LOW INFLATION IN THE EURO AREA AND THE GLOBAL ECONOMY

Many factors have contributed to the low inflation that has characterized the global economy over the last five years, as highlighted by numerous studies, including some carried out at the Bank of Italy. In the euro area, a large role has been played by firms' reduced labour costs and low profit margins in a context of substantial spare capacity and labour force underutilization, as well as by worsening inflation expectations, which have been reflected in both wage and price dynamics.¹

According to analyses carried out by some international institutions, with increased economic integration, global cyclical conditions should play a bigger part in determining inflation in the main advanced economies, with a corresponding weakening of the relationship between price dynamics and cyclical conditions (the Phillips curve) and thus of the efficacy of each country's economic policies. However, empirical evidence for the euro area has not yielded conclusive results.²

An analysis of inflation developments in the main advanced economies carried out at the Bank of Italy using an econometric model that takes into account individual countries' interdependencies and specificities confirms that price dynamics can largely be explained by a common component (global factor).³ However, the analysis also finds that this global factor is highly correlated with the more volatile components of consumer price inflation, such as energy commodity prices, and modestly correlated with core inflation, which is loosely linked to the global component.

A study conducted using a general equilibrium model⁴ reached similar results: in the euro area, international factors, especially the rapid fall in oil prices, seem to have played a large role in lowering inflation both during the global financial crisis and in the two years 2014-15. Core inflation, however, has remained low in recent years, largely owing to both the decline in aggregate demand and employment that followed the 2008-09 and 2012-13 recessions and the subsequent weak recovery, during which lingering spare capacity and labour force underutilization continued to act as a brake on wage and price dynamics in many countries. Monetary policy has maintained its ability to affect inflation: the launch of unconventional measures

¹ For an overview of the studies on low inflation in the euro area carried out by the Bank of Italy and by other Eurosystem central banks, see S. Neri and S. Siviero, 'Low inflation in the Eurozone', *Vox*, 15 August 2015; M. Ciccarelli and C. Osbat (ed.), 'Low inflation in the euro area: Causes and consequences', European Central Bank, Occasional Paper Series, 181, 2017.

² The global output gap's direct effect on inflation is due to: the growing international integration of trade channels and production processes caused by global value chains, capital mobility, and the increased substitutability of production factors; see R. Auer, C. Borio and A. Filardo, 'The globalization of inflation: the growing importance of global value chains', BIS Working Papers, 602, 2017; 'Domestic and global drivers of inflation in the euro area', European Central Bank, *Economic Bulletin*, 4, 2017, pp. 68-95.

³ A. Carriero, F. Corsello and M. Marcellino, 'The global component of inflation volatility', Banca d'Italia, Temi di Discussione (Working Papers), 1170, 2018.

⁴ L. Burlon, A. Notarpietro and M. Pisani, 'Exchange rate pass-through into euro-area inflation. An estimated structural model', Banca d'Italia, Temi di Discussione (Working Papers), forthcoming.

in 2014-15 supported price growth and translated into a depreciation of the euro and an improvement in inflation expectations.⁵

Overall, the results of these studies suggest that, even in the presence of deflationary pressures at global level, internal factors are the main culprit in the euro area's low inflation of recent years. In this context, maintaining price stability has called for a vigorous monetary policy response.

⁵ G. Bulligan, 'The effect of the Eurosystem Expanded Asset Purchase Programme on inflation expectations: evidence from the ECB Survey of Professional Forecasters', Banca d'Italia, Questioni di Economia e Finanza (Occasional Papers), forthcoming; G. Bulligan and D. Delle Monache, 'Financial market effects of the ECB unconventional monetary policy announcements', Banca d'Italia, Questioni di Economia e Finanza (Occasional Papers), 424, 2018.