## Comment on Rikard Forslid: Tax competition and agglomeration: Main effects and empirical implications

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The paper deals with tax competition in the new economic geography (NEG) framework. Although it concentrates on theoretical aspects, the paper also provides some guidance for empirical work. The introduction of public policy aspects and tax policy issues into the NEG setting is interesting and highly relevant as economic integration, both at the global and at regional levels, has led to growing concern about the ability for countries to maintain control over national tax policy not least in the European Union. In the policy debate, the most common view of the effects of economic integration on taxes seems to be in line with the predictions of the traditional tax competition (TC) literature, namely that integration will lead to intense tax competition as countries compete for mobile factors. In consequence, tax revenues will possibly fall which, in turn, could seriously affect the level of social protection. The only alternative could be to shift taxation from mobile factors, such as capital, to less mobile factors, such as labour, or, if one considers different types of labour with varying mobility, from more mobile to less mobile workers. However, since the mobility of labour is expected to be highly correlated with education and income level, there are also potential distributional and equality issues that decision makers have to face.

New economic geography adds to this debate as it suggests that agglomeration forces, which tend to concentrate economic activity, provide a dampening effect on factor mobility in the economic integration process. Thus, countries that benefit from these forces could maintain higher taxes without experiencing an outflow of the mobile factor. Another interesting feature of NEG models is the non-monotonic relationship between the level of trade costs and agglomeration forces, where the impact of agglomeration forces is strongest at intermediate levels of integration. This means that one would

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expect an increase in the differences in tax rates across countries up to some level of integration, after which the tax gap will tend to narrow.

What, then, is the empirical relevance of the effects on taxes in the NEG framework and what could it add to the policy debate? Starting with the latter issue, the new insights from NEG suggest that economic integration may not necessarily lead to tax competition. Instead, the theory implies a restoration of a country's possibilities to conduct a national tax policy, especially if the country is able to attract industries where there are agglomeration forces. However, one should not forget, and it is also mentioned in the paper, that tax competition may not always be a bad thing. For instance, there is a large literature on the behaviour of politicians and bureaucrats that states that just as there are market failures, there are political failures. This line of research emphasizes that as politicians act in their self-interest, there will be a tendency for government expenditure to increase and, consequently, the political sector will grow too large as compared to what is in the public interest. If so, tax competition could be a way of disciplining decision-makers and avoiding excessive public sector expansion. Another research area, the optimal tax theory, also argues that as taxing mobile factors is associated with efficiency losses, tax competition that forces governments to reduce taxes on mobile bases will also increase welfare.

If we turn to the empirical side, one could start by looking at what has happened to tax rates over time. In most OECD countries, trade costs have gradually decreased over the last decades and appear to coincide in time with falling statutory tax rates on both labour and capital. Naturally, this does not necessarily mean that there has been tax competition. Instead, this could be the result of a general trend as many countries have reformed their tax systems by lowering taxes but broadening their tax base. Moreover, the development of effective tax rates, which show what is really paid in taxes, is much less clear. However, if one considers that most restrictions on capital mobility were removed around 1990, capital taxes are not as low as expected and there are no signs of a race to the bottom. If we consider more systematic studies of integration and tax competition, most of these are based on the standard TC literature and focus on capital mobility as a measure of integration. Generally, these studies also find a negative impact of capital mobility on corporate tax rates (corporate income taxes are the commonly studied ones since corporate income is

considered to be the most mobile tax base). There are some empirical works, however, that use trade openness as a measure of integration. The use of trade openness is not clear cut, though. For example, Rodrik (1997) finds that countries that are integrated with the world economy in terms of volumes of trade but exert capital account restrictions have higher taxes.

How then could the NEG framework and the impact of agglomeration forces be tested? There are several problems that empirical studies must encounter. For instance, it is important to differentiate between NEG and alternative explanations, such as the standard TC framework. This question is related to the issue of finding good measures of agglomeration. For example, the use of country size or GDP per capita as a measure of agglomeration can be motivated as larger and richer countries are associated with stronger agglomeration forces and, thereby, could have higher tax rates. However, a positive relationship between these agglomeration variables and taxes is also compatible with the standard TC theory (in addition, it should also be noted that GDP could be high for many other reasons than agglomeration). The choice of which empirical measures of agglomeration to use is therefore crucial, but may turn out to be quite problematic as agglomeration forces in the NEG setting must work at the country level to affect national tax policy. In reality, though, agglomeration forces may primarily work at more disaggregated levels, such as in particular industries or smaller geographical regions of a country.

A final comment concerns the non-monotonic relationship between trade costs and agglomeration forces where it is, of course, an empirical question whether countries are to the left of the "hump" or to the right. With respect to the European Union, with almost 50 years of integration, most studies suggest that there will be scope for further concentration of overall economic activity as integration proceeds and, thus, that Europe is still to the left of the hump. This does not rule out that specific industries and smaller regions may actually be to the right but, again, it is questionable if this will turn up as a negative effect on taxes in empirical studies.

## Reference

Rodrik, D. (1997), Trade, social insurance, and the limits to globalization, NBER Working Paper 6905, National Bureau of Economic Policy Research.