

THE IMPACT OF THE ECONOMIC CRISIS ON THE BUSINESS ENVIRONMENT IN THE SLOVAK REPUBLIC

Katarína Štofková

University of Žilina, Department of communication, Slovakia

Ivan Stríček

University of Žilina, Department of communication, Slovakia

Jana Štofková

University of Žilina, Department of communication, Slovakia

Abstract

The paper deals with the impact of the economic crisis on the business environment in the Slovak Republic as well as in selected countries of the European Union (EU) in the automotive industry. Analyzes the development of the business environment in the period before the economic crisis and subsequently affected by the impact of the crisis especially in the automotive industry. This paper reports the draft measures to support the development of the business environment in the EU and particularly deals with measures to encourage automobile manufacturers and their suppliers in the Slovak Republic.

Key words

Economic crisis, automotive industry, measures, improvement

Introduction

The economic crisis that preceded the financial crisis in the United States (US), thanks to increasingly important between world economies and globalization, rapidly expanded and has also hit Europe in a relatively large scale. The Slovak Republic (SR) was reflected first in the banking sector (the real estate market) and then showed in drop of consumption as a result of increasing uncertainty about future developments in the economy. The negative trend in consumption therefore had an impact on the manufacturing industry and one of the most affected industries were automotive.

In this paper we will discuss the impact of the crisis on the economies of the EU and Slovakia and its impact on the development of selected macroeconomic indicators (GDP, unemployment) characteristic for the business environment. Contains the evaluation and comparison of development of indicators in selected EU countries on the basis of international indexes of quality assessment of the business environment and analyze the business environment in Slovakia.

The global crisis with beginning in 2008 is considered the as worst crisis of recent decades. The origin of the crisis extends to financial markets primarily in the US where it proved to be the beginning of the mortgage crisis. In the first phase of the crisis the banking sector was globally the most affected part of the economy. Therefore we can talk about the financial crisis. The financial crisis however did not remain isolated in the banking sector but through aggregate demand and negative expectations spilled over into the real economy and has grown into a global economic crisis. Almost all developed countries have been hit by the recession which was associated with a decrease in economic activity, increasing unemployment and rising insolvency of businesses and residents.

1. The impact on the business environment in selected EU countries

Slovakia is an open economy with a high share of exports in GDP with most exports in EU countries (82.8% in 2013). From this share in 2013, 21.1% went to Germany, 13.6% to Czech Republic, 8.3% to Poland, 6.2% to Hungary, 6.1% to Austria and 5% to France. Therefore it is important to monitor the development of the business environment in these countries. To evaluate the situation in these countries we will use the results of the international index of Doing Business. The following table shows the overall ranking of these countries from 2008 to 2014.

The above table shows that the business environment since the beginning of the economic crisis worsened considerably apart from Slovakia and the Czech Republic and also in Hungary. The French position has deteriorated significantly less especially in 2013 and 2014. Austria also fell significantly in the last two years. Relatively stable position retains Germany. Poland as a single after a fall in 2009 annually improves position. In addition to the overall evaluation we focused on indicators of the availability of credit facilities and tax obligations of companies in the period 2008-2014 as the most significant indicators of the impact of the crisis on the business environment.

Table 1. Assessment of selected EU position in Doing Business Index 2008-2014

Location of selected countries in position Doing Business							
	2008	2009	2010	2011	2012	2013	2014
Slovakia	32	36	42	41	48	43	49
Germany	20	25	25	22	19	19	21
Czech Republic	56	75	74	63	64	68	75
Poland	74	76	72	70	62	48	45
Hungary	45	41	47	46	51	52	54
Austria	25	27	28	32	15	28	30
France	31	31	31	26	29	35	38

Source: Author, Data - Index Doing Business

Some industries for example food and pharmaceutical industries ("acyclic") the crisis did not affect significantly. Especially the pharmaceutical industry continued long-term growth trend. The economic crisis has had an impact on employment in the industry. Employment at the onset of the crisis responded fall in with some delay compared with a fall in production, but the decline was not as dramatic as in the case of the production. Employment at the beginning mainly declined in the furniture and textile industry (decline in 2008 by 6% in 2009 to 12%). Also decreased employment in other sectors, its deepest slump was in 2009. The recovery of industrial production has not brought growth of employment, a slight decrease was only at the beginning of 2010 (Table 2). Development of employment is reflected in the evolution of labor productivity, which exceeded the pre-crisis level in all industrial production. [1]

Table 2. Development of employment and labor productivity in selected manufacturing sectors of the EU 27 in 2007-2011 (annual growth in %)

	Employment					Labor productivity				
	2007	2008	2009	2010	2011	2007	2008	2009	2010	2011
Production and manufacturing of basic metals	-0,4	-0,4	-8,0	-5,3	1,1	1,6	-2,9	-20,3	25,3	3,7
Manufacture of fabricated metal products, except machinery and equipment	3,3	2,6	-8,2	-5,3	1,5	2,8	-5,0	-15,2	13,1	5,1
Manufacture of electrical equipment	2,4	1,2	-8,1	-2,1	3,2	2,3	-1,4	-13,1	14,0	0,9
Manufacture of machinery and equipment	2,9	2,1	-5,7	-5,0	2,7	5,3	-0,6	-22,0	16,5	8,5
Manufacture of computer, electronic and optical products	3,3	2,6	-8,2	-5,3	1,5	8,6	4,0	-8,8	12,6	5,6
Manufacture of motor vehicles, trailers and semi-trailers	-0,2	0,9	-8,9	-2,7	2,9	6,3	-6,8	-16,8	24,9	9,7

Source: Authors on the basis of data of the European Commission (2012)

2. The automotive industry in selected countries

In Europe is in the automotive industry 290 plants in 25 countries. The automotive industry generates 12.9 million high-skilled jobs accounting for about 5.3% of EU staff, of which 2.2 million workers are directly involved in the vehicles production. In EU in 2012 produced more than 16.2 million vehicles, trucks, buses (19% of world production). In the world in 2012 produced 84.1 million vehicles. The 2012 EU exported 6.6 million vehicles. Most of them went to the USA -13.4%, -11.6% Russia and China to -8.1%. Imports of motor vehicles in the EU this year amounted to 2.3 million pieces, of which imports from Turkey 22.6% share, 17.6% from South Korea, 15.2% from Japan and 10.5% from USA of the total imported vehicles. The automotive industry is the largest private investor in research and development in Europe, invests more than 32 billion Euro and implemented 9500 new patents per year. [2]

The volume of car production in the EU compared to the US and China remained relatively stable (Figure 1). Crisis hit the automotive industry in the US reduced the number of cars produced in 2009 by half compared to 2006, after the production volume increased in 2013 compared to almost pre-crisis levels of 2006. The development of car production in China has significantly increasing trend, in 2004 was produced 2.48 million cars, in 2013 it was 18.1 million cars what representing a worldwide sharpest jump. In Chin was already in 2012 the biggest car producer in the world.

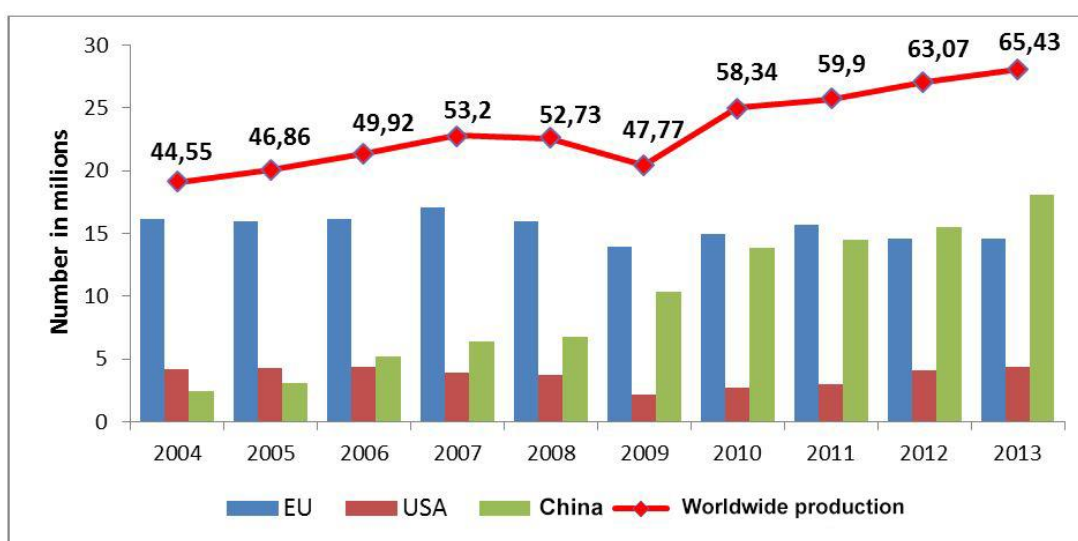


Figure 1. Comparison of production of passenger cars in the EU, US and China, with global production in the years 2004-2013 (Source: authors on the basis of OICA data)

The worldwide production volume of passenger cars was according to the OICA in 2004 44.55 million units and in 2013 were around the world produced 65.43 million passenger cars.

Production of cars in the Czech Republic had also in the first years of the economic crisis upward trend. Between 2012 and 2013 there was a slight decrease in production mainly due to the reduction in production in the TPCA whose share of the total production of passenger cars in the Czech Republic according to the Auto SAP decreased from 34.49% in 2008 to 16.4% in 2013.

Production of cars in France has since 2007 significantly downward trend, the difference between 2007 and 2013 is 42% decrease. In Germany the production most fell in 2009, its further development varied from 2012 with an upward trend. In Slovakia the production decreased in 2009 by almost 20% compared to 2008, since 2010 the volume of production has increased.

3. Measures for support the development of the automotive industry in Slovakia

The automotive industry in Slovakia has a specific position within the EU. Its importance began to grow in Slovakia after the arrival of Volkswagen to Bratislava in 1991 and significantly strengthened in the years 2003-2005 the arrival of two other producers, PSA Peugeot Citroen in Trnava and Kia in Žilina. The automotive industry has become the engine of the Slovak economy, its share in total industrial production in 2013 was 43%. Slovakia is out on top in the world in the number of automobiles per 1000 inhabitants in 2013 it was 181 pieces. The economic crisis didn't affect automobile production in Slovakia in the same extent as in the old EU countries. Volume decreased only in 2009, since then rises and reaches the Slovak ratios record levels. It also increases the volume of exports of vehicles, since the vast majority of our car production is exported. In 2012 the share of exports in total exports of vehicles Slovakia was 23.6%.

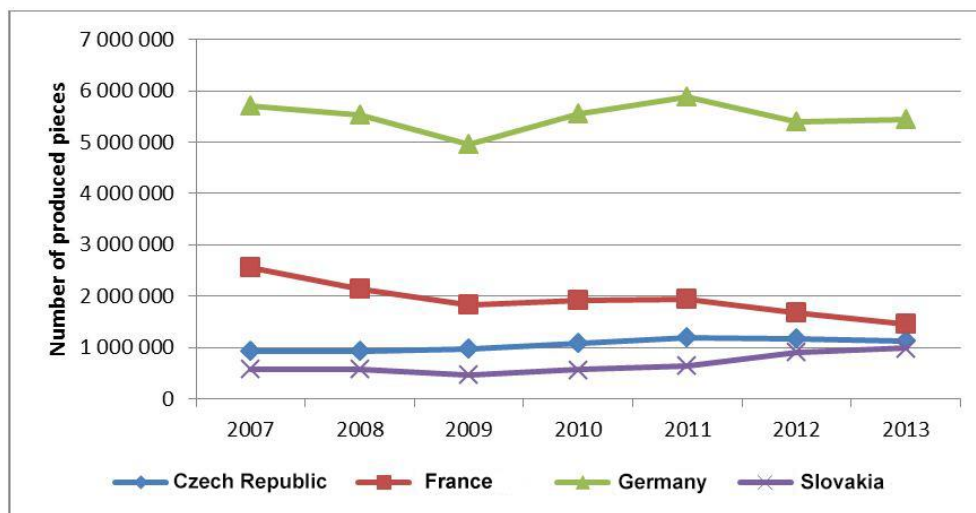


Figure 2. Production of passenger cars in selected EU countries in the period 2007-2012 (Source: authors on the basis of OICA data)

Employment has also after a drop in 2009 an upward trend. In Slovakia was in 2012 employed in the automotive industry 74 thousand employees with a share of 3.18% of total employment. For comparison in the Czech Republic is involved in employment in the automotive industry in total employment of 2.25%, in Germany it is 1.85% and 0.84% in France. Slovakia became dependent on the automotive industry and its condition affects the entire Slovak economy, so it is important for our country to create favorable conditions for maintaining competitiveness and attractiveness for foreign partners.

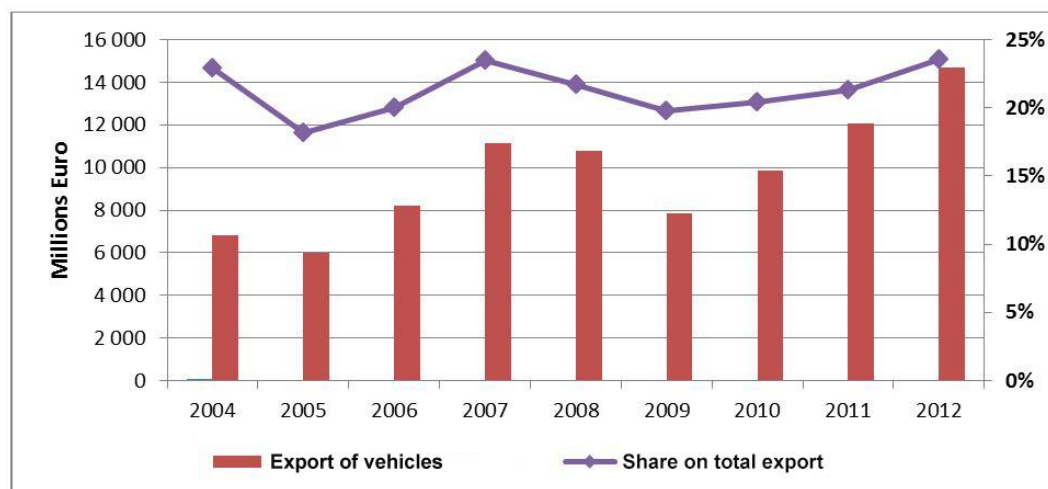


Figure 3. The volumes of exports of vehicles in Slovakia in 2004 - 2012. (Source: Author, Data Slovstat)

To ensure the competitiveness and long-term sustainability of automotive industry in Slovakia we propose the following measures:

- modification of the education system to support the automotive industry,
- the development of applied research according industry needs,
- support the development of Slovak subcontractors,
- improving the business environment.

4. Modification of the educational system to support the automotive industry

The automotive sector is one of the most important Slovak employers but education and training system doesn't meet its demand and requirements in full scale. Change is necessary in vocational training especially at high schools. The analysis of ZAP SR shows that 30% of high school graduates end up in labor offices, 60% continued to study at university, and only 10% of high school students started to work in the field on which they

had trained. Without a change there will be in a few years in Slovakia no real or new skilled workforce. There is a high proportion of university educated graduates, according ZAP SR should not go on university more than 30% of high-school students. Higher proportion reduces the quality of university education. In education at high schools should be more involved employers and thus reflect market needs in the education system. Therefore support the proposal to introduce the dual high education, which provides the theoretical part of the teaching from state and practical training from companies which in particular welcome mainly the business community. Finance on this form of education should come from employers with support from the government, for example the possibility of writing off the cost of education from the tax base. At present, the dual education are only 0.5% of students of vocational high schools.

Certain modifications are required also at universities. Only one third of students end with degree of technical schools graduates and rest two-thirds of students studying humanities. Therefore, it is necessary to support the courses that are important to the economy and to increase the proportion of students in the technical fields. Even at the level of higher education is necessary to develop cooperation between schools and employers, between theory and practice. Education adapted to the demand in the labor market will improve opportunities for graduates of secondary and higher education and contribute to the reduction of unemployment in Slovakia.

5. Support the development of Slovak subcontractors

In addition to supporting companies in automotive industry we can't forget on their subcontractors. Their development will contribute to ensuring competitiveness and also to the further development of employment in Slovakia. The competitiveness of enterprises in Slovakia depends primarily on ensuring quality production, reasonable cost and flexibility. Acceptable costs are closely related primarily to the reduction of logistics costs reduced through subcontractors active in Slovakia. Proximity of subcontractors will also provide increased flexibility.

In the context of linking suppliers with vehicle producers are important transport links. Therefore, an additional condition for the development of subcontractors is supporting the development of infrastructure, completion of the high-way network, complete the interconnection Bratislava and Košice, which is a priority objective for maintaining foreign investors in Slovakia. Currently is 300 suppliers in automotive industry (80%) located in Bratislava - Žilina - Banská Bystrica. Modern logistics systems operate on the basis of just-in-time and just-in-sequence and subcontractors supplied not only individual components but entire modules and systems. Modules come in the order they will be used on the production line. Therefore, it is modern transportation crucial for the production, particularly highway.

Conclusion

The automotive industry in the EU needs to support investment in innovation, research and development, especially in the area of alternative fuels, electric mobility and security. What is needed is increased support for domestic sales, for example in the form of financial incentives for environmentally friendly vehicles. It is also important to promote sales on the world market by eliminating tariff barriers and improve the conditions of free trade. Unpopular measure that must be implemented in the EU is the restructuring of the automotive industry, which represents a reduction of production capacity and staff and will increase productivity and reduce costs.

Slovakia has in comparison to old member states with the position of the automotive industry the advantage of lower production costs and high productivity. Production of cars has a positive trend but for improving competitiveness and sustainable development of the automotive industry, are needed measures to promote education, applied research, better support for subcontractors whose development will contribute at least partially to the diversification of manufacturing industry, which is dominated by the automobile industry.

To improve the overall business conditions in Slovakia it is necessary to improve the quality of the business environment, draw of EU funds and focus on supporting small and medium-sized enterprises.

Brief biography of each author

Katarína Štofková is working as an associated professor at the University of Žilina. She graduated from the University of Žilina in 2004, since then is she active in scientific research activities as well as education process. Katarína Štofková is a lecturer at the University of Žilina, she teaches subjects as management, economics and finance. She is involved in management of several projects at the University of Žilina. She is the author of several books and monographs, author of numerous papers in journals and proceedings of conferences. She attends Erasmus program as a lecturer every year.

Ivan Stríček is 3rd grade student at Department of communication with specialization in industrial quality processes, data processing and economy. He worked in transnational company Samsung as an analyst at the department of quality management. Nowadays he focuses on the issue of effective decision-making in network

and commercial communication companies in his dissertation thesis with the emphasis on increasing the efficiency of decision-making through implementation of information management processes and qualitative management and setting targets necessary to measure the performance of partial activities and determine their future direction.

Jana Štofková is a professor at the University of Žilina, Faculty of Operation and Economics of Transport and Communications. She graduated from the University of Žilina in 1976, since then, active in research and education. Jana Štofková is an expert in management, finance and financial management and she is involved in management of several projects of EU, funds of Ministry of Education and projects for various institutions. Jana Štofková is lecturer at the University of business management, finance, public administration. Attended several international internships, dealt with projects related to the economy, finance and management. She is the author of several books and monographs, author of numerous contributions in journals and proceedings of conferences. She was a member of scientific council, member of working group of the Accreditation Commission, member of habilitation and inauguration committees vice dean etc.

Acknowledgement

This contribution was undertaken, as parts of the research project VEGA 1/0733/15, VEGA 1/0895/13.

References

- [1] FIFEKOVÁ E., NEMCOVÁ E. Hospodárska kríza a štrukturálna adaptácia priemyslu EÚ – výzvy a obmedzenia. In Elektronický časopis Prognostické práce [online]. 2013, 1/2013. [cit. 2014-04-08]. Online: <http://www.prog.sav.sk/fileadmin/pusav/download_files/prognosticke_prace/2013/clanok_2_2013_Fifekova_Nemcova.pdf>. ISSN 1338-3590
- [2] Facts about the Automobile industry. 2014. [online]. Acea.be, [cit. 2014-03-16]. Online: <<http://www.acea.be/automobile-industry/facts-about-the-industry>>.
- [3] Podiel exportu na HDP Slovenska vzrástol do roku 2012 až na 95, 4%. 2013. [online] Teraz.sk, december 2013. [cit. 2014-03-15]. Online: <<http://www.teraz.sk/ekonomika/hdp-export-podiel-rast/67640-clanok.html>>.
- [4] Slovenský export je úzky. Vyvážame najmä autá, televízory a ropné oleje. 2013. [online] Ekonomika.sme.sk, apríl 2013. [cit. 2014-03-15]. Online: <<http://ekonomika.sme.sk/c/6782462>>.
- [5] Do štátov únie vyváža Slovensko takmer všetko, je to riziko. 2013. [online] Spravy.pravda.sk, jún 2013. [cit. 2014-03-15]. Online: <<http://spravy.pravda.sk/ekonomika/clanok/283558-do-statov-unie-vyvaza-slovensko-takmer-vsetko-je-to-riziko/>>.
- [6] Automobilový priemysel je pre Slovensko strategický. 2013. [online]. Plasticportal.eu, november 2013. [cit. 2014-03-18]. Online: <<http://www.plasticportal.sk/sk/automobilovy-priemysel-je-pre-slovensko-strategicky/c/1944>>.
- [7] ŠTOFKOVÁ, K. : Sieťové podnikanie. In: Manažment a sieťové podnikanie vo vedomostnej ekonomike. Žilinská univerzita v Žiline, EDIS - vydavateľstvo ŽU v Žiline, 2013. ISBN 978-80-554-0804-0
- [8] ŠTOFKOVÁ, K. IN ŠTOFKOVÁ, J.: Manažment podniku, EDIS, Žilinská univerzita v Žiline, 2011, ISBN 978-80-554-0418-9
- [9] ŠTOFKOVÁ, Z., PITLOVÁ, P. : Elektronizácia a jej implementácia vo vybranom sektore služieb. In: DoNT 2013. Žilinská univerzita v Žiline, 29.10.-30.10.2013. ISBN 978-80-554-0778-4.