ASPECTS OF THE MAIN EFFECTS OF INFLATION

Prof. Radu Titus MARINESCU PhD (*radu_titus_marinescu@yahoo.com*)
„Artifex"University of Bucharest
Doina BUREA PhD Student *(doina.burea@yahoo.com)*
Bucharest University of Economic Studies
Tudor SAMSON Ph.D Student *(tudorsamson@gmail.com)*
Bucharest University of Economic Studies

Abstract

Inflation is present in any economy, so it can not be fully controlled but only influenced. When inflation rises, an imbalance is created because prices are rising and the purchasing power of the national currency decreases. Inflation affects different people differently. This is because of the drop in the value of money. When the price increases or decreases the value of money, some groups of the company win, and others lose.

Keywords: *production, inflation, price fluctuation, goods and services, fixed / flexible income*

Clasificarea JEL: *E31, E64*

Introduction

In general, there are two economic groups in each society, the fixed income group and the flexible income group. People who are in the first group lose and those in the second group win. The reason is that the fluctuation of prices for different goods, services, assets, etc. is not uniform. When there is inflation, most prices are rising and individual price rises are significantly different. Prices for goods and services are rising faster, others are slower and others remain unchanged.

Literature review

Anghelache and Manole (2016) have analyzed the correlation between Gross Domestic Product, inflation rate and unemployment in the case of Romania, outlining the impact of the last two indicators mentioned on the economic growth. King and Watson (2012) provide evidence on the different evolutions of the actual inflation and the fundamental inflation, while observing a dataset characterized by significant loss in labor's income share. Malmendier and Nagel (2016) hypothesize that inflation experiences is significant in the individual's perception over this indicator, alter the existing adaptive learning models, in an age-oriented approach, outlining the difference in younger vs.

older age groups. Anghelache, Gheorghe, and Voineagu (2013) have described the instruments dedicated for the measurement and analysis of inflation, the authors appreciate the sound methodology associated with the Laspeyres, Paasche, Fisher, Walsh, Lowe, Young or Divisia indices, and also they outline the importance of the theoretical and practical knowledge regarding inflation, considering its major impact on the macroeconomic system. Trehan (2015) has outlined the preference of forecasting professionals towards the core inflation data, who are given a much higher importance in terms of modeling, on the expense of headline inflation data, while households grant more trust to datasets describing recent behavior of the inflation. Anghel (2015) analyzes the evolution of the inflation in Romania for the time horizon of the respective year, and emphasizes the high level of this indicator in Romania, subsequent studies, for a different horizon, published by Anghel, Anghelache, and Manole (2016), Anghelache, Niţă and Badiu (2016), Anghel, Anghelache, Samson and Stoica (2016), reach the same general conclusion, which underlines the prominent value of the inflation rate. Anghelache, Mitruţ, and Voineagu (2013), Anghelache et.al. (2007) have presented the macroeconomic statistical instruments, focusing on the National Accounts system, their book includes a significant analysis of the inflation phenomenon. Popescu and Ciurlău (2013), Ionescu (2007), Dornbush, Fisher and Startz (2007), Creţoiu, Cornescu and Bucur (2011), Bucur (2010), books that represent references in macroeconomic studies, treat the mechanism of the inflation, its network of macroeconomic correlation and the impact upon the national economy. Anghelache and Sacală (2015) have presented the concept of inflation from both theoretical and practical viewpoints, covering important issues on the historical evolution of thinking related to inflation, the core methods used to identify and measure the size and dynamics of the phenomenon. Ang, Bekaert, and Wei (2007) have analyzed the characteristics of four forecasting methods applied in the case of inflation in the United States of America, and argue that surveys is the most effective method, in comparison to the other three and the combinations of methods considered and tested. Del Negro and Eusepi (2011) have emphasized the need for time-variation in the inflation target, referring to a specific period, their data reject the case of agents with imperfect information, they have presented a set of models, which were unable to give a complete view on the evolution of the variable. Velde (2009) has analyzed the economic system of France in a bygone period of history, from the viewpoint of the effects of monetary mass reduction on other designated indicators, and he states that the experiment was not successful in reaching the reduction of prices in the same amount as the monetary mass, while other targeted indicators rose. Anghelache and Manole (2015) have analyzed the fundamentals of the relationship between unemployment and inflations, as phenomena with observable impact on the Romanian economy. Anghel (2014) has designed an econometric model that explains the correlations between the exchange rate for the national currency and inflation in Romania, the results show a less than significant influence of the exchange rate under the observation of very different patterns of evolutions for the two indicators. Fuhrer (2012) studies the inflation associated with the United States economy, he outlines the major role of short-run inflation expectations in explaining the indicator over the previous two decades, while long-run expectations are less significant in this scope. Anghelache, Anghel,.G., Manole, and Lilea (2016) have presented the concepts and instruments of economic modeling, instruments that can be used in inflation analysis and forecasts. Anghelache, Anghelache et. all (2015) have studied the population consumption price index for the Romanian economy, outlining the major aspects revealed by the macroeconomic dynamics within the European Union overall evolution. Ascari and Ropele (2009) argue that trend inflation has a significant impact previous results in literature, while this factor should not be underestimated in both theoretical and practical studies. Armantier et.al. (2015) have compared the results on inflation expectations drawn from a survey with the behavior of the respondents within a special designed experiment, and outline the correlation between the two factors. Bordo, Dueker, and Wheelock (2008) analyze the correlation between inflation, monetary policy and stock market conditions in the United States of America, one key conclusion refers to the important role of central banks in the regulation of financial market stability.

Research methodology and data

Major effects of inflation are: effects on income and wealth redistribution; Effects on production; Other effects. There are two ways to measure the effects of inflation on the redistribution of income and wealth in a society. First, based on the change in the real value of these earnings, due to the following factors: wages, rents, interest, dividends and profits. Secondly, on the basis of the distribution of income over time, as a result of inflation, namely, the income of the rich has increased, and those of the middle and poor classes have fallen due to it. Inflation brings changes in real income distribution for those who have relatively inflexible cash incomes, as well as for those who have relatively flexible money incomes. Poor and middle classes suffer from wages, which are more or less fixed, compared to commodity prices, which continue to rise, resulting in a result of poverty. On the other hand, businessmen, industrialists, traders, real estate owners, speculators, have variable incomes and gains during rising prices. This latter category of people becomes rich. Thus, there is an unjustified transfer of income and wealth from the poor to the rich. As a result, the rich rely on wealth and excessive consumption, while the poor and middle classes live in misery and lucky poverty. Affiliation to groups whose earnings or inflation losses depend on who anticipates inflation and who does not. Those who predict inflation correctly can adjust their current earnings, depending on: purchasing power, loans, lending against loss of income and wealth because of inflation, so they do not suffer from inflation. People who are unable to predict and predict the inflation rate correctly so that they can adapt their economic behavior consequently suffer. The inability to predict inflation correctly leads to the redistribution of income and wealth, in practice the result is that some people win while others lose. The net result is the redistribution of income and wealth. The effects of inflation on different groups of society are discussed below:

- Debtors and creditors: During periods of rising prices, borrowers and creditors win and lose. When prices rise, the value of money is decreasing. Although borrowers have the same amount of money, they pay less for goods and services. This is due to the fact that the value of money is lower than when they have borrowed money. Thus, debt burden is reduced and borrowers earn, and on the other hand, creditors lose. Although they return the same amount of money they have borrowed, they get less in real terms because the value of money is decreasing. Thus, inflation brings with it a redistribution of real wealth in favor of debtors at the cost of creditors.
- Employees, such as officials, teachers, and other social categories lose when there is inflation. Employees can earn or lose depending on the speed at which their wages adapt to the rise in prices. If their unions are strong, they can receive salaries indexed according to the cost of living index, so they may be able to protect themselves from the negative effects of inflation, but the problem is that there is a time lag between wage increases towards Employees and rising prices. If the unions have concluded contractual clauses for a specified period, employees lose when prices continue to rise during the contract period.
- Pensioners, unemployed, social security recipients, etc., all these people lose because they receive fixed payments, while the value of money continues to fall with the rise in prices.
- Owners or investors: people who hold shares or company titles earn during inflation, because when prices are rising, business activities increase business profits. As a result of the increase in profits, dividends are rising faster than prices.
- Investors in bonds, securities, etc., who receive a fixed interest rate, lose during inflation because they receive a fixed amount, while the purchasing power is decreasing.
- Business people of all kinds, such as manufacturers, traders and real estate owners, are gaining in the short term during periods of rising prices. Thus, when producer prices are rising, the inventory value of goods in stock increases

in the same proportion, so they get a higher profit when selling goods in stock. The same is the case with short-term traders. But manufacturers, in the long run, reduce their profits, as the cost of goods does not rise in relation to rising prices for their goods. This is due to the fact that the prices of raw materials and other factors of production and wages do not immediately rise to the level of price increases. Real estate owners increase their profits during inflation, as landed property prices have a faster evolution than the general price level.

• Farmers are of three types, owners, lessees, and landless agricultural workers. Owners lose during rising prices because they receive fixed rents. But the lessees who own and grow their farms are gaining, because the prices of agricultural products grow more than the cost of production, because the prices of purchases and sales of land do not rise to the same extent as the increase in prices for agricultural products. On the other hand, landless agricultural workers are severely affected by rising prices because their wages are not increased by farm owners because trade unionism is absent among them and consumer goods prices are rising rapidly.

• The government behaves like a low-yielding debtor at the expense of households, which are the main creditors. This is because interest rates on government bonds are fixed and not high to offset the expected increase in prices. With inflation, even the real value of taxes is low. Thus, the redistribution of wealth to the government as a benefit comes back to taxpayers. Because government taxpayers are high-income groups, they are also government creditors, because they are the ones who have government bonds. As creditors, the real value of their assets is declining, and as taxpayers, the real value of their debt also decreases during inflation.

Regarding the effects on production, when prices increase, increasing production is encouraged. Making profitable profits, they are investing more in gaining more profits in the future. This tends to increase employment, production and income. But this is only possible to the full occupancy level. Further growth in investment beyond this level will lead to severe inflationary pressures in the economy, as prices increase more than production when resources are fully committed. So, inflation negatively affects production by the level of full employment.

The adverse effects of inflation on production are:

• Inappropriate allocation of resources: Inflation determines the inappropriate allocation of resources when producers divert resources from essential production for non-essential goods from which they expect higher profits.

• Changes in the trading system: inflation leads to changes in the transactions made by producers. They pay attention to turning money into stocks or other financial or real assets. This means that time and energy are diverted from the production of goods and services and some resources are used in a foolish way.

• Production cuts: Inflation negatively affects the production volume, as the hopes of rising prices, along with rising costs of inputs, bring uncertainty. This reduces production.

• Quality reduction: Continuous price increases create a seller's market. In such a situation, manufacturers produce and sell sub-standard commodities in order to obtain higher profits, so that it reaches up to falsification of goods.

• Accumulation: Producers benefit most from rising prices as a result of stockpiling, thus generating an artificial fall in commodity on the market. Then, manufacturers sell their products on the black market, leading to an increase in inflationary pressures.

• Reducing savings: when prices are rising fast, the tendency to save decreases, as money is needed to buy goods and services just like before inflation. Reduced saving negatively affects investment and capital formation, so production is hindered.

• Obstruction of foreign capital: inflation hinders inflow of foreign capital, as rising costs of materials and other factors of production make foreign investment less profitable.

• Encourages speculation: Rapid price increases create uncertainty among producers who are compromised in speculative activities in order to make profitable profits instead of engaging in productive activities that contribute to obtaining the various types of raw materials needed in production.

Inflation leads to a number of other effects, which are in line with:

• Government: inflation affects the government in different ways. It helps the government in financing its activities through the inflationary system. As the income of the population increases, the government collects in the form of taxes, so the government's revenue grows during the rise in prices. Moreover, the real debt burden decreases when prices are rising. But government spending increases with increasing production costs for public projects and businesses, and increases in administrative spending such as prices and wages will increase. Overall, the government wins under inflation as rising salaries and profits spread the illusion of prosperity within the country.

• Balance of payments: Inflation implies the sacrifice of specialization benefits and the division of international work. This negatively affects a country's balance of payments. When prices grow faster in the country of origin than in foreign countries, domestic products become more expensive compared to foreign products. This tends to increase imports and reduce exports, thus making the balance of payments unfavorable for the country. This only happens if the country follows a fixed exchange rate policy. But there is no negative impact on the balance of payments if the country is in the flexible exchange rate system.

• Exchange rate: When prices rise faster in the home country than in foreign countries, it reduces the exchange rate in relation to foreign currencies.

• The collapse of the monetary system: if hyperinflation persists and the value of money continues to fall several times in a day, it eventually leads to the collapse of the monetary system, as it did in Germany after the First World War.

• Social: Inflation is a social danger. By widening the gap between the rich and the poor, rising prices create discontent among the masses. Pressed by rising livelihoods, workers are using strikes that lead to production losses. Attracted to profit, people resort to hoarding, falsification, manufacturing of products that do not meet standards, speculation, etc. All this reduces the efficiency of the economy.

• Political: rising prices also encourage riots and protests by political parties opposed to the government, and if grievances are gathered, they can become awkward and can bring the fall of the government. Many governments have been sacrificed on the altar of inflation.

Conclusion

Thus, inflation redistributes earnings from employees and fixed income groups to profits recipients, and from creditors to borrowers. In terms of redistribution of wealth, the very poor and very wealthy are more likely to lose than middle-income groups. This is due to the fact that the poor have little wealth in their monetary form and have little debt, while the very rich have a substantial part of their wealth in bonds and have relatively few debts. On the other hand, middle-income groups are likely to be heavily affected by debt and have a certain wealth of stocks as well as real assets.

References

1. Ang, A., Bekaert, G. and Wei, M. (2007). Do Macro Variables, Asset Markets, or Surveys Forecast Inflation Better?. *Journal of Monetary Economics*, 54 (4), 1163-1212
2. Anghel, M.G., Anghelache, C., Manole, A. (2016). Some aspects regarding the inflation evolution during the last period. *Romanian Statistical Review, Supplement*,.8, 104-109
3. Anghel, M.G., Anghelache, C., Samson, T., Stoica, R. (2016). Analysis of index prices of population consumption reveals a moderation through fiscal measures. *Romanian Statistical Review Supplement*, 12, 146-154
4. Anghel, M.G. (2015). The Inflation (Consumer Price) Evolution. *Romanian Statistical Review Supplement*, 1, 128-132
5. Anghel, M.G. (2014). Econometric Model Applied in the Analysis of the Correlation between Some of the Macroeconomic Variables *Romanian Statistical Review Supplement*, 1, 88-94
6. Anghelache, C. and Manole, A. (2016). Elemente semnificative privind corelaţia dintre ritmul de creştere a PIB, rata inflaţiei şi rata şomajului. *ART ECO - Review of Economic Studies and Research*, 7 (1), 10-13

7. Anghelache, C., Niţă, G. and Badiu, A. (2016). The Inflation (Consumer Prices) in the Romanian Economy. *Romanian Statistical Review Supplement*, 1, 99-102
8. Anghelache, C., Anghel, M.G., Manole, A. and Lilea, F.P.C. (2016). *Modelare economică, financiar-monetar-bancară şi informatică*, Bucureşti: Editura Artifex
9. Anghelache, C. and Sacală, C. (2015). Some Theoretical Aspects regarding the Inflation. *Romanian Statistical Review Supplement*, 6, 5-11
10. Anghelache, C., Anghelache, G.V., Dumitrescu, D., Dragomir, B. and Soare, D.V. (2015). Index of Population Consumption Prices. *Romanian Statistical Review Supplement*, 4, 65-71
11. Anghelache, C. and Manole, A. (2015). The Correlation between Inflation and Unemployment. *„Economica" Scientific and Didactic Journal*, 1 (91), 15-123
12. Anghelache, C., Mitruţ, C. and Voineagu, V. (2013). *Statistică macroeconomică. Sistemul Conturilor Naţionale*. Bucureşti: Editura Economică
13. Anghelache, C., Gheorghe, M. and Voineagu, V. (2013). *Metode şi modele de măsurare şi analiză a inflaţiei*. Bucureşti: Editura Economică
14. Anghelache, C. (coordonator), Isaic-Maniu, A., Mitruţ, C., Voineagu, V., Dumbravă and Manole, A. (2007). *Analiză macroeconomică. Teorie şi studii de caz*. Bucureşti: Editura Economică
15. Ascari, G., Ropele, T. (2009). *Trend Inflation, Taylor Principle, and Indeterminacy*, Journal of Money, Credit and Banking, 41, 1557–1584
16. Armantier, O., Bruine de Bruin, W., Topa, G., Klaauw, W. and Zafar, B. (2015). Inflation Expectations and Behavior: Do Survey Respondents Act on their Beliefs?. *International Economic Review*, 56 (2), 505-536
17. Bordo, M.D, Dueker, M., Wheelock, D. (2008). *Inflation, Monetary Policy and Stock Market Conditions*, NBER working paper No. 14019
18. Bucur, I. (2010). *Macroeconomie*. Bucureşti: Editura C.H. Beck
19. Creţoiu, Gh., Cornescu, V. and Bucur, I. (2011). *Economie*. Bucureşti: Editura C.H. Beck
20. Del Negro, M. and Eusepi, S. (2011). Fitting Observed Inflation Expectations. *Journal of Economic Dynamics and Control*, 35 (12), 2105-2131
21. Dornbush, R., Fisher, S. and Startz, R. (2007). Macroeconomie. Bucureşti: Editura Economică (McGraw-hill/Irwin, New York, 2004)
22. Fuhrer, J. (2012). The Role of Expectations in Inflation Dynamics. *International Journal of Central Banking*, 8 (1), 137-165
23. King, R. and Watson, M. (2012). Inflation and Unit Labor Cost. *Journal of Money, Credit and Banking, 44* (Supplement 2), 111-149
24. Ionescu, C. (2007). *Economie, volumul I, Macroeconomie*. Bucureşti: Editura Economică
25. Malmendier, U. and Nagel, S. (2016). Learning from Inflation Experiences. *The Quarterly Journal of Economics*, 131 (1), 53-87
26. Popescu, Gh. and Ciurlău, C.F. (2013). *Macroeconomie*. Bucureşti: Editura Economică
27. Trehan, B. (2015). Survey Measures of Expected Inflation and the Inflation Process. *Journal of Money, Credit and Banking,* 47 (1), 207-222
28. Velde, F. (2009). Chronicle of a Deflation Unforetold. *Journal of Political Economy*, 117 (4), 591-634