**Revisiting Incentivism Theory —Testing Barriers to Riches on post-war panel data**

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In this monograph. we set out the theory of growth and its relationship to taxes and we also review the empirical evidence on this relationship. The empirical evidence is of two main sorts: ‘reduced form' correlations and individual country studies using a structural (causal) model of the DSGE sort. Of these two the former are able to cover large samples of different counties and episodes, which makes them attractive and persuasive. However, they have the drawback of poor 'identification' of the underlying causality. One cannot be sure that this runs from tax to growth as opposed to either reverse causation or joint causation by some third unmeasured factor. Nevertheless, many economists may be inclined to ignore this problem on the grounds that only the first causal direction is likely from purely theoretical reasoning; growth is unlikely to cause lower tax, indeed it should cause more tax revenue. As for third joint causes, one may appeal to deep cultural factors originating from early history but the difficulty is that culture is widely shared in the advanced economies usually considered and yet their experience varies greatly. As for DSGE models of country episodes, the wide variety of possible specifications combined with the difficulties of estimation and testing mean that a convincing model may be hard to find. In what follows we will revert to these issues as we try to weigh up the evidence.

Following Lucas (1988) and Gillman and Kejak (2005), we examine representative households operating in competitive markets who own a Cobb-Douglas production function with constant returns to scale dividends and wages add up to total GDP. We assume that each household can work or may undertake some activity to innovate its methods, so raising its productivity. This is the model's mechanism of growth. We assume that it can be `education' or `entrepreneurship'. If the former it is affected by the government's subsidy to education (our education variable) as well as by its general tax rate; if the latter, by the `business tax rate'. This set-up enables us to treat each model as a variant of the same model. The economy is open but is `small' in the sense that it can borrow on world markets at the world real interest rate and its goods prices are also set on world markets. Each economy in our world of 76 countries will face the same world market; each country has a different level of total factor productivity and the choices of its citizens determine how fast they raise this, by diverting their time from normal work to productivity-enhancing activities. In doing this they can draw on the world stock of available knowledge and borrow world capital to implement their resulting higher productivity output.