FACTOR TAXATION AND LABOR SUPPLY
IN A DYNAMIC ONE–SECTOR GROWTH MODEL

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Abstract

This paper studies a class of AK-type growth models with public capital stock and elastic labor supply. The government taxes both factor incomes and conduct expenditure. To rationalize the taxation, government expenditure affects the productivity of private sectors. It shows the existence of a unique balanced-growth path, near which there is only a transitional dynamic path leading the economy toward it. While a higher capital tax rate reduces economic growth in the short run, the long-term growth effect is ambiguous, and this long-term growth effect remains ambiguous even if the level of tax rate is larger than the degree of government externality. A higher labor income tax rate has equally ambiguous growth effects both in the short and long runs. However, if the intertemporal elasticity of substitution for labor supply is small enough, a higher labor tax rate always lowers economic growth in the long run, despite the existence of productive government taxation.

Key words: taxation, infrastructures, economic growth, transitional dynamics
JEL classification: E6, O4.

Comments from two anonymous referees are greatly appreciated.

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