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# Structural Weaknesses in the Economy of Bosnia and Herzegovina – A Brake on Growth and Development

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#### **Abstract**

To present the status and development of economies of the countries, a number of macroeconomic indicators is available and used and the most important aggregate in the system of national accounts is the gross domestic product (GDP).

An analysis of GDP serves to present the status and trends of the economy of Bosnia and Herzegovina (BiH). We have used the comparison method, in order to establish the status, as well as trends in the economy of BiH in comparison with the neighbouring countries with similar GDP structures and with economies of some developed countries.

We note that the structure of gross value added (GVA) in BiH is not primarily oriented towards profitable activities, nor towards activities giving a synergistic effect on the entire economy. The service sector is not sufficiently developed. GDP per capita in 2015 was almost eight times lower than the one recorded in the EU member countries. The relationship between consumption and investment, in addition to the negative balance of trade, are negative determinants of the BiH economy. The global crisis has produced negative effects on the BiH economy. Such trends were imminent even in the developed countries, the only difference is that the developed countries, by size of their GDP per capita, are far stronger and more developed than the BiH economy. The economy is small in its size and growth rates are not sufficient to provide a visible progress, as is the case with developed countries.

BiH needs to put maximum efforts into increasing its value added in areas that are fast and strong in contributing to the growth and development.

**Keywords**: GDP, GVA, the economy of BiH, structure of the economy, economic growth

#### 1. Introduction

Gross domestic product (hereinafter: GDP) is a key macroeconomic aggregate, used as a measure of the national economy and its trends (Burda and Viploš, 2004).

In Bosnia and Herzegovina (hereinafter: BiH), GDP is based on the methodological postulates of the System of National Accounts SNA 1993 (United Nations, 1993) and the European System of Accounts ESA 1995 (Office for Official Publications of the European Communities, 1996), which will be based on the latest ESA 2010 beginning with 2017. Being aware of the experiences of the countries that are already applying the new methodologies, we have estimated that no significant differences in the level of GDP have been caused, which will allow us to make optimal comparisons.

Using the data on GDP in BiH, we will attempt to show that small economies have problems with growth and development due to the poor structure of GVA, lagging considerably behind developed countries.

Since production approach is considered the primary approach to the compilation of annual and quarterly GDP, GDP calculated using this approach shall represent the basis for a deeper analytical review of the BiH economy. We will also discuss the expenditure approach to GDP compilation and observe the economy from the expenditure perspective, as well as differences in the structure of consumption between underdeveloped and developed countries. We will observe trends over the past ten years, finding out how a small open economy reacts to the crisis, as well as in the post-crisis period to the present.

One of the simplest tools for measuring the performance of the national economy and economic policy is GDP per capita compared to other countries.

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## 2. System of National Accounts-Framework

The cornerstone for national accounts production is a sound statistical basis, supported by documents.

National accounts are an indicator of the state and trends of a national economy (Babić, 2003).

A systematically precise description of an entire economy and its component parts is provided in the European System of National and Regional Accounts 2010 (hereinafter ESA 2010), through an internationally harmonized accounting framework. Due to changes in the overall environment, globalization, new products, the importance of information and communication technologies, and the important role of services, the existing methodologies, namely the European System of National Accounts 1995 (ESA 1995) and the System of National Accounts 2008 (SNA 2008), had to be revised.

Thus, the existing methodology of national accounts ESA 1995 was replaced by ESA 2010. At the international level, ESA 2010 is fully consistent with the System of National Accounts (SNA 2008-The System of National Account 2008; hereinafter SNA 2008).

SNA 2008 was adopted by the UN as a joint proposed recommendation of five international institutions (UN, IMF, World Bank, OECD and the European Commission). SNA 2008 has been implemented by the USA since 2013, while the European Union has been implementing ESA 2010 since 2014.

ESA 2010 is a harmonized methodology, which represents common standards, classifications and rules. It is used for the production of national accounts data in the European Union and other European countries, in order to allow for comparisons of data with other economies. ESA is internationally compatible and is based on SNA 2008, but more detailed (Office of the European Union, 2013).

BiH has begun introducing ESA 2010 which replaces the methodological framework for the production of national accounts data ESA 1995. It is expected that GDP will be compiled based on ESA 2010 in 2017, with the time series covering the period 2005-2015. It is estimated that the application of this revised methodology will not significantly affect the level of GDP and its growth rates.

Therefore, we use the available data for BiH to evaluate the use of GDP and to show how GDP provides a picture of the national economy, the structure of the economy and its status in comparison with other countries.

In the context of illustrating GDP of BiH, we present frameworks for the analysis and use of ESA.

## 2.1 Framework for the ESA Application

The ESA framework can be used to analyse and evaluate<sup>1</sup>:

- The structure of a total economy,
- Specific parts or aspects of a total economy; (banking and finance, the role of government, regions),
- The development of a total economy over time,
- A total economy in relation to other total economies.

Specific uses include the monitoring and guiding of European monetary policy, the criteria of convergence, granting of monetary support to regions in the EU, and determination of own resources (VAT).

The concept of ESA provides international compliance, compliance with other statistics, operability, consistency, flexibility, and multi-purposeness.

# 2.2 Impact of the ESA 2010 Revision on GDP

ESA 2010 sets down the harmonized methodology which has been applied in all EU member states since 2014. ESA 2010 is the European version of the world-wide SNA 2008.

Having a common methodology at the EU level is particularly important in terms of achieving a uniform and comparable production of economic statistics in the member states. All EU member states compile their national accounts in accordance with the methodological rules set down in ESA 2010 (Regulation (EU) No. 549/2013 of the European Parliament and of the Council of 21 May 2013 on the European System of National and Regional Accounts).

The new ESA 2010 programme will allow an improved monitoring of economic changes in the next 15 years.

The main changes introduced in ESA 2010 which will affect the GDP of BIH are:

• Research and development (in ESA 2010 investment, in ESA 95 expenditure),

<sup>1</sup>According to Evropski sustav nacionalnih računa ESA 1995 (European System of National Accounts ESA 1995), translation, published by the Croatian Bureau of Statistics, 1998, pages 25 and 26

- Output for own final use/production of software for own final use (according to ESA 2010, estimates should be made).
- Changes in the calculation of insurance (under ESA 95, valuation of insurance services was based on the difference between premiums and claims. ESA 2010 introduced adjusted claims using the moving average method
- Sector classification (under ESA 95, the demarcation between the general government sector and other sectors was generally based on the quantitative criterion (the 50% criterion). This criterion consists of calculating market revenues and their share in production costs: if the share is above 50% over a long period, the unit is in principle market. Under ESA 2010, production costs also include the costs of capital (net interest charge).
- Calculation of output for the Central Bank; under ESA 2010, calculation of output for the CB remains the same

   expenditure approach. Under ESA 95, the Central Bank output should be allocated to the intermediate consumption of other financial intermediaries (under ESA 2010, only the part of the total Central Bank output to be allocated to the intermediate consumption of the above subsector.
- FISIM; under ESA 2010, the calculation of FISIM is based on the reference interest rate, while earlier it had been calculated based on the difference between positive and negative interest rates.
- Goods sent abroad for processing.
- Military equipment; under ESA 2010, the acquisition of military equipment or weapons is to be recorded as capital formation, not as intermediate consumption – in the survey conducted by BHAS, this item will have no impact in BiH.

Based on available data we analyzed some of the neighbouring countries whose economies have similarities with the structure of GDP in BiH. We have found how these changes affected the level of GDP and examined the changes in the growth and level of GDP in the EU and the Eurozone, with the aim of optimal comparisons of GDP of BiH with other countries.

We will show that the application of the new ESA 2010 does not change the level of GDP significantly; thus, data on GDP of BiH will be optimally comparable.

By switching to the new methodology, changes in Serbia referred to the treatment of research and development, while significant changes occurred in the statistical system as well (in statistical sources and procedures – exhaustiveness or full coverage of GDP, FISIM allocation by institutional sector, inclusion of illegal activities). In comparison with the value prior to the revision, all changes covered by the revision caused an increase in the GDP level in the entire time series (1997 – 2012), on the average by 7%. Real growth of GDP calculated in accordance with ESA 2010 for 2013, compared to the previous year, according to the preliminary results for 2013, amounted to 2.6%, which was slightly higher compared to the previous estimates (prior to the revision)<sup>2</sup>.

By revising the released data on GDP of Montenegro<sup>3</sup> (2010-2013), changes that have had an impact on the level of GDP occurred. The changes relate to the following: capitalization of research and development costs and capitalization of costs of military weapons, improvement of calculation of FISIM, general government consumption expenditure and imputed rent. These changes caused a nominal increase in the level of GDP by 0.9% on the average for the period 2010-2013, but this effect has not significantly affected the previously released real growth rates. The real growth rate for 2011 remained unchanged, for 2012 it decreased by 0.2%, while for 2013 the real growth rate increased by 0.2% percentage points in comparison to the previously released ones.

As a consequence of the ESA 2010 application, the Croatian GDP (Croatian Bureau of Statistics, 2016) recorded a nominal increase by 1.2% on the average in the period between 1995 and 2012. The highest impact on the correction of nominal GDP growth was based on Research and development (0.5%), followed by inclusion of illegal activities (0.7%).<sup>4</sup>

In Macedonia, for example, the percentage of change of GDP calculated in accordance with ESA 2010 in comparison with the one calculated in accordance with ESA 1995, in the period 2000-2012, varied between 0.5% and 1.4%.<sup>5</sup>

As a consequence of the ESA 2010 implementation and introduction of other statistical improvements, the average annual revision of GDP at current prices in the period 1997-2013 recorded an increase by 3.4% in the Eurozone and by 2% in the EU<sup>6</sup>.

<sup>5</sup>http://www.stat.gov.mk/ESS revizija.aspx

<sup>&</sup>lt;sup>2</sup>Website of the Statistical Office of the Republic of Serbia

<sup>&</sup>lt;sup>3</sup>www.monstat.org/userfiles/file/GDP/2015/godisnji%20BDP%202014\_crnogorska%20ver.pdf

<sup>&</sup>lt;sup>4</sup>Website of the Croatian Bureau of Statistics

<sup>&</sup>lt;sup>6</sup>http://ec.europa.eu/eurostat/documents/3217494/6391869/KS-GP-13-002-EN-N.pdf/b311952d-ff3c-497b-a468-036641a5c3e7

#### 3. GDP of Bosnia and Herzegovina

Undeniably the most important macroeconomic aggregate used a measure of the total size of the economy is gross domestic product. It represents an indicator of economic activity of resident institutional units of an area, over a certain period of time, and is calculated for the level of the overall economy. GDP is a basic and best-known macroeconomic indicator in which all the individual economic indicators are aggregated at the highest level (Čičković, 2014).

GDP of BiHis calculated in accordance with the methodology of the UN System of National Accounts – SNA93 and the European System of National Accounts – ESA 95.

There are three different approaches to the GDP calculation (production, expenditure and income approaches), each one showing a different aspect of the economic situation (Eurostat, 2010). Although theoretically the measurements of GDP using different approaches should coincide, in practice differences arise due to differences in data sources and used methods (Vukotić, 2007).

According to the production approach, GDP represents the sum of gross value added (GVA) by economic activity, plus taxes and less subsidies on products. GDP by income approach represents the sum of compensation of employees, consumption of fixed capital, net taxes on production, operating surplus and mixes income. GDP by expenditure approach consists of final consumption of goods and services, and gross fixed capital formation plus imports and less exports of goods and services.

Production approach is considered a primary approach in the compilation of both annual and quarterly GDP; thus, our first analytical overview of the BiH economy in the period 2011-2015 will be based on this approach.

# 3.1 GDP of Bosnia and Herzegovina-Production Approach

This paper partly presents how the ESA framework can be used for an analysis and evaluation of the structure of the overall economy and its composite parts, the development of the overall economy over time, and the overall economy in relation to other economies.

# 3.1.1 GDP Production Approach - Current Prices

In the last decade, GDP at current prices in BiHhas had a constant tendency of growth; from 20 billion KM in 2006, it reached 28.5 billion KM in 2015 (Agency for statistics of Bosnia and Hercegovina, 2016).

The highest nominal increase of GDP was recorded in 2006, 2007 and 2008; at the annual level, the increase amounted to approximately 13% in comparison with the previous year. The global economic and financial crisis of 2009 resulted in a decrease of GDP by 3% in comparison with the previous year (2008). After an increase in GDP was recorded in the following two years, by 2.2% and 3.4%, in 2012 a negative growth rate of -0.06% was recorded, as a consequence of reduced agricultural yields and a poor year in the field of energy. In the years that followed, the economy of BiH has been slowly recovering and the nominal GDP has been increasing by approximately 2% each year, while in 2015 the nominal growth rate of around 4% was recorded. We have estimated that in 2016 GDP will increase by approximately 3%.

Table 1. Gross domestic product of BiH, current prices

	GDPthous.KM	Index	
2006	20,060,199	113.63	
2007	22,544,511	112.38	
2008	25,504,263	113.13	
2009	24,779,930	97.16	
2010	25,346,492	102.29	
2011	26,209,627	103.41	
2012	193,056	99.94	
2013	26,743,085	102.10	
2014	27,304,359	102.10	
2015	28,539,519 <sup>1</sup>	104.52	

Source: Agency for Statistics BiH (2016), Economics statistics, National Accounts, www.bhas,ba

In the five-year period (2011 and 2015) there were no significant changes in the structure of gross value added, as in the past ten years, when the structure was approximately the same; therefore, the data for the period 2011-2015 are sufficient to analyse the structure of BiH economy.

<sup>&</sup>lt;sup>1</sup>Preliminary data

Table 2. GVA current prices-structures, BiH(%)

Classification of Economic Activities	2011	2012	2013	2014	2015
A Agriculture, forestry and fishing	6.76	6.14	6.85	5.96	6.23
B Mining and quarrying	2.18	2.25	2.17	2.01	1.98
C Manufacturing	10.91	10.55	10.94	10.95	11.64
D Electricity, gas, steam and air-conditioning supply	3.9	3.71	4.22	4.01	3.88
E Water supply; sewerage, waste management and remediation activities	1.08	1.14	1.08	1.11	1.07
F Construction	4.04	3.91	3.82	4.01	3.94
G Wholesale and retail trade; repair of motor vehicles and motorcycles	13.05	13.4	13.32	13.49	13.45
H Transportation and storage	3.28	3.39	3.44	3.63	3.64
I Accommodation and food service activities	2.08	2.11	2.06	1.99	2.02
J Information and communication	4.68	4.74	4.76	4.73	4.59
K Financial and insurance activities	3.8	3.74	3.67	3.62	3.61
L Real estate activities	5.05	5.17	5.23	5.17	5.03
MProfessional, scientific and technical activities	2.78	2.84	2.58	2.59	2.76
N Administrative and support service activities	0.64	0.69	0.72	0.81	0.83
O Public administration and defence; compulsory social security	9.1	9.06	8.85	8.9	8.65
P Education	4.8	4.85	4.71	4.77	4.61
Q Human health and social work activities	4.62	4.77	4.78	4.86	4.76
R Arts, entertainment and recreation	0.82	0.89	0.94	1.07	1.14
S Other service activities	1.17	1.18	1.15	1.18	1.14
FISIM	2.81	2.7	2.62	2.56	2.56
Gross value added	81.95	81.83	82.66	82.28	82.43
Taxes on products less subsidies on products	18.05	18.17	17.34	17.72	17.57
Gross domestic product	100.0	100.0	100.0	100.0	100.0

Source: Agency for Statistics BiH (2016), Economics statistics, National Accounts, www.bhas.ba

Of 19 sections of economic activity, the highest shares in GVA (over 8%) are those of trade, manufacturing and public administration.

Depending on the level of development and characteristics of their national economies, different countries have different compositions of GDP and GVA. In the past few years, GVA has kept a level of around 82%.

The largest share in the structure of GVA is that of trade, the activity which in the past five years has continued to participate with approximately 13% (2015) in the structure. This percentage has not changed over a long period of time. Trade, together with accommodation services, has a share of 20.1% in 2015, while we are well aware that trade is not an important driver of growth and development.

The status of service activities is often taken as a measure of development of an economy (Unković, 2010). However, this mainly concerns trade with domestic and imported goods and real estate market, while sophisticated service activities that characterize developed economies are not represented.

The strongest synergistic effect on the economic development is that of manufacturing, which had the second largest share in GVA in 2015, with 11.64%. The share of manufacturing in the GVA structure increased by modest 0.73% over the five-year period (2011-2015), but the present trend of growth is evident. When industry is presented, manufacturing, mining and quarrying and electricity, gas and water supply are often observed together. If we observe the industry of BiH, its share in GVA was 17.50% of the total GVA in 2015. In the same year, industry had a share of 19.2% in the EU member states, while in the Eurozone this share amounted to 19.9%. Certain countries, such as Germany with the share of industry of almost 26%, Ireland with 39%, or Slovenia with 27%, are highly developed countries that are not comparable with BiH.

The section of economic activities Public administration is at the third place in terms of shares in GVA, with a slightly decreasing trend, from 9.1% to 8.6%. Public administration which in 2015, together with human health and education, had a share of 18.02% in the GVA structure, is at the same level as in the EU member states and the Eurozone.

The share of agriculture in GVA is high, with almost 7%. The highest contribution to this percentage is that of GVA in the section agriculture in the Republic of Srpska (one of the entities). In the EU member states, the share of agricultural GVA in the total GVA in the same year amounted to 1.5% and in the Eurozone 1.6%. The situation in the neighbouring countries is similar, if not worse; the share of agricultural GVA in the total GVA in Montenegro is 10%, in FYR

Macedonia 11.2%, and in Serbia 8.7%. Agriculture is the least profitable area in the overall economy; thus, this is also an indicator of the underdevelopment of the economy. It is well known that economies with a high share of agriculture in GDP, including the BiH economy, belong to less developed or underdeveloped economies.

Approximately 5% of GVA belongs to real estate activities, but this percentage is much higher in the EU member states and the Eurozone, with approximately 11%, but it is also higher in the neighbouring countries, such as Serbia and Montenegro.

GVA of financial and insurance activities account for 3.6% of GVA, while in the EU member states this percentage is over 5%.

In BiH, agriculture accounts for over 7% in the structure of GDP, services account for only about 56%, and industry for approximately 23%. This implies a poor economic structure. In developed countries, agriculture has a lower share (approximately 1 to 3%), the share of industry is significantly higher, while the service sector includes sophisticated services and a higher share, which in some of the countries exceeds 70%.

Each country strives to export as little raw material as possible, while achieving a higher level of processing, as this creates greater value added, with products being more valued at the market. This product finalization can significantly change the structure of the economy, which is crucial for growth and development.

## 3.1.2 GDP Production Approach – Constant Prices

GDP calculated at constant prices shows the changes within its scope, from which the impact of price changes is eliminated. Annual change rate shows the real economic growth between two periods.

Table 3. An overview of GDP real growth rates (changes compared to the previous year), neighbouring countries, EU(%)

	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015
BIH	5.4	5.7	5.5	-2.9	0.8	0.9	-0.9	2.4	1.1	3.0
Serbia	4.9	5.9	5.4	-3.1	0.6	1.4	-1.0	2.6	-1.8	0.8
Montenegro	8.6	10.7	6.9	-5.7	2.5	3.2	-2.7	3.5	1.8	3.4
FYR Macedonia	5.1	6.5	5.5	-0.4	3.4	2.3	-0.5	2.9	3.6	3.8
Croatia	4.9	5.1	2.1	-6.9	-2.3	-0.2	-2.2	-1.1	-0.5	1.6
Slovenia	5.7	6.9	3.3	-7.8	1.2	0.6	-2.7	-1.1	3.1	2.3
EU (28 countries)	3.3	3.1	0.4	-4.4	2.1	1.7	-0.5	0.2	1.6	2.2
Eurozone (19)	3.2	3.0	0.4	-4.5	2.1	1.5	-0.9	-0.3	1.2	2.0

Source: websites: www.ec.europa.eu/eurostat, www.bhas.ba, www.stat.gov.mk, www.monstat.org, www.stat.gov.rs, www.dzs.hr, www.stat.si

Table 4. An overview of GDP real growth rates (changes compared to the previous year), BiH and EU(%)

	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015
BIH							-0.9			-
EU (28 countries)	3.3	3.1	0.4	-4.4	2.1	1.7	-0.5	0.2	1.6	2.2
Eurozone(19)	3.2	3.00	0.4	-4.5	2.1	1.5	-0.9	-0.3	1.2	2.00

Source: www.ec.europa.eu/eurostat and www.bhas.ba

By observing real growth rates of GDP in the European countries in the past ten years, one may note that in 2009 and 2012 negative rates prevailed in all countries, which means that GDP recorded a real decrease due to the crisis. A slight increase in real growth rates in GDP has been recorded since 2010, with a decrease in 2012, while positive trends in the economy and GDP were recorded in 2013. In 2013, GDP recorded a real decline in the Eurozone, Slovenia, Croatia and majority of the EU member states. However, BiH and all its neighbouring countries, except Croatia, had a positive real growth rate of GDP.

Thus, between 2006 and 2008, real growth rates of GDP were very consistent and ranged around 6%. After the negative growth rate of GDP of 2.9% recorded in 2009 due to the global financial and economic crisis, a slight recovery was recorded in 2010 and 2011, with 0.8% and 0.9% respectively; in 2012, a significant decline in agricultural yields was recorded, while it was also a poor year in the field of energy, which resulted in a negative real growth of 0.9%. Since then, the real growth rate of GDP has been increasing; in 2015, an increase by 3% was recorded. A similar trend was also recorded in the neighbouring countries and in the EU member states; these countries recorded more balanced real growth rates. The greatest cyclicality in real growth rate trends was recorded in Montenegro.

Real growth rates of GDP, when comparing BiH with the EU countries, show that trends are also similar in the economic crisis years, as well as in the post-crisis period, except in 2013, when a higher growth rate was recorded in BiH. Such cyclicality occurs in small economies.

#### 3.2 Quarterly GDP Estimates

Quarterly gross domestic product is used for early estimates of GDP for the previous year and for analyses of economic trends in the current year.

## 3.2.1 Quarterly GDP at Constant Prices

Quarterly GDP is characterized by seasonal adjustments, as an integral part of the calculation, starting from the fact that quarterly data series are largely exposed to the impact of seasonal fluctuations. Contrary to the annual GDP calculation, whose main task is to present the achieved level of development of the national economy, quarterly GDP should show the trends of economic activity and possible turning points in the economic cycle.

When the national economy is in recession, quarterly GDP is used as an indicator of economic recovery; if quarterly GDP is positive in three consecutive quarters, one may claim that the country is emerging from recession. This was also the case after 2009, after the deep crisis of national economies.

Quarterly GDP provides an overview of the economy a year earlier than the annual GDP. The table and figure below clearly show that this is true. In 2016, positive growth rates were recorded in all observed economies, for all three quarters. It is obvious that the annual GDP will record the same trend; it is not expected that the fourth quarter could cause a significant change.

By examining the table below, one may also note that since 2015 all the observed countries have recorded positive growth rates in each quarter (except Serbia in the first quarter of 2015).

Table 5. Real growth rates of GDP by quarter, (same quarter of the previous year =100) (%)

	I	II	III	IV	I	II	III	IV	I	II	III
	2014	2014	2014	2014	2015	2015	2015	2015	2016	2016	2016
BIH	3.5	-0.1	-0.9	2.5	1.7	4.3	3.9	2.1	1.8	1.2	2.4
Serbia	0.0	-1.2	-4.1	-1.8	-1.7	1.2	2.3	1.1	3.8	1.9	2.6
Montenegro	2.1	0.3	1.6	3.2	4.2	3.8	4.5	0.9	1.1	2.7	2.4
FYR											
Macedonia	3.3	4.4	1.9	5.0	4.2	0.8	4.5	6.0	2.6	3.1	2.4
Croatia	-1.0	-0.9	-0.3	0.1	0.6	1.2	2.8	1.8	2.7	2.8	2.9
Slovenia	2.3	3.6	3.8	2.6	2.5	2.0	2.0	2.8	2.3	2.8	2.7
EU (28)	1.5	1.4	1.7	1.8	2.3	2.1	2.0	2.4	1.9	2.1	1.6
Eurozone (19)	1.4	0.9	1.1	1.3	1.9	2.0	2.0	2.3	1.6	2.2	1.6

Source: www.ec.europa.eu/eurostat www.bhas.ba, www.stat.gov.mk, www.monstat.org,www.stat.gov.rs, www.dzs.hr, www.stat.si

From the observed table, we have extracted BiH, the EU and the Eurozone, to clearly show how in a small economy in the observed period the real growth rate ranged unevenly, being very cyclical, whereas this was not the case in the EU member states and in the Eurozone.

We have decided not to include the neighbouring countries in the graph, for visual readability, as the growth rate trends recorded in these countries are similar to that of BiH.

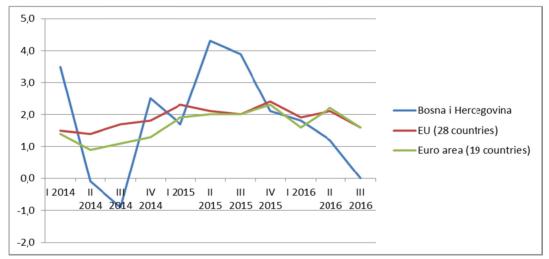


Figure 1. Real growth rates of BDP by quarter, (same quarter of the previous year =100), BiH, EU and Eurozone Source: www.ec.europa.eu/eurostat and www.bhas.ba

# 3.3 GDP of BiH - Expenditure Approach

GDP by expenditure approach<sup>7</sup> is measured as the sum of final consumption expenditure of goods and services and gross capital formation of the national economy, plus exports and less imports of goods and services. It also shows how the calculated GDP is spent and whether all the expenditure in a given period is provided from GDP for the given period.

Final consumption represents the sum of household consumption final expenditure expenditure, non-profit institutional units (hereinafter NPISH) consumption expenditure and general government consumption expenditure (Eurostat, 2005).

Household final consumption expenditure is expenditure of resident household, for goods and services used to directly satisfy personal needs of community members.

Non-profit institutional units serving households final consumption expenditure covers goods and services provided by NPISHs to households, free of charge or at prices that are not economically significant, through social transfers or in kind.

General government final consumption expenditure consists of individual and collective consumption. Individual consumption refers to non-market services to the population (education, health, social, cultural, recreational services, sports, etc.) and to market goods and services (pharmaceutical and therapeutic products, medical services, etc.) provided to the population free of charge or at prices that are not economically significant. Collective consumption covers expenditure on administrative, defense, economic, research and development, and similar purposes.

Gross capital formation includes gross fixed capital formation, changes in inventories and acquisition less disposals of valuables.

Gross fixed capital formation consists of capital formation of business entities, entrepreneurs and physical entities, which refer to new fixed assets, intangible fixed assets and costs of ownership transfer.

Changes in inventories include raw materials inventories, inventories of finished goods and merchandise and work-in-progress inventories.

If we observe the composition of GDP by expenditure approach, almost 79% (2015) refers to household final consumption expenditure. Between 2011 and 2015, household consumption final expenditure was the most significant component of aggregate demand in Bosnia and Herzegovina, with an average share of 80.5% of the nominal GDP. Within household consumption final expenditure, the largest part refers to the expenditure on food and non-alcoholic beverages (32-33%). The share of non-profit institutions (NPISHs) in the total GDP is negligible, amounting to 1.6% on the average. General government final consumption expenditure recorded an average rate of 21.6% of GDP in the given period. In the structure of total consumption, general government final consumption expenditure gradually decreased from 22.2% in 2011 to 20.9% in 2015.

The share of capital formation was 17.4% on the average, and it has remained almost at the same level throughout the years. Foreign trade of BiH has an extremely unfavorable ratio. Within its scope, the item of inventories is very unstable and it varies from very high levels in 2010 to negative inventory values in 2014.

The external component of aggregate demand (or exports) has had a growing tendency; its share in 2011 amounted to 31.2%, while in 2015 it increased to 33.5%. The component of imports in the observed period has a large share in GDP, with 52.5% of GDP on the average. Imports of goods and services have been high in all recent years, and its share in the composition of GDP varied between 51% and 55%, while the share of exports was only 33%.

The economy of BiH is small in terms of its size and poorly developed. By observing the structure of consumption of GDP for the previous period and by comparing it with the neighbouring countries, it can be concluded that a common feature of all these countries is that a significant portion of GDP belongs to household final consumption expenditure (in 2015, household consumption final expenditure accounted for 78.5% of the consumption of GDP, with the nominal growth of 1.4% and the real growth rate of 1.8%, due to the CPI being lower than 99.0%). A similar structure of consumption is observed in the countries in the region; in Serbia, household consumption final expenditure accounted for 73.8% of the GDP consumption, with the nominal index of 102.1 and the real growth rate of 0.4%. In developed countries, the share of household consumption final expenditure in the structure of GDP consumption is slightly lower. In Germany, household consumption final expenditure accounts for 57.9% of the GDP consumption, with an increase by 2.6% in current prices. In France, household consumption final expenditure has a share of 53.0% in the GDP consumption, while in Slovenia this percentage amounts to 51.0%, with an increase by 0.4% in current prices. When it comes to the structure of consumption in developed countries, it can be noted that the expenditure on food has a much lower share than in underdeveloped countries, while the expenditure on services is at a much higher level.

Release GDP expenditure approach, preliminary data, No. 1/2016, Agency for Statistics BiH

Table 6. GDP by expenditure approach, current prices, composition(%)

	2011	2012	2013	2014	2015
Household final consumption expenditure	81.4	80.88	79.71	80.99	78.55
NPISH final consumption expenditure	1.69	1.74	1.54	1.17	1.07
General government final consumption expenditure	22.21	21.79	21.16	21.58	20.91
Gross capital formation	17.87	17.86	16.88	18.21	17.85
Gross fixed capital formation	17.65	17.32	16.68	18.57	17.05
Changes in inventories	0.22	0.54	0.2	-0.36	0.8
Valuables	0.00	0.00	0.00	0.00	0.00
Exports of goods and services	31.23	30.72	31.98	33.07	33.48
Imports of goods and services	54.40	52.98	51.29	55.01	51.87
Gross domestic product	100.00	100.00	100.00	100.00	100.00

Source: Agency for Statistics BiH, Release, GDP-Expenditure approach 2015, preliminary data

Real growth rates of household final consumption expenditure and general government final consumption expenditure decreased in 2015 compared to the previous year, while gross fixed capital formation decreased by as much as 5%. Exports increased by 2%, while the total real growth of GDP amounted to 3.7%, due to the low base.

By observing the real growth rates GDP components by expenditure approach for BiH and its neighbouring countries, as well as for the EU member states and the Eurozone, we can note that the real growth rates between 2011 and 2013 generally had negative or unchanged trends in all countries. These trends moved in a positive direction in 2014 and 2015, with the real growth rates growing closer to those of the neighbouring countries and of the EU member states.

The trends in real growth rates for the general government component were balanced in the five-year period, changing from negative to positive direction.

Gross capital formation is not of a stable character, primarily due to the component of inventories, in both nominal and real trends.

Table 7. Gross domestic product, expenditure approach, real indices

	2011	2012	2013	2014	2015
Household final consumption expenditure	99.84	99.34	100.02	101.91	101.76
NPISH final consumption expenditure	99.11	103.49	91.06	76.08	97.11
General government final consumption expenditure	99.21	100.79	99.4	100.95	100.78
Gross capital formation	114.61	104.14	97.19	108.28	103.00
Gross fixed capital formation	106.2	102.18	99.05	111.71	96.48
Changes in inventories	-20.87	263.84	37.38	-182.5	-235.3
Valuables	99.04	100.49	100.71	100.63	102.80
Exports of goods and services	104.64	100.05	107.83	104.4	106.34
Imports of goods and services	102.92	100.62	99.80	107.97	100.91
Gross domestic product	101.83	100.12	101.74	100.08	103.70

Source: Agency for Statistics of BiH, Release, GDP-expenditure approach 2015, preliminary data

Table 8. Gross domestic product, expenditure approach, real growth rates

	2011	2012	2013	2014	2015
Bosnia and Herzegovina	1.8	0.1	1.7	0.1	3.7
Serbia	1.4	-1	2.6	-1.8	0.8
FYR Macedonia	2.3	-0.5	2.9	3.6	3.8
Montenegro	3.2	-2.7	3.5	1.8	3.4
Croatia	-0.2	-2.2	-1.1	-0.5	1.6
Slovenia	0.6	-2.7	-1.1	3.1	2.3
EU (28 countries)	1.7	-0.5	0.2	1.6	2.2
Eurozone (19 countries)	1.5	-0.90	-0.3	1.2	2.0

Source: www.ec.europa.eu/eurostatwww.bhas.ba, www.stat.gov.mk, www.monstat.org,www.stat.gov.rs, www.dzs.hr, www.stat.si

Compared with countries in our close environment and compared to the EU member states and the Eurozone, for the past five years, it can be noted that in BiH, unlike in other countries, positive real growth rates were recorded continually, with the highest one being recorded in 2015 (3.7%), while in Serbia it amounted to 0.8%, in Croatia 1.6% and in the EU member states 2.2%. The power and strength of the EU economy and its GDP are almost incomparable to BiH, but the annual real growth itself indicates certain positive tendencies in the economy in relation to the reference period of the real growth rate.

## 4. GDP/ PerCapita of BiH - Comparisons

One of the simplest tools for measuring the performance of the national economy and economic policy is GDP per capita compared to other countries.

For the purposes of comparison, we have selected the neighbouring countries, whose economic structures are similar, as well as the countries that have recently joined the EU, the most developed countries in the EU, total EU member states, and the Eurozone countries.

Table 9.GDP per capita EUR

Geo/year	2011	2012	2013	2014	2015
Bosnia and Herzegovina	3,490	3,491	3,568	3,648	3,821
Serbia	4,619	4,400	4,781	4,672	4,720
Montenegro	5,265	5,126	5,412	5,561	5,826
FYR Macedonia	3,665	3,680	3,948	4,141	4,377
EU countries	26,100	26,600	6,700	27,600	28,900
Eurozone	29,200	29,200	29,500	30,000	30,800
Croatia	10,446	10,297	10,228	10,152	10,382
Slovenia	17,973	17,504	17,439	18,107	18,693
Bulgaria	5,600	5,700	5,800	5,900	6,300
Hungary	10,100	10,000	10,300	10,700	11,200
Slovakia	13,100	13,400	13,700	14,000	14,500
Luxembourg	82,500	82,600	85,000	88,300	89,900
Norway	72,300	79,000	77,400	73,200	67,100
Switzerland	63,400	64,700	63,700	64,700	73,000

Source: www.ec.europa.eu/eurostat www.bhas.ba, www.stat.gov.mk, www.monstat.org,www.stat.gov.rs, www.dzs.hr, www.stat.si

GDP per capita of BiH in the period 2011-2015 varied between 3,490 EUR and 3,821 EUR, which represented an increase by 0.9%. GDP per capita of BiH was the lowest.

GDP per capita of BiH in 2015 amounts to 13% of the GDP per capita of the EU member states, or 12% of GDP per capita of the Eurozone. The highest GDP per capita in Europe is recorded in Luxembourg, Sweden and Norway (67,000 to 90,000 EUR, 2015). GDP per capita of Luxembourg is twenty three times higher than GDP per capita of BiH. Countries such as BiH, that are candidates or potential candidates for the EU membership, are below 6,000 EUR. GDP per capita of countries that became the EU members in the last wave amounts to between 6,000 EUR and 16,000 EUR.

BiH has a negative natural increase and the population decline causes a mechanical increase of GDP.

By means of the rapid population decline in BiH, GDP/per capita ratio will be mechanically improved to a significant extent. On the other hand, lower population growth implies that a higher growth and higher potential of GDP are more difficult to achieve, and BiH will have to face this on the road of growth and development.

#### 5. Conclusion

The most important macroeconomic aggregate which represents a measure of the size and strength of the national economy is annual gross domestic product. The economy of BiH, as the economies of most neighbouring countries, is small in its size and poorly developed when compared to developed countries.

In the five-year period (2011 – 2015), there were no significant changes in the structure of GVA. Of 19 sections of economic activity, the highest shares in GVA (over 8%) were those of trade, manufacturing and public administration. The strongest synergistic effect on the economic development is that of manufacturing, which had the second largest share in GVA in 2015, with 11.64%, while in the developed European countries it is two or three times higher. In comparison with strong economies, the economy of BiH does not have a developed service sector, as services provide far less value added than is the case in developed economies. The share of agriculture is significantly high in comparison with the developed countries, while we are well aware that agriculture is not an important driver of development. Bearing all this in mind, there is no hope for a fast recovery and growth.

In the past ten-year period, GVA in BiH has had a constant tendency of growth (except in the crisis years 2009 and 2012). The share of GVA has been generally uniform throughout the period, while only slight positive structural shifts have been recorded.

A common feature of all the neighbouring countries that a significant portion of GDP belongs to household final consumption expenditure (approximately 73% to 78%), while in developed countries consumption is much lower, at around 50% of GDP.

The external component of aggregate demand, although it had a slight increasing tendency, is not even close to being adequate; in addition to excessive imports, this component represents one of the weaknesses of BiH.

GDP per capita in BiH in 2015 was almost eight times lower than the GDP per capita of the EU member states, and more than eight times lower than the GDP per capita in the Eurozone.

We conclude that the structure of economy of BiH is not good nor adequate to provide greater value added or a synergetic effect on the growth and development of the BiH economy. In addition, the structure of consumption, excessive import and insufficient import represent the weaknesses of the economy of BiH.

In order for the economy of BiH to achieve a faster and higher growth, it is necessary to strengthen its structure, by strengthening the development of industry and services. The structure of a country's economy is not determined infinitely; it changes over time, depending on the conditions. The goal of each country, including BiH, is to have as high a degree of finalization of goods and services as possible, which would make goods and services more valuable, thus strengthening the economy with greater value added.

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