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The Future of the Corporate Income Taxation in the European Union

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A. Introduction

The future of capital income taxation in the European Union (EU) hinges importantly on the future of the corporation tax. No doubt, schedular capital (income) taxes on real estate and the earnings of small-businesses will be around for a long time to come, but the base of a comprehensive capital income tax requires the inclusion of corporate earnings, i.e. profits, interest and royalties. Capital income taxation, broadly defined, will wither if the body politic does not want to tax corporate earnings, either deliberately or by ignoring the policy and administrative issues that arise in a globalised capital market.

Accordingly, this paper focuses mainly on corporation tax (CT) regimes. The future of the corporation tax starts now. Therefore, Part B surveys and evaluates the actual CT regimes in the EU to see whether they yield any clues about what the future may hold in store. The survey starts with an analysis of corporation-income tax relationships in the Member States centered on the treatment of distributed and retained profits. Subsequently, there is a comparison between nominal tax rates on various forms of capital income (retained profits, dividends, interest) and labor income. This is followed by a review of the most important tax base features, including the use of tax incentives. Finally, there is a discussion of a number of technical aspects that bear on the enforcement of the taxation of corporate earnings. A rather crazy quilt of CT systems emerges of widely diverging tax bases and tax rates. Tax competition forces are clearly at work. Indeed, the future of capital income taxation in the EU does not look very rosy, unless some form of tax coordination can be found.[1]

[1] It is often said that rate reductions have not been accompanied by commensurate declines in corporate tax revenues. However, this does not account for the secular rise in profits nor for the greatly increased share of economic activity that is conducted in corporate form. These two factors should have resulted in a rise in corporate tax revenues.

Under the EU treaty, the Member States do not have to harmonize their CT rates or bases. Harmonization is to be "approximated" only if required for the functioning of the internal market. So far, CT harmonization has been confined to various measures aimed at promoting cross-border business cooperation between related companies[2] and to administrative assistance.[3] Furthermore, in 1997, a non-binding Code of Conduct on Business Taxation, purporting to curtail 'harmful tax practices' by the Member States, was adopted (European Commission, 1997). These practices have regard to the tax-favored provision of financial services to third parties, intra-group financing and the licensing of intangible property in return for royalty payments. (They mirror the treaty ban on state aid to private enterprise.) Beyond this, regulations exist on the statutes for a European Company and a European Economic Interest Grouping.[4]

The case for further tax coordination seems strong. Greater approximation of capital income tax systems could promote investment, improve the tax burden distribution and, last but not least, reduce compliance and administrative costs. While the normal return on mobile capital cannot be taxed at the same high rates as labor income, tax coordination should enable the Member States to capture some of that return. After all, capital is less mobile in the EU as a whole than between individual states. Tax coordination should also make it possible to tax firm-specific rents more effectively (although not at the same high rates as location-specific rents, if separately identifiable). Furthermore, there is no reason why foreign share- and bondholders should be completely exempt from tax. Beyond that, the CT is

Admittedly, some of the revenue foregone has been made up by various base broadening measure.

[2] These measures comprise the parent-subsidiary directive (90/435/EEC, amended by 2003/123/EC) which eliminates the double taxation and withholding taxes on dividends paid to defined parent companies, the merger directive (90/434/EEC amended by COM(2003)613final) which suspends the taxation of capital gains on defined cross-border mergers or reorganisations), and the interest-royalty directive (2003/49/EC) which eliminates withholding taxes on interest and royalty payments between defined related companies. The European Commission has also indicated that a new proposal on cross-border loss-relief will be issued in the near future (COM(2003)614final). Finally, mention should be made of Directive 69/335/EEC, which obliges Member States not to levy capital duty on the issuance of new shares at a rate exceeding 1%.

[3] This has resulted in the mutual assistance directive (77/799/EEC amended by 2004/56/EC) on the exchange of tax information between Member States, and the arbitration convention (90/436/EEC extended by protocol (OJC202/01) of 16 July 1999) on the resolution of the double taxation of profits if adjustments are made to transfer prices by one Member State which have consequences for the amount of taxable profits in other Member States.

[4] See Council Regulations 2157/2001/EC (along with Directive 2001/86/EC) and 2137/85/EEC. In addition, the regulation on the Statute for a European Cooperative Society was adopted on 22 July 2003.

needed as a backstop to the individual income tax (PT). Without a CT, the labour income of the self-employed would be retained in corporate form and largely escape the PT. In short, effective if moderate taxation of capital income seems desirable.[5]

Although the arguments for coordinating the capital income taxes are overwhelming, the difficulties in reaching agreement are daunting. In the spirit of the subsidiarity principle, a gradual, bottom-up and largely reversible approach seems preferable to a complex, top-down, all-or-nothing approach. Also, a broadly based approach encompassing the taxation of all forms of capital income seems preferable to confining the coordination efforts to corporate profits. In search of the shape of a common coordinated approach, Part C starts with a discussion of various features of the existing CT regimes that could form the building blocks for further coordination. In sequence, the steps that could be taken comprise the introduction of dual income taxes (DITs), the imposition of source withholding taxes on interest and royalties, the approximation of CT rates between Member States, and eventually the harmonization of the various tax bases and the introduction of a European-wide CT, if and when the EU obtains the power to tax.

B. Survey of Corporation Taxes

1. Corporation Tax Regimes[6]

Table 1 shows the CT systems that are found in the various EU Member States. The statutory CT rates range from 12.5% in Ireland to 40.7% in Germany. The average CT rate in the EU (not counting Estonia which exempts retained corporate profits from tax) is slightly more than 27%. Interestingly, CT rates in the 10 New Member States are on average some 7 percentage points lower than in the 15 Old Member States. CT rates have greatly been reduced since the early 1990s when capital markets were liberalised. Generally, the rate reductions have been accompanied by base broadening measures, so that CT revenue contributions changed little in relative terms. It is doubtful, however, whether this situation can be sustained in the years to come.

[5] For the rationale of retaining the CT, see Bird (2002) and for the arguments for retaining the CT in a globalised capital market, see Zodrow (2004).

[6] This and the next section draw on Cnossen (2004), although the tables have been updated and information has been added about the New Member States. For a recent review, see also Schratzenstaller (2004).

Table 1: European Union: Corporation Taxes (CTs), Individual Income Taxes (PTs) and Wealth Taxes in 2004 (Rates in %)

CT–PT system	CT rate[a,b]	Tax treatment of dividends at shareholder level	PT on capital gains[c]		Net wealth tax	Inheritance and gift tax
			Ordinary shares	Substantial holdings		
Imputation system		Tax credit				
Malta	35	$^{35}/_{65}$ of dividend	—	35	—	—
Spain	35	$^{2}/_{5}$ of dividend	15	15	0.2–2.5	7.65-47.6
UK	30	$^{1}/_{9}$ of dividend	8–26	8–26	—	20–40
Schedular PT rate		PT rate[d]				
Austria	34	25*[e]	—	½ of gain	—	2–54
Belgium	35	15*[e]	—	—	—	3–27(30)
Cyprus	15	15*	—	—	—	—
Czech Rep.[f]	26	15*	—	—	—	0.5–20
Denmark	30	28/43	28/43	28/43	—	15–36.25
Hungary	16	30.5*	—	—	—	2.5–40
Lithuania	15	15*	—	—	—	5–10
Poland	19	19*	19	19	—	3–12
Sweden	28	30	30	30	1.5	10–30
Dividend exemption		Size of exemption				
Finland[f]	28	Full dividend	29	29	0.9[g]	10–16
France[f]	35.4	½ of dividend[e]	25	25	0.55–1.8	5–40
Germany	40.7	½ of dividend	—	½ of gain	—	7–50
Greece	35	Full	—	20	—	10–40
Italy[h]	33	$^{3}/_{5}$ of dividend	12.5	$^{2}/_{5}$ of gain	—	—
Latvia	15	Full	—	—	—	—
Luxembourg	30.4	½ of dividend[e]	—	½ of gain	0.5[g]	6.4–48
Netherlands	34.5	Full	—	25	1.2	5–68
Portugal	27.5	½ of dividend	—	10	—	0–10
Slovak Rep.	19	Full	19	19	—	—
Slovenia	25	$^{2}/_{5}$ of dividend	—	—	—	5–30
Double Taxation		PT rate				
Ireland	12.5[i]	Full	20	20	—	
No CT		PT rate				
Estonia[f]	0	$^{24}/_{76}$ of dividend	24	24	—	—

[a] *CT rates include (i) a surtax in Cyprus (5%), (ii) surcharges in Belgium (3%), France (3%+3.3%), Germany (5.5%), Luxembourg (4%), Portugal (10%) and Spain (0.75%–0.01%), and (iii) local taxes in Germany (effectively 17.6% – deductible from itself and from the CT) and Luxembourg (7.5% – not deductible from the CT). Spain levies a local tax, not shown in the table, based on the type of business activity and the surface area of the premises. Hungary levies a 2% local tax on*

business sales, which resembles a subtraction type of value–added tax, as well as a 0.2% innovation tax on the same base. These taxes are not included in the Hungarian CT rate.

[b] *Flat minimum taxes, creditable against the final CT, are levied in Austria and France. Lower or graduated CT rates apply to lower amounts of profits or to small businesses in Belgium, Cyprus, France, Ireland, Luxembourg, the Netherlands, Portugal, Spain and the UK.*

[c] *PT rates shown are for long-term capital gains. Short-term gains are taxed at higher (effective) rates in Denmark, Portugal, Spain and the UK. Various Member States exempt small amounts of capital gains or tax them at a lower rate. The Czech Republic, Germany and Slovenia tax speculative capital gains on shares held less than a specified period. Generally, capital gains are not adjusted for inflation.*

[d] *An asterisk (*) indicates that the PT rate is a final withholding tax, which is optional in Austria and Belgium.*

[e] *Austria, Belgium and Luxembourg permit a limited deduction from individual income for the purchase of newly issued shares. France provides a 25% tax credit against the PT (max. €20,000). Austria also exempts dividends paid on newly issued shares.*

[f] *For the Czech Republic, Estonia, Finland and France, the table reflects the situation announced for 2005.*

[g] *In Finland, non-resident companies and domestic legal entities other than corporations are subject to a 1% net wealth tax. In Luxembourg, resident companies are subject to a 0.5% net wealth tax.*

[h] *Italy also levies a 4.25% regional tax on productive activities (IRAP) in the form of an income-type value-added tax. This tax, however, is being reviewed.*

[i] *Ireland applies a 10% rate to the profits of manufacturing companies.*

Source: Author's compilation from Supplementary Service to European Taxation (Amsterdam: IBFD Publications BV, loose-leaf), Vols A and B.

The CT regimes in the Member States can be distinguished depending on whether and to what extent they reduce the double tax on distributed profits – i.e. provide dividend relief – that arises when corporate profits are subjected to the CT and again to the PT when paid out as dividends (section 2.1). Double taxation also occurs when retained profits are subjected to the CT and again to a capital gains tax (CGT) at the shareholder level on increases in share values – increases that, among others, reflect the corporation's greater net worth as a result of profit retention (section 2.2). These two forms of double taxation violate the normative implication of the comprehensive income concept that corporate profits, distributed as well as retained, should be fully integrated with any other income of shareholders and taxed at their marginal PT rates.[7] Also of interest is the existence of other broad-based taxes on capital, i.e. net wealth and inheritance and gift taxes (section 2.3).

[7] See Musgrave and Musgrave (1984). Note that full integration under a comprehensive income tax implies that, for tax purposes, corporate profits should be allocated to shareholders as they accrue. The CT could then be abolished. If retained, it would function as a withholding tax for the PT (as well as a schedular income tax on the equity income of non-residents).

1.1 Distributed Profits

Imputation systems are the most structured form of dividend relief at the shareholder level.[8] Under imputation systems, shareholders are given a full (or partial) tax credit against their PT for the CT that can be imputed to the dividends (grossed up by the tax credit) received by them. Accordingly, imputation reduces the excess CT+PT burden on profit distributions in proportion to the marginal PT rates of shareholders.[9] Under full imputation, as in Malta, distributed profits would be taxed at the marginal PT rate of shareholders.

The double tax can also be mitigated at shareholder level by subjecting dividend income to a separate or schedular PT rate lower than the top PT rate. Consequently, the relief is proportionately greater for high-income-bracket PT payers than for low-income-bracket PT payers. This regressive result can be mitigated but not eliminated, by permitting low-income-bracket PT payers whose marginal ordinary PT rate is lower than the special PT rate to opt for full double taxation of their dividend income (with a credit for any PT withholding tax imposed at the corporate level).

Furthermore, exempting dividend income from the PT, fully or partially, can provide dividend relief. A full exemption would be equivalent in effect to a schedular PT rate of 0%. More generally, a partial exemption expressed as a fraction, α, of the total dividend, is equivalent to α times the ordinary PT rate under the schedular approach. The exemption approach, however, does not permit the imposition of a (final) withholding tax at the level of the corporation, because the potential tax liability at shareholder level is not known.

As is evident from table 1, the EU Member States treat distributed profits in the following manner:

(1) Three Member States employ an imputation system. The relief is expressed as a fraction (or percentage) of the net dividend.[10] Malta has a full imputation system. Since its CT rate equals the top PT rate, imputation is equivalent to a full dividend exemption at the top rate.

(2) Nine, mainly small Member States provide dividend relief at the shareholder level by taxing distributed profits at a schedular (flat) PT rate separate from the

[8] Equivalent relief can be provided at the corporate level under a split-rate or dividend-deduction system. For a discussion of the pros and cons, see, among others, U.S. Department of the Treasury (1992), Cnossen (1997), and Graetz and Warren (1998).

[9] More than full relief is possible under the CTs in Member States that permit the payment of dividends out of exempt profits without imposing a compensatory tax at the corporate level. Presumably, for this reason, Malta imposes a 15% tax on dividends paid out of untaxed profits.

[10] Alternatively, the relief can be expressed as a percentage of the CT (indicating the extent to which the double tax is mitigated) or as a percentage of the grossed-up dividend (representing the comparable tax-inclusive PT rate).

PT on other income. Moreover, in all Member States, except Denmark, the schedular PT rate is collected in the form of a (final) withholding tax at the level of the corporation. Austria and Belgium mitigate the regressive impact of the schedular approach by giving shareholders the option to be taxed at their actual marginal PT rate.

(3) Eleven Member States, including France and Germany, exempt dividend income, either fully or partially, in the hands of shareholders. Also, the Netherlands follows the exemption approach, but views the net wealth tax (which it calls income tax) as a substitute for the PT on dividend income (as well as interest and rental income) that it abolished.

(4) One Member State, Ireland, taxes distributed profits fully at corporate and at shareholder level (classical system), although the CT and PT rates are so low that the effective tax rate is still lower than in eight other states.

(5) One Member State, Estonia, does not tax corporate profits, although it subjects dividends to a "distribution tax" of 26%. If qualified as a withholding tax,[11] the distribution tax violates the Parent-Subsidiary Directive with which Estonia must comply by the end of 2008.

Imputation systems, long supported by the European Commission (see Cnossen, 2004, fn. 15), used to dominate the CT picture in the EU, but in recent years most Old Member States have switched to schedular taxes on dividend distributions (as well as other capital income). Perhaps not surprisingly, most New Member States followed this lead. The cross-border implications of imputation were found to be discriminatory and overly complicated. More generally, the Member States do not anymore seem to believe that the normative implications of the comprehensive income concept should be adhered to in the design of corporate-personal income tax relationships.

1.2 Retained Profits

The CT plus the PT on realised capital gains determines the tax treatment of retained profits. Generally, most Member States make a distinction between capital gains realised on the sale of ordinary (widely-held) shares (e.g. quoted on national stock exchanges) and capital gains realised on the sale of other (non-traded) shares, which often represent a controlling interest (called substantial holding) in (closely-held) corporations. Table 1 indicates that 11 out of 25 Member States tax capital gains on ordinary shares, but that 17 states tax gains realised on the sale of substantial shareholdings in closely-held companies. Capital gains on these holdings are more widely taxed than gains on traded shares because they often

[11] This may be inferred from the decision of the European Court of Justice in Athinaiki Zithopiia v. Elliniko Domosio (C-294/99 [2002] ECR I-3683).

represent labour income sheltered in the corporate form at a CT rate that is lower than the marginal PT rate on other labour income.

The CT rates shown in table 2 are the nominal rates. Deferral and various tax base preferences result in low effective CT rates. Furthermore, it should be noted that no Member State makes a systematic attempt to alleviate the double tax on retained profits (as Norway does) by allowing shareholders to increase the acquisition price of shares by the corporation's retained profits net of CT.

1.3 Net Wealth and Inheritance Taxes

As regards other taxes on capital, only six (old) Member States impose a net wealth tax on individuals. As is well known, a net wealth tax is equivalent to an ex-ante income tax. As under the income tax, returns on wealth are taxed, but in contrast to an ex-post income tax, the personal risk premium is not taxed under a wealth tax (see Cnossen and Bovenberg, 2001). Furthermore, all but 6 Member States tax wealth transfers, i.e. gifts and inheritances. Rates depend on such factors as the degree of sanguinity, the size of the bequest, the type of asset that is bequeathed, and the beneficiary's age. The revenue from net wealth and inheritance and gift taxes is very small. Finally, most Member States tax real estate (not shown in table 2) and/or real estate transfers at widely varying effective rates.

2. Comparison of Nominal Tax Rates

Table 2 compares the CT/PT rates on distributed and retained profits with the rates on interest[12] and labour income. Clearly, the nominal tax rates on retained and distributed profits (the return on equity) as well as interest (the return on debt) diverge widely within and between the Member States. The differences in the (effective) tax rates and diverging opportunities for tax arbitrage imply that profit distributions are discriminated against (section 3.1) and that debt is treated preferentially compared with equity (section 3.2). Of further interest is that labour income appears to be taxed much higher than capital income (section 3.3).

[12] The tax treatment of royalty income is not shown, because most royalties accrue to corporations and hence are taxed at the CT rate. Also, the tax treatment of rental income is not shown, because rental income arising outside corporations consists mainly of rental values of owner-occupied property, which are treated preferentially under all PT regimes in the Member States.

Table 2: European Union: Corporation Taxes (CTs) and Individual Income Taxes (PTs) on Capital and Labour Income in 2004 (rates in %)

CT–PT system	CT on retained profits[a]	CT+ top-PT on distribut. profits[b]	PT on interest (final)[c]	Taxes on labour income				
				Top-PT[d]	Social security contributions[e]			
					Payroll	Wages[f]		Ceiling (€)
						Employer	Employee	
Imputation system								
Malta	35	35	10/15	35	—	10	10	32,500
Spain	35	50.0	15	45	—	37.2	6.25	—
UK	30	53.3	20	40	—	—	—	—
Schedular PT rate								
Austria	34	50.5	25	50	7.5	9.3	10.85	41,400
Belgium	35	44.7	15	53.6	15	10–15	6.0	
Cyprus	15	27.7	10	30	2	8	6.3	79,000
Czech Rep.	26	38.7	15	32	—	15.5	6.0	—
Denmark	30	60.1	47.6	59.8	—	—	8	—
Hungary	16	46.5	15/0	38	3	11	5	21,000
Lithuania	15	27.7	15/0	33	—	7.6	0.5	…
Poland	19	34.4	19	40	—	9.06	10.3	…
Sweden	28	49.6	30*	56.5	—	19.28	—	—
Dividend exemption								
Finland	28	28	28*	51.5	—	3.31	1.75	—
France	35.4	54.7	26*	59.9	6.7–16.0	17.4	2.85	19,808
Germany	40.7	54.8	36.9*	47.5	—	11.25	11.25	4,350
Greece	35	35	10/15	40	—	27.96	19.45	24,670
Italy	33	45.2	12.5	45.6	—	35.06	7.44	…
Latvia	15	15	25/0	25	—	24.09	9	…
Luxembourg	30.4	43.9	38.9*	38.9	—	—	8.2	84,177
Netherlands	34.5	34.5	None	52	—	17.64	7.05	43,754
Portugal	27.5	42.0	20*	40	—	23.75	11	4,387
Slovak Rep.	19	19	19	19	—	20.4	9.4	…
Slovenia	25	50.9	25*	50	0–14.8	7.05	6.6	…
Double taxation								
Ireland	12.5	49.2	20*	42	—	10.75	6	42,160
No CT								
Estonia	0	24	24	24	—	33.5	—	…

[a] *See table 1: Rates do not include PTs on capital gains taxes, if levied.*

[b] *Calculated as CT + [(1 – CT – exempt dividend) PT] minus any imputation tax credit if applicable.*

[c] *An asterisk (*) indicates that the country does not apply a final withholding tax to interest. Accordingly, the rates shown are the ordinary (top) PT rates. In Greece and Malta, the PT withholding tax on bank interest is 15%. Hungary, Lithuania and Latvia do not tax interest received from banks.*

[d] *PT rates include the following: (i) surcharges in Germany (5.5%) and Luxembourg (2.5%), (ii) surtaxes in France (CSG – 8.2%; CRDS – 0.5%; prélèvement social – 2.3%); and (iii) local taxes in Belgium (7.25%, surcharge), Denmark (33.3%), Finland (17.5%), Italy (1.4%, surcharges) and Sweden (31.5%).*

[e] *Payroll taxes and employers' social security contributions are generally deductible from corporate profits (except the payroll tax in Cyprus). Similarly, employees' social security contributions are either not taxed or are deductible from PT-liable income (except in Ireland).*

[f] *Not including contributions to (old-age) pension plans (and contributions to dependency schemes), except in Estonia, Greece, Latvia, Italy and Spain where these contributions could not be identified separately.*

Source: Author's compilation from Supplementary Service to European Taxation (Amsterdam: IBFD Publications BV, loose-leaf), Vols. A and B.

2.1 Discrimination of Profit Distributions

Malta, Finland, Greece, Latvia, the Netherlands and the Slovak Republic are the only Member States that tax profit distributions and retentions at the same marginal CT/PT rates. Consequently, the choice between profit retention and distribution is not affected. As table 2 indicates, however, in all the other Member States, the CT+PT on current distributions[13] appears to be (considerably) higher than the CT (plus CGT, if any) on retained profits. There is a presumption, therefore, that the CT+PT regimes discourage the payout of dividends and the financing of investment by the issuance of new shares.

Whether this happens depends on the view that is adopted regarding the impact the PT on dividends has on marginal investments financed with equity, be it retained profits or new share capital (the amount of debt is assumed to be fixed). Under the traditional view, it is assumed that shareholders derive a positive benefit from receiving dividends. Hence, dividends cannot be lowered without cost. Accordingly, the PT results in double taxation of the income attributable to investments financed with retained earnings. In contrast, under the new view, the assumption is that earnings on equity-financed investments can ultimately be

[13] The following simplifying assumptions have been made in calculating the effective CT+PT rates on distributed profits: (a) CTs are borne by profits; (b) after-CT profits are fully distributed; (c) dividends are received by resident PT-liable individuals; (d) individuals and corporations face the maximum CT and PT rates, inclusive of taxes levied by subordinate levels of government; (e) CT and PT rates remain unchanged; and (f) the amount of pre-tax corporate profits available for distribution remains the same regardless of the level of the tax rates or the degree of dividend relief. See OECD (1991).

distributed to shareholders only in the form of dividends subject to the PT, which is capitalised in share prices.[14] Although the issue is far from resolved, most empirical studies support the traditional view.[15] Whatever view is adopted, taxing dividends twice always harms investment by new businesses, which have to rely on new share issues to provide for their equity needs. This discourages new firms from entering the market.

2.2 Preferential Treatment of Debt

The combined PT/CT on debt equals the PT rate on interest income. Table 2 indicates that most Member States appear to tax interest, deductible in ascertaining taxable profits, at lower rates than profit retentions (which may also be subject to the CGT). Denmark, Sweden, Luxembourg and Ireland are the only exceptions. In some Member States, the favourable treatment of interest vis-à-vis retained profits is somewhat difficult to gauge because the effective CGT rate is not known. Generally, however, the tax-exempt status of institutional investors, such as pension funds, facilitates the preferential treatment of interest. The effect is reinforced by financial innovation, which makes debt and equity close substitutes.

The tax-favoured status of debt discriminates against corporations that face difficulties in attracting debt because they do not yet enjoy a high credit rating, own mainly non-liquid assets (such as firm-specific machinery) against which it is difficult to borrow, or generate insufficient taxable profits to be able to deduct interest. Consequently, these corporations, which tend to be fledgling enterprises, have to incur higher capital costs on account of taxation than older, established corporations with either easier access to debt financing or sufficient retained profits to finance new investments.

2.3 Separate and Higher Taxation of Labor Income

As the right hand side of table 2 shows, invariably, labour income is taxed at much higher nominal (and effective) tax rates than capital income, including profit distributions, particularly if payroll taxes and social security contributions, which also impinge on the work-leisure choice, are taken into account. Generally, labour income is taxed separately from capital income regardless of the normative implication of the comprehensive income concept that the two forms of income should be taxed jointly at the same rate. Apparently, this reflects the view that the greater mobility of capital precludes the application of high CT+PT rates. Indeed if

[14] Furthermore, earnings distribution in the form of share repurchases is precluded. For more on the traditional vs. new view debate, see Sinn (1991).

[15] See especially Zodrow (1991). For a recent contribution that modifies his findings, see Auerbach and Hassett (2002).

mobile capital were taxed higher than in other countries, the excess tax would have to be borne by labour. Accordingly, the better policy is to tax labour directly so as to avoid the distortionary effect of the shift in incidence.

3. Tax Base Issues and Tax Incentives

Obviously, the CT base is as important for analysing the effective tax burden on capital as the nominal tax rate. Theory prescribes that corporate profits should be calculated on an accretion basis. In practice, however, taxable profits are determined on the basis of International Financial Reporting Standards (IFRS) or Generally Accepted Accounting Principles (GAAP), subsequently adjusted to reflect CT requirements. The accounting principles prescribe that prospective losses should be taken into account in computing taxable profits, but that accrued capital gains – in violation of the normative implication of the accretion concept of income – should not be taxed until they are realised.

Furthermore, revenues and costs should be matched on an annual basis under the accrual system of accounting.[16] Expenses, including interest, in earning taxable profits and in maintaining the assets used in the corporation's activities are deductible (section 4.1). Furthermore, the CT rate should be the same regardless of the type of business or activity. However, this prescription is mostly honoured in the breach. Generally, the "normal" tax base and the "normal" tax rate are eroded by special concessions intended to stimulate "worthy" economic sectors or activities (section 4.2).

3.1 Determination of Taxable Profits

The usual rules for calculating taxable profits regarding depreciation, inventory valuation, the provision of contingencies, and loss offsets, are shown in table 3. In all Member States, capital costs are recovered by way of a variety of straight-line and declining-balance[17] methods, based on historical cost, at widely varying rates. LIFO (last-in-first-out), FIFO (first-in-first-out) and average cost methods are used to value inventories. LIFO tends to be more favourable in times of rising prices, because the last purchased unit is deemed to be sold first which should reduce book profits compared with FIFO which assumes that the first unit bought is deemed to be sold first. Favourable depreciation rules, LIFO and the rollover of capital gains on depreciable assets generally are justified to mitigate the impact of inflation. As a

[16] Exceptionally, small firms would be allowed to calculate their profits on a cash basis of accounting.

[17] The same result is obtained in the Czech and Slovak Republics through the use of accelerated depreciation methods based on coefficients.

rule, Member States do not explicitly index depreciation allowances and capital gains for the effects of inflation.

Expenses made in the ordinary course of business are deductible, but most Member States limit or preclude the deductibility of entertainment and promotional expenses, donations, and costs of private cars used for business purposes. These expenses combine business and personal aspects that are difficult to disentangle without some arbitrary rule. Furthermore, most Member States permit a general provision for doubtful debts (calculated as a percentage of total accounts receivable). In other states, doubtful debts can only be taken into account on a specific, case-by-case basis. The Czech Republic's CT permits a contingency reserve for future repair and maintenance costs.

Generally, the tax treatment of contingencies tends to vary widely between Member States. While most states adopt a restrictive attitude, some states tend to be rather liberal in permitting companies to set aside funds for potential future obligations. Some estimates, for instance, put the percentage of tax-free provisions as a proportion of balance sheet value at 27% for Germany (European Parliament, 2001), which, incidentally, has the highest CT rate in the EU. Finally, loss carry-forward provisions tend to be generous, but only four countries permit losses to be compensated with profits of earlier years. In many states, however, the impact of this provision is mitigated by allowing groups of related companies (generally defined by reference to ownership criteria) to be taxed on a consolidated basis.[18]

In conclusion, the rules for calculating taxable profits appear to differ rather widely between Member States.

[18] The same result can be obtained by permitting loss compensation between related companies on a case-by-case basis or by allowing one company to deduct from its taxable profits a capital contribution to a loss making related company. Rules to this effect are found in Cyprus, Finland, Ireland, Malta, Sweden and the U.K.

Table 3: European Union: Corporation Tax Base Rules in 2004

Member State	Methods and Rates (%) of Depreciation[a]			Inventory Valuation[b]	Provision for Doubtful Debts	Loss Carryover (years)		Group Consolidation
	Machinery	Buildings	Intangibles			Forward	Back	
Austria	SL-14.3	SL-3	SL-15	LIFO	Allowed	Unlimited	—	Yes
Belgium	SL-10/33	SL-3/5	SL-20	LIFO	—	Unlimited	—	No
Cyprus	SL-10	SL-4	SL-8	FIFO	—	Unlimited	—	No
Czech Rep.	DB-16$^2/_3$	DB-3$^1/_3$	DB-16$^2/_3$	Average cost	Allowed[c]	5	—	No
Denmark	DB-25	SL-5	100	FIFO	Allowed	Unlimited	—	Yes
Estonia[d]	—	—	—	—	—	—	—	—
Finland	DB-25	DB-7	SL-10	FIFO	—	10	—	No
France	DB-32.1	SL-5	SL-20	Average cost	Allowed	5	3	Yes
Germany	DB-20	SL-3	SL-15	LIFO	Allowed	Unlimited	1	Yes
Greece	SL-14.3	SL-12.5	SL-10	Average cost	—	5	—	No
Hungary	SL-14.5	SL-5	SL-8	LIFO	—[e]	Unlimited	—	No
Ireland	SL-12.5	SL-4	SL-10	FIFO	—	Unlimited	—[f]	No
Italy	SL-13.3	SL-4/8	SL-33.3	LIFO	Allowed	5[f]	—	Yes
Latvia	DB-40	DB-10	SL-20	Average cost	—	5	—	Yes
Lithuania	DB-20	DB-12.5	DB-15	FIFO	Allowed	5	—	No
Luxembourg	DB-30	SL-4	SL-20	LIFO	Allowed	Unlimited	—	Yes
Malta	SL-16$^2/_3$	SL-2	SL-8	FIFO	—	Unlimited	—	No
Netherlands	SL - 14.3	SL-2.5	SL-20	LIFO	Allowed	Unlimited	3	Yes
Poland	SL-10	DB-3	SL-20	LIFO	Allowed	5	—	Yes
Portugal	DB-35.7	SL-5	SL-10	LIFO	Allowed	6	—	Yes
Slovak Rep.	SL-16$^2/_3$	SL-5	SL-20	Average cost	Allowed	5	—	No
Slovenia	SL-25	SL-5	SL-10	LIFO	—	5	—	Yes
Spain	DB-28.6	SL-3	SL-5	LIFO	Allowed	15	—	Yes
Sweden	DB-30	SL-4	DB-30	FIFO	—	Unlimited	—	No
UK	DB-25	SL-4	DB-25	FIFO	—	Unlimited	1	No

[a] *SL = straight line (linear) method; DB = declining balance method in the first period. Depreciation rates shown represent the most tax efficient possibility; other possibilities are not shown.*

[b] *LIFO = last-in-first-out method of inventory valuation; FIFO = first-in-first-out method of inventory valuation. Valuation method shown represents the most tax efficient possibility; other possibilities are not shown.*

[c] *In the Czech Republic, provision is also allowed for future repair and maintenance costs of tangible assets having a depreciation period of at least 6 years.*

[d] *Estonia does not levy a CT on retained profits.*

[e] *In Hungary, a reserve is also allowed for increases in working capital up to 25% of before-tax annual profits or HUF 500 million, whichever is lower; amounts not used by the end of the 4th year become taxable.*

[f] *Ireland has a 3 year carry back period for losses suffered at the cessation of business and Italy an unlimited carry forward for losses in the first 3 years.*

Source: Author's compilation from Supplementary Service to European Taxation (Amsterdam: IBFD Publications BV, loose-leaf), Vols. A and B.

3.2 Tax Incentives

In all Member States, the tax base is eroded by a variety of tax incentives (provisions that provide special treatment to qualified investment projects not available to investment projects in general) primarily to promote specific types of activities, such as research and development (R&D), to stimulate economic activity in backward regions, to attract foreign direct investment or financial operations, or, yet, to reduce unemployment.

As shown in table 4, the tax incentives can be conveniently grouped into those that tax corporate profits at a lower nominal rate, and those that provide more attractive terms of recovering investment costs. CT rate incentives include tax holidays, special enterprise zones, preferential rates for specific sectors or activities, and tax credits that reduce the tax liability. The investment cost-recovery incentives comprise accelerated depreciation, investment allowances and credits, and investment subsidies.[1]

A number of New Member States, notably the Czech Republic, Hungary, Lithuania and the Slovak Republic provide tax holidays for new large companies. Once granted, tax holidays relieve the tax administration and the companies from having to levy or comply with the CT. In addition, tax holidays are neutral between capital- and labour intensive projects. On the other hand, tax holidays tend to attract economically less beneficial short-run projects, stimulate tax avoidance (through transfer pricing manipulation with related companies), and are prone to abuse, because they offer an opportunity to designate existing investment as new investment. The reduced CT rates in Cyprus, Hungary, Lithuania, Malta and Slovenia have similar drawbacks, although their revenue cost is lower and more transparent than the cost of tax holidays.[2] The same is true of the favourable tax regimes that Belgium, France, Luxembourg and the Netherlands apply to holding companies.

Nearly all Member States grant allowances and tax credits (in addition to normal depreciation) for R&D expenditure. Also many Member States promote investments to save energy, protect the environment, reduce waste, or increase employment through the tax system. Compared to tax holidays and preferential CT rates, these incentives are better targeted and more transparent instruments to promote particular types of investment, although they favour short-lived assets and may induce companies to abuse the system, e.g. by selling old machinery

[1] Note that an investment allowance reduces taxable income, whereas an investment tax credit is set against the tax payable. Thus, with a CT rate of 20%, an investment allowance of 50% of the amount invested equates to an investment credit of 20% of that amount.

[2] It should be noted that preferential CT rates reduce the implicit value of investment recovery incentives, such as accelerated depreciation.

(previously eligible for the tax incentive) at inflated prices to newly incorporated companies that again claim the investment benefit (double dipping). If the CT rate is uniform, investment tax credits are equivalent to investment allowances and to the investment subsidies or cash grants found in Poland. Accelerated depreciation provisions probably are the best-targeted and least distortionary forms of investment incentive.

Table 4: European Union: Tax Incentives in 2004

Member State	Tax Rate Incentives			Investment Recovery Incentives	
	Tax holiday	**Reduced rate**	**Tax credit**	**Accelerated depreciation**	**Additional allowance, tax credit, other**
Austria					R&D, training
Belgium	Tonnage tax	Coordination centers		Qualifying assets, small companies	Intangibles, specified investments
Cyprus	Shipping income	International business companies			
Czech Rep.	Large investments		Apprentices or disabled employees		Tangible fixed assets
Denmark	Tonnage tax				R&D: 150%
Estonia	No CT				
Finland	Tonnage tax			Small companies in least developed regions	
France	Tonnage tax Newly created and innovative companies, Corsica, companies in depressed (sub)urban zones	Headquarters and distribution centres			R&D tax credit Corsica: small companies tax credit
Germany	Tonnage tax				Small companies
Greece	Tonnage tax Offshore engineering and construction companies	Large investments: CT rate freeze Aegean islands			Investment Cash grants in development areas
Hungary	Venture capital companies and funds	Offshore companies Specified items of income		R&D Special deductions for	Apprentices and disabled workers Various tax credits, investment reserve
Ireland	Tonnage tax	Manufacturing companies		International Financial Services Centre, Shannon Free Airport Zone, Urban and rural renewal schemes	R&D Double rent relief under renewal schemes
Italy	Tonnage tax	Newly quoted companies	New employees	New investments	R&D
Lithuania	Large investments	Large investments Small companies	Economic zones	R&D	

Table 4 continued: European Union: Tax Incentives in 2004

Luxembourg	Holding companies	"Milliardaire" holding companies New industrial activities	14% tax credit for machinery;	Investments to save energy, reduce waste, protect environment or employ disabled persons	Qualifying assets tax credit Occupational training tax credit
Netherlands	Tonnage tax	Group finance activities		Environmental protection assets, innovative technology	R&D Investments: small scale, energy saving, environmental protection
Poland				Specified fixed assets	Economic zones: cash grants
Portugal	Azores and Madeira	Less developed areas	Investment and R&D projects	Investments to save energy, reduce waste or protect environment, and in less developed areas	Basic investment credit Large projects
Slovak Rep.	Large joint ventures		Large new business investments		
Slovenia		Special economic zones			New machinery, equipment and long-term intangible assets, investment reserve
Spain	Tonnage tax Holding companies	Canary Islands Special Zone Basque country			Tax credits: export-related activities, R&D, employee training, cultural assets, environmental preservation, internet and e-commerce
Sweden					Small companies: relief from double taxation
UK	Tonnage tax				R&D

Source: Author's compilation from Supplementary Service to European Taxation (Amsterdam: IBFD Publications BV, loose-leaf), Vol. A.

Although the use of tax incentives is widespread, conventional wisdom is that they distort investment decisions, are often ineffective,[1] erode the tax base, and are prone to abuse and corruption.[2] On the other hand, there is little reason to believe that the tax incentives lead to an increase in the price of elastically supplied (foreign) capital goods.[3] Whatever the case, tax incentives cannot compensate for deficiencies in the design or operation of the tax system or for inadequate physical, financial, legal or institutional infrastructure (Easson and Zolt, 2003). Nor can they correct for unsound macroeconomic or labour market policies. The better part of wisdom would be to correct those deficiencies instead of introducing tax incentives that ameliorate their effects.

After a thorough review, Zee et al. (2002) opine that the only tax incentives worth contemplating are those that permit a faster recovery of investment costs, i.e. investment allowances and tax credits, or accelerated depreciation.[4] An incidental if welcome side effect of these incentives is that they limit the discretionary involvement of the tax office. Investment allowances and credits are not open-ended, the revenue cost is directly related to the amount of the investment, and the maximum cost is more easily estimated. This conclusion finds support in an earlier study by Mintz and Tsiopoulos (1995) who compare the cost effectiveness of tax allowances and credits to tax holidays in attracting foreign investment. The European Commission also favours tax allowances and tax credits if a Member State decides that it should promote investment through the tax system. However, even then, it would be good policy to attach a sunset provision and to monitor and evaluate the success of the tax incentives.

4. Anti-Tax Avoidance Measures

Basically, under the CT, corporate profits are taxed at source. Other things being equal, resident PT payers can only evade the extra PT on corporate distributions by not declaring dividend income. This contrasts with interest, which is not taxed at source but at the level of the recipient of the interest income. Accordingly, the PT

[1] The effectiveness of an investment project would be greater the lower the marginal effective tax rate or METR. However, the data required to compute METRs are often not available.

[2] See Shah (ed.) (1995), OECD (1995) and UNCTAD (2000). However, Clark (2003) concludes that "[e]mperical work using improved date measuring FDI offers convincing evidence that host country taxation does indeed affect investment flows. Moreover, recent work finds host country taxation to be an increasingly important factor in locational decisions" (at p. 1176).

[3] See Hassett and Hubbard (1998) whose conclusion is disputed by Coolsbee (1998) who finds that much of the benefit of tax incentives is captured by supplies of capital goods through higher prices.

[4] On the other hand, investment allowances and credits favour capital-intensive investment.

(or CT) on interest can be evaded or avoided by not including the income in the return or by paying the interest into tax-exempt institutions. Consequently, corporations have a strong incentive to substitute debt for equity by lending from tax-exempt pension or investment funds. The same applies to royalties, which are also deductible at corporate level and taxable at the level of the recipient. Conversely, tax-exempt institutions have a tax-induced preference for debt, which skews their investment portfolios.

Table 5: New EU Member States: CT/PT Withholding Taxes and Anti-Tax Avoidance Measures in 2004 (Rates in %)

Member State	Residents					Non-residents				
	Withholding taxes[a]			Thin-cap ratio	Pension/inv. funds	Withholding taxes[a] (non-treaty countries)			Transfer pricing rules	CFC legislation
	Dividends	Interest	Royalties			Dividends	Interest	Royalties		
Austria	25*	25*	—	—	Exempt	25	—	20	OECD	—
Belgium	15	15*	—	—	Exempt	15	—	—	Yes	—
Cyprus	15*	10*	—	—	Exempt	—	—	10*	OECD	—
Czech Rep.	15*	15*	—	4:1	15/5%	15*	15*	25	Yes	—
Denmark	28	—	—	4:1	Exempt	28*	—	30	OECD	Yes
Estonia	—	24	24	—	Exempt	24[b]	—	15	Yes	Yes
Finland	28	28	28	—	1% net wealth	28	—	28	No	Yes
France	—	25*	—	1.5:1	Exempt	25*	16*	33 1/3	Yes	Yes
Germany	21.1	31.65*	—	1.5:1	Exempt	21.1	—	21.1	Yes	Yes
Greece	—	10*	—	—	Exempt	—	35*	20	Yes	—
Hungary	—	—	—	3:1	Exempt	20*	—	—	OECD	Yes
Ireland	20	—	20	—	Exempt	20	20	20	No	—
Italy	12.5*	12.5*	—	5:1	Exempt	27*	27	22.5	Yes	Yes
Latvia	—	—	25	4:1	Exempt	10*	25	15	Yes	—
Lithuania	15*	0	15*	4:1	Exempt	15	10	10	OECD	Yes
Luxembourg	20	—	—	—	Exempt	20	—	—	No	—
Malta	—	10*	—	—	Exempt	—	—	—	No	—
Netherlands	25	—	—	3:1	Exempt	25*	—	—	Yes	—
Poland	19*	19*	19	3:1	Exempt	19*	20*	20*	OECD	—
Portugal	15	15	15	—	Exempt	25*	20*	15*	OECD	Yes
Slovak Rep.	—	19*	—	—	Exempt	—	19	19	Yes	—
Slovenia	15[d]	25	15	—	Exempt	15*	—	—	Yes	—
Spain	15	15	15	3:1	Exempt	15	15	25	OECD	Yes
Sweden	30	30	—	—	Exempt	30*	—	28	Yes	Yes
UK	—	20	22	—	Exempt	—	—	22	OECD	Yes

[a] *An asterisk (*) means that the withholding tax represents the final (PT) liability. No withholding taxes apply to intercompany dividend, interest and royalty payments if the conditionsof the parent-subsidiary and the interest-royalty directives are met.*

[b] *In Estonia, distributed profits are also subject to the distribution tax of 24% until 2008.*

[c] *In Malta, the withholding tax rate is 15% for bank interest; election for taxation with credit for the tax withheld is possible.*

[d] *In Slovenia, the withholding tax on royalties is actually 25% but only 60% of the gross amount is taxable.*

Source: Author's compilation from Supplementary Service to European Taxation (Amsterdam: IBFD Publications BV, loose-leaf), Vols A and B.

As shown in table 5, most Member States prevent the avoidance or evasion of the tax on interest income through schedular, low-rate withholding taxes on interest and royalties. However, the withholding taxes would be ineffective with respect to exempt pension and investment funds if these funds would be able to obtain a refund of the tax withheld. Apparently, most states prevent this from happening by making the withholding tax the final tax liability, but the exact scope of this measure is not clear.

Restrictions on the use of debt in corporate finance can also prevent the evasion or avoidance of capital income taxation. Table 5 indicates that 11 out of 25 states have adopted thin capitalisation ratios under which the use of debt cannot exceed three or five times the amount of equity in the balance sheet. Of course, thin capitalisation ratios and final withholding taxes both increase the cost of debt finance.

Tax administrations cannot enforce the tax on domestic source income paid to non-residents. Accordingly, (final) withholding taxes on interest and royalties (as well as dividends) paid abroad are even more crucial than on domestic payments. Indeed, as indicated by table 5, half of all Member States have withholding taxes on remittances abroad. An obvious drawback of withholding taxes is that they act as an import tariff on capital by making inbound capital more expensive. But not taxing inbound capital might lead to round tripping, i.e. a foreign parent company would withdraw interest and royalty income from its domestic subsidiary, and reinvest the income on a tax-free basis in the same subsidiary.

Apart from changing the debt/equity ratio, corporations can also evade the CT through transfer pricing manipulation. Profits can be shifted to low-tax countries or tax havens by selling product prices below arm's length prices to affiliated foreign companies or by buying products at higher than arm's length prices. Nearly all Member States have rules to curtail this practice, generally by applying the transfer pricing guidelines of the Organisation of Economic Co-operation and Development (OECD).[1]

[1] These guidelines promote various methods for determining arm's length prices, including the comparative uncontrolled price (sales of similar products made between unrelated parties in similar circumstances), the resale method (the subtraction of an appropriate mark-up from the price at which the goods are ultimately sold to unrelated parties), and the cost plus method (under which an appropriate profit percentage is added to manufacturing costs). These methods are difficult to apply when the goods sold embody valuable intangible property, which makes them unique. Additional methods which attempt to deal with this situation are the profit split method (under which the worldwide taxable income of related parties engaging in a common line of business is computed) and the transactional net margin method (under which the profits are computed by applying the ratio of profits to some economic indicator of an unrelated party to the profits of the tested party).

Finally, half of all Member States have introduced (CFC) legislation with respect to foreign corporations controlled by resident shareholders. Under CFC legislation, the possibility of deferring domestic tax on foreign source income is prevented by taxing resident shareholders currently on their proportionate share of some or all of the CFC's income. The proper application of CFC legislation as well as the determination of appropriate arm's length prices requires sophisticated tax administrative skills, which are not readily available in some Member States.

5. Summary

This part of the paper has shown that the CTs in the EU Member States are levied at widely differing rates applied to widely differing tax bases. No state heeds the normative implication of the accretion concept of income that the taxation of corporate earnings (profits and interest) should be integrated with the PT. Generally, dividend income is taxed at schedular PT rates and capital gains on shares are exempted or taxed at very low effective rates. Furthermore, interest is taxed at lower rates than apply to retained profits or dividend income. Overall, capital income is taxed separately from and at much lower rates than labour income that is subject to the PT and various hefty, regressive social security contributions.

Corporate profits are determined on the basis of international accounting standards (IAS), the European-wide rule from 1 January 2005 for companies listed on EU stock exchanges. The general rules for ascertaining taxable profits are broadly in line with what can be expected, but extremely generous tax incentives, e.g. the tax holidays in the New Member States, reduce the tax base to on average three-fourths of what it otherwise would be. It is difficult to gauge the effectiveness with which the CTs and PTs on capital income are enforced. In all but two Member States, pension and investment funds are not taxed and can hence be used as conduits for not paying tax on the normal return on capital. To some extent, this may be prevented by the use of final source withholding taxes and thin capitalisation ratios. Little inbound debt capital appears to be taxed. All Member States are reluctant to impose effective withholding taxes on interest for fear of scaring away foreign direct investment. Most states attempt to apply appropriate transfer pricing rules, but half of all Member States do not have CFC legislation.

More generally, tax competition forces appear to be at work. Particularly, the ten new EU Member States seem intend on emulating the Irish economic miracle of promoting economic growth and revenue through low nominal CT rates and generous tax incentives to stimulate domestic and foreign investment. Initially, corporate tax revenues may rise notwithstanding the low rate, because multinational companies channel their income to the low tax states (without necessarily changing their production locations) through transfer pricing

manipulation, thin capitalisation, and royalty payments to low tax states.[2] However, as more Member States join the low-tax club, a no-win situation will emerge. Accordingly, some form of tax coordination has to be put in place if the baby is not to be thrown out with the bath water.

C. Coordination of Corporation Taxes

The CT systems described in Part B have various interesting features in common that yield some clues about desirable CT reform and coordination (section 1). In the spirit of the subsidiarity principle, CT coordination should be a bottom-up process initiated by the Member States rather than a top-down process prescribed by the European Commission, although the Commission could be instrumental in the formulation and dissemination of appropriate advice (section 2).

1. Some Common Features

The current taxation of corporate earnings and other capital income surveyed in Part A yields a number of insights that have a bearing on the future of the CT in the EU. These insights can be summarised as follows.

(a) All Member States tax capital income and labour income separately, regardless of the normative implications of the accretion concept of income. Often capital income *appears* to be taxed jointly with labour income, but in practice no Member State does so. This situation could be recognised more formally by adopting a dual income tax (Cnossen, 2000), called DIT for short, that would eliminate various ambiguities and tax capital income more effectively (Zee, 2004).

(b) Capital income is taxed at much lower rates than labour income, by a margin of perhaps as much as one to three. This is due to the greater mobility of capital. If capital would be taxed as high as labour (or, more precisely, at a higher rate than the rate in other countries), the incidence of the excess would almost certainly fall on labour. Also, flat rates seem indicated to limit the countless opportunities for tax arbitrage. For equity reasons, the lower rates on capital income could be supplemented by wealth (transfer) taxes.

(c) With few exceptions, distributed profits are taxed at higher CT+PT rates than retained profits, which may distort dividend payout and investment policies. Equal treatment seems worth pursuing. This would be possible if dividend

[2] By following a low rate/large "tax base" philosophy, Ireland has snatched sisable revenues from other Member States. Ireland's CT/GDP ratio is 3.7 compared with a EU-15 ratio of 2.5, although Ireland's CT rate is less than one-third of the EU-15's average rate. Cyprus, the Czech Republic, Luxembourg, Malta and the Netherlands appear to be following a similar strategy.

income would be exempted under the DIT (whose PT rate on capital income equals the CT rate).

(d) Domestic interest income is not taxed if it accrues to tax exempt institutions, such as pension funds. If debt can easily be substituted for equity, this implies that the normal return on capital is not taxed. In the event, the tax on capital income resembles a business cash flow tax, whose tax base is confined to inframarginal profits. Final source withholding taxes (without the possibility of a refund for tax-exempt institutions) or no deduction for interest at the level of the corporation seems the answer if the income tax is to be maintained. This would represent a move toward a comprehensive business income tax (CBIT) under which profits are determined on a normal accrual basis of accounting but interest is not deductible at the corporate level and not taxed at the level of the recipient (U.S. Department of the Treasury, 1992). Accordingly, tax-exempt institutions would be taxed implicitly.

(e) The tax incentives particularly in the New Member States are so generous that investment costs can often be written off immediately. Again, this converts the CT into a cash-flow tax, because the normal return on capital is not taxed (assuming that interest is actually taxed through, say, (final) source withholding). The abolition of the tax incentives but the retention of the *de facto* exemption of interest also would make the CT equivalent to a cash flow tax if equity can be fully substituted by debt.[3] To the extent that full substitution is not possible, an argument can be made in favour of an allowance for corporate equity, called ACE (Institute for Fiscal Studies, 1990).[4] Under an ACE regime, a deduction is allowed from corporate profits of an amount equal to the amount of equity in the balance sheet multiplied by the risk-free rate of interest (normal return on capital). Investment is

[3] Under a proper cash flow tax, of course, corporations are denied a deduction for interest as well as dividends paid (if not already denied), but they are allowed an immediate write-off of the cost of business assets. As a result, the return on marginal investments, just making a viable economic return, is exempted. For arguments why taxation on cash flow has economic and administrative advantages over a conventional income tax, see McLure and Zodrow (1996).

[4] The ACE system was conceived by Boadway and Bruce (1986) and given hand and feet by the Institute for Fiscal Studies (1991). Until recently, a form of ACE was in use in Croatia, where it was called the interest-adjusted income tax (IAIT). For a favourable discussion of the system and of the criticisms levelled against it, see Keen, M. and J. King (2002). The ACE system is not discussed further, because it is assumed that the body politic wishes to tax the normal return on capital. It should be noted that, whatever the merits of cash-flow taxation or ACE systems, it should be pointed out that taxes on economic rents would still require tax policy coordination in the EU if location decisions are not to be affected.

subsidised if interest is not taxed effectively – the situation in many Member States – and investments are written off immediately.

(f) Interest on inbound capital generally is not taxed for fear that debt-financed investment costs will rise and foreign investment will decline. Tax coordination is required if this interest is to be taxed. The third country issue remains, but capital is less mobile in the EU as a whole than with respect to (small) individual Member States. Further coordination could be pursued with the U.S.A. and Japan.

It is difficult to choose between these often conflicting directions for change, but – after allowing for the partiality that may be in the eye of the beholder – the common denominator seems to be that the body politic in most Member States appears to want to tax capital income at positive rates, if some way can be found to temper real or perceived tax competition. Another common strand seems to be that capital income should be taxed separately from labour income and at moderate, flat rates.

2. Bottom-Up Approach: Tax Coordination by Member States[5]

This paper proposes that an agenda for capital income tax coordination (and perhaps eventually tax harmonisation) should comprise five sequential steps:

(a) the introduction of DITs by all Member States under which capital income would be taxed once at a single rate (different for each Member State) to mitigate the distorting effects of the current differential rate CT+PT systems on corporate financial and investment policies;

(b) the introduction of interest withholding taxes by the Member States at the CT rate (or, alternatively, the treatment of interest on a par with dividends) to effectively tax the normal return on capital and mitigate incentives for thin capitalisation; and

(c) the close approximation of the CT rates throughout the EU to eliminate incentives for transfer pricing manipulation and thin capitalisation.

Following these steps, a fresh review should be made of:

(d) the introduction of EU-wide CBT with formula apportionment and, subsequently,

(e) the adoption of a European CT if and when the EU is given the power to tax.

These steps are elaborated below.

[5] This section draws heavily on Cnossen (2004) and an earlier version in Cnossen (2001).

2.1 Dual Income Tax (DIT)[6]

The dual income tax (DIT) is a pragmatic approach to the uniform taxation of capital income, which, in the early 1990s, was successfully introduced in the Nordic countries, especially Norway, Finland and Sweden.[7] In adopting the DIT, these countries argued that, in (small) open economies, any source-based tax on capital income in excess of the real world rate of interest raises the pre-tax return by the full amount of the tax, so that the after-tax return continues to equate to the exogenously given real world rate of interest. Accordingly, caution in setting the CT rate was advisable. Furthermore, capital market innovation in conjunction with tax arbitrage implied that it would not be possible to tax capital income effectively at progressive rates. Since, for revenue and distributional reasons, these countries were not prepared to lower the top PT rate to the level of the lower CT rate, they decided to tax capital income on a schedular basis.

The main features of the Nordic DIT are the following:

(a) *Separation of capital and labour income.* All income is separated into either capital income or labour income. Capital income includes business profits (representing the return on equity), dividends, capital gains, interest, rents and rental values. Labour income consists of wages and salaries (including the value of labour services performed by the owner in his or her business), fringe benefits, pension income and social security benefits. Royalties are taxed as labour income or as capital income (if know-how is acquired or capitalised).

(b) *Tax rates.* Basically, all capital income is taxed at the proportional CT rate (see table 1 regarding the Nordic countries), while labour income is subject to additional, progressive PT rates. To minimise tax arbitrage, the tax rate on labour income applicable to the first income bracket is set at (approximately) the same level as the proportional CT rate.

(c) *Costs of earning income and allowances.* All costs of earning income and all allowances are deductible only from income subject to the basic or proportional tax rate. Accordingly, the tax benefit of costs that incorporate an

[6] For a review and evaluation of the economic and technical aspects of the DIT on which this section draws, see Cnossen (2000). For an update on developments in Norway, see Christiansen (2004) and for arguments favouring a DIT in Germany, see Spengel and Wiegard (2004).

[7] Generally, the introduction of the DIT caused few political, economic or administrative problems. Over the years, Norway and Finland have adhered closely to the requirements of a pure DIT. In 1995, however, Sweden deviated from the original model by again taxing corporate profit distributions twice. No credit for the CT is provided against the PT on distributed profits. In Sweden, moreover, capital gains are not corrected for the CT already paid on retentions.

element of individual consumption does not rise with income, although the limitation discriminates against wage earners since the self-employed can deduct their business costs against the top marginal tax rate on labour income.

(d) *Offset of capital income against labour income.* Finland and Sweden tax capital and labour income entirely separately. Alternatively, in Norway, the two forms of income are taxed jointly at the CT rate, while net labour income is subsequently taxed at additional, progressive PT rates. Joint taxation permits the offset of negative capital income against positive labour income. But the same effect is achieved in Finland and Sweden by permitting a tax credit for capital income losses (calculated at the basic rate) against the tax on labour income. Furthermore, joint taxation, as in Norway, permits the application of joint basic allowances. Separate taxation, on the other hand, enables the imposition of flat source taxes, if desired, on various forms of capital income, as is done in Finland.

(e) *Avoidance of double taxation.* In Norway, the double taxation of distributed profits at the corporate level and the shareholder level is avoided through a full imputation system. Alternatively but equivalently, double taxation can be avoided by exempting dividend income at the shareholder level, as Finland does. Under either approach, compensatory taxes guarantee that no dividends are paid out of exempt profits without having borne the CT, which would subsequently be exempt from the PT. The double taxation of retained profits at the corporate level in conjunction with the taxation of realised capital gains at the shareholder level is avoided in Norway by permitting shareholders to write up the basis of their shares by the retained profits net of the CT. The system is called the RISK method.[8] Similarly, the basis is written down if losses occur or profits are distributed out of previously accumulated earnings. Appropriate adjustments are also made if capital is paid in or paid out. The first in/first out principle applies if part of the same shareholding is sold. The RISK method deals both with the danger of excessive distributions of retained profits and with the unwarranted exemption of realised gains at the shareholder level due to unrealised gains at the corporate level. The double tax on retained profits is mitigated in Finland (only 70% of capital gains are taxed), but fully maintained in Sweden.

(f) *Withholding taxes.* The single taxation of capital income can be ensured through withholding or source taxes at the corporate level or at the level of other entities paying interest, royalties or other capital income. In principle, withholding or source rates should be set at the level of the CT rate.

[8] RISK stands for "*Regulering av aksjenes Inngangsverdi med endring i Skattlagt Kapital*" (adjustment of basis by changes in capital subject to tax). The RISK method is not easy to implement, as pointed out by Andersson, et al. (1998).

Consequently, these rates could represent the final tax liability if capital income is taxed separately from labour income and no basic allowance applies. This is the case in Finland and Sweden with respect to interest income. No country, however, imposes a withholding tax on interest or royalties paid to non-residents in treaty countries. Withholding taxes are imposed only on dividends paid to non-resident (portfolio) shareholders.

(g) *Proprietorships and closely-held corporations.*[9] In Finland and Norway, the taxable profits of proprietorships and closely-held corporations, conventionally computed, are split into a capital income component and a labour income component, and these are taxed on a current basis.[10] The capital income component is calculated by applying a presumptive return (the sum of the nominal interest rate plus an entrepreneurial risk premium) to the value of the gross assets of the business (Norway) or to equity (Finland).11 Residual profits are considered as labour income.[12] The reason for determining capital income first is that the appropriate return on labour is difficult to estimate because diligence, effort and ingenuity may diverge widely, as may the hourly wage rate relating to various kinds of labour and the number of hours worked. Moreover, if labour income were to be determined first, the marginal PT rate on the profits of the self-employed and active shareholders would exhibit a regressive incidence. Additional earnings

[9] For a detailed description and evaluation of the profit-splitting scheme, see Hagen and Sørensen (1998). This scheme avoids most of the deferral and lock-in effects of the tax that various EU Member States impose on capital gains on substantial shareholdings. Also, the profit-splitting rules of the DIT seem easier to administer than some of the tortuous and arbitrary provisions for preventing the undertaxation of the self-employed currently on the statute books in countries without a DIT. For a different view, see Sørensen (1994) who has labelled the compulsory profit-splitting rules the Achilles heel of the DIT. For a different approach as well as an attempt to tax more of the economic rents earned by corporations at the shareholder level, see Sørensen, 2003.

[10] This is referred to as the "source" model of income splitting. Under the "fence" model in Sweden, labour income retained in the business is taxed at the capital income tax rate. Profits are split, however, upon a subsequent withdrawal or when a capital gain is realised on the shares of an active shareholder. The fence model tends to favour the self-employed over wage earners and produces the familiar lock-in effect.

[11] Basically, the gross method minimises tax arbitrage and hence complexity because the presumptive return is applied to a base – i.e. the business's total assets – that is not influenced by the financing structure of the business. The net (equity) method, on the other hand, is more conducive to investment neutrality because it does not encourage debt-financed investment if the government sets the presumptive rate of return above the going interest rate.

[12] Both Finland and Norway mitigate the tax burden on labour-intensive firms by basically allocating a specified percentage of labour income – 10% of the payroll in Finland and 11% in Norway – to the capital income component of the DIT.

would then be taxed at the proportional CT rate instead of the progressive PT rate.

(h) *Net wealth tax.* The progressivity of the burden distribution of the capital income tax can be increased by the net wealth tax, which is levied in Norway, Finland and Sweden. This tax implies that residents are taxed differentially higher than non-residents.

2.2 Interest Withholding Taxes

The goal of ensuring single taxation under the current DITs, however, is mostly honoured in the breach with respect to interest (and royalty) payments to exempt entities, such as pension funds, and foreign debt holders (or suppliers of know-how). This hole in the capital income tax bucket can only be plugged by imposing a withholding tax at the CT rate on all interest – in effect, treating interest on a par with dividend income, which is taxed only at the corporate level. Arrangements could then be made under which the tax withheld at the business level would be creditable in the residence Member States (hence, capital income could be taxed at different rates by these Member States).

Alternatively, the tax withheld would not be creditable but would constitute the final liability in the source state (which would require approximation of tax rates if investment location decisions are not to be distorted).[13] Final, source-based, withholding taxes on interest would make the DIT equivalent to a comprehensive business income tax (CBIT). This tax, proposed by the U.S. Department of the Treasury (1992), proceeds from the fundamental equivalence between a CT levied at source and an equal-rate PT on corporate earnings with a full credit for the underlying CT. Accordingly, no deductions are allowed at the corporate level for dividends and interest paid to shareholders and debt holders, but these income items are not taxed at the level of the recipients, be they individuals, corporations, exempt entities or non-residents. This makes the debt-equity distinction irrelevant and greatly reduces the distinction between retained and distributed earnings (depending on the treatment of capital gains).[14]

The CBIT can be introduced while largely maintaining the present rules for determining taxable profits, including those applicable to depreciation and inventory accounting. Exempt entities and non-residents would be treated the same as resident individuals or corporations. They would not be eligible for a refund of the CBIT, nor would they have to pay any additional CBIT in the form of a

[13] Slemrod (1995) states that "although it is not *desirable* to tax capital income on a source basis [because source-based taxes are distortionary], it is not administratively *feasible* to tax capital on a residence basis".

[14] The CBIT differs from a cash-flow tax in that assets are depreciated over their lifetime, as they would be under a conventional income tax. Hence, the normal return on capital is taxed.

withholding tax or otherwise. Corporations receiving CBIT income as dividends or interest would also not be taxed on such income. To ensure that dividends and interest are not paid out of exempt earnings, a compensatory tax should be levied on exempt income (made available for distribution as dividends or interest).[15] Capital gains on shares would be taxed only to the extent that they exceed the acquisition cost stepped up by the corporation's retained profits net of the CT.

The main problem of the DIT (final) withholding tax on interest and the CBIT is that they would raise capital costs and dampen (debt-financed) investment, because the normal return on capital (i.e. interest), even if received by exempt entities and non-residents, would be implicitly taxed. Although the introduction of interest withholding taxes would seem a goal worth pursuing, gradual and concerted action is called for. Coordination with the United States and Japan would be essential to prevent tax-induced capital outflows due to the higher cost of capital in the EU.

2.3 Approximation of CT Rates

The exemption of dividend income at the personal level and the taxation of interest income at source should reduce the need for concerted tax harmonisation at the central EU level. The problem of thin capitalisation would be solved and the schemes for CT-PT integration would become redundant. Manipulation of transfer prices, however, could still affect the allocation of the corporate tax base across the Member States. To limit this form of tax arbitrage, a minimum rate, as proposed by the Ruding Committee (1992), would have to be agreed to. Presumably, rate approximation would be easier to achieve following the introduction of DITs and interest withholding taxes.

2.4 Common Base Taxation?

The DIT and CBIT would still proceed from the separate-accounting approach in determining the taxable profits of affiliated corporations in different Member States. Provisions for the removal of cross-border obstacles to economic activity and business restructuring, therefore, would still be needed. As pointed out by the European Commission (2001),[16] a comprehensive solution to these problems, if

[15] The U.S. Department of the Treasury (1992) advocated imposing the compensatory tax also on foreign-source income, while retaining the current foreign tax credit rules. To avoid double taxation, this should not, of course, be done in the EU, where the exemption method would apply to foreign-source income.

[16] For a brief but useful summary of the Commission proposals, see Weiner (2002). It should be noted that the European Commission does not address the distortions of the CT regimes on financing and investment decisions within the Member States, which should have repercussions on the CTs in the other Member States. Neither does it deal with the

desired, can only be achieved through common base taxation (CBT), i.e. the joint determination of the profits of firms with cross-border operations on the basis of consolidated accounts and, subsequently, the assignment of those profits to each of the Member States in which the firms carry on business on the basis of the weighted share in various economic activities of the corporation, represented by such factors as its sales, payroll and property (in other words, formulary apportionment – widely practiced in the United States and Canada).

The advantages of CBT with formula apportionment are fewer distortions, less tax arbitrage and lower compliance costs. Cross-border loss offset would occur automatically. But the path to CBT would not be easy, as pointed out by McLure (2004) in a cogent assessment of the European Commission proposals.[17] According to McLure, under CBT, firstly, there would be the problem of the diversity of existing definitions of profits (see Part B) and the lack of an objective standard against which to judge those definitions. Secondly, there is no clearly best way to define groups of firms for purposes of consolidation. Thirdly, no apportionment formula is conceptually and theoretically superior to others. And finally the CBT administration would require unprecedented cooperation among participating Member States.[18] Agreement would probably be easier to reach, however, following the introduction of DITs, the taxation of interest accruing to foreign bondholders, and the approximation of CT/PT rates on capital income.

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appropriate tax treatment of interest (representing the normal return on capital), which mostly escapes tax. Finally, the Commission seems to believe that CT approximation should be achieved through tax competition rather than tax coordination.

[17] McLure (2004) quotes Shön (2002, p. 276) who gives the following sobering assessment of the European Commission's efforts at tax coordination: "Imagine you had met Sisyphus in Hades, confronting the man who had for decades tried to push a stone up a hill, never succeeding and every time starting anew. Imagine further that this man explained to you that he was fed up with this frustrating work and that he would now try another way, choosing a new stone that was much larger and more complicated than the one he had used before. Would you think of him as vain or visionary? Would you think of him as heroic or helpless? That is exactly what comes to mind after working through the European Commission's new communication on company taxation in Europe."

[18] McLure (2004) is even more apprehensive about another proposal of the European Commission, i.e. home state taxation (HST) under which participating Member States would maintain their own rules for determining taxable profits, but firms with cross-border operations would be taxed by the Member State in which their headquarters are located. Subsequently, the consolidated profits would be assigned to each of the participating Member States on the basis of formulary apportionment. According to McLure, HST has no counterpart in the real world and might impede further evolution toward a harmonised CT system. Also, substantial cooperation would be required in the choice of an apportionment formula and perhaps in the rules for consolidation and cross-border loss offsets. Under HST, moreover, competition for headquarters locations would increase.

2.5 A European CT?

EU-wide unitary taxation would fully reduce distortions and compliance costs only if applied by a joint administration under a common code uniformly interpreted by the European Court of Justice.[19] Indeed, CBT would probably not be possible without these conditions. Accordingly, the logical conclusion of the tax coordination and tax harmonisation steps outlined above would be a European CT whose revenue would either be shared by the Member States on the basis of some formula or flow into the EU's budget. A truly European CT, however, would require fundamental changes in the EU's constitution moving it in the direction of a federal (tax) system. For the time being, this seems a bridge too far.

3. Concluding Comments

This paper has developed an approach to the coordination of capital income taxes in the EU, which combines CT reform *in* the Member States with CT coordination *between* the Member States. The centrepiece of this approach is a dual income tax (DIT) as found in the Nordic countries which taxes all capital income at a single, uniform rate, i.e. the CT rate. The DIT does not raise capital costs outright (interest paid to tax-exempt entities and non-residents is not taxed), yet it leaves the door open to taxing the normal return on capital more fully through EU-wide and international tax policy coordination.

Under the DIT, full neutrality will not be achieved unless a withholding tax is imposed on interest (and royalties) at source. This would convert the DIT into a comprehensive business income tax (CBIT) if the withholding tax would not be creditable in the residence states. This source-based tax would require tax rate approximation if investment location decisions are not to be distorted. But, paraphrasing Slemrod (1995), a EU featuring (equal-rate) source-based capital income taxes would be more efficient than a EU featuring fully enforced residence-based taxes (if feasible of implementation) only because the cost of enforcement is lower for the system of source-based taxes.

Agreement on a (minimum) CT rate would reduce the incentive for profit shifting to low-tax jurisdictions. Such a tax would, however, leave separate accounting and the attendant cross-border obstacles to economic activity intact. The tax costs of separate accounting can be reduced only through the introduction of CBT on a EU-wide basis accompanied by a system of formula apportionment. The adoption of a truly European CT whose revenue would flow into the EU's budget would have to wait until the EU acquires the power to tax.

[19] Of course, even then it would be important to heed the rule that all capital income should be taxed only once and at a uniform rate.

This paper has argued for tax coordination in a form that relinquishes tax subsidiarity gradually but is also reversibly. It has not come out in favour of unbridled tax competition, although it should be acknowledged, particularly in the EU, that tax competition can serve as a discipline on the "profligacy of Princes" (Adam Smith) and present-day governments in the EU (Edwards and Keen, 1996). Neither has this paper advocated the exemption of the normal return on capital by confining the corporate tax base to business cash flow or by introducing a personal consumption tax for which strong arguments can be brought to the fore. It has not taken either of these routes in the belief that the body politic wants to tax all returns on capital – normal as well as above normal – although at a lower rate perhaps than on labour income. In sum, tax coordination reconciles the requirement of fiscal efficiency with the desire to tax capital income more effectively.

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