Reform of the sugar sector and its impacts on the Slovak sugar market

Reforma sektora cukru a dopady na slovenský trh s cukrom

M. Božík, T. IZAKOVIČ

Research Institute of Agricultural and Food Economics, Bratislava, Slovak Republic

Abstract: A full liberalisation of the sugar market is hardly acceptable for Slovakia, because it would significantly affect not only the economic performance and employment across different sectors, but also their production structures, particularly in the farming-intensive regions. We nonetheless believe that the reform is necessary as the sugar sector remains the last unreformed CAP sector in the EU, which puts it in a better position vis-à-vis other producers and farms. On the other hand, the justified claims of producers for the compensation of losses, similarly as the claims laid during the 1992 CAP reform, would disrupt the EAGGF budgetary framework through 2013, because only the claims of Slovak sugar beet producers would amount to some • 200 million during 2010–2015. We believe that the solution and consensus lies in the combination of reforms based on the scenarios of fixed quotas and falling prices, and/or the application of the "Midway situation" after 2011. The alternative setting of quotas, based the administratively assessed production efficiency levels for the individual EU countries, would also be unacceptable for Slovakia. In the recent past, the volume of investments in the Slovak sugar industry has been considerable and the most viable sugar refineries have already emerged from the selection process. The situation in the sugar beet sector is similar and the results of the "Fall in Prices" scenario until 2011 are largely similar to the situation before the accession to the EU.

Key words: price, sugar, impacts, intervention quota, liberalisation AGRO-3 model, reform, simulations, Common Agricultural Policy

Abstrakt: Plná liberalizácia trhu s cukrom je pre Slovensko ťažko akceptovateľná, pretože výrazným spôsobom zasiahne nielen do ekonomických výsledkov a zamestnanosti celých odvetví, ale aj do produkčnej štruktúry, hlavne v intenzívnych pestovateľských oblastiach. Napriek tomu sa domnievame, že reforma je potrebná, pretože cukor zostal jediným nereformovaným sektorom SPP EÚ, čím je značne zvýhodnený oproti ostatným producentom a farmám. Na druhej strane by oprávnené nároky producentov na kompenzáciu strát, podobne, ako sa to udialo pri SPP reforme v roku 1992, výrazne narušili rozpočtový rámec EAGGF do roku 2013, pretože iba slovenské nároky pestovateľov cukrovej repy by predstavovali súhrnne pre obdobie rokov 2010–2015 200 mil. €. Domnievame sa, že riešenie a konsenzus bude možné nájsť v kombinácii reformy scenárov fixných kvót a zníženia cien, resp. prehlbovaní "Midway situation" po roku 2011. Pre Slovensko je taktiež neprijateľné alternatívne definovanie kvót princípom administratívne stanovenej úrovne efektívnosti produkcie jednotlivých členských krajín EÚ. Investície do cukrovarníckeho priemyslu na Slovensku boli v poslednom období značné a vyselektovali najperspektívnejšie cukrovary. Podobne sa vyvíja situácia i u pestovateľov cukrovej repy a ekonomické výsledky scenára "Fall in prices" do roku 2011 sú značne podobné stavu pred vstupom do EÚ.

Kľúčové slová: cena, cukor, dopady, intervenčná, kvóta, liberalizácia, model AGRO-3, reforma, simulácie, Spoločná poľnohospodárska politika

INTRODUCTION

The current sugar sector in the EU single market is a subject of heavy criticism due to insufficient competitiveness, market distortions, high prices, and the impact it has had on the world market, particularly in relation to developing countries. Despite the numerous appeals for reform, the sugar sector remains unreformed for almost four decades.

The reformed Common Agricultural Policy of the EU (CAP) has shifted its focus from supporting prices and production towards a more comprehensive policy of sup-

port through the single farm payment scheme. This has, among other things, intensified the pressure towards reforming the sugar sector and gave the CAP a new dimension (CAP Reform Brussels 2003; Drafting of the Commission 2003; Council regulation 2003).

Unless the EU sugar policy changes, it would turn into an anomaly that deviates from the underlying principles of the reformed CAP – market orientation, decoupled payments to farms and a better balance between the two CAP pillars through enhanced rural development.

The public debate on the possibilities for the EU sugar sector reform, which unfolded following the publication

of a Commission report¹ from September 2003, which was annexed to the overall assessment of impacts on the sugar sector², confirmed the need for a profound reform and pointed at the complexities that such a reform would bring about. The debate emphasised that despite the claims that the fixed nature of the EU sugar policy is a proof of its proper functioning; the policy has ceased to be sustainable as it is. The gap between the EU market and world market prices continues to widen. Under these circumstances, there is a risk that the EU structural surplus will further increase while the rigidity of the current system of quotas gives the sugar sector no incentives to adjust itself to the development on the world market.

The European Commission emphasises that the expectations of positive impacts of any reform are sometimes overly simplified. For example, the impact of the necessary restructuring in the sector will not be felt evenly in all sugar-producing regions of the EU. Also the fact that developing countries will have their potential winners and potential losers as a consequence of the EU sugar market development, regardless of whether or not the reform takes place, raises serious questions of how to solve this problem (Reforming the EU 2003).

METHODOLOGICAL PROCEDURE

The original proposal (autumn 2003) of the sugar sector reform places the beginning of the reform to 2010 and its completion to 2015. Based on that assumption, we have defined the parameters of individual scenarios contained in the Commission proposals as the parameters of the final year of the reform, i.e. 2015. In the period of 2010–2015, these parameters converged linearly towards the final year. The parameters of the so-called "Midway Situation 2006–2011" were considered final in 2011 and converged towards that level since 2006.

For each scenario, we simulated a balance in the food vertical (cumulated effect along the whole vertical) using the AGRO-3 model for the years 2006, 2010, 2013 and for the end of the reform in 2015. The AGRO-3 model has already been published, e.g. in the Agricultural Economics 1/2004 and in some research project reports published by the VÚEPP Bratislava (Božík et al. 2000, 2003). It is the Slovak adaptation of the original AGRO-3 model developed by the VÚZE Praha (Foltýn 2001; Foltýn, Zedníčková 1999). The AGRO model was the used to simulate the impacts of the reform in the sugar sector.

Individual proposals for the reform are defined by the European Commission (Communication ...2003) as:

- Scenario "Status Quo", maintaining the current mechanism, quotas and price level;
- Scenario "Fixed Quotas", maintaining the system of quotas and reducing their current level;
- Scenario "Fall in Prices", assuming the abolition of quotas after 2010, reduction of the external market protec-

- tion, and a considerable decline in the prices of sugar and sugar beet;
- Scenario "Liberalisation" that assumes full market opening and liberalisation.

With a view to the fact that the sugar sector reform is sufficiently justified and will, in all likelihood, be implemented, we consider the "Status Quo" scenario (see the EC studies) as a reference scenario.

RESULTS OF MODEL SIMULATIONS ALONG THE SLOVAKIAN SUGAR VERTICAL OF THE PROPOSED REFORM SCENARIOS

The proposed reform and interferences with the current long-term stable and reform-resistant mechanism will, no matter what option is pursued, lead to significant changes in the demand and supply in the Slovak market. Results discussed in the different scenarios bellow we present in Tables 1-4.

Fixed quotas

The scenario assumes the reduction of sugar quotas, which would, when proportionately divided amongst Member Sates, reduce the Slovak sugar quota A by 3.3% in 2010, 13% in 2013 and 20% in 2015 to 152 000 tons. This option, under the production-economic parameters specified in the tables below, will cause that in 2015, compared to 2006:

- the area of land for sugar beet growing will shrink by 34% (15 200 hectares) and per hectare yields will increase by 18.5% (60.1 t/ha);
- the production of sugar beet will decline by 21.5% (915 000 t);
- profit per metric tonne of sugar beet will decline by almost 30%;

Although under this scenario the Commission does not contemplate compensations to farmers, the decline in the profits of Slovak farmers – caused by the fall in sugar beet prices to $40 \mbox{ } \mbox{\'e}/\mbox{t}$ (based on EC proposal – see Table 1) – may reach $140 \mbox{ } \mbox{\'e}/\mbox{ha}$ in 2015 compared to 2006.

We assume the total reduction in farmers' profits to exceed € 17 million.

The fall in sugar prices and the reduction of customs protection by 36% compared to the non-preferred imports from third countries will cause that the EU sugar importers, such as the ACP and the EBA initiative, will attain a price on the EU market which is 87% higher compared to the price they would attain on the world market.

The model results show that the Slovak farmers' sugar quota reduction will, by the year 2015, reduce the domestic supply to the quota level and, at the same time, increase the domestic sugar consumption by approximately 14 000 t (199 000 t, i.e. by 7.5%). The total export will plum-

¹ COM(2003) 554 final

² SEC(2003) 1022

met to a half (to 8 000 t) and will be, in its entirety, subject to claim for export support (quota B). This will reduce the cost of export support from \in 9 million (year 2006) to about \in 2.5 million in 2015. Assuming that the claim for compensations paid to the farmers, who will remain on the market in 2015 under the "status quo" scenario, will reach \in 2 million³, the total balance of the EAGGF savings for Slovakia will be positive. The impacts on the sugar industry are likely to be significant also under this "soft" scenario, because the revenues of the sector may fall by 47 million while the sugar imports by the end of the reform may increase in comparison with 2006 by 42 000 t to 55 000 t.

If this scenario is pursued, the consumer sugar market will not, compared to 2006, react any significantly. Even if the consumer price falls by 10%, the sugar consumption will increase only slightly (by 2%).

Fall in prices

The scenario assumes a transitional period for quotas (2006–2011), after which they will be abolished. The ef-

fect of the "fall in prices" option and the unleashed production in the post-adaptation period (until 2011) will, at the end of the reform implementation, push the domestic demand up (in comparison to the "fixed quotas" option) and, quite surprisingly, bring the level of imports down. This decline in imports will be offset by higher domestic output. In spite of this, the results of this scenario are less favourable from the farmers' perspective that those reached under the "status quo" scenario. The sugar quota reduction (2006–2001), when proportionately divided amongst Member Sates, will reduce the Slovak sugar quota A by 9.5% in 2010 to 172 000 tons. In the subsequent period, including the final year of 2015, the quota will be removed.

This "fall in prices" scenario will, towards the end of the reform implementation period, because that in 2015 compared to 2006:

- the area of land for sugar beet growing will shrink by 25% (17 300 hectares) and per hectare yields will increase by 14.5% (58 t/ha); Nevertheless, in comparison with the "fixed quotas" scenario, the fall in the farmers' prices of sugar beet will decrease both the motivation of sugar-beet producers (the level of assumed compen-

Table 1. Consequences of the options for the Slovakia, in 2006–2015 Agriculture

	Sugar beet area	Sugar beet yield	Total production	Beet price	Costs	Profit		Direct aid
	1 000 ha	t/ha	1 000 t	€/t	€/t	€/t	€/ha	€/ha
Status quo								
2006	23.0	50.7	1 164.4	46.3	27.8	18.5	937.5	
2010	19.6	56.0	1 099.4	46.3	28.2	18.1	1 013.2	
2013	16.0	60.7	968.7	46.3	26.5	19.8	1 204.4	
2015	14.5	60.7	881.9	46.3	26.5	19.8	1 204.4	
Fixed quotas								
2006	23.0	50.7	1164.4	46.3	27.8	18.5	937.5	
2010	19.8	55.9	1104.8	45.2	28.3	17.0	949.9	
2013	16.4	60.3	991.0	42.1	26.6	15.4	931.7	5.8
2015	15.2	60.1	914.5	40.0	26.7	13.3	797.3	140.3
Fall in prices								
2006	22.6	50.6	1 141.7	45.2	27.8	17.4	880.4	57.1
2010	18.6	55.5	1 034.3	41.0	28.4	12.7	702.7	234.8
2013	17.0	59.2	1 006.6	32.5	27.1	5.4	321.3	616.2
2015	17.3	58.0	1 004.1	25.0	27.6	-2.6	-149.6	1 087.1
Liberalisation								
2006	22.6	50.6	1 141.7	45.2	27.8	17.4	880.4	57.1
2010	15.9	55.5	883.9	41.0	28.4	12.7	702.7	234.8
2013	11.3	58.9	664.4	30.5	27.2	3.3	193.7	743.8
2015	5.6	57.3	319.5	21.0	27.9	-6.9	-396.2	1333.7

Source: VÚEPP, AGRO - 3 results

³ The requirement for the compensation of lost profits caused by the reform in 2015 in the amount of 140 €/ha × 14 500 hectares, which is the area of land that would be used for sugar beet growing under the "status quo" scenario, i.e. without reform.

sations is not "built in" the modelling of farm income) and the intensity of production

- the production of sugar beet will decline by 14% (1 004 000 t);
- profit per metric tonne of sugar beet will decline by almost 30%.

After 2011, the Commission assumes compensations to farmers. The decline in profits by the year 2015, caused by the fall in the sugar-beet prices to 25~€/t (assumption of the Commission), may reach 1~087~€/ha compared to the "status quo" and 947~€/ha (1087-140) compared to the "fixed quotas". The amount of profit reduction (1~087~€/ha) is the amount that we propose to be included as compensation into the single farm payment to sugar beet growers.

We expect that the total reduction in the farmers' income will exceed \in 29 million, which is \in 12 million more compared to the "fixed quotas" scenario.

The fall in the sugar prices and the reduction of customs protection by 60% (as proposed by the Commission) compared to the non-preferred imports from third countries will cause that the import price, including customs duties and transport costs, will be theoretically higher (by 16%) in 2015 than the price on the domestic

market⁴. Importers, such as the ACP and the EBA initiative, would then gain only 26% more on sugar imports compared to what they would gain on the world market, which represent a reduction in their income by about 60% compared to the "fixed quotas" scenario.

However, from the Slovak producers' perspective, the fall in process and abolition quotas would contract the domestic supply (compared with 2006) by 12% to 167 000 t and, at the same time, inflate demand by 11% (to 206 000 t) and sugar imports by 200% (40 000 t).

Although this scenario does not assume sugar exports, the export of sugar-containing products will be fairly significant (+46% against 2006) and no export support will be disbursed. The compensations payable to the farmers who would remain on the market in 2015 under the "status quo" scenario, will reach € 16 million.

The impacts on the sugar industry will be considerable; the revenues of the sector may fall by ϵ 63 million, which is ϵ 16 million more than under the "fixed quotas" scenario.

The consumer market should, based on the results of the simulation, react by the increased consumption of sugar (up 7.5% compared with 2006), which will likely reduce the consumption of isoglucose. This scenario is

Table 2. Consequences of the options for the Slovakia, in 2006–2015 Sugar industry

	Production quota A total		Import	Domestic	Sugar	Processed	Export refund	Export subsidies
				consumption	export	products		
	1 000 t	1 000 t	1 000 t	1 000 t	1 000 t	1 000 t	1 000 t	mio. €
Status quo								
2006	189.8	189.8	13.1	185.2	17.7	19.4	17.7	9.1
2010	182.5	182.5	13.2	178.7	17.0	9.9	17.0	8.4
2013	160.8	160.8	51.2	197.0	15.0	37.0	15.0	6.5
2015	146.4	146.4	63.2	199.0	10.6	35.6	10.6	4.1
Fixed quotas								
2006	189.8	189.8	12.6	185.2	17.2	19.4	17.2	8.9
2010	183.4	183.4	10.4	178.7	15.1	9.9	15.1	7.3
2013	164.5	164.5	46.0	197.0	13.5	34.2	13.5	5.1
2015	151.8	151.8	55.3	199.0	8.1	37.2	8.1	2.5
Fall in prices								
2006	186.1	186.1	17.5	186.3	17.3	19.4	17.3	8.4
2010	171.7	171.7	22.3	178.0	16.0	6.8	16.0	6.0
2013	0.0	167.1	35.5	202.6	0.0	27.8	0.0	0.0
2015	0.0	166.7	39.5	206.2	0.0	28.3	0.0	0.0
Liberalisation								
2006	186.1	186.1	17.5	186.3	17.3	19.4	17.3	8.4
2010	0.0	146.7	31.3	178.0	0.0	6.8	0.0	0.0
2013	0.0	110.3	94.7	205.0	0.0	28.1	0.0	0.0
2015	0.0	53.1	157.9	210.9	0.0	29.0	0.0	0.0

Source: VÚEPP, AGRO - 3 results

⁴ Under the "fixed quotas" scenario, this import price in 2015 would reach 98% of the price level in the EU market.

consumer-friendly because the sugar consumer price may fall by 32% to a level similar to the 2003/04 (similarly as consumption).

Liberalisation

For the period of 2006–2011 under this scenario, similarly as in the "fall in prices" scenario, we used the transitional "Midway Situation 2006–2011". After 2010, the sugar market liberalization will, towards the end of the reform implementation period, contract the domestic production of sugar by 72% to 53 000 t and increase the domestic demand by 14% (compared with 2006). Only 25% of the demand will be covered by domestic production, the remaining 75% (158 000) will have to be imported. This means that 72% of production capacity in sugar refineries will be redundant, compared with 2006.

Our models show that the sugar market liberalisation will, towards the end of the reform implementation period, because that in 2015 compared to 2006:

the area of land for sugar beet growing will shrink by 76%
(5 600 hectares); with per hectare yields at 57 tons, the sugar beet production will decrease by 73% (320 000 t);

- without support, the sugar beet growers will sustain a loss of about 400 •/ha and the sugar beet price will drop to 21 •/t. In the year 2015, the decline in profit or loss may amount to 1 334 •/ha against the 2015 "status quo", which is the amount of compensation that we suggest be included into the single farm payment to sugar beet growers.

We expect that the total reduction in the farmers' income against the "status quo" will exceed \in 47 million, which is \in 18.5 million more compared to the "fall in prices" scenario.

The removal of customs protection will cause that the import price, including the transportation costs, will be theoretically lower (by 16%) in 2015 than the price on the domestic market. Importers, such as the ACP and the EBA initiative, would then gain only 17% more on sugar imports to the EU compared to what they would gain on the world market, which represent a reduction in their income by about 9% compared to the "fall in prices" scenario.

Although this scenario does not assume sugar exports, the export of sugar-containing products will reach the level of the "fall in prices" scenario (+49% against 2006) and there will of course be no export support. The compensations payable to the farmers who would remain

Table 3. Consequences of the options for the Slovakia, in 2006–2015 Price and agriculture and sugar industry revenue

	World market price	Intervention price	Price of white sugar EU	Drop in custom duties	Drop in custom duties	Sugar beet prices	C sugar quota	Direct aid	Fall in ag. revenue	Fall in sugar industry revenue
	€/t	€/t	€/t	%	€/t	€/t	€/t	€/t	mio. €	mio. €
Status quo										
2006	210.0	632.0	725.0		419.0	46.3	17.0	0.0	0.0	0.0
2010	210.0	632.0	704.2	-6.0	393.9	46.3	17.5	0.0	-3.0	-9.1
2013	210.0	632.0	641.7	-24.0	318.4	46.3	19.0	0.0	-9.1	-34.4
2015	210.0	632.0	600.0	-36.0	268.2	46.3	20.0	0.0	-13.1	-49.8
Fixed quotas										
2006	210.0	632.0	725.0	0.0	419.0	46.3	17.3	0.0	0.0	0.0
2010	223.3	0.0	704.2	-6.0	393.9	45.2	18.5	0.0	-3.9	-8.5
2013	263.3	0.0	641.7	-24.0	318.4	42.1	19.4	0.1	-12.2	-32.1
2015	290.0	0.0	600.0	-36.0	268.2	40.0	20.0	2.0	-17.3	-46.5
Fall in prices										
2006	217.3	632.0	704.2	-6.0	393.9	45.2	17.5	1.3	-2.2	-6.6
2010	246.5	0.0	620.8	-30.0	293.3	41.0	19.5	4.6	-11.4	-31.0
2013	271.9	0.0	525.0	-48.0	217.9	32.5	22.5	9.9	-21.2	-49.9
2015	290.0	0.0	450.0	-60.0	167.6	25.0	25.0	15.8	-28.8	-62.6
Liberalisation										
2006	217.3	632.0	704.2	-10.0	377.1	45.2	20.0	1.3	-2.2	-6.6
2010	246.5	0.0	620.8	-50.0	209.5	41.0	20.0	4.6	-17.6	-46.5
2013	271.9	0.0	475.0	-80.0	83.8	30.5	20.0	11.9	-33.6	-85.2
2015	290.0	0.0	350.0	-100.0	0.0	21.0	21.0	19.3	-47.2	-119.0

Source: VÚEPP, AGRO - 3 results

in the market in 2015 under the "status quo" scenario, will reach \in 19 million.

The impacts on the sugar industry will be extreme; the revenues of the sector will fall by \in 119 million (from \in 137.6 to \in 18.6 million), which is \in 56 million more than under the "fall in prices" scenario. This scenario is likely to bring the sugar industry in Slovakia to a complete extinction.

Table 4. Consequences of the options for the Slovakia, in 2006–2015

Per capita sugar consumption and retail price

	Total sugar	Sugar direct	_
	kg per capita	kg per capita	€/kg
Status quo			
2006	33.3	12.8	1.22
2010	34.1	13.6	1.18
2013	33.6	13.3	1.13
2015	34.1	13.6	1.10
Fixed quotas			
2006	33.3	12.8	1.22
2010	34.1	13.6	1.18
2013	34.1	13.3	1.13
2015	33.9	13.6	1.10
Fall in prices			
2006	33.5	13.0	1.19
2010	34.6	13.4	1.14
2013	35.2	14.1	0.96
2015	35.8	14.7	0.82
Liberalisation			
2006	33.5	13.0	1.19
2010	34.6	13.4	1.14
2013	35.6	14.5	0.87
2015	36.6	15.4	0.64

Source: VÚEPP, AGRO - 3 results

Table 5. % change in the number of employees

	Agriculture	Sugar beet production	National economy
2010	-0.06	-13.91	-0.03
2013	-0.12	-28.70	-0.07
2015	-0.15	-33.91	-0.08
2010	-0.08	-19.13	-0.05
2013	-0.11	-26.09	-0.06
2015	-0.11	-24.78	-0.06
2010	-0.13	-30.87	-0.08
2013	-0.22	-50.87	-0.12
2015	-0.33	-75.65	-0.18

Source: VÚEPP, AGRO - 3 results

The consumer market should, based on the results of our simulation, react by increased consumption of sugar (up 10% compared with 2006). This scenario is extremely consumer-friendly because the consumer price of sugar may fall by 47%, i.e. will be below the pre-accession price level.

Employment

Depending on the reform option selected, the sugar market reform is likely to diminish the size of the land currently used for sugar beet growing. We expect that growers will substitute this outage in sugar beet by cereals, oil crops and, partly, early potatoes and legumes. Notwithstanding such substitution, the reforms will influence employment in agriculture and other sectors connected with the growing and processing of sugar beet and sugar. Currently, six out of seven workers in the sugar industry come from other sectors than agriculture (repair and maintenance services, construction work, transport, consultancy, other services...). In the year 2003 alone, the sugar beet growing business provided employment to 430 full-time workers (without seasonal workers) while the sugar industry employed 1 006 full-timers. Results discussed in the different scenarios bellow we present in the Table 5.

Fixed quotas

Despite its substitution by other products, the reduced production of sugar will reduce the number of workers in the farming sector by 2015 by 0.15% (88 workers), but the rate of employment reduction in the sugar industry will reach 34% (341 employees). These changes and their secondary impacts on the related sectors will make 0.08% of workforce in the entire economy redundant (1 135 employees).

Fall in prices

In the sugar industry, the number of workers will decrease by 19.3% by 2010 and 24.8% (249 workers) by 2015. The number of workers in the farming sector will decline by 0.11% (64 employees). On the whole, the reform will make 0.06% of workforce in the entire economy redundant (761 workers).

Liberalisation

The sugar market liberalisation will reduce the number of workers involved in sugar-beet growing by 75% (234 workers); taking into consideration the substitution of this outage, the number of workers in the entire agricultural sector will decline by 0.33% (196 workers). The fall in the number of workers in the sugar industry will be extreme, reaching 76% (761 workers). Employment in the national economy will decrease by 0.18% (2 234 workers).

Investments

The loss of investments in the sugar beet processing sector will represent quite a considerable consequence of the reform. So far, the total amount of investments in the sugar-beet processing sector reached about \in 125 million. This amount includes the cost of the previous and current modernisation of sugar refineries and the close of the inefficient refineries (Trnava). For example, the modernisation of the sugar refinery in Trenčianska Tepla, which is currently under way, will consume approximately \in 25 million, etc.

CONCLUSION

The full sugar market liberalization is not acceptable for Slovakia because affecting not only economic results (profit/loss) and employment of all industries linked to the sugar, but also the structure of production, mainly in the intensively growing areas. Nevertheless, we consider that the reform is necessary. Sugar sector is the only sector of the CAP EU which has not been reformed. That is the reason why the sugar industry has advantages compared to other producers and farms.

On the other side, valid claims of producers for compensation of losses (analogous to the CAP reform in 1992) could significantly and negatively affect the frame of the EAGGF budget frame up to 2013. The claims of Slovak producers of sugar beet could account 200 mill. EUR in total for the period of 2010–2015.

We believe that a solution and consensus could be found in combination of the fixed quotas and a fall in prices scenarios, eventually in deepening of "the Midway Situation" after 2011.

At any case, the future definition of quotas through the administratively specified level of individual member states production efficiency we have to refuse. Investments to the Slovak sugar industry were large in the last period and selected the most perspective sugar factories. The situation of sugar beet producers is developing similarly and economic results of the "fall in prices" scenario until 2011 are analogous to the situation before the EU accession.

REFERENCES

Foltýn I., Froněk P. (2001): Methodological techniques for construction and statistical analysis of supply and demand elasticities in agriculture sector models. Zemědělská ekonomika, 47, (12): 549–553.

Božík M. a kol. (2000): Modelové riešenie dosahov variantných agrárnych politík v agropotravinárskom sektore a regionálna alokácia. (Realizačný výstup). Bratislava, VÚEPP, 15 p.

Božík M. a kol. (2003): Dlhodobé analýzy postavenia poľnohospodárstva v rámci EÚ. (Výskumná správa). Bratislava, VÚEPP, 86 p.

CAP Reform Brussels (2003). 19 September 2003, DS 303/1/03REV 1, Council of the European Union.

Foltýn I, Zedníčková I. (1999): Model Agro 3. VÚZE Praha (pracovný dokument).

Foltýn I. (2001): Sociální a ekonomické dopady vstupu ČR do EÚ, VÚZE, 47 p.

Drafting of the Commission regulation for the application of the Council regulation no 1259/1999 as regards the single area payment (2003). EC EU, D 20371, DG AGRI, Brussels.

Communication from the Commission to the Council and the European Parliament: Accomplishing a sustanable agricultuarl model for the Europe through the reformed CAP – the sugar sector (2003). Brussels, 26. 9. 2003, 12965/03, 23 p.

Council regulation (EC) No 1782/2003 of 29 September 2003 establishing common rules for direct support schemes under the common agricultural policy and establishing certain support schemes for farmers (2003). 21. 10. 2003 L 270/1 Official Journal of the European Union EN.

Reforming the European Union's sugar policy (2003). Summary of impact assessment work, Commission staff working paper, Brussels, 23. 9. 2003, 48 p.

Arrived on 14th September 2004

Contact addresses:

Ing. Marian Božík, PhD., Ing. Tibor Izakovič, Výskumný ústav ekonomiky poľnohospodárstva a potravinárstva, Trenčianska 55, 824 80 Bratislava, Slovenská republika

e-mail: bozik@vuepp.sk, izakovt@vuepp.sk