

Do Corporate Taxes Reduce Productivity and Investment at the Firm Level? Cross-Country Evidence from the Amadeus Dataset

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NON-TECHNICAL SUMMARY

As a key issue of public policy the evaluation of the link between taxation and growth has produced a well established body of macroeconomic research. While considerable methodological progress has been made in recent years, not least to address the simultaneous determination of tax and growth rates, macroeconomic studies at the aggregate level cannot provide a deep understanding of the channels through which taxation affects growth. This paper aims at filling this gap by analysing the effects of corporate taxes on two of the main drivers of growth, productivity and investment at the firm-level.

Corporate taxes may impact firm-level productivity and investment through various channels. In the first place, high corporate taxes may reduce incentives to invest in productivity enhancing innovations since the firm only appropriates the share of the resulting profit increase that is not taxed away. Secondly, corporate taxes may have a negative effect on risk taking by firms if profits are taxed at a higher rate than losses are compensated. Finally, to the extent that corporate taxes reduce investment, this may reduce productivity if new capital goods embody technological progress. This paper identifies the effects of corporate taxes on productivity by using a differences-in-differences strategy. Specifically, it asks whether firms in relatively profitable sectors have disproportionately lower productivity growth rates in countries with high statutory corporate tax rates. In a stratified sample of firms over the period 1996-2004, this is found to be true across firms of different size and age classes, except for young and small firms. A simulation experiment indicates that over 10 years the effect on the annual TFP growth rate of a reduction of the corporate tax rate from 35% to 30% would be 0.4 percentage points higher for firms in the sector with median profitability than in the sector with the lowest level of profitability. Under the assumption that the effects from corporate taxation are close to zero for firms with the lowest tax base, this may be interpreted as a median effect. The estimations further suggest that the findings on small and young firms are due to their generally low profitability and not to reduced statutory tax rates or exemptions. Finally, the negative effect of corporate taxes on productivity growth is particularly large for firms that are catching up to the technological frontier, indicating that above and beyond innovation behaviour within firms corporate taxes appear to have an effect on the composition of firms.

To estimate the effect of corporate taxes on firm-level investment, a standard firm-level investment equation is estimated in which corporate taxes enter through a tax-adjusted user cost of capital. The results suggest that the user cost of capital has a significantly negative effect on firm-level investment, with the long-run user cost elasticity of the investment rate around -0.7. The effect of the user cost is larger in relatively profitable sectors where the tax base is large, indicating that the tax component of the user cost is indeed likely to be responsible for the observed reduction of investment rates. The various results presented here are robust to various changes in specification and sample.

J.E.L. Classification: D21; D24; E22; E62; H25; H32.

Keywords : Productivity; Growth; Tax Structure; Firm level data; Fiscal policy.