Corporate taxes and the location of intellectual property

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Helen Miller, Senior Research Economist at the Institute of Fiscal Studies, presented the work titled "Corporate taxes and the location of intellectual property" which she has co-authored with Rachel Griffith and Martin O'Connell. The presentation was followed by a lively general discussion chaired by **Zsolt Darvas**, Research Fellow at Bruegel.

In the last years, governments have engaged worldwide in a new race to the bottom on corporate taxes concerning intellectual property. Over the last twenty years, intellectual property has become a new third factor of production along the two traditional ones (capital and labour) for firms and a key determinant of economic growth for developed as well as for developing countries.

The highly mobility of intellectual property has led governments to undertake some policies expressly targeted to attract property rights of multinational corporations. In 2007 the Benelux countries, for example, have introduced a so-called 'patent-box', which is a significantly reduced tax rate for patent income. For example, while the standard corporate tax rate is 34% in Belgium, the tax rate on patent income is only 6.1%. The United Kingdom will introduce similar fiscal advantages staring from 2013. It is generally called 'box', because corporations have to tick a box in their tax declaration. While 'patent box' is the official name in the UK, in Benelux countries the official name is different.

More in detail, patent boxes offer a reduced rate of corporate tax for the income derived from patents. The effective reduction depends on the specific national legislation through which patent boxes have been adopted. In some countries, patent boxes have been motivated as necessary innovation policy stimulating R&D activities. But Helen Miller argued that they are poorly targeted in this regard, because their final aim is to target income more than ideas. In addition they can also distort the decision to invest in patentable kinds of intellectual property and create benefits for only few, highly mobile, firms more than for innovative firms as a whole.

On the other hand, patent boxes do correspond to a principle of efficiency. As it has been highlighted by the Mirrlees Review, it is actually more efficient to tax immobile income more than mobile income. Furthermore, patent boxes could have beneficial effects if attracting income translates into attracting real innovative activities.

Evaluating the exact impact of patent boxes is not trivial as it depends on how firms react to their introduction. The paper presented during this Economic Policy Seminar provides a first empirical evidence on how responsive the location of intellectual property is to corporate taxes. The study models firm behaviours by observing legal patent location decisions by headquarters and controlling for patent heterogeneity. Thanks to the use of a random coefficient model and the match of data provided by the European Patent Office for the period 1985-2005 with European and US firms' financial accounts, the paper shows that patents do respond to taxes and do respond in a heterogeneous way. The adoption of a patent box system from one country does affect in a different way the other countries in the sample used. Moreover, the paper shows that the adoption of patent boxes causes a fall in the revenues of the government that adopted the patent box as well as in the revenues of the other governments of the sample.

The discussion following the presentation highlighted the importance of doing further research on this subject. In particular, it would be interesting to gather additional evidence on the impact of patent boxes on the location and amount of research activities. A more inclusive sample of countries and more detailed data on the modalities through which headquarters finance subsidiaries, finally, would allow a more precise estimate of the impact of patent boxes, even for non-European firms.