

ACROPOLIS

BeFIND



Belgian Policy Research Group on Financing for Development.

Follow you, follow me: public investment under tax competition

Jean HINDRIKS

Dept. of Economics and CORE, UCLouvain.
Email: jean.hindriks@uclouvain.be

Yukihiko NISHIMURA*

Graduate School of Economics, Osaka University
Email: ynishimu@econ.osaka-u.ac.jp

The mobility of capital and the presence of multinational firms able to shift profits to tax havens limit the ability of governments to tax capital income and domestic profit. Profit shifting leads to an estimated revenue loss for developing countries that is roughly three times greater than the amount they receive each year in foreign aid (DEVE 2014). In this policy brief, we report recent theoretical research on the interaction between the taxation of multinational corporations and public investment. In our setting, public investment increases the productivity of capital that in turn induces a comparative advantage in the tax-competition. We show that it is preferable for countries to commit first on public investment and then to set taxes.

We investigate the issue of tax base mobility either via capital mobility or profit shifting. It is well known that this mobility triggers a race to the bottom in the form of tax competition. The standard approach to tax competition assumes that regions set taxes simultaneously and non-cooperatively. This form of tax competition is very costly for developing countries as it often consists of tax incentives that governments of low-income countries (also, albeit to a lesser extent, of high-income countries) typically offer in the form of tax exemptions with the aim of attracting (or retaining) foreign investors. Such fiscal benefits to international investors are widespread in developing countries. An

investigation by ActionAid (2014) of the giant multinational corporation Associated British Foods found that it has denied Zambian government USD 17.7 million since 2007 and that the Zambian subsidiary has paid less than 0.5% of its profit in corporate tax. Eliminating tax incentives is often seen by many as low-hanging fruit for developing countries. The issue is how to motivate them to do it. One interesting option for developing countries is to use public investment as a commitment device to stop offering tax incentives. The idea is that eliminating tax incentives can be optimal (i.e., sustainable) only if governments in developing countries have first chosen to foster investment in,

ACROPOLIS

BeFind



Belgian Policy Research Group on Financing for Development.

for example, infrastructure, human capital and institutions, which matter very much for the productivity of private corporations.

To make this point, we use a simple framework with the following elements: (1) two countries of different size compete for transnational firms, the smaller country being a developing country with little market power on the global capital market; (2) the smaller country offers tax incentive to compensate for its smaller market ; (3) each country undertakes public investment that drives foreign investment and promotes economic growth; (4) public investment also has a positive effect on the government's ability to raise tax revenue; (5) private capital is owned mostly by non-residents; (6) mobile firms are able to extract rents when countries compete to host them.

In the fiscal competition game that countries play with each other, we also assume that each government independently chooses its tax rate and the level of public investment in order to maximize national output and the tax revenues. Capital is freely mobile across countries and its location is eventually guided by the international arbitrage condition based on the after-tax return.

Considering the choice of public investment prior to tax competition, we show that it is always preferable for the smaller (developing) country to set its tax in response to the tax chosen by the larger (developed) country; that is to say the smaller country should let the tax initiative to the larger country. This “matching” strategy is beneficial for the developing country, which will receive the tax follower advantage. As a

result, the smaller (developing) country will chose a relatively lower tax rate than the larger country in order to partially offset its lower productivity of capital. We then show that, the developing country will invest more in public infrastructure under this tax-matching strategy than it would otherwise. So the developing country ends up with more tax revenue and more public investment than it would obtain by competing in the classic way with the larger country. We also examine the optimal timing of investment. We show that only the simultaneous choice of public investment prevails in equilibrium, that is, no country has any incentive to take the initiative in its choice of public investment. The negative message is that each country has the incentive to under-provide public investment. This negative outcome is due to the mobility of capital. The fundamental reason is that the benefit of public investment is partly captured by the capital owner in the form of increased return on capital, and, due to limited taxation, it is not possible for the government to fully extract this rent from public investment.

In terms of policy recommendations, the message is twofold. First, in an open economy with an international market for capital, public investment (in infrastructure, education, R&D), unlike public consumption (such as public wages and transfers), can greatly influence the nature of competition. As a result, governments should look forward and anticipate the consequences of their commitment to public investment for competition. Second, public investment is not a reversible decision as are tax choices, it has long-lasting effects, and it displays strong commitment benefits. For that reason, it is recommended that the investment decision be delegated to a separate governmental

ACROPOLIS

BeFind



Belgian Policy Research Group on Financing for Development.

agency and not be associated with the fiscal authority. Furthermore, when receiving foreign aid, the government may consider spending that transfer into public investment (rather than public consumption) in order to boost its future capacity to tax capital and profit.

Therefore, public investment is a powerful instrument for tax-revenue mobilization in developing countries.

References

- ActionAid, 2014, Almost half of all investment in developing countries goes through tax havens, March 2014.
- DEVE, 2014, Tax revenue mobilization in developing countries: issues and challenges, DG external policies of the union, EU April 2014.
- Hindriks, J. and Y. Nishimura, 2015, A note on equilibrium leadership in tax competition models, *Journal of Public Economics*, vol. 121, pages 66-68.
- Hindriks, J., S. Peralta, and S. Weber, 2008. Competing in taxes and investment under fiscal equalization, *Journal of Public Economics*, vol. 92(12), pages 2392-2402.
- IMF, 2013, *Fiscal Monitor, World economics and financial surveys*, Washington DC 2013.

To find out more:

- ➔ Hindriks, J and Y. Nishimura, 2014, On the timing of Tax and Investment in fiscal competition models, CORE Discussion Paper 2014/65.
http://www.uclouvain.be/cps/ucl/doc/core/documents/coredp2014_28web.pdf
- ➔ Hindriks, J. and Y. Nishimura, 2015, A Note on equilibrium leadership in tax competition models, *Journal of Public Economics*, vol. 121, pages 66-68.

Disclaimer: The views expressed in this policy brief are solely those of the author and do not necessarily represent the views of the Directorate General of Development Cooperation of the Belgian Ministry of Foreign Affairs, Foreign Trade and Development Cooperation or any other entity of the Belgian Government.