

The impact of competitiveness on export performance of the Republic of Macedonia^x

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Abstract

The benefits of the increased competitiveness are discussed in the context of the superior national productivity, achieving higher GDP growth, but as well higher export with positive implications on the trade and current account balance. The Republic of Macedonia, as a small an open economy, continuously works on improving its national competitiveness, which in parallel with the aspiration towards the EU accession process, became its strategic interest too. Although in the recent decade, there is a trend of improved competitiveness in Republic of Macedonia, the progress is much slower than in other EU countries with limited impact on its export performance. Therefore, the aim of this paper is to analyze if the competitiveness made an impact on different aspect of export performance such as: export growth, export market size growth, as well as trade and current account balance. Using the trend and regression analysis, for the period 2005-2015, this paper presents that there is still positive correlation between competitiveness and the exports of goods and services but close to the critical level of t-value (2,25) and the statistical significance of 95%. However the exports growth and other export performance indicators show some discrepancies from the basic findings, which are in details presented in the paper.

Keywords: Competitiveness, export growth, market share growth, trade balance.

JEL classification: F 31, F 41, F45

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Introduction

The competitiveness at the national level is based on superior productivity performance and the economy's ability to shift output to high productivity level" (European Competitiveness Report 2000) enabling higher production, higher exports and prosperity of a country on the long run. Having in mind that the economic growth of the small and open economy, such as Macedonia, relies very much on its export performance, improving export performance is critical to boost the economic growth, as well as to reduce unemployment and trade deficit.

Namely, in the short to medium run, an improved export performance is needed to strengthen the trade balance and reduce the country's dependence on remittances from migrant workers to raise national income, while in the longer run, companies are expected to promote integration of the domestic tradable goods sector into global supply chains and support sustainable growth. (IMF Report, 2015)

Thus, competitiveness can have direct impact on economic growth if its enables higher exports value and volume through improving its export performance, in terms of better and more diversified export structure. As the export has been proofed as a major contributor to the GDP growth of the Republic of Macedonia , there is a continuous attempt by the Macedonian authorities to increase its chances for the better positioning at the global markets by implementing various measures towards increasing companies' and overall national competitiveness. In fact, despite the global financial and economic crisis in the recent decade, Macedonia is continuously improving its competitiveness, being a leader in overall competitiveness among the other Western Balkan countries, but still, much behind the one in EU countries.

Therefore there is a challenge for the policy makers and academicians to analyze if the increased competitiveness in Macedonia has made significant and positive impact on different aspect of export performance such as: export growth and export share in GDP, export /import coverage rate, export value index, trade balance annual change, as well as quality and diversification of the Macedonian export structure.

II. Evidence Of Competitiveness Impact On Export Performance -Literature Review

Theoretical standings about the positive impact of competitiveness on export performance derive from the definition of the competitiveness concept.

However in the literature on competitiveness, there are variety definitions that understand this concept in it narrow or wider sense of meaning.

Generally, the "competitiveness" concept can be used to cover almost any aspect of market performance: product quality, the ability to innovate, the capacity to adjust rapidly to customers' needs and the absence of restrictive practices in the labor market are frequently evoked in discussions of competitiveness. (Turner and Van't Dack,1993).

Krugman (1994) defined the national competitiveness as: ability to produce goods and services that meet the test of international competition, while OECD uses varying definitions, among which the following might be quoted: "[Competitiveness] may be defined as the degree to which, under open market conditions, a country can produce goods and services that meet the test of foreign competition while simultaneously maintaining and expanding domestic real income" (OECD Programme on Technology and the Economy 1992). Hence, competitiveness relates to the country's trade performance (which can be referred to as international competitiveness) and to the economic welfare of the country's citizens.

Besides the brother understanding of competitiveness, there are definitions which are focusing on its price and costs side (price/costs competitiveness). Changes in price/cost competitiveness depend on movements in nominal exchange rates as well as costs and prices at home and abroad. According to a standard export demand equation, the appreciation of the country's real effective exchange rate should lead to a fall in demand for its goods.(Bierut & Kuziemska-Pawlak, 2016). There is furthermore understanding of so called "technological competitiveness" that can be defined as "the capacity to innovate, as well as to increase efficiency and reduce costs"(ECB, 2012). The ability of a country to innovate and provide differentiated products in international markets constitutes an important source of competitive advantage. Spending more on innovation-spurring activities allows firms to improve the quality of their products and climb up the quality ladder. Technological advancements can lead to process or product innovations: process innovation results in a product being manufactured in a more efficient way, thereby reducing the costs of production, while product innovation results in a new commodity or a higher quality good (ECB, 2005). Hence,

process innovations influence the intensive margin of export volumes via their impact on export prices. In turn, product innovations affect the extensive margin of exports through their impact on export offer.

Beside theoretical standings there is also an empirical evidence of such relationship in the world scientific literature.

Namely, the role of variables reflecting technological change as a part of increased competitiveness is found as crucial one in explaining export performance. Amable and Verspagen (1995) report a significant, negative impact of a measure of unit labor costs and a significant, positive impact of the patenting variable (representing the effects of innovation) on export market shares, while the impact of the investment variable (representing the effects of new capital equipment) is positive but insignificant.

Carlin et al. (2001) suggest that successful export performance might be associated with ‘relatively deep-seated features of a nation’s institutions’. These institutional variables include human capital formation, disembodied technical progress (as reflected in aggregate business sector total factor productivity growth) and the structure of corporate ownership. Bournakis and Tsoukis (2013) also attempt to uncover some of the deep institutional determinants of export performance. Apart from confirming the significant effect of traditional variables, relative unit labor costs and the share of R&D expenditures in GDP, on export performance, they show that product market rigidities such as barriers to entrepreneurship, barriers to competition and barriers to FDI impact negatively export performance via their adverse effect on R&D.

Finally, Bierut and Kuziemska-Pawlak(2016) analyzing competitiveness and export performance of CEE countries, came to the results that higher competitiveness (especially innovation pillar) and better overall regulatory quality have positive and consistently significant impact for export performance.

III. Data and Methodology

The empirical analysis presented in this paper is based on the World Economic Forum's Global Competitiveness Index (GCI) historical annual data for Republic of Macedonia over the period 2005-2015. Additionally for the comparison purposes the GCI historical data for other four Western Balkan Countries are used for the same time period. The historical data in the data set correspond to the data that was originally published in eleven past editions of the WEF Global Competitiveness Report. The GCI is a composite competitiveness index combining "hard data" on various national characteristics and "soft data" compiled from the WEF's annual Executive Opinion Survey. To ease the calculation of indexes, the WEF converts all hard data items onto a 1-7 scale using a min-max transformation. The theoretical maximum of GCI is 7.

The WEF constructs a Global Competitiveness Index (GCI) which includes a weighted average of 114 different components. These components are grouped into 12 pillars of competitiveness which are further organized into three groups (sub-indexes): basic requirements sub-index (pillars 1-4), efficiency enhancers sub-index (pillars 5-10) and innovation and sophistication sub-index (pillars 11-12).

The analysis are focused on testing the impact of the level of competitiveness on export performance indicators, such as : Export annual growth rate , export contribution in % of GDP, export /import coverage rate , trade deficit annual change in %. All these data are taken from the World Bank data base, from the World Economic Forum's Competitiveness Reports in the period 2005-2015, as well as from the State Statistical office of the Republic of Macedonia at annual basis for the same observed period, which is presented in the Table 1 as follows:

Table 1 ; Summary of the data and their sources

Variable	Abbreviation	Description	Source
WEF Global Competitiveness Index	GCI	GCI is a composite competitiveness index consisted of 12 pillars and 144 indicators (1-7 scale)	World Economic Forum's Competitiveness Reports (2005-2015)
Export share in GDP in %	EXP	export share as % in GDP	World Bank data base
Export annual growth rate	EXPGr	Percentage annual change	World Bank data base
Export /import coverage rate	CovR	The % of coverage of import with export	Macedonian State Statistical Office
Trade Balance annual change in %.	TB Ch	The % annual change of the trade balance	Macedonian State Statistical Office (calculated by author)
Export Value Index	EXPVINX	The index of the export value related to baseline year 2005	World Bank data base

Source: Related sources, created by the author

In order to analyze the trend of diversification as well as potential export structure quality improvement the trend of export by sectors according to Standard International Trade Classification (SITC) is presented.

For estimating the impact of Macedonian economy's competitiveness on selected export performance indicators, the trend and regression model is used. Thus, to examine if the increased competitiveness contribute to the increased export contribution to GDP , export growth , as well as export /import coverage rate and trade balance improvement in the case of the Republic of Macedonia , it is examined the level of correlation that the GEF's Global competitiveness index (considered as independent variable) has on the five selected indicators. (as dependent variables). In order to analyze if the increased competitiveness positively affected the export structure of the Macedonian economy, and thus improved the export's quality , the trend analysis of the export by sectors developments is made for the period 2005-2015 as well, it is done the comparison between the trend developments of the export volume index and export value index.

IV The Trend Of Competitiveness and Export Performance Indicators

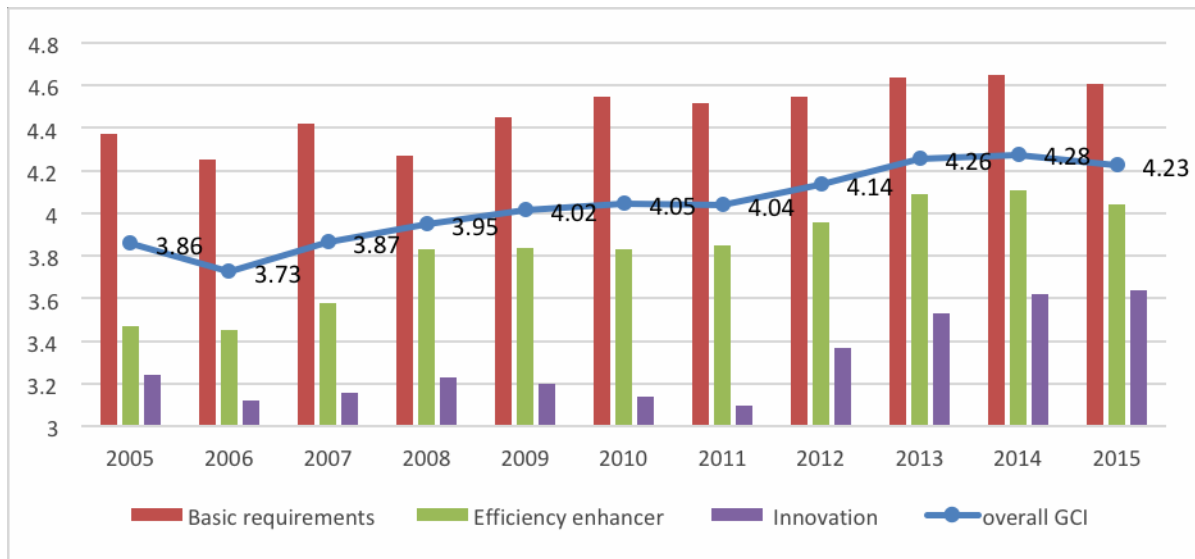
4.1. Competitiveness indicators (Global competitiveness index and 3 sub-indexes)

Being part of Europe with EU aspiration, Macedonian economy is struggling to catch up with European Union members, employing numerous of policies and measures to increase its competitiveness.

Namely, regardless the poor results in comparison with the EU countries¹ and despite some turbulence over the global financial crisis, Republic of Macedonia in the period 2005-2015, marks the modest, but still, continuously upward trend of competitiveness within the observed period, starting with the score of 3,86 in 2005 and reaching the score of 4,23 in 2015. (Figure 1). Thus overall improvement of the competitiveness of Republic of Macedonia, measured through global competitiveness index is at the level of 9,5%

¹ As per latest Global Competitiveness Report 2016/17 data the European average competitiveness score (4.72), is much above the Macedonian score of 4.23

Figure 1: Macedonian Global Competitiveness Index and 3 sub-indexes (2005-2015)



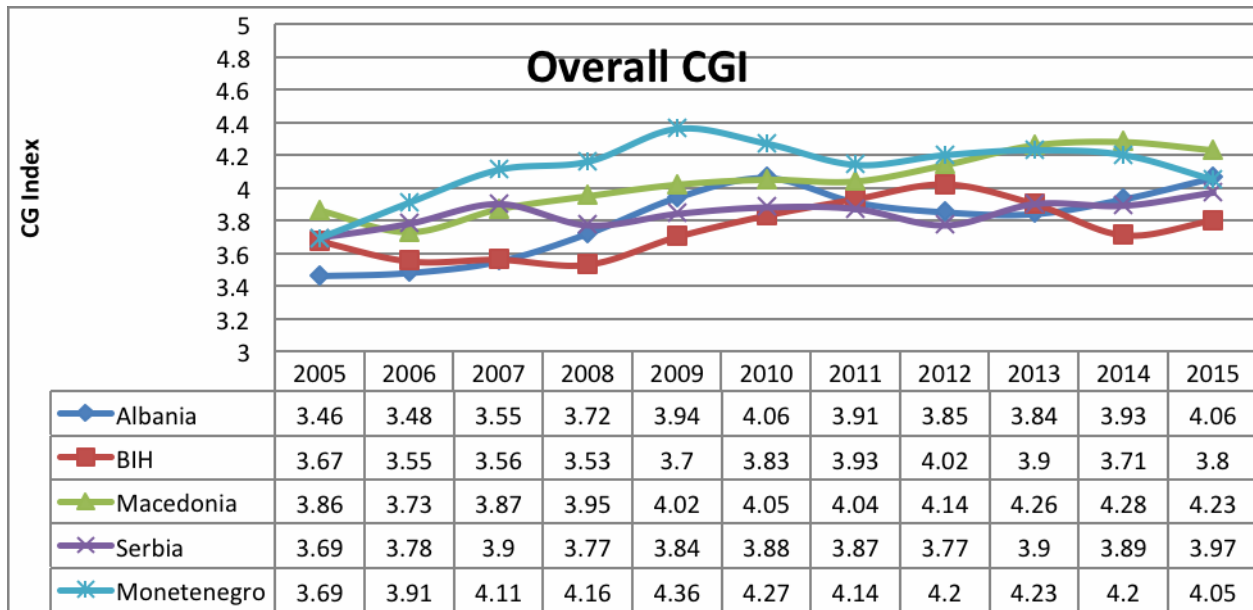
Source: GEF Global Competitiveness Report 2016/17, created by the author

Analyzing the competitiveness sub-indexes, the following can be noticed:

- The basic requirements sub-index which is related to the institutional and legal environment in the country is the highest in relation to the other two sub-indexes, reaching the score of over 4,5 since 2010 despite the crisis turbulence.
- The lowest but the most volatile sub-index is the innovation sub-index with the trend of continuous increasing since 2012. But, even in the best period, the innovation sub-index hardly reached the score of 3.6.

.However, being compared with the competitiveness indicators from the other Western Balkan countries, Macedonia marks the most stable upward trend of competitiveness, as it is the most competitive country at the beginning and at end of the observed period. (Figure 2)

Figure 2 : GCI trend in Western Balkan Countries (2005-2015)



Source: GEF Global Competitiveness Report 2016/17, created by the author

4.2. Macedonian Export Performance indicators

As a small and open country, the economic development and progress in Republic of Macedonia very much depends on its export performance. Export of goods and services has been presenting significant share of the economy’s GDP, providing major contributions to the real growth, and therefore, helping to pull the country out of the recession over the global financial crisis. Export increase derives mostly from the export oriented production in the subsidized Technological Industrial Development Zones (TIDZ) representing about half of the total exports in the recent years. In the following the basic performance indicators trend will be presented and analyzed.

a) Export of goods and services share as % of GDP

The turbulence of the crisis period affected the positive and upward trend of the export of goods and services contribution in nominal GDP of the country. Exports of goods and services have been presenting contribution in the nominal GDP at the level between 35% in 2005 up to 50% at the end of 2015(Figure 3). In that respect, the most critical year was 2009, when Macedonian export reached the its lowest share of 32 % in the national GDP, due to the canceled arrangement from

the EU countries which suffered tremendous consequences from global financial crisis. The trend of turbulence is evident for all Western Balkan countries (WBC) except for Serbia, which previously suffering with both economical but as well as political problem, increased its openness to the world and increased its export of goods and services from 27.14 % to 46,7 % from the GDP. (Figure 4).

Figure 3: Republic of Macedonia

Export of goods and services (% of GDP)

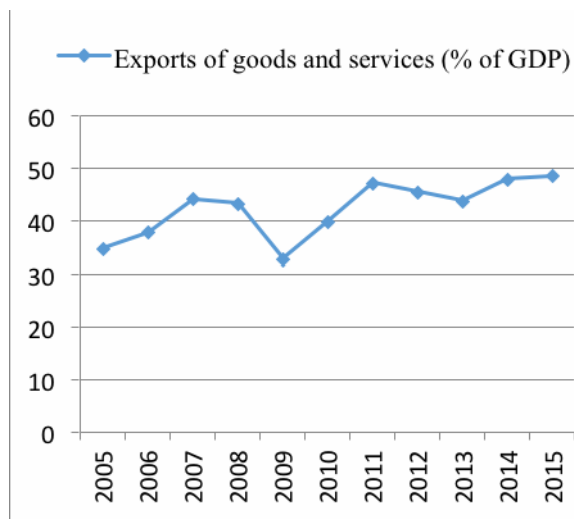
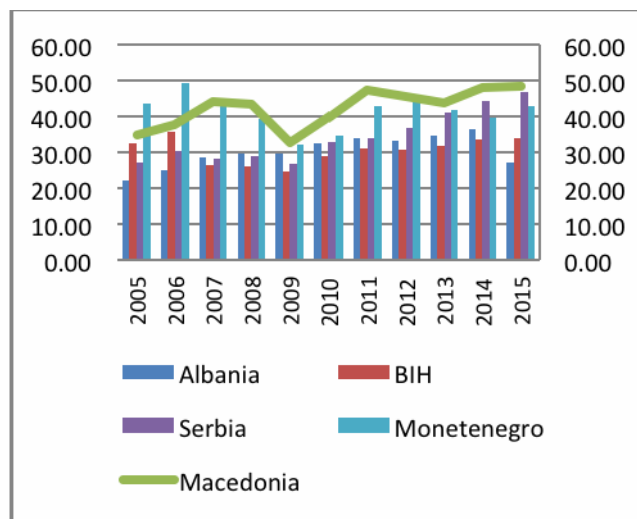


Figure 4: Western Balkan Countries

Export of goods and services (% of GDP)



Source: WB database, author's calculations

Albania as the country with the lowest level of participation of the export in GDP is also marking upward trend till 2014 when it reached the level of 36,37% of export in GDP , however experienced drop to 27.19% in the next year. Macedonia and Montenegro are the two countries who have the highest level of export at the beginning of observed period but experience significant ups and downs in the export participation in gross domestic product of their countries.

b) Export of goods and services annual growth rate

The ability of Macedonian exporters to maintain or even increase their positions during times of severe contraction in trade flows has allowed for steady market share gains within the European Union, as well as in the world. During the observed period the exports of goods and services marked 8% average annual growth rate, achieving the highest annual growth rate of 23,7% in 2010 related to the previous year (2009) marked as the worst economic year not only for Macedonia but for the whole Western Balkans. Namely, the turbulence of the financial crises affected the Macedonian export annual growth, marking negative trend in 2008 and 2009 (-4,6% and -13,9% respectively), but as well as modest growth rate of less than 2% in 2012 caused by the sovereign debt in Euro zone. (Figure 5).

Comparing with the exports growth rate in the neighborhood and EU countries the exports of Republic of Macedonia has marked much higher positive growth rate than its peers countries in the period of prosperity and stabilization, but also significant negative export growth rate in the period of the crisis.(Figure 6)

Figure 5: Republic of Macedonia

Export growth change in %

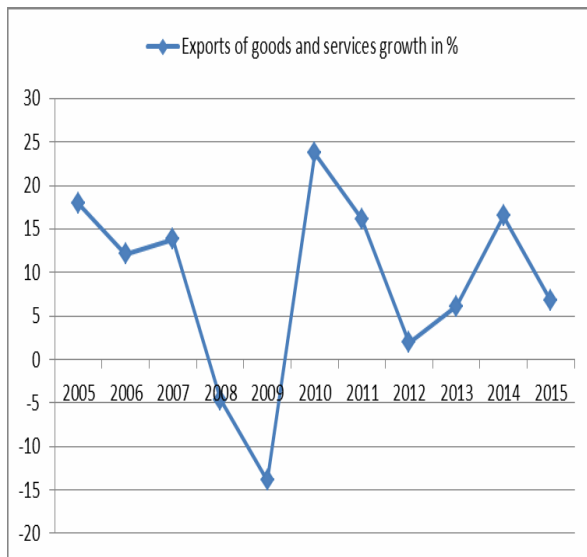
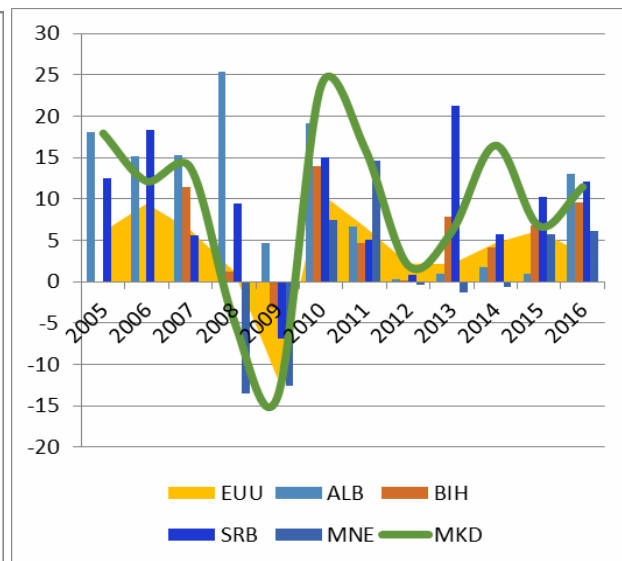


Figure 6: WBC & EU countries

Export growth change in %



Source : WB database , author's calculations

c) Export /import coverage rate

The positive tendency of increasing import coverage by export is evident throughout the whole observed period with some downfalls in 2009 and 2012. Namely, at the beginning of the observed period about 63 % of the import was covered by export , while in 2015, export /import coverage rate increased at the level of over 70%. (Figure 7)

Figure 7: Export/import coverage rate

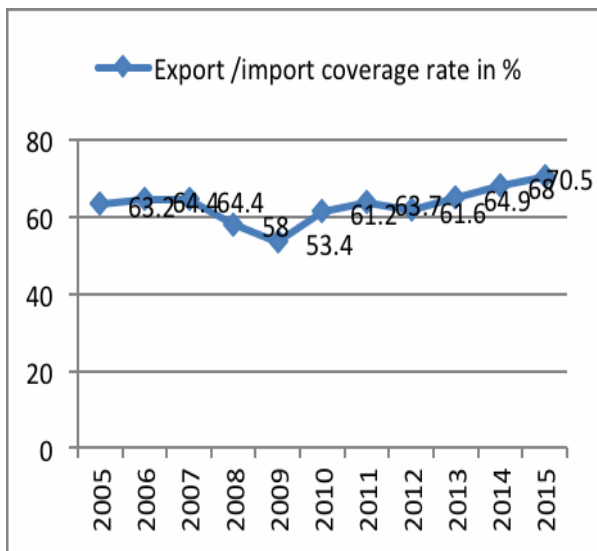
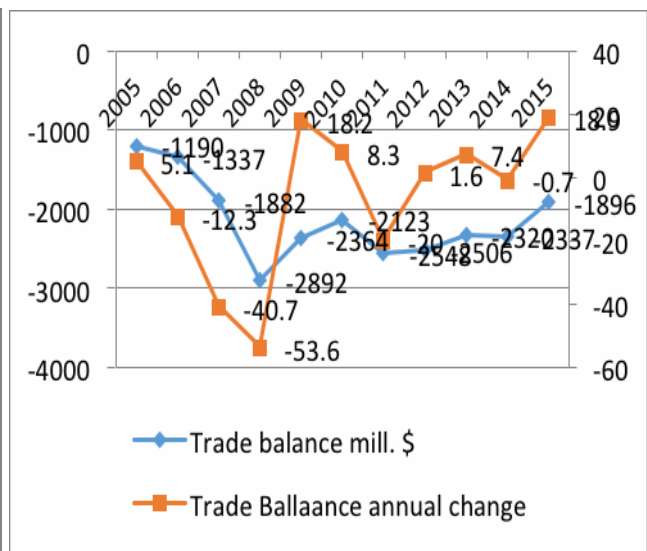


Figure 8: Trade Balance & TB annual change



Source : State Statistical Office of RM, author's calculations

d) Trade Balance and Trade Balance annual change

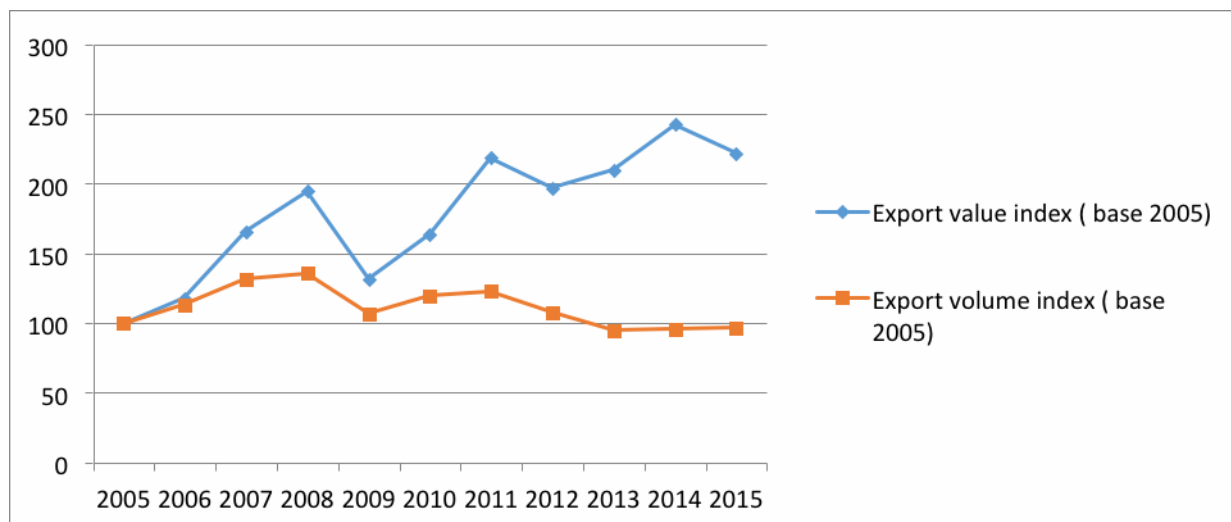
The trade balance and thus the trade balance annual change didn't follow the improving trend of exports and export share in the nominal GDP in the observed period. Actually, besides the fluctuations in the crisis years, the level of trade deficit reached in 2005 (amounting 1,1 million\$) has even been worsened over the observed period , including 2015 , when the trade deficit was almost doubled reaching 1,9 billion \$. The trend of trade balance annual change was also unlike the other analyzed indicators , as it has shown the biggest drop in 2008, due to the sudden cuts in exports (as the foreign trade partners have canceled their trade arrangement), but still keeping the imports on the high level. However in the next 2009, which is considered as the worst year for

the Macedonian economy, the decreased export was accompanied with even the lower import, reflecting the improvement in the trade balance annual change of 18%.

4.3. Trend of improving quality of export structure (composition)

Despite successful integration into European supply chains, there is significant room for improvement in the overall quality of Macedonian export products. Namely Macedonian export is still concentrated in certain sectors (textile, food and tobacco) exporting over 87% of its goods and services in the European Union and Western Balkan countries. However in the recent years there is a trend of improvement, regarding quality of the Macedonian economy exports, in terms of product diversification, moving the export structure from dominant traditional export products to new capital intensive goods, as well as from low technology export structure to high technology one. The increasing trend of exported goods with higher value added is evident when analyzing the trend of export volume versus export value index over the observed period. Assuming the 2005 as a baseline year, the exports volume index hasn't been changed much, as it has increased slightly till 2008 and then with fluctuations even marked values slightly below 100. In the same time, the export value index in 2015 has been more than doubled comparing with the baseline year, which refers to conclusion that in the export structure it is trend of increasing of high skills and technology intensive products, having in mind the very low level of inflation rate for the observed period. (Figure 9)

Figure 9 :Export volume vs Export value index



Source : State Statistical Office of RM, author's calculations

The positive change in the Macedonian export structure is even more obvious, when analyzing the trend of exports by sectors, according to Standard International Trade Classification (Table 2).

Table 2: R. Macedonia export structure by sectors according to SITC (2005-2015) in mill.\$

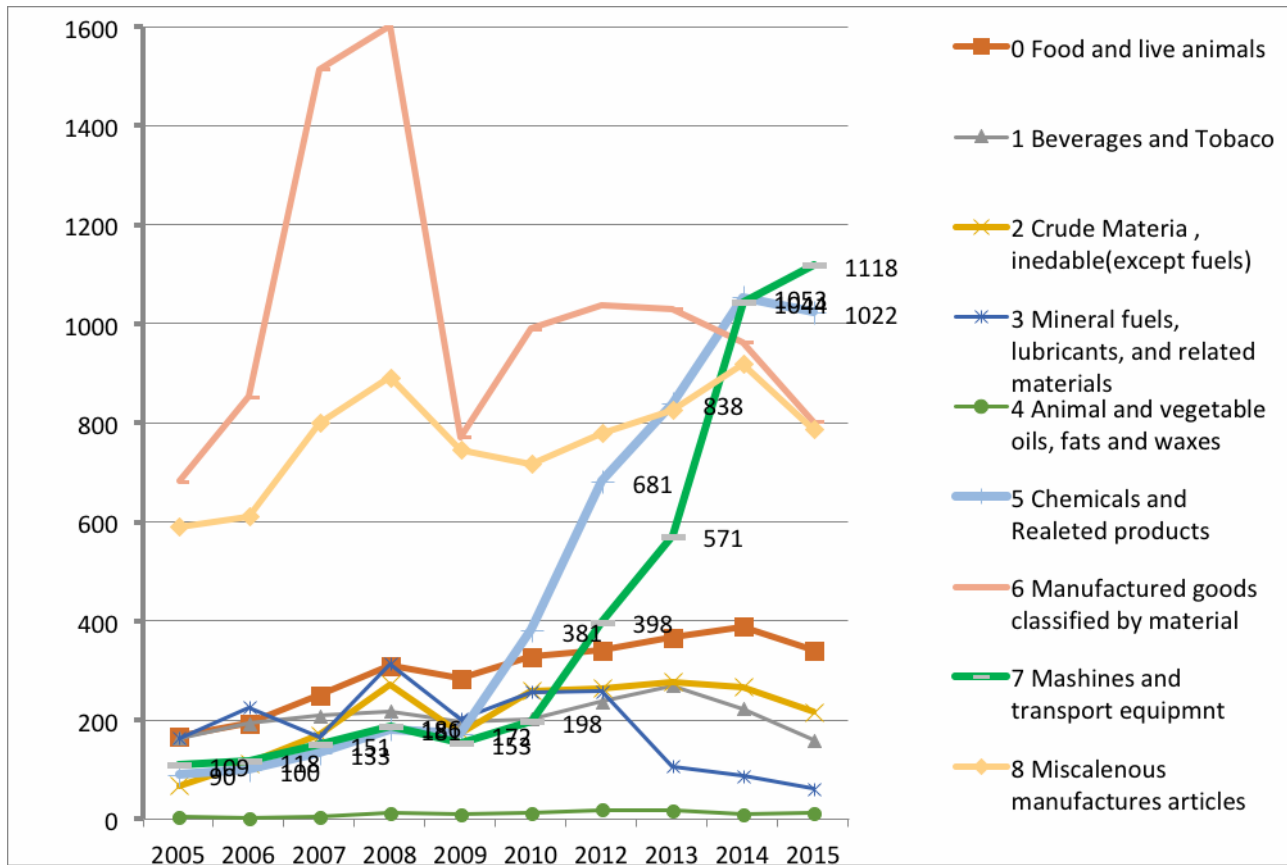
export in mill. \$	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015
0 Food and live animals	167	192	250	308	283	328	373	339	365	388	339
1 Beverages and Tobacco	163	193	209	218	197	202	234	237	270	223	160
2 Crude Materia (except fuels)	67	113	170	272	173	259	288	265	278	267	216
3 Mineral fuels, lubricants,...	163	225	165	314	202	257	390	258	106	87	61
4 Animal&vegetable oils, fats&waxes	2.8	2.1	2.5	12.4	8	11	10	17.8	15.5	9.7	12
5 Chemicals&realeted products	90	100	133	181	172	381	747	681	838	1053	1022
6 Manufactured goods by material	682	853	1513	1602	771	990	1233	1038	1030	962	802
7 Mashines and transport equipmnt	109	118	151	186	153	198	353	398	571	1044	1118
8 Miscalenous manufactures articles	590	612	800	892	745	717	836	779	825	920	787
9 Other unclassified goods	3	3	2	1	1	2	3	1	3	4	1

Source: State Statistical Office of RM, author's calculations

Namely, although the exports value has been more than doubled in the analyzed period, the export structure has been change in favor of certain group of products, while the other are participating with the same or even lower value in the total Macedonian export. In that respect the traditional exporting products from the sector “Food and live animals” doubled its export value in the observed

period, while tobacco products within sector 1 (Beverages and Tobacco) (although with some increasing fluctuations), have finished the observed period with the same (even decreased) export value index. It is also important to notice that there is a negative trend of export value index in the sector 3 “Mineral fuels, lubricants and other...”, as the value of the export is threefold lower than the one at the beginning of the observed period. This fact confirms the notion about the trend of decreasing share of the low-skills & technology products in the Macedonian exports structure. The exported goods from the sectors 6 and 8 (“Manufactured goods by material” and “Miscellaneous manufactured articles”) have noted about 50% increase, which is also a sign of improving expert quality structure. However the biggest improvement is noticed in the case of the two sectors according to SITC , “sector 5 – Chemicals and related products ” as well as the sector 7 “ Machines and transport equipment”. Both of these two sectors marked tenfold increase of their export value in the observed period, both presenting almost half of the Macedonian export value in 2015. The other two sectors – sector 2 “Crude materials, except oil” and sector 4 –”Oils, fats and waxes”, although marking 2-6 times increase introspectively over the observed period, their share in the overall export is still insignificant to reflects the change in the export structure. The trend of exporting value of the goods clarified as per SITC is even more evident in the presented Figure 10. As a conclusion it can be said that the textiles, beverages, tobacco, and food products remains to be highly dominant in the Macedonian overall expert of goods , however the country managed to push its advantage in chemical products and production of transport equipment and other manufactured goods with higher added value.

Figure 9 : Macedonia export structure by sectors according to SITC (2005-2015) in mill.\$



Source : State Statistical Office of RM, created by the author

V. Impact Of Competitiveness On Export Performance Indicators

To examine if the increased competitiveness contribute to increase of exports and exports growth as well as the level of coverage of the import with export , and improvements in trade balance in Republic of Macedonia, it is examined the influence of the GEF's Global competitiveness index on the four already observed export performance indicators: participation of the export as % in the nominal GDP , exports annual change rate in % , export /import rate annual change, trade balance annual rate change and export value index –all data covering the period between 2005 and 2015 .

For that purpose OLS approach is applied, where as independent variable is considered competitiveness level measured through the Global competitiveness index (GCI), while as the dependent variables are used already mention export performance indicators.

The Econometric Model represents the random effects of linear regressions as follows:

$$\ln EXP_i = \beta_0 + \beta_1 \ln GCI_i + \varepsilon_i$$

$$\ln EXPGr_i = \beta_0 + \beta_1 \ln GCI_i + \varepsilon_i$$

$$\ln CovR_i = \beta_0 + \beta_1 \ln GCI_i + \varepsilon_i$$

$$\ln TBCh_i = \beta_0 + \beta_1 \ln GCI_i + \varepsilon_i$$

$$\ln EXPVINX_i = \beta_0 + \beta_1 \ln GCI_i + \varepsilon_i$$

where all dependent variables EXP, EXPGr, CovR, TBCh and EXPVINX are the expression for the respective trade performance indicators in time i; β_0 is the constant; while GCI is the level of competitiveness measured and expressed as Global Competitiveness Index . With ε is presented the error term, or stochastic factor that is supposed to be with zero conditional mean and constant variance, $\varepsilon_i = 0$ for each period i. All the data are transformed into logarithms.

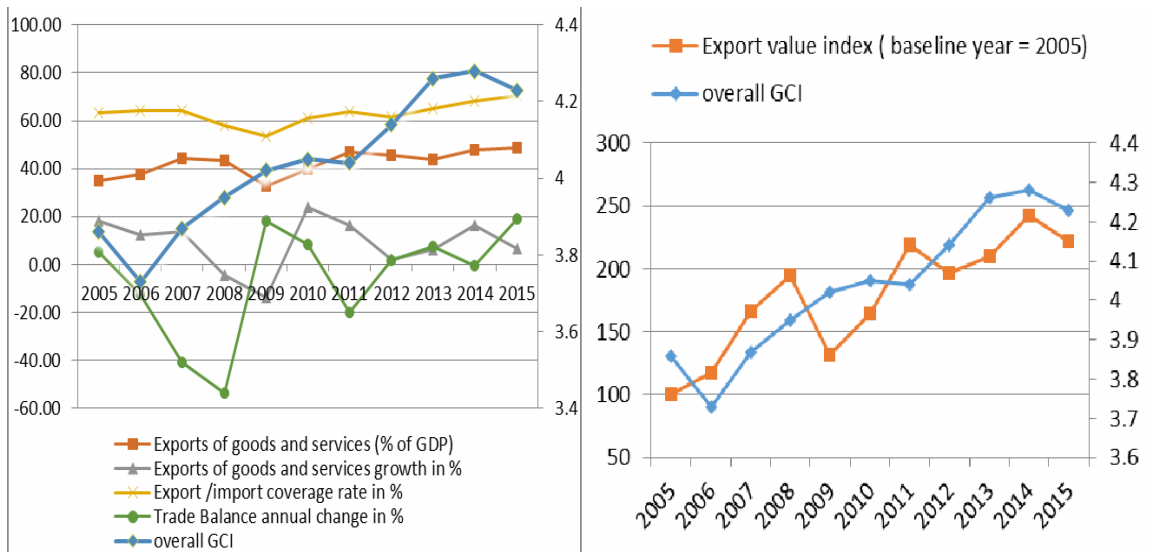
All data from independent and depended variables for the observed period are presented in the Table 3 , while the trends of their developments are presented in the Figures 10 and 11.

Table 3 : Global Competitiveness Index and Export Performance Indicators (2005-2015)

	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015
overall GCI	3.86	3.73	3.87	3.95	4.02	4.05	4.04	4.14	4.26	4.28	4.23
Exports of goods and services (% of GDP)	34.81	37.79	44.12	43.22	32.81	39.79	47.12	45.37	43.79	47.86	48.53
Exports of goods and services growth in %	17.92	12.13	13.79	-4.66	-13.89	23.68	16.13	1.95	6.09	16.47	6.71
Export /import coverage rate in %	63.2	64.4	64.4	58	53.4	61.2	63.7	61.6	64.9	68	70.5
Export value index (baseline year = 2005)	100	118	166	195	132	164	219	197	210	243	222
Trade Balance annual change in %	5.1	-12.3	-40.7	-53.6	18.2	8.3	-20	1.6	7.4	-0.7	18.9

Sources : WEF, WB data base, Statistical office of RM, authors calculations

Figures10&11 : GCI and Export Performance Indicators (2005-2015)



Sources : WEF, WB data base, Statistical office of RM, created by the author

The results from regression analysis are presented on the table 4 which bring us to the following conclusions:

Table 4: Regression models results

reg EXP GCI

EXP	Coef.	Std. Err.	t	P> t	[95% Conf. Interval]
GCI	17.83017	7.938985	2.25	0.051	-.1290625 35.7894
_cons	-29.72586	32.09469	-0.93	0.379	-102.3291 42.87737

reg CovR GCI

CovR	Coef.	Std. Err.	t	P> t	[95% Conf. Interval]
GCI	13.99961	5.982777	2.34	0.044	.4656302 27.53359

_cons | -11.22488 22.90915 -0.49 0.636 -63.04898 40.59922

reg EXPGr GCI

EXPGr | Coef. Std. Err. t P>|t| [95% Conf. Interval]

GCI | -4.852212 20.48112 -0.24 0.818 -51.18373 41.47931

_cons | 28.35797 82.7984 0.34 0.740 -158.945 215.661

reg TB Ch GCI

TB Ch | Coef. Std. Err. t P>|t| [95% Conf. Interval]

GCI | -4.453684 17.99829 -0.25 0.810 -45.16864 36.26127

_cons | 23.47685 59.57799 0.39 0.703 -111.2979 158.2516

reg EXPVINX GCI

EXPVINX | Coef. Std. Err. t P>|t| [95% Conf. Interval]

GCI | 14.05002 7.352581 2.91 0.028 -2.582678 30.68271

_cons | -4.137096 24.33854 -0.17 0.869 -59.19469 50.9205

Source: created by the author

The results of the first model indicate the positive correlation between competitiveness and the exports of goods and services as % of GDP but just above the critical level of t-value (2,25) and the statistical significance of 95%. This means that the modest, but continuous improvement of

competitiveness of Macedonian economy positively contributed to the increasing trend of the exports share in the national gross domestic product. Very similar findings can be concluded when analyzing the impact of GCI on export import coverage rate. Namely, in years, along with the improved competitiveness of Macedonian economy, the coverage rate of import with export was also improved, which is empirically confirmed with the second regression model achieving positive t-value of 2,34, with statistical significance slightly above 95%. However, the other two observed indicators show quite different results. Both, “export growth rate” and “trade balance annual change” have similar fluctuation over the observed period and thus show significant discrepancies from the competitiveness line trend. In that respect, the annual change of both indicators shows negative and insignificant correlation with GCI at very low statistical significance of about 20%. However, it is important to mention that the observed period 2005-2015 is considered as the most turbulent one, not only for Macedonia, but as well for the whole Europe. In fact over the period Macedonian export was growing at the annual average rate of 8%, but with high fluctuation, achieving its lowest change rate of - 13,9% in 2009 (considered as the worst economic year due to the Global financial crisis) and achieving the highest export growth rate of 23,7% in the next year(2010). Shortly after the recovering, the sovereign debt crisis in the Euro zone affected the Macedonian export as its annual growth achieved positive, but very modest rate of less than 2% in 2012. However, the reasons for annual changes (positive or negative) of both exports and trade balance are rather due to other outside factors than to the factors related to the competitiveness of the Macedonian economy. Yet, if we analyze the global competitiveness index and export value index (having 2005 as a baseline year) the correlation of these two indicators is significant enough, as the t-value of 2,9 is above the critical level and the statistical significance is at the level above 95%. Therefore it can be concluded that the increased competitiveness is contributing the increased level of export, its share in gross domestic product and improved export/import coverage ratio, but no significant impact can't be confirmed in the case of export and trade balance annual changes. As the changes of export in the crisis period very much depends on the external factors much more related to the problems of the Macedonian trading partners rather than to Macedonian competitiveness factors the latest results discrepancies from the general findings can't be accepted as accurate ones.

Conclusions

Competitiveness can have direct impact on economic growth if it enables higher exports value and volume through improving its export performance, in terms of better and more diversified export structure. Despite the global financial and economic crisis in the recent decade, Macedonia is continuously improving its competitiveness, being a leader in overall competitiveness among the other Western Balkan countries, but still, much behind the one in EU countries. Although Macedonian export is still concentrated in certain sectors (textile, food and tobacco), there is a trend of improvement, regarding quality of the Macedonian economy exports, in terms of product diversification, moving the export structure from dominant traditional export products to new capital intensive goods, as well as from low technology export structure to high technology one. In that respect, the exports value has been more than doubled in the analyzed period, while the export structure has been changing in a favor of high-skills & technology products. In particular, the biggest improvement is noticed in the case of the two sectors “Chemicals and related products” and “Machines and transport equipment”, both of them marking tenfold increase of their export value in the observed period, and presenting almost half of the Macedonian export value in 2015.

The empirical analysis partly confirmed the notion about the national competitiveness impact on Macedonian exports performance.

In fact, out of the regression analysis it can be concluded that the modest, but continuous improvement of competitiveness of the Macedonian economy positively contributed to increased level of export, its share in gross domestic product and improved export/import coverage ratio, but, no significant impact can't be confirmed in the case of export and trade balance annual changes. As the changes of export in the crisis period very much depends on the external factors much more related to the problems of the Macedonian trading partners rather than to Macedonian competitiveness factors the latest results discrepancies from the general findings can't be accepted as accurate ones.

Therefore it can be finally concluded that the textiles, beverages, tobacco, and food products remains to be highly dominant in the Macedonian overall export of goods, however increased competitiveness in the recent years contributed in improving the quality of the export structure pushing its advantage in chemical products and transport equipment as well as other manufactured goods with higher added value.

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