Milica Jovanović<sup>1</sup> Aleksandar Đorđević<sup>2</sup> Innovation Center, University of Nish

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### MARKET SIZE AND FOREIGN TRADE AS DETERMINANTS OF NATIONAL COMPETITIVENESS SUSTAINABILITY<sup>3</sup>

#### Abstract

Market size in many ways determines the national competitiveness of an economy. If there is a large national market, it is a source of demand for manufacturing companies. There are cases where the national economy has a large market and a weak industry, e.g. Russia, while on the other hand, Switzerland, which has a small market size, compensates that with productivity and exports to other markets. Market size and foreign trade complement each other in influencing the sustainability of national competitiveness. If there is a large market and insufficient industry to meet the demand in that market, it is necessary to import the products and satisfy the needs of the domestic market. However, the small national market and the production of a large quantity of products that it cannot absorb requires export to other markets. The paper presents a comparative analysis of the competitiveness of Serbia and countries in the region, and their indices of market sizes, which include, but are not limited to, foreign market percentages and exports. Certainly, both determinants significantly affect national competitiveness and its sustainability.

Keywords: sustainability, national competitiveness, market size, foreign trade

JEL classification: 057

# ВЕЛИЧИНА ТРЖИШТА И СПОЉНА ТРГОВИНА КАО ДЕТЕРМИНАНТЕ ОДРЖИВОСТИ НАЦИОНАЛНЕ КОНКУРЕНТНОСТИ

#### Апстракт

Величина тржишта умногоме одређује националну конкурентност једне привреде. Уколико постоји велико национално тржиште, то представља извор тражње за производна предузећа. Постоје случајеви где национална привреда има велико тржиште а слабу индустрију, нпр. Русија, док са друге стране, Швајцарска, која има мало тржиште, то надомешта продуктивношћу, производима високог степена обраде и извозом на друга тржишта. Величина тржишта и спољна трговина међусобно се допуњују у утицају на одрживост

<sup>&</sup>lt;sup>1</sup> jovanovicmilicaa90@gmail.com, ORCID-ID 0000-0002-6410-0938

<sup>&</sup>lt;sup>2</sup> djaleksandar91@gmail.com, ORCID-ID 0000-0002-9683-8582

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националне конкурентности. Уколико постоји велико тржиште а недовољна индустрија да подмири тражњу на том тржишту, неопходно је увозити производе и задовољити потребе домаћег тржишта. Међутим, мало национално тржиште и продукција великог броја производа које оно не може да апсорбује, захтева извоз на друга тржишта. У раду је приказана упоредна анализа конкурентности Србије и земаља у окружењу, и њихови индекси величине тржишта који између осталог обухватају и проценат страног тржишта и извоз. Реч је о факторима који значајно утичу на националну конкурентност и њену одрживост.

**Кључне речи:** одрживост, национална конкурентност, величина тржишта, спољна трговина

### Introduction

Traditionally, the size of an economy coincides with its domestic market. However, in the world of globalization, a country's market may but may not coincide with its borders. This is why market size is defined as a combination of country size and foreign markets (Schwab, 2015). Since globalization has become an inevitable reality, firms and thus many countries have oriented beyond their traditional domestic markets, focusing on high-growth export markets, in order to expand and to strengthen their positioning in the world trade arena. Trade is positively associated with growth performance (Park et al., 2010). Given that market size affects productivity, this indicator plays an important role within the global competitiveness index. First of all, market size has a significant impact on innovation in a particular country. Larger markets create greater incentives to generate new ideas and encourage the transfer of knowledge. The reason is that the same innovation will generate more profit if sold in a larger market. Also, the size of the market enables economies of scale and leads to greater specialization. Export performance has been gaining increasing attention from policy makers, business managers and marketing researchers due to the fact that foreign markets tend to be more diverse than domestic ones and, in many cases, more competitive. Particularly, in terms of policy making, a better understanding of export performance is important as it allows the accumulation of foreign exchange reserves, increased employment levels, improved productivity, and enhanced prosperity (Sousa, 2004).

# 1. Comparative analysis of competitiveness of Serbia and countries in the region (tenth pillar of competitiveness)

The competitiveness pillar "Market Size" is estimated on the basis of secondary data from international statistical databases. The rise or fall of the value of this pillar practically means that there has been an increase or decrease in domestic and / or foreign demand. Therefore, it is logical for this index to fall after 2008 as a consequence of a marked decrease in domestic demand (Ristic, Tanaskovic, p. 73, 2011).

Year	2011/	2012/	2013/	2014/	2015/	2016/	2017/
	2012	2013	2014	2015	2016	2017	2018
No. of countries	142	144	148	144	140	138	137
Country <sup>4</sup>	S*/R**	S/R	S/R	S/R	S/R	S/R	S/R
SRB	3,6/70	3,6/67	3,7/69	3,7/71	3,7/75	3,6/74	3,7/74
ALB	2,9/101	2,9/98	2,9/107	2,9/105	3,0/104	2,9/109	3,0/105
BIH	3,0/97	3,1/93	3,1/98	-/-	3,1/97	3,1/98	3,1/97
BGR	3,8/64	3,8/62	3,9/63	3,9/63	3,9/65	3,9/65	3,9/65
HRV	3,6/72	3,6/71	3,6/74	3,6/79	3,6/79	3,5/78	3,6/77
HUN	4,2/52	4,3/52	4,3/52	4,3/53	4,3/51	4,3/53	4,3/55
MKD	2,8/107	2,8/104	2,9/109	2,9/108	2,9/108	2,9/110	-/-
MNE	2,0/130	2,1/130	2,1/135	2,2/134	2,2/131	2,1/130	2,3/128
ROU	4,4/44	4,4/43	4,4/46	4,4/45	4,6/43	4,5/42	4,6/41
SVN	3,4/80	3,5/78	3,5/83	3,5/81	3,4/85	3,3/84	3,4/82

Table 1: Comparative presentation of the market size index of Serbia and the countries in the region

Source: WEF (2011, 2012, 2013, 2014, 2015, 2016, 2017)

Table 1 provides an overview of our country's position in terms of market size, as a separate pillar of competitiveness, with respect to the surrounding countries, over the last seven years.

Considering the market size index, Serbia, with 74th position in the Global Competitiveness Index in 2017, was better ranked than even 5 countries in the region - Albania, BiH, Croatia, Montenegro and Slovenia, although in the observed period her position worsened. Of the observed countries, Romania has the highest rating (4.6) according to the data for the last analyzed year and this trend is present throughout the analyzed period.

## 2. Comparative analysis of the competitiveness of Serbia and countries in the region by factors (tenth pillar of competitiveness)

The market size index is taken from the domestic market size index (75%) and the foreign market size index (25%). The score based on the domestic market size index has been at a solid level in the last seven years for our country (Table 2), while the rating based on the foreign market size index has increased over the observed period for our country. According to the domestic market size index, Serbia ranks 74th, while according to the foreign market size index it ranks 67th in 2017.

Our country is characterized by an imbalance between production and consumption, which is covered by imports of consumer goods and energy, rather than imports of machinery

<sup>\*</sup>S - Score

<sup>\*\*</sup>R - Rank

<sup>&</sup>lt;sup>4</sup> SRB-Serbia; ALB-Albania; BIH-Bosnia and Herzegovina; BGR-Bulgaria; HRV-Croatia; HUN-Hungary; MKD-North Macedonia; MNE- Montenegro; ROU-Romania; SVN-Slovenia.

and equipment. However, this discrepancy is not sustainable in the long run as expenditures on equipment and machinery are low and without investments it is impossible to increase exports.

According to the domestic market size index, Montenegro was the worst ranked country in comparison to the countries in our region, while it also held the position of worst ranked country in the seven year period, while Romania was the best ranked in the entire period (currently 39th out of 137 countries). Behind us, according to this index, are Albania, BiH, Croatia, Montenegro and Slovenia (for 2017). Also, Montenegro is ranked worst on the basis of the foreign market size index (124th position in the most recent Report).

Year		)11/ )12	201 20		201 201									
10111	S*	R**	S	R	S	R	S	R	S	R	S	R	S	R
A. DOMESTIC MARKET SIZE - 75%														
1. Domestic market size index	3,5	70	3,5	67	3,5	68	3,4	73	3,5	77	3,4	74	3,4	74
B. FOREIG	B. FOREIGN MARKET SIZE - 25 %													
2. Foreign market size index	3,9	77	4,1	74	4,3	76	4,4	74	4,4	74	4,4	72	4,5	67
GDP (PPP) PPP \$ billions	-	-	-	-	78,7	73	81,1	74	95,5	75	97,5	74	101,8	74
Exports % GDP	-	-	-	-	41,0	71	44,9	55	45,3	50	48,2	38	52,7	29

*Table 2: Market size index by factors for Serbia (2011-2017)* 

Source: WEF (2011, 2012, 2013, 2014, 2015, 2016, 2017)

Export risks are very likely without raising the level of productivity in the production of goods and services, greater product specialization, increased exports of processed products with a higher degree of finalization, but also a decrease in wheat and maize exports, given the high demand for food in the world (Bayoumi, Harmsen, Turunen, 2011). Export activity, among other things, is affected by the change in the value of the euro against other currencies, the weakening of the dinar against the euro, but also the inability to collect customer receivables for exported goods. It is necessary not only to increase exports, but also to make a qualitative change in the export structure, in order to ultimately reduce the trade deficit.

R&D activities are assigned to determine long-term resource allocations that can change the production structure, from the traditional to the production of high-tech goods and services. Private investment in scientific research requires, among other things, incentives, abundant human capital, and a moderate relationship between consumption and investment in physical and human capital (Martellato, p. 5, 2012).

With exports as a % of GDP, Serbia occupies the 29th position, which is better than 4 countries in the region - Albania, BiH, Montenegro and Romania, while Hungary is the most favorable in terms of this indicator, followed by Slovenia and Bulgaria, according to data for the last observed year (Hungary - 6th out of 137 countries).

Albania, BiH, Montenegro and Macedonia are the countries with which Serbia has a trade surplus, while the EU countries are our most important foreign trade partners. However, in terms of geographical proximity, the volume of exports to the EU market is not nearly as large as it could be. One reason is that in 1998, these countries ranked Serbia as one of the high risk countries, which is a significant constraint on business cooperation (Stanojević, Jovancai, p. 286, 2015).

*Table 3: Comparative presentation of market size index by factors for countries in the region (2011-2017)* 

	ALB	BIH	BGR	HRV	HUN	MKD	MNE	ROU	SVN	
	S/R	S/R	S/R	S/R	S/R	S/R	S/R	S/R	S/R	
A. DOMESTIC MARKET SIZE – 75%										
1. Domestic market size index										
2011	2,7/ 99	2,9/ 94	3,6/ 67	3,4/ 72	3,9/ 54	2,6/ 107	1,9/ 130	4,2/ 42	3,1/ 82	
2012	2,7/ 97	2,9/ 91	3,6/ 66	3,4/ 72	3,9/ 55	2,6/ 102	1,9/ 131	4,3/ 44	3,1/ 82	
2013	2,7/ 105	2,9/ 96	3,6/ 64	3,3/ 75	3,9/ 56	2,6/ 107	1,9/ 135	4,2/ 43	3,1/ 89	
2014	2,7/ 103	-	3,6/ 66	3,3/ 76	3,9/ 56	2,6/ 109	1,9/ 134	4,2/ 44	3,1/ 91	
2015	2,7/ 102	2,9/ 95	3,6/ 72	3,3/ 80	4,0/ 58	2,6/ 110	1,9/ 131	4,4/ 42	3,0/ 91	
2016	2,6/ 106	2,8/ 97	3,5/ 71	3,2/ 80	3,9/ 58	2,5/ 113	1,8/ 131	4,3/ 42	2,9/ 93	
2017	2,7/ 104	2,9/ 96	3,6/ 72	3,3/ 80	4,0/ 59	-	2,0/ 129	4,4/ 39	3,0/ 91	
B. FOREIGN MARKET SIZE – 25%										
			2.	Foreign ma	rket size ind	lex				
2011	3,3/ 107	3,6/ 96	4,5/ 62	4,2/ 74	5,2/ 35	3,4/ 102	2,6/ 133	4,9/ 46	4,4/ 68	
2012	3,3/ 109	3,6/ 94	4,6/ 59	4,1/ 72	5,2/ 34	3,5/ 98	2,7/ 132	4,9/ 48	4,4/ 66	
2013	3,5/ 113	3,7/ 102	4,8/ 59	4,3/ 75	5,3/ 34	3,7/ 103	2,9/ 137	5,0/ 47	4,6/ 68	
2014	3,6/ 110	-	4,8/ 60	4,3/ 75	5,3/ 33	3,7/ 102	3,0/ 133	5,1/ 43	4,6/ 68	
2015	3,7/ 106	3,9/ 98	4,8/ 61	4,4/ 76	5,4/ 31	3,9/ 100	3,0/ 128	5,2/ 43	4,5/ 68	
2016	3,7/ 107	3,9/ 97	4,8/ 56	4,4/ 69	5,4/ 31	3,9/ 95	3,1/ 128	5,2/ 39	4,6/ 66	
2017	3,7/ 101	3,9/ 94	4,9/ 55	4,5/ 69	5,4/ 32	-	3,1/ 124	5,3/ 38	4,6/ 65	
			G	DP (PPP) I	PPP \$ billion	ns				
2011			-	-				-	-	
2012	-	-	-	-	-	-	-	-	-	

2013	26,1/ 108	31,9/ 100	103,8/ 66	78,4/ 75	195,6/ 55	21,9/ 114	7,3/ 136	273,4/ 47	58,0/ 84
2014	26,5/ 109	-	105,0/ 68	77,9/ 77	198,2/ 55	22,6/ 113	7,4/ 134	285,1/ 46	57,4/ 85
2015	31,6/ 107	38,1/ 98	128,6/ 70	88,5/ 76	246,4/ 57	27,6/ 111	9,4/ 131	392,8/ 45	61,1/ 89
2016	32,6/ 111	40,5/ 99	136,9/ 70	91,1/ 75	258,4/ 57	29,0/ 114	10,0/ 130	413,8/ 44	64,0/ 89
2017	34,2/ 107	42,2/ 97	144,6/ 70	95,1/ 75	270,3/ 58	-	10,4/ 130	441,6/ 41	66,2/ 87
Exports % GDP									
2011	-	-	-	-	-	-	-	-	-
2012	-	-	-	-	-	-	-	-	-
2013	31,8/ 92	36,2/ 82	66,4/ 28	42,2/ 67	97,3/ 10	52,6/ 45	38,3/ 79	39,8/ 74	84,7/ 17
2014	33,7/ 85	-	69,8/ 27	42,4/ 63	97,6/ 8	53,0/ 42	43,6/ 58	41,9/ 65	88,1/ 14
2015	38,3/ 72	42,7/ 58	70,4/ 22	48,0/ 46	98,4/ 8	58,4/ 30	40,7/ 63	44,8/ 52	87,8/ 14
2016	35,8/ 62	42,7/ 50	68,7/ 19	52,0/ 32	99,5/ 9	60,5/ 23	42,1/ 52	44,6/ 44	90,1/ 12
2017	37,7/ 62	42,3/ 46	65,7/ 20	54,0/ 27	99,4/ 6	-	42,6/ 45	44,5/ 43	91,0/ 13

Source: WEF (2011, 2012, 2013, 2014, 2015, 2016, 2017)

One of the indicators of Serbia's low competitiveness is its very low exports, whether in absolute terms, either in terms of population or as a ratio of exports to GDP. Based on the GDP and population figures from the 2011 WEF report (8 million inhabitants in Serbia, 4.4 million in Croatia, 2.0 million in Slovenia) and the value of exports of the analyzed countries, it is concluded that Serbia made only US \$ 1752 in export per capita, Croatia US \$ 5183, Slovenia US \$ 14983 (Maksimović, p. 106, 2012).

### 3. International trade impact on sustainable development

Trade impacts different aspects of sustainability in various ways, both positively and negatively. It has a rich context in the real world, so the full scope of the effects of trade must be understood when talking about it as an engine or impediment for sustainability. But trade is not the only tool we have. Sustainable development depends on thoughtful use of the whole toolbox and tailoring it to achieve all three pillars of the goals. In most international organizations, including the United Nations (UN) and the World Trade Organization (WTO), conventional wisdom is that international trade supports sustainable development. "Trade growth enhances a country's income generating capacity, which is one of the essential prerequisites for achieving sustainable development," the WTO noted in the 2016 UN High-Level Political Forum on Sustainable Development. This belief is usually based on the relationship between trade and only one or, at most, two of the three pillars of sustainability. These pillars are the economy, social interests and the environment.

International trade has a fundamental role to play as an enabler for generating inclusive economic growth and sustainable development, and in turn contribute to eradicating poverty.

Thus, trade should be integrated into the future development framework in accordance with the appropriate goals, targets and indicators as a key enabler of poverty eradication and sustainable development (Galmes, 2015).

Recognizing international trade as a means for achieving socioeconomic development is not a new phenomenon. At the establishment of the United Nations Conference on Trade and Development (UNCTAD) in 1964, the international community acknowledged that: "Economic and social progress throughout the world depends in large measure on a steady expansion in international trade. The extensive development of equitable and mutually advantageous international trade creates a good basis for the establishment of neighbourly relations between States, helps to strengthen peace and an atmosphere of mutual confidence and understanding among nations, and promotes higher living standards and more rapid economic progress in all countries of the world" (UNCTAD, 1964).

In practice, however, it remains a considerable challenge to trade policymakers to map out interlinkages between trade policy and sustainable development, let alone to ensure that trade policy outcome positively influence sustainable development. In this increasingly globalized world, achieving the SDGs (Sustainable development goals) as a universal agenda requires policy coherence at all (national, regional and global) levels, where trade policy and its policy and institutional interfaces with all the SDGs is one part of the jigsaw.

Let us first examine how trade may function as a means of implementation for attaining the SDGs. As a financial means, international trade can be an important source of finance to both the private sector and the public sector in developing countries. In many low-income countries, exports of goods and services account for 50 per cent or more of their gross domestic product (GDP) (UNCTAD, 2015). In 2013, for instance, the total merchandise export earning of least developed countries (LDCs) (at US\$ 213 billion) was twice as great as the combined amount of foreign direct investment (FDI) inflow (US\$ 28 billion), remittances (US\$ 31 billion) and official development assistance, (US\$ 43 billion) received by LDCs in the same year (UNCTAD, 2014). As regards the public sector, trade policy could be used to raise the public revenue. A government can raise revenues, for instance, via:

- imposing tax on imported goods and services (i.e. tariff revenues);
- imposing tax on exported goods and services (e.g. export tax); and
- claiming certain proceeds from commodity exports.

Such trade-related taxes can carry a significant weight in the public revenue of low-income countries that face limited capacity of the public revenue collection (Alouis & Gideon, 2013). The revenue raised by trade-related measures can constitute around 10–25 per cent of the total public revenue of low-income countries (Cagé & Gadenne, 2014). Using trade policy for raising public revenue however comes with the risk of causing trade distortion to the domestic market, which reduces the welfare of different segments of people in the society. Trade policy can also act as a non-financial means in the implementation of the SDGs by interacting with various factors that influence social and environmental sustainability.

### **Conclusion**

Market size and international trade mutually affect national competitiveness and its sustainability. National economy size determines the effectiveness of companies, whether private or public and to a certain level the profitability and success of a country as a whole. Nevertheless, there are cases when small market size countries have high ranked competitiveness scores. The main channel through which this is achieved is international trade. When national market is not enough productive countries export. On the other side of the blade there are countries with big national markets and insufficient production who need to import from the aforementioned countries.

Due to its low competitiveness, the Serbian economy is not sufficiently integrated into world trade and inadequately represented on the EU market, since primary products and reproductive material are dominant in trade with these countries, which represent our most important foreign trade partners. Also, Serbia is lagging behind other countries in the EU market in terms of product quality and competitiveness due to inadequate technology and equipment.

The uncompetitiveness of domestic products and services on the world market is evident through the degree of coverage of imports by export products that are more or less intense. Domestic products do not have competitive technological content, modern features, required quality, which leads to small exports of these products and low revenues from technology exports. This shows that Serbia is technologically straggling the developed countries and that it is largely dependent on foreign countries, with a negative balance of payments for technology (Mitrović, p. 16, 2008). In order to overcome the weaknesses of domestic foreign trade, small exports and few export partners<sup>5</sup>, it is crucial to find new markets through new trade routes or to identify existing export markets that have additional free space for domestic products.

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<sup>&</sup>lt;sup>5</sup> First of all, they are Germany, Italy and BiH, while the EU accounts for more than half of Serbia's total imports and exports.

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