

Box

Growth rate of potential GDP

The Potential Gross Domestic Product (GDP) is defined, according to Box 2 in the August 2005 Inflation Report, as the level of GDP that does not generate inflationary pressures. Excess demand, i.e. the difference between actual GDP and potential GDP, generates inflationary pressures because, ultimately, the response of aggregate supply translates partly into higher output and partly into aggregate price level increases.

As the measure of excess demand in the economy, the gap between actual and potential GDP is relevant for setting the monetary policy stance. Over the projection horizon, monetary policy aims to direct inflation towards the target by managing aggregate demand. In addition, the GDP forecasts throughout the projection horizon are based on the output gap resulting from the projection and on the medium-term potential GDP level.

The specifics of the potential GDP concept may vary with the time horizon considered. In the long run, potential GDP is determined by the institutional and structural features of the economy, i.e. demographic factors affecting the labour force, investment, total factor productivity, etc. This interpretation corresponds to the steady-state rate of economic growth in neoclassical models. This value usually changes over relatively long periods of time, and only as a result of significant lasting changes in the fundamental conditions of the economy.

In the medium term, the growth rate of potential GDP may deviate from its long run equilibrium level, to which it tends to revert after the effects of various temporary factors have faded. Inflows of foreign direct investment (including, in the case of Romania, the flows generated by structural funds that will be granted by European Union starting 2007), temporary labour force migration, variation in agriculture potential due to weather conditions⁵⁵ are among the factors that influence the medium term growth rate of potential GDP.

Potential GDP is not directly observable in actual real GDP data. Its measurement is a difficult task for any economy, and especially so for emerging economies, which are characterised by relatively frequent structural adjustments. Its value is inferred based on data regarding the developments in other observable macroeconomic variables, such as the inflation rate, the interest rate, the exchange rate, the unemployment rate, etc. Therefore, any potential GDP estimate is accompanied by a degree of uncertainty. This uncertainty has the strongest impact on recent periods, for which more accurate estimates can be obtained only after the revision of the initially released GDP figures and by incorporating information that is released with delay. Moreover, there are measurement issues specific to Romania, which only add to the existing uncertainties: the short sample of available data covers a period with frequent and distinct structural changes, and, also, it does not extend over a full business cycle.

Estimates regarding the level of potential GDP using several methods (production function, unobserved components filter, structural vector auto regressions) were carried out within the NBR⁵⁶. The results show an accelerated annual potential GDP growth rate from 2000 onwards. During 2003-2006 Q2, the estimates point to a growth rate of potential GDP in the range of 5.5-6.4 percent per annum. These results suggest that the potential GDP growth rate for the period 2006-2008 will remain at around 6 percent.

⁵⁵ CORE2 inflation, i.e. the CPI component that is directly determined by excess demand, is defined by excluding volatile prices for foodstuffs – fresh fruit and vegetables, eggs (see Box 1 in the August 2005 Inflation Report).

⁵⁶ Forthcoming in NBR's Occasional Paper Series.