THE EFFECT OF TAXATION ON THE TOTAL COST OF CREDIT OVER THE PERIOD 1998-2017

An important component of the cost of credit consists in the taxes paid by banks, referred to in the economic literature as the tax wedge. This largely depends on the rates and bases of taxes on bank profits.

The tax wedge on loans by Italian banks was estimated for the period 1998-2017 using a structural model that describes the banking sector's lending behaviour. Assuming a constant cost of financial resources (debt and equity), the model identifies the effects of changes in the tax laws on the cost of credit.¹

The figure shows changes in the ratio of the tax wedge to the interest rate paid by borrowers in the period 1998-2017;² this indicator allows a direct comparison with the nominal tax rate on profits (Ires and IRAP). In the period considered, the average tax wedge amounted to 70 basis points; the ratio of the tax wedge to the interest rate paid by borrowers was 15 per cent.³ The dynamics of the tax wedge as a percentage of the cost of credit differed significantly from the dynamics of the overall nominal tax rate on bank profits due to changes to the laws on the tax base. From 2002 to 2011, notwithstanding a decline of



8 percentage points in the nominal rate, the tax wedge remained substantially unchanged as a percentage of the cost of credit, largely on account of stricter limits on the deductibility of loan loss provisions. Starting from 2012, while nominal rates remained virtually unchanged (with the exception of the corporate surtax in

¹ E. Zangari and E. Pisano, 'Forward-looking effective tax rates in the banking sector', Banca d'Italia, Temi di Discussione (Working Papers), forthcoming. The paper examines the dynamics and composition of the tax wedge in the period 1994-2017 with a model of loan pricing similar to that used by, among others, D. Elliot, S. Salloy and A. O. Santos, 'Assessing the cost of financial regulation', IMF Working Paper, 12/233, 2012. The results reported in the box relate to the period following the introduction of the regional tax on productive activities (IRAP) in 1998. For the purposes of identifying only the effects of changes to the tax laws on the cost of credit, the economic parameters of the model (the cost of the debt, the cost of equity, the equity-to-loan ratio, and the loan loss provisioning rate) are assumed to be constant and equal to the average of annual values. Sensitivity analyses show that changes to the tax wedge have a low sensitivity to assumptions regarding the financial cost of loans.

² This ratio corresponds to the marginal effective tax rate, used in the literature to measure the taxation on marginal loans, that is, loans that guarantee yields that exactly match the cost of the financial resources and of taxation (see M. P. Devereux, 'Measuring taxes on income from capital', CESifo Working Paper Series, 962, 2003).

³ In other words, the average interest rate paid by borrowers in the reference period is equal to 4.6 per cent, of which about 0.7 percentage points (15 per cent) are ascribable to the tax wedge.

2013), there was a significant reduction in the tax wedge, largely due to the easing of limits on the deductibility of loan loss provisions and the changes to the tax treatment of equity under the allowance for corporate equity (ACE).

The limits on the deductibility of loan loss provisions, in effect until 2015, were a major component of the tax wedge: due to this component, in the period 1998-2012 the ratio of the tax wedge to the cost of credit was on average larger by about 3 percentage points. Starting in 2013, the contribution to the tax wedge provided by this component gradually declined to nil. This led to a reduction of about 15 basis points in the overall interest rate paid by bank debtors and the elimination of an anomaly in the Italian tax system.

Another important component of the tax wedge is due to the unfavourable tax treatment of equity financing owing to the deductibility of interest on the debt only. From the end of 2011, the ACE reduced this asymmetry by allowing a return on equity established by the law to be deducted from the Ires tax base. In the period 2012-17, this measure reduced the ratio of the tax wedge on the average cost of credit by about 3 percentage points, helping to lower the interest rates paid by debtors by about 12 basis points. The effect changed over time on account of the adjustments made to the rate of return on equity, which was first increased between 2014 and 2016 and significantly reduced thereafter. The ACE was repealed in 2019.

Given the full deductibility of loan loss provisions, the tax wedge is now almost wholly attributable to the un-deductibility of the cost of equity.

2