

# Tax competition and determination of the quality of public goods

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The literature on horizontal tax competition put forward a type of utility function that is not specified or specified with additive-type function. This is the reason why we attempted to explore this research track: a multiplicative utility function, whence the interest of the proposed modeling in this papers. Regarding the question about the options available to a local governments: tax the capital or not. In our paper, tax break is a measure corresponding to a total exemption whose main objective is to increase domestic market attractiveness. The firms should be motivated to stay on this market. Consequently, taxing the capital is summarized by the idea that as far as the marginal tax rate increases, tax revenues increase up to a maximum. From this maximum rate, there is a decrease performance in tax revenues (the fiscal theory of the Laffer curve). I argue that the present situation regarding taxation of capital can be analyzed as a consequence of insurance game; in others words as a shield to avoiding capital escape, especially in a context of lack of quality standards which accompanies public goods. Without loss of generality, the various players, represented among others by local governments or states, have a choice between two strategies: to tax or not to tax a particular factor (capital). If we hypothesize these jurisdictions are divided into two groups, four scenarios are conceivable.

- *The first two cases are asymmetrical: the two groups are choosing to conduct contrary fiscal policies. One group chose to impose a maximum tax rate on capital, the other not.*
- *The other two situations are symmetrical: both groups are choosing to drive the same tax policy, or to impose a maximum tax rate on capital or not.*

To resolve this game, just take each situation, one after another, and whether player has an interest in change strategy if the other does not change. The economic analyses offer the consequences of tax competition mechanisms in terms of the collective welfare of the jurisdiction in question.

## Strategic dominance and Nash equilibrium

We took as a starting point the assumption that all local governments are perfectly the same, and we asked the question if the analyses performed in each configuration (the issue is the welfare of the local government  $i$ ) allow us to define a Nash equilibrium. For this to be realized, it is necessary that, by adopting the same behavior as other governments, the marginal government in question has no incentive to deviate. It must also be if a dominant strategy regardless of strategy of the other governments, *i.e.* the government  $i$  has an optimal strategy which does not depend on what will do other local governments.

By comparing the different configurations of the local government in question in terms of taxation, we note that it has always interest in choosing to tax capital in addition to the immobile factor. Indeed, the utility of the representative household is improved in all configurations studied.