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Discussion Paper

**European Group Taxation –
Formula Apportionment versus Current Inclusion**

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European Group Taxation - Formula Apportionment versus Current Inclusion

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Abstract:

The European Commission's proposal to establish a common corporate tax base reduces both compliance and administrative costs for European groups. The proposal would replace separate entity accounting with a profit allocation based on formula apportionment. Since formula apportionment rests on the source principle, the group faces an incentive to invest in low tax member states. Some member states might face a loss in both real economic activity and tax revenue. Moreover, anti-avoidance tax rules concerning non-EU countries must be harmonised.

Residence-based group taxation based on separate entity accounting could be an alternative. The subsidiaries' profits and losses are attributed to the parent of the group (current inclusion), and the group's profit is taxed at the corporate income tax rate of the parent. The parent's state of residence grants a foreign tax credit. Current inclusion prevents tax distortions regarding the location of investments, if no limitations on the foreign tax credit exist. Given that applicable exit taxation rules infringe upon EC law, a serious drawback of residence-based current inclusion might be the incentive to move the tax residence of the group's parent to a low tax member state.

Keywords:

Common Consolidated Corporate Tax Base, Current Inclusion, European Group Taxation, European Law, Exit Taxation, Formula Apportionment, Mergers Directive, Separate Entity Accounting.

JEL Classifications:

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1. Introduction

Based on the European Commission's report "Company Taxation in the Internal Market" (European Commission (23 October 2001)), the Commission proposes a common consolidated corporate tax base for European groups. Moreover, the Commission wants to replace the current transaction-based system of separate entity accounting (SA) which relies on the arm's length principle with a system relying on formula apportionment (FA) of the group's profit. The Commission's proposal has its merits. A common corporate tax base and FA would reduce compliance and administrative costs of taxing European groups as well as profit shifting opportunities that exist under SA. However, the proposal rests on the source principle, and thus international tax planning opportunities caused by the different statutory profit tax rates that the group faces would not be eliminated.

Therefore, it is worth evaluating current inclusion as an alternative to the Commission's proposal. Under current inclusion, the taxable profit of the group's subsidiaries is attributed to the parent. Current inclusion is based on SA and thus avoids the introduction of a completely new system of profit allocation. Since a common corporate tax base is a prerequisite for current inclusion, this would also reduce compliance and administrative costs. Current inclusion rests on the residence principle, and therefore it has the potential to reduce greatly international tax planning incentives.

However, current inclusion might face a severe drawback. Parent companies located in high tax jurisdictions experience the incentive to move to another jurisdiction in order to subject the attributed group profit to a lower corporate income tax rate. The incentive to move is probably reduced to a great extent by exit taxation. However, exit taxation could fail to conform with European law. Thus, current inclusion might provide ample room for international tax planning as well as present an unacceptable risk of corporate tax revenue losses.

The remainder of the paper is organised as follows: Section 2 sets out both the economic effects and the legal framework of international corporate income taxation. Section 3 presents and evaluates the Commission's proposal. Section 4 discusses the alternative system of current inclusion. Section 5 analyses exit taxation rules. Section 6 concludes.

2. International Corporate Income Taxation

2.1 Economic Effects

Business income taxation should be neutral with respect to investment and financing decisions. International tax neutrality (production efficiency) is preserved, if the worldwide income is taxed in the state of residence (capital export neutrality, CEN) (Musgrave (1969), Desai and Hines (2003)). Alternatively, all income can be taxed in the source country (capital import neutrality, CIN). Taxation at source might be justified on the grounds of benefit taxation (Gammie (2003)), and it can be neutral regarding capital ownership (Desai and Hines (2003)), but the source principle is not compatible with production efficiency (Homburg (1999)). A neutral (production efficient) tax system renders tax planning useless and thus avoids both the direct costs of tax planning (the costs of tax and legal consultancy as well as the government's cost of tackling tax avoidance) and the indirect costs that arise because the taxpayer alters his investment and financing plans in the presence of taxes (deadweight loss) (Musgrave (1992), Feldstein (1999)).

Both natural and legal persons such as corporations are taxable subjects. Income tax neutrality is challenged by the existence of taxable entities other than natural persons because taxable income can be sheltered from personal income tax. A parent company is able to avoid corporate income taxes on profits of a subsidiary as long as the subsidiary retains its income. Most member states (e.g. Germany and Spain) have implemented source-based taxation and grant tax exemption for dividends received by a parent company from both domestic and foreign subsidiaries. As a consequence, the tax burden of a multinational group is determined by the profit tax rates of the group's companies as well as by the profit allocation within the group. Some

member states (e.g. Great Britain) rely on residence-based taxation. Foreign dividends are included in the parent's taxable income and (indirect) credit for foreign corporate income taxes is granted. However, since these member states do not tax retained profits of foreign companies either, they grant a tax deferral, and thus in this respect, the source principle applies. On the shareholder level, most member states employ shareholder relief systems to tax dividends, i.e. they tax dividends and capital gains at a reduced income tax rate. As a consequence, low-taxed foreign corporate profits attract shareholders because the shareholder relief regime does not differentiate between dividends received from domestic corporations and those from foreign corporations.

In the area of international business taxation, tax planning makes use of legally separated entities (SA) by intra-group trading and intra-group financing and thus exploits the differences of both the statutory tax rate and the tax base in the countries where the corporations are located. Though intra-group transactions have to conform with the arm's length standard, a multinational is able to shift book profits as well as investments to foreign low-taxed subsidiaries (Desai, Foley, and Hines (2004), Clausing (2003), Devereux and Griffith (1998)). Moreover, a group may deduct expenses (e.g. interest expenses relating to external debt) from high-taxed domestic corporate income and pay lower foreign corporate income tax on corresponding revenues. But, the parent usually is not allowed to deduct losses of a foreign corporation from its domestic income, even if this is possible in the case of comparable losses of a domestic corporation.

The source principle invites corporations to shift book profits as well as investments to low tax member states, but it does not induce an incentive to transfer the tax residence of a corporation to another member state. Under the residence principle, however, a parent company located in a high tax country may move to a low tax country to reduce the tax burden of the group and to improve the group's competitiveness. In this case however, the parent company usually faces exit taxes. Exit taxes are calculated from the difference of the fair value of the company's assets

and their book value which is based on historical acquisition or production costs (Endres et al. (2006)). Exit taxation may trigger large amounts of taxes when valuable firm-specific assets are transferred and thus may prevent a company from moving.

2.2 European Law

Art. 3 (1) lit. c) EC describes the common market as “an internal market characterised by the abolition, as between member states, of obstacles to the free movement of goods, persons, services and capital”. Art. 98 EC requires an efficient allocation of resources within the EU. Even though direct taxation is a matter of each member state, the European Court of Justice (ECJ) has repeatedly stressed that national tax law has to conform to EC law (European Court of Justice (28 January 1986), European Court of Justice (14 December 2000), Gammie (2003)). In the area of business taxation, the freedom of establishment (Art. 43 EC) and the free movement of capital (Art. 56 EC) are most important. In order to determine a forbidden restriction of a fundamental freedom, the ECJ chooses a transaction-based approach. The Court usually makes a comparison between a purely domestic and a cross-border transaction. In principle, the ECJ requires that both transactions are treated equally in terms of taxation.

Residence-based taxation rests on equal treatment of domestic and foreign income. In this fundamental respect, the economic principle of CEN corresponds to the legal principles of non-discrimination and non-restriction within the European internal market. However, the same is true for source-based taxation and the economic principle of CIN. As EC law demands that residents and non-residents are treated equally by the source state (non-discrimination), the source principle guarantees that residents and non-residents are taxed equally by the source state on their income derived in that state. In principle, CEN as well as CIN can conform to EC law pursuant to established ECJ case law (European Court of Justice (12 May 1998)).¹

¹ See Terra and Wattel (2005), *European Tax Law*, 4th edition, The Hague 2005, p. 258-260 who find that only CIN conforms to EC law.

Consequently, the transaction approach of the ECJ does not provide a clear guideline, whether corporate income taxation within the EU should be more oriented towards the residence principle or towards the source principle.

Regarding the tax base, the ECJ's rulings give somewhat clearer guidance. Pursuant to the Court's ruling in the Marks & Spencer case, the freedom of establishment requires that the country of the parent – given it operates a group relief at domestic level – has to account for the loss of a foreign subsidiary, if the loss can no longer be deducted in the country of establishment of the subsidiary (European Court of Justice (13 December 2005)). Other important judgements are related to financing decisions. Pursuant to the Bosal judgement, the state of the parent must not exclude interest costs for foreign shareholdings, if they are allowed for domestic shareholdings (European Court of Justice (18 September 2003)). Also, thin capitalisation rules shall not discriminate against foreign parents according to the Lankhorst-Hohorst ruling (European Court of Justice (12 December 2002)). In the Lasteyrie du Saillant case, the ECJ decided that taxes on unrealised gains of shareholdings triggered by the transfer of tax residence to another member state infringed upon the freedom of establishment (European Court of Justice (11 March 2004)). Although this ruling does not pertain to a company transferring its tax residence, it might prevent the member states from maintaining their exit taxation rules. Without exit taxation, European groups would be able to make much more effective use of tax rate differences between member states. Such tax planning opportunities could cause a substantial loss of both economic activity and tax revenue. Thus, member states have to react in respect to their group taxation rules including exit taxation regimes.

3. The European Commission's Proposal: Source-Based Corporate Income Taxation

3.1 Profit Allocation and Common Consolidated Corporate Tax Base

The Commission proposes a common corporate tax base and wants to abolish SA and the arm's length principle for transactions within EU-groups (European

Commission (23 October 2001)). The profit would no longer contain intra-group profits, a consolidation would be effected. A consolidated group tax base displays some interesting advantages (Mintz (2004)). Intra-group transactions can no longer be used to shift profits to low tax EU-jurisdictions. Therefore at first glance, tax planning costs and the risk of double taxation due to conflicting arm's length prices and due to the disallowance of business expenses are reduced significantly. The proposal meets an important requirement of European law, since automatic consolidation of losses within the EU would be accomplished. Exit taxation of an unrealised gain is not necessary as long as the asset remains within the group. The transfer of seat or an outbound merger does not affect the group's tax burden and the allocation of tax revenues (Mintz and Weiner (2003)).

Like applicable tax law, the Commission's proposal is governed by the source principle. The rate of the corporate tax will still be set by each individual member state. Each member state taxes the part of the group's profit that has its source in the respective member state. Thus, an allocation of the group's profit or loss to the member states where the group does business is required. Profit allocation is accomplished under the terms of an agreed formula (FA). The formula can be based on macro as well as on micro factors. Most probably, the formula consists of weighted allocation factors like capital, labour and sales (Hellerstein and McLure (2004)). The apportionment formula might depend on the type of business, e.g. the formula for banks or insurance companies could differ from the formula for industrial companies.

FA creates new tax planning opportunities. Since the Commission adheres to the source principle, international tax rate arbitrage does not cease to exist. In fact, tax planning is transferred to the formula factors. Once they are set, companies can influence the economic factors entering the formula (McLure (1980), Cnossen (2003)). The average EU-tax rate and thus the European tax burden decreases when the group transfers factors to a member state with a low corporate income tax rate. On the other side, the costs of international tax planning are probably substantial when

real factors have to be relocated for tax purposes. Even though the scale of tax planning might be reduced by choosing appropriate factors, it can never be eliminated. Member states may find that international tax planning does not only put their tax revenue at risk but reduces domestic investments.

For instance, if the formula includes capital, intangibles create tax planning incentives because these assets have to be assessed and allocated among the member states where the group does business. The assessment and allocation of intangibles in non-active markets must be based on the expected cash flow of the assets which reintroduces the transfer pricing problem through the backdoor. Consequently, the group's international tax planning enjoys a higher degree of flexibility. If intangibles are excluded in order to avoid such ambiguities, the factor capital does not reflect the economic activity adequately. Companies owning valuable intangibles might feel invited to shift profits to low tax member states by transferring tangible assets to these member states and thus relocating production sites. Given this effect of the formula, high tax member states could be inclined to admit book profit shifting to a certain extent in order to prevent the relocation of production sites. In this case, accepting intangibles as part of the allocation formula should be the appropriate tax policy.

3.2. Beyond the Common Tax Base: Non-EU countries

The arm's length principle will remain in force in relation to non-EU countries due to the necessary water's edge restriction. Thus, the group faces two types of corporate tax rates – the average EU-tax rate and the corporate tax rates of non-EU countries. A group operating within the EU as well as in non-EU countries is engaged in complex tax planning. By relocation of real factors, like capital, within the Union and possibly by the flexibility of the formula, the group is able to reduce its European average tax rate. By shifting profits outside the EU to a non-EU country with a lower corporate tax rate than the average EU-tax rate the group reduces its worldwide tax burden. Both types of international tax planning are related to each other: If the group

reduces the EU-average tax rate, this also reduces the incentive to shift profits out of the EU.

All EU member states will be eager not to lose tax revenue when the new system is introduced. Therefore, the formula might be based on factors that do not significantly alter the allocation of corporate tax revenue among the member states. Of course, such a static approach does not deal with the group's incentive to move the factors that enter the formula. Moreover, since the European groups might shift profits outside the EU, the profit to be allocated to the member states does not only depend on the apportionment factors, but also on the average EU-tax rate. Thus, member states with low tax rates may suffer from higher tax rates in other member states.

When member states agree on FA they must also agree on common rules that restrict profit shifting via intra-firm transactions to non-EU countries in order to protect the common European tax base. The same is true for both dividend taxation and capital gains taxation. Without harmonised tax rules, a European group is invited to concentrate non-EU tax planning to member states with the weakest restrictions and to transfer shareholdings in non-EU companies to member states that provide the most advantageous tax treatment for the respective capital income. Anti-avoidance legislation and taxation of shareholdings in other member states become ineffective. These member states, however, bear their respective share of loss in tax revenue.

Regarding external debt, the group faces the choice to incur debt either in non-EU countries or within the EU. Given an average EU tax rate that exceeds the corporate income tax rate in non-EU countries, the group has an incentive to shift external debt to the European part of the group in order to reduce taxes to be paid within the EU. Again, the group should concentrate external debt to member states that do not restrict debt financing which, however, affects the tax revenue of all member states where the group is taxed. Thus, member states have to decide whether to introduce common restrictions of interest deductibility concerning external debt.

4. An Alternative: Residence-Based Corporate Income Taxation

4.1 Profit Allocation and Current Inclusion

In order to avoid distortions of investment and financing decisions caused by source-based FA, taxation of a European group must be based on the residence principle and brought more in line with CEN. Profits and losses of both subsidiaries and permanent establishments are attributed to the corporate parent thus conforming to the loss consolidation required by European law (current inclusion). Like FA, current inclusion calls for a harmonised European corporate tax base. EU member states tax the profits of subsidiaries and permanent establishments that are located in the respective country according to the arm's length principle as is the case under applicable law. Corporate income taxes paid in other member states are to be credited against the corporate income tax of the parent company. Dividend payments and capital gains upon the sale of shares are not taxed in order to avoid taxing the underlying profits twice.

Current inclusion reduces the group's tax planning opportunities within the EU to a great extent. As opposed to FA, and probably most important, the tax incentive to shift real factors within the EU does not exist (Newlon (2000)). Moreover, both intra-group debt financing and intra-group trading do not affect the group's overall profit, when expenses and revenues are consolidated at the parent's level. Taxation of profits from intra-firm trading could be deferred until ultimate realisation. Transfer pricing disputes would be of minor relevance for companies within the EU. Tax arbitrage would not be possible either by claiming losses in high tax jurisdictions while yielding profits in low tax jurisdictions, or by deducting interest expenses in high tax jurisdictions while generating the corresponding revenues in low tax jurisdictions.

A tax consolidation system based on current inclusion is used by some member states, among them Germany, in the case of domestic groups (Kesti (2005)). In an international context, some member states, among them Great Britain, rely on

residence-based taxation and current inclusion in the case of foreign permanent establishments which are not legally separated. Applying established tax consolidation rules and the internationally accepted separate entity approach reduces compliance and administrative costs and makes an agreement of the EU member states regarding a common group taxation scheme much easier.

One might argue that SA is inappropriate to allocate profits within a group of companies. In fact, groups have replaced the market with hierarchy in order to coordinate their business. Market prices for goods and services traded within the group do rarely exist. Consequently, SA is flawed from an economic perspective. Unfortunately, the same is true for FA. It is impossible to allocate the group's profit according to certain factors that have caused that profit (Mintz and Weiner (2003), McLure and Weiner (2000)). Formulas used to allocate profits are open to arbitrariness and have to be judged rather on their economic effects than on their correctness. Thus neither FA nor SA should be regarded as a profit allocation mechanism that is fair according to the input (e.g. capital, labour or revenues) involved.

Established ECJ case law, most notably the judgement in the case *Cadbury Schweppes* (European Court of Justice (12 September 2006)), does not oppose the introduction of current inclusion of foreign corporate profits and losses.² Indeed, the ECJ ruled that CFC legislation effecting the inclusion of profits of a controlled foreign company into the tax base of the domestic corporate shareholder violates the freedom of establishment, if the controlled company carries on a genuine economic activity in its member state of establishment (European Court of Justice (12 September 2006)). However, CFC legislation and a current inclusion scheme are not comparable, because the latter does not make any distinction between a domestic and a foreign EU-company, nor does it depend on the level of taxation in a certain member state.

² See Terra and Wattel, *European Tax Law*, 4th edition, The Hague 2005, p. 258-260 who argue that the elimination of source state tax advantages by residence based taxation is against EC law.

4.2 Corporate Income Tax Assessment

The group's profit is taxed at the parent's corporate tax rate, if foreign corporate income taxes are fully credited. Only an unlimited foreign tax credit ensures CEN within the EU. An economically desirable unlimited credit is, however, fiscally unacceptable. The ordinary foreign tax credit must be limited to the amount of domestic income taxes that are apportioned to the foreign income. In case foreign taxes exceed domestic taxes, the group's tax burden is determined by the foreign tax rates (excess credit situation).

In an excess credit situation, the group's profits are effectively taxed at source. Intra-firm transactions and intra-group allocation of external debt remain relevant tax planning tools. Thus, the foreign tax credit is a crucial issue. The likelihood that high foreign taxes are not credited is reduced when foreign taxes paid in different member states are not calculated on a country by country basis (per country limitation), but summed up in order to calculate the foreign tax credit limitation (EU-wide overall limitation). In the latter case, it might be advisable to grant an option for a per country limitation, because foreign losses reduce the overall foreign income and thus the amount of foreign taxes to be credited. Foreign taxes that are not yet credited should be carried forward so that these credits can be used in subsequent years.

Residence-based taxation is restricted to the EU, and thus the group might shift profits and investments outside the EU. In this respect, there is no difference between FA and SA with current inclusion. However, as opposed to FA, profit shifting from a single member state to non-EU countries does not negatively affect the tax revenue of other member states. When a European group reduces the taxes in a certain member state, this decreases the amount of taxes to be credited by the member state where the group's parent is located. Accordingly, there is no pressure for common EU-rules that combat international tax planning with respect to non-EU countries.

One of the points of serious concern with residence-based taxation is the incentive to move the tax residence to low tax countries. The parent of a European group could move to a low tax member state in order to reduce the group's tax burden. Low taxes on the group's profit may cause an excess credit situation, but this does not prevent the group to alter the parent's tax residence. It is hard to predict how strong the incentive to move would be. Firstly, it is unclear how member states would choose their corporate income tax rate. Under current inclusion, higher corporate tax rates could generate additional tax revenue without being harmful for European inbound investment and there could be a trend for corporate income taxes in Europe to converge. Secondly, the costs of moving the parent's tax residence might be substantial reducing the incentive to take advantage of low taxes in other member states. Thirdly, the incentive of engaging in intra-European tax planning depends on the group's ability to shift profits outside the EU. Even though the intensity of the incentive to move the tax residence is unclear, residence-based taxation remains exposed to this type of international tax planning.

5. Residence-Based Corporate Income Taxation and Change of Fiscal Domicile

5.1 Immediate Exit Taxation

The group can move the parent's fiscal domicile to a low tax member state by engaging in a share exchange, an outbound merger³, or an outbound transfer of seat.⁴ In the first case, the parent's shareholders exchange their shares in the parent company with the shares of another company that becomes the new parent company of the group. Within the EU, a share exchange does not trigger taxes, if a company acquires the majority of shares of another company in exchange of the issue of its own shares to the shareholders of the latter company. These shareholders do not

³ See EC Directive 2005/56/EC of the European Parliament and of the Council of 26 October 2005 on cross-border mergers of limited liability companies, in: OJ of the EU, L 310, p. 1-9.

⁴ See Art. 8 of Council Regulation (EC) No 2157/2001 of 8 October 2001 on the Statute for a European company (SE), in: OJ of the EU, L 294, p. 1-21.

See Weber (2003), p. 350-354, for the case that the company may lose its status as legal entity upon the outbound transfer of seat, if the real seat theory applies. This problem, though, could be circumvented by converting a national company into an S.E. before the outbound transfer of seat.

realise a gain, since each member state where the shareholders are resident keeps its taxing right for the unrealised gains of the shares.⁵ Thus, the group gains access to a low corporate income tax rate without an additional tax burden. In order to limit this type of tax planning, the group's profits should be attributed to the company that performs the central management functions of the group.

A share exchange does not alter the location of the companies' assets and does not put at risk the taxes on the unrealised gains related to these assets. Unlike an exchange of shares, the outbound transfer of seat or outbound merger could be advantageous, if the company's assets and related unrealised gains are transferred to a low tax jurisdiction. Regarding European mergers – but also a transfer of seat of the European company (S.E.)⁶ – the mergers directive prescribes a general tax deferral for unrealised gains, if the taxing right of the former country of residence is maintained. This is true for all assets and liabilities which can be attributed to a domestic permanent establishment and which subsequently contribute to the permanent establishment's profit.⁷ Exit taxation of unrealised gains of these assets is not necessary from a fiscal point of view, because they are still subject to the domestic tax jurisdiction.

By contrast, all assets that are not attributed to a domestic permanent establishment of the moving company are subject to immediate exit taxation. Firm-specific assets which are the most valuable intangibles, including goodwill, are very likely to be attributed to the moving company for tax purposes. Immediate exit taxation can be expected to trigger a large amount of corporate income taxes. Given the requirements of the mergers directive, exit taxation could dramatically reduce or abolish the tax incentive to move the parent company to a low tax member state. The outbound

⁵ See Art. 8 of EC Directive 2005/19/EC amending Directive 90/434/EEC 1990 on the common system of taxation applicable to mergers, divisions, transfers of assets and exchanges of shares concerning companies of different Member States (mergers directive), in: OJ of the EU, L 58, p. 19-27.

⁶ See Art. 10b of mergers directive.

⁷ See Art. 4 of mergers directive.

merger or transfer of seat might therefore prove to be an irrelevant tax planning tool under a system of residence-based group taxation.

The economic effects of exit taxation depend on both the taxes on unrealised profits and the expected advantage of lower taxes on future corporate profits associated with the transferred assets. To illustrate these effects, consider a group consisting of a parent and a subsidiary both of which are located in member state A which taxes profits at a corporate income tax rate τ_A . Neglect personal income taxes and assume that the parent owns an acquired patent that is capitalised. The subsidiary uses the patent and pays a (tax deductible) license fee that conforms to the arm's length standard. The parent's taxable profit is increased by the license fee and induces taxes in member state A. Assume an investment outlay of 1 in $t = 0$ and a decreasing cash flow from the investment of the amount $(p + d) \cdot (1 - d)^{t-1}$ for $t > 0$ with p representing the rate of return and d the economic depreciation rate which equals the tax depreciation rate (King and Fullerton (1984)). In case the intangible asset is used in member state A, we obtain, using the capital market return r , the net present value

$$(1) \text{ NPV}_0^A = -1 + \frac{(p + d) \cdot (1 - \tau_A)}{r + d} + \tau_A \cdot \frac{d}{r + d}.$$

The first term denotes the investment outlay, the second term the present value of the after-tax cash flow, and the third term the present value of tax savings due to depreciation of the investment outlay at the depreciation rate d .

The exit tax has the same effect as a step-up of the asset's basis. The parent pays exit taxes on the difference between book value (acquisition cost of 1) and exit value upon the transfer of the asset to member state B (e.g. by transfer of legal seat). Assume that the exit value (fair value) of the asset in $t = 0$ is based on the expected pre-tax cash flow and the capital market return. The exit tax amounts to $\tau_A \cdot [(p + d)/(r + d) - 1]$. Given a common tax base which implies that the exit value corresponds to the entry

value, we obtain the net present value from owning the asset in member state B which taxes profits at the tax rate τ_B

$$(2) \ NPV_0^B = -1 - \tau_A \cdot \left(\frac{p+d}{r+d} - 1 \right) + \frac{(p+d) \cdot (1-\tau_B)}{r+d} + \tau_B \cdot \frac{p+d}{r+d} \cdot \frac{d}{r+d}.$$

The first term denotes the investment outlay, the second term the amount of exit taxes, the third term the net present value of the asset's after-tax cash flow in state B, and the fourth term the tax savings from the depreciation of the asset's entry value $(p+d)/(r+d)$ in state B at the depreciation rate d . If the investments' net present values are compared, it follows that

$$(3) \ NPV_0^A - NPV_0^B = \frac{r}{r+d} \cdot \left(\tau_B \cdot \frac{p+d}{r+d} - \tau_A \right).$$

In case of a marginal investment ($p = r$), the difference in the net present values is determined by the statutory tax rates. The asset transfer is advantageous, if $\tau_B < \tau_A$. In case of a profitable investment ($p > r$), the tax rate effect interferes with a tax base effect either reducing or abolishing the incentive to transfer the asset.

Valuable firm-specific intangible assets are usually not capitalised. Assume that the parent owns a self-developed intangible asset which is used by the subsidiary. Given the above assumptions, the intangible asset saves taxes in $t = 0$, because the production cost is immediately expensed. The investment's net present value in state A, when discounted at the capital market return r , amounts to

$$(4) \ NPV_0^A = \frac{p-r}{r+d} - \tau_A \cdot \frac{p-r}{r+d}.$$

The first term denotes the net present value of the economic rent, and the second term the present value of taxes. Since the parent enjoys cash flow treatment with

respect to the intangible asset, the interest component of the cash flow goes effectively untaxed (Sinn (1987)). The corporate income tax turns out to be a tax on the economic rent ($p - r$).

Member state A taxes the fair value of the asset upon its transfer. Since the asset's book value equals zero, the exit tax amounts to $\tau_A \cdot (p + d)/(r + d)$. Again, member state B uses the exit value as entry value and the intangible asset is depreciated over its useful life in member state B in order to avoid double taxation. The investment's net present value amounts to

$$(5) \quad NPV_0^B = \frac{p-r}{r+d} - \tau_A \cdot \frac{p-r}{r+d} - \tau_B \cdot \frac{p+d}{r+d} \cdot \frac{r}{r+d}.$$

The first term denotes the net present value of the economic rent, the second term the exit tax less the tax savings due to expensing the acquisition cost, and the third term the present value of taxes due in member state B. If the net present values are compared, it follows that

$$(6) \quad NPV_0^A - NPV_0^B = \tau_B \cdot \frac{p+d}{r+d} \cdot \frac{r}{r+d}.$$

The difference in the net present values indicates a disadvantage of the asset transfer for $\tau_B > 0$. This is true for both marginal and profitable investments, because capitalisation upon the transfer of the asset eliminates the cash flow treatment and causes a higher tax burden.

Although the above economic analysis rests on very restrictive assumptions⁸, it shows that exit taxation might be burdensome. Self-developed intangibles are the most relevant assets. In this case, exit taxation definitively reduces the incentive to

⁸ The most important caveat is asymmetrical information which companies might take advantage of; fiscal authorities usually have less reliable information about the asset's fair value than the company.

move the legal seat of the group's parent company to another member state. Obviously, exit taxation renders residence-based taxation less sensitive to international tax planning which supports the view that residence based current inclusion might not be circumvented by multinationals which transfer their tax residence to low tax member states.

5.2 Deferred Exit Taxation

It might be against primary European law to tax unrealised gains when a company moves to another member state. Any exit taxation regime must not violate the fundamental freedoms, most notably the freedom of establishment (Art. 43 EC). It could be argued, though, that an outbound transfer of seat is not protected by the fundamental freedoms, if the corporation ceases to be a legal person upon the transfer of seat due to the real seat theory (European Court of Justice (27 September 1988)).⁹ But, every tax restriction has to be evaluated against the background of European law, irrespective of civil law (van Thiel (2003), European Commission (19 December 2006)). Given that member states are not in the legal position to uphold exit taxation as permitted by the mergers directive, residence-based taxation might be open for international tax planning with respect to the parent's tax residence.

Under the transaction-based approach of the ECJ, a comparison can be made in the light of the specific tax rule (European Court of Justice (21 September 1999)) between a company moving within its member state of residence and a company leaving that member state for another EU member state. When a company transfers its legal seat within a member state or engages in a purely domestic merger, it is common not to levy taxes on unrealised gains. As a result, a domestic corporate reorganisation does not alter the company's tax burden. Indeed from an economic point of view, the tax effects in both member states are relevant. The court's comparison, though, between

⁹ The ECJ stated that a legal person cannot exist beyond its own national legal system which regulates its very existence.

a domestic and cross-border transaction basically¹⁰ accounts for tax rules in the member state where the moving company is initially located.

Putting the ECJ requirements concerning exit taxation into the context of the model (see sec. 5.1), the investor must not experience an increasing tax burden in member state A when transferring the asset to member state B via outbound transfer of seat or outbound merger. In terms of the model, exit taxation does not infringe upon European law, if the step up is not disadvantageous. In case of a capitalised asset, the condition for exit taxation conforming to European law is

$$(7) \tau_A \cdot \frac{p-r}{r+d} \leq \tau_A \cdot \frac{p}{r+d}.$$

The left side of the inequality denotes the amount of exit taxes in member state A and the right side denotes the present value of taxes, if the asset is not transferred to member state B. Obviously, the condition holds because $p-r < p$. Exit taxes are levied on the net present value before taxes $(p-r)/(r+d)$ granting cash flow tax treatment to the asset, whereas the net present value of the domestic transaction is determined by the taxable profit p . In present value terms, cross-border exit taxation is less burdensome than domestic taxation. From a perspective that focuses on member state A and accounts for the net present value effects of taxation, the exit tax does not hinder the company to move to another member state.

Given a non-capitalised asset, like a self-developed intangible, exit taxation does not infringe upon European law in terms of the model, if the amount of the exit tax does not exceed the tax burden of the net cash flow for $t > 0$, in case the asset is not transferred to another member state. It follows that

¹⁰ See European Court of Justice, 7 September 2006, C-470/04 (N), in: <http://curia.europa.eu>, lit. 55 for an overall view in respect to several tax jurisdictions, suggesting that the former residence state has to account for future changes in the asset's value, if the new residence state does not; a harmonised European corporate income tax base precludes double taxation because both states apply the same rules (including exit and entry values) to determine taxable income.

$$(8) \tau_A \cdot \frac{p+d}{r+d} = \tau_A \cdot \frac{p+d}{r+d}.$$

Obviously the investor's tax burden in member state A is not altered by the transfer of the asset because the asset enjoys cash flow tax treatment in both cases. Again, from the perspective of member state A, the exit tax does not impede the transfer of the asset in net present value terms.

However, it is unclear, if present value effects of taxation play a dominant role in practice. Instead, liquidity effects of taxation could prove to be more relevant. A company may not engage in an outbound transfer of seat or an outbound merger in order to avoid the immediate exit tax payment. Liquidity becomes decisive, if companies can neither avail of sufficient liquid funds on their own nor are able to incur additional debt to pay the exit taxes (imperfect capital market). The requirement of European law that a cross-border transaction is treated like a purely domestic transaction has also to be seen in the light of the liquidity effects of exit taxation. According to ECJ case law, a liquidity disadvantage is a restriction and needs to be justified on legal grounds (European Court of Justice (08 March 2001)). Tax payments in the cross-border case may be neither higher nor earlier than in the domestic case (European Commission (19 December 2006)).

Exit taxation could be justified by the coherence of the income tax system. Coherence, as defined by the ECJ, means that several tax rules have to be evaluated in a systematic context on the level of the same tax and the same taxpayer (European Court of Justice (06 June 2000), Vanistendael (2005)). This narrow definition of coherence has faced criticism (Seer (2006)), but it is fulfilled in the case of exit taxation. There is a direct link between the postponement of taxation of unrealised gains (advantage) and subsequent taxation of these gains (disadvantage) in the hands of the same taxpayer (Kotanidis (2004)). Pursuant to the Marks & Spencer judgement, exit taxation could also be justified, because it prevents tax planning and fights tax

avoidance in the sense that taxpayers are not free to decide where they are taxed. Moreover, the ECJ acknowledged the justification of the allocation of taxing rights in this case (e.g. European Court of Justice (13 December 2005)).¹¹ Exit taxation is just about this allocation, i.e. where are the increases of value to be taxed. In fact, the ECJ has not ruled out the member states' right to tax unrealised gains (European Court of Justice (11 February 2004)).¹²

Any restriction has to be proportionate which means it has to be both appropriate and necessary (European Court of Justice (11 March 2004)). Taxation of an asset's unrealised gain apparently meets the first criterion. Any immediate taxation, however, is not necessary, if the taxing right is not threatened or if the taxing right can be kept up by a less restrictive measure. Thus, immediate taxation may not meet the second criterion. Concerning the unrealised gains of assets that are not attributed to a permanent establishment, immediate taxation might well be considered as an infringement of the freedom of establishment (Art. 43 EC). Only taxation upon realisation is equivalent to a comparable domestic transaction. It is very well conceivable that exit taxation must be deferred until realisation in order to conform to European Law.

Most likely, the tax authorities are not in a position to effectively monitor the assets of a moving company in order to assess exit taxes according to subsequently realised profits (Seer (2006)). Thus, exit taxation must be based on reasonable assumptions concerning the realisation patterns. Exit taxes should be distributed over the useful life of the asset.¹³ In practice, depreciation tables can be used as a guideline in order to determine the asset's useful life and expected profit. According to ECJ case law, all assumptions must be open to the taxpayer's counter evidence (European Court of Justice (11 March 2004), European Court of Justice (12 December 2002)). This means that the taxpayer can prove respectively that the actual amortisation periods are

¹¹ See also opinion of advocate-general Kokott (12 September 2006).

¹² Cerioni (2005), p. 267-281, finds, however, that exit taxation no longer is possible.

¹³ See European Commission (19 December 2006), p. 9-10 who supports the view that transferred fixed assets should be taxed according to their useful life (e.g. depreciation).

longer and that the current assets have not yet been sold. Moreover, it should be possible for the taxpayer to settle its complete tax liability immediately at its present value (Kotanidis (2004)).

Given that the ECJ accepts the justifications for exit taxation and finds that deferred taxation is proportionate, the above results (see sec. 5.1) still are valid. In terms of the model, the net present value of the exit tax remains unchanged, if the tax is spread over the useful life of the asset. In case of a capitalised asset, the periodical tax base equals $(p - r) \cdot (1 - d)^{t-1}$ resulting in the present value $(p - r)/(r + d)$ that is identical with the asset's unrealised gain. In case of a non-capitalised asset, the periodical tax base equals $(p + d) \cdot (1 - d)^{t-1}$ resulting in the present value $(p + d)/(r + d)$ that equals the asset's fair value. Both equation (3) and equation (6) hold, suggesting that the exit tax reduces (capitalised asset) or abolishes (non-capitalised asset) the incentive to move even in the absence of liquidity effects.

Alternatively, the exit tax could be designed so that the present value of exit taxes equals the respective present value in the purely domestic case. The periodical tax payment in case of a capitalised asset then amounts to $\tau_A \cdot p \cdot (1 - d)^{t-1}$ resulting in the present value $\tau_A \cdot p/(r + d)$, and in case of a non-capitalised asset, we obtain $\tau_A \cdot (p + d) \cdot (1 - d)^{t-1}$ resulting in the present value $\tau_A \cdot (p + d)/(r + d)$. Obviously, equation (6) holds again, because an exit tax on the basis of the fair value of a non-capitalised asset equals the present value of taxes in the domestic case. In case of a capitalised asset, however, the present value of the exit taxes changes. Replacing the expression for the exit tax in equation (2) by the term $\tau_A \cdot p/(r + d)$ and again assuming that the entry value in member state B equals the fair value of the asset, we obtain the net present value from owning the asset in member state B in case of deferred taxation

$$(9) \quad NPV_0^B = -1 - \tau_A \cdot \frac{p}{r + d} + \frac{(p + d) \cdot (1 - \tau_B)}{r + d} + \tau_B \cdot \frac{p + d}{r + d} \cdot \frac{d}{r + d}.$$

If the net present value of equation (1) is compared with the net present value of equation (9), it follows that

$$(10) \quad NPV_0^A - NPV_0^B = \tau_B \cdot \frac{p+d}{r+d} \cdot \left(1 - \frac{d}{r+d}\right).$$

For tax rates $\tau_B > 0$, equation (10) is positive which indicates that replacing the fair value of the asset with the net present value of taxable profits as exit tax base abolishes the incentive to move completely.

In summary, primary European law probably does not force the member states to abolish their exit taxation rules, but most likely it prevents them to tax unrealised profits immediately. Given that deferred taxation can be designed to conform to European law, liquidity effects should not hinder the transfer of the tax residence. Still, exit taxation makes this type of international tax planning unattractive in present value terms. As a consequence, residence-based group taxation might not be threatened by the incentive to move the group's parent company to a low tax member state.

6. Conclusion

The European Commission's proposal to establish a common corporate tax base has its merits, because it significantly reduces both compliance and administrative costs for European groups. The Commission's suggestion to replace separate entity accounting with a profit allocation based on formula apportionment, however, has some disadvantages. Since formula apportionment is based on the source principle, some member states might face a loss in both real economic activity and tax revenue. Moreover, anti-avoidance tax rules concerning non-EU countries must be harmonised to prevent negative tax revenue spillover effects.

Given these objections, residence-based group taxation deserves closer consideration. Current inclusion also rests on a common corporate tax base, though it preserves separate entity accounting. As opposed to applicable law, the subsidiaries' profits and losses are attributed to the parent of the group. The group's profit is taxed at the corporate income tax rate of the parent, while the subsidiaries' corporate income taxes are credited against the parent's tax liability. In this case, current inclusion prevents tax distortions regarding the location of investments. If, however, limitations on the tax credit exist, residence-based taxation produces the same distortions as source-based taxation. Still, current inclusion has the advantage over formula apportionment that the allocation of corporate tax revenue is not altered to a great extent, that no pressure is exerted on the member states to harmonise their anti-avoidance tax rules in respect to non-EU countries, and that European group taxation continues to rely on the internationally accepted separate entity approach.

Given that current immediate exit taxation infringes upon European law, a serious drawback of residence-based current inclusion might be the incentive to move the tax residence of the group's parent to a low tax member state. However, it is quite likely that exit taxation is not rejected by the ECJ, if a deferred taxation scheme applies. Deferred exit taxation eliminates unfavourable liquidity effects upon exit. Still, exit taxes render it burdensome for the group to move the parent's tax residence to another member state.

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