

# THE CORRELATION BETWEEN INFLATION AND ECONOMIC GROWTH IN ROMANIA

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## Abstract

*The purpose of this paper is to highlight the existence of interdependencies between the phenomena of inflation and that of the growth process, but also to analyze the development of both phenomena in Romania. Preferences on issues of relationship with inflation and economic growth is necessary and a priority, both because its analysis reveals huge potential for development and for fact that it promotes the transition process in Romania which was the route to short and efficient functioning of competitive market economy. Reality shows that the stimulating effect of inflation on economic growth does not increase with its amplification but is restricted to certain limits. By a methodological point of view, the research was conducted as ideological and quantitative approach, using appropriate techniques of analysis and interpretation. The research results show that the relationship inflation – economic growth can be seen in two ways, one that reflects the positive aspect, the other that highlights the negative aspect of the relationship between the two. Following the investigations, we conclude that in Romania controlling inflationary phenomenon since 2000 has led to positive rates of GDP growth.*

**Key words:** inflation, economic growth, inflation target

## INTRODUCTION

Inflation, one of the most intricate and controversial issues of the contemporary economy has been, in some countries and during certain periods, the main threat of the economic development and progress. Still, under different circumstances, the inflationary economic growth policy may become a useful tool for the decision makers on the macroeconomic level, but at the same time a risk factor that can blow up a transition economy, of the kind the Romanian one used to be. The propensity towards the issue of inflation and its relation with the economic growth is not only necessary but also a priority, in our opinion, both because its analysis reveals the huge development potential, and for the fact that the transition process favours the shortest and most efficient way of rendering functional a competitive market economy.

## MATERIAL AND METHOD

*The economic growth and the inflation influence in opposite directions a country's socio-economic development. The relation inflation- economic growth can be summarized in a few phrases that reflect on the one hand, the positive aspect and on the*

other hand, the negative aspect of the relation between the two.

The main *positive* consequences inflation has on production consist of:

- Under certain circumstances, inflation is an incentive for the economic growth and development.
- Inflation favours the debtors.
- "The growing" inflation imposes a forced savings mechanism."
- Inflation favours export (through the currency devaluation)
- Inflation favours, to a certain extent, the increase of the profits.
- Inflation brings about "ex ante restrictions in creating the needed money resources to expand production."

The reality reveals that, the stimulating effect inflation has over the economic growth does not increase together with its amplification, but it is restricted by certain limits, as:

- The development stage of the national economies
- The duration of the inflation
- The intensity of this phenomenon.
- The size of the negative consequences inflation has over the economic growth can be summarized in the following sentences:

- Inflation weakens the competitive capacity of the national companies.
- Inflation discourages and attenuates the private economic actors' propensity towards saving.
- Inflation may lead to the stagnation and even to the regress of the economic growth.
- Inflation affects the production areas.
- The investors are no longer encouraged to show interest for the production activities.
- There appear distortions that sustain themselves in the functioning of the productive system.

As it has been recorded in specialist literature [1], economists do not have a unitary opinion on the inflation-economic growth relation.

Certain contemporary economists, such as Hicks and Tobin, still deny the necessity of the inflation as a promoting factor of the economic growth. They start from the fact that the quantitative theory of the currency has not been confirmed by economic practice, since prices could not be regulated by means of the circulating cash. The price increase determined by the inflationary phenomena cannot be cancelled by measures of restricting the circulating cash amount, which means that the inflation can no longer be "sterilized" by monetary measures.

The supporters of the necessity of inflation for the sustention of the economic development (Rostow, Barro etc.) state that stimulating the demand by means of inflation has a favourable influence upon the increase of the output and that, parallel to the slow but systematic depreciation of the money, the salaries continue to increase and the employment degree does not diminish. Consequently, the increase of the cash and of the volume of the credits may favourably influence the evolution of the economic life.

The experience of the developed capitalist countries tends to outline more and more a short-term favourable effect of inflation (the economic growth), on condition that it is "balanced", confirming, as a rule, the theoretic reasoning. Obviously, the field of this reasoning does not include the disadvantages and the substantial losses that the citizens, whose incomes are not connected to the inflation rate, are submitted to, while their number is not at all to neglect.

Stanley Fisher, one of the most important contemporary analysts of the inflationary phenomenon has noticed the existence of a

positive relation (we mean the relation between the inflation and the economic growth) under low inflation rates, and of a negative relation under high inflation rates [5]. The estimates made by Fisher in 1993 highlighted the fact that a 10% increase in the inflation rate is associated with a 0.4% decrease of the GDP per capita, while Barro [2] stated that a 10% increase of the inflation determines a decrease of only 0.2-0.3% in the annual GDP growth rate per capita but, that "on the long run, these changes in the increase rates have dramatic effects upon the living standards. For example, a 0.3 – 0.4% diminishing of the increase rate, in the following years, leads to a decrease of the GDP with 6 up to 9 percent [2]".

What results is that there is a fundamental asymmetry with respect to the costs and benefits of inflation. While the benefits of inflation are temporary, the costs are cumulative [6]. The short and long-term costs of the inflation are much higher than the possible benefits it may have.

It results that the controlled, short-term inflation has a positive effect upon the economy, while on the medium and long-term the impact upon the economic growth is negative. In other words, for small values of the inflation, the relation is positive or it does not exist at all, while for high values of the inflation, the relation becomes negative. If this non-linear relationship would exist, then it should be possible to determine, as a rule, the inflexion point of the threshold where the operator of the relation between the two variables would change.

The existence of the threshold effects in the relation between inflation and economic growth is unanimously accepted. The threshold is about 2% for the industrialized countries and 11% for the developing ones. This gap between 2% and 11% is explained by the level of development of the structure of the respective economies. The idea that results refers to the fact the economic policies with immediate effect, which lead to short-term results in the field of production, do not necessarily uphold the healthy economic development. To become really beneficial, the economic growth must be sustainable. This sustainability cannot be accomplished in the case of high and recurrent fluctuations of the inflation rate.

This is why on the long run; the economic policy focuses on targeting the inflation rate.

**OUTCOMES AND DISCUSSIONS**

We have analysed the correlation between inflation and economic growth in Romania for two distinct periods:

1. the period 1990-2000
2. the period 2001-2009

1. Over the analysed period of time, inflation in Romania was oscillating, high, during the first period mainly as a consequence of:

- the effects of the delay in the essential restructuring of the economy

- the recurrent cessation of the stabilizing efforts
- the inadequate wage policy
- the expanded financial disorder
- the decrease of the domestic output of goods and services.

The deep causes that generated the price increases have remained practically the same during all this time, the only distinct elements being their manifestation means, the intensity variations and the associated situational elements.

The table no.2 presents the data that highlight the inflation rate, the variation of the GDP growth, the increase rhythm of the GDP, between 1990-2000.

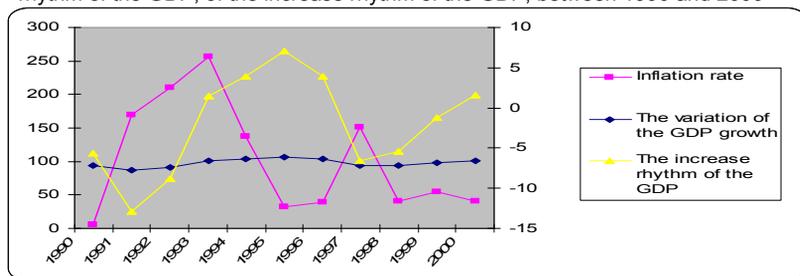
Table no. 2 The evolution of the inflation rate, of the variation in the increase of the GDP, the increase rhythm of the GDP, between 1990-2000

	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000
Inflation rate	5.1	170.2	210.4	256.1	136.7	32.3	38.8	151.4	40.6	54.8	40.7
The variation of the GDP growth on the previous year=100	94.4	87.1	91.2	101.5	103.9	107.1	103.9	93.4	94.6	98.8	101.6
The increase rhythm of the GDP	-5.6	-12.9	-8.8	1.5	3.9	7.1	3.9	-6.6	-5.4	-1.2	1.6

Source: www.bnr.ro

As one can notice from the following graph, too, the annual economic growth rhythm during the first analysed period has recorded even negative values, on the background of a high inflation.

Graph no. 1 The evolution of the inflation rate, of the variation in the increase of GDP, the increase rhythm of the GDP, of the increase rhythm of the GDP, between 1990 and 2000



Inflation was, between '90-2000, one of the main instability factors of the Romanian economic environment, both due o its level and to its volatility, the forecasting of its evolution and the coverage of the costs related to it being difficult to achieve. The persistent misbalances on the level of the offer and demand have turned the corrective inflation, preponderant in the first transition years towards the market economy, into structural inflation, possible to control only if

the monetary policy is sustained by the other macro-economic policies. The period between the last quarter of the year 1993 and December 1994 was characterized by making some decision whose aim was: to stop the dynamic of the inflationary forecasts, the remonetization of the economy, the achievement of transparency in the functioning of the currency market. The positive effects did not take long to appear: the distrust in the national currency was

stopped, which lead to remonetization that resulted into a transparent foreign currency market, which facilitated exports. The second important measure was the substantial devaluation of the official foreign currency rate, while the third aimed at thoroughly controlling the monetary fund by hindering the currency emission, which also engendered some fiscal measures that targeted a low budget deficit. In 1998, the GDP continued to decrease by 5.4%, inflation reached 40.6% in comparison to 1997, and the budget deficit was 3.3% of the GDP due to a severe public expense cut. The year 1999 had to face three major trials on the level of the economic policy [3]: the risk of ceasing external payments, the danger of a banking crisis (bad loans) and a possible financial crisis. However, the country's positioning in foreign default was avoided, this one being due to a fiscal adjustment and balance of payments. The year 2000 highlighted signs of slight revival of the economy, on the background of a severe depreciation of the euro, of drought and

floods, of some turbulence in the banking system, of the sock produced by the oil price, the inflation rate reached 40.7%.

2. The period 2001-2009 is characterized by a descendent slope of the inflation rate, reaching the lowest level, 4.84% in 2007, the year 2004 being the first inflation year with one figure after 1990, confirming the disinflationary trend of the last years. The year 2008 shows an inflation rate of 7.9%, 3.9% above the 4% target set by the Romanian National Bank. As far as the economic growth is concerned, we would like to highlight the fact that during the analysed period, the increase rhythms of the GDP have been positive, which is encouraging for the Romanian economy, this leading that in 2004, Romania recorded the highest economic growth in the last 20 years, 8.5%. The evolution of the three analysed indicators can also be seen in the following table. The evolution of the three analysed indicators can also be seen in the following table.

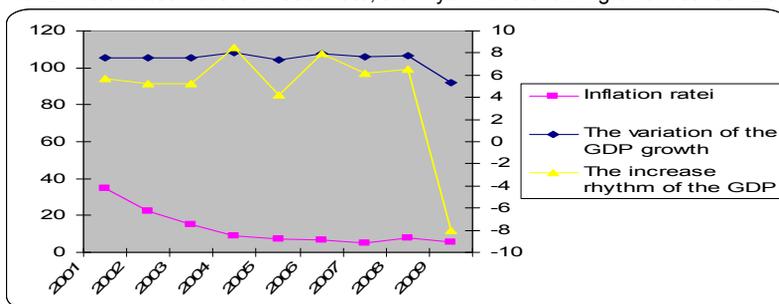
Table no. 3 The evolution of the inflation rate, the variation of the GDP growth, the GDP growth rhythm between 2001 and 2009

	2001	2002	2003	2004	2005	2006	2007	2008	2009
The rate of inflation	34.5	22.5	15.3	9	7.5	6.56	4.84	7.9	5.8
The variation of the GDP growth, previous year = 100	105.7	105.2	105.2	108.5	104.2	107.9	106.2	106.5	92
The rhythm of the GDP growth	5.7	5.2	5.2	8.5	4.2	7.9	6.2	6.5	-8

Source: INS, BNR, The European Commission– the spring forecasts, May 2009

Graphically we can notice more easily the inflation trend over the analysed period, but also the rhythm of the GDP growth.

Graph no. 2 The evolution of the inflation rate, the rhythm of the GDP growth between 2000-2009



What results from the analysis of the graph is encouraging, because along with the increase of the annual GDP rhythm, the yearly average rate of the inflation sets on a descending trend, so that by the end of the year 2006, inflation will equal approximately that of 1990. What results from graph no. 2 is that the GDP increased in 2007 by 6.2% in comparison to 2006, when the annual increase rate was 7.9 in comparison to that of 2005. In 2005, its real dynamics was reduced to less than half of the previous year's level. The evolution was generated by the diminishing of the increase speed of the domestic demand, by the presence of the supply socks, as well as by the deepening of the negative contribution brought by the net exports. Starting with 2006 we notice a fall of the increase rhythm of the gross domestic product, which reached a record level in 2009, -8%.

## CONCLUSIONS

The analysis of the above presented data reveals that during the first 10 years of transition, the real GDP recorded an overall decreasing tendency. It must be highlighted that the positive trends of the years 1992-1996 have not been able to recover the huge drops in the other years of the period under study, and this may be also explained by the existence of an inflationary phenomenon. As we can also notice from the graphs, the periods of strong inflation of the years 1990-1993 and 1997 have also contributed to the significant diminishing of the GDP. As a consequence, starting from the definition of the economic growth as a GDP growth phenomenon on the whole and per capita, on a medium-long term, as a prevailing tendency, we can appreciate that it did not take place from 1990 to 2000. *The concluding idea according to which after 1989 until 2000 we did not have to do with a proper economic growth, but, with an "increase that impoverishes"* at the most, is legitimate.

From the perspective of the second decade analyzed in this paper, Romania set

on a normal trend, which brought, together with the decrease of the inflation and its maintenance to acceptable figures, to a positive economic growth. The exception is given by the year 2009, which brought to Romania the globally spread crisis, and which due to the globalization phenomenon could not be avoided. Thus, the increase of the inflation rate in 2008 to 7.9% foresaw a rhythm of the GDP growth nobody was expecting: -8%, a level reached only in 1992. *From the perspective of the economic policy we can conclude that BNR tried and managed to lead a viable inflation targeting policy, but that this one has not always been sustained by measures in the real economy that might consolidate the obtained advantages, which was proved in 2009.*

We believe that there is not a unique recipe, universally valid for the diminishing (its eradication being out of question) of the inflationary stress. But there are ways of monitoring, of analyses and forecasting of the different processes and economic phenomena which might have negative repercussions over the sustainable development (the long-term development) of any world economy. Which is more, we must keep under direct observation any manifestation on the international financial markets, so that no major disturbance occur in the fragile domestic economic-financial system, with domino-like impact on the existence and activity of all economic agents.

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