

ROMANIA BETWEEN OPPORTUNITIES AND CHALLENGES IN A EUROPEAN UNION OF CONTROVERSIES

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Abstract

The paper deals to the idea that Balkan EU economies have to improve their position in the context of the new challenges for the EU. The analysis is focused on five representative indicators: GDP growth rate, gross fixed capital formation, unemployment rate, inflation rate and governmental gross debt and covers 2012-2018. The analysis is realized on three steps: a comparative analysis between the five indicators, a regression analysis in order to quantify the present and future regional disparities and a cluster analysis able to give a scientific approach to the regional development. One of the paper's main conclusions is that the Balkan EU economies have to be analyzed using two cluster structures. In order to check this, the analysis uses clusters approach in 2016 and 2018. The second conclusion is that Romania presents the better economic performance during 2016-2018 and can become a regional economic leader. The analysis in the paper is based on the latest official statistic data, on pertinent tables and diagrams. The modeling procedures in the paper were supported by dedicated software IBM-SPSS.

Keywords: regional economic disparities; regional clusters; regional economic leader.

JEL Classification: R11, R12, R13.

1. Introduction

2017 started with new important challenges for the EU. The Brexit seems to become real; the new President of USA started to change the official American attitude towards the EU; the refugees' crisis is far away of solving and the Greek economy just started the economic recovery process.

EU has to redefine itself, to increase cooperation and to find new ways of cohesion across Member States. This is the moment when other European economies, as Poland for example, will improve their positions alongside Germany and France in leading the new EU27. On the other hand, the adhering process has to be suspended at least on short and medium terms.

All the above expected developments can put in a good light the Balkan region, which covers both Member States and candidate states, as well.

Five from the eleven Balkan economies are Member States. They can support the regional development in this area and to accelerate the adhering process. On the other hand, the group of the Balkan Member States and the whole region ask for a leader able to support better their interests in the European Institutions.

Unfortunately, the economic performances of the Balkan Member States are not the best, but the official forecasts pointed out a positive trend at least on short time.

The paper analyses the economic performances of the Balkan Member States using five representative economic indicators. The analysis covers 2012-2018, including the official Eurostat forecasts.

In order to quantify the economic disparities between these states, the regression analysis is useful. It is followed by a cluster approach.

The basic idea is to identify that economic leader able to promote development in the region.

2. General economic approach

According to the World Bank, Bulgaria is an industrialised upper-middle-income country, which operates as a free market (World Bank, 2017). It realised a GDP of 143.1 billion USD, a GDP per capita of 20116 USD and an average monthly salary of 491 Euros in

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2016 (CIA, 2017; National Statistical Institute of Bulgaria, 2017). Finally, Bulgaria is characterised by strong growth ahead (European Commission, 2016).

Greece faced to serious socio-economic problems, which put into discussion a possible Grexit. The EU support and a severe recovery programme are close to an economic stabilization. This is why the recovery backed by domestic demand and exports (European Commission, 2016). As a result, the GDP was 194.9 billion USD (World Bank, 2016) and the GDP per capita achieved to 26391 USD (International Monetary Fund, 2016). Moreover, the average monthly salary in Greece is 1630.6 USD (OECD, 2017).

Croatia goes on the economic recovery way, as well (European Commission, 2016). The GDP was 91.1 billion USD in 2015, and the GDP per capita achieved 21169 USD in the same year (World Bank, 2017). On the other hand, the average monthly salary was 1166 USD in 2016 (Croatian Bureau of Statistics, 2017).

Romania seems to have the best economic position across the Balkan region. According to the European Commission, Romania has one of the faster GDP growth rates across the EU. The unemployment and inflation rates are low enough. Moreover, the forecasts are positive for the Romanian economy (European Commission, 2016). The GDP was about 199 billion USD (World Bank, 2016), while the GDP per capita achieved 22319 USD in 2016 (International Monetary Fund, 2016). The average monthly salary was 740 USD in 2015 (Butnariu, M., 2016).

Finally, Slovenia is characterised as a country with solid, broad-based growth ahead (European Commission, 2016). The GDP was 45.9 billion USD in 2016 and the GDP per capita achieved 33279 USD in the same year (International Monetary Fund, 2017).

The biggest economy in term of GDP is Romania, followed by Greece (see Figure 1).

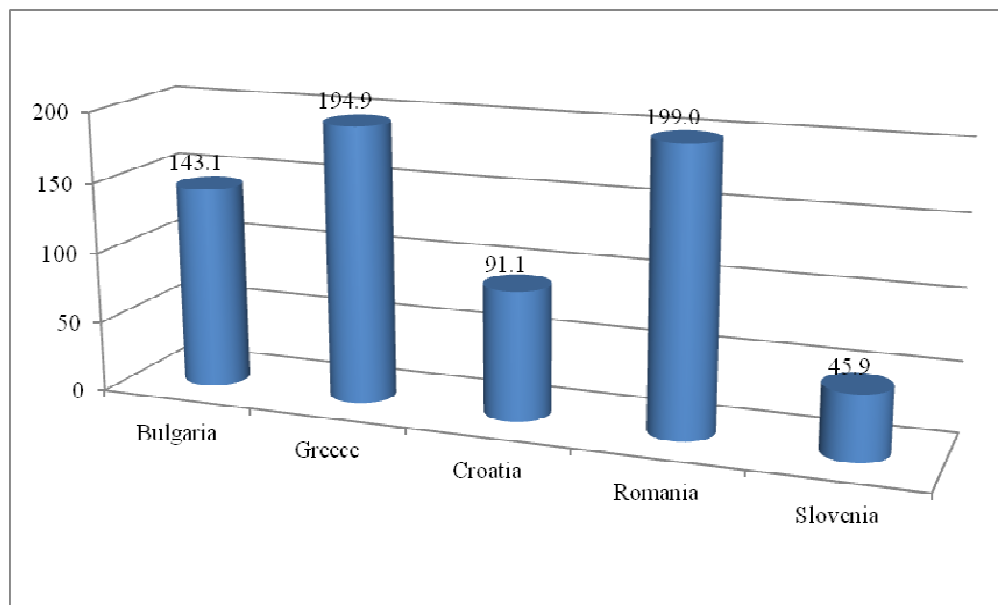


Figure 1. GDP in 2016 (billion USD)

On the other hand, the most developed economy in the region is Slovenia, followed by Greece (see Figure 2).

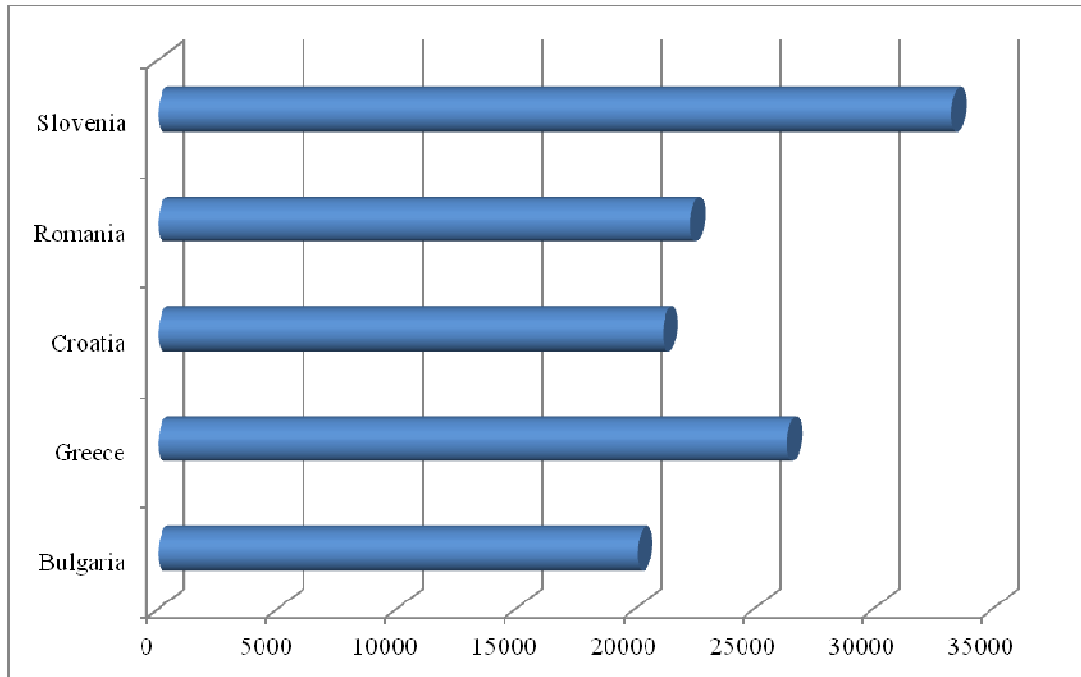


Figure 2. GDP per capita in 2016 (USD)

Both above figures lead to the idea that the Balkan Member States have two development levels: an average one and a less than average another.

3. Economic development under increased regional disparities

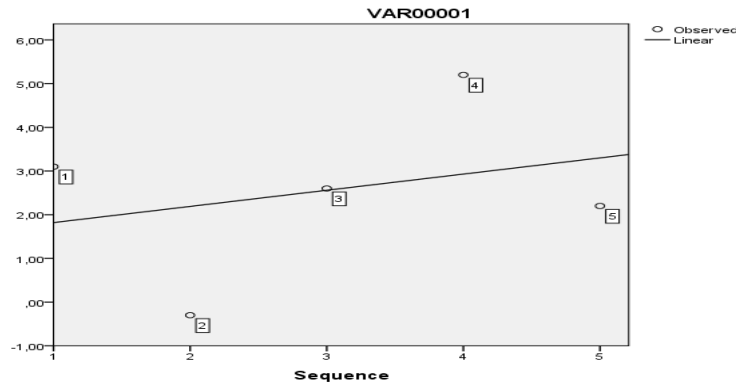
The last official statistic data cover forecast during 2017-2018. The analysis in this paper proposes five economic indicators: GDP growth rate, gross fixed capital formation, unemployment rate, inflation rate and general governmental gross debt. The analysis covers three steps: a comparative analysis between the five countries, a regression analysis in order to point out the regional economic disparities and a cluster analysis, as well.

The trend of the GDP growth rate is presented in Table 1.

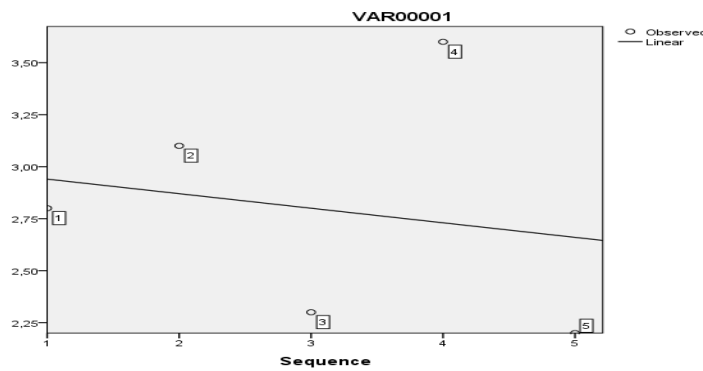
Table 1: GDP growth rate's trend (%)

Country	2012	2013	2014	2015	2016	2017	2018
Bulgaria	3.0	0.9	1.3	3.6	3.1	2.9	2.8
Greece	1.0	-3.2	0.4	-0.2	-0.3	2.7	2.8
Croatia	2.1	-1.1	-0.5	1.6	2.6	2.5	2.3
Romania	2.5	3.5	3.1	3.7	5.2	3.9	3.6
Slovenia	2.6	-1.1	3.1	2.3	2.2	2.6	2.2

The data in Table 1 support the analysis of the disparities related to this indicator, as in Figure 3. The analysis covers 2016 and 2018. The dependent variables are the Member States rates and the independent variable is time. The analysis respect ANOVA conditions.



2016



2018

1. Bulgaria; 2. Greece; 3. Croatia; 4. Romania; 5. Slovenia

Figure 3. GDP growth rate disparities in 2016 and 2018 (%)

A first intermediate conclusion is that the analyzed Member States will face to an increase in this kind of disparities in 2018 compared to 2016. Moreover, these Member States can be group into two clusters. As a result, the two step cluster analysis uses the GDP growth rates as continuous variable. The cluster quality is good (0.8) in 2016 and 2018. This result supports the above cluster approach under the GDP growth rate.

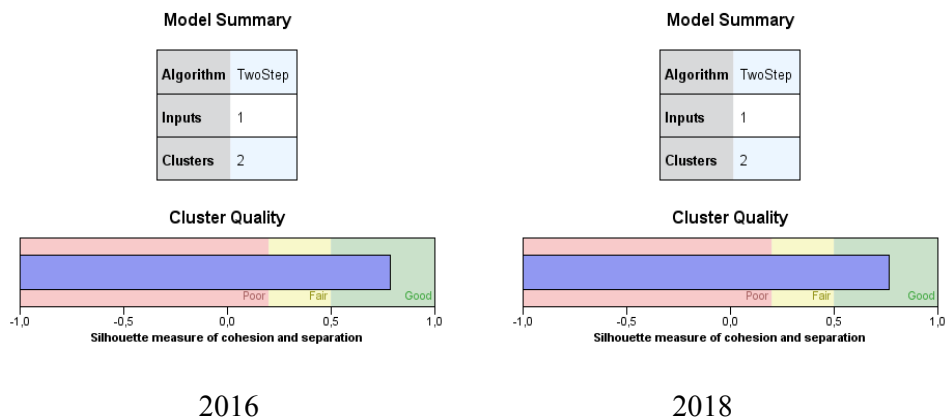


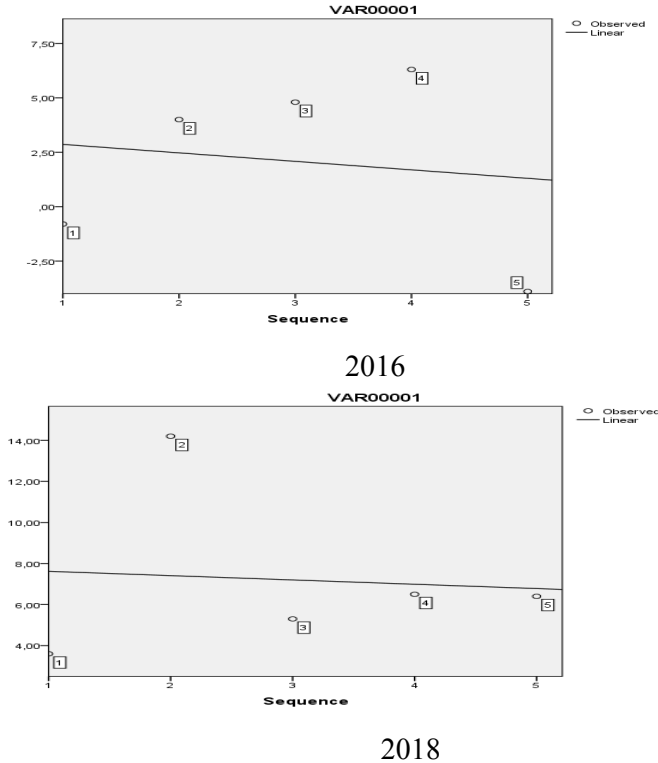
Figure 4. GDP growth rate clusters in 2016 and 2018

An important economic indicator which supports the economic trend is gross fixed capital formation. It led to high disparities across the analysed countries (see Table 2).

Table 2: Gross fixed capital formation's trend (%)

Country	2012	2013	2014	2015	2016	2017	2018
Bulgaria	12.4	0.3	3.4	2.7	-0.8	3.2	3.6
Greece	-1.1	-8.4	-4.6	-0.2	4.0	13.7	14.2
Croatia	3.5	1.4	-2.8	1.6	4.8	6.1	5.3
Romania	5.2	-5.4	3.2	8.1	6.3	6.4	6.5
Slovenia	1.6	3.2	1.4	1.0	-3.9	5.3	6.4

According to Table 2, the gross fixed capital formation will have a positive evolution during 2016-2018, excepting Croatia. On the other hand, the disparities in 2016 support two distinct clusters. The situation will improve in 2018 (see Figure 5).



1. Bulgaria; 2. Greece; 3. Croatia; 4. Romania; 5. Slovenia

Figure 5. Gross fixed capital formation disparities in 2016 and 2018 (%)

The quality of this new cluster approach is good for 2016 (0.8) and 2018 (0.9). As a result, the theoretical approach in this paper of dividing the five Member States into two clusters is demonstrated for the second economic indicator, as well (see Figure 6).

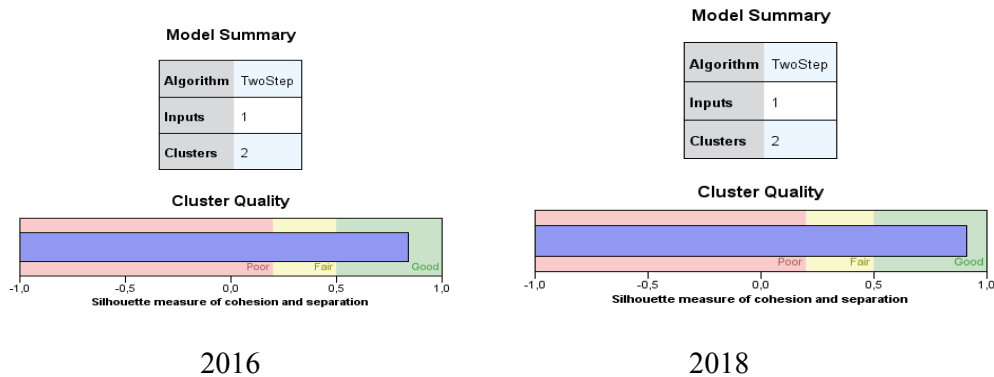


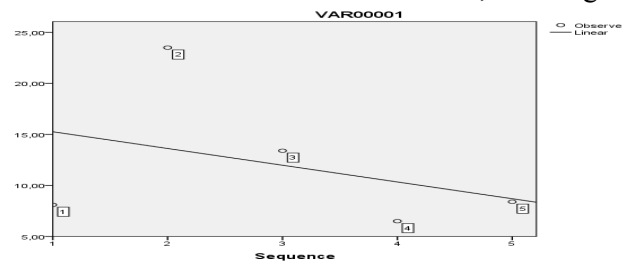
Figure 6. Gross fixed capital formation clusters in 2016 and 2018

The third economic indicator puts into discussion is unemployment rate. As general point of view, the unemployment rate decreased in all five Member States during 2014-2016 and will continue to decrease during 2017-2018 (see Table 3).

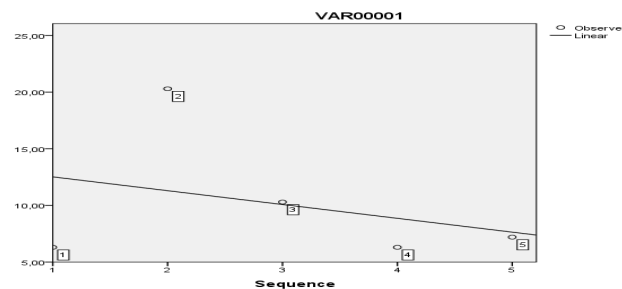
Table 3: Unemployment rate's trend (%)

Country	2012	2013	2014	2015	2016	2017	2018
Bulgaria	11.7	13.0	11.4	9.2	8.1	7.1	6.3
Greece	11.6	27.5	26.5	24.9	23.5	22.2	20.3
Croatia	-	17.3	17.3	16.3	13.4	11.7	10.3
Romania	7.0	7.1	6.8	6.8	6.5	6.4	6.3
Slovenia	6.6	10.1	9.7	9.0	8.4	7.7	7.2

According to Table 3, the disparities related to this indicator decreased, but they support the same “classic” two clusters in 2016 and 2018, as in Figure 7.



2016

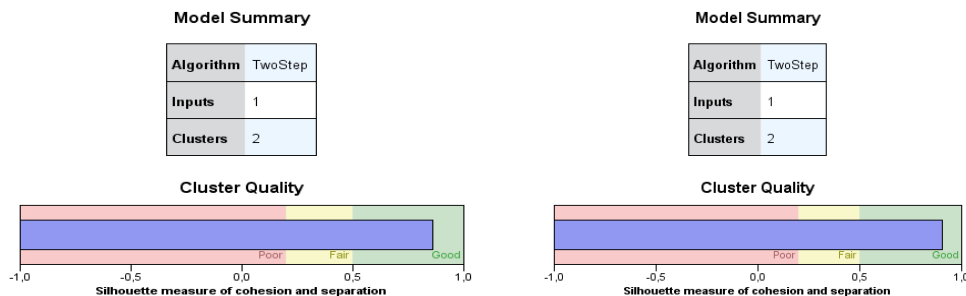


2018

1. Bulgaria; 2. Greece; 3. Croatia; 4. Romania; 5. Slovenia

Figure 7. Unemployment rate disparities in 2016 and 2018 (%)

Both components of the Figure 7 support the grouping of the five countries into two clusters. The viability of such approach is pointed out by Figure 8, as well.



2016

2018

Figure 8. Unemployment rates clusters in 2016 and 2018

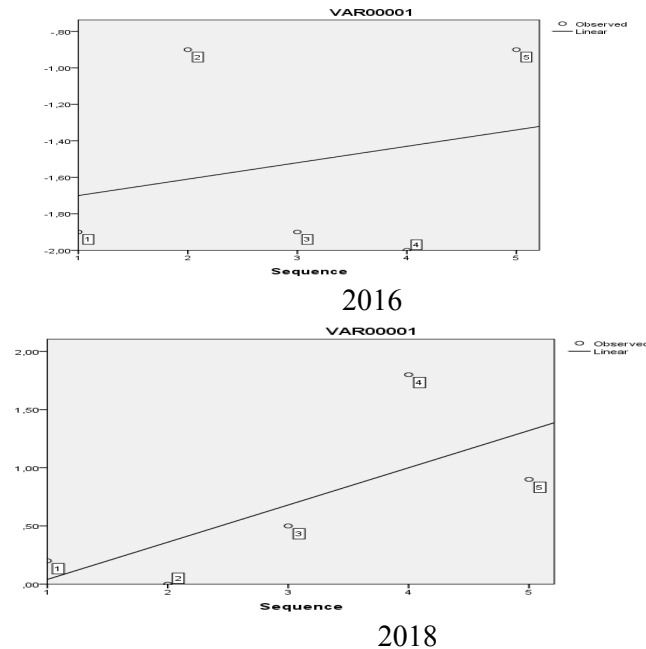
The cluster quality is very good (0.9) in 2016 and in 2018, and represents the third argue for a two clusters analysis.

All EU Balkan economies faced to negative inflation rates in 2016 and will achieve positive rates again in 2018, excepting Greece which will have a neutral inflation rate in 2018 (see Table 4).

Table 4: Inflation rate's trend (%)

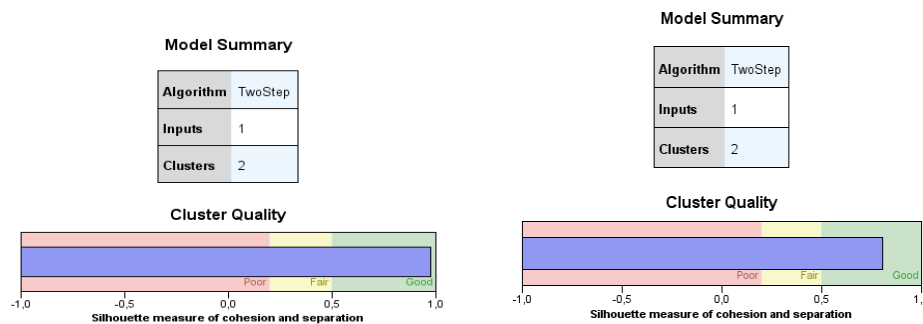
Country	2012	2013	2014	2015	2016	2017	2018
Bulgaria	-	-0.6	-2.6	-2.1	-1.9	0	0.2
Greece	2.3	-1.9	-2.4	-2.1	-0.9	0.1	0
Croatia	-	1.3	-0.8	-1.3	-1.9	-0.2	0.5
Romania	22.6	2.2	0.4	-1.4	-2.0	0.8	1.8
Slovenia	3.9	0.9	-0.6	-1.8	-0.9	0.5	0.9

Using data from Table 4, the inflation disparities in 2016 and 2018 are presented in Figure 9.



1. Bulgaria; 2. Greece; 3. Croatia; 4. Romania; 5. Slovenia
Figure 9. Inflation rate disparities in 2016 and 2018 (%)

The inflation rates in Figure 9 support the splitting of the five Member States into two clusters. It is the fourth situation when these Member States can be analyzed under two clusters approach. In order to verify again this approach, the cluster analysis led to maximum quality value (1.0) in 2016 and good value (0.8) in 2018 (see Figure 10).



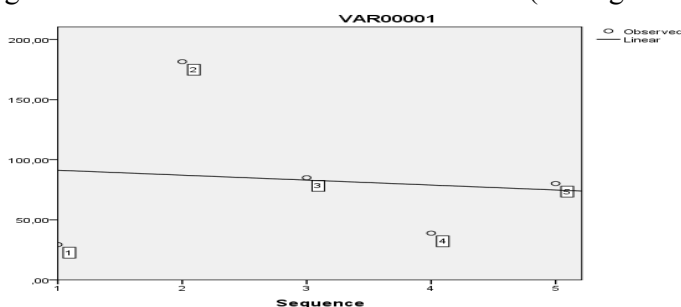
2016 2018
Figure 10. Unemployment rates clusters in 2016 and 2018

The last economic indicator took into consideration is gross governmental debt. It fluctuated in all five Member States during 2014-2016 (see Table 5).

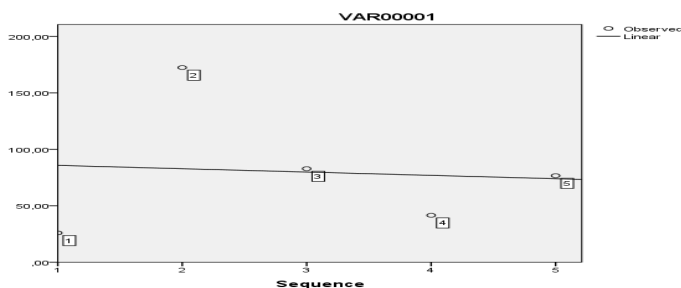
Table 5: Gross governmental debt's trend (%)

Country	2012	2013	2014	2015	2016	2017	2018
Bulgaria	40.5	17.0	27.0	26.0	29.4	26.3	25.9
Greece	115.3	177.4	179.7	177.4	181.6	179.1	172.4
Croatia	-	82.2	86.6	86.7	85.0	84.3	82.8
Romania	21.5	37.8	39.4	37.9	38.9	40.2	51.5
Slovenia	29.5	71.0	80.9	83.1	80.2	78.3	76.6

According to Table 5, Greece faced and will face to the peak of the governmental debt, while Bulgaria achieved and will achieve the bottom (see Figure 11).



2016

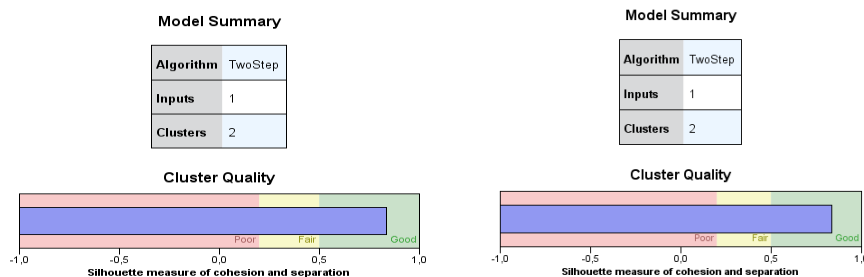


2018

1. Bulgaria; 2. Greece; 3. Croatia; 4. Romania; 5. Slovenia

Figure 11. Governmental gross debt disparities in 2016 and 2018 (%)

Is no doubt that the above cluster approach is available for the governmental gross debt's analysis. The clusters qualities are 0.8 for 2016 and 2018 (see Figure 12).



2016

2018

Figure 12. Government gross debt clusters in 2016 and 2018

4. The need for a regional leader

The analysis in the 3rd chapter pointed out a lot of economic disparities between the five Member States. Unfortunately, these disparities will not significantly decrease in 2018 according to the official forecasts.

On the other hand, it is the time for economic stability in the region. This is why finding an economic leader becomes essential. In order to realize it, a complex comparative analysis for 2016 and 2018 can lead to the truth.

This analysis uses the above five economic indicators for 2016 and 2018 (see Table 6).

Table 6. Economic synthesis of 2016

Country	Rank for GDP growth rate	Rank for gross fixed capital formation	Rank for unemployment rate	Rank for inflation rate	Rank for government gross debt	Total
Bulgaria	4	2	4	4	5	19
Greece	1	3	1	2	1	8
Croatia	3	4	2	4	2	15
Romania	5	5	5	5	4	24
Slovenia	2	1	3	2	3	11

The ranking system in Table 6 takes into consideration points for maximum values for GDP growth rate and gross fixed capital formation and minimum values for unemployment rate, inflation rate and government gross debt. The same procedure is used for 2018 (see Table 7).

Table 7. Economic synthesis of 2017

Country	Rank for GDP growth rate	Rank for gross fixed capital formation	Rank for unemployment rate	Rank for inflation rate	Rank for government gross debt	Total
Bulgaria	4	1	5	4	5	19
Greece	4	5	1	5	1	16
Croatia	2	2	2	3	2	11
Romania	5	4	5	1	3	19
Slovenia	1	3	3	2	3	12

A comparative analysis between the latest two tables points out that the economic disparities between the five Member States will decrease in 2018 compared to 2016. Bulgaria will maintain its economic position in 2018 as in 2016, while Slovenia will improve it in 2018.

Romania and Croatia will face to a decrease in their economic positions, but Romania will maintain its leader position in 2018 as in 2016. Greece will achieve the best increase in economic performance in 2018 compared to 2016.

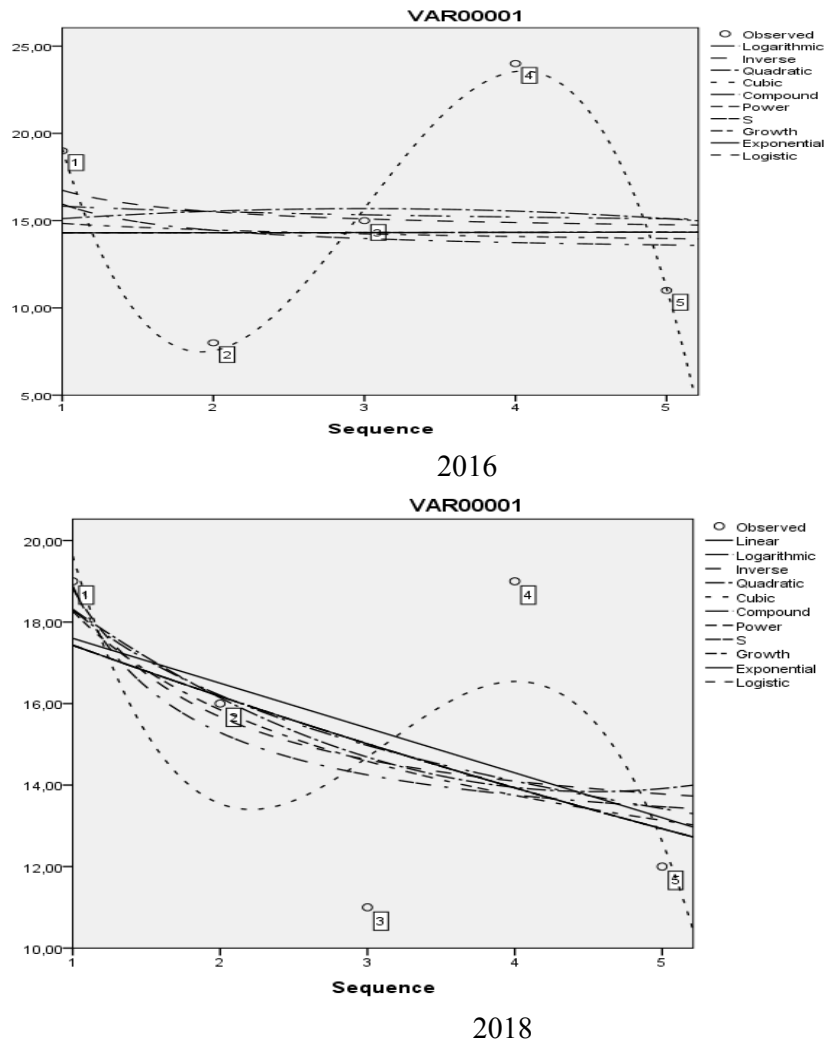
The final conclusion of the analysis in this chapter is that Romania has to assume its role of regional leader and to promote economic growth and stability in the region.

5. Conclusions

The Balkans can be an interesting target for the EU on medium term. All Balkan economies are connected to the EU as Member States or candidate states, as well.

Nowadays, EU faces to the challenge of redefining the European project for cohesion and prosperity. This is why a better support from the Balkan Member States will lead to a different approach of the center-periphery balance.

The economic disparities across the Balkan Member States will decrease in 2018 compared to 2016, but they will be still great (see Figure 13).



1. Bulgaria; 2. Greece; 3. Croatia; 4. Romania; 5. Slovenia
Figure 13. Economic disparities in 2016 and 2018 (%)

On the other hand, Romania (nr. 4 in Figure 13) seems to have the best economic evolution at least on short term. This is why Romania can be a regional leader for these five Member States.

In the context of changing, Romania will be able to improve its position in the EU's management structures, as well.

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