THE IMPACT OF INFLATION EXPECTATIONS ON TRANSYLVANIAN SMES’ ACTIVITY

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ABSTRACT. Due to its negative effects on economy, across the time, the inflation process always represented a problem of actuality, in the economic debates. Among all of the inflation’s social costs, the effects on the companies’ activity will represent the main aspect of our research: the rise of production costs and the reduction of real incomes. The economic experience showed us that the inflation level depends in a great measure on the economic agents’ expectations about the evolution of inflation in the future. Because inflation’s evolution influences their activity’s results, the economic agents pay more attention on the inflation’s evolution and try to anticipate its future evolution in order to avoid possible losses. Consequently, in this paper we will emphasize the inflation expectation influence on the Transylvanian small and medium sized companies’ activity. We will study the impact of the inflation expectations on the wages paid to the employees, on the production costs and on the products’ prices.

The information necessary for this research will be collected using a questionnaire. The survey will be applied on a group of companies, randomly selected. In order to draw up our conclusions, the gathered data will be processed using statistical methods and procedures.

KEYWORDS: inflation, inflation expectations, wage, cost, price

JEL CLASSIFICATION: E31, E37

Introduction

The expectations represent “an opinion about the future value of an economic variable” (Y. Crozet, 1998). Due to the economic uncertainties that influence economic agents’ wealth, the firms can no longer remain indifferent to the evolution of the economic variables. In order to obtain economic advantages, the economic protagonists try to anticipate the changes that will take place in the economic environment, forming in that way their expectations.

The inflation expectations represent a measure of the population and firm’s credibility on the competence of monetary policy creators to fight against inflation. As a consequence, the inflation expectations represent a testing instrument used in the monetary policy implementation. European Central Banks study the evolution of inflation expectations in order to verify the validity of its own forecasts and to evaluate the credibility of its monetary policy. The measurement of the inflation expectations can be done using questionnaires. In spite of the fact that this method has the disadvantage that the results are more related to the previous experiences of the

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enterprises than to their actual economic behavior, the results obtained by this method have always had a high level of relevance.

The authors will study the impact of inflation expectations on the activity of the Transylvanian small and medium sized companies. The paper has two major parts. In the first part, we will describe the method used in our study, while, in the second one, we will present the result obtained from the questionnaire implementation. Finally we will present our conclusions on the effects of inflation expectations on employee’s wages, average cost and merchandises’ prices.

Material and method

Because there are only few papers written on the Romanian inflation expectations, the authors considered suitable to conduct a questionnaire based research in order to gather the necessary information for this study.

The papers that described the inflation expectations’ formation and evolution are based on researches with questionnaires implemented quarterly. Our study is only in an incipient phase, being applied only one time. As a consequence, we consider that the conclusions issued from this paper are valid only on a short term. In the data analyses process we will use statistical descriptive methods. The firms that are composing the sample were randomly selected. In spite of the fact that the sample might not be statistically representative, we choose to select it randomly for two reasons. Firstly, we did not use a representative sample because it was impossible to apply the questionnaire proportionally on all the firms’ fields of activity. Secondly, the studies on the same subjects, realized on other countries (in Poland by A. Czogala, A. Kot and A. Sawicka) used also a randomly selected sample and the results obtained during the years were considered to be a very good indicator of the inflation tendencies in Poland.

The questionnaire was applied on 69 SMEs from Transylvania, from which 36.23% were micro-enterprises, 36.23% were small enterprises and 27.54% were medium enterprises. On the graph 1 we have the firm’s distribution upon their field of activity.

The questionnaire contains questions by which the authors want to identify the impact of the firms’ inflation expectations on the wages and average costs. Correlating their evolution with the evolution of the labor productivity, the authors will identify the impact of inflation expectations on the products’ prices.
2. Results obtained and discussions
2.1. The expectations on wage and labor productivity evolution

Firstly, on the basis of the data gathered from the questionnaire, we will study the impact of the inflation expectations on the wages’ evolution.

The wage represents the amount of money that the employees receive as a result of their activity. From the firms’ point of view, the wages represent a cost element, its rising determining an increase in the production costs. If the revenues remain unchanged, the augment of the cost will lead to a profit reduction. The amount of the wage must be proportional with the labor productivity. That means that the wage rises must be covered by the growth of the labor productivity. The wage increases obtained as a result of labor productivity growth are healthy for the economy, while the situations when the increase of wages is not sustained by an appropriate increase in the labor productivity are generating inflationary pressures.

On the graph 2 we have the firms’ responses to the question “do you expect, in the next 12 months, in your company, the wages to rise / remain at the same level / fall approximately with …%”. The wage downward rigidity is much accentuated, because in the following 12 months the firms do not expect the salaries to fall.
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Graph 2 – Firms’ expectations about the evolution of wages and labor productivity in the next 12 months (as a tendency)

We consider that the equilibrium registered between the rise of salaries and the increase in the labor productivity will have a positive influence on the Transylvanian economy. As in the case of wages, most of the enterprises expect the labor productivity to grow, a few expect the labor productivity to remain at the same level, while no one expects to decrease. Studying the data from the values’ evolution point of view, we observe that the most of the firms expect increases in the wage and labor productivity with a value between 0 and 20%.

Source: based on questionnaire

Graph 3 – Firm’s expectations about the evolution of wage and labor productivity in the next 12 months (as a percentage)

Source: based on questionnaire

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More than that, analyzing the graph 4, we observe that, no matter what type of firm we take in consideration, the expected average values for the labor productivity are greater than the expected average values for the wages. Owing to this fact, we can affirm that the wages evolution will be realized on the basis of labor productivity growth.

![Graph 4](image)

Source: based on questionnaire

**Graph 4** - Firms’ expectations about the evolution of wages and labor productivity in the next 12 months (average values)

If we look on the 2007 spring forecast of the National Forecast Commission, in 2008 as compared to 2007, we see that a 10.6% (NFC, 2007) rise in the level of salaries is expected, value that is fairly close to the values obtained by the authors for any type of enterprise. We consider that the values obtained from the questionnaires are slightly greater than the value announced by the NFC because this value is representative for the whole country, while our value refers only to Transylvania, region that, after Bucharest, has the most developed economy and it is normal that the salaries register greater levels of increase than in other areas.

According to the NBR inflation report from May 2007 (NBR, 2007), the inflation value in Romania at the end of the second trimester of 2008 as compared to second trimester of 2007, will be 4.1%. Due to the fact that this value is much lower then the expected increase of the wages’ average value, we consider that, in the next 12 months, the labor productivity will be the main factor that will influence the growth of salaries, inflation having a medium to low influence on the wages’ evolution.
The authors opinion is sustained by the answers received from the firms at the question “do you consider that, among the wage increases that will be realized in the next 12 months in your enterprise, the wage indexation with the inflation level will influence the wage increases in a … proportion”, presented in the graph 5. Only 4% from the firms consider that, in the next 12 months, inflation will have a high influence on the salaries evolution, while none of the firms affirm that the influence will be very high. However, the fact that 55% of the firms consider that, in the following 12 months, the influence of inflation on the wages will be a medium one, determine the authors to affirm that the inflation still represents a factor with a significant influence in wages’ evolution and the firms should confer it a proper attention.

2.2. The expectations on the average cost evolution

The inflation affects not only the wages of the employees, but also all the cost elements of the firm. As a consequence, the authors considered useful to study the firms’ expectations about their average cost evolution and about the inflation influence on average cost in the next 12 months. We choose to study the average cost and not the total cost because under the inflation influence (when the level of production remains stable) it is certain that the total cost will grow. Therefore, the total cost analysis presents no interest for the authors, they choosing the average cost study. The last one, under the influence of the expected labor productivity (as we saw in 2.1) may fluctuate in any direction.

The firms’ answers to the question “do you expect, in the next 12 months, in your company, the average cost to rise / remain stable / fall with approximately …%” are represented in the graphs 6 and 7.
Graph 6 – The firms’ expectations about the average cost evolution in the next 12 months (as a tendency)

Looking on the graph 6, we observe that 11.59% of the firms expect in the following 12 months their average cost to fall (with maximum 15% - look on the graph 7) without expecting a reduction in the employees’ wages. In our opinion, this situation may be the result of the expected labor productivity increases. In addition, we subscribe to the idea that the RON appreciation as reported to the foreign currencies determines a reduction in the production costs for the firms that purchase the raw materials from abroad. Although in our study we did not analyzed the influence of the RON appreciation on the firms’ average cost, we consider that this factor could represent one of the causes of average cost reduction.

A considerable part of the firms (34.78%) expect that in the following 12 months their average cost to remain stable, although all of them expect to register increases in the labor productivity. We consider this situation as being the result of a suitable increase in the cost’s components (19 from 24 firms which are in this situation are expecting their wages to increase).

More than a half of the interviewed firms (53.62%) expect an increase in the average cost for the next 12 months. 34 from 37 firms, which are in this situation, expect that wages and labor productivity to grow, also. In section 2.1 we saw that the firms expect the labor productivity to rise more rapidly than wages, so, the only way the average cost could rise would be the situation when the other cost elements increase. We noticed that most of the firms that are expecting an increase in their average cost are estimating a value less than or equal to 10%.
Graph 7 – The firms’ expectations about the average cost evolution in the next 12 months (as a percentage)

Starting from the received answers, we calculated the average value for the average cost. The results are represented in the graph 8:

Graph 8 – Firm’s expectations about the average cost and price in the next 12 months (average values)

We analyzed the answers using statistical descriptive methods and we observed that the expected values for the average cost are greater or equal with -15% and lower or equal with 22%, while the average value is 3.97%. In addition,
with a confidence level of 95%, we can affirm that the average value obtained for the Transylvanian SMEs' average cost will be situated between 2.08% and 5.85%. These values are very close to the inflation target announced by NBR for the next 12 months, 4.1%. The expected average growth of the average cost being lower than the forecasted inflation target, the authors consider that the expected inflation will influence the average cost evolution with a medium to low intensity.

The author conclusion is sustained by the answers received to the question: “do you consider that, in the next 12 months, in your company, the inflation will influence the average cost evolution in a … proportion”. As we can see in the graph 9, only 8.70% of the interviewed firms consider that inflation will have a high or very high influence on the average cost evolution, while 11.59% of the firms consider that inflation will have a very low influence. The largest part of the firms considers that the inflation will influence the average cost with medium (40.58%) to low (39.13%) intensity.

2.3. The prices formation and evolution

The inflation represents the process of prices’ persistent growth, along with the decrease in the purchasing power of the money. So, when we are expecting a certain value for the inflation in the following 12 months, it means that we are expecting the products’ price to rise with that value. As we saw in the previous sections, the expected level of inflation will determine the growth of the inputs’ price: wages for the labor and acquisition prices for the raw materials. When the average income remains stable, the increase of the average cost will reduce the average profit. In most of the cases, the firms are not willing to accept the decrease of their profit, and in order to cover the rise of the costs they will update the price.
In Romania, the indexation process is still facing a harmful characteristic: the firms are updating their prices with a greater value than the inflation. We consider this situation has its roots in two causes: firstly, the firms have a low level of confidence in the NBR forecasts and secondly, the firms are trying to obtain greater profits on short term. Due to the Romanian economy experience about inflation process until 2002, NBR had not succeeded until now to gain the total confidence of economic agents, reason why they are continuing to expect slightly higher levels for the inflation than the announced target. Beside the study of inflation influence on the level of prices, the authors will examine the persistence and the intensity of this behavior.

In order to highlight the influence of the expected inflation on the goods’ prices, we are starting from the answers received to the following question: “do you expect that, in the next 12 months, in your company, the prices to rise / remain stable / fall with approximately …%”. We have the distribution of the answers in the graph 10:

![Graph 10](image_url)

**Graph 10** – The firms’ expectations about the price evolution in the next 12 months (as a tendency)

Looking on the graphs 10 and 11, we observe that 7.25% (5 firms) are expecting their level of price to fall. This is possible because 4 of these 5 firms are expecting their average cost to fall, while the fifth firm is expecting its average cost to remain stable in the next 12 months.
When the average cost falls, the firm obtains an increase of the profit with every product sold. In our case, those 5 firms are expecting to reduce their price too, remaining at the same level of the profit. We consider that the decision could be the result of a higher concurrence on firms’ markets or the desire to gain new clients.

A half of the firms that are expecting their prices to remain stable (7 firms) in the following 12 months justify their decision by establishing their average cost at the same level as now. We have only one firm that expects its average cost to fall, but it is not reducing its price. The other 6 firms that are expecting their price to remain at the same level in the following 12 months are expecting their average costs to increase. Studying in what types of activity are involved those firms, we consider that the level of concurrence from their markets represents the source of the price stability (commerce and construction).

The greatest part of the firms (72.46%) expects their prices to grow in the next 12 months. According to the answers received, the main cause for the price rises is represented by the increase of the average cost. There are a few firms that are expecting in the following 12 months their prices to grow even if their average cost is expected to remain stable or to fall.

Using the statistical descriptive methods, we observed that the price values obtained from the questionnaires are spread between -15% and 30%, with an average value of 6.52%. The standard deviation recording the value 8.65, we may consider that the gathered data are quite dispersed along the variation interval. In spite of that, we can affirm with a 95% level of confidence that the average value of the Transylvanian SMEs’ prices will record a value between 4.44% and 8.59%. As
we can see on the graph 8, the expected average prices are slightly greater than the inflation target announced (4.1%) for the following 12 months, no matter what category of firm we take into account. In consequence, the authors consider that the inflation target announced by NBR does not represent a main cause for the price augmentation in the economy of Transylvania.

We can identify this aspect looking on the graph 12, too. The interviewed firms expect in the following 12 months the inflation influence on the price evolution to have a medium to low strength. Even if the majority of the firms share this opinion, 13.05% of firms believe that the inflation will influence their goods prices with a high and a very high intensity, while 14.49% are expecting this influence to be very low.

We saw on graph 8 that the expected average value for the price increase in the next 12 months is higher than the inflation target announced by NBR. The authors consider that the firms’ lack of confidence in NBR capacity to achieve its goals represents one of the reasons for this situation. The main cause of the confidence deficiency remains the belief that other persons and institutions influence the NBR in its decisions. We considered adequate to verify the actuality of this conviction, demanding the firms to estimate the NBR independence degree as reported to the president, government, parliament and political parties. We quantified the received answers using a scale form 1 to 5 (where 1 represents a very low degree of independence, while 5 represents a very high degree of independence). In the graph 13 we can see the calculated independence degrees.
We observe that the firms consider the NBR independence degree as being slightly over medium as reported to the main institutions of the state. That means we can state the firms’ level of confidence in the NBR capacity to achieve its targets is a medium one. We believe that the situation emphasize the economic agents conviction about the effects of political interference in the economy. If NBR wants that its monetary policy to reach its goals, it has to take some actions in order to increase the economic agents’ level of confidence in its capability and in its willingness.

The graph 13 presents the way in which the enterprises realize the indexation process. We observe that only 47.06% of the firms use in their profit, incomes or costs forecast a value equal with the inflation target announced by NBR. We may consider that these companies have a higher level of confidence in NBR capacity to properly manage the monetary policy and to achieve its announced targets. However 44.12% of the firms use in their forecasts a higher value than the announced inflation target: 17.65% a value greater than the inflation target with at most 1% and 26.47% a value greater than the inflation target with at
least 1%. It is obvious that these enterprises have a low confidence in the NBR capacity to manage the monetary policy.

Once that only 8.82% of the firms use in the indexation process a value lower than the inflation target, 47.06% of the firms a value equal with the inflation target and 44.12% a value higher than the inflation target, it is obvious that the expected value for the price increase in the following 12 months will record a value higher than the NBR inflation target. In conclusion, the authors consider that a low level of confidence in NBR capacity to achieve its goals determine the firms to form inflation expectations higher than the inflation target. On the long term, NBR must control the evolution of firms’ inflation expectations because these could be the source of higher level of inflation in our economy.

**Conclusions**

As a result of very high inflation rates, 10 years ago the wages, production costs or goods prices were rising with an accelerate rhythm. But, in the last 5 years we observe an accentuated reduction of the inflation influence on the evolution of these variables. In this study we tried to identify which is the expected strength of inflation influence on the Transylvanian SMEs’ activity, from the second trimester of 2007 until the second trimester of 2008.

The wage increase for the next 12 months is expected to be influenced, in a higher proportion, by the labor productivity and only in a lower proportion by the expected level of inflation. This situation will sustain the economic development of the Transylvania and the increase of the purchasing power of population.

The average cost is expected to rise with a lower value than the inflation, reason why we consider that the inflation influences it with a medium to low
intensity. We believe that there are others factors, with a substantial influence, which attenuate the rise of the costs (the exchange rate or the labor productivity).

In contrast with the expected evolution of the costs, in the evolution of the prices is expected a more consistent growth than the projected value for inflation. The authors consider that the main reason is represented by the reduced level of confidence in the NBR capacity to achieve the inflation target. Due to the belief that the activity and the decisions of NBR are affected by the external influences the firms granted NBR only with a medium level of confidence. In conclusion, we may affirm that the firms establish the price increases under the influence of their inflation expectations at a slightly higher level than the announced inflation target.

REFERENCES