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AGRICULTURAL MARKET IMPACTS OF THE ADAPTATION OF EU'S COMMON AGRICULTURAL POLICY (SPECIAL ATTENTION TO THE CASE OF HUNGARY)

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Abstract

The Eastern enlargement of the European Union is a historical move without precedent. The adaptation to the Common Agricultural Policy (CAP) has various impacts. The Eastern enlargement of the CAP raises the most problematic questions in the following areas of discussion:

- Taking over of significantly higher CAP-prices;
- Taking over of the “compensatory payments”;
- Taking over supply control and management;
- Budgetary impacts;
- WTO-commitments.

This paper systematically analyses these above-mentioned factors. Special attention is paid to the WTO-connections. It has to be underlined that the system of Agreement of Agriculture, the “modalities” laying the basis for the commitments have not properly taken the unique situation of the transitory economies into consideration.

As a consequence the EU's Eastern enlargement shall have difficulties with regards to the application of WTO-commitments, finding of a reliable solution to this particular matter shall be one of the conditions of EU-enlargement. The new WTO Round hopefully can cope with some of the issues and propose acceptable solutions in order to proceed with the enlargement process.

1. Introduction

Changes in agri-policies, especially the EU adaptation have major macroeconomic effects. (It is especially valid for Hungary where the agri-economy represents a significant part in a macroeconomic point of view. This, due to the nature of our country, will be more than that of the EU average).

There is quite a lot to explore in the field of macroeconomic effects and impact studies of different scenarios, also to carry out a theoretical analysis, one needs to have wide-ranging quantitative studies and apply econometric methods as well as models. For these methods the countries that already joined and the relevant EU authorities have mobilised substantial intellectual and financial resources.

This work cannot be evaded when talking about the Hungarian accession, moreover, one can see that the control and correction of the models will be a continuous process. However these assessments will raise some important problems of methodology as well. There is a need for having a comprehensive sectoral and macroeconomic analysis, which will put the determining factors of EU adaptation of the Hungarian agri-economy in one system as well as look at the alternative conditions and foreseeable effects of the EU accession in a macroeconomic context showing potential impacts on the national economy.

Within the framework of our research activity aiming at the comprehensive analysis of the effects of the EU adaptation of the Hungarian agri-economy the objectives will be fulfilled through the complex application of several scientific methods. Beyond the application of simple theoretical and statistical models the utilization of partial and general equilibrium models could also be conducted. This latter activity became possible at the University of Göttingen, Institute of Agricultural Economics. (Münch, 1999. and Banse, 1999). As a result it led to the exploitation of the macroeconomic relations of the accession of agriculture.

The current paper presents on one hand the possible main sectoral impact factors of adaptation, on the other hand it touches the field of agricultural subsidies that can be obtained from the CAP-system, and at last describes the possible wider macroeconomic impacts of EU-adaptation.

2. Possible sectoral influences

Without adaptation of CAP according to the analyses plant cultivation can reach the level prior to the transition before 2006. (In the area of oleaginous plant and sugar production it can even surpass it, in corn production, however, it would still fall behind.) Animal farming grows much slower, especially in the case of milk and beef. Pork production increases only moderately after years of stagnation, poultry a little more dynamically. The highest figures of former production, however, will not be reached by any sector of animal farming within the period subject to the simulations. On the other hand production grows much more rapidly than domestic consumption. In the case of most high priority products the net exporter's position can in theory strengthen. In comparison to the above scenario there are significant differences in the other situations under examination - based on the adaptation of CAP. In the case of the latter ones grain production, especially the production of the types subsidised to the greatest extent (barley and other types of feeder grain) will be stimulated by the growing prices. A significant increase can especially be expected in corn production (the EU21 is a net importer) instigated by the nearing of prices to the EU level.

Although grain production is increasing, a decline can be expected in the production of oil-seeds since the price ratio between grain and oil-seeds will change fundamentally. The production according to the simulations is scarcely half of the one without the adaptation of CAP. Production will start to grow only slowly after the decline and will not reach the level of the base period even later.

Sugar and milk quotas are expected to be considerably restrictive in Hungary because quota quantities may remain under the level of actual base period production, e.g. if the domestic consumption of the base period and the potential amount of subsidised export according to the WTO agreement make up the quota together. This calculation method would be seriously disadvantageous for Hungary since it would be based on the decreased level of domestic consumption.

Pork and poultry production according to the simulations will stagnate, then decline and remain on a low level at the end of the period. The main reason for this decline can be found in the increasing grain prices resulting from the adaptation of CAP and in the decreasing pork and poultry prices following from the EU expansion, on top of the inner efficiency problems of the sectors concerned.

In consequence of this almost dramatic difference the domestic use of feeder grain would decrease significantly. Important characteristics of the cases analysed are the following:

- a grain production significantly higher than other options, especially in the case of feeder grain;
- at the same time the domestic use of grain (mainly feeder grain) considerably lower than in the case without CAP adaptation (and unprecedentedly low in the last quarter of the century);
- and resulting from this a considerable net export amount - almost unthinkably large - of grain, above all feeder grain.

Resulting from the lower oil-seed production following from the CAP adaptation the net export will diminish, moreover even a moderate net import can evolve in the first years of adaptation according to the simulations. The net exporter's position can reappear by the end of the period under examination but on a level lower than in the base period. In the case of dairy products net import can emerge resulting from the domestic production restricted by the quota and the increasing domestic consumption.

Beside the discussed level of grain export the most important change can be forecast in the foreign trade turnover of pork and poultry. Following from the discussed effects instead of the formerly considerable net export - that would basically survive according to scenario a) - a net importer's position will increasingly formulate after the adaptation of CAP. (The simulation forecasts a net import of ca. 80 thousand tons of bony meat for 2006.)

The tendencies described would result in the fundamental - and not problem-free - transformation of the export structure of the Hungarian food industry. According to the simulation a considerable net export would prevail and the assets regarding the main products under examination would exceed 1 billion EUR per year (calculated at the real exchange rate of 1997). On the other hand the determinant factor would be the grain export, and a net import would come about regarding several traditional export products. This tendency warns about the danger of the one-sided extensive specialisation. It is justified, however, to call the attention to the reality restrictions (logistical problems, increasing grain surplus in the EU, WTO restrictions, etc.) of the above. In view of this the amount of grain export according to the simulations could scarcely be realised. Thus the structural changes described also contain in reality the danger of a significant decrease in the net export.

3. Support available from the CAP system in theory

During the research one of the key topics was the estimable amount and the structure of the support that the Hungarian agriculture can expect from the EU by means of Hungary's membership.

The main transfer effects analysed and simulated during the research can be seen in table 1. It can be concluded that the support to be expected from the EU is around 250 million EUR per year that can be completed with accompanying and other structural measures. The estimable total amount of these can, however, only be maximum 530-630 million EUR in 2003. Whereas the amount of compensatory payments - in the case of their expansion - would be more than 1.2 billion EUR. Consequently the latter would make up approximately two thirds of the total agricultural support obtainable from the EU. If they became available, their total amount would reach the fivefold amount of the obtainable market support.

Table 1: Possible amount of agricultural transfers
(million ECU)

		1994	1997	2003
1.	Market and production support	175-230	261	249
2.	Accompanying measures, orientation support	175-275	220-330	180 ² 100-200 ³
3.	1+2	350-500	480-590	530-630
4.	Direct payments (compensation)	850	1000	1260
5.	Total	1200-1350	1480-1590	1790-1890

Remarks:

1. Calculations supposing full EU membership
2. Specialised agricultural regional development support
3. Possible agricultural proportion of programmes financed from structural funds

Lack of compensation would not only mean the dramatic decrease of transfers. It would also have a serious market distorting effect not only hindering the new member states to obtain new markets in the EU15 but - in connection with the administrative competitive advantage resulting from the compensation of the EU actors on the agricultural market - causing them even to lose a considerable part of their own domestic market as well.

4. General equilibrium analysis. Macro-economic effects

The impact analysis of the EU-integration of the agriculture cannot stop at the borders of the sector. It has an extremely wide system of macro-economic and social correlation. The equilibrium analysis can give support in the examination of these.

In the frame of this analysis (Banse (1999)) the following four courses of movement were examined:

- a) National politics in Central European countries without EU accession.
- b) EU accession in 2003: structural support, contribution to the EU budget but without adaptation of CAP.
- c) Same as in scenario b) with full adaptation of CAP.
- d) Same as in scenario c) with direct compensatory payments.

In the course of the analyses the results of individual scenarios have been compared in detail. (The first phase of the adaptation is characterised by the figures of table 2 based on the simulation for 2005.) In view of this the following can be underlined:

Table 2: Results of the examined courses of movement by 2005

(in the percentage of scenario b)

	a)	b)	c)	d)
	scenarios			
Welfare of private households				
Agricultural (rural)	-1.9	0.0	1.0	6.0
non-agricultural (urban)	-3.1	0.0	-0.2	0.5
Wages				
blue collar	-3.4	0.0	0.5	1.1
white collar	-3.8	0.0	0.4	2.0
GDP	-3.6	0.0	0.5	1.2
Exchange rate	3.0	0.0	-1.7	-4.7
Gross investments	-9.3	0.0	0.1	2.6
Income of private households				
agricultural	-2.0	0.0	1.1	6.1
non-agricultural	-3.2	0.0	-0.1	0.7
Production				
value added in agriculture	-2.1	0.0	7.5	8.2
value added in non agric. sectors	-3.6	0.0	-0.3	0.6
Trade				
agro-food imports	-1.3	0.0	-1.8	-0.2
agro-food exports	-4.4	0.0	14.2	8.6
non-agro-food imports	-3.6	0.0	-0.8	-0.9
non-agro-food-exports	0.6	0.0	-4.6	-10.9
Transfers (net) from EU (in billion EUR)	0.00	0.49	0.58	1.18

Source: Banse (1999)

- GDP. The scenarios with EU membership (b, c and d) show considerably higher GDP, as well as agricultural and non-agricultural added value than scenario a). On the other hand among the membership scenarios GDP is highest in d), then c) and finally b). Consequently GDP is much higher in the case of agricultural adaptation than without the adoption of the acquis relevant to CAP (e.g. in the case of a transition period). This GDP surplus is the highest in the years directly following the accession, its proportion - beside the significant increase of the Hungarian economy - decreases only later. The production surplus of the agriculture is especially remarkable in these scenarios. In case d) the production of non-agricultural sectors is also higher than in case b), whereas in c) the non-agricultural added value slightly decreases.
- Investments. Parallel to the increase of GDP the increase of gross investments is significant all along. In scenario c) non-agricultural investments slightly fall behind those in b), whereas the highest investment level can be seen in d). In the latter case non-agricultural investments are also the highest. The continuous high level of agricultural investment would provide an unparalleled opportunity for modernising the agriculture.

- Welfare of households. The welfare of agricultural households increases by 1% in scenario c) and by 6% if the farmers receive direct compensation (d). The welfare of city households is higher in b) than in a), whereas it decreases as a result of higher food prices in case c). Indirectly, however, (through macro-economic relations) non-agricultural households also profit from direct compensations (d).
- Financial transfers. The rules of financial solidarity would strengthen Hungary's position in the case of the expansion of CAP. Direct payments would result in significant money transfers for Hungary, which brings about the real appreciation of the Forint compared to scenario b).
- Foreign trade balance and balance of payments. The membership scenarios show higher level of export and lower level of import compared to a), i.e. a more favourable foreign trade balance. The foreign trade balance is the highest in scenario b), it is here that the deficit is the smallest. This means that the agricultural adaptation can to a small extent unfavourably influence the foreign trade balance. The main reason for this is the real appreciation that beside the increase of domestic consumption can weaken international competitiveness. On the other hand it must be emphasised that the distortion of the foreign trade balance is financed by the improvement of other items of the balance of payments (above all the balance of transfers). Consequently among the conditions of agricultural adaptation (as in scenarios c) and d)) a wide ranging import of capital goods can be financed, which can strengthen modernisation tendencies and contribute to the improvement of the welfare of households as well. In the membership scenarios, however, the sectoral structure of foreign trade varies: in scenarios c) and especially d) agricultural assets and agricultural export are higher, and import is lower.

5. Conclusions

Based on the analyses the following factors in connection with the especially sensitive agricultural areas of the accession negotiations can be identified:

- transition period versus immediate adoption of CAP;
- expected restriction requirement of agricultural production;
- compensatory payments;
- domestic support of the recovery and adaptation of the Hungarian agriculture;
- special regional development issues.

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