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EU countries in NATO. Part II

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Abstract: The European Union and the North Atlantic Treaty Organization are strategic partners. EU and NATO share 22 of their member states, and five EU member states are members of NATO's Partnership for Peace. The two organizations are promoting the same principles and values and they are sharing the same strategic interests. They also work together for managing different crisis. In this paper we will present the main defense expenditure indicators in the EU member states using the latest available data, and we will also focus on the evolution of those indicators over the last years in Romania.

Key-words: defence expenditure, GDP, NATO, EU

1. Introduction

Just like in the previous paper – EU Countries in NATO. Part I – we begin by enumerating the EU member countries that are also part of NATO, in alphabetical order of the country code: Belgium (BE), Bulgaria (BG), Czech Republic (CZ), Denmark (DK), Germany (DE), Estonia (EE), Greece (EL), Spain (ES), France (FR), Croatia (HR), Italy (IT), Latvia (LV), Lithuania (LT), Luxembourg (LU), Hungary (HU), Netherlands (NL), Poland (PL), Portugal (PT), Romania (RO), Slovenia (SI), Slovakia (SK), United Kingdom (UK).

The other EU member countries (except Cyprus) – Austria, Finland, Ireland, Malta and Sweden are part of the Euro-Atlantic Partnership Council (EAPC).

2. Objectives

The objective of the present paper is to present the evolution of the defense expenditure indicators in the last year – estimated 2016 – with the aid of the data from SIPRI Military Expenditure Database. This database provides information about military expenditure by country, presented according to the calendar year.

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3. Material and Methods

From the data provided by SIPRI Military Expenditure Database, we made a ranking of the EU member countries that are also part of NATO, taking into account the following indicators: Defence expenditure (millions USD), Defence expenditure as a share of GDP and annual real change based on 2010 prices (%), GDP (2010 prices and exchange rates – billion USD) and Defence expenditure per capita and military personnel (2010 USD).

4. Results and Discussions

The results of the ranking of the 22 nations are presented in the three tables below.

| Country | | BG | CZ | DK | DE | EE | EL |
|--------------------------------------|----|----|----|----|----|----|----|
| Defense expenditure [mill. USD] | 9 | 16 | 13 | 10 | 3 | 19 | 8 |
| Defense expenditure [% of GDP] | 20 | 10 | 19 | 14 | 12 | 2 | 1 |
| GDP [bill. USD] | 8 | 18 | 12 | 9 | 1 | 22 | 10 |
| Defense expenditure per capita [USD] | 8 | 22 | 16 | 3 | 5 | 9 | 6 |

Table 1. Ranking for the first 7 countries

As you can see in Table 1, Germany has the biggest GDP of the EU member countries and is on the 3rd place on the Defence expenditure and on the 5th place on the Defence expenditure per capita. But that expenditure represents only 1.20% of the GDP, so, in this respect, Germany is placed only on the12th place.

| Country | | FR | HR | IT | LV | LT | LU | HU |
|--------------------------------------|----|----|----|----|----|----|----|----|
| Defense expenditure [mill. USD] | 6 | 2 | 18 | 4 | 21 | 17 | 22 | 14 |
| Defense expenditure [% of GDP] | 21 | 5 | 11 | 16 | 7 | 6 | 22 | 17 |
| GDP [bill. USD] | 5 | 2 | 17 | 4 | 21 | 20 | 16 | 14 |
| Defense expenditure per capita [USD] | 13 | 2 | 19 | 10 | 18 | 15 | 7 | 20 |

Table 2. Ranking for the next 8 countries

In Table 2 we can see that Italy has the 4th GDP in the European Union. Also, it ranks 4th on Defense expenditure (millions USD), but only 10^{th} on Defense expenditure per capita and 16^{th} on Defense expenditure as percent of GDP.

Close to Italy is Spain – ranking 5^{th} on GDP and 6^{th} on Defense expenditure.

| Country | | PL | РТ | RO | SI | SK | UK |
|--------------------------------------|----|----|----|----|----|----|----|
| Defense expenditure [mill. USD] | 7 | 5 | 11 | 12 | 20 | 15 | 1 |
| Defense expenditure [% of GDP] | 13 | 4 | 9 | 8 | 18 | 15 | 3 |
| GDP [bill. USD] | 6 | 7 | 11 | 13 | 19 | 15 | 3 |
| Defense expenditure per capita [USD] | 4 | 12 | 11 | 21 | 14 | 17 | 1 |

Table 3. Ranking for the last 7 countries

The United Kingdom in on the 1^{st} place on Defence expenditure and Defence expenditure per capita and 3^{rd} on Defence expenditure (% of GDP) and also 3^{rd} on GDP in the NATO.

Next in Table 3. is Poland, which ranks 5^{th} on Defense expenditure and 4^{th} on Defense expenditure (% of GDP).

Romania ranks 12 on Defense expenditure, 8th on Defense expenditure (% of GDP), 13th on GDP and only 21st from a total of 22 countries on Defence expenditure per capita.

We also have the data concerning these 4 indicators for Romania from 2009 to 2016 (estimation), as shown in Table 4.:

| Year | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 | 2016e |
|------------------------------------|-------|-------|-------|-------|-------|-------|-------|-------|
| Defense expenditure [mill. USD] | 2,225 | 2,086 | 2,380 | 2,100 | 2,452 | 2,692 | 2,580 | 2,651 |
| Defense expenditure | | | | | | | | |
| [% of GDP] | 1.33 | 1.24 | 1.28 | 1.22 | 1.28 | 1.35 | 1.45 | 1.41 |
| GDP [bill. USD] | 169 | 168 | 170 | 171 | 177 | 182 | 189 | 199 |
| Defense expenditure per capita | | | | | | | | |
| [USD] | 111 | 103 | 108 | 104 | 113 | 124 | 138 | 141 |

Table 4. Defense expenditure indicators for Romania 2009 – 2016e

Based on the numbers in Table 4., we calculated the Index number – the ratio of two numbers expressed as a percentage – with the following formula:

I $_{t/1}$ are I_{2015/2010}, I_{2014/2010}, I_{2013/2010}, I_{2012/2010} and I_{2011/2010}.

I $_{t/t-1}$ are I_{2015/2014}, I_{2014/2013}, I_{2013/2012}, I_{2012/2011} and I_{2011/2010}.

$$(Index_number)_i = 100 \frac{(Value_in_period_i)}{(Value_in_base_period)}$$

We calculated two variants of this formula – using as the base period the year 2010 and the previous year, respectively.

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| Defense expenditure [mill. USD] | | | | | | | | |
|--|---------|---------|---------|---------|---------|--|--|--|
| Index numbers 2011 2012 2013 2014 2015 | | | | | | | | |
| I t/1 | 114.064 | 100.648 | 117.535 | 129.022 | 123.690 | | | |
| I t/t-1 | 114.064 | 88.238 | 116.778 | 109.773 | 95.868 | | | |

The results for Defense expenditure (mill. USD) are shown in Table 5:

 Table 5. Index numbers for the Defence expenditure (mill. USD)

The Defense expenditure compared with the numbers from the year 2010 has increased in each of the 5 years analysed, the biggest increase being in 2015.

Compared with the numbers from the previous year, we have 3 increasing values (in 2011, 2013 and 2014) and 2 decreasing values (in 2012 and 2015).

We made the same analysis for the indicator Defense expenditure as a share of GDP. The results are shown in Table 6.:

| Defense expenditure (% of GDP) | | | | | | | | |
|--------------------------------|---------|--------|---------|---------|---------|--|--|--|
| Index numbers | 2011 | 2012 | 2013 | 2014 | 2015 | | | |
| I t/1 | 103.389 | 98.490 | 103.084 | 108.642 | 116.775 | | | |
| I t/t-1 | 103.389 | 95.262 | 104.664 | 105.392 | 107.486 | | | |

Table 6. Index numbers for the Defense expenditure (% of GDP)

The Defense expenditure as a share of GDP decreased only in 2012, compared with the value from 2010.

Also, compared with the previous year, we have a decrease only from one year -2012.

For GDP the index numbers are shown in Table 7.:

| GDP [billion USD] | | | | | | | | |
|-------------------|---------|---------|---------|---------|---------|--|--|--|
| Index numbers | 2011 | 2012 | 2013 | 2014 | 2015 | | | |
| I t/1 | 101.056 | 101.704 | 105.296 | 108.535 | 112.511 | | | |
| I t/t-1 | 101.056 | 100.641 | 103.532 | 103.076 | 103.663 | | | |

Table 7. Index numbers for GDP (bill. USD)

The GDP has increased during the whole period analysed, even if the percent was not bigger than 4% compared with the previous year.

And for the Defense expenditure per capita, the results for Romania are shown in Table 8.:

| Defense expenditure per capita [USD] | | | | | | | | |
|--------------------------------------|---------|---------|---------|---------|---------|--|--|--|
| Index numbers | 2011 | 2012 | 2013 | 2014 | 2015 | | | |
| I t/1 | 104.995 | 101.100 | 109.960 | 119.890 | 134.217 | | | |
| I t/t-1 | 104.995 | 96.290 | 108.764 | 109.031 | 111.950 | | | |

 Table 8. Index numbers for the Defence expenditure per capita (USD)
 Image: Comparison of the capital state of

The Defense expenditure per capita was only decreasing in 2012 compared with 2011. For the rest of the comparisons, we have only increasing results.

We also made a graphic comparison of the 4 indicators analysed, as shown in Figure 1. and Figure 2.

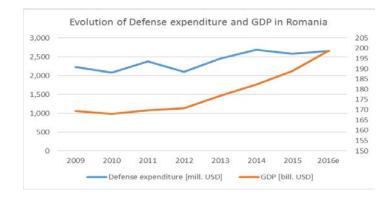


Fig. 1. Evolution of the Defense expenditure and GDP in Romania between the years 2009 – 2016e

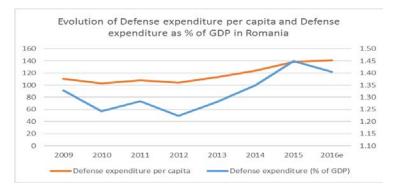


Fig. 2. Evolution of the Defense Expenditure per capita and of the Defense expenditure as share of GDP in Romania between the years 2009 – 2016e

5. Conclusions

Defense expenditure is strictly correlated with the evolution of GDP. But it also has to take into account the geopolitical evolution of the region and the increased danger of conflicts nowadays. That is why we need a closer collaboration between the EU and NATO.

A new approach to Western security cooperation should extend beyond military thinking and search for more creative responses to current threats.

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