The Countercyclical Capital Buffer (CCyB) rate
for the first quarter of 2016 is set at zero per cent

Article 136 of Directive 2013/36/EU (Capital Requirements Directive, CRD IV) requires the designated national authorities to adopt a framework for setting the Countercyclical Capital Buffer (CCyB) rate as of 1 January 2016. The rate will be reviewed quarterly. The European directive was enacted in Italy by Bank of Italy Circular No. 285/2013 'Supervisory Instructions for Banks', containing specific rules on the CCyB. Legislative Decree 72/2015 nominates the Bank of Italy as the authority designated to adopt macro-prudential measures in the banking sector, including the CCyB. The rules apply to banks and investment firms at the individual and the consolidated level.[1]

Based on an analysis of the reference indicators[2] the Bank of Italy has decided to set the countercyclical buffer rate (for exposures to Italian counterparties) for the first quarter of 2016 at zero per cent. Specifically:

– At the end of the second quarter of 2015 (the last for which full information is available) the deviation of the total-credit-to-GDP ratio from its long-term trend (the credit-to-GDP gap), calculated using the standard methodology, was about -10 percentage points (see Figure 1, Statistical Appendix). According to the model developed by the Bank of Italy, which takes account of the specificities of Italy's financial cycle, the gap is about -8 points.[3] Similar information comes from the analysis of only bank credit (Figure 2). The values of the indicators at the end of June 2015 are presented in the table on the following page.

– Although the Italian economy's macro-financial conditions are improving, they remain generally weak. The unemployment rate has been falling in recent months but it is still higher than in the past (Figure 3). During the summer, the growth in bank credit to the private sector was still virtually nil, despite a steady improvement (Figure 4). Real property prices are no longer falling but they remain well below their long-term level (Figure 5).

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[1] The Bank of Italy has exercised the regulatory option set out in Article 130(2) CRD IV in order to exempt small and medium-size Italian investment firms from the countercyclical buffer, also bearing in mind their relative systemic riskiness.

[2] According to CRD IV the credit-to-GDP gap should be used as the main indicator to set the countercyclical buffer rate. It measures the credit cycle on the basis of the deviation of the ratio of total credit to the non-financial private sector to GDP from its long-term trend calculated by the standard methodology recommended by the Basel Committee on Banking Supervision (see Methodological Appendix). Recommendation 2014/1 of the European Systemic Risk Board (ESRB) allows the designated authorities of EU countries to adopt credit-to-GDP gap measures other than the standard one where that does not properly reflect the characteristics of the national financial cycle.

[3] For the technical details see the Methodological Appendix.
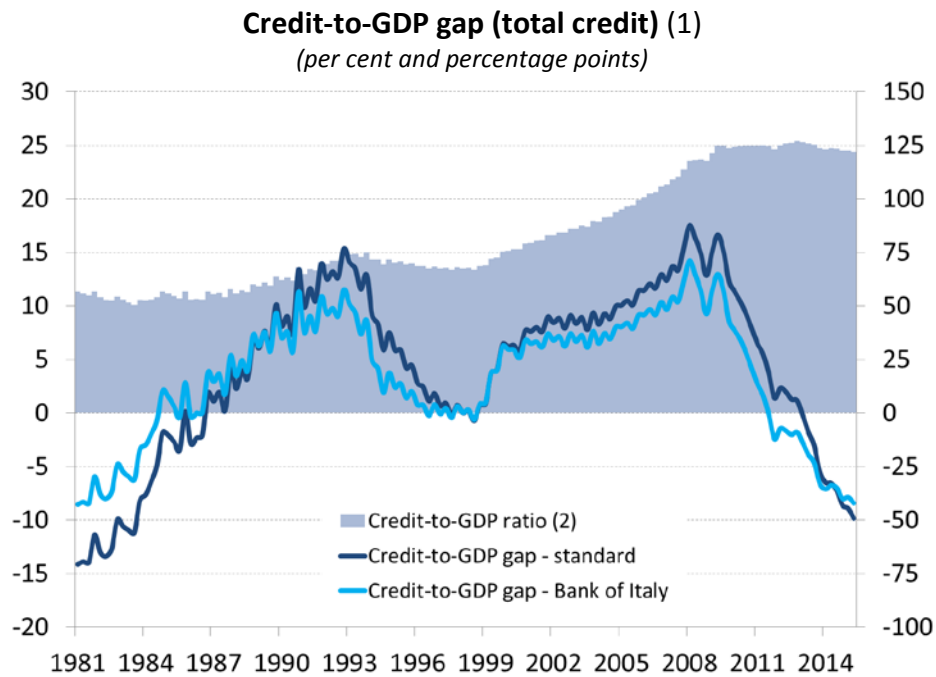
Credit-to-GDP ratio and estimated credit-to-GDP gap (1)

(per cent and percentage points)

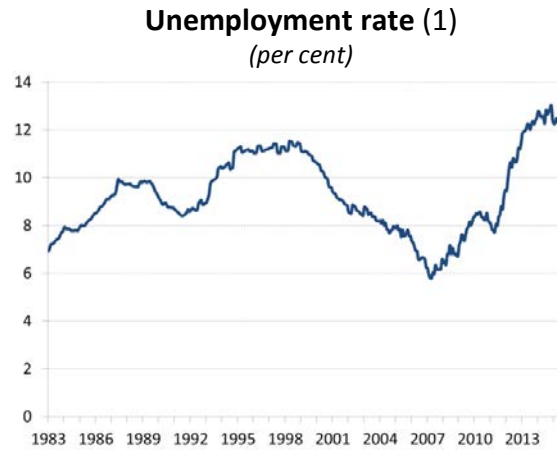|	Latest observation (June 2015)	Previous observation (March 2015)
Total credit		
Credit-to-GDP ratio	121.8	122.4
Credit-to-GDP gap - standard	-9.9	-8.9
Credit-to-GDP gap - Bank of Italy	-8.4	-7.9
Bank credit		
Credit-to-GDP ratio	87.7	87.3
Credit-to-GDP gap - standard	-5.9	-6.0
Credit-to-GDP gap - Bank of Italy	-4.5	-5.0

(1) See Methodological Appendix.

Statistical Appendix

Figure 1

Credit-to-GDP gap (total credit) (1)
(per cent and percentage points)

(1) See Methodological Appendix. – (2) Right-hand scale.

Figure 2

Credit-to-GDP gap (bank credit) (1)
(per cent and percentage points)

(1) See Methodological Appendix. – (2) Right-hand scale.
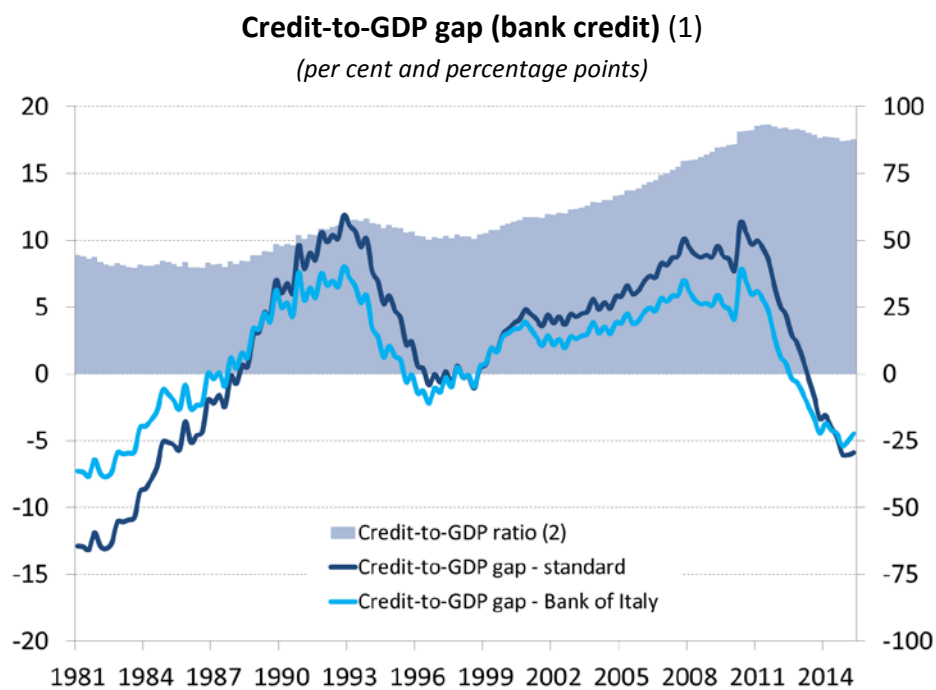
Figure 3

Unemployment rate (1)
(per cent)

Source: Eurostat.
(1) Seasonally adjusted monthly unemployment rate.

Figure 4

Bank credit to the private sector (1)
(12-month percentage change)

Total
Firms
Households
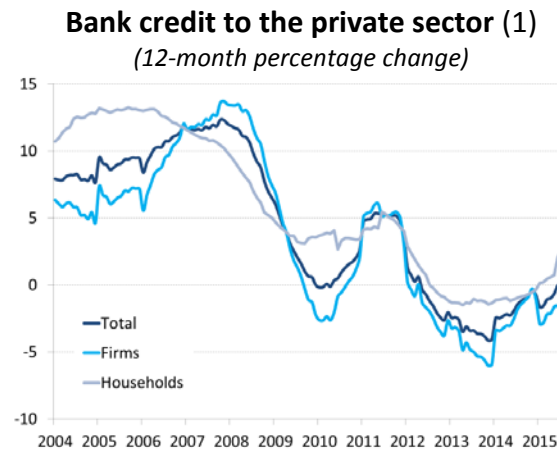
Source: Based on ECB data.

Figure 5

Price gap and real prices of property (1)
(per cent and indices)

Real prices (2)
Price gap
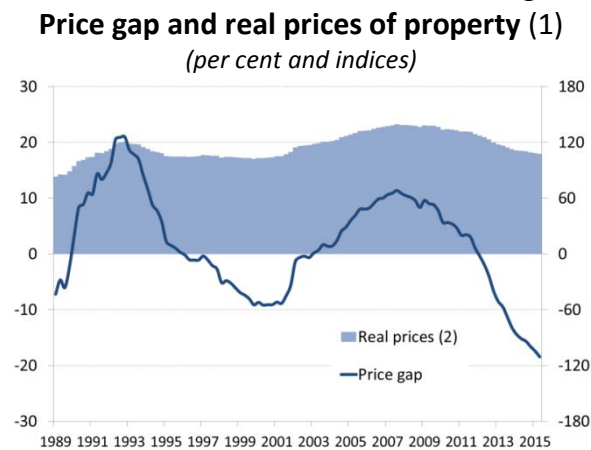
Source: Our calculations.
(1) The price gap is the percentage deviation of real prices from their long-term trend. For the method of calculation see the publication cited in the last footnote of the Methodological Appendix. – (2) Index, 1990=100. Right-hand scale.

Methodological Appendix

The standard methodology recommended by the Basel Committee on Banking Supervision defines the credit cycle as the deviation of the ratio of total credit to the non-financial private sector to GDP from its long-term trend (credit-to-GDP gap) calculated using a one-sided Hodrick-Prescott filter (HP)[1] in which the long-term trend is estimated at every point in time only on the basis of current and past information. An analysis of credit dynamics in Italy from 1970 to date reveals two problems with this methodology:

a. The estimate of the cycle calculated in real time is systematically and significantly revised downwards when new data on credit and GDP become available. The one-sided HP filter is in fact very different from the two-sided one (which uses information from the whole sample) and it tends to overestimate credit cycle volatility.[2]

b. The average duration of expansionary phases in Italy would be around 12 years, which is much longer than documented in the literature and highly unrealistic.[3]

Although the two-sided HP filter cannot, by definition, be calculated in real time, its time series can still be used to make a better estimate of the state of the credit cycle by adjusting the value obtained with the one-sided HP filter on the basis of the historical differences observed between the estimates produced with the two filters, as suggested by Alessandri et al. (2015).[4]

This adjusted filter produces real time estimates that are closer to those obtained with the two-sided filter. The adjustments greatly reduce the estimated volatility of the cycle; notably, the peaks of the expansionary phases of the early 1990s and mid-2000s are much lower both for total credit and for bank credit.

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[1] R.J. Hodrick e E.C.Prescott, 'Postwar U.S. Business Cycles: An Empirical Investigation', *Journal of Money, Credit, and Banking*, 29, 1, 1997, pp. 1-16.

[2] As already pointed out by A. Orphanides and S. van Norden, 'The Unreliability of Output Gap Estimates in Real Time', *The Review of Economics and Statistics*, 84, 4, 2002, pp. 569-583.

[3] According to S. Claessens, M.A. Kose and M.E. Terrones ('How Do Business and Financial Cycles Interact?', *Journal of International Economics*, 87, 1, 2012, pp. 178-190), the expansionary phase of a financial cycle lasts on average two years; according to M. Drehmann, C. Borio and K. Tsatsaronis ('Characterising the Financial Cycle: Don't Lose Sight of the Medium Term!', BIS Working Papers, 380, 2012), the median duration is five and a half years.

[4] P. Alessandri, P. Bologna, R. Fiori and E. Sette, 'A note on the implementation of a countercyclical capital buffer in Italy', Banca d'Italia, Questioni di Economia e Finanza (Occasional Papers), 278, 2015.