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Are Corporate Tax Rates Heading for 0%?

The last enlargement of the European Union brought countries with low corporate tax rates into the EU, and has revived worries that tax competition could constrain economic policies in Member States. Yet, the Union's most geographically central and richest countries, in which firms wish to invest, can still maintain higher rates provided that a solution is found to tax optimisation practices, whereby firms locate activities in one country and pay taxes in another. Furthermore, firms also take into consideration available infrastructure and public services when locating their activities. Nevertheless, corporate pressure for tax competition risks distorting tax and spending structures, at the expense of households. There are thus political and social reasons favouring tax coordination in Europe, though this does not mean uniformity.

Taxes in Europe

Taxation is still largely a national prerogative in Europe.[1] For long, coordination was restricted to VAT. But on 1st July, the European Savings Tax Directive[2] came into force, following an agreement on a "tax package", reached in January 2003.[3]

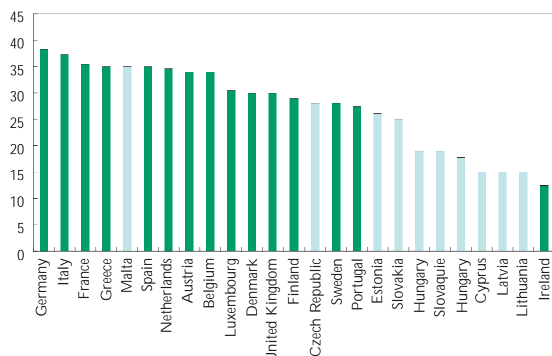
As far as corporate tax is concerned, the European Commission put forward proposals for minimum rates a long time ago.[4] But these were not followed up. Then, in October 2001, it set out a twofold strategy. First, a number of piecemeal measures aimed at reducing distortions were implemented. Second, the Commission proposed consolidating the tax bases of firms working in several member states. The tax bases would be apportioned among States concerned, according to a formula still to be defined, which could include turnover, the wage bill and/or fixed assets. These proposals seek to eliminate competitive distortions resulting from tax discrimination based on nationality. They also seek to combat tax optimisation, whereby firms shift profits to low-taxation countries, without relocating their actual business activities. It should be noted that these proposals do not strive to diminish competition. On the contrary, competition across countries should be strengthened by making tax systems more transparent through harmonised tax bases.

Yet corporate taxes vary significantly across Member States, and even more so since enlargement. In 2004, nominal tax rates were more than 35% in Germany, France and Italy, but stood at only 19% in Poland, 15% in Latvia and Lithuania and 0% (for reinvested earnings) in Estonia (see Graph 1). Such spreads in tax rates raise two types of worries in the high-tax countries. The first concern is that firms will be encouraged to relocate activity to low-tax countries. The second is that competition will force high-tax countries to cut tax rates, which in turn will push down spending (hence

1. According to the Nice Treaty, coordination on tax issues requires unanimity between members.
2. The Directive organises the exchange of information about income on savings earned by Europeans in countries in which they are not resident, so that income can be taxed in the country of residence. However, such coordination is not complete. Luxembourg, Belgium and Austria, which all have banking secrecy laws, do not have to abide by the Directive as long as countries outside the Union (especially Switzerland) have not abolished banking secrecy. In the meantime, the three countries will apply a withholding tax.
3. Apart from the exchange of information, the package includes the elimination of "harmful" tax practices (*i.e.* tax discrimination depending on a firm's nationality).
4. In 1975, and then in 1992 (the Ruding Report).

forcing their social model in line with the lowest common denominator), or will oblige them to raise taxes on less-mobile tax bases (consumption and labour). Low-tax Member States retort that tax competition is beneficial as it forces governments to increase public sector efficiency.

Graph 1 – Maximum nominal corporate tax rates, in %, in the EU25 (2004) (%)

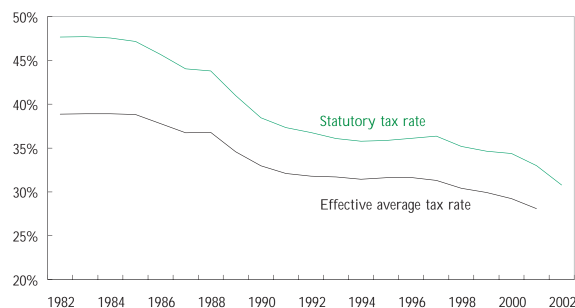


Source: Eurostat.

A fall in corporate tax rates can indeed be observed over the long term. This holds for nominal and effective rates, with the latter accounting for tax allowances, which may vary from country to country. Falls in effective rates have been less marked than for nominal rates, as tax bases have widened. This occurred especially in the early 1990s and early 2000s (Graph 2). The cuts in nominal rates which occurred after 1995 were compensated for by broader tax bases, so that revenues from corporation tax have remained stable at around 2 to 2.5% of GDP. The Single European Market, established during the 1990s, did not distort tax structures at the expense of the least-mobile tax bases. On the contrary, after having risen regularly throughout the 1970s and 1980s, taxes on labour began to fall during the second half of the 1990s. This occurred as social insurance contributions on low-wage earners were reduced, followed by cuts in income tax.

The race-to-the-bottom in corporate taxation within the EU15 was thus limited. Only one country (Ireland) deliberately pursued a policy of tax competition. Today, however, the situation is different. As can be seen in Graph 1, the nominal tax rates in the new Member States are nearly all lower than in the EU15 (excluding Ireland), as a result of important tax cuts during the last decade.[5] This new situation begs the question of whether tax competition in the EU25 will be fiercer.

Graph 2 – Trends in corporate tax rates: EU15 average, for 1982 to 2001



Source: P.P. Devereux & R. Griffith (2002), "Evaluating Tax Policy for Location Decisions", CEPR *Discussion Paper*, No 3247, March.

All rates to 0%?

Will tax competition bring corporate rates down to the lowest level, *i.e.* the 0% rate on reinvested earnings in Estonia? Three reasons suggest this is not likely for the moment:

✦ Low corporate tax rates are not the cause of foreign direct investment (FDI) inflows in the new Member States.

De Mooij and Ederveen (2003) have studied the results of 350 econometric estimations of FDI sensitivity to taxes, and concluded that a 1 point cut in rates leads, *ceteris paribus*, to a 3-4% rise in FDI inflows.[6] Work by the CEPII on bilateral FDI flows within the OECD countries bears out the scale of these results.[7] Nevertheless, recent estimates on FDI flows within the EU25 (for 1990 to 2000), suggest that tax spreads only affect flows within the EU15, and not between old and new Member States.[8] Tax competition would therefore mainly occur among old members. Still, FDI in new members during these years might have been largely motivated by privatisation opportunities, and cost considerations may become more important in the future. This could be especially so as new members are increasingly integrated into the international division of labour. But the impact of taxes should not be greater than in the EU15, or within the OECD.

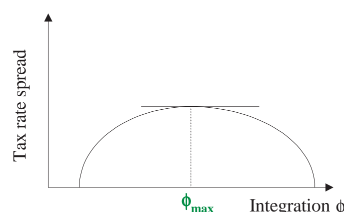
5. At the start of the 1990s, average corporate tax rates were higher in the Czech Republic, Slovakia, Poland and Hungary than in the EU15. Part of the subsequent fall may therefore be viewed as catching-up with EU15 levels. Furthermore, cuts in tax rates were sometimes undertaken to make tax systems more neutral: the most striking case being the Slovakian tax reform of 2004, which established a flat tax rate of 19% for personal taxes, for corporate taxes and for VAT. The objective has been to favour growth in general (and not just FDI), by having less-distorting tax systems, even though this can lead to higher inequalities.
6. R. De Mooij & S. Ederveen (2003), "Taxation and foreign direct investment: a synthesis of empirical research", *International Tax and Public Finance*, 10, 2003, pp 673-693.
7. A. Bénassy-Quéré, L. Fontagné, A. Lahrèche-Révil (2005), "How Does FDI React to Corporate Taxation?", *International Tax and Public Finance*, forthcoming.
8. A. Lahrèche-Révil (2005), "Who's Afraid of Tax Competition?", CEPII *Working Paper*, forthcoming.

✦ Integration within the EU25 is following enlargement, and this may be compatible, temporarily, with permanent spreads in tax rates.

The new economic geography demonstrates that agglomeration economies and transport costs are key determinants in firm location. Agglomeration economies arise when firms may achieve higher profits from locating where other firms already exist, as transport costs involved in accessing demand are lower. Countries displaying such economies (usually large countries) earn a rent and may tax firms on their territory more, without diverting investment. To be sure, transport costs to markets should not be prohibitive (otherwise firms will locate more closely to markets and will not concentrate geographically) nor be insignificant (which would reduce the attractiveness of large countries, as lower costs in small countries combine with low transaction costs to make small countries attractive). In this way economic integration, which ultimately translates into lower transport costs, allows larger countries to tax firms more than do smaller ones. But this only holds to a certain degree, beyond which deeper integration (*i.e.* lower "transport costs") reduces agglomeration rents accruing to large countries (Graph 3). Are the European countries below or above this threshold? In the former case, greater market integration (following from the single market, catch-up in transport infrastructures and monetary integration *etc.*) will lead first to a sustainable rise in tax spreads, while the latter case will lead to a rapid fall in spreads. The threshold level can be determined using econometric estimates of the bell-shaped relationship between tax spreads and the level of integration.[11] From these estimates it follows that in 2000, the majority of country couples within the EU25 were below the critical integration threshold: for them, further integration should be compatible with high tax spreads. For the others, above the threshold, deeper integration should lead to tax rate convergence. Given that market access to the EU for the new members is very recent, integration between them and the old members is still below the threshold. But it is progressing quickly and it will not be possible to maintain tax spreads for long.

✦ The availability of high-quality public goods may justify higher tax spreads.

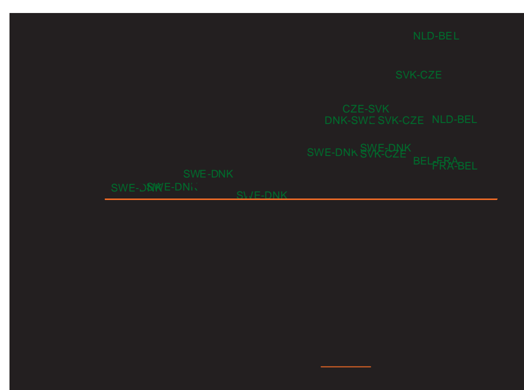
Graph 3 – Integration and sustainable tax rate spreads



Source: Baldwin and Krugman (2004), see footnote 9.

A firm seeking to develop its activities in a country will compare taxation with the availability of infrastructure and public services that are useful to its production and/or distribution. Estimates made by the CEPII, using data on US FDI in the EU, highlight the importance of two public factors in particular: road infrastructure and public spending on research and development.[12] The scale of the effects calculated suggests that a one percentage point rise in the corporate tax rate may be compensated for by a 5% improvement in the road network or by a 3% rise in public spending on R&D, and so does not affect US FDI into France. The figures show that a real trade-off exists and that EU Member States may specialise in different ways. Countries like France and Germany may offer dense as well as high-quality infrastructure and services, in exchange for relatively high taxation. In contrast, other countries like Poland and Estonia may take advantage of low taxation.

Graphe 4 – Bilateral integration and tax spread sustainability



Source: Gilbert *et alii* (2005), see footnote 11.

9. See R.E. Baldwin & P.J. Krugman (2004), "Agglomeration, Integration and Tax Harmonisation", *European Economic Review*, Vol. 48, No 1, pp 1-23.
10. See G. Gilbert, A. Lahrèche-Révil, T. Madiès & T. Mayer, (2005), "La concurrence fiscale: conséquences internationales et locales sur l'imposition des entreprises", *in* J. Le Cacheux and C. Saint-Etienne, eds, *Fiscalité de croissance*, Report by the French Council of Economic Analysis, forthcoming.
11. The measure of integration is taken from work by Keith Head and Thierry Mayer, and is based on a comparison of bilateral trade between two countries and domestic trade within the countries. See K. Head & T. Mayer (2004), "The Empirics of Agglomeration Trade", *in* V. Henderson & J.F. Thisse (eds), *Handbook of Regional and Urban Economics*, Vol 4, Amsterdam: Elsevier, chap 59, pp 2609-2669.
12. A. Bénassy-Quéré, N. Gobalraja & A. Trannoy (2005), "Tax Competition and Public Input", *CEPII Working Paper*, No 2005-08.

Households versus firms

The issues developed here suggest that competition on corporate taxes may be less worrisome within the EU25 than often thought. Furthermore, such competition could be beneficial, obliging Member States to improve the efficiency of their public sectors and to provide infrastructure and services in proportion to tax rates.

There are, however, limits to this argument. First, it ignores the fact that public goods useful to firms are largely financed by taxes on immobile factors (e.g: by VAT). Consequently, competition on corporate taxation may shift the tax burden onto less mobile tax bases, with each State attempting to attract productive capital by offering high-quality infrastructure and services to firms, with residents footing the bill. This is indeed the traditional conclusion reached by tax competition analyses, which stress that tax competition weakens equity in financing public goods.

Symetrically, the argument does not take into account that tax receipts may also produce public goods which do not directly enter firms' production functions (for example, care for the elderly, redistribution or culture). Competition could therefore lead to a distortion in the structure of public spending, in favour of firms and at the expense of households. Overall, governments are therefore caught in a vice between firms exerting pressure on tax competition and households on whose votes they rely. From this perspective, tax coordination in Europe is justified on political and social grounds. It is a question of allowing the people of Europe to influence the distribution of the tax burden and the distribution of spending, or risk evidening the gap between societies and their political leaders.

In a small economy, all taxes (on labour, capital and consumption) bear on labour *de facto*, as the rate of return on capital is given by the world market. If corporate taxation rises, firms are forced to cut labour costs to achieve the same post-tax profitability, equal to the world interest rate. With a population of 456 million, the EU is far from being a small country, and should have some room for manoeuvre concerning the rate of return on capital. This requires tax coordination, on the basis of what has been said here. It does not mean uniformity, but implies defining the contribution of firms to the financing of public goods, given that tax rates vary from country to country, as a function of geography, and depending on the quantity and quality of public goods provided.

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12 A. Bénassy-Quéré, N. Gobalraja & A. Trannoy (2005), "Tax Competition and Public Input", CEPII *Working Paper*, no 2005-08.

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