Economic trends in the Slovenian food industry during the pre - and post EUaccession period

Aleš Kuhar¹, Emil Erjavec¹, Katarina Borovšak¹

¹University of Ljubljana, Biotechnical faculty, Groblje 3, 1230 Domžale (ales.kuhar@bf.uni-lj.si)

ABSTRACT

The accession to the EU was certainly the most comprehensive change of economic environment since Slovenia gained its independence. Therefore the paper tries to present an overview of the national food industry economic development in the period before the EU accession and the first five years of the EU membership. Based on a framework of economic indicators the paper tries to answer some of the most recurrent questions related to the restructuring process of Slovenian food industry in the last decade. Results confirm that the economic restructuring which had been hindered in the Slovenian food industry during the last decade has been triggered radically after EU accession. This brought to the termination of favourable economic conditions in the highly protected domestic market and deteriorated radically the business performance, and only those food companies which will restructure proactively will sustain in the EU markets.

Key words: industrial restructuring; EU accession, food processing industry, Slovenia

INTRODUCTION

Accession to the European Union has triggered substantial changes in the business environment of Slovenian food processing industry which intensified restructuring processes and increased pressures to the business performance of the sector. The agro-food industrial complex is among the sectors for which EU enlargements traditionally brought radical changes in the economic environment. Price level and cost differences, hardly comparable production structures, but mostly disparities in types and comprehension of the agriculture policies required large adjustments and caused notable economic pressures (El-Agraa, 1994; Kuhar and Erjavec, 2007). The largest European Union (EU) enlargement in May 2004 involved ten countries, most of which just completed their transition to market economy, and another two countries

with similar attributes – Bulgaria and Romania -joined the Union in 2007, Croatia in 2013. The enlargement of 2004 differs from the previous ones since the margin in economic prosperity is notably larger compared to any previous enlargement. These disparities bring both distinct challenges and opportunities for the new member states and for the incumbent countries of the Union (Artis et al, 2006). However, neither the scale of the last EU enlargement nor the combination of the patterns and characteristics of agriculture, food processing, and rural economies are comparable with the past enlargements (Macours and Swinnen, 1997). Therefore, the evaluation of EU enlargement and its implications for the agro-food sectors has drawn considerable research attention. There is no generally accepted theoretical framework in economic literature, for sectoral competitiveness; similarly there is no consolidated terminological definition. The concept of competitiveness is clearly multidimensional and therefore it is difficult to deal with theoretically as well as empirically. Some of the leading authors (e.g. Trail and da Silva, 1996; Lall, 2001) therefore suggest a composite approach specifically designed according to the focus of analysis.

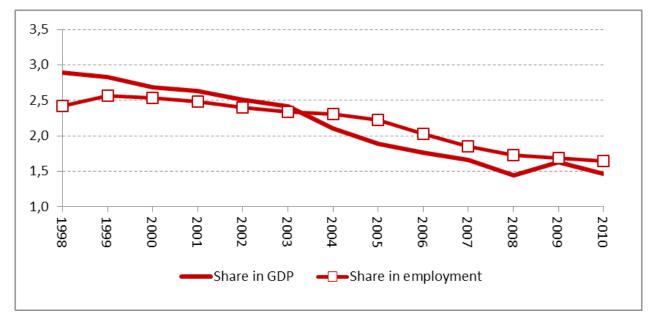
MATERIAL AND METHODS

In a strict sense, there is no specific research methodology applied in this paper, however based on a framework of economic indicators we try to answer some of the most recurrent questions related to development of Slovenian food industry in the last decade. Four questions were put under the research scrutiny: 1) Is food industry facing cost - price squeeze?; 2) Who is creaming in the food chain?; 3) Are the trends in international trade with food surprising?; 4) Has the budgetary support to the sector stimulated competitiveness? The paper is structured accordingly to the elaborated four questions. Using data acquired from different official sources a series of economic indicators is calculated to elucidate the determinants of Slovenian food manufacturing sector development. In the first part of the paper the situation in the sector is presented using indicators of business performance, efficiency and profitability whereas in the central part, the article tries to answer the elaborated questions and comment competitiveness determinants.

RESULTS AND DISCUSSION

Economic performance

In Slovenia the Food, beverages and tobacco manufacturing sector represented 1.46% of value added in GDP in 2010 and 1.65 % in the total employment (SORS, 2012). According to the value added contribution in total manufacturing food industry is the third largest sector in Slovenia. However, in the last years the importance of food industry is declining in all macroeconomic indicators, since in the year 1998 the food industry contributed about 2.8% of Slovenian GDP and almost 2.5% of total employment (Figure 1).



Graph 1. Slovenian food industry contribution to the national GDP and total employment in the period 1995 – 2010 (SORS, 2012)

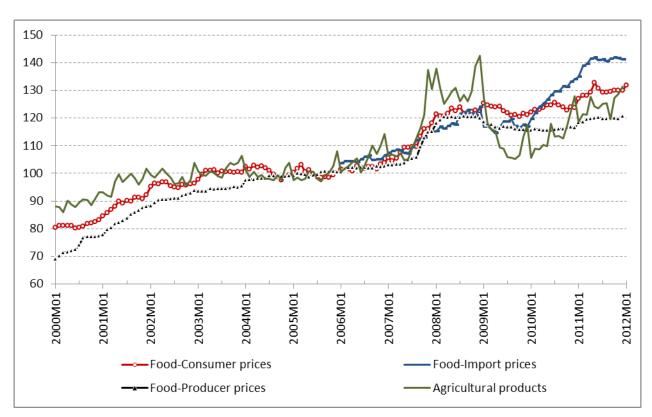
According to the value added contribution in total manufacturing food industry is the third largest sector in Slovenia. However, in the last years the importance of food industry is declining in all macroeconomic indicators, since in the year 1998 the food industry contributed about 2.8% of Slovenian GDP and almost 2.5% of total employment. Industrial production of food manufacturing mainly decreased after the year 2000. Until the year 2003 the production volume somehow stagnated, but in 2004 volume dropped for more than 10 % and then remained stable until 2007. In the year 2011 the food manufacturing was at about 10% below the level of 2004 and beverage sector at about 15% lower. Unfavourable conditions in business performance of Slovenian agro-food sector are discernable also from trends in productivity and value added per employee. In the year 2000 agro-food industry attained about 25 % better productivity than average manufacturing and about one fifth higher value added per employee.

However, the trends in the following years were constantly negative and in the year 2004 the value added per employee in food industry fell below the average of manufacturing (index for 2005 = 92.2), whereas productivity was still slightly above the manufacturing average (2005 = 101.5). In the following years the indicators fell again, where the productivity was still one tenth higher than on average of the processing sector, whereas the VA/employee was almost one tenth below the same average. Consequently with worsening of productivity and value added creation, also profitability indicators have dropped, however with oscillating patterns in the last years. Trends of the profitability in the period between 2000 and 2007 measured as return to sales (ROS). In the pre-accession period the ROS was some 3.4%, but after the accession the indicator fell to negative value. Since then the results were constantly and steadily improving in order to reach 4.2% in 2007, which was higher than the average of the processing industry in Slovenia (ROA 2007=3.9%). However, after that, the indicator dropped again considerably, particularly due to the excessive loss in the beverage sector.

The brief overview of some key indicators of business performance above shows rather apprehensive changes in Slovenian agro-food sector. The sector has moved from one of the most prosperous industrial activities in Slovenia to the average during the last decade.

Is food industry facing cost - price squeeze?

Price trend comparison at different levels of measurements reveals general information about the economic environment of an industrial sector. Graph 2 shows movements of price indices for agricultural inputs, producer prices of food, beverages and tobacco, the producer prices of the food processing industry aggregate and import prices of food in the period 2000-2012. Price index of food, beverages and tobacco at the retail level generally fluctuates around the inflation rate, if there is no radical structural change in the economic environment. To a large extent it was also the case in Slovenia; however after the year 2004 prices started to lag behind inflation and we can notice a drop by 5 % in real terms. This might almost entirely be explained by the EU accession and inclusion of Slovenia to the internal market. Further the retail prices were falling also in the subsequent period, and it reached the lowest point at the end of 2006. After that lowest point slight strengthening has been present until the 2007, when the constant trend of food price increase started. In the last months of the 2011 the food prices were at about 30% higher than in 2005 and more than 50% higher than in 2000.



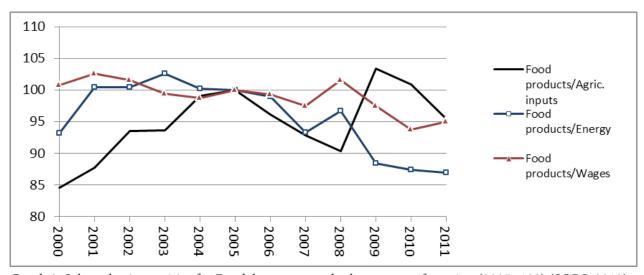
Graph 2. Indices for consumer prices of food, producer prices of food, import prices of food and agricultural products between 2000 and 2012; 2005=100 (SORS, 2012)

Agricultural prices were growing in nominal terms, however when expressed in real terms they were constantly falling until 2005. This was, however, an expected outcome of the agricultural policy reform initiated in year 2000 as a part of the EU accession process. Market-price support measures of the agricultural policy were gradually substituted by income support measures. In comparison with year 2000 prices of agricultural commodities were lower by 12 % in real terms in 2005. In the subsequent years the real price started to increase and then two price peaks of the decade were reached, one in end of 2007 and the second one in the first years of 2009. The prices were then around 40% higher than in 2005. Immediately after the peak the prices started to fall sharply and in the summer 2009 almost reached the average level of 2005. In the following years the prices of agricultural commodities were growing with fluctuating trend, however in the January 2012 the prices were again 30% above the 2005 average. Prior the year 2005 the food producer prices were growing faster than consumer prices and agricultural prices, since they compensate

30% in the first five analysed years. The latter we can be observed as a significant push-up in the period of agricultural inflation (Y2007), however the price increase was not as high. After that a considerable lagging of the producer prices behind the food consumer prices is evident, which is being explained by the growth of the food import prices. The latter increased by impressive 20 percentage points in the last two years of the analysis.

The price parities are shown in the Graph 3 where food manufacturing producer price index is compared with price movements of agricultural inputs, energy prices and labour prices. It might be anticipated that price parity for agricultural inputs is favourable for food manufacturers in the first period of analysis; indeed the index improved by 115 % between 2000 and 2005. Then, due to the abovementioned rise in agricultural producer prices in 2007, the price parity worsened (decrease by 10%), but improved again in 2009 in order to fall again in 2011 to about 5% below the average in 2005. Also the relation with the energy aggregate prices was favourable for food manufacturers in

the first part of the analysed period. However, in the second part of the analysed period all price advantage has been annulled due to sharp price increase and the corresponding price parity has fallen to 87% in 2011. Furthermore, if trends in labour prices are compared to the producer prices of food, beverages and tobacco the former exceeds the latter, and therefore the price parity gets less favourable for food producers. The parity value decreased constantly since 2000 with a turnaround in 2008, but then the parity fell and reached 95% in 2011. Labour intensive sectors of food industry were especially negatively influenced.



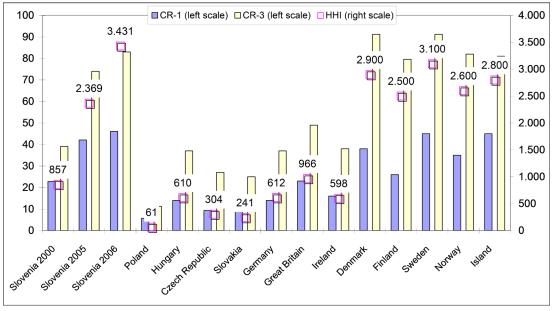
Graph 3. Selected price parities for Food, beverages and tobacco manufacturing (2005=100) (SORS, 2012).

From the price trends and parities revealed above one cannot firmly state radical cost-price squeeze for the agro-food manufacturers in Slovenia during the analysed period. Especially the sub-sectors with intensive agriculture input dependence (e.g. dairy, meet, bakery.) could benefit from evident improvement of price parity, however this is not confirmed by business performance. A great part of potential positive price-cost development is however absorbed within the retail sector.

Who is creaming in the Slovenian food chain?

Today the food retailers are not only passive intermediates between producers and buyers, but a dominant determinant in the agro-food chain. Domination of retail trade in is a global phenomenon (Dobson et. al, 2003). Slovenia is no exemption and it ranges among the European economies with the highest level of concentration in food retailing sector (Juhasz and Stauder, 2005). A basic analysis of data reveals significant trends.

The data show enormous growth of the HHI value in the period between 2000 and 2006 since the index quadruplicated. In the last year the HHI reached the value of 3.431, a considerably higher value than estimated for Sweden and Denmark, which have the highest HHI in Europe. According to the other indicator of the market structure, namely the Concentration ratio (CR), Slovenian retailing sector is highly saturated. In 2006 the largest Slovenian retailer contributed 46% of the total sectorial revenue, whereas the first three retailers contributed as much as 83%. Both figures are among the highest in Europe. Simultaneously with the retail sector concentration growth also the nature of the supply chain relations has changed considerably. Retailers are imposing many other contractual and operational practices that negatively influence suppliers. Unjustified costs are carried onto agro-food producers which deteriorate their business performance and are of benefit to retailers.



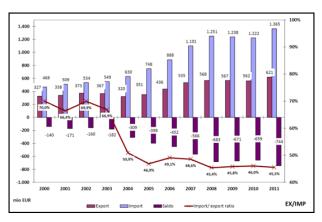
Graph 4. Structural indicators in the retail sector for Slovenia and selected countries. (IMAD, 2009)

The scale of operations of the major retailers and their control of purchases means that they are able to dictate terms and conditions to producers effectively. Through aggressive bargaining strategies, including the use of de-listing tactics, and the increasing use of auctions for awarding contracts, retailers have been able to drive down the prices and margins that producers receive. Along with these moves there has been the increasing use of vertical restraints placed on producers. These buyer-induced restraints generally take one of two forms: either aimed at further rent extraction or limiting producers' freedom or incentives to supply elsewhere. The first form includes listing charges, shelf-space fees ("slotting allowances"), promotion support payments and retroactive discounts on goods already sold. The second form includes exclusive supply obligations and other "non-compete" contract clauses as well as most-favoured-buyer type contracts. Also heavy investment has also allowed retailers to reap economies of scale through the operation of large store formats and large chains of stores. This has been supported by the implementation of sophisticated logistics and distribution systems combined with significant investment in new technology (such as e-POS). The result has been significantly improved efficiency with greater sales per outlet and per employee. However, beside a

very successful modernisation, the introduction of contemporary management practices and conduct, established growth of profit might be ascribed to the market structure, too. Oligopoly – oligopsony market structure enables economic domination of retailers in the Slovenian food chain. A high level of vertical power makes retailers possible to introduce business practices that adversely affects the competitiveness of their suppliers and distort competition. Beside the evident negative effects on food suppliers' business performance, the result in Slovenia might be also that suppliers are likely to invest less and spend less on new product development and innovation, leading to lower quality and less consumer choice. The high level of concentration in Slovenian retailing has negative implications also on smaller entities in the sector itself. Certain practices give the major buyers substantial advantages over other smaller retailers, whose competitiveness is likely to suffer as a result, again leading to a reduction in consumer choice. Negative occurrences in the vertical relations is not unique in Slovenia, however several structural deficits of the food sector make the condition for suppliers even more unfavourable. One of these negative features is a low level of integration of Slovenian food processors into the international markets.

Are the trends in international trade with food surprising?

Slovenia has traditionally been and will very likely remain a net food importer; however the importance of agro-food trade in total international trade is limited. The aggregate of agro-food commodities accounted less than 3 % of total exports and about 6.5 % of total imports of Slovenia (SORS, 2012). If we focus on processed food alone, total trade has been growing steadily in the analysed period (Figure 3). The value of export reached 1,365 billion EUR in 2011, which is some four times more than in 2000. The import was increasing constantly after the independence, however after the EU accession the growth rate was noticeably intensified due to a significant reduction in the border protection. Export of processed food oscillated somewhere around 350 million EUR in the pre-accession period. Until the year 2004 the value increased constantly, however in the year of accession exports decreased. Exports improved again after 2005 and in the last year the figure reached 0.6 billion of EUR.



Graph 5. Slovenian international trade with food, beverages and tobacco products. (SORS; 2012)

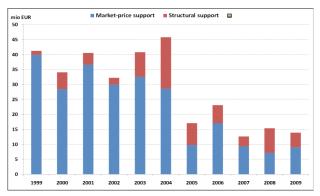
Until the accession Slovenian international trade with food was a rather equalised and the export-import ratio did not oscillate considerably. Due to the import increase and export decrease after year 2004 net trade deficit was almost doubled and consequently the export-import ratio fell to 45 % from the levels above two thirds in the pre-accession period. The Slovenian food market

was highly protected until the EU accession, the effective tariff rate in the pre-accession period was fluctuating around 10% for the majority of food groups. From the evaluated import protection one could anticipate the effect of the inclusion to the internal market of the European Union on Slovenian food trade. The effect of "trade creation" appeared, which is described as a basic effect of trade union (El Agraa, 1994). On the export side of the Slovenian trade balance, the EU accession effects might be also expected from the regional structure of trade, since not less than 60% of the food exports was realised on the markets of former Yugoslavia. With these countries Slovenia signed preferential trade agreements which made food products competitive in comparisons with other imported products. However, after the accession the trade agreements were abolished. This immediately resulted in export decrease, but the export switched to the EU markets. In the year 2011 the share reached almost two thirds of the total exports.

The changes in trade policy after the accession might not be the single determinant of the constant decrease of Slovenian exports to the traditional markets. Beside these, there are other factors, among which the most influential are: revitalisation of domestic food production in these markets, partially the Slovenian food export was replaced with investments in production capacities in former Yugoslav countries, and last, but not least, the policy measures to promote Slovenian agrofood export changed. The next chapter describes the budgetary policy for food industry in Slovenia during the pre-accession period.

Has the budgetary support to the sector stimulated competitiveness?

Agricultural policy remains a rather important determinant of the economic environment of food industry in majority of modern economies. Influenced are especially those sub-sectors that are closely related to the volatile agricultural markets. Budgetary transfers to food industry have been decreasing during the analysed period (Figure 13), however with important changes in the structure of intervention. In the period between 2000 and 2004 the Slovenian food industry annually received between 30 and 45 million EUR of budgetary transfers. However, after the EU accession the figures drastically decreased. In the year 2005 the total transfers to food industry dropped to 15 million EUR, reached 22 million in 2006, and decreased to mere eleven millions EUR in 2007. In the years 2008 and 2009 the levels remained comparable to that.



Graph 6. Budgetary outflows for Food, beverages and tobacco manufacturing in Slovenia. (AIS, 2012)

The total budgetary transfers are divided into Market interventions and Structural policy measures. The first part includes mainly transfers to exporting food enterprises (export subsidy) and the Proportion of this type of support in total transfers was some 90% until 2003, when the share of structural measures increased, but the value of export subsidies also decreased considerably. The export subsidies in combination with bilateral trade agreements had clear distortive implications on competitiveness of Slovenian food sector and importantly influenced the structure of exports. Despite the considerable amount of budgetary transfers to Slovenian food sector, majority of them was not intended for long term competitiveness improvement, but rather to stabilise domestic agricultural markets and to correct price distortions. Only in the last period the share of structural measures increased, however processes to build sustainable economic competitiveness are demanding and long lasting.

CONCLUSIONS

The economic restructuring that had been hindered in the Slovenian food industry during the last decade was triggered radically after EU accession which brought to the termination of favourable economic conditions in the highly protected domestic market. Competition from the internal market, but more significantly the reduction of export competitiveness due to the abolition of free trade agreements caused an important long term deterioration of economic performance in almost all sub-sectors of the Slovenian food industry. The agro-food sector is among the parts of Slovenian economy that has undergone the most radical changes. The government failed to implement a gradual foreign trade liberalisation in the market of processedfood products, which would allow control over the dynamics of exposure of domestic suppliers to foreign competition. Instead, food-processing industry was in some key segments protected up to the accession, when the "ad hoc" liberalisation took place. The presentation of selected economic reveals the indicators that the Slovenian food manufacturing sector experiences constant deterioration of business performance.

The sector is partly exposed to the cost-price squeeze, whereas the Slovenian retail sector undoubtedly dominated the chain. Consequently, the domestic food manufacturing industry is stagnating due to the evident market power abuse. Furthermore, it revealed that among the main determinants of low competitiveness was also the Slovenian pre-accession trade policy. The "ad-hoc" trade policy liberalisation triggered substantial import pressures and detrimental effects to the competitiveness of Slovenian companies on the traditional export markets. Therefore, the revealed trends in the Slovenian international trade with food are not surprising. In close relation to the international trade is also the government intervention in the Slovenian food sector through the budgetary transfers. The majority of transfer to food industry was under the measure that has in great extent comparable implications as classical export subsidies, only a small part of the preaccession budged was stimulating competitiveness.

The considerable growth of structural funds in the last years is beneficial; however, the moment was lost for the needed pre-accession restructuring of the industry. Now, a decade after the accession it has been confirmed that the consequences are more negative than they would have been, if a gradual liberalisation strategy was chosen. Only those Slovenian food-processing companies which have modernized their management and marketing strategies and have actively seek for new business opportunities are building the sustainable ground for successful long term operation within the common European markets.

REFERENCES

- Artis, M., Banerjee, A., Massimiliano, M. (2006). The Central and Eastern European Countries and the European Union. Cambridge: Cambridge University Press.
- Bojnec, Š., Münch, W., (2001). Some Implications of Slovenian Agricultural Accession to the European Union, Eastern European Economics, 39: 19 – 38
- Dobson, P. W., Waterson, M., Davies, S. W., (2003): The Patterns and Implications of Increasing Concentration in European Food Retailing, Journal of Agricultural Economics, 54: 111 – 123
- El-Agraa, A, M. (1994): The Economics of the European Community. Hertfordshire: Harvester Wheatsheaf.
- Erjavec, E., Kuhar, A., (2000): Slovenska živilskopredelovalna industrija in Evropska unija, Domžale: Biotehniška fakulteta, Oddelek za zootehniko.
- Erjavec, E., Rednak, M., Volk, T. (1997): Slovensko kmetijstvo in Evropska unija, Ljubljana: ČZP Kmečki glas
- FAO. (1998), Policy Options for Slovenian Agriculture in an EU Accession Environment -TCP/SVN/6713-A. Rome: FAO.
- Hughes, D, (2004): Food manufacturing. in M. Bourlakis, and P. Weightman, ed.: Food supply

management. Oxford: Blackwell Publishing

- Juhász, A., Stauder, M., (2005): Hungarian food retailing: concentration, polarisation and a new entrant in: IAMO Forum 2005 "How effective is the invisible hand?- Agricultural and Food Markets in Central and Eastern Europe?", Proceedings, IAMO, Halle (Saale), June 16 – 18, 2005 pp. 134 – 149
- Kuhar, A., Erjavec, E. (2007) Implications of Slovenia's EU accession for the agro-food sectors. Economic and business review, 2: 147-164.
- Lall, S, (2001): Competitiveness, technology and skills. Cheltenham: Edward Elgar
- Macours, K, Swinnen J.F.M. (1997), Causes of Output Decline in Economic Transition: The Case of Central and Eastern European Agriculture, PRG Department of Agricultural Economics, PRG Leuven, Working Paper No. 11.
- SORS. (2012): Statistical Yearbook of Slovenia. Ljubljana: Statistical office of Republic of Slovenia.
- Trail, B., da Silva. G., (1996): Measuring international competitiveness: The case of the food industry. International business review, 5: 151 166

Ekonomski trendovi u slovenskoj prehrambenoj industriji prije i nakon ulaska u EU

SAŽETAK

Ulazak u Europsku Uniju bio je sigurno najopsežniji izazov u slovenskoj ekonomiji od njezinog osamostaljenja. Stoga se ovim radom želi dati prikaz ekonomskog razvoja nacionalne prehrambene industrije u razdoblju od ulaska u EU te u sljedećih pet godina članstva u EU. Na temelju ekonomskih pokazatelja ovim se radom pokušava odgovoriti na neka od pitanja, koja se odnose na proces restrukturiranja slovenske prehrambene industrije u posljednjem desetljeću. Rezultati potvrđuju da je ekonomski preustroj, koji je kočio slovensku prehrambenu industriju posljednje desetljeće, zapravo aktiviran nakon ulaska u EU. To je dovelo do ograničavanja povoljnih ekonomskih uvjeta na vrlo zaštićenom domaćem tržištu, čime su radikalno uništeni poslovni rezultati, a samo one tvrtke koje se budu proaktivno restruktuirale, održat će se na tržištu EU.

Ključne riječi: industrijsko restrukturiranje, pristup EU, prehrambena industrija, Slovenija