Efficiency and factor reallocation effects and marginal excess burden of taxes in the UK economy

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Abstract:

This paper analyses welfare impacts of tax reforms using a multisectoral general equilibrium tax model with multiple capital assets for the UK economy with micro-consistent benchmark data set for the year the 1995 received from the Inland Revenue. Households make consumption and labour leisure choices subject to their budget constraints, producers choose inputs to maximise profits. Prices adjust until demands equal supplies. Government revenue from the direct and indirect taxes finance public consumption and transfers.

Welfare gains from replacing existing capital income tax rates by a uniform 26.5 percent rate across sectors and assets are 0.035 percent of GDP (£219 million) in equal yield case, 0.28 percent of the GDP (1.8 billion) in no equal yield case. Tax induced changes in the relative prices of capital assets across sectors lead to reallocation of these assets among sectors. Producers tend to substitute capital for labour in agriculture, finance, public administration, and education sectors where capital inputs become relatively cheaper than labour inputs. Labour substitutes capital in manufacturing sector, where capital becomes relatively expensive after a uniform tax reform.

The marginal excess burden (MEB) of taxes varies according to the tax instruments in use, ranging from 35 pence in case of capital income taxes to 54 pence per pound of additional revenue from production taxes.

Keywords: general equilibrium, economic welfare, tax model, UK economy

JEL Classification: D5, D6, H2, H3