

**CORPORATE INCOME TAXATION  
IN THE EUROPEAN UNION:  
CURRENT STATE AND PERSPECTIVES**

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The Australian National University  
Australian Taxation Office

Centre for Tax System Integrity



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## **Abstract**

The paper reviews the state and recent changes in corporate income taxation in the European Union (EU) and major Organisation for Economic Cooperation and Development (OECD) countries. It also reviews coordination measures proposed and adopted in the EU so far. This empirical evidence is related to theoretical results on international tax competition. On this basis I conclude that tax competition has contributed to move the system of international capital taxation in an economically desirable direction. Although EU and OECD efforts to promote non-discrimination ('Code of Conduct') and curb international tax engineering strategies in multinational enterprises are desirable, a further harmonisation of corporate tax systems does not seem to be warranted.

# Corporate income taxation in the European Union: Current state and perspectives

*Bernd Genser<sup>1</sup>*

## 1. Introduction

Tax coordination as a measure against potentially harmful tax competition has been a controversial topic in the political as well as in the academic arena. Within the European Union (EU), Euro-sceptics emphasise the importance of subsidiarity, the free decision on national tax rates that responsive politicians must charge their citizens to cover the costs of an efficient pattern of public services. Tax competition is beneficial as it forces governments to charge efficient tax prices for their public services. Furthermore, tax competition is regarded as a vehicle to tame over-expanded 'leviathan' governments.<sup>2</sup> Euro-harmonisers point to the welfare costs of harmful tax competition. National taxes may create fiscal externalities on neighbouring countries, in particular in the form of tax base flight to escape high taxation. Moreover, governments have an incentive to relieve the tax burden on their citizens by burdening non-residents, for example, tourists or foreign corporations. Without tax coordination, national governments may choose sub-optimal levels of public services financed by inefficiently chosen tax rates, which are either too low or too high. In general, there is little disagreement that there are welfare gains as well as welfare losses from international tax competition.<sup>3</sup>

It is important to keep in mind that tax competition is the process of tax policy decisions by which rational governments optimally respond to tax policy measures of foreign governments, in order to improve the economic situation in their constituency. One possible outcome, but not necessarily the only one, is the 'race to the bottom' Nash-equilibrium, when all countries end up with inefficiently low tax rates. The traditional view of the EU authorities was that tax competition in commodity taxation leads to economic situations that distort trade and reduce community welfare. Thus value added tax (VAT) autonomy should be controlled through supranational directives. On the other hand, competition in factor taxation was considered to create only minor distortions. The only serious problem in factor taxation, which is addressed

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<sup>1</sup> Bernd Genser is from the University of Konstanz, Austria, and was a Visiting Fellow at the Centre for Tax System Integrity in December 2000.

<sup>2</sup> Brennan & Buchanan (1980); Kehoe (1989), Edwards & Keen (1994)

<sup>3</sup> For contrasting overviews of the arguments for and against tax competition see, respectively, Feld & Kirchgässner (1996); Sinn (1994); for further surveys see Keen (1993); Genser & Haufler (1999); Wilson (1999).

in the European Community Treaty (EC Treaty), is international double taxation of income, which member states are obliged to avoid by following the guidelines of the OECD model treaty.

Even if this view might have been justified in the founding days of the European Economic Community (EEC), when trade had been the important engine of growth and factors of production were pretty immobile, the situation has changed in the last decades. Capital mobility has increased dramatically after the liberalisation of the European capital market a decade ago, and the global financial market as well as the growing importance of multinational firms with subsidiaries spread all over the world have created a new economic environment for national capital taxation.

Capital tax competition implies that national governments strategically adjust their tax policy to pay attention to new situations, particularly to tax rate changes of their competitors. In effect, national corporate income tax systems have undergone major changes in most OECD countries, and the discussion on further tax reform requirements continues. The crucial question for the EU is, of course, whether capital tax competition and its presumed equilibrium outcome will be harmful for the EU member states and conflict with the objectives of the EC Treaty. In this case, the EU Commission is obliged to propose appropriate coordination and harmonisation measures in line with its constitutional competencies.

In fact, there have been attempts in the past to coordinate corporate income taxation in the EU, but most proposals failed because they did not get unanimous approval by the council. But this history of failures in coordination steps does not mean that EU members refuse to cope with the challenges of capital tax competition. All have adjusted their corporation taxes but have refused to have their room for corporate income taxation restricted by community law, recognising that corporate profits remain one of the few tax bases for national governments that might help to relieve the high tax burden on labour. In the face of high unemployment levels in most EU countries, corporate taxation thus continues to play an important role in the overall tax system, for both efficiency reasons and for the equity reason of 'sharing the tax burden'. But this view contrasts with real tax patterns in the EU member states, which show that in a number of countries 'the yield of the corporation tax seems to be much smaller than the attention devoted to its form and structure' (Cnossen, 1993, p. 5).

In this paper I try to account for both the domestic and the international developments in the area of corporate income taxation. Section 2 gives an overview of the fiscal capacity of corporate income taxes in the EU and in some other OECD countries. Section 3 highlights the variation in corporate income tax systems among the developed countries. Section 4 addresses the integration of corporate and personal income taxation. Section 5 then reviews the harmonisation steps taken in the EU to date, as well as some of the additional harmonisation proposals made. Section 6 combines the empirical findings with theoretical results in favour of international corporate income tax harmonisation. Section 7 concludes the paper.

## **2. Fiscal importance of corporate income taxes**

Although much political attention is devoted to the adequate taxation of company profits in market economies, corporate income tax<sup>4</sup> is not a major source of government revenue in the industrialised world. Table 1 shows that the corporate income tax/gross domestic product (CIT/GDP) ratio has been below 4% for most OECD countries in the last three decades. In the three-year interval 1996–98, 1998 being the last year documented by the OECD, taxes on corporate income are 3.3% of GDP in the 15 EU member states, slightly higher than the OECD average of 3.2%. But this result is due to the high CIT/GDP ratio of Luxembourg, which has a stronger effect on the unweighted EU average than on the OECD average. Over the last 30 years the CIT/GDP ratio has slightly increased in the EU as well as in the OECD. An interesting counter example is Germany, which only in 2001 has implemented a new corporate income tax reform to bring down its high corporate income tax rates. Germany shows a declining trend of the CIT/GDP ratio over the last three decades and has by far the lowest ratio of all EU member states in the mid-1990s (Table 1), which is undercut only by Ireland in the OECD. This empirical evidence contrasts markedly with the traditional complaint of German companies as being discriminated against and overtaxed compared to their international competitors. The three-year average for Germany (1996–98) of 1.5% is significantly lower than the CIT/GDP ratio of all the other major EU members and the United States. Even low-tax Switzerland collected one-third more out of corporate income taxes than Germany in the 1990s.

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<sup>4</sup> Throughout this paper we use the terms ‘corporate income tax’ and ‘corporation tax’ synonymously.

While Australia's CIT/GDP ratio has moved up in line with the international trend, its level has always been well above the OECD average. In the late 1990s Australia collects 4.4% of GDP out of corporate income taxes and might be well ranked second behind Luxembourg, sharing this position with Norway (Table 1).

It is important to recognise that the integration of corporate and personal income taxation does not directly influence the CIT/GDP ratios<sup>5</sup> and is not responsible for the variance revealed in Table 1. If corporate income tax payments are credited partially or fully to shareholders' income tax, the OECD consistently books these credits as a reduction of personal income tax. The low German CIT/GDP ratio can therefore not be attributed to the German system of full integration of corporate and personal income tax.

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<sup>5</sup> There is of course an indirect influence, because corporate income tax rates are generally set at lower levels if corporate profits are subject to double taxation in a classical corporate income tax system.

**Table 1: Corporate income tax revenue in OECD countries as a percentage of GDP**

<b>Country</b>	<b>1970</b>	<b>1980</b>	<b>1990</b>	<b>1995</b>	<b>1996</b>	<b>1997</b>	<b>1998</b>
Austria	1.5	1.4	1.4	1.5	2.0	2.1	2.1
Belgium	2.4	2.5	2.4	3.0	3.1	3.4	3.9
Denmark	1.1	1.4	1.5	2.0	2.3	2.6	2.8
Finland	1.7	1.4	2.0	1.8	2.7	3.7	4.2
France	2.2	2.1	2.3	2.1	2.3	2.6	2.7
Germany	1.9	1.8	1.6	1.1	1.4	1.5	1.6
Greece	0.3	0.9	1.6	2.0	2.0	2.1	n.a.
Ireland	2.6	1.4	1.7	2.8	3.2	3.3	3.5
Italy	1.7	2.4	3.9	3.6	3.9	4.2	3.0
Luxembourg	5.6	6.7	6.5	7.3	7.8	7.8	8.2
Netherlands	2.5	2.9	3.2	3.1	4.0	4.4	4.3
Portugal	n.a.	n.a.	2.4	2.6	3.1	3.6	4.0
Spain	1.4	1.2	2.9	1.8	1.9	2.6	2.5
Sweden	1.8	1.2	1.7	2.9	2.8	3.1	2.9
United Kingdom	3.2	3.0	4.2	3.3	3.8	4.3	4.1
<b>EU 15</b>	<b>2.1</b>	<b>2.1</b>	<b>2.6</b>	<b>2.7</b>	<b>3.1</b>	<b>3.4</b>	<b>3.5</b>
Norway	1.1	5.7	3.8	3.8	4.4	5.2	4.2
Switzerland	1.7	1.7	2.1	1.9	1.9	2.0	2.1
<b>OECD Europe</b>	<b>1.9</b>	<b>2.2</b>	<b>2.5</b>	<b>2.7</b>	<b>2.9</b>	<b>3.1</b>	<b>3.2</b>
Canada	3.5	3.7	2.5	2.9	3.2	3.8	3.7
United States	3.7	2.9	2.1	2.6	2.7	2.7	2.6
Australia	3.9	3.3	4.1	4.3	4.5	4.3	4.5
Japan	5.2	5.5	6.7	4.3	4.6	4.3	3.8
New Zealand	4.9	2.6	2.4	4.5	3.5	3.9	3.8
<b>OECD total</b>	<b>2.4</b>	<b>2.5</b>	<b>2.7</b>	<b>2.9</b>	<b>3.0</b>	<b>3.2</b>	<b>3.3</b>

*Source:* OECD, 2000.

There are, however, some other caveats with respect to the interpretation of CIT/GDP ratios in Table 1. First, corporate profits exhibit considerable cyclical fluctuations and this pattern carries over to fluctuations in corporate income tax revenue with a lag of one or two years, depending on the administrative rigidity of tax authorities towards company efforts to defer corporate income tax payments. Second, the degree of incorporation differs between countries and reflects historical traditions as well as tax incentives. As a matter of fact, the low CIT/GDP ratio in Germany reflects the low number of incorporated firms. The German tax system followed a ‘principle of tax neutrality’ between companies and owner-managed firms by taxing retained company profits and entrepreneurial income at the same rate upon accrual

and by fully crediting corporate income taxes for personal income taxes upon redistribution. These tax rules allowed the large sector of medium-sized firms, as well as small-scale firms, to remain unincorporated. In contrast to the German tradition, Switzerland, the Netherlands and the United States exhibit industrial and service sectors with a large number of small-scale companies, which make use of the preferential treatment of retained earnings under a classical corporate income tax system. Third, tax authorities spend a lot of time and effort on monitoring companies, due to the complexity of the tax system and the awareness of sophisticated tax engineering strategies of companies. Disposable corporate income tax revenue is therefore reduced by collection and monitoring costs, and the net revenue figures might be much lower than the gross figures in tax statistics indicate.

The fiscal importance of corporate income taxes cannot be immediately evaluated from CTI/GDP figures, since the total tax ratio differs markedly across the OECD. In 1998 Sweden still had a total tax ratio of 52% of GDP, and the EU average of 41.3% is well above the OECD average of 37%. The group of low-tax countries, with a total tax ratio of 30%, comprises developed countries (United States, Japan and Australia) as well as developing countries (Turkey, Mexico). Relating corporate income tax revenue to total taxes shows that the fiscal importance of corporate income taxes in the EU is less than the OECD average (Table 2), an effect which again is more clearly pronounced if Luxembourg is excluded from the other 14 EU countries due to its special position. Germany, although being a low-tax country among the EU 15, has the lowest share of corporate income taxes in total tax revenue in the late 1990s (an average of 41.1% for 1996–98). On the other hand, Ireland, Luxembourg, the Netherlands, Portugal and the United Kingdom collect more than 10% of their tax revenue from corporate income tax, similar to Canada and the United States. In Australia and Japan, corporate income tax is an even more important revenue source, which in the 1990s covers roughly 15% of total tax revenue.

The average time profile of the CIT/GDP ratio in the OECD countries in the last three decades is U-shaped, indicating a relative fall in corporate income tax revenue in the 1980s and an increase in the 1990s. This pattern is influenced by the development of the total tax ratio, which has been reduced in most OECD countries in their attempts to stop the long-term trend of rising budget expenditure. On the other hand, the corporate sector has expanded worldwide as a result of capital market deregulation, globalisation strategies and favourable investment opportunities, including tax cuts on foreign investment income.

### 3. Forms of corporate income taxation

Revenue differentials in corporate income tax across the OECD countries can be attributed to the tax rates, which are charged on capital income at different levels in accordance with the type of corporate income taxation in force. Scanning the industrialised countries, we can identify at least three types of corporate income taxation, which reflect different economic arguments for its justification.<sup>6</sup>

**Table 2: Corporate income taxes in OECD countries as percentage of total tax revenue**

Country	1970	1980	1990	1995	1996	1997	1998
Austria	4.4	3.5	3.6	3.7	4.7	4.7	4.8
Belgium	6.8	5.7	5.5	6.7	6.8	7.4	8.5
Denmark	2.6	3.2	3.2	4.0	4.6	5.2	5.6
Finland	5.2	3.9	4.6	3.9	5.6	8.1	9.0
France	6.3	5.1	5.3	4.8	5.2	5.8	5.9
Germany	5.7	5.5	4.8	2.8	3.8	4.1	4.4
Greece	1.6	3.8	5.5	6.5	6.3	6.4	
Ireland	8.8	4.5	5.0	8.5	9.5	10.0	10.7
Italy	6.5	7.8	10.0	8.7	9.2	9.5	7.0
Luxembourg	19.2	16.4	16.1	17.5	18.0	18.6	19.7
Netherlands	6.7	6.6	7.5	7.5	8.3	10.5	10.6
Portugal			8.0	8.0	9.5	10.9	11.6
Spain	8.2	5.1	8.8	5.4	5.8	7.8	7.3
Sweden	4.4	2.5	3.1	6.1	5.6	6.1	5.7
United Kingdom	8.7	8.4	11.6	9.4	10.7	12.1	11.0
<b>EU 15</b>	<b>6.8</b>	<b>5.9</b>	<b>6.8</b>	<b>6.9</b>	<b>7.7</b>	<b>8.5</b>	<b>8.7</b>
Norway	3.3	13.3	9.0	9.2	10.5	12.2	9.7
Switzerland	7.6	5.8	6.7	5.7	5.6	5.9	6.0
<b>OECD Europe</b>	<b>6.4</b>	<b>6.0</b>	<b>6.7</b>	<b>6.9</b>	<b>7.3</b>	<b>7.9</b>	<b>8.1</b>
Canada	11.3	11.6	7.0	8.2	8.8	10.4	10.0
United States	13.2	10.8	7.7	9.4	9.6	9.4	9.0
Australia	17.0	12.2	14.1	14.8	15.0	14.6	15.2
Japan	26.3	21.8	21.6	15.3	16.4	15.0	13.3
New Zealand	17.8	7.8	6.4	12.0	9.8	10.6	10.9
<b>OECD total</b>	<b>8.7</b>	<b>7.6</b>	<b>7.9</b>	<b>8.0</b>	<b>8.3</b>	<b>8.8</b>	<b>8.9</b>

*Source:* OECD, 2000.

<sup>6</sup> See also Mintz (1995) or Sørensen (1995).

The generally accepted view in favour of a separate income tax on company profits is that it serves as a backstop to personal income tax. Although personal income tax has been based on the Schanz/Haig/Simons concept of comprehensive income in all OECD countries, income tax codes deviate from this standard in taxing company profits at the personal level not upon accrual but upon realisation. Thus company owners would be offered an income tax holiday in a world without corporate income tax, since they would be able to accumulate tax-free profits through retention and earn an interest premium on income tax deferral. Once the decision in favour of a backstop corporate income tax is made to close this loophole, the issue of double taxation of profits at the company and the personal level arises. The range of solutions to this issue in the OECD countries comprises classical double taxation of corporate profits, as well as various forms of integration between corporate and personal income taxes (see section 4 below).

A second justification for a corporation tax is based on the evidence that companies benefit from their legal status of limited liability as well as from certain public sector activities, which they can use as production inputs. An efficient allocation of resources would require that companies contribute to the costs of these public services and the corporate income tax may be regarded as such a user charge. This view must be questioned since efficient user charges should be closely correlated to the public services provided and be valued according to their shadow prices. But since there is not a simple appropriate tax base closely related to these services that would allow to charge proper shadow prices, company profits may be chosen as a second best device. Thus the corporate income tax rate may consist of an ability tax and a benefit tax component. In this case the user charge component of the corporate income tax is a real cost element, which must be excluded from the integration mechanism with personal income tax. The user charge view thus provides an argument against full imputation of corporate income tax.

A third and final justification for a corporate income tax is the occurrence of pure profits. Economic rents may stem from fixed factors of production (for example, land or natural resources), but they may also result from public inputs or services, which are provided to the firm free of costs (for example, public infrastructure, preferential legislation or protection). Taxing pure profits is a non-distortive and economically attractive way of raising government revenue. Since pure profits are a part of total company profits, which are supposed to be forwarded to the company owners upon dividend payment, a decision has to be made whether

or not integration should include the corporate income tax on pure rents. If pure rents generate a higher ability to pay, they should be taxed at a higher rate, and thus a certain degree of double taxation of company rents (that is, partial imputation) can be justified.

Corporate income tax codes are based on national tradition and political trade-offs between conflicting objectives in all industrialised countries. The development of corporate tax systems in the EU countries during the last two decades exhibits both: some tendency of convergence in tax rates on company profits but still a considerable heterogeneity in the tax structure.

A common feature of corporate income tax codes is their close relation to the national income tax codes with respect to the determination of the corporation tax base. This reflects the primary objective of implementing the corporation tax as an income tax rather than a benefit tax. National practices of defining taxable income differ with respect to feasible depreciation regimes for capital investment, feasible regimes for inventory valuation and the treatment of losses, the treatment of reserves for firm pensions and severance payments. On the other hand, all tax codes acknowledge common bookkeeping standards such as the deductibility of nominal interest payments or historical cost depreciation.

**Table 3: Corporate income tax (CIT) rates in OECD countries**

Country	Basic CIT rate		Surtax		Total CIT rate	
	1989	2000	1989	2000	1989	2000
Austria	30.0	34.0	none	none	30.0	34.0
Belgium	43.0	39.0	none	3% T	43.0	40.2
Denmark	50.0	32.0	none	none	50.0	34.0
Finland	33.0	29.0	19.5% Y	none	48.0	29.0
France	39.0	33.3	none	13.3% T	39.0	41.7
Germany	56.0	40.0	none	5.5% T	56.0	42.2
Greece	46.0	35.0	none	none	46.0	35.0
Ireland	43.0	24.0	none	none	43.0	24.0
Italy	36.0	37.0	16.2% Y,d	none	46.4	37.0
Luxembourg	34.0	30.0	2% T	4% T	34.7	31.2
Netherlands	35.0	35.0	none	none	35.0	35.0
Portugal	36.5	32.0	10% T,d	10% T,d	40.2	35.2
Spain	35.0	35.0	none	none	35.0	35.0
Sweden	40.0	28.0	20% Y,d	none	52.0	28.0
United Kingdom	35.0	30.0	none	none	35.0	30.0
<b>EU 15</b>	<b>39.4</b>	<b>32.9</b>			<b>42.2</b>	<b>34.5</b>
Norway	27.8	28.0	23% Y	none	50.8	28.0
Switzerland	9.8	8.5	22.6% Y,d	28% Y,d	30.2	34.0
<b>OECD Europe</b>	<b>n.a.</b>	<b>n.a.</b>			<b>n.a.</b>	<b>n.a.</b>
Canada	28.0	28.0	3% T+14% Y	8% T+17% Y	42.0	43.6
United States	34.0	35.0	9% Y,d	9% Y,d	39.9	40.8
Australia	36.0	34.0	none	none	36.0	34.0
Japan	40.0	30.0	17.3% Y	17.3% Y	46.9	35.2
New Zealand		33.0	none	none		33.0
<b>OECD total</b>	<b>n.a.</b>	<b>n.a.</b>			<b>n.a.</b>	<b>n.a.</b>

Source: Bundesministerium der Finanzen, 2000

### Notes:

Surtax: Y rate applied to corporate income, T rate applied to tax amount; d surtax deductible from corporate income tax base.

Belgium: 2000 surtax 3%.

Finland: 1989 municipal income tax 14–19.5%.

France: 1989 rate on distributed profits 42%, 2000 surtax 10%, social surcharge 3.3%.

Germany: rate on distributed profits 1989 36%, 2000 30%, 2000 solidarity surcharge 5.5%.

Ireland: reduced corporate income tax rate for special zones 10%.

Italy: 1989 municipal income tax 16.2%; 2000 local surtax on company value added 4.25%.

Luxembourg: surcharge for unemployment fund 1998 2%, 2000 4%.

Portugal: 1989–2000 municipal surtax 10%.

Sweden: 1989 profit-sharing tax 20%.

Norway: 1989 income tax for equalisation fund 2%, municipal income tax 21%.

Switzerland: maximum rates of cantonal and municipal income tax for Zurich.

Canada: surtax 1989 3%, 2000 8%; provincial corporate income tax 1989 14%, 2000 17%.

United States: state corporate income tax for New York.

Australia: basic corporate income tax rate will be reduced to 30% in 2001.

Japan: 1989 35% on distributed profits; 1989–2000 local county tax 5%; municipal tax 12.3%.

In 2000, corporate income tax rates in the EU range from 24% in Ireland up to 42% in Germany, an interval which also includes the corporate income tax rates in all the other important OECD countries except Canada (Table 3). In all countries but Germany these statutory rates determine the tax burden on retained company as well as on distributed profits. Germany used to apply a reduced rate on distributed earnings, but the most recent company tax reform abolished this split rate system by 1 January 2001. Profits earned in unincorporated businesses are subject to personal income tax; the top rates of the progressive tariffs in the EU range from 40% in the United Kingdom and Portugal to 62% in France. While the relative span of personal and corporate tax rates is roughly the same, the levels of personal income tax rates are about one third higher than the corresponding corporate income tax rates. These figures induce capital accumulation in companies, even though tax preferences for owner-managed firms mitigate the discrimination of unincorporated enterprises in some countries.<sup>7</sup> The preferential treatment of company profits is effective under a classical corporation tax as well as under partial integration, since corporate income tax is the relevant income tax burden as long as profits are reinvested rather than distributed.

The reduction of corporate income tax rates in the 1990s is much more pronounced in the EU than in the major industrialised countries (Table 3), although some member countries (for example, Austria, Luxembourg, Netherlands, Spain, United Kingdom) had already cut statutory rates a decade before. Lower rates are in line with higher CIT/GDP ratios, since corporate income tax reforms have followed the 'tax cut cum base broadening' strategy by cutting tax preferences, increasing minimum taxes, and extending depreciation periods. But this revenue-preserving effect has even been outweighed by the growth of the company sector. This is true for the United States, the engine of global growth in the 1990s, but also for Ireland and the Netherlands, which are the most impressive examples in the EU. An analogous development has also taken place in Australia, where the number of resident companies grew at a rate of 8% in the 1990s (see Warren, 1998, pp. 83ff.).

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<sup>7</sup> Germany, for example, applied a reduced top rate of 49.6% to profits earned in owner-managed businesses in 1998, which was reduced to 45.4% in 2000. The most recent tax reform abolished the reduced personal income tax rate on owner-managed businesses from 1 January 2001.

#### **4. Integration of corporate and personal income tax**

Double taxation of dividends at the company and the personal level was the rule in the industrialised countries up to the 1970s. Although the EU Commission failed in its program to harmonise corporate income tax systems (Commission of the European Communities, 1975) and to introduce a mandatory imputation system in the European community, all but one of the 15 member countries have meanwhile adopted measures to reduce the double taxation of corporate profits. Within the EU in 2000, only Ireland applies the classical system of company taxation, as do the United States and Switzerland within the OECD (Table 4). Five EU member states, who had a classical system a decade ago, have switched to an integrated system in the 1990s; most recently the Netherlands in 1999. Interestingly enough, Ireland went in the opposite direction and gave up its traditional imputation system in favour of a classical system with a corporate income tax rate as low as 24%.

Five EU member states have introduced a flat rate personal income tax schedule for dividend income, which allows them to collect the tax as a withholding tax without a further assessment procedure. Austria, Belgium, Denmark and the Netherlands tax dividend income at a rate of 25%, Sweden at a rate of 30%. These flat rates are half or even less than half the top personal income tax rate. Since the personal income tax schedule is progressive, these countries provide an assessment option if dividend income earners would pay a personal income tax rate on their total annual income, which is lower than the flat rate. Greece could also be added to this group of countries, since the Greek solution not to tax dividend income at the personal level can be interpreted as applying a flat personal income tax rate of zero.

Luxembourg applies a reduced personal income tax rate on dividend income by exempting half the dividends from personal income tax. The same system has become effective in Germany from 1 January 2001. Since both countries have progressive personal income tax tariffs, the personal income tax rate on dividends can be determined only upon assessment of annual income.

The other seven EU member countries reduce double taxation of dividend by corporate income tax credits. Up until 2000, in Finland, Italy and Germany the credit was the full amount of corporate income tax on dividend distributions. Basically this system eliminates the double taxation of dividends, as is the case in Australia and New Zealand. But the

regulations are more complicated and the effective tax burden on dividends deviates from the tax burden on other personal income. In Finland, dividend income is taxed at a flat rate of 29%, much lower than the regular tax rate on personal income, which can go up to 56%. A similar system has been implemented in Norway, with a reduced flat rate of 28%. The attractive feature of the Finnish and the Norwegian systems is that the corporate income tax credit exactly covers the income tax liability and no further tax payments are required. In Italy, company profits are subject to an additional regional tax on company value added, which is not credited, and thus dividends are taxed at a higher rate than labour income.

Double taxation of dividends is relieved but not eliminated in the other EU countries where corporate income tax credits fall short of corporate income tax payments on dividends at the company level. The degree of integration differs between France, where corporate income tax credits exclude only the surtaxes, and the United Kingdom, where the credit is less than 25% of corporate income tax payments.

**Table 4: Integration of corporate income tax (CIT) and personal income taxation (PIT) in OECD countries**

Country	Integration regime 1989	Double taxation relief	Integration regime 2000	Double taxation relief
<b>EU 15</b>				
Austria	reduced PIT rate	half regular PIT rate on dividends	reduced PIT rate	final withholding PIT rate 25% on div.
Belgium	imputation	CIT credit 50% of net dividends	reduced PIT rate	final withholding PIT rate 25% on div.
Denmark	imputation	CIT credit 25% of net dividends	reduced PIT rate	reduced PIT rates 25% and 40% on div.
Finland	classical CIT	partial PIT exemption of dividends	imput. & red. PIT	CIT credit 29/71 of net div., red. PIT rate 29% on div.
France	imputation	CIT credit 50% of net dividends	imputation	CIT credit 50% of net dividends
Germany	imputation	CIT credit 100% of CIT on dividends	imputation	CIT credit 100% of CIT on dividends
Greece	dividend deduction	dividends deductible of CIT base	reduced PIT rate	zero PIT rate on dividends
Ireland	imputation	CIT credit 35/65 of net dividends	classical CIT	none
Italy	imputation	CIT credit 9/16 of net dividends	imputation	CIT credit 100% of CIT on dividends.
Luxembourg	classical CIT	none	reduced PIT rate	PIT on 50% of dividends
Netherlands	classical CIT	none	reduced PIT rate	reduced PIT rate 25% on dividends
Portugal	classical CIT	none	imputation	CIT credit 60% of net dividends
Spain	imput. & red. PIT	CIT credit 10% of net div., PIT only on net div.	imputation	CIT credit 50% of net dividends
Sweden	classical CIT	none	reduced PIT rate	reduced PIT rate 30% on dividends
United Kingdom	imputation	CIT credit 25/75 of net dividends	imputation	CIT credit 1/9 of net dividends
<b>Other OECD Europe</b>				
Norway	dividend deduction	div. to residents deductible of CIT base	imput. & red. PIT	CIT credit 7/18 of net dividends
Switzerland	classical CIT	none	classical CIT	none
<b>Non-European OECD</b>				
Canada	imputation	CIT credit 16.67% of net dividends	imput. & red. PIT	CIT credit 16.67% of net dividends
United States	classical CIT	none	classical CIT	none
Australia	imputation	CIT credit 36/64 of net dividends	imputation	CIT credit 34/66 of net dividends
Japan	imput. & red. PIT	CIT credit up to 12.8% of net dividends	imputation	CIT credit up to 12.8% of net dividends
New Zealand	imputation	CIT credit 100% of CIT on dividends	imputation	CIT credit 100% of CIT on dividends

Source: Bundesministerium der Finanzen, 2000

**Notes**

Classical CIT: CIT on gross dividends plus PIT on net dividends.

Reduced PIT rate: CIT on gross dividends plus reduced rate on net dividends.

Imputation: CIT on gross dividends plus PIT on (gross or net) dividends minus CIT credit.

Imputation & reduced PIT rate: CIT on gross dividends plus reduced rate PIT on dividends minus CIT credit.

Dividend deduction: no CIT on dividends, PIT on gross (=net) dividends.



Although there had been major changes in the traditional systems of corporate income taxation in the past decades, it is interesting to note that there was no movement towards a pure conduit system of corporate income taxation. Under this system, which had been discussed in Germany in the 1960s, all corporate profits, whether distributed or retained, are taxable personal income and subject to personal income tax at the shareholder level. In this system a corporate income tax would be most important to provide tax credits, which could be used by shareholders to cover their income tax liability at the personal level, which would become due even when no dividends were paid. Although the conduit system strictly follows the concept of comprehensive income taxation, none of the OECD countries has adopted it.

The 2000 structure of double taxation relief in the OECD countries is the result of a series of income tax reforms that have narrowed the range of traditional forms of double taxation relief, and increased the degree of integration. Another important reform element has been the simplification of administration by introducing flat rates on dividends at the personal level. But final withholding taxes on dividend income, as introduced in Austria and Belgium, must not be qualified as dual income taxes, which have been extensively discussed and also implemented in the Nordic countries. Since dividends in Austria and Belgium bear both a corporate and personal income tax component, capital income may still be taxed higher than labour income. Only Finland and Norway seem to have made a step towards a dual income tax by combining full corporate income tax crediting with preferential dividend taxation. Whether these tax reforms pave the way for other EU or OECD countries to implement dual income taxes through similar tax reforms remains to be seen.

Whereas integration has no direct effect on corporate income tax revenue, corporate income tax credits always cause a revenue shortfall in personal income tax. The revenue figures in Table 1 have to be balanced with the revenue figures of personal income tax on capital income in those countries which have a fully or partially integrated corporate income tax. Some governments, including the German and Australian governments, have articulated their concern about rising corporate income tax credits, which have become an important element of strategic tax planning. But criticism of this kind is not well-founded, since corporate income tax credits do not reduce the total amount of tax revenue. They only swap personal income tax revenue for corporate income tax revenue as long as the primary target of integration, namely, avoidance of undesirable double taxation of dividend income, prevails.

## **5. Legal mandate of the EU Commission and harmonisation steps to date**

As our discussion in the previous sections has shown, the development of corporate income taxation in EU member countries exhibits some convergence, which cannot be attributed to activities of the European Commission. While, in contrast to commodity taxation, the commission has no direct obligation to harmonise company taxation, it nevertheless initiated a series of investigations and negotiations in the past. The two most important activities were the submission of a draft directive proposal on the harmonisation of corporate income taxation in 1975, and the nomination of a committee of independent experts (headed by Onno Ruding) that was asked to analyse the harmonisation requirements for European capital taxation in December 1990.

The commission's proposal for a European corporate income tax required harmonising tax bases, tax rates (within a band from 45% to 55%) and corporate income tax imputation (corporate income tax credit between 45% and 55% of corporate income tax paid on dividends). Given the high diversity of national corporation tax systems in the EC-9 countries at that time (only four of the nine members applied a partial imputation system), this proposal did not find unanimous consent in the council and was finally repealed in 1990. At the same time the council passed two directives which had already been submitted in the late 1960s, namely, the Merger Directive and the Parent/Subsidiary Directive. Both of these measures put entrepreneurial transactions between companies residing in different EU countries on an equal footing with analogous transactions between companies residing in one country. The council also adopted the so-called 'Arbitration Convention', a contractual commitment of the member states to acknowledge corrections of corporate income tax bases in the course of tax monitoring in multinational firms so as to exclude double taxation.

The Ruding Committee delivered a comprehensive report in 1992 (Commission of the European Communities, 1992) that identified a number of distortions from the interaction of uncoordinated corporate income tax systems, and proposed a common EU corporation tax system as a long-term target, to be approached in three stages. Primary targets in the first two stages were extending the non-discrimination directives (adopted in 1990) to all enterprises, harmonising national corporate income tax bases, and aligning statutory tax rates within a range of 30–40%. The decision on a common corporate tax system was to be postponed to the third and final stage. From the recommendations made in the report, the commission took up

only two relatively minor harmonisation proposals aimed at exempting cross-border income flows within multinationals from source taxation. It denied, however, the necessity of further harmonisation steps in corporate income taxation.<sup>8</sup>

The reluctance of the commission to interfere in national company taxation seems to be at least partly influenced by its weak position in direct tax harmonisation. Commodity tax harmonisation has been regarded as an important desideratum in the early days of European integration, and has found explicit recognition in Article 99 of the EC Treaty, as well as in some other articles that refer to impediments to free competition in the Common Market. Factor taxation, on the other hand, is not explicitly addressed, apart from the avoidance of international double taxation (Article 220 EC Treaty). Hence the harmonisation of capital taxation has to be based on Article 100, which allows for a mandatory adjustment of national legislation in order to back the functioning of the internal market. The Maastricht Treaty did not relax political constraints for the commission with respect to capital taxation initiatives. The broader room for interventions, based on the free mobility of capital as one of the four basic liberties in the European internal market, has been constrained by the subsidiarity principle, which grants national political autonomy as long as member can reach EU goals without supranational regulation.

Nevertheless, the commission and the council have used their competencies under Article 100 to enact the first steps in company tax harmonisation. Besides the 1990 directives, the commission recommended further harmonisation steps which abolish source taxes on interest and royalty payments or which acknowledge the deductibility of losses between parents and subsidiaries residing in different member states. In all these cases the functioning of the internal market is hampered by discrimination, since income flows between firm units located in different member states face a higher tax burden than analogous income flows between firm units within a single country.

A recent commission initiative (Commission of the European Communities, 1997) is aimed at what is labelled 'unfair' tax competition. Following the commission's proposal, as well as a parallel initiative by the OECD (1998), the council has adopted a Code of Conduct for business taxation. The measures proposed under this code, however, are not targeted at

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<sup>8</sup> For comments on the Ruding Report see Devereux (1992); Genser, Schaden & Steinhart (1993).

strategic tax rate reductions per se, but only at discriminatory tax preferences for foreigners that are not available to resident taxpayers. The member countries of the EU commit themselves to refrain from:

- tax preferences accorded only to non-residents
- tax advantages granted to firms with no real economic activity in the country
- rules for profit determination that depart from internationally accepted principles
- non-transparent administrative practices in enforcing tax measures.

In sum, the stance taken by the commission seems to be that distortions and tax revenue shifts between member countries caused by different (effective) rates of company taxation may not be sufficient to justify corporate income tax harmonisation, unless these distortions are connected with discrimination. The underlying trade-off between the conflicting objectives of tax neutrality and subsidiarity is also at the heart of economic analyses which try to determine the desirable degree of corporate income tax harmonisation in the EU.

## **6. Effects of international tax competition: Theory and evidence**

Existing international double taxation arrangements for the corporation tax stipulate that the residence country either exempts foreign-earned income from tax, or grants a (limited) tax credit. With tax exemption, the tax rate relevant for the international corporation is effectively set in the source country of the investment, and this country also receives the tax revenue. Hence a pure source principle applies to the taxation of corporate income. In contrast, if a tax credit is granted, the tax rate of the residence country is the relevant one for the corporation. This case is generally referred to as residence-based taxation, even though tax revenue is effectively shared between the source country of the investment and the residence country of the investor.

While both the source principle and the residence principle avoid the international double taxation of corporate income, their economic effects are quite different. Put very simply, the residence principle neutralises the effects of international differences in tax rates for the decision where to invest internationally mobile capital, whereas the same is not true under the source principle. Consequently, capital tax competition would pose a far less serious problem (and probably none at all) if the residence principle could be enforced for corporate tax policy

and for capital taxation in general. Most commentators agree, however, that at present the taxation of corporate profits closely follows the source principle (for example Tanzi & Bovenberg, 1990; Keen, 1993, Sørensen, 1995).

Since source-based capital taxes directly reduce the return received by investors, host countries trying to attract capital have an incentive to keep these taxes low. From a policy perspective, inefficiently low capital income taxes imply that public consumption goods and income redistribution will be increasingly difficult to finance in the future, and that the effective taxation of labour will have to increase, with adverse consequences for already strained labour markets in Europe. It is therefore important to see whether a 'race to the bottom' in corporate income taxation can be confirmed by empirical evidence available to date (see Genser & Haufler, 1999). To see how national corporate tax systems have responded to the pressures of tax competition, it is necessary to differentiate between three alternative measures of the corporate tax burden.

(i) The effective marginal tax rate measures how a marginal adjustment to the capital stock in a given country is taxed, taking into account both the nominal tax rate and the definition of the tax base (for example depreciation rules). This measure is relevant for incremental additions to the capital stock in a particular country, given that the firm is already present there.

(ii) The effective average tax rate measures total corporate taxes paid, as a fraction of the profits made in the host country. It includes lump sum taxes (for example cash flow taxes on corporate profits), which leave marginal additions to the capital stock untaxed, as well as lump sum subsidies for the location of a firm. Hence this is the widest and most general measure of the corporate tax system that affects the fundamental location decision of an internationally mobile firm.

(iii) The statutory (nominal) tax rate is the most readily available measure, and easy to compare across countries. For this reason it may have substantial influence on investment decisions even though it does not incorporate any other differences in national tax systems (in particular, differences relating to the corporate tax base). Moreover, it is the critical tax parameter for those decisions of the firm that are unrelated to real economic activity, for example, setting transfer prices within a multinational enterprise.

Turning first to the development of statutory tax rates, it is evident that these have fallen significantly over the past two decades (see Table 3). Since 1980 the average statutory corporate tax rates in the EU have fallen by roughly one quarter, from more than 47% in 1980 to 33% in 2000. The only countries that still had a nominal corporate income tax rate above 40% in 2000 were Germany and France. But Germany cut its company tax rate substantially and has been applying a corporate income tax rate of 25% from 1 January 2001.

The empirical evidence on marginal effective tax rates has to account for the combined effect of reduced corporate income tax rates and broader tax bases. Simulation studies based on tax data (Commission of the European Communities, 1992, p. 183; Chennells & Griffith 1997) show that the fall in this tax measure has been less pronounced than the reduction in nominal corporate tax rates. These results are also in line with our empirical findings in Tables 1 and 2 that falling corporate income tax rates have not eroded corporate income taxes as a source of total tax revenue.

Finally, we turn to empirical evidence on effective average tax rates. The statistical concept of this measure is relatively straightforward, relating actual tax revenue collected to the operating profits of firms derived from national account data (see Mendoza, Razin & Tesar, 1994). Nevertheless, the calculation of reliable figures raises serious problems, since the required statistical data are not available and the figures are very sensitive to errors and inconsistencies in primary statistics as well as in approximation routines. Mendoza, Razin and Tesar (1994, p. 313) find a stable or slightly increasing trend in the average corporate income tax burden for the major industrialised countries. Subsequent studies, which include more countries and use more recent data, indicate that effective average corporate income tax rates have developed quite differently in the EU (see Hettich & Schmidt, 2000; Volkerink & de Haan, forthcoming). Between 1980 and 1996<sup>9</sup> four EU countries (Belgium, France, Germany, United Kingdom) have a significant fall in the average company tax burden, four countries (Sweden, Austria, Netherlands and Greece) have largely unchanged effective average tax rates, and one country (Italy) has a steep rise. The unweighted average of these figures yields a fall in the average effective corporate tax burden in the range of 10–15%, roughly consistent

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<sup>9</sup>The sample also includes several non-EU countries and finds, for example, a moderate fall in the effective average corporate income tax burden in Switzerland during the 1990s.

with the most recent estimates for the development of effective marginal tax rates.<sup>10</sup> These results seem to be at odds with the evidence on rising corporate tax revenue in the EU countries (Table 1). However, recall that effective corporate tax rates are calculated as tax revenue divided by the actual tax base (operating profits), whereas the CIT/GDP ratios relate tax revenue to GDP. Hence the different figures need not be incompatible when the share of operating profits in GDP (the 'profitability' of companies) has risen.<sup>11</sup> There is evidence that this has been the case since the early 1980s (cf. Commission of the European Communities, 1992, p. 154).

So far we have concentrated on corporation tax only. In a long-term perspective, however, the corporation tax will fall on the individuals who own the corporation. Hence the effective taxation of the profit income accruing to these individuals will also depend on changes in personal income tax, and on the extent to which corporation tax and personal income tax are integrated. As our discussion in section 4 has shown, there has been a general trend in the EU to move away from the classical system of corporate taxation, and towards integration of corporate and personal income taxes. Hence by looking at corporation tax only, one is likely to underestimate the fall in effective tax rates on profit income that has occurred in the EU.

Note, however, that granting more generous forms of double taxation relief for domestic shareholders (but not to foreigners) will not generally improve the competitive position of a country trying to attract foreign capital. As shown by Boadway and Bruce (1992), income tax integration reduces the effective taxation of domestic savings, but does not affect the cost of capital and hence the effective marginal tax rate on investment in a small open economy. If the marginal investor in a small open economy is a foreigner, they will not benefit from the integration measure, unless the corporate income tax credit is extended to the income tax liability in their home country. This discriminatory effect may, however, be avoided if investment takes place via an international holding company located in the country of residence.

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<sup>10</sup> The similarity in the trends of average and marginal effective tax rates is also noted by Mendoza, Razin and Tesar (1994, p. 320).

<sup>11</sup> This distinction is also critical in interpreting the econometric evidence on capital market liberalisation and the development of corporate tax revenue. Schulze and Ursprung (1999) show in their survey of this literature that most studies use the corporate income tax ratio as the dependent variable. It is then not surprising, given the data in Table 1, that these studies generally reject the hypothesis that capital market liberalisation has reduced corporate tax revenue.

To summarise, there has been an undeniable, though not dramatic, reduction in the overall tax burden on companies and their shareholders in most EU member states. However, national and international considerations both seem to have contributed to recent corporate tax reforms, and it is by no means straightforward to isolate the exact role that tax competition has played in this process.

Economic theory shows that corporate income taxes following the source principle give rise to tax competition. The conflict between national autonomy over corporate income taxation and the free and undistorted flow of capital would not arise if capital could be taxed consistently under the residence principle.<sup>12</sup> Under residence-based taxation, a firm located in a particular country always pays the same tax rate on its profits, no matter in which country the returns on investment are earned. For this reason, the residence principle implies capital export neutrality, since investment goes to the country where the gross return to capital is highest. Arbitrage by investors will thus equalise the gross return to capital between different locations. Furthermore, in a competitive environment, producer profit maximisation will ensure that this gross return equals the marginal productivity of capital. Hence residence-based taxation of capital income implies that capital has the same marginal revenue product everywhere and production efficiency holds, even if tax rates differ between countries.

Under the source principle, in contrast, host countries treat domestic and foreign investors alike, implying capital import neutrality. Hence investors reallocate their investment flows until net-of-tax rates of return to capital are equalised internationally. This implies, however, that in the presence of international tax differentials gross rates of return and hence marginal productivities of capital will differ internationally, so that production efficiency is not attained.

The principal problem of enforcing residence-based corporate income taxes is the possibility to defer taxation in the residence country through the retention of profits in a low-tax country. But even if deferral were abolished, as under subpart F legislation in the United States, there remains the problem of source tax credits, which might require an international harmonisation of corporate income tax rates in the source countries. Finally, consistency would require to extend this tax system to foreign interest income as well, either by means of harmonised

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<sup>12</sup> See Razin & Sadka (1991); Wilson (1999); Bundesministerium der Finanzen (1999).

source taxes or a mandatory notification of the interest payment to the tax authority in the residence country. Our conclusion from this discussion is that there are severe, and probably insurmountable, harmonisation requirements necessary to levy capital taxes consistently under the residence principle (see Haufler 1999; Genser & Haufler 1999).

Under the source principle, investment distortions and tax competition can be ruled out completely only if company taxes are fully harmonised between countries. Hence, in contrast to residence-based company taxation, there is a real conflict between the simultaneous goals of tax neutrality and tax autonomy. Any tax harmonisation measure should then be justified by clear empirical evidence that uncoordinated company taxation leads to significant revenue and welfare losses for the EU as a whole.

The major driving force for strategic undercutting of corporate income tax rates in international tax competition is the elasticity of the corporate income tax base. While it is true that globalisation of the capital market has substantially increased the interest elasticity of mobile capital, tax effects nevertheless are still regarded as minor determinants of international investment decisions. This is certainly true for foreign direct investment in physical capital, where transaction and implementation costs are still high and tax rate differentials have to be substantial to induce a reallocation of marginal capital flows. Capital mobility, which induces a move of the headquarters of a company, is restricted to major multinational enterprises and attains high publicity. While there is evidence that tax havens play a role in international location decisions, measures against tax havens are taken separately and need not be embedded into a general harmonisation strategy. By far the most elastic tax base is paper profits, which can be shifted internationally without significant costs between subsidiaries of multinational enterprises. Tax engineering of large-scale companies has become an issue with deregulated capital markets and the call for coordinated supranational measures (see Huizinga & Nielsen, 1997; Devereux & Griffith, 1998; Haufler & Schjelderup, 2000). But again, these measures against transfer pricing, thin capitalisation or internal royalty payments have a long tradition and can be refined without forcing member countries to abandon their traditional sovereignty over corporate income taxation legislation.

Finally, there is another advantage that complementary regulations have over an explicit harmonisation of corporate income tax legislation (for example, a minimum corporate income tax rate). Obtaining the required unanimous consent to the 'right' tax rate is only the first part

of the political problem, since the substantial adjustments in nominal corporate tax rates in the past two decades (see Table 3) show that such a harmonised rate may quickly be out of line with international developments. In any case, the difficulties of finding and adjusting a common minimum corporate tax rate in the EU would be far greater than in the area of value added taxation, where adjustments generally tend to be infrequent and gradual, but still no consent has been found since 1991.

## **7. Conclusion**

In this paper I have tried to evaluate the need for specific measures of company tax harmonisation in the EU. I have shown that, despite some convergence of member states' corporate income tax systems and tax rates, important differences remain. Hence, from the fundamental principle of subsidiarity, tax harmonisation measures must be justified by clear empirical evidence for their necessity, and must aim at minimising the interference with member states' existing corporate tax systems. In 1992 the Ruding Committee (Commission of the European Communities, 1992, p.12) summarised its evaluation of the empirical evidence on tax competition as follows: 'There is no evidence to suggest that independent action by national governments is likely to provoke unbridled general tax competition, leading to erosion of corporate tax revenues of Member States.'

Although my review shows there is still substantial heterogeneity in corporate income taxation across the EU and the OECD, and the Ruding evaluation is still valid, tax competition seems to have moved international corporate income tax legislation in an economically desirable direction. In contrast to the far-reaching harmonisation proposals made in the Ruding report, I conclude that there seem to be good reasons for the recent approach taken by the European Commission, namely, to concentrate on coordination steps that avoid an explicit harmonisation of corporate tax systems in the EU. Whether the Code of Conduct will prove to be an effective deterrent for discriminatory tax policies by individual member states remains to be seen. Moreover, additional efforts at curtailing profit-shifting strategies are likely to become necessary as the number of multinational firms, and the volume of trade between them, continues to grow. However, the future development of national corporate income tax policy will show whether these 'soft' types of coordination are sufficient to keep corporate income taxation sovereignty and to avoid the requirement of an explicit harmonisation of corporate tax systems within the EU and worldwide.

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