

THE CORRELATION BETWEEN THE INCREASE RATE OF GDP AND THE INFLATION RATE

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Abstract: The paper is based on base macroeconomic indicators analyze, registered in Romania after 1990, the main attention being focused on the correlation between GDP rate and inflation rate. GDP had different evolutions, in conditions of a high rate of inflation (excepting the period 2000-2004). In the paper analyze, it is shown the fact that the chaotic evolution of the main indicators of Romania in the period after 1990 is explained by the inconsequence and incoherency of the macroeconomic policy (till the end of 2000), due to the absence of the long term macro-strategies.

Keywords: correlations, economic growth, GDP, inflation rate, macroeconomic equilibrium

The transition process of Romania, begun after the year 1989 aimed at accomplishing two major objectives, on which depended directly the increase potential of the life standard:

- first of all, to build the system of the market economy, which could continuously generate stimulants for innovation, taking chances in business, the raise of productivity and competitiveness? This system should have contained the legislative frame, the institutions, but also the capacity to assure the application of the new regulations regarding the private property, the free initiative and the new role of the state in economy and social life;

- secondly, to reorganize the old state enterprises so that they become competitive, at the same time with the encouragement of the private initiative and of the foreign investors.

Theodor Stolojan considered that the processes of transition of the Romanian economy were “strongly covered in myth”, this fact causing the turn of attention from the real causes of the low life standard of Romanians²⁷.

A first example is the evolution of the inflation rate in our country. The high inflation, produced after the year 1990 was due greatly to the raise of the monetary mass, in this case the explanation lies in the lowering of the production, the apparition of the financial blockage, the lack of trust in the national currency etc. (we speak about the years 1991, 1992, 1993, 1997, 1998, 1999, 2000).

The representatives of the Government and of the National Bank offered various explanations of the high rate of inflation (the liberalization of prices – necessary

²⁷ the author quoted, “Taking the Romanian transition out of myth”, scientific communication presented in the volume of the International Symposium of Economic Sciences Works, SIMPEC 2002, Brasov, volume I, page 1

though at the beginning of transition, the assurance of the competitiveness of the Romanian products at exportation, to necessity to cover certain deficits on the account of the monetary creation, etc.) but still, no argument was too credible, the only real explanation being the laxity of the monetary and fiscal politic.

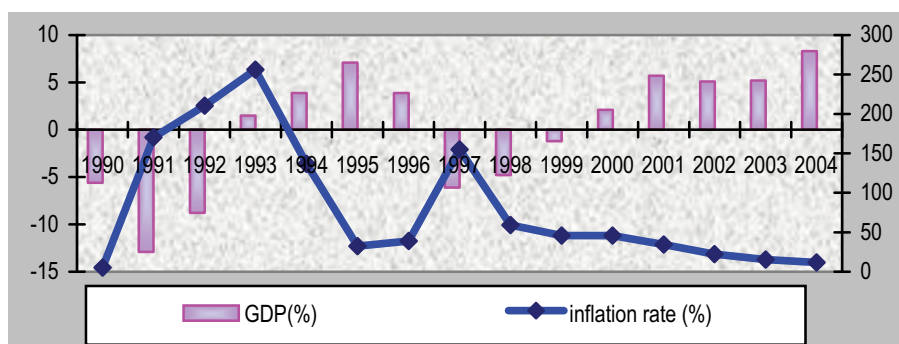
Moreover, the tries to move the attention to the real sector that “does not reorganize fast and well enough” were nothing else but an attempt to justify the lack of consistency in leading the monetary and fiscal politic. We state this since the reorganization of the real sector should be a natural consequence of the manifestation of the monetary politic which establishes the access conditions of companies to the financial resources from the bank system.

Another illusion, provoked more or less willingly (illusion based on the confirmed reality in the developed states, according to which, in order to assure a high life standard, the economic raise is necessary), was the raise of the life standard of the population at the same time with the sustained economic raise.

In the real life however, paradoxically, the economic raise in Romania takes place in conditions that maintain or even emphasize the poverty phenomenon of the population, like: corruption, the tendency to generalize the fiscal evasion, the twisted allocation of the value within the Romanian economy, between the different economic sectors that participate in the realization of the economic circuits (for instance, it is at least debatable the fact that the banking sector and that of insurance have the highest wages from economy, ant the sectors that mostly contribute to the exportation of Romania – textile, confections, furniture, have the smallest retributions).

The analysis of the macro-economic indicators of Romania show us a raise of the *rough internal product* from one year to another, at current prices, this raise however was due until 2000 to a massive depreciation of the national currency. This way, in the period 1993 -2004, GDP evaluated in an oscillating manner, in the conditions of the constant conservation of the inflation rate at high levels (except for the interval 2000-2004), the industrial production continuously diminished, and the commercial balance registered deficits every year, a natural consequence of the diminishing of production.

It is significant in this respect the visualization of the evolution curves of GDP in comparison with the inflation rate (figure no. 1).



Source: NBR, Annual Report, 2004

Figure no. 1. GDP and inflation evolution during the period 1990-2004

Analyzing the chart figure presented above, it can be noticed that the periods in which a negative economic raise was registered (1990-1993) correspond to the periods

of inflation increase, which is the most sensitive indicator of the equilibrium state, and the other way around, the reviving of GDP determined a slight revival of the economy, characterized by the reduction of the inflation rate (1995-1996 and 2000-2004). Unfortunately however, the trend of these indicators failed to maintain itself in the year 1997 too, returning to the unfavorable evolutions of the previous years. Moreover, the period 1998-1999 was characterized by an obvious contradiction of the two indicators: the reduction of GDP, at the same time with the reduction of the inflation rate (effect of a restrictive monetary politic). The re-establishment in a certain manner of the macro-economic balance was accomplished only after the year 2000.

The rough internal product is a macro economic indicator which is calculated both in current prices, as well as in comparative prices, according to which we can talk about a nominal and real evaluation.

The real evaluation supposes the recalculation in comparative prices (of the basic period) of GDP from the current period, with the help of the deflator of the rough internal product (D). his is expressed by the relation:

$$GDP_1^{comp} = \frac{GDP_1^{crt}}{D} \quad (1)$$

The analysis we aim to accomplish develops during the period 2000-2005 and has as a purpose to distinguish of a comparison between the nominal evolution of the rough internal product and the real one. During the mentioned period, data regarding GDP and the deflator are described in table no. 1.

Table no. 1. GDP evolution and GDP deflator in the period 2000-2004

Year \ Indicators	2000	2001	2002	2003	2004
GDP -mld. RON-	80,3773	116,7687	151,7687	197,5648	246,3716
Deflator	1,443	1,374	1,234	1,194	1,158

Source: Anuarul Statistic al Romaniei, 2005

Analyzing the data in table no. 1, it is found out that during the period 2000-2004 a raise of GDP was registered, raise that in absolute values represents 165,9943 billion RON, corresponding to a raise index of 3,065.

If we report to the previous period, during the period 2000-2004 in table no. 2 are presented the modifications both in absolute and relative values.

Analyzing the nominal evolution of the indicators (by reporting to the previous period), we notice an economic raise exaggeratedly big, if not impossible, from one period to another. For instance in 2001 against 2000 the raise rate was of 45,27% , fact that in absolute measure represents a raise of 36,3914 billion RON. In 2002 we have a raise of 29,72 % , in 2003 of 30,42% and in 2004 of 24,70%, fact that leads to the conclusion that the reporting to the basic period (in our case the reference year being 2000) will has as a result the obtaining of certain results that cannot characterize in a real and correct manner the state of an economy.

Table no. 2. Relative and absolute modifications of GDP

Year	2000	2001	2002	2003	2004
Relative modifications GDP	80,3773	116,7687	151,7687	197,5648	246,3716
$I_{n/n-1}$	X	1,4527	1,2972	1,3042	1,2470
$D_{n/n-1}$ (billion RON)	X	36,3914	34,7063	46,0898	48,8068

Source: own calculations on the base of data from Anuarul statistic al României, 2005

From this point of view, it is necessary to recalculate the GDP values in comparable prices (the prices of the basic period = year 2000), by using the GDP deflator. Practically we propose ourselves to determine the real economic raise of economy, by eliminating the most significant part of inflation.

This way, we will obtain GDP expressed in comparable prices for the 5 years of analysis (table no. 3).

Table no. 3. GDP evolution expressed in comparable prices

Year	2000	2001	2002	2003	2004
GDP compared -mld. RON-	80,3773	84,9845	89,33858	97,58956	105,0935

Source: own calculations on the base of data from Anuarul Statistic al României, 2005

The real evolution expressed relatively and absolutely by the recalculation of GDP in comparable prices (the year of reference being 2000) registers the following values:

Table no. 4. Real evolution expressed in relative and absolute values-GDP

Year	2000	2001	2002	2003	2004
Indicators GDP	80,3773	84,9845	89,33858	97,58956	105,0935
$I_{n/n-1}$	-	1,05732	1,051234	1,092356	1,076893
$R_{n/n-1}$	-	5,732	5,1234	9,2356	7,6893
$D_{n/n-1}$ (billion RON)	-	4,6071	4,35408	8,2509	7,5039

Source: own calculations on the base of data from Anuarul statistic al României, 2005

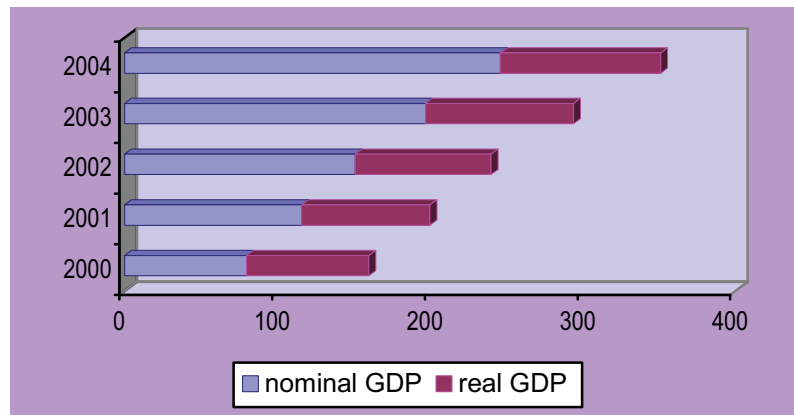


Figure no. 2. Real and nominal GDP during the period 2000-2004

During the analyzed period, we notice a maximum raise level of 9,2356% realized at the level of the year 2003, against the previous one, fact that corresponds to a value of 8,2509 billion RON (for the rest the increase rate was situated around the number of 5 percents, except for the last year, when it registered a more accentuated value of 7,68%). During the period 2000-2004 an average increase rate was registered of 6,93% $\left(\bar{R} = \left(\sqrt[4]{I_{n/1}} - 1\right) \cdot 100\right)$ fact that in absolute values corresponds to an average

increase of 6,17905 billion RON $\left(\bar{\Delta} = \frac{\Delta_{n/1}}{n-1}\right)$

In conclusion, the evolution rather chaotic of the main indicators of Romania during the period after 1990, seen as synthetic results of the state of economy, can be explained, first of all, by the inconsequentially and the incoherence of the monetary and fiscal politics, lead by the Romanian authorities (till the end of the year 2000), fact due to the lack of a horizon materialized in strategies of macro-development on long term. The economic management was reactive and not programmatic, in the sense that, generally, it sought short term solutions (with a powerful effect on the poll) which should attenuate certain conflict states from the area of the economic or from the area of the social²⁸.

As it was shown, the year 2000 was the year of the “re-establishment” of the balances at macro-economic level, toward the end of the analyzed interval being noticed a significant improvement of the macro-economic indicators.

According to the data furnished by the National Bank of Romania²⁹, the year 2004 registered, on the whole, positive evolutions of the main macro-economic indicators.

The economic raise registered the best performance from the transition period, the GDP dynamic (8,3 per cent) being superior with 3,1 percentage points to the result obtained in the year 2003 and with 2,8 percentage points to the initial objective.

²⁸ Constantin Rotaru, Romanian Banking System and the European Integration, Expert Publishing House, Bucharest, 2000, page 74

²⁹ Annual report, 2005

Structurally, the GDP raise continued to be influenced by the rapid increase of consume and investments, while the net exportation brought a negative contribution. The high increase rate is also due to an exceptional agricultural year. However, there are certain clues that, at least starting from the second half of the year 2004, GDP is effectively situated above the potential level, certain risks of over heating of the economy being able to appear, with the amplification of the inflationist pressures.

The inflation rate lowered to 9,3 per cent, with 8,4 percentage points below the level of the previous year, in spite of the unfavorable internal and external shocks. We should state that it is for the first time after 1990 when Romania has an inflation rate expressed by a single number, offering credibility to the duration perspective of the progressive nominal convergence against the countries members of the European Union.

The fiscal adjustment process continued, the deficit of the consolidated general budget, being reduced to 1,1 per cent of GDP (2,3 per cent in 2003).

The official currency reserves raised from 6,4 billion euro to 10,8 billion euro, assuring the maintenance of the cover of future importations of goods and services at a comfortable level, situated in the area of the accepted international optimum (4-6 months); the international reserves managed by BNR (including gold) covered at the end of the year 5,2 months of importations. The rate of unemployment also had a favorable evolution, from 7,4 per cent in December 2003 to 6,2 per cent in December 2004. These results consolidated the progress obtained starting with the year 2000 on the line of the macro-economic stability and contributed to the obtainment by Romania of the status of functional market economy, granted by the European Commission.

In this context, the month of December 2004 meant a reference moment in the integration process – finalization of adhesion negotiations to the European Union – fact that laid the premises of the signing, in April 2005, of the Adhesion Treaty.

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