ANALYSIS OF ROMANIAN ECONOMIC STABILITY IN TERMS OF EVOLUTION OF THE BUDGETARY DEFICIT AND OTHER MACROECONOMIC INDICATORS, IN THE PERIOD 2005-2012

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Abstract In this paper we shall study the evolution of the Romanian macroeconomic stability in the period 2005-2012. This analytical research is based on secondary data provided by the Romanian National Institute of Statistics, as well as by EUROSTAT, and these data will be introduced in tables, based on which we shall draw up charts to help us make a correct image of the studied phenomena. In the end, we shall use a certain kind of chart – the macro-stabilization pentagon – which will give us the measure of macroeconomic stability at the level of our country, during the considered period. The results of this endeavour will serve to all those who want to know to what extent Romania has had a stable economy in a period marked by the economic crisis wherefrom it hasn't fully detached yet. However, in the part designated to conclusions, we shall observe that the year 2012 has positive characteristics, from the economic point of view, the surface of the macro-stabilization pentagon afferent to this year benefiting from a significantly more emphasized regularity than the other studied years.

We will use during the paper the following economic indicators: budgetary deficit, current account deficit, inflation rate, unemployment rate and gross domestic product growth rate. With the values of all these indicators we will compile some tables and, subsequently, charts for every one of them and after that we will use the economic macro stability pentagon, in order to find out if the Romanian economy recovered after the economic crisis.

We were suggested to the idea of this approach manner by two books: Finanțe publice (Iulian Văcărel coord., 2003) and Reflecții economice - Contribuții la teoria macrostabilizării (Mugur Isărescu, 2006). In these books we found references to the particular chart – the macro stability pentagon. In the final part of this paper we will try to use this chart to make an image of the overall economic behaviour of our country.

Keywords: budgetary deficit, current account deficit, inflation rate, unemployment rate, gross domestic product growth rate, macro economic stability.

JEL classification: A10, E63
In this paper we shall proceed with an analysis of some macroeconomic indicators evolution, at the level of Romania, in the period 2005 – 2012. We are doing this analysis in order to figure out if the Romanian economy has had an appropriate manner to deal with the crisis.

The period we have had in view transcends the climax of the economic crisis that hit our country, the effects of which are still felt in the present. If we pay attention to the time interval taken into consideration, we shall notice that within it there appear some years preceding the crisis – in the period 2005 – 2008 – but also subsequent to the period of its maximum manifestation – in the period 2010 – 2012. Furthermore, we shall see if we correctly considered the year 2009 as the year in which the economic crisis did or did not know its highest phase, as concerns Romania.

In order to make an image as accurate as possible on the studied phenomena, we shall use the chart illustrative method, introducing the data obtained from the National Institute of Statistics, but also from other sources such as EUROSTAT, in tables, and we shall continue with charts to help us see the evolution of some macroeconomic indicators. In the final part we will elaborate a different kind of chart which is called the economical macro stability pentagon, which is more likely to show us the manner in which the Romanian economy recovered after the crisis.

The indicators on which we have stopped are the following: the budgetary deficit, the current account deficit, the unemployment rate, the inflation rate and the gross domestic product growth rate. On all these indicators, more precisely on the study of their evolution, we shall support our conclusions regarding the economic stability Romania had had between 2005 and 2012. In this point of the paper, it is important to mention that the data afferent to year 2012 are not final for any of the studied indicators, and this fact we shall take it as it is during our endeavour. We shall start by studying the evolution of the considered indicators, in the order they were mentioned in the previous paragraph. We shall open our endeavour with the budgetary deficit, positioning in a table the result of some personal calculations made on the basis of some statistic data provided by the INS (The National Institute of Statistics), data regarding the amounts afferent to budgetary income and expenses made from budgetary sources, relating the difference between these sources with the gross domestic income.

| Table no. 1. Evolution of Romanian budgetary deficit in the period 2005 – 2012 (% in GDI). |
|----------------------------------------------|----------|----------|----------|----------|----------|----------|----------|----------|
| Budgetary deficit                           | 2005     | 2006     | 2007     | 2008     | 2009     | 2010     | 2011     | 2012     |
|                                              | -0.8     | -3.3     | -3.4     | -5.7     | -9       | -6.8     | -4.3     | -2.52    |

Source: personal calculations made on the basis of some data provided by the National Institute of Statistics (INSSE).

Further on, based on the data in Table no. 1, we shall make a chart to help us better notice the evolution of this indicator in the considered period.
We can easily notice that this indicator, in terms of its evolution, confirms the previously presented supposition concerning the year 2009 as the year of maximum manifestation of the economic crisis in our country. Indeed, at a value of 0.8 percentage, for the year 2005, the budgetary deficit registers a level of 9 percentage in the year 2009, then it gradually decreases to approximately 2.5%, value afferent to year 2012.

Switching out attention from the budgetary deficit to the current account deficit, we shall consult certain data regarding this indicator, data provided by the specialized media.

Table no. 2.  Evolution of Romanian current account deficit in the period 2005 – 2012 (% in GDI).

<table>
<thead>
<tr>
<th>Year</th>
<th>2005</th>
<th>2006</th>
<th>2007</th>
<th>2008</th>
<th>2009</th>
<th>2010</th>
<th>2011</th>
<th>2012</th>
</tr>
</thead>
<tbody>
<tr>
<td>Current account deficit</td>
<td>8.73</td>
<td>11.2</td>
<td>16.15</td>
<td>13.84</td>
<td>4.41</td>
<td>4.82</td>
<td>4.71</td>
<td>4</td>
</tr>
</tbody>
</table>

Source: EUROSTAT (EUROSTAT).

Further on, we shall make the chart afferent to this table, trying to identify, in terms of the image provided by it, the main characteristics of the current account deficit evolution for the considered period.
Analyzing the chart, we notice the coexistence, within it, of three types of behaviour, mainly an increase, in the sense of value doubling, in the first three years of the period, from 2005 until 2007, trend followed by a significant decrease at half the level afferent to the year 2005, from 2007 until 2009, then a level trend, which continues during the last years of the studied time interval.

Having in view the way, the data on which the determination of this indicator value relay on, we can try to explain the three types of behaviour, either by exports value increase or by import value volume decrease. Both explanations could be supported independently or cumulated. At the export increase part, we could bring as argument the increase of Dacia company exports on the west-European market and for imports decrease, we could argument with the consumption decrease due to the economic crisis. We shall not venture to such appreciations in this paper, as they would presume an endeavour that needs to be founded which would exceed the size of an article as this one.

What we can keep in mind though, is the fact that in 2009 the chart knows a significant turning point, even though this trend can not be accounted for exclusively by the hypothesis according to which the year 2009 would be the “hardest” from the economic perspective at the level of Romania.

The third indicator, the unemployment rate, describes well enough the effects of a fatal period, from the economic point of view, which crisis can cause at the level of a country. The following table and chart help us analyze the evolution of this indicator.

Table no. 3. The evolution of unemployment rate in Romania in the period 2005 – 2012.

<table>
<thead>
<tr>
<th>Year</th>
<th>2005</th>
<th>2006</th>
<th>2007</th>
<th>2008</th>
<th>2009</th>
<th>2010</th>
<th>2011</th>
<th>2012</th>
</tr>
</thead>
<tbody>
<tr>
<td>rate</td>
<td>5.9</td>
<td>5.2</td>
<td>4</td>
<td>4.4</td>
<td>7.8</td>
<td>7</td>
<td>7.4</td>
<td>6.5</td>
</tr>
</tbody>
</table>

Source: The National Institute of Statistics
Further on, based on these data, we shall make a chart to help us form as correct an image as possible on the evolution of this indicator.

Chart no. 3
Source: made by the author

From this chart we can notice that, at least for the studied period, this indicator had an almost cyclical evolution, in the sense that the values afferent to the ends of the time interval we refer to, are located at a small distance from one another – 5.9 compared to 6.5 percentages. During the rest of the period, the evolution can be explained based on the economic position Romania has crossed since 2005 until 2012, having to deal with a descending trend, with a peak in 2009, then with a slightly decreasing trend until the end of the period. We notice again a negative peak afferent to year 2009.

As concerns the fourth indicator we have proposed to analyze, in terms of its evolution, this is the inflation rate and we shall use again data provided by the National Institute of Statistics.

Table no. 4
The evolution of inflation rate in Romania in the period 2005 – 2012

<table>
<thead>
<tr>
<th>Year</th>
<th>2005</th>
<th>2006</th>
<th>2007</th>
<th>2008</th>
<th>2009</th>
<th>2010</th>
<th>2011</th>
<th>2012</th>
</tr>
</thead>
<tbody>
<tr>
<td>Rate</td>
<td>9</td>
<td>6.56</td>
<td>4.84</td>
<td>7.85</td>
<td>5.59</td>
<td>6.09</td>
<td>5.79</td>
<td>4.95</td>
</tr>
</tbody>
</table>

Source: The National Institute of Statistics
The chart we have made, based on the data from Table 4, will show as follows:

![Chart no. 4: The evolution of inflation rate in Romania in the period 2005 – 2012](chart)

**Source:** made by the author

From the chart above, we can easily notice the trend, mainly descending, this indicator has known during the period taken into account. Having in view that as the inflation rate is concerned, there is a major interest from the perspective of the monetary policy promoted by The National Bank of Romania, this indicator being “aimed at” by the before mentioned institution, we could appreciate that it has a relatively technical character than the other indicators we have studied in this paper, and this character could not be useful to us in supporting the hypothesis formulated at the beginning of the paper.

The last indicator we have taken into account, the increasing rate of the gross domestic product being one of the most important macroeconomic indicators, will help close an analysis circle of the evolution of the economic market position afferent to the time interval on which we have focused our attention.

**Table no. 5**
The evolution of gross domestic product increasing rate in Romania in the period 2005 – 2012

<table>
<thead>
<tr>
<th>Year</th>
<th>2005</th>
<th>2006</th>
<th>2007</th>
<th>2008</th>
<th>2009</th>
<th>2010</th>
<th>2011</th>
<th>2012</th>
</tr>
</thead>
<tbody>
<tr>
<td>GDP growth rate</td>
<td>4,2</td>
<td>7,9</td>
<td>6,3</td>
<td>7,3</td>
<td>-6,6</td>
<td>-1,6</td>
<td>2</td>
<td>0,2</td>
</tr>
</tbody>
</table>

**Source:** The National Institute of Statistics
The chart that will help us illustrate the evolution of this indicator will be presented below:

The chart of the gross domestic income increasing rate in Romania in the period 2005 – 2012
Source: made by the author

The image presented by chart no. 5 is a sufficiently eloquent one regarding the consideration of year 2009 as an year when the economic crisis had maximum negative effects in the Romanian economy.

In this point of the paper, we have enough data and images to illustrate the economic configuration in which Romania was between 2005 and 2012. Anyway, we shall not stop here, but we shall use a different kind of chart, which in the specialized language is called the macro-stabilization pentagon. This chart takes into consideration exactly the indicators we have studied in this paper. This macro-stabilization pentagon is made up starting from the placement of the five indicators on five abscissae having a common origin. The next stage is that of configuration of the real pentagon, resulting in such a geometrical figure, whose surface, amplitude and regularity show the image of economic stability of a state in a certain moment or in dynamic (Văcărel (coord), 2003, p. 651). Another mention of this particular instrument of analysis was made by Mugur Isărescu, the Governor of Romanian National Bank (Central Bank of Romania), (Isărescu, 2006, p. 127) article in which the author revealed the importance of this particular chart for an analysis as the present one.

With all these positive characteristics of this chart, it has a limit determined by the fact that if we want to analyze more series in the same time, then the chart can become relatively full, and if the available surface is reduced in size, we can encounter chart comprehensibility difficulties. For this reason, we shall analyze the evolution every two years, trying to catch the trend of studied phenomena.
To avoid the unnecessary information in the paper, we shall drop the tables and maintain the charts, the data being anyway presented up to this moment. In this respect, the chart shows as follows:

![Chart no. 6](image-url)

**Chart no. 6**
Source: made by the author

Based on the before presented chart, we can try to present certain conclusions concerning the evolution of the macroeconomic stability degree during the studied period. In this chart there appears relatively clear that the Romanian economy initially knew a positive evolution, being noticed a recovery in the sense of the previously mentioned three characteristics: surface, amplitude and regularity. Therefore, we could state that the Romanian economy was more stable in 2006 and 2008 than in the years following the crisis.

The chart representations afferent to years 2010 and 2012 suffered a reduction, modifying both the surface and the regularity and amplitude. The surface decreased, and so did the amplitude, which knew a diminishing, but the Romanian economy recovered at pentagon regularity, both for 2010 and for 2012.

What we can understand from all these charts we have presented during this paper, is that year 2009 was a peak from the crisis point of view and that after that moment the macroeconomic indicators knew a relatively milder evolution, fact that can be noticed in chart no. 6. Indeed there can be emphasized two different behaviours in the years 2010 and 2012 compared to 2006 and 2008, the indicators values being significantly grouped on both time zones. The surfaces afferent to years 2006 and 2008 are significantly higher than those afferent to years 2010 and 2012, being
clearly different only as concerns the budgetary deficit, the latter being at the level of year 2012 at the lowest level.

Giving credit to this method of determination of the stability degree, through the macro-stabilization pentagon, we could state that the year 2012 has regular characteristics more clear than all the other studied years, and this fact is exactly due to decrease of the budgetary deficit.

Regarding all these aspects we may affirm that Romanian economy, overall, is on a good way to its endeavour to meet the values of the main economic indicators existing in the EU.

References


