About inflation

Definition and measurement

Inflation is a dynamic phenomenon. It usually refers to persistent increases in the level of a price index of goods and services. Such indices include:

- The Consumer Price Index, which is the most widely quoted index. Its evolution through time provides a characterization of the increase in the price of the basket of goods and services of an average household in the economy.
- The Producer Price Index, whose evolution measures the average change in prices received by domestic producers for their output. As there is usually a time-lag by which an increase in producer prices feeds through consumer prices, the evolution of the producer price index is frequently used as a predictor of future consumer price inflation.
- Indices of so-called "core inflation", which exclude from price indices a number of highly volatile items, such as food and energy. These indices are used to assess the underlying longer-term inflationary tendencies in the economy.
- The GDP deflator whose evolution provides a broad indication of inflationary developments in the domestic economy. The GDP deflator is defined as the ratio of the nominal GDP measure divided by its real GDP estimate.

The costs of inflation

The costs of inflation are a subject of some controversy. These costs are clearly a function of the inflation rate itself, with substantial agreement that high levels of inflation are disruptive to economic efficiency and social welfare.

Intuitively it is useful to distinguish between the costs of anticipated inflation versus the costs of unanticipated inflation. The costs of (low) anticipated inflation are relatively small. They include the so-called "shoe-leather cost". This phrase refers to the shoe leather that economic agents allegedly destroy due to their frequent trips to the bank in order to deposit their (excess) currency in interest earning deposits. It arises from the need of economic agents to economize on their holdings of currency (which earn no interest, and whose real value is eroded by inflation). An additional cost of anticipated inflation is the so-called "menu costs" (i.e. costs arising from the need to change prices more frequently in a high inflation environment).

Turning to the costs of unanticipated inflation, these are likely to be much more significant than the costs of anticipated inflation. Firstly, high and variable inflation has the undesirable effect of increasing the risk

associated with investment decisions. This higher risk leads to lower investment flows and thus lower output growth and employment in the economy. Secondly, high and, especially, variable inflation makes it difficult for economic agents to distinguish changes in relative prices (which act as a signal and facilitate the efficient allocation of resources in a market economy) from changes in the overall price level. Thirdly, high inflation has sometimes resulted in the imposition of inefficient (administrative) controls on the evolution of prices and/or wages. And, again, these wage and/or price distortions destroy the in-built efficiency of a market economy (which is built on the ability of the system of free prices to reflect the inter-play of demand and supply and, through changes in relative prices, guide the efficient the allocation of resources among alternative uses in the economy).

Redistribution effects

Inflation has also redistribution effects. It is well-known that, other things being equal:

- inflation has undesirable social consequences and hits particularly hard the vulnerable sections of the population. These groups are less able to safeguard their real income from inflation, and are frequently relying on incomes which are fixed in nominal terms;
- inflation favours debtors at the expense of creditors;
- in a progressive taxation system inflation induces a shift to higher tax brackets;
- inflation reduces the real value of Government debt; and
- inflation acts as an implicit tax on the holdings of currency.

Causes of inflation in the short and longer term

In the long run there is substantial agreement among economists that inflation is a purely monetary phenomenon caused by too-much money chasing too few goods. Of paramount importance for the evolution of inflation in the medium to longer term is the stance of the monetary authorities (such as whether they will accommodate, or not, an initial price increase by providing liquidity). Last, but not least, a very important determinant of the actual evolution of inflation is the inflation expectations of economic agents in the economy. These are highly volatile but are closely connected with the perceived credibility and confidence in the conduct of economic policy by the authorities.

In the short-term, however, an increase in the price level may be due to any combination of “demand-pull”, “cost-push” and “structural-inertial factors”.

By “demand-pull” we refer to a situation where there is an excess demand, at current prices, for the available supply of goods and services. This excess demand will tend to raise the overall price level.

By "cost-push" we refer to a situation where the initial increase in the price level is largely due to an increase in the costs of inputs to the production process. An example is an increase in raw materials and/or wages, which represent important costs in the production process.

By "structural-inertial factors" we refer to characteristics in the structure of the economy which may propagate an initial increase in the level of prices to further increases in subsequent periods. An example is an economy with wide indexation of prices (including wages) to the inflation rate. In such an economy an initial price increase will automatically lead to higher prices and wages in the next period, which may set in motion a wage-price spiral. This will be especially pronounced in economies with limited competition and where price setting follows a cost-plus rule.

On the inter-relationship between inflation and growth

As noted already, there is substantial agreement among economists that inflation has an adverse effect on medium and long-term economic growth. The natural issue which arises concerns the threshold level of inflation, above which inflation significantly reduces economic growth in a particular economy. This is obviously a policy-relevant issue, as it provides an indicative estimate of the target level (or ceiling) of inflation for the conduct of monetary policy in the economy.

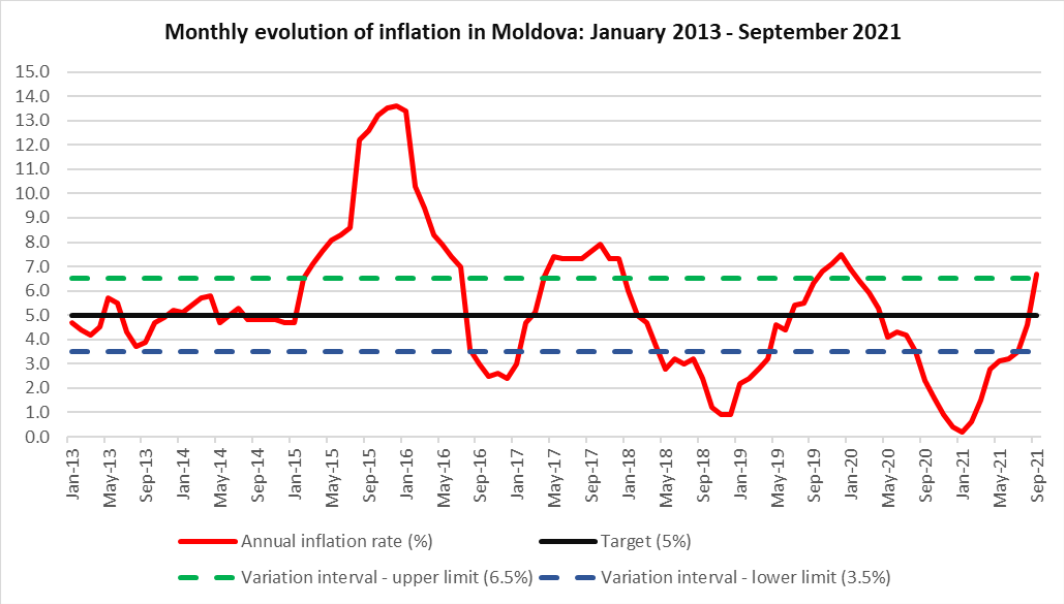
The determination of the threshold level of inflation is largely an empirical issue, which is linked to the structure of the economy at a particular point in time. A study by Christoffersen and Doyle (1998) estimated the inflation threshold at 13 percent for transition economies. An econometric study on threshold effects in the inter-relationship between inflation and growth was undertaken by Khan and Senhadji (2001). The paper surveyed earlier related empirical studies and provided evidence suggesting that the threshold level of annual inflation above which it significantly slows growth is within the range 1-3 percent for industrial countries, and 7-11 percent for developing countries.

Most central banks in fully-fledged market economies have indeed chosen an inflation target around 2 percent [Romer and Romer (2002)]. It should be noted, at the same time, that there has been some reconsideration following the experience of the financial crisis, where interest rates where reduced significantly towards zero. As noted by Blanchard, Dell'Ariccia Mauro (2010), a slightly higher target in normal times, say around 4 percent, may increase the room for expansionary monetary policy to deal with unexpected shocks to the system.

The evolution of inflation in Moldova

The graph below depicts the monthly evolution of the annual rate of change of the Consumer Price Index in Moldova from January 2013 onwards. Monetary policy in Moldova seeks to retain the inflation rate within a corridor of plus and minus 1.5 % around the 5 % inflation target, a corridor that is clearly marked in the graph

below. The latest annual inflation estimate for September 2021 was 6.68 %, which has breached the upper limit of the corridor.



Source: National Bank of Moldova based on data compiled by the National Bureau of Statistics

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