Swedish Lessons: How Important are ICT and R&D to Economic Growth

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Paper Abstract: We investigate to what extent ICT and R&D capital is associated with value added growth in the Swedish business sector. By estimating output elasticities based on data for 47 different industries for the period 1993–2012 we show that ICT and R&D capital are significantly associated with value added for most specifications. We also divide ICT capital into hardware and software capital. To our knowledge, this distinction has not been made in any previous study at the industry level. In this case only the estimated elasticity of software is significantly different from zero. Finally, we use the growth accounting framework to compare the contribution from ICT and R&D to value added growth when output elasticities are based on either income shares or weighted least squares (WLS) estimates. The contribution of ICT to value added growth increases from 0.9 to 1.5 percentage points when WLS estimates are used instead of income shares.