I. INTRODUCTION

In 1992, the Ruding Committee, appointed by the European Commission to examine the need for company tax (CT) harmonisation in the European Union (EU), presented its findings and recommendations. Although the Committee concluded that differences in CTs distort the workings of the internal market — differences which most likely would not be eliminated by market forces or tax competition — it none the less proposed to leave the CTs in the EU essentially the same as it had found them, replete with their widely diverging domestic and cross-border treatment of different kinds of returns and different kinds of recipients of the various returns. As argued below, however, differential treatment will perpetuate the distortions inherent to the current CTs and erode the taxing authority of source states. A minimum statutory CT rate of 30 per cent, proposed by the Ruding Committee, and the adoption of the (draft)
Fiscal Studies

directives of the European Commission are insufficient to repair the infringements of the neutrality and subsidiarity requirements, as applied to taxation, agreed to by the member states. More fundamental reform seems called for. Moreover, CT reform in the member states is a condition for CT co-ordination between the member states.

This article reviews the distortions and the tax-base erosion of the current CTs in the EU and examines various options for reform and co-ordination. The article falls into five sections. Following this introduction, Section II briefly reviews current CTs, distinguishing their treatment of the returns on equity (profits) from their treatment of the returns on debt (interest). The review shows that reform is called for if member states wish to continue taxing company earnings (and other capital income) in an even-handed manner. As explained in Section III, reforms should be guided by the neutrality criterion and the subsidiarity requirement (i.e. member state tax autonomy), as laid down in the treaties establishing the single internal market. Subsequently, Section IV examines various alternatives to the current arrangements. These alternatives are full integration, dual imputation, dividend deduction, an allowance for corporate equity, a cash-flow tax, a comprehensive business income tax and the dual income tax. Section V explores the preferred alternative.

At the outset, it should be emphasised that the article focuses on desirable CT reform in a world of increasing capital mobility. Attempts to maintain global, residence-based, income taxes in a world of increasing capital mobility have resulted in complex, fragmentary and largely ineffective levies on company profits (and other capital income) that violate horizontal and vertical equity norms, as well as competitive conditions. It will be argued that across-the-board source taxation of all capital income at low proportional rates is most likely to ensure a greater degree of effective equity, as well as yield neutrality gains compared with the current situation by eliminating the tax discrimination of different types of investment and methods of financing. Specifically, company earnings on equity and on debt should be subjected to identical tax treatments. Co-ordination is essential for the survival of the CT. Agreement on the CT entitlement rules — who should tax, where and what — is a prerequisite for maintaining operational independence in implementing the tax.

II. REVIEW OF CURRENT COMPANY TAXES

The 15 member states of the EU tax different kinds of returns (retained profits, dividends, capital gains, interest, royalties) and different kinds of recipients of these returns (tax-liable residents, non-residents, exempt entities; companies, individuals) at widely diverging effective rates of tax. This is a source of

---

1 For a review of the directives and other EU measures affecting the co-ordination of the income taxes, see Easson (1992).
distortion, discrimination and socially unproductive tax arbitrage. These issues are dealt with below, following a brief survey of current CTs.

Survey of Company Taxes

Company taxes in the EU (and elsewhere) are commonly distinguished depending on whether and to what extent they reduce the double tax — CT and personal income tax (PT) — on distributed profits, i.e. provide dividend relief. As shown in Table 1, basically four approaches are being used.

- Six member states employ the imputation system, including the largest states: France, Germany, Italy and the United Kingdom. Under the imputation system, shareholders are permitted a full or partial tax credit against their PT for the CT that can be imputed to the dividends received by them. (Finland provides full relief; other member states offer less than full relief.) Two distinguishing features of imputation systems are (a) the gross-up of the net dividend by the tax credit (which is usually expressed as a fraction of the net dividend) and (b) the imposition of CT on exempt profits that are used to pay dividends (compensatory tax).

- Two member states use the tax credit method which, in contrast to the imputation system, either does not have the gross-up feature (Portugal) or permits the tax credit without ensuring that the underlying CT has been paid (Spain) — in other words, without levying a compensatory tax.

- Six member states provide dividend relief at shareholder level by taxing dividend income at a special, usually flat, PT rate. Since Greece exempts dividend income in the hands of shareholders, its special PT rate may be said to be zero. Luxemburg exempts half of dividends received; dividend income, in other words, is taxed at half of marginal PT rates.

- One member state, the Netherlands, regards companies as entities entirely separate from their shareholders and taxes them as such under what is called the classical system. Apart from a small exemption at shareholder level, dividend income is fully subject to the twin yoke of the CT and the PT.

Thus 14 out of 15 member states provide dividend relief at shareholder level. The imputation system is the most structured form of relief, because it reduces the double CT/PT burden on profit distributions in proportion to the marginal PT rates of all shareholders. In contrast, under the tax credit method without gross-up and the special PT rate schemes, the relief tends to be greater for high income.

\[\text{References}\]

4 For reviews of various theoretical and empirical studies, see OECD (1991, ch. 2) and US Department of the Treasury (1992, ch. 13).

5 See Mintz (1995) for an exposition of the various reasons for levying the CT.

6 For an analysis of the imputation system and other methods of dividend relief, see the classical analysis by McLure (1979) as well as US Department of the Treasury (1992).
### TABLE 1
European Union: Taxes on Company Earnings in 1996

<table>
<thead>
<tr>
<th>CT system / Member state</th>
<th>CT (on retained profits)$^1$</th>
<th>Dividend relief</th>
<th>Ordinary top PT$^a$</th>
<th>CT+PT on distributed profits$^1$</th>
<th>Top PT on interest$^1$</th>
<th>Top PT on capital gains$^{a,b}$</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>As a percentage of classical tax burden$^b$</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Imputation system</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Finland</td>
<td>28</td>
<td>$l_{11}/l_{11}$</td>
<td>100</td>
<td>57.5</td>
<td>28</td>
<td>28**</td>
</tr>
<tr>
<td>France</td>
<td>36$^{1/2}$</td>
<td>$l_{1}/l_{1}$</td>
<td>91</td>
<td>60.2</td>
<td>61.5</td>
<td>19.4$^*$</td>
</tr>
<tr>
<td>Germany</td>
<td>56$^1$</td>
<td>$l_{3}/l_{3}$</td>
<td>59</td>
<td>57</td>
<td>64.4</td>
<td>57$^*$</td>
</tr>
<tr>
<td>Ireland$^3$</td>
<td>38 (10)</td>
<td>$l_{2}/l_{2}$</td>
<td>49</td>
<td>48</td>
<td>58.1 (50.6)</td>
<td>42$^*$</td>
</tr>
<tr>
<td>Italy</td>
<td>53.2</td>
<td>$l_{63}/l_{63}$</td>
<td>66</td>
<td>51</td>
<td>58.7</td>
<td>12.5**</td>
</tr>
<tr>
<td>UK</td>
<td>33</td>
<td>$l_{2}$</td>
<td>51</td>
<td>40</td>
<td>49.8</td>
<td>40$^*$</td>
</tr>
<tr>
<td><strong>Tax credit method</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Portugal</td>
<td>39.6</td>
<td>Tax credit</td>
<td>91</td>
<td>40</td>
<td>42.2</td>
<td>20**</td>
</tr>
<tr>
<td>Spain</td>
<td>36</td>
<td>60% of CT$^b$</td>
<td>71</td>
<td>56</td>
<td>60.6</td>
<td>36$^*</td>
</tr>
<tr>
<td><strong>Special PT rate</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Austria$^5$</td>
<td>34</td>
<td>PT rate</td>
<td>109</td>
<td>50</td>
<td>48.5</td>
<td>22$^{a,*}$</td>
</tr>
<tr>
<td>Belgium$^4$</td>
<td>40.2</td>
<td></td>
<td>135</td>
<td>60.6</td>
<td>55.1</td>
<td>15$^{**,*}$</td>
</tr>
<tr>
<td>Denmark</td>
<td>34</td>
<td></td>
<td>105</td>
<td>61</td>
<td>60.4</td>
<td>61$^*</td>
</tr>
<tr>
<td>Greece</td>
<td>35</td>
<td></td>
<td>152</td>
<td>45</td>
<td>35</td>
<td>15$^{**,*}$</td>
</tr>
<tr>
<td>Luxemburg$^4$</td>
<td>40.3</td>
<td>Half of PT</td>
<td>62</td>
<td>51.3</td>
<td>55.6</td>
<td>51.5</td>
</tr>
<tr>
<td>Sweden</td>
<td>28</td>
<td></td>
<td>152</td>
<td>56</td>
<td>49.6</td>
<td>30</td>
</tr>
<tr>
<td><strong>Classical system</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Netherlands</td>
<td>35</td>
<td>No relief</td>
<td>0</td>
<td>60</td>
<td>74</td>
<td>60</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>20$^*$</td>
</tr>
</tbody>
</table>
Abbreviations have the following meaning: CT = company income tax; PT = personal income tax; CG = central government; r = reduced rate.

Some information may be incomplete or out of date.

Percentages have been rounded to one decimal place.

Rates include surcharges, surtaxes or profit (income) taxes levied by local governments (if different, an average or representative rate has been chosen). Net wealth or capital taxes — levied in Germany, Italy and Luxembourg — are not included.

Measured against the combined CT+PT under the classical system, according to the formula

\[
\text{Dividend relief} = \frac{\text{CT+PT without relief}}{\text{CT+PT with full relief}}
\]

*Calculated as CT + [(1 - CT/PT) - (1 - PT/CT)] minus any tax credit, if applicable. Under the dual income tax in Finland, the top PT rate on capital income equals the CT rate of 28 per cent. In countries with special PT rates on dividend income, obviously the special PT rate is taken as the top PT rate in calculating the CT+PT on distributions. Dividend payments to residents are subject to withholding tax in Austria (22%), Belgium (25%), Denmark (25%), Germany (25%), Italy (12.5%), Luxembourg (25%), the Netherlands (25%), Portugal (12.5%) and Spain (25%).

An asterisk (*) denotes that interest payments are subject to a withholding tax; a double asterisk (**) means that the withholding tax is final. Generally, royalty payments to residents are not subject to withholding tax, except in France (15%) and the UK (25%).

Usual are subject to CT at the normal rate; generally, the tax is deferred if the gain is reinvested.

Capital gains are adjusted for inflation in Ireland, Italy, Luxembourg and the UK. Alternatively, short-term and long-term gains are taxed at different (effective) rates in Denmark, France and Spain as well as in Ireland. PT rates shown are for long-term capital gains. Various countries exempt small amounts of capital gains.

A lower rate of 30 per cent applies to distributed profits. This rate is 42 per cent if the 7.5 per cent surcharge and the 17 per cent tax-exclusive, deductible, local tax are included. This form of partial dividend relief at company level is called the split-rate system. Overall, however, imputation is the dominant feature of Germany's CT/PT system.

Capital gains up to DM 30 million on substantial holdings (more than 25 per cent of the share capital) are exempt.

The rates/fractions given in parentheses apply to profits/loss credits of qualifying manufacturing and processing companies.

In Ireland, the capital gains tax rate is 27 per cent on the disposal of shares in unquoted trading companies held for at least five years.

In Portugal, 60 per cent of the underlying CT is creditable against the PT without gross-up. Alternatively, a special (final) PT rate of 12.5 per cent applies to net dividend income. This provides dividend relief at 70 per cent, distributions being taxed at a CT+PT rate of 47.2 per cent.

In Spain, 40 per cent of the net dividend is grossed up and credited against the PT. However, there is no compensatory tax on distributions out of profits not subject to CT.

Reduced rates are related to the length of the holding period and the amount of other income.

Austria, Belgium and Luxembourg permit a (limited) deduction from personal income of expenditures on the purchase of new shares.

In Belgium, the PT rate is 15 per cent on dividends paid on shares issued after 1 January 1994 and 25 per cent on interest paid on bonds issued before 1 March 1990.

Share income not exceeding Dkr 33,800 (Dkr 67,600 for married couples) is taxed at 25 per cent.

Df 1,000 dividend income is exempt from PT (Df 2,000 for married couples).

Fiscal Studies

bracket PT-payers than for low income bracket PT-payers. This regressive effect can be mitigated (as is done in Austria and Belgium) 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 classical double taxation of their dividend income (with credit for the special PT withheld at source). Furthermore, more than full relief can be provided under the special PT rate schemes as well as the tax credit method, if dividends are paid out of exempt profits.7

2. Taxing Returns on Equity: Distortion and Discrimination

Finland and Greece are the only member states that tax profit distributions and retentions at the same marginal CT/PT rates. In all other member states, the CT+PT on distributions is generally higher than the CT on retentions.8 In comparing the effective tax rates, the PT on capital gains should be taken into account, of course. Generally, however, effective rates are (very) low or nil (see Table 1). Seven member states do not tax capital gains on ordinary shares. Other member states tax capital gains but only upon realisation: a concession, equivalent in value to an interest-free loan. Gains on the sale of shares that represent a substantial holding, i.e. a controlling interest, are taxed more widely but, again, deferral and preferential rates should result in relatively low tax burdens.

If, as appears to be the case, the CT+PT on profit distributions is higher than the CT (plus capital gains tax, if any) on retained profits, then dividend payout decisions will be distorted and new investment will be discouraged. At least, this should be the case under the ‘traditional view’, which holds that dividend payouts cannot be lowered without cost because they offer non-tax benefits, for instance by signalling shareholders that the company is financially healthy or by limiting financial discretion and hence potential misuse of funds by management.9 Under the ‘new view’, on the other hand, the double tax does not affect dividend payout decisions or the effective rate of tax on investments financed by retentions, because the PT on dividend income ‘trapped’ in the

7 Whether or not tax preferences at company level should be passed through to shareholders is a difficult policy issue that is not discussed here. For a good treatment, see McLure (1979, ch. 4).
8 Note that 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 companies 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 company income available for distribution remains the same, regardless of the level of tax rates or the degree of mitigation. See OECD (1991, p. 254).
9 For fairly recent treatments of the signalling effect and the ‘principal-agent’ problem, see Williams (1988) and Easterbrook (1984), respectively.
company acts as a once-off wealth tax. Most empirical studies support the traditional view over the new view (Poterba, 1987; Gerardi, Graetz and Rosen, 1990; Zodrow, 1991). Whatever view is adopted, taxing dividends twice always harms investments by new and emerging firms, which have to rely on new share issues to provide for their equity needs.

The distortions described above yield important EU-wide implications. First, the higher tax on dividends, which stimulates profit retention, reduces the amount of capital becoming available on European capital markets and thus hampers the development of EU share markets. Second, investments by old firms financed through retained earnings tend to yield a lower (before-tax) return than can be obtained elsewhere. In other words, resources are misallocated. Third, the tax bias in favour of old firms inhibits the entry of new firms, i.e. the tax system infringes on competitive conditions, thereby jeopardising the dynamics of the single internal market. In addition, current CT/PT systems have differential inter-member-state effects. The high tax on distributed profits, for instance, discriminates in favour of member states with many mature firms (which do not need new equity). Also, it confers an artificial advantage on member states with companies that conform to the ‘conduit’ model of the firm (with shareholders managing the company) and that, therefore, do not need to distribute a large portion of their profits to satisfy shareholders.

Last but not least, the discrimination between mature companies (able to rely on profit retention to finance investments) and new, emerging companies (having to rely on new share issues) closely echoes the tax discrimination between the company form and the non-company form of doing business. Under a CT with less than full imputation, the total tax on the equity income of new firms (having to distribute all profits), for which the company form is a *conditio sine qua non*, would generally be higher than the PT on the business income of the self-employed. Conversely, the CT (plus capital gains tax, if any) on the retained profits of mature companies would generally be lower than the PT on the business income of the self-employed, who cannot incorporate their businesses.

10 For reviews and analyses of these views, see Poterba and Summers (1985), Sinn (1985 and 1991), Zodrow (1991) and Sørensen (1994b and 1995). As Head (1996) points out, the policy implications of these two views are quite different. Under the new view, in contrast to the traditional view, any CT reform aimed at greater integration with the PT is of doubtful relevance from an efficiency point of view, but must clearly be rejected on equity grounds because it results in windfall gains to existing shareholders. The strong conclusions of the new view, however, rest entirely on the assumption that equity earnings must eventually be distributed as PT-liable dividends. Furthermore, it should be noted that the double tax also should not affect the cost of capital in a small open economy in which the required return on equity before PT is exogenously determined from abroad. The main effect of the PT on equity income is then to make shareholding less attractive relative to debtholding.

11 Gravelle and Kotlikoff (1989) have noted that the distortions of the business form are greater than shown by earlier estimates, because the CT/PT also distorts the relative importance of company producers (able to exploit economies of scale) and non-company producers (able to apply greater entrepreneurial skills) within an industry.
Under financial neutrality, the CT+PT on the equity income of all companies, regardless of maturity, of course, should equal the PT on the business income of the self-employed.

3. Taxing Returns on Debt: the Hole in the CT Bucket

As Table 1 indicates, interest appears to be taxed positively, although generally at lower rates than the CT+PT on profit distributions. In reality, however, most interest is not taxed at all due to the symbiosis between interest deductibility at company (and personal) level and the existence of capital-rich tax-exempt investors, such as pension funds, life insurance companies and social security funds. Typically, interest income accruing to these institutional investors is not taxed, in contrast to returns on equity, which are taxed at source.12

The effective exemption of much interest has greatly stimulated debt finance (thin capitalisation) and eroded the capital income tax base in most member states. In the Netherlands, for instance, in 1989 approximately Df 40 billion (8 per cent of GDP) of tax-deductible interest payments was ‘washed out’ by tax-exempt investors. On a net basis, the business sector accounted for 60 per cent of this amount (Cnossen, 1995). Furthermore, Sørensen (1988), reporting on the Danish situation, calculated that, in 1986, tax revenue collected on personal capital income was minus 1.6 per cent of GDP (11 per cent of total capital income computed on the basis of national accounts). Earlier, Hansson and Norman (quoted in Sørensen (1994a, p. 78)) estimated that the yield of the Swedish tax on capital income was minus 0.3 per cent of household economic income. These findings are corroborated by Gordon and Slemrod (1988), who concluded that the complete exemption of capital income in the US in 1983 would have raised revenue.13

The growing internationalisation and liberalisation of capital markets also suggest that interest is hardly taxed, because these developments increase opportunities for evading or avoiding the PT or CT on interest income. Whereas retained earnings are taxed at source through the CT, the tax authorities cannot be sure that cross-border interest payments are reported and taxed. Moreover,

---

12 The tax-exempt status of institutional investors should affect their portfolio choice and thereby the ownership structure of firms. In the US, for instance, 95 per cent of all company debt is thought to be owned by tax-exempt investors, compared with half of all equity (Graetz, 1989, p. 722).

13 It should be noted that Gordon and Slemrod (1988, p. 105) compare the tax revenue collected under the actual tax system with the tax revenue that would have been collected under a cash-flow tax. The cash-flow tax effects are simulated by ‘allowing new investments to be expended and then taxing at ordinary rates any resulting cash flow from the investments, including the sales price if the assets are sold’. In terms of revenue raised, therefore, existing US income taxes do not tax the normal return to saving and investment, but they may tax any return over and above this — as a cash-flow tax would.

14 Earlier, Bird and McLure (1990) drew attention to the erosion of the capital income base through the combination of interest deductibility, financial innovation, international tax arbitrage and evasion. For a
withholding rates on cross-border interest payments (which vary by class of payer and payee, and by type of financial instrument — by itself a source of wasteful tax arbitrage) are very low. As a result, as Huizinga (1994) concludes, ‘international interest income to a large extent escapes taxation’. This favours international debt finance, violates neutrality, skews investors’ portfolios and results in an arbitrary division of the interest income base between lending and borrowing countries.

The tax-favoured status of debt also discriminates against companies 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 companies, which tend to be fledgling enterprises, have to incur higher capital costs on account of taxation than do older, established companies with either easier access to debt financing or sufficient retained profits to finance new investments. Furthermore, at the EU level, the preferential treatment of debt favours member states with institutions (banks and large firms with liquid assets) that allow substantial debt finance. In short, the equality of competitive conditions is violated.

4. Conclusion

This brief survey has raised three concerns. First, in nearly every member state, effective CT+PT rates on investment returns vary depending on the choice of financing (equity or debt), the company’s dividend policy (distribution or retention), the form in which the investment is undertaken (the company form or the non-company form), the tax status of the recipient of the return (liable to the PT and/or the CT, or exempt) and the place of residence of the recipient of the return (at home or abroad). Broadly, as the OECD (1991) has pointed out, debt finance is favoured and individual investors are discriminated against. Also, the...
taxing arrangements raise the entry costs of new companies which provide an important impetus to the development of entrepreneurial skills in the single internal market.

Second, even if the CT/PT systems would achieve neutrality with respect to different types of investment and methods of financing, they would still distort the level of investment. By taxing the opportunity cost of capital, the CT/PT reduces the incentive to invest, because investments that just yield a viable economic return before tax will not be worth undertaking after tax. This is the price that must be paid if it is considered desirable to tax investment returns.

Third, the symbiosis between interest deductibility and capital-rich tax-exempt domestic and foreign sectors and other opportunities for tax arbitrage erode the company (and capital) income tax base. This effect is reinforced by the substitution of hard-to-reach international debt (interest being taxed on the residence principle) for easier-to-tax equity (profits being taxed on the source principle). The toothless bite of capital income taxes, of course, greatly mitigates the distortions mentioned above, but at the expense of violating prevailing interpersonal and interjurisdictional equity norms.

III. CRITERIA FOR REFORM AND CO-ORDINATION

The previous section indicates that reform and co-ordination seem called for. As with other economic policy issues in the EU, the compass should be focused on the twin lodestars: neutrality and subsidiarity. This section examines these criteria more closely as they apply to company taxation.

1. Neutrality and Subsidiarity

The leitmotif of the Treaty of Rome (1957) is that competition should be the mechanism for allocating economic resources in the EU. Accordingly, tax neutrality should be its corollary in so far as it aims at ensuring that equal conditions for competitors are not distorted through the tax system. Neutrality within member states is an indispensable condition for neutrality between member states. As long as CTs distort the choice between debt and equity, distribution and retention, the company form and the non-company form of doing business within member states, they are bound to distort investment decisions across the EU.

companies (of which 16 per cent responded) in the EU and the countries of the European Free Trade Association (EFTA).

It should be emphasised that tax neutrality, as interpreted here, abstracts from various next-best issues, such as differences in mobility, asymmetric information, etc. For a broad treatment of the welfare economics of tax co-ordination, see Keen (1994).
The Treaty of Maastricht (1992) enshrined subsidiarity as the guiding criterion in the discussion on the assignment of policy functions in the EU. Still evolving, subsidiarity proceeds from a presumption in favour of decentralisation. Basically, policy functions, including taxation, should be exercised by the member states, but the states are obliged to consider the effects of their actions on other member states (Smith, 1993). While tax neutrality generally requires a substantial degree of tax co-ordination, subsidiarity, in contrast, implies that each member state should be permitted as much tax independence as is commensurate with the goals of free trade and free competition in the single internal market (Cnossen, 1990).

In taxation, subsidiarity seems to have two distinct but related dimensions. First and foremost, subsidiarity implies that member states should co-operate to establish the rules of the tax game. Basically, these rules should have regard to the allocation of the various tax bases in the EU to individual member states in such a way that overtaxation or undertaxation across member states is avoided. Also, unambiguous definitions and practices, i.e. transparency, are essential. Second, and no less important, subsidiarity means that member states should be able to operate their own tax systems, designed in accordance with the agreed rules, without the need for day-to-day co-operation with other member states in the form of information exchange, cross-border audits, etc. Operational independence has regard to legal concepts and practices, as well as assessment, collection and appeal procedures. Viewed together, these two features of subsidiarity suggest that tax sovereignty has to be ceded in establishing the tax entitlement rules so that tax independence can be exercised more fully in administering these rules.

2. Application to Company Taxation

Neutrality and subsidiarity are difficult to effect in the field of company taxation. For one thing, as amply illustrated in Section II, various kinds of return (retained profits, dividends, interest, royalties) and various kinds of recipients (tax-liable individuals, exempt entities, out-of-state residents) have traditionally been treated differently for tax purposes within and between member states. For another, while company profits are mainly taxed on the source basis, the claim to tax interest rests mainly on the residence principle. Thus company earnings are subject to different internal tax regimes and different interstate tax entitlement...
rules. Clearly, some fundamental rethinking must be done to straighten out these mixed sets of tax rules and practices in light of the new requirements.

Internal neutrality requires foremost that various kinds of company earnings, with respect to equity and debt, are subjected to identical tax treatments. The age-old distinction between debt and equity has become unrealistic and unworkable. Discriminatory and distortionary effects are exacerbated by the symbiosis of debt finance and capital-rich, tax-exempt sectors. Wasteful tax arbitrage and dead-weight losses may be sizeable. Half-baked solutions, such as prescribed debt-equity ratios, apart from bringing their own distortions along, will not solve the problem. The solution can be found only by viewing interest as another form of distributed company earnings.

External neutrality is even more difficult to achieve, because historically the CT has been levied on the source principle, instead of the residence principle. Company profits are taxed where they arise, i.e. in the source state, instead of according to who they accrue to, i.e. in the residence state. Unlike the residence state, however, the source state cannot ensure neutrality regarding EU-wide investment location decisions because, other things being equal, companies will tend to establish their profit-making activities in the state with the lowest CT instead of the state with the lowest production costs. While the source state can tax companies doing business on its territory alike (non-discrimination principle), it has no say over the out-of-state tax treatment of repatriated profits. In other words, the source state cannot equalise effective tax rates for all participants, taking account of any additional taxes they must pay in the residence state (capital import neutrality). Only the residence state can ensure efficiency in the EU-wide (and world-wide) allocation of resources (capital export neutrality).

Capital export neutrality (embodied by the pure residence principle), on the other hand, is difficult to put into practice, particularly for the CT, in a single market with total freedom of trade and factor movements and a planned centralised monetary policy with a single currency. For one thing, source states would have to give up their historic right to tax company profits. For another, company profits would have to be taxed on an EU-wide basis as they accrue, and in accordance with the profit-determination rules of the residence state. Obviously, tax deferral, let alone tax exemption, cannot be allowed as it would

---

21 Most economists tend to favour capital export neutrality, which promotes efficiency in the allocation of investment, over capital import neutrality, which promotes efficiency in the allocation of savings. The reason is that users of capital, i.e. business firms, tend to be more sensitive to differences in returns than are suppliers of capital, i.e. savers. Hence, distortions in deviating from capital export neutrality tend to be greater. Businessmen and governments, on the other hand, tend to favour capital import neutrality, which they associate with the source principle. Capital export neutrality, however, would not be achieved with a source-based CT unless there were harmonisation. In considering these positions, note that as capital and capital owners become increasingly more mobile in the EU, the distinction between capital export and capital import neutrality is blurred. For a useful treatment, see Devereux and Pearson (1990).
imply the continuation of source taxation. Furthermore, residence states should be able to check the accuracy, in source states, of the reporting for out-of-state profits. All this suggests that residence-based CTs would violate the operational independence principle, because an inordinate degree of day-to-day interstate coordination (resembling the workings of a single, EU-wide CT administration) would be required. Clearly, at this juncture, the CTs in the EU should continue to be founded on the source entitlement principle.22

The primacy — perhaps the expediency — of the source entitlement principle establishes a case for exempting all inward dividend income from CT or PT and all outward dividend income from withholding tax. In other words, residence states should give up all claims to taxing out-of-state dividend income whether from direct investment or portfolio shareholding in the EU. Furthermore, the current residual right, for interpersonal equity purposes, of residence states to tax inward dividends violates financial neutrality and operational independency. Similarly, source states would have to renounce all claims to taxing out-of-state shareholders with respect to dividends paid to them. Likewise, imputation tax credits should not be extended to non-resident shareholders.

Neutrality and operational independence in taxing company equity income can largely be undone, however, by non-neutrality and operational dependence (i.e. the need for day-to-day co-operation) in the tax treatment of interest (and royalties) payable to out-of-state residents. Full reliance on the residence principle means that interest (most likely) will not be taxed, because it accrues to tax-exempt out-of-state investors or is channelled through tax havens. Moreover, residence taxation of interest requires substantial day-to-day co-operation, because source states must inform residence states of outward interest payments. This weak spot in the CT bucket can only be repaired by taxing interest on the basis of the source principle. This is a clear breach with current practice, but an inevitable one if interest payments on inward debt are to be taxed at all.

3. Summing Up

In sum, most practical considerations imply that the choice is not between the source and the residence principle for taxing company profits, but between the source principle and no tax at all. Under the source principle, however, neutrality can be achieved only if the basic design of the various CTs is, by and large, harmonised and if statutory rates are approximately the same. If so, operational independence will largely be safeguarded because companies will have few incentives to relocate their profit-making activities to other member states, or to shift profits by manipulating their intercompany transfer prices (including

---

22 See especially Musgrave (1987), who is the most vocal academic proponent of the source entitlement principle in allocating the CT base as a matter of inter-nation equity. For strong arguments in favour of the source principle, see also Vogel (1990). Brean (1992) rightly points out that the precise source of income may sometimes be difficult to pinpoint.
overhead expenses) or their debt-equity structures. Moreover, the need for day-to-day co-operation would be minimised.

Specifically, neutrality and subsidiarity seem to imply the following criteria against which current CT systems and various alternatives, focusing on tax co-ordination through tax reform, should be evaluated:
• greater uniformity of the overall effective tax rates on the return to equity, whether retained or distributed, and the return to debt;
• greater uniformity of effective tax rates, regardless of whether the return of an investment accrues to domestic or foreign investors;
• minimisation of the potential for tax avoidance and tax evasion, as well as the compliance and administrative costs of the CT regime; and, perhaps more controversially,
• allocation of the tax base for equity income as well as debt income primarily to the member state of investment (source state) instead of the state of the investor (residence state).

IV. OPTIONS FOR CO-ORDINATING COMPANY TAXES

Which CT would best meet the criteria spelled out above? In trying to answer that question, this section reviews and evaluates various alternatives to the current CTs that have been proposed in the literature or put into practice. Some alternatives attempt to reduce or eliminate the discriminatory treatment of various forms of company earnings by adhering more closely to the requirements of a global, progressive income tax. Full integration, dual imputation and dividend deduction are examples of this approach. Other options, such as an allowance for corporate equity and a cash-flow tax, emphasise the desirability of neutrality. Specifically, only pure profits or rent income should be taxed, not the opportunity cost of capital. A third set of alternatives occupies the middle ground by taxing all company earnings (retentions, distributions, interest) in full, but at the same low, proportional CT/PT rate. The comprehensive business income tax and the dual income tax are examples of this approach.

1. Full Integration

Proponents of the global concept of income, as formulated by Schanz, Haig and Simons, argue that the CT should be fully integrated with the PT of shareholders. Under full integration, all company earnings (distributed as well as retained profits, and interest) would be allocated to shareholders and debtholders and taxed at their marginal PT rate. Because all company earnings would be taxed alike, for new investment, the distinction between equity and

23 For the classical exposition of the S-H-S income concept, see Goode (1975). For the normative inference of full integration, see Musgrave and Musgrave (1984).
Full integration has been proposed by the Royal (Carter) Commission in Canada (1966), the US Department of the Treasury (1979 — Blueprints) and the Campbell Committee (1981) in Australia. Under both the voluntary CT- and PT-rate alignment plan (Carter) and the mandatory partnership methods (Blueprints, Campbell), all corporate equity income would be allocated to shareholders and taxed in their hands with a full credit for the CT paid on their behalf. To prevent double taxation of retentions, the basis for corporate shares would be written up by the amount of the allocation net of the tax credit. Profit distributions would be considered repayment of capital up to the amount of the written-up basis; further repayments would be considered taxable capital gains.

These plans, however ingenious, have never left the drawing board, primarily because they are considered impracticable (McLure, 1979; US Department of the Treasury, 1992). The administrative objections relate to the precise and timely allocation of company profits to shareholders and, perhaps even more important, to the ascertainment of true economic income under which capital allowances would reflect actual economic depreciation and capital gains would be taxed as they accrued. In practice, this would require that all assets be revalued each year to measure the real loss or gain. In the presence of inflation, moreover, adjustments would have to be made to the real value of the outstanding debt. Further complications arise when cross-border investments are taken into consideration. Under global, fully integrated CTs, the returns on these investments should be taxed on the basis of the residence principle — an extremely demanding administrative requirement, as argued above.

The administrative objection to full integration also has an economic counterpart. The economics literature has argued that, from a national point of view, the greater mobility of capital compared with labour means that it is not optimal to tax capital income at the same (high) rate as labour income, since this does not take account of the greater elasticity of supply of capital compared with labour (in terms of sensitivity to changes in the net real interest rate and the net real wage rate, both after tax, respectively). High tax rates would induce capital flight and saddle labour with the burden in the form of lower productivity and lower real wages. Although capital is not fully mobile, especially in its physical form, moderation (or world-wide co-ordination) none the less seems to be required.

24 For a useful treatment, see Boadway, Bruce and Mintz (1982).
25 Here, the emphasis is on physical capital. See Atkinson and Sandmo (1980) and King (1980). As an extension, it has been suggested that a small, open economy in a world of full capital mobility acts optimally by placing the marginal tax burden exclusively on the immobile factor, labour (Razin and Sadka, 1989). It should be pointed out, however, that these studies assume that there is no co-ordination of capital income taxes.
2. Dual Imputation

The dual imputation system focuses especially on the effective, one-level taxation of interest and dividend income. Under this system, interest is treated in the same fashion as dividends are under current (full) imputation systems. In other words, interest would not be deductible at company level, but debtholders would be permitted a tax credit for the underlying CT against their PT (or CT) on their taxable interest income (grossed up by the tax credit). Alternatively, but equivalently, interest could continue to be deductible in computing taxable company profits, but it would be subjected to a withholding tax at a rate equal to the CT rate. Eleven member states already tax interest at source, but without regard to the comparable implications of dividend imputation systems. Exempt entities, for instance, are entitled to a refund of interest withheld. In contrast, under most imputation systems (Ireland and the UK are exceptions), exempt entities do not have the right to claim refunds of unused tax credits. The same rule should apply to interest, if equal treatment is to be ensured. To block an obvious avoidance route, the withholding tax on non-residents would have to be raised.

A dual imputation system would put dividend and interest on the same tax footing, but would maintain the favourable tax treatment of retained profits. The effective tax rate on debt-financed investment would increase, but the tax rate on equity-financed investment (assuming statutory rates remain unchanged) would decrease in member states that do not yet have an imputation system. There would be few technical transition problems, but tax treaties might have to be renegotiated to extend the tax credit to debtholders in other member states. This would complicate the workings of the system and infringe on the operational independence principle. The greatest drawback of a dual imputation system — indeed, of any scheme that reduces the tax benefits to debt finance — is that the effective taxation of interest at the lender’s CT rate or his (higher) PT rate would reduce the post-tax return to saving or instead raise the cost of capital to a level that could have detrimental effects on capital formation in the EU.

3. Dividend Deduction

Greater equality in the current treatment of dividend and interest can also be achieved by allowing a deduction for dividends paid in calculating taxable profits. The dividend deduction system is not found in the EU, but was in use in most Nordic countries before they switched to the imputation system. Unless

---

26 The system’s name was coined by Graetz (1989). Warren (1991) came out in favour of the system in his report to the American Law Institute.

27 Iceland still permits a dividend deduction up to an amount equal to 10 per cent of paid-in capital plus any later issue of stock dividends. Also, the US Treasury Department Report to the President (1984) included a proposal for a 50 per cent deduction (later reduced to 10 per cent) for dividends paid. It should be noted that a
the goal is to stimulate equity investment by non-residents, a drawback of the dividend deduction system is that the relief is automatically extended to foreign shareholders, who do not pay the (additional) national PT incurred by domestic shareholders. To prevent this, a dividend withholding tax could be introduced (or increased). This would make the dividend deduction system equivalent to an imputation system. Without a withholding complement, the dividend deduction system would jeopardise the effective, one-level taxation of distributed profits.

Furthermore, a deduction for dividends paid on new share issues has received strong support from proponents of the new view, particularly in the US. Until 1991, Sweden also permitted a deduction for dividends paid on newly issued shares. The total, cumulative amount could not exceed the paid-in capital, and the concession expired 20 years after the year of issue. Furthermore, it should be noted that Austria, Belgium and Luxemburg permit a (limited) deduction from personal income for expenditures on the purchase of new shares, a concession which can be viewed as an alternative to a dividend deduction scheme for new share issues. In practice, it appears difficult to draw an effective distinction between new equity and old equity.

4. Allowance for Corporate Equity

Full integration, dual imputation and dividend deduction all tax the opportunity cost of capital — often referred to as ‘normal profits’. This implies, however, that the level of saving and investment would continue to be distorted. If the CT is not to interfere with the level of economic activity, only ‘pure profits’ or ‘economic rents’ should be taxed. The ACE system, conceived by Boadway and Bruce (1984) but given hand and feet by the IFS Capital Taxes Group (1991), purports to achieve this by providing an Allowance for Corporate Equity in computing taxable profits, equal to the product of ‘shareholders’ funds’ (generally, the company’s total equity capital, including taxable profits net of CT) and an ‘appropriate nominal interest rate’, set by the government but reflecting a normal market rate of return on, say, medium-term government bonds. Since the allowance would approximate normal profits, its deduction from total taxable profits means that the CT would be confined to pure profits from intramarginal investments.
Proponents of the ACE allowance (Devereux and Freeman, 1991; Gammie, 1992b) point out that in present value terms its tax base is identical to the base of an annual pure profits tax, for two reasons. First, the equity allowance permits any schedule of depreciation allowances without altering the present value of the tax payments associated with the cash flow of an investment. High depreciation allowances result in a lower amount of shareholders’ funds and hence a lower allowance, and vice versa. Second, both companies and shareholders can borrow at the appropriate nominal interest rate to offset different profiles of tax payments or distributions, respectively. Furthermore, the ACE allowance preserves neutrality under inflation, because the interest rate is set at its full nominal level.

A form of ACE allowance has been adopted in Croatia where it is called the Interest Adjusted Income Tax (IAIT) (Rose and Wiswesser, forthcoming). Under the IAIT, companies that keep proper accounts are permitted to deduct an imputed normal return, called ‘protective interest’ (equal to the rate of growth of manufacturing prices plus 3 percentage points), on their equity from taxable profits as conventionally computed. The self-employed, who may not have proper accounts, are permitted to deduct a similar return, which, however, is calculated by reference to the book value of depreciable assets. Savings of individual taxpayers are included in the tax base, but the normal return on them is exempt (prepayment method). Pension contributions, on the other hand, are deductible from taxable income, while payouts are taxed (standard method). The IAIT was implemented on 1 January 1994. Reports on the Croatian experience are not in yet.

Undoubtedly, the ACE allowance has attractive neutrality properties. The neutrality conditions, however, are met only if capital markets are perfect. If dividends continued to be taxed under present PTs, the ACE system would favour retentions even more strongly over distributions than do the current systems. To be fully neutral, the ACE allowance requires the reform of the PT, along the lines of an extended personal equity plan (IFS Capital Taxes Group, 1989) or the IAIT in Croatia. But the move to a full expenditure tax would fundamentally change the debate and greatly complicate the reform. Under current PT taxing arrangements, the ACE allowance would erode the source entitlement principle — resembling the erosion of the residence principle due to interest deductibility. The ACE allowance might be given consideration if express or tacit co-ordination on taxing capital income cannot be achieved yet the existing bias against equity is a serious problem.

\[^{31}\text{For a thorough comparison of a personal consumption tax and a PT, see Bradford (1986).}\]

84
5. **Cash-Flow Tax**

Usually, a tax on the pure profits of an investment is associated with cash-flow taxation. As has been shown in the literature (Meade Committee, 1978), a tax on the flow of funds into and out of any investment is equivalent in present value terms to an annual pure profits tax levied over the lifetime of the investment. Under the cash-flow tax, companies would be denied a deduction for interest as well as dividends paid (if not already denied), but they would be allowed an immediate write-off of the cost of business assets. As a result, only pure profits or rent income would be taxed, not normal profits. In particular, the return on marginal investments, just making a viable economic return, would be exempted. Again, full neutrality, generally, cannot be achieved if, at the same time, current PTs are not replaced by personal consumption taxes, under which all savings or, alternatively, the yield of all savings are exempted from PT.32

Full neutrality is also achieved under the cash-flow-equivalent, subtraction-VAT type of origin-based direct tax, which has been proposed in the US (Hall and Rabushka, 1995) in replacement of the current personal and company income taxes. Under the ‘flat tax’, value added, consisting of wages and capital income, is determined by deducting purchases (including investment goods) from sales. Subsequently, wages are deducted and taxed separately at the individual level, permitting a basic exemption (and effective progressivity). Remaining capital income is taxed at the flat rate without basic exemption. Again, pure profits would be taxed, but the return on intramarginal investments would be exempted. For the time being, it seems unlikely that the US will introduce a flat tax. Apart from the fear of the unknown, transitional difficulties and international problems (for example, obtaining a foreign tax credit for it) seem to preclude its adoption.33

6. **Comprehensive Business Income Tax**

The dividend deduction system and the ACE allowance (without a personal expenditure tax complement) continue to favour retained profits over dividends and interest, and exempt entities and foreign shareholders and debtholders over domestic holders. A cash-flow tax, on the other hand, would be costly upfront to revenue (the immediate write-offs generally would call for rebates and positive

32 The combination of a cash-flow CT and a traditional PT would yield neutrality towards company financing decisions only if the marginal PT rates on interest, dividends and accrued capital gains on shares were identical. See OECD (1991, p. 32).

33 See McLure and Zodrow (1996) for arguments why taxation based on cash flow has administrative and economic advantages over a conventional income tax. For a discussion of implementation problems, see Mintz and Seade (1991) and Shome and Schutte (1993).

34 See the detailed treatment in US Department of the Treasury (1992, ch. 3). For reviews of the US Treasury study, see Goode (1992) and Sunley (1992).
tax payments would be delayed) and out of step with conventional concepts of
determining profits. In view of these drawbacks, perhaps the focus should be on
a more even-handed taxation of profits, conventionally computed, and interest at
company level. Taxation at company level would keep the tax intact on normal
profits as well as corporate earnings paid to tax-exempt and foreign
shareholders, i.e. shore up the source entitlement principle.

On the basis of this philosophy, the comprehensive business income tax
(CBIT), proposed by the US Department of the Treasury (1992), taxes all
company earnings at company level. The CBIT proceeds from the fundamental
equivalence between a CT levied at source and an equal-rate PT on company
earnings with full credit for the underlying CT. Accordingly, under the CBIT,
CT and PT are integrated by not allowing deductions, at company level, for
dividends and interest paid to shareholders and debtholders, and not taxing these
income items at the level of the recipients, be they individuals or companies.
This makes the debt-equity distinction irrelevant, and greatly reduces the
distinction between retained and distributed earnings (depending on the
treatment of capital gains). Extending the CBIT to proprietorships and
partnerships — more difficult to achieve — would also make the distinction
between companies and non-companies irrelevant for tax purposes.

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 like
resident individuals or companies. 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
withholding tax or otherwise. Companies receiving CBIT income also would not
be taxable on such income. To ensure that dividends and interest are not paid out
of exempt earnings, a compensatory tax (already in place under various
imputation systems in the EU) should be levied on exempt income (made
available for distribution as dividends or interest). Capital gains on shares
would only be taxed to the extent that they exceed the acquisition cost stepped
up by the company’s retained profits net of the CT.

The CBIT, as proposed, would reduce the relative tax burden on new equity-
financed investment and increase the burden on debt-financed investment.
Established firms and institutional investors would face a relatively higher tax
burden, as would tax haven countries, but new, growing firms would be taxed
less heavily. The CBIT would eliminate the incentives for thin capitalisation and
the bias against profit distributions. The exemption of dividend income at
shareholder level and the taxation of interest at source should reduce the need for
coordinated tax co-ordination at the central EU level. In other words, operational

35 The US Department of the Treasury (1992) advocates also imposing the compensatory tax on foreign source
income, while retaining 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.
independence would be promoted, although substantial non-subsidiarity (co-
operation) is required to get there, especially as regards interest on inward debt
investment (Gammie, 1992c). To alleviate the effects on current debt-equity
structures, the CBIT could be introduced gradually. The US Department of the
Treasury (1992), for instance, proposes a 10-year phase-in period. Initially, say,
10 per cent of interest payments would be disallowed, while dividend income
would be taxed on a schedular basis at a rate that would be reduced over time.

7. Dual Income Tax

The CBIT could function properly in the US, where the CT rate does not differ
much from (or is equal to) the top PT rate. The situation in the EU, however, is
markedly different. While most CT rates do not exceed the US CT rate, PT rates
in the EU are considerably higher than EU CT rates, as well as the US PT rate. If
it is not possible to reduce PT rates on all income, other approaches to CT
reform must be explored.

An imaginative solution to the problems posed by the CT/top-PT differential
has been found by the Nordic countries. 36 Denmark and Sweden, but especially
Finland and Norway, have transformed their CTs and PTs into dual income
taxes, under which capital income is treated separately for tax purposes from
labour income (see Table 2).37 To limit possibilities for tax arbitrage and to deal
with growing capital mobility, all capital income, conventionally ascertained, is
taxed once, no more and no less, at a uniform, flat rate, i.e. the CT rate, while
labour income continues to be taxed at progressive rates. Full imputation, as in
Finland and Norway, ensures that distributed profits are always subject to CT or
PT. Capital gains are taxed in a similar fashion to that under the CBIT. Capital
income accruing in proprietorships and closed companies is determined as the
product of equity for tax purposes and a presumptive rate of return; remaining
‘profits’ are taxed as labour income.38 To limit opportunities for tax arbitrage, the
CT rate equals the lowest PT rate on labour income. In the course of the reforms,
labour and capital income tax rates were substantially reduced (see Table 2),
although revenue increased.39

The Nordic countries noted that the lower flat tax on capital income would
mitigate the lock-in effect of a capital gains tax that induces capital owners to

36 See the surveys and evaluations by Lodin (1993) and Sørensen (1994a).
37 For individual country reviews, see Pedersen (1993) for Denmark, Tikka (1993) for Finland, Skaar (1991)
for Norway and Grosskopf (1990), Mutén (1992) and Andersson and Mutén (1994) for Sweden. For an outline
of a Dutch dual income tax aimed at reducing the wedge on labour income and eliminating the highly
differentiated taxation of capital income, see Cnossen (1995).
38 For a good treatment of the issues, see Hagen and Sørensen (1996).
39 CT and PT receipts from capital income increased, e.g. in Sweden by 2.7 percentage points of GDP; at the
same time, the highly distortionary tax burden on labour income was reduced — by 5.6 percentage points of
GDP over a period of three years. See OECD (1994, Table 3) in conjunction with Swedish Ministry of Finance
 postpone realisation, thereby frustrating the workings of the capital market. Furthermore, a lower rate eases the effects of applying the tax to inflationary gains, which should not be taxed but for which it is difficult to correct on practical grounds. It has also been pointed out (Sørensen, 1994a) that horizontal equity implies that capital income should be taxed lower than labour income. After all, on the assumption of equal income-earning capacities, a global income tax that taxes savings twice weighs more heavily on people who save or who enter the labour market early than on people who consume their income early or start working later in life. In this situation, a lower tax rate on capital income lessens the horizontal discrimination between taxpayers with different patterns of consumption or different earnings profiles.

<table>
<thead>
<tr>
<th>TABLE 2</th>
</tr>
</thead>
</table>

**Tax Rates on Labour and Capital Income in the Nordic Countries**

<table>
<thead>
<tr>
<th></th>
<th>Labour income</th>
<th>Capital income</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Personal income</td>
</tr>
<tr>
<td><strong>Sweden</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Before 1991</td>
<td>36–72</td>
<td>36–72</td>
</tr>
<tr>
<td>In 1991</td>
<td>31–51</td>
<td>30</td>
</tr>
<tr>
<td><strong>Norway</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Before 1992</td>
<td>26.5–50</td>
<td>26.5–40.5</td>
</tr>
<tr>
<td>In 1992</td>
<td>28–41.7</td>
<td>28</td>
</tr>
<tr>
<td><strong>Finland</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Before 1993</td>
<td>25–57</td>
<td>25–57</td>
</tr>
<tr>
<td>In 1993</td>
<td>25–57</td>
<td>25</td>
</tr>
<tr>
<td><strong>Denmark</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Before 1994</td>
<td>50–68</td>
<td>50–56</td>
</tr>
<tr>
<td>In 1994</td>
<td>38–58</td>
<td>38–44/58</td>
</tr>
</tbody>
</table>

*a* inclusive of local taxes  
*b* Effective 1 January 1995, tax rates on labour income were increased to 32–56 per cent, whilst the company profits rate was reduced to 28 per cent. Furthermore, the double tax on dividends was reinstated and the reduced rate on capital gains was abolished.  
*c* In 1995, the CT rate was increased to 28 per cent.  
*d* The highest marginal rate on capital income less than Dkr 20,000 (Dkr 40,000 for married couples) cannot exceed 44 per cent.  
*Source: Sørensen, 1994a, p. 59.*

40 To illustrate, if the nominal return on an asset is 10 per cent and the rate of inflation is 4 per cent, then a PT rate of 50 per cent must be reduced to 30 per cent \(0.5(0.1 - 0.04)/0.1\) if only the real return is to be taxed.
The treatment of capital income under the dual income tax strongly resembles its treatment under the CBIT, and effects should be similar. Labour income, however, is subject to higher (progressive) tax rates and capital income is taxed at a flat rate. Furthermore, interest is taxed at the level of the recipient instead of at company level. A non-refundable withholding tax on interest, set at the level of the CT rate as in Finland, would make the treatment of capital income paid to resident PT- or CT-liable individuals or investors identical to its treatment under the CBIT. A very important difference with the CBIT is that the Nordic countries do not tax interest on the source basis. (Withholding tax rates on interest paid on inward debt investment are nil.) To do so would require extensive discussion with other EU member states and other countries, as well as with participants in international debt markets.\footnote{As Malcolm Gammie pointed out to me, international debt markets generally operate on a gross interest payment basis and most existing loan instruments have gross-up clauses and clauses permitting early repayment if the taxation basis for interest changes. These clauses would be likely to be triggered, however low a withholding tax on interest were introduced (or increased).}

V. PREFERRED SOLUTION

In terms of the neutrality and subsidiarity criteria developed in Section III — equality of effective CT+PT rates on various forms of company earnings, regardless of the tax status of the recipients — full integration, dual imputation and dividend deduction do not seem to be serious prototypes for co-ordinating the CTs in the EU. All of these prototypes place undue reliance on the residence principle for taxing the full return on capital. It does not seem that this principle could be adequately implemented in a world of greatly increased capital mobility and financial innovation, offering a multitude of opportunities for domestic and cross-border tax arbitrage.

Without a personal expenditure tax complement, the ACE allowance and the cash-flow tax similarly rely on the residence principle in taxing the normal return on equity at the individual level. In view of the opportunities for cross-border arbitrage, this implies giving up on the effective taxation of normal profits, as has \textit{de facto} been done with the taxation of interest. A personal expenditure tax complement would sanction the exemption of normal (and pure) profits and interest at company and individual level. But again, opportunities for tax arbitrage and evasion raise doubt as to whether the consumption of these returns would ever be taxed.

More importantly, the body politic in the EU (and the US) thus far seems to favour the taxation of the normal return to capital. The CT is looked upon as a progressive element in most tax systems and an essential complement to the PT. There appears to be no compelling reason, moreover, to eliminate the CT (and
other taxes on capital income) on efficiency grounds. If so, the remaining contenders for the present CTs are the CBIT and the dual income tax. To meet the neutrality and subsidiarity criteria, however, the dual income tax, like the CBIT, would have to be levied in full on the source basis. This can be achieved through the imposition of a withholding tax on interest at company level, which would not be rebatable to exempt entities and non-residents.

Unlike the CBIT, the dual income tax continues to tax labour income at progressive rates over and above the proportional rate applicable to capital (and labour) income. Most EU member states may wish to do so, for two reasons. First, they have a preference for a fairly large public sector; in other words, the demand for revenue is large. Relatively immobile tax bases, such as labour, will then have to be exploited more intensively than in, for example, the US. Second, separate taxation of labour and capital income leaves open the option of lowering the tax rate on capital income further (without, at the same time, having to lower the rate on labour income), should capital become even more mobile than it is at present. A vertical equity argument for higher taxes on labour income, moreover, is that most income differences in modern economies seem to be due more to differences in human capital than to differences in financial capital. Furthermore, efficiency considerations support progressive taxes on labour income, because they may moderate wage demands in unionised countries (Lockwood and Manning, 1993).

The dual income tax seems more or less in line with conventional methods of ascertaining profits or income, and existing forms of CT/PT systems. Six member states already have an imputation system. This system, or an equivalent compensatory tax, would also have to be introduced by the other member states upon the adoption of an EU-wide dual income tax. All states would have to deny the imputation credit to out-of-state shareholders and exempt entities. Another six member states already tax company profits, whether retained or distributed, at flat rates; they would have to eliminate the special PT rate on dividend income. All but four member states already apply a withholding tax to interest payments. This withholding tax would have to be introduced by all member states, but exemptions or tax refunds for non-residents and exempt entities would have to be abolished. Moreover, nearly all member states (Finland is the exception) should align the taxation of all forms of capital income with their CT rates. Finally, residence countries should exempt out-of-state dividend, interest and royalty income.

---

42 On the efficiency costs of the CT and its effect on the distribution of the tax burden, see Gravelle (1994, especially ch. 2).

43 Source taxation increases the importance of properly defining the source of income. Formula-based taxation to determine the source of income of companies operating throughout the EU would be a much more far-reaching alternative. See McLure (1989) and Weiner (1992). Formula-based taxation, however, would require an overarching EU CT.
Under the dual income tax, all equity and debt income earned by companies is taxed only once: at shareholder and debtholder level through imputation (dividends) and withholding (interest, royalties) techniques. Also, such income would be taxed only by the source state. As a point of immediate policy relevance, this suggests that the parent-subsidiary directive (no source dividend tax on intercompany profit distributions) should be welcomed, but that the draft interest-royalty directive (no source tax on interest and royalties) should not be adopted. After all, the parent-subsidiary directive eliminates an undesirable extra layer of tax, but the draft interest-royalty directive prohibits a desired single layer of tax.

The proportional, *in rem* taxation of all company earnings would obviate the need for thin capitalisation rules. Also, the lack of external neutrality of current imputation systems would be a matter of the past. Tax credits would not be extended to out-of-state shareholders, because the proportional rate in source states and the exemption of capital income in domicile states would approximately ensure non-discriminatory treatment. Manipulation of transfer prices (prices charged to foreign affiliated companies) would still be possible to influence the allocation of profits (and thus CT revenues) between the member states, but a minimum CT rate, as proposed by the Ruding Committee, should reduce the incentive for this form of tax arbitrage (Daly and Weiner, 1993). In this connection, it should be emphasised that approximation of statutory tax rates seems more important than approximation of effective tax rates. Differences in statutory rates are important for exploiting opportunities for tax avoidance (transfer pricing, thin capitalisation). Effective tax rates, on the other hand, have regard to the ascertainment of taxable profits (depreciation, inventory valuation) with respect to less mobile physical capital. Tolerable differences in effective tax rates would increase the operational independence of the member states.

The dual income tax would reduce the cost of equity-financed investment and increase the cost of debt-financed investment. This should benefit new, starting enterprises. The lower cost (and therefore the higher relative return) of equity should promote shareholding, make mergers (to avoid the double tax on dividends) less attractive, induce pension funds to change the composition of their portfolios in favour of shares, and form a natural barrier against easy foreign acquisition of domestic firms. In short, the dynamics of the market would be strengthened and ownership patterns would more closely reflect underlying market forces. Finally, the dual income tax should reduce the need for taxing capital gains on substantial shareholdings, because the profit of closely-held companies is split into a capital and a labour component with annual taxation of the proceeds from employment performed by management. This should improve the workings of the capital market, because profits of closely-held companies can be distributed without incurring tax.

Phase-in issues should be given due attention. Although the more effective taxation of interest income is clearly a goal worth pursuing, gradual and
concerted action is called for. Caution is advisable because the current tax-induced changes in corporate financing patterns may to a large extent serve to reduce the distortions of real investment and saving decisions. Higher before-tax interest rates, moreover, would dampen (debt-financed) investment demand. Coordination with the US and Japan would be essential in order to prevent tax-induced capital outflows from reducing the post-tax return to saving or instead raising the cost of capital in the EU, and to jointly constrain tax haven practices. A start could be made with a common minimum EU withholding rate. Interest paid to out-of-state residents should be included in the base. The low level of the rate would minimise changes in the interstate distribution of tax revenues. Additional revenues, moreover, would be likely to be positive for all member states in view of the present arrangements, which closely resemble the proverbial sieve.

This article has argued that domestic and cross-border investment decisions in the EU are distorted by a crazy quilt of widely diverging tax rates on company earnings (and other capital income). Tax neutrality, an important leitmotif in the Treaty of Rome, requires a more even-handed approach to the taxation of retained profits, distributions and interest, as well as capital gains, royalties and other forms of capital income. Current dividend relief systems repair only a minor defect (of doubtful pain for mature companies) of classical CT/PT systems and greatly complicate the treatment of outward and inward dividend income. More importantly, the deductibility of interest at company level, in conjunction with the existence of capital-rich exempt domestic and foreign sectors, creates an enormous loophole in the CT and greatly distorts the debt-equity choice.

Tax subsidiarity, an important leading thought in the Treaty of Maastricht, requires agreement on the allocation of tax bases throughout the EU and on the basic structure of the instruments for tapping those bases. The allocation of the CT base should probably be based on the primacy of the source entitlement principle, extended to all company earnings — profits as well as interest and royalties. A CT structure, agreed upon along these lines, would permit substantial operational independence; in other words, the need for day-to-day coordination would be minimised. The EU VAT is a good example of the way in which these distinct but related dimensions of subsidiarity have been effected. The Sixth Directive provides for a common VAT structure, yet member states enjoy nearly full independence in operating their VATs. Perhaps the CTs in the EU should be co-ordinated in similar fashion.

44 The prospects of international co-ordination are not as bleak as they seem to be at first sight. The US, for instance, has already debated the merits of the CBIT, which closely resembles the dual income tax.
REFERENCES


Brean, D. J. S. (1992), ‘Here or there? The source and residence principles of international taxation’, in R. M. Bird and J. M. Mintz (eds), Taxation to 2000 and Beyond, Toronto: Canadian Tax Foundation.


Fiscal Studies


