THE STRATEGIC ISSUES OF INFLATION TARGETING IN THE CONTEXT OF ECONOMIC GROWTH

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ABSTRACT

The aim of this study is to test the relationship between inflation and GDP in the RA. Before estimating this relationship, we have checked the order of integration of the variables. Finally, we can see that there is a negative relationship between inflation and GDP in the RA, at least in the short run, which is consistent with most of the theories that have been developed throughout the years.

It is not an easy task to find many areas in economics where almost full agreement has emerged in the last few years. However, today there is a widespread and growing consensus that the single most important goal of monetary policy should be the pursuit of price stability. Reflecting this recognition, an increasing number of central banks have been granted independence and charged with the exclusive objective of controlling inflation and preserving the stability of prices. But embracing price stability as the explicit primary goal for monetary policy does not preclude the adoption of different operating mechanisms, and the choice of monetary regime that will best serve the objective of price stability has, indeed, generated much debate.

So, in order to expose the interrelation between real GDP and inflation in RA economy we offer the following formula:

\[ GDP_r = y_0 + y_1 INF + \varepsilon_t \]  \hspace{1cm} (1)

Where:
\- GDP\(_r\) - real GDP (factor),
\- INF - inflation (factor),
\- y\(_0\), y\(_1\) - flexible factors of independent variables,
\- \varepsilon_t - value of random error

In order to calculate the annual official statistical data of 2000-2017 real GDP and inflation were considered.

There are 17 statistical columns in the econometric model (1). Which means that the results are close to reality. It was estimated by the method of the least squares via "Eviews 9" computer program and corresponding regression and correlation analysis were carried out. We should mention that before estimating the model it is necessary to smoothen the dates so in order to avoid getting fake multifactor linear regression.
Table 1. The correlation values between selected factors*

<table>
<thead>
<tr>
<th></th>
<th>GDP</th>
<th></th>
<th>Inflation</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Real GDP</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Inflation</td>
<td>-0.539111</td>
<td>1</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

* Calculated by the author.

A correlation analysis has been done in the article according to which the degree of precision of chosen factor and inflation has been revealed. Moreover we have a significant negative connection (0.53) between real GDP and inflation: (Table 1).

What we have as a result of the regression model assessment is given in table 2, where $y_0, y_1$ are the factors of independent variables, where $t$ statistics and Prob. are the statistical features. And in order to perceive the qualitative features the values of $R^2$ and adjusted $R^2$ are given.

Table 2. Estimated Output of Real GDP and Inflation *

<table>
<thead>
<tr>
<th>Factor</th>
<th>$t$-statistics</th>
<th>Prob.</th>
<th>$R^2$</th>
<th>Adjusted $R^2$</th>
</tr>
</thead>
<tbody>
<tr>
<td>0.081598</td>
<td>5.106937</td>
<td>0.0001</td>
<td>0.890641</td>
<td>0.876306</td>
</tr>
<tr>
<td>-0.212567</td>
<td>-2.560383</td>
<td>0.0210</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Calculated by the author.

We can conclude from the results of table 2, that there is a significant interconnection between real GDP and inflation, because the factor of determination is equal to 0.89, i. e. about 89% of dependent variable is explained by the regression and the rest 11% by random errors. The adjusted coefficient of determination is equal to 0.87, which is 87% showing what effect the adjusted coefficient of determination has had on determination. Since the adjusted coefficient of determination in our estimated model is close to the coefficient of determination that means that we have qualified regression analysis.

As a result the values of equation of linear regression are reflected in the following formula:

$$GDP_r = 0.081598 - 0.212567INF + \epsilon_t$$  \hspace{1cm} (2)

According to that, as a result of applying econometric model and mathematical tools, it was grounded, that 1 percentage point change in inflation cause 0.21 percentage point reduction of GDP. Consequently, the later reduction of inflation will lead to the diminution of real GDP.

We should mention that the inflation targeting has some advantages especially in time of mid-term monetary policy implementation. For instance, the deference between exchange rate and inflation targeting gives the Central bank an opportunity to concentrate on the problems emerged in domestic market and to rapidly react to economic shocks when realizing monetary policy.

In contrast to the aims of monetary policy the choice of inflation targeting regime has sustainability in comparison with money and exchange rate targeting regime. The benefit of the inflation targeting is its availability to all the members of the society which is the result of the transparency of the regime.

It is worth to mention, that the implementation of inflation targeting regime is carried out through the following phases:
1. The choice of inventory
2. Predictable inflation
3. Real inflation

Fig. 1. The mechanism of inflation targeting regime

As a conclusion, in the article was approved, that one of the reasons why an explicit inflation targeting regime is so popular today was that it seems to lack some of the drawbacks of alternative
monetary policy regimes. For many years, the relationship between economic growth and inflation has been one of the most widely researched topics in macroeconomics.

REFERENCES