special situation as result of the transition to the single payments scheme.

It is very important to recognise the choices in legislation, and parts which is compulsory, which will be as limitations in the statistical model. After identification of choices and fixed conditions, we can start to develop statistical model. How can we find choices in legislation and how can we recognise the compulsory conditions? There are “key” words in legal terminology, which can help to identify conditions, which should be inserted in the statistical model. For example, such words as “may decide” or “may implement” give the choices. Or such combination of words “up to 55%” give also choices and also limit, for example, new Member States can decide to provide direct payments up to 45%, in case if national budget is restricted at the same time new Member States shall not exceed 55% level if there is not set other legal conditions by EU legislation. In many cases interpretation of “shall” means obligations, terms, which are compulsory for the Member States and new Member States. But we should be careful with word “shall” there can also be some exception, for example “reduction shall not be higher than 3 %”, the new Member States may decide to reduce 1% of national ceiling in order to provide national reserve. This phrase of article gives options in the defined interval. The some examples of main choices of the new Member States are given in Table 1.

Table 1 General choices of the new Member States

Choice	Description of general choices
National reserve	**S (or Res)-** Each new Member State shall proceed to a linear percentage reduction of its national ceiling in order to constitute a national reserve. This reduction *shall not be greater than 3 %.*
Regional allocation of the ceiling	**R (or Reg)** - The new Member States shall apply the single payment scheme at regional level. The new Member States shall define the regions according to objective criteria. New Member States with less than three million eligible hectares *may be considered* as one single region.
Value of entitlement	**E -** The new Member States *may* also, according to objective criteria, fix, within the regional ceiling or part of it, different per unit values of entitlements to be allocated to farmers, for hectares of grassland as identified on 30 June 2003 and for any other eligible hectare or alternatively for hectares of permanent pasture as identified on 30 June 2003 and for any other eligible hectare.

The one of new characteristics of the CAP reform is that the Member States and the new Member States may decide to retain some level of envelope for certain agricultural sectors, such as: arable crops, seeds, beef and veals, sheep and goat, milk. The main choices are described in Table 2.

Table 2 Choices of direct payments by sectors

Sector	Description of choices of the direct payments
Arable crops payments	**A1** – *may retain up to 25 %* of the component of national ceilings corresponding to the arable crops area payments or, alternatively **A2** – *may retain up* to 40 % of the component of national ceilings corresponding to the durum wheat supplement payment
Beef and veal payments	**B1** - *may retain up to 100 %* of the component of national ceilings corresponding to the slaughtering premium for calves. **B21** – *may retain up to 100 %* of the component of national ceilings corresponding to the suckler cow premium. and **B22** – *may retain up to 40 %* of the component of national ceilings corresponding to the slaughter premium for bovine animals other than for calves. or alternatively, **B31** – may *retain up to 100 %* of the component of national ceilings corresponding to the slaughter premium for bovine animals other than for calves. or, alternatively, **B41** – *may retain up to 75 %* of the component of national ceilings referred corresponding to the special male premium.
Sheep and goat payments	**C1** - *may retain up to 50 %* of the component of national ceilings corresponding to the sheep and goat payments
Dairy premiums (Article 71i)	**D1** - Starting from 2007, the amounts resulting from dairy premium and additional payments provided for in Articles 95 and 96 and to be granted in 2007 shall be included in the single payment scheme. *However*, new Member States *may decide* that the amounts resulting from dairy premiums and additional payments, provided for in Articles 95 and 96, shall be included, *in part or in full*, in the single payment scheme starting from 2005.
Optional exclusion of some direct payments	**Op1 (or V1)** - *may decide*, by 1 August 2004 at the latest, to *exclude* from the single payment scheme: *one or more* of the direct payments granted in the reference period under: Article 4(4) of Regulation (EC) No 1251/1999. **Op1 (or V2)** - *may decide*, by 1 August 2004 at the latest, to *exclude* from the single payment scheme: *one or more* of the direct payments granted in the reference period under Article 3 of Regulation (EC) No 2358/71 (seeds).
Optional implementation for specific types of farming and quality production	**Op2 (or V2) -** *may retain up to 10 %* of the component of national ceilings corresponding to each sector. In the case of the arable crops, beef and veal and sheep and goat sectors, this retention shall be taken into account for the purpose of application of the maximum percentages fixed, respectively, in Articles 66, 67 and 68.

The new Member States should do detailed cross analysis of legislation concerning two choices of the payment schemes in order to develop the statistical model. In the further sections of the paper is described framework of the statistical model. The model is developed for Latvia but in the paper it is shown as framework with description of main parts of the model avoiding use of specific results and numbers.

2. Development of the statistical model

2.1. Framework of the statistical model

There are the following steps for developing the statistical model: first, the terms of EU legislation are included in the input and data processing parts of the statistical model. The input part consists of the variable and static part. The variable part is necessary for adapting the statistical model for the new Member States and the static part is developed based on EU legislation. Second, the processing part of statistical model is developed based on statistical data and the statistical decision making theory, defining the functions of the gains and losses at: state (macro) level, sector level. Third, the main outcome of the statistical model is the estimation of gains and losses at different levels depending on the choice of decisions, as well as level of direct payments and necessary budget to provide chosen set of choices. In some case results include a certain level of subjectivity regarding the choice of decisions, but policy-makers can use them as a useful tool for evaluation of critical decisions.

In the statistical model two sub-models of the payments schemes are included. Input parts are separate for each sub-model but there is some common output part in order to compare these two choices year by year and to take the best decision, which payment scheme and in which year to apply.

The framework for the single area payment scheme is shown in Figure 2.

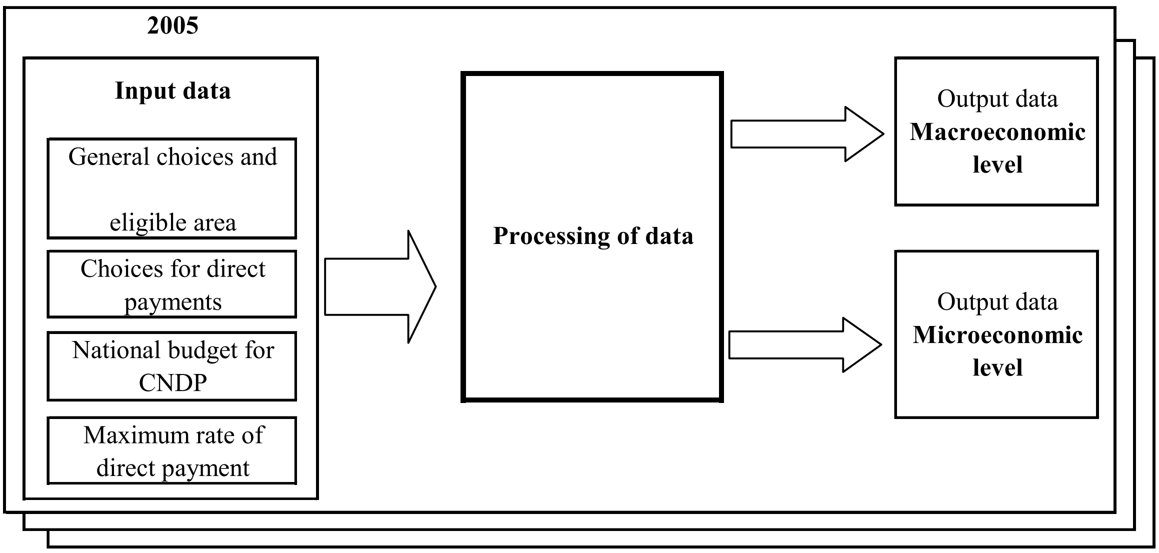

Figure 2 Framework of sub-model of the single area payment scheme

The framework of sub-model of the single payment scheme of the CAP reform is more complicate due to different sub-choices. This scheme contains a lot of sub-choices and combinations of choices. For example, new Member State may decide to divide national ceiling in several regional envelops defining for each region different value of entitlements. It means that for each choice of regional breakdown exists a lot of sub-choices. The framework of the single payment scheme of the CAP reform is shown in Figure 3.

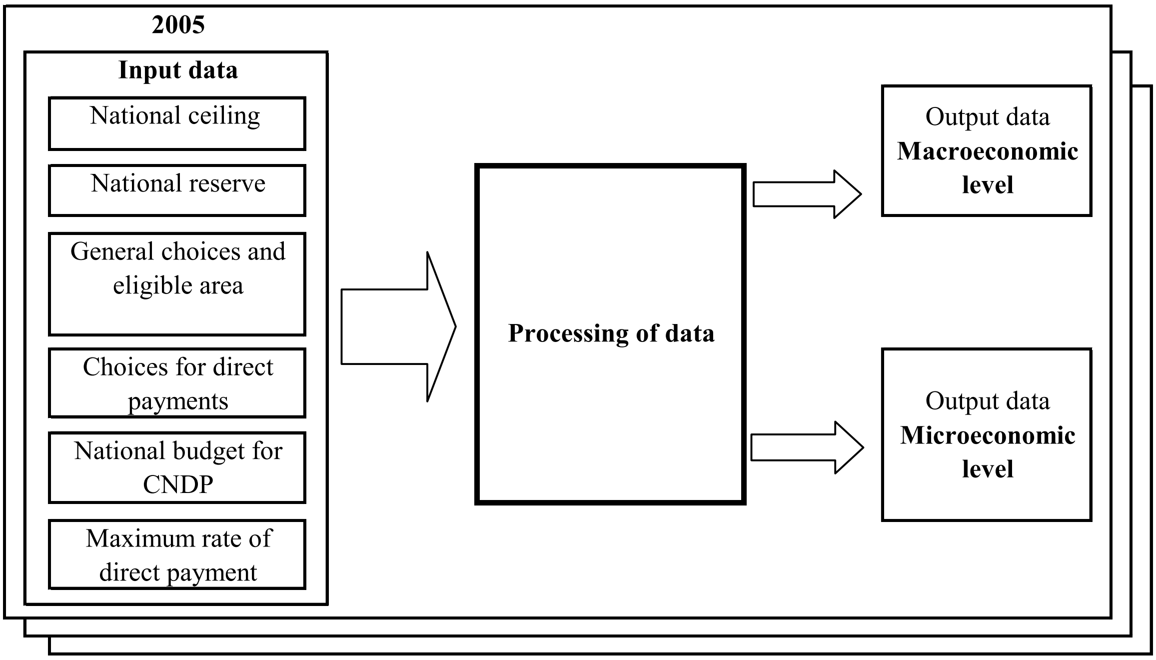

Figure 3 Framework of sub-model of the single payment scheme

2.2. Input part of the statistical model

After detailed analysis of articles of legislation it is important to express these articles in quantitative form in the statistical model. It is more and interesting for development of the sub-model of the single payment. Some of examples of general choices are given in Table 3.

Table 3 Quantitative description of choices

Choice	Description of general choices
S - National reserve	Choice S_i is between $\{s_{1\ min,}\ s_{1\ max}\}$ where $s_{1\ min} = 0{,}001$ and $s_{1\ max} = 0{,}03$
R- Regional allocation of the ceiling	Choice R1 is between $\{r_{1\ min,}\ r_{1\ max}\}$ where $r_{1\ min} = 0$ and $r_{1\ max} = 1$ Choice R2 is between $\{r_{2\ min,}\ r_{2\ max}\}$ where $r_{2\ min} = 0$ and $r_{2\ max} = 1$ Choice R3 is between $\{r_{3\ min,}\ r_{3\ max}\}$ where $r_{3\ min} = 0$ and $r_{3\ max} = 1$ Choice R4 is between $\{r_{4\ min,}\ r_{4\ max}\}$ where $r_{4\ min} = 0$ and $r_{4\ max} = 1$ Choice R5 is between $\{r_{5\ min,}\ r_{5\ max}\}$ where $r_{5\ min} = 0$ and $r_{5\ max} = 1$ …. Choice Rn is between $\{r_{n\ min,}\ r_{n\ max}\}$ where $r_{n\ min} = 0$ and $r_{n\ max} = 1$ Specific conditions: n = 20 $\sum r_{ij} = 1$
E - Value of entitlement	Choice E1 is between $\{e_{1\ min,}\ e_{1\ max}\}$ where $r_{1\ min} = 0$ and $r_{1\ max} = 1$ Specific conditions: New Member States should decide carefully and value of E depends on previous policy taking into account rate of single area payment for 2004 in order to provide sustainable agricultural policy

Input part for regional choices is time-consuming because there is necessary to develop specific input part, especially, if we would like to develop such model, which could be adapted for more than one new Member State.

The choices of direct payments can be inserted in input part of the model in the following form (Table 4):

Table 4 Quantitative description of choices of the direct payments by sectors

Sector	Description of choices of the direct payments
A - Arable crops payments	Choice A1 is between $\{a_{1\ min,} a_{1\ max}\}$ where $a_{1\ min} = 0$ and $a_{1\ max} = 0{,}25$ or Choice A2 is between $\{a_{2\ min,} a_{2\ max}\}$ where $a_{2\ min} = 0$ and $a_{2\ max} = 0{,}40$
B - Beef and veal payments	Choice B1 is between $\{b_{1\ min,} b_{1\ max}\}$ where $b_{1\ min} = 0$ and $b_{1\ max} = 1$ or Choice B21 is between $\{b_{21\ min,} b_{21\ max}\}$ where $b_{21\ min} = 0$ and $b_{21\ max} = 1$ Choice B22 is between $\{b_{22\ min,} b_{22\ max}\}$ where $b_{22\ min} = 0$ and $b_{22\ max} = 0{,}4$ or Choice B31 is between $\{b_{31\ min,} b_{31\ max}\}$ where $b_{31\ min} = 0$ and $b_{31\ max} = 1$ or Choice B41 is between $\{b_{41\ min,} b_{41\ max}\}$ where $b_{41\ min} = 0$ and $b_{41\ max} = 0{,}75$
C - Sheep and goat payments	Choice C1 is between $\{c_{1\ min,} c_{1\ max}\}$ where $c_{1\ min} = 0$ and $c_{1\ max} = 0{,}50$
D - Dairy premiums	Choice $D_{1j}$is between $\{d_{1\ min,} d_{1\ max}\}$ where $d_{1\ min} = 0$ and $c_{1\ max} = 1$
V1 – Arable crops	Choice V1 between $\{V_{i\,1}\ V_{i\,2}\}$ where $V_{i\,1} = 0$ and $V_{i\,2} = 1$
V2 - Seeds	Choice V2 between $\{V_{i\,1}\ V_{i\,2}\}$ where $V_{i\,1} = 0$ and $V_{i\,2} = 1$

2.3. Data processing in the statistical model

The main part of the statistical model is data processing – in this part for each sub-model are developed specific mathematical equations in order to estimate possible gains and losses. The functions of gains or losses are defined by principles of the decision-making theory, where function of losses (or gains) is L(q,a). Accordingly the decision-making theory we have to find such decision, which is optimal of all space of decisions D. It means that it is necessary to search such decision function for which maximum value of risk is equal to the less possible maximum risk.

The functions of gains or losses are developed enclosing different conditions, which depends on several factors. The calculations of the functions of gains and losses for each sector are defined differently but they are expressed as financial gains, in order to estimate the gains between these sectors. The part of data processing is divided in two types of calculations – in macroeconomic and microeconomic level.

In the processing part the regional sub-model consists of set of calculations, which are incorporated on the base of objective criteria. In case of Latvia the objective criteria are fixed in the following way: each sector envelope of direct payments subdivided between regions according specific statistical data of sector. For example: envelope of arable crops payments divided proportionally area of arable crops of regions. The slaughter premium divided proportionally number of slaughter animals in region in 2003. These criteria are inserted as experiment to show what will happen if the Latvia would be consider as 5 regions. In the same time there could be other choice for Latvia. Latvia can be considered as one region because area is with less than three million eligible hectares.

For example, the Figure 4 shows the objectivity of criteria and allocation between regions taking into account above-mentioned regional approach. It shows that value of entitlement of the single payment depends on level of historical production in sector. These objective criteria can be chose by new Member State. And there could be used also other approach of calculation of regional ceilings.

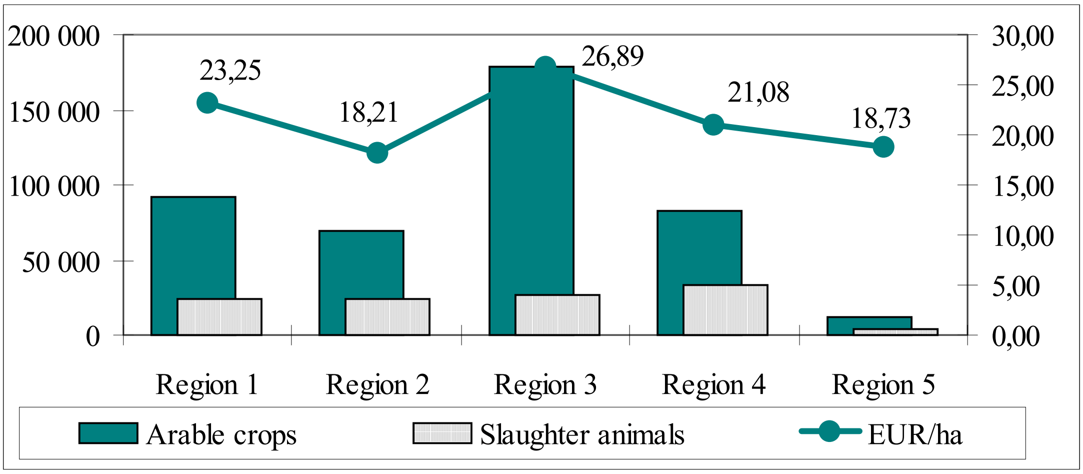

Figure 4 Values of entitlements of the single payment and distribution of area of arable crops and number of slaughter animals in 5 regions

2.4. Output part of the statistical model

One of results of output was shown in the previous section, it is regarding regional choices. Output part comprises of different tables and graphs of results, which assist to take decision. The one part of results is data output in macroeconomic level (Table 5). There is included the allocated finance for each sector. In addition, the main outcome of statistical model is the function of gains and losses and they show development in economy.

Table 5 Framework of output data in macroeconomic level

Sector	Impact on the budget			Gains	Losses
	EU budget	National	Total		
A	F_{EU1j}	F_{Nat1j}	$F_{Total\ 1j}$	G_{1j}	L_{1j}
B	F_{EU2j}	F_{Nat2j}	$F_{Total\ 2j}$	G_{2j}	L_{2j}
C	F_{EU3j}	F_{Nat3j}	$F_{Total\ 3j}$	G_{3j}	L_{3j}
D	F_{EU4j}	F_{Nat4j}	$F_{Total\ 4j}$	G_{4j}	L_{4j}
E	F_{EU5j}	F_{Nat5j}	$F_{Total\ 5j}$	G_{5j}	L_{5j}
F	F_{EU6j}	F_{Nat6j}	$F_{Total\ 6j}$	G_{6j}	L_{6j}

The function of gains is defined as G(q,d(x)), where 1,2,…i means the gains for i-sector and 1,2,….j means gains in j-year.

The function of losses is defined as L(q,d(x)), where 1,2,…i means the expected losses for i-sector and 1,2,….j means the losses in j-year.

The function of gains for each sector should be comparable with others, and if the functions of gains are similar and it is difficult to decide, which choice of criteria and allocated funds will be optimal, then there is other solution – to supplement the statistical model with output in microeconomic level. Then it is necessary to include several types of farms in the statistical model in order to estimate the gains in microeconomic level. Each type of farms has distribution density, which depends on many factors, for example level of support, prices of sector products, regional location and other factors. The framework of output data in microeconomic level is shown in Table 6.

Table 6 Framework of output data in microeconomic level by breakdown of average income and size of farms

Farm type A			Farm type B			Farm type C		
Size of farm	Average income, EUR	Number of farms	Size of farm	Average income, EUR	Number of farms	Size of farm	Average income, EUR	Number of farms
1-3	S_{11}	W_{11}	1-3	S_{12}	W_{12}	1-3	S_{13}	W_{13}
3-5	S_{21}	W_{21}	3-5	S_{22}	W_{22}	3-5	S_{23}	W_{23}
5-10	S_{31}	W_{31}	5-10	S_{32}	W_{32}	5-10	S_{33}	W_{33}
10-15	S_{41}	W_{41}	10-15	S_{42}	W_{42}	10-15	S_{43}	W_{43}
15-20	S_{51}	W_{51}	15-20	S_{52}	W_{52}	15-20	S_{53}	W_{53}
Etc.	S_{61}	W_{61}	Etc.	S_{62}	W_{62}	Etc.	S_{63}	W_{63}

3. Conclusions

- The statistical model should be improved in the processing part. Some of important calculations are still unclear due to uncertain articles of legislation. Very important terms of legislation is fixed imprecise and can be interpreted in several ways. There is necessary clarification in legislation.
- The single payment scheme is more favourable in context of flexibility. The new Member States have possibility to find more appropriate policy for the state. But at the same time it is more difficult to predict all consequences of chosen set of decisions.
- Allocation of envelope between different regions can provide principles of equity but it is also sensitive decision, which can raise social frustration in regions
- Quantitative limits for area under fruits and vegetables in the single payment scheme, which based on reference period of 2000 –2002, can be disadvantage for some new Member States. And if the single payment scheme will be implemented in 2005 it can raise losses for this sector due to rapid changes.
- Values of entitlements of scenario - new Member State continue the single area payment scheme in 2005 is close to results of scenario – new Member State chose one region and full decoupling of the payments (no other sector directs payments, except the single payment) in 2005.
- Scenarios with more regions as one and with retention of several direct payments can raise social frustration in some sectors due to rapid decrease of value of the single payment in 2005 or 2006 in comparison with the single area payment in 2004. Therefore transition from the single area payment scheme to the single payment scheme should be implemented gradually, and retention of payments should be chosen carefully.

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