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### Fiscal Policy, Prices, Inflation - Dependencies and Interdependences

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## Fiscal Policy, Prices, Inflation - Dependencies and Interdependences

Ileana Iulia ISTUDOR<sup>1\*</sup>, Florina MOCANU<sup>2</sup>

### *Abstract*

*The phenomenon called inflation is a complex problem of macroeconomic analysis and is one of the most important forms of the economic and social imbalance. Inflation is the persistent and significant growth process of the price level. Also, inflation can be defined by a decrease in purchasing power of a monetary unit, respectively of the quantity of goods and services that can be purchased with the help of a monetary unit. Thus, inflation leads to the distortion of the ratio between the nominal and the real value, with the effect of reducing the purchasing power of money. Through taxation, the State can gain from inflation in its capacity as the tax collector. In the case of indirect taxes, which are found in the sales prices of products and services, any increase in them directly affects their level. The intent of this article is to highlight the dependencies and interdependencies that may exist between fiscal policy, prices and inflation. Period under study extends over six years, from 2013 to 2018. The processed data are for Romania and have been extracted from the National Bank of Romania and National Institute of Statistics reports.*

**Keywords:** *inflation; value added tax; indirect tax; purchasing power; fiscal policy.*

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## 1. Introduction

The present study presents the influence of fiscal policy on inflation in the case of Romania, against the background of the coordination between fiscal and monetary, between 2013 and 2018.

Tax policy should not be viewed as only a component of the economic policies mix through which it ensures the financial resources necessary for the supply of goods and public services.

Indirect taxes (VAT, excise duty) are charged on sales of goods and services, also known as consumer taxes or taxes on expenses.

One of the major monetary policy strategies of the National Bank of Romania (NBR) is direct inflation targeting. The effectiveness of this strategy has depended heavily both on the process of fiscal consolidation and the narrowing of fiscal dominance, against the background of the coordination between fiscal and monetary.

This research paper is a continuation and extension of previous research undertaken by the authors (see: 'The Impact of VAT on Prices in Romania [1]).

## 2. Problem Statement

An appropriately designed and implemented fiscal policy is an important lever to stimulate economic growth and its balanced distribution, in order to ensure economic development. In terms of tax incidence, taxes change prices. The effect of tax reduction is generally favorable to the economy and the population [2]. An increase of taxes reduces companies' financial performance, slows down economic growth, or may induce an economic contraction [3].

At the same time, fiscal policy has the role of a macroeconomic stabilizer, the automatic fiscal stabilizers playing an important role in equalizing the excessive fluctuations in aggregate demand, effect of inadequate fiscal and budgetary decisions. The automatic fiscal stabilizers are more efficient with the degree of discretionism of fiscal policy is more lower [4].

This concept originates in the fact that some elements of fiscal policy contribute to stabilizing the business cycle automatically, without the need for governmental factors action, being necessary only using of existing tax legislation and the rules set out in the legislation on public expenses.

Florin Georgescu quotes Mervyn King, a former Governor of the Bank of England, who said: "Central banks are accused of being obsessed

with inflation. This is an untruth. If they are obsessed with something, it is about fiscal policy." [5]

Inflation is determined by cyclical and structural factors. Between cyclical factors, besides international prices for raw materials, fuels, and so on, the fiscal-budgetary policy is outlined. This has a negative impact when it releases an unsustainable fiscal impulse in the conditions of an excess of domestic demand.

Core inflation is the component of the inflation rate that is persistent ([6-7]) or generalized (which excludes relative price changes, [6]).

Regarding core inflation, there are two meanings:

A1. Total inflation excluding prices which by their nature are volatile and have a transient effect on inflation;

A2. Total inflation excluding prices that are out of control of monetary policy and indirect tax increases with impact on prices (VAT, excise duty).

### **3. Aims of the research**

The purpose of the study is to demonstrate the existence of a fiscal dominance over monetary policy as a result of inappropriate fiscal policy within the macroeconomic policy mix.

### **4. Research Methods**

Making research was based on a theoretical documentation regarding the main approaches to the impact of fiscal policy on inflation which was materialized through a case study. Its realization was made possible by: extraction and processing of the statistical data related to the economic indicators that characterize the analyzed phenomenon and plotting their evolution in time. The graphical methods used have facilitated the formulation of the conclusions about the dependence, interdependence between fiscal policy, prices and inflation.

### **5. Findings of the research**

#### ***5.1. Conceptual approaches to core inflation***

The core inflation estimation methods refer to:

1. The calculation of core inflation by excluding from the total consumption basket the categories of goods with traditionally very volatile

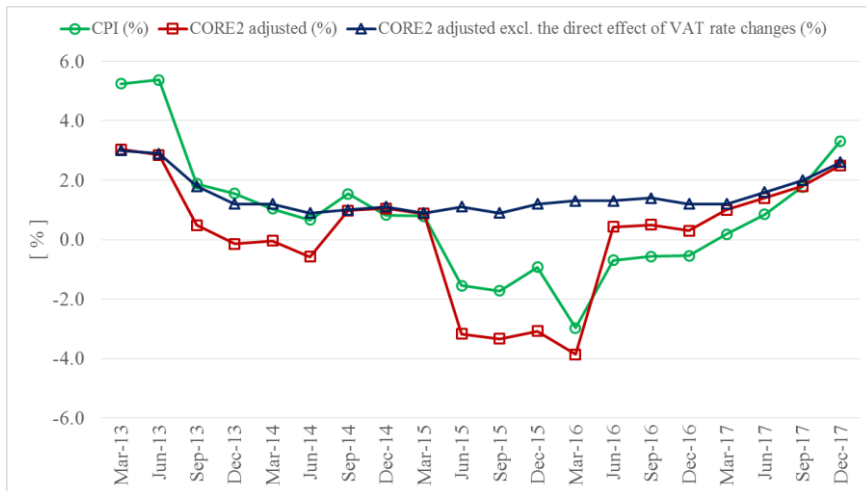
prices (energy, some food goods) or influenced by the change of indirect taxes (in the economies in transition, the administered prices are also excluded).

2. Purely statistical methods which seek to extract the dominant trend of changing the prices of most goods in the consumption basket.

In Romania, the core inflation rates used by the National Bank of Romania (CORE1, CORE2 and CORE 2 adjusted) are constructed by excluding prices from the Consumer Price Index (CPI), whose dynamics are not under the control of monetary policy (very volatile prices and administered). Particular importance is given to the core inflation rate CORE 2 adjusted.

### 5.2. The impact of indirect taxes on inflation

From 2013 to 2016, the inflation rate in Romania calculated on the basis of CPI (Consumer Price Index) showed a marked downward trend, due to the persistence of the aggregate demand deficit, the fall in raw material price quotations (especially energy raw materials), but also the successive reductions in the Value Added Tax.



**Chart no. 1.** CPI evolution, CORE 2 adjusted, CORE 2 adjusted excl. VAT in 2013-2017

*Data source: NBR - Inflation reports [8]*

The sharp decline in inflation during that period, was determined by one of the most important fiscal law amendment at the level of indirect taxation (at the level of the Value Added Tax), ie the adjustment of the standard VAT rate, from 1 June 2015, from 24% to 9%, to all foods without

distinction, non-alcoholic beverages and food services. As a result of this fiscal policy measure, inflation has entered into the area of negative values. From January 1, 2016, the macroeconomic vision for VAT continued with the reduction in the standard VAT rate from 24% to 20%, continuing the implementation of fiscal stimuli to increase domestic consumption.[9]

VAT reduction from 24% to 20% starting January 1, 2016 gave a new impuls to the fall in prices, which led to the annual inflation rate recording historical minimum levels for that period of the year. In this sense, inflation at the end of 2016 (excluding the first-round effects of the VAT reduction) was below the lower limit of the inflation target range (2.5 percent  $\pm$  1 percentage point), being -0.54 percent.

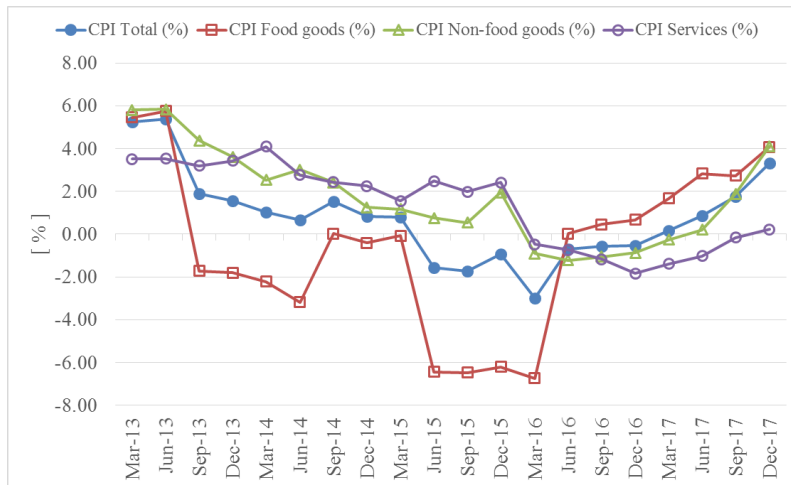
Although the year 2017 started with new tax cuts and reductions (the 20% to 19% reduction in the standard VAT rate, the removal of extra fuel excise), the annual inflation rate has been on the rise since the first months of the year. Thus, after almost four years was placed under the range of  $\pm$  1 percentage point, associated with the constant target of 2.5 percent, since September 2017 inflation has entered this range reaching its upper half.

As a result of tax measures implemented in the second half of 2017 (the increase in excise duty on tobacco products in July, the increase in excise duty on fuels in September-October), the annual inflation rate at the end of 2017 was close to the upper limit of the range of  $\pm$  1 percentage point (3.32% versus -0.54% in December 2016). (Chart 1).

The information provided by the National Bank of Romania (NBR) states that, excluding from the calculation of the annual inflation rate calculated on the basis of the CPI, the transient effects of successive reductions in the VAT rate between 2015 and 2016, inflation would have reached 2% in December 2015 and 3% in 2016 respectively.

Regarding the influence in the structure, it is observed that between 2015 and 2016, to the pronounced downward trend of the annual dynamics of core inflation, a significant contribution was made by the category of food goods. This evolution is a consequence of the VAT adjustment for food, the food having the largest share in the daily consumption basket of the population (Chart 2).

In 2017, in structure, to the pronounced upward trend of the annual dynamics of core inflation, the same category of food goods contributed decisively. This trend was the result of the acute deficits for offer that marked the European market in 2017, in the case of some representative products (meat, dairy products). According to NBR reports, empirical evidence suggested a transmission of more than two-thirds, after a semester, of the production prices increase of the specific industry in consumer prices. Less pronounced pressures were seen in non-food goods and services (Chart 2).



**Chart no. 2.** CPI evolution and CPI components during 2013-2017  
*Data source: Statistical databases and metadata - Consumer price index [10]*

By limiting the analyzed timeframe to the period June 2017 - June 2018, the very low levels of the annual inflation rate in the first half of 2017 were impacted by the effects of fiscal measures adopted at the beginning of 2017 (such as reducing the standard VAT rate from 20% to 19% and removal of extra fuel excise). The upward trend, visible during the whole of 2017, reflected the increase in the aggregate demand surplus as well as the pressures accumulated in the production costs of enterprises: wages, transport, utilities (Chart 3).

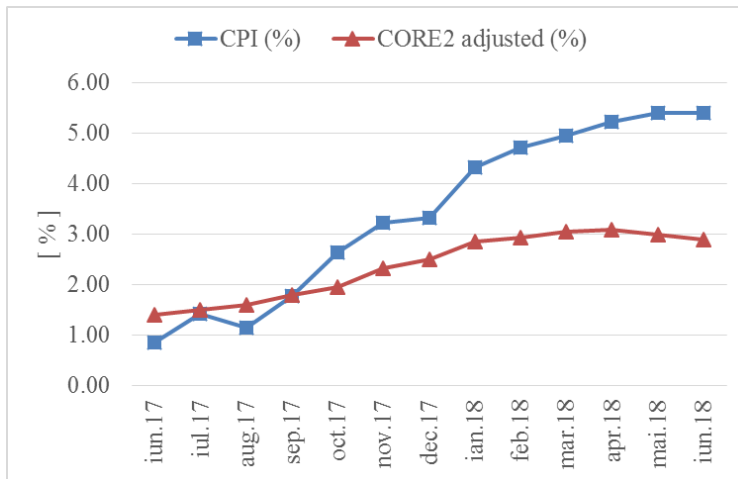
The action of these factors has been amplified since September 2017 by a series of shocks on the offer side (administered price increases - more pronounced in the case of electricity, the rise in fuel prices - as a result of the increase in oil quotations and the reintroduction of excise on fuels, the repeated acceleration of the food price fluctuations against the background of some temporary deficits for offer who appeared at European level).

The annual CPI inflation rate continued its upward trajectory during the first quarter of 2018, up to 4.95% in March, value exceeding the upper limit of the associated range for the constant target of 2.5% ( $\pm 1$  percentage point).

From the growth of 1.63 percentage points recorded in March 2018 compared to the end of 2017, one percentage point was due to the exhaustion of statistical effects at the annual CPI inflation rate - as a result of the change of some indirect taxes and the elimination of some non-fiscal charges at the beginning of the year 2017. To them were added the price increases in the analyzed period, at the level of exogenous components of



the consumption basket (the most significant increases being in electricity and natural gas, with a contribution of 0.5 percentage points).



**Chart no. 3.** The evolution of CPI and CORE2 adjusted between June 2017 and June 2018

*Data source: NBR - Inflation reports [8]*

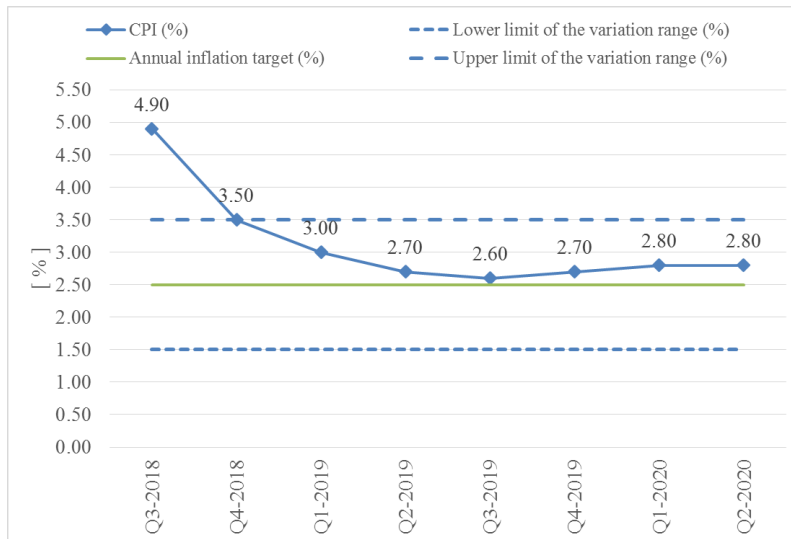
The annual CPI inflation rate stopped growth in June 2018, remaining at the level of 5.40%, above the variation range of the inflation target. At the same time, for the whole of the second quarter, its growth has moderated significantly. The increase compared to March 2018 was determined only by the exogenous components of the consumption basket (fluctuation of the fuel price - mainly determined by the evolution of the international oil price, the increase of the tobacco price, against the background of a new adjustment step of the excise on this products category). A compensatory influence has come from the attenuation of the annual core inflation rate. Under these circumstances, for the first time in the last six quarters, the advance recorded by the annual CPI inflation rate was less pronounced, indicating the flattening of the inflationary curve.

### **5.3. Inflation rate perspectives**

According to NBR forecasts, the inflation rate is projected to decelerate to 3.5% by the end of 2018, respectively 2.7% at the end of 2019 (Chart no. 4).

Revisions to previous forecasts were due to lower contributions from the side of the adjusted CORE2 index and administered prices,

partially compensated by higher contribution of fuel prices and tobacco products, but only for 2018 [11].



**Chart no. 4.** CPI forecast for the period from 3rd quarter 2018 to 2nd quarter 2020

*Data source: NBR - Inflation reports [8]*

The annual inflation rate measured by adjusted CORE2 is projected to reach 2.7% at the end of 2018 and 3.2% at the end of 2019, values revised downwards compared to previous forecasts. To this correction a contribution was brought by moderation of pressures exerted through aggregate demand (with persistent effects on the annual rate of the core inflation) and faster dissipation of pressures exerted by the quotations of agrifoods raw materials which has influence on the prices of processed foods.

In the structure, in 2018, significant upward revisions focused on the dynamics of fuel prices and the evolution of tobacco product prices.

For the year 2019 most revisions are explained by the VAT reduction for thermal energy and other subcategories of the products group with administered prices.

The European Union country report for Romania for 2018, predicts that "total inflation will continue to increase in 2018 too, as a result of intensified demand pressures and blurring of the effect produced by disinflationary tax cuts" [12].

## 6. Discussions

Relevant risks continue to be associated with both internal and external environment. Domestically, there are still risks of increasing the projected inflation rate resulting from maintaining a staff deficit on the labor market, with the potential to bring additional aggregate demand surplus in the economy. At the same time, from the perspective of public finances, it is necessary to ensure a balance between the fiscal measures with a role of stimulating the aggregate demand and, respectively, those of strengthening the productive capacity of the economy.

In the medium term, a balanced mix of macroeconomic policies needs to be implemented in parallel with the continuation and deepening of structural reforms in the economy, in order to ensure an sustainable economic growth without compromising the objective of price stability.

## 7. Conclusions

In Romania over the past few years, VAT rate changes were one of the most important sources of volatility for the evolution of the annual inflation rate. The impact of changes in the VAT rate on inflation was a transitory one.

Interventions on the VAT rate led to an immediate re-establishment of the consumer price level, the effect persisting, usually, over a period of 12 months at the level of the annual inflation rate.

The cumulative effect of expanding the reduced VAT rate (for some products from the daily consumption basket) and reducing the standard VAT rate (June 2015 and January 2016) has temporarily led to negative annual inflation rates. As to the magnitude of the effect of the change in the VAT rate, it is reduced to a redistribution of revenue between consumers and the State.

The evolution of prices excluded from the CPI for the calculation of core inflation depends on factors that cannot be controlled by monetary policy by the central bank:

- alignment of excise duties: tobacco, alcohol;
- elimination of subsidies: administered prices (products and services from the energy field)
- very volatile prices (on vegetables, fruits, eggs) that have an increased impact on the short-term inflation rate due to the high share in the consumption basket.

The reaction of monetary policy to such factors is neither necessary nor advisable. Reacting through a more severe monetary policy, to inflationary pressures, private investment may be affected.

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