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What kind of Corporation Tax Regime?

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Abstract

This paper explores the taxation of corporations in the wider context of capital income taxation. The pros and cons of various income-based and cash-flow forms of corporation tax (CT) are discussed. The paper concludes that the dual income tax (DIT), which taxes all capital income at the proportional CT rate, is to be preferred over other forms of taxing capital income. The DIT is best attuned to the reality of capital mobility and is not held hostage by the higher tax on labour income. Levied at a uniform flat rate, the DIT minimizes opportunities for tax arbitrage.

JEL-Code: G300, H240, H250.

Keywords: comprehensive business income tax, corporation tax, dividend relief systems, dual income tax, flat tax, cash flow taxation.

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Each year Neil Brooks and I teach at the African Tax Institute of the University of Pretoria. Further, I've been on an IMF mission with Neil to Bangladesh, a trip that I survived thanks to Neil's collegiality and great sense of humour during the little time that was reserved for a joint beer each day. Throughout the mission, Neil showed that tax systems should not only be studied and understood but that they should be experienced (as vividly demonstrated in Brooks, 2007). He applied this attitude to Bangladesh's income taxes, while I reviewed the country's messy product tax system. With this paper, I venture with some trepidation into Neil's territory, remembering that even if I stubbornly ignore a fatal flaw in my argument, Neil will be there to point out that "It's only a flesh wound!").

1 Why Tax Corporations?

The taxation of corporations has long been one of the most controversial and inconclusive areas in the public finance literature. Various rationales have been advanced as to why it is desirable, necessary and convenient to tax corporations (Bird, 2002), but none is particularly persuasive.¹ If so, the traditional arguments for taxing corporations have to be reviewed, particularly in light of the greater mobility of capital and the increased importance of multinational companies.

1.1 Traditional arguments

Until recently, the literature distinguished three major functions of the corporation tax (CT): as a method of taxing foreign investment, as a method of taxing capital gains, and as a non-distorting tax on rents or pure profits (Head, 1997; De Mooij, 2005).

- One of the longest standing arguments in favour of the CT is that source countries should have the primary claim to tax foreign direct investment. This source entitlement principle (Musgrave, 1987) is justified on benefit-received grounds (in other words, the CT is viewed as a user charge for government-provided services) or as a method of sharing in the location-specific rents which accrue to foreign-owned corporations. The taxation of foreign direct shareholders is also defended on the basis of the argument that not taxing them would benefit the treasury of the foreign countries which do tax foreign income and provide a credit against tax (or a deduction from income) for the source-country tax.
- The second rationale for the CT is that it serves as a proxy for the tax that should be levied on capital gains that accrue to shareholders due to the retention of corporate profits. Through the CT, these gains are taxed on a current rather than a realization basis, which would bring deferral and lock-in effects in its train. More generally, CTs serve as a backstop to the personal income tax (PIT) (imperfect, admittedly, if the CT rate is lower than the marginal PIT rate). Without the CT, the corporation might be used to shelter other income, including labour income, from higher PIT rates. Beyond that, corporations act as “third-party” collectors for taxes on wages, interest and dividends, and as suppliers of information on tax matters. In this context, the addition of another tax, i.e. the CT, should not be particularly burdensome.
- The third role of the CT is its function as a non-distortionary tax on pure profits, i.e. the return in excess of the normal return.² The part of the CT that falls on pure

¹ As noted by Bird (2002), for many people the most persuasive argument for taxing corporations is that that's where the money is. This is also what Willie Sutton said when the judge asked him why he robbed banks.

² The normal return on capital is also called the hurdle or marginal rate of return, since it is the return at which an investment is just worth undertaking. The normal return is likened to the world rate of interest, adjusted for inflation and risk. In other words, it is the market return received by investors before PIT. By contrast, the above-normal return is defined as the rent that businesses earn; it is called the inframarginal return on investment.

profits is non-distortionary regardless of whether the profit is distributed or retained in the company. In addition, advocates of the new view argue that a tax on distributed profits (normal as well as above-normal) earned by mature companies which can meet their need for equity through retentions is neutral.³

Obviously, these arguments, which are largely compatible, bypass an assessment of the incidence of the CT. In the tax literature, it is argued that in a small open economy, with perfect capital mobility, a source-based tax on the normal return will be fully shifted to local factors, such as relatively immobile labour, consumers and land.⁴ A source-based tax on mobile rents is also likely to be shifted to a very large extent, whereas the burden of a tax on location-specific and hence immobile rents will be fully borne by capital owners. But, it is generally concluded, as long as we cannot be more precise about the CT's incidence, we might as well continue to impose it in one form or another.

1.2 A broader view of the issues

The three functions of the CT have not been universally accepted. The source entitlement principle has been called into question, because it is difficult to view the CT as a proxy for the benefits received from government provided services. Specifically designed, targeted user charges would be more appropriate instruments. Further, it has been argued that all corporate source income, whether paid in respect of equity or debt, should be taken into consideration, particularly since the two sources of finance are largely substitutable. And in line with this: if equity income is taxed on a source basis, why should interest be taxed on a residence basis, or vice versa? Another point is that the taxation of firm-specific rents affects the location decisions of multinational firms. Accordingly, a broader view of the functions of the CT seems called for (Auerbach, Devereux, and Simpson, 2010). The more pertinent questions are: how should the corporate tax base be defined, where should that base be taxed, and what should be the relationship between the CT and the (residual) PIT imposed on shareholders?

- *What is the base of the CT?*

Conventionally, the base of the CT is defined as the profits of the corporation determined on the basis of sound accounting principles, i.e. under the matching rule related costs and gains of doing business are considered on a period-by-period basis. Interest is deductible in computing taxable profits, depreciation charges reflect the costs of using capital equipment, and capital gains are accounted for on a realization basis. This accounting approach differs from the concept of true economic profits, under which profits are computed as the difference between opening and closing wealth (both measured on a current value basis), adjusted for profit distributions. The measurement of true profits, however, is a very demanding design requirement. In practice, it would require that all assets should be re-valued 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.⁵

³ For more on the “new” vs. “old” view of dividend taxation, see below.

⁴ Specifically, the gist of the research summed up by Zodrow (2010) suggests that the corporate tax burden is primarily borne by labour, particularly in the long run.

⁵ For a useful treatment, see Boadway, Bruce and Mintz (1982).

Whatever the case, both under accounting profits and true profits, the normal and above-normal returns on equity are taxed (the normal return to debt-financed investment is not subject to CT, due to interest deductibility). The normal return to equity is not taxed under a CT that takes the cash flow of a business as its base, defined as the amount that remains after capital equipment has been fully expensed (written down immediately) and the deduction for interest has been clawed back. Under a source-based cash flow tax, this base is equivalent to the base of an origin-based value-added tax (VAT) after deducting wages from the difference between sales and purchases. Instead, if the cash flow tax is destination-based, its base is (roughly) equivalent to the base of the usual destination-based VAT minus wages. Under a variant of the business cash-flow CT, but with equivalent result, capital investments would be depreciated in a conventional manner, but, additionally, a presumptive interest charge on the undepreciated basis would be deductible from profits.

- *Where should the CT base be taxed?*

Conventionally, profits are taxed on a source basis, although residual corporate income (dividends and capital gains) is taxed on a residence basis. Also, interest is, in principle, taxed in the country of residence. Source-country taxation would be achieved more fully by not permitting a deduction for interest from taxable profits, and residence-country taxation by permitting a deduction for dividends at corporate level in the source country and allowing a credit for the foreign CT against the tax on capital gains accruing to shareholders in the residence country.

Source country taxation goes by the name of separate accounting or separate entity taxation, because corporations are required to determine their worldwide profits on a country-by-country basis under what is called the arm's length principle. Just like the determination of true economic depreciation and the accrual taxation of capital gains, administratively, arm's length taxation is another extremely demanding design requirement. Equally demanding is the determination of the appropriate debt-equity mix if interest is deductible and dividends are not. These problems tend to be less severe if two or more countries agree to determine the taxable profits of corporations operating in both countries in accordance with formulary apportionment by applying the respective CTs to a common base apportioned on the basis of an agreed formula (generally, comprising sales, payroll and capital). Essentially, this turns the CT into a tax on the factors in the formula with, at the margin, different effects than a traditional profits tax.

- *What is the relationship between the CT and the PIT?*

The questions about the most appropriate CT base and its taxing locus also have implications for the taxation of capital income other than corporate profits. If corporate equity income (and, possibly, interest income) is taxed at the level of the corporation, should dividend income be exempted at the level of the recipient or should there be a second layer of tax in the form of the PIT? Perhaps, the normal return on equity should not be taxed again, but rents might be subject to the PIT as well as the CT. And what about other capital income, such as income from immovable property, should it be taxed at the same rate as equity income? Further, under a business cash-flow tax, should the normal return on non-corporate investments also be exempted, i.e. should an expenditure tax be imposed next to a cash-flow CT? And the question where personal capital income should be taxed is as relevant as it is for corporate equity income. Traditionally, interest

income is taxed on a residence basis, but “final” withholding taxes may be used to introduce a source-country element.

Important, in the context of CT-PIT relationships, is the nature of the PIT rate structure that is applied to capital income. Traditionally, all capital income, other than retained profits, have been joined with labour income and subjected to the same (progressive) PIT rate structure. In recent years, however, capital mobility and tax arbitrage considerations have led to the separation of capital income from labour income. Labour income can then continue to be taxed at progressive rates, while capital income is taxed at a lower, proportional rate, i.e. the CT rate.

1.3 Organisation of paper

This paper focuses especially on CT-PIT relationships, called CT regimes. A distinction is made between CTs that purport to tax the normal return to capital (called income-based CTs) and CTs that confine the base to above-normal returns to capital (called cash-flow based CTs). Income-based CTs are subdivided into conventional CT regimes (Section 2) and schedular income tax systems (Section 3). Conventional CTs are a schedular element in otherwise comprehensively defined income tax systems, which tax all income, from capital and labour, jointly at the same (progressive) rate structure. Under schedular income tax systems, on the other hand, profits along with all other capital income are taxed separately from labour income at different, generally proportional rates. Cash-flow based CTs that confine the base to inframarginal profits, are examined in Section 4. The final section sums up the main considerations that go into the choice of the most appropriate CT and concludes that this should be the dual income tax (DIT), which has been pioneered in the Nordic countries.

2 Conventional Corporation Tax Regimes

As a tax on the return on equity, the CT interacts with the PIT of shareholders entitled to corporate profits. In tax law and theory, this interaction may be denied or explicitly recognized and reflected in the form of the tax. Following a brief overview, this section discusses the classical system, full integration, dividend relief systems, and various ad hoc approaches to the double taxation of profits distributed by corporations.⁶ Generally, the discussion abstracts from open economy considerations.

2.1 Overview

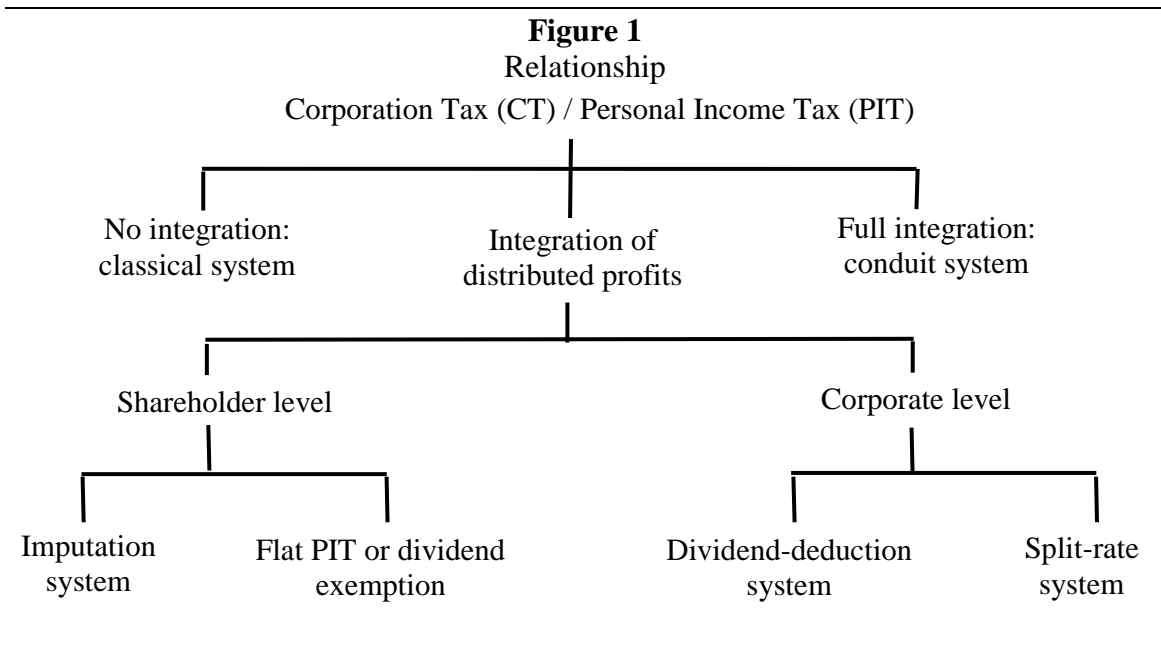
Figure 1 presents the various conventional CT-regimes that can be distinguished depending on whether and to what extent they are integrated with the PIT of shareholders. At one extreme, the corporation is regarded as an entity entirely separate from its shareholders and taxed as such (classical system).⁷ At the other extreme, the

⁶ This section draws heavily on Cnossen (1997).

⁷ The label ‘classical system’ was introduced by Van den Tempel (1970, 7). It should be noted, however, that, contrary to what the terminology suggests, the imputation system, discussed below, is of older date. In the 19th century, some German states already had some form of imputation and in 1922 it was incorporated

corporation is viewed as a pass-through, a conduit, of all corporate equity income of shareholders – distributed as well as undistributed earnings. The CT, if retained, serves solely as a prepayment of the PIT, just like a wage withholding scheme.

In practice, the integration of the CT with the PIT of shareholders is limited to distributed profits, called dividends. This form of partial integration, often referred to as dividend relief, can be achieved either at the shareholder level or at the corporate level. At the *shareholder* level, dividend relief can be provided systematically (i.e. proportionate to the marginal PIT rates of shareholders) under the imputation system, which permits shareholders a full or partial credit against their PIT for the CT that can be imputed to the dividends, grossed-up by the tax credit, received by them. Alternatively, dividend relief can be provided in an ad hoc manner at shareholder level by taxing dividend income at a flat rate (lower than the highest marginal rate of the PIT) or by exempting the whole or part of the net dividend received by shareholders. The most obvious method of dividend relief at the *corporate* level is to permit a deduction for dividends from taxable profits, as is commonly done for interest. This is called the dividend-deduction system. Another approach that can achieve the same result is the split-rate system, under which a lower rate of tax is levied on distributed profits.



The workings of these forms of CT-PIT relationships are illustrated numerically in table 1 for a corporation whose profits are \$300 before CT. The profits after CT are assumed to be fully distributed and taxed again at the shareholder level at PIT rates of 30% or 50% without or with relief (fully or partially) for the CT that can be imputed to the dividend. Subsequently, the total CT+PIT burden is calculated and expressed as a percentage of the profits before CT. The resulting effective tax rate is then compared with the two nominal PIT rates, and the degree of overtaxation expressed as a percentage of these PIT rates.

as the withholding method in the Model Income Tax Ordinance of the United Kingdom, which was introduced in many colonies. For the classic treatment of the separate entity system, see Goode (1951).

Finally, the degree of tax relief (the reduction of the CT+PIT burden as a percentage of the overtaxation under the classical system) is calculated for each approach.

[Table 1 about here]

2.2 Classical system

Under the classical approach or separate entity system of corporation tax, no deduction for dividends to shareholders is allowed in computing taxable profits. Moreover, those distributions are taxed again in full in the hands of shareholders at rates that differ from one shareholder to another – depending on the amount of the dividend and the shareholders' other income – but that may range from the lowest to the highest marginal rate of the progressive PIT. This phenomenon is called the 'economic double taxation of dividends'.⁸

The workings of the classical system are shown in table 1 (column 2). The profits-after-CT of \$240 are distributed in full and taxed again at the shareholder level at PIT rates of 30% and 50%, respectively, resulting in PIT liabilities of \$72 and \$120, respectively. Combined CT and PIT liabilities are \$132 and \$180. When expressed as a percentage of original corporate equity income, these liabilities translate into effective tax rates of 44% for the 30%-bracket shareholder and 60% for the shareholder whose dividend falls in the 50% bracket. If these effective rates, in turn, are compared to the appropriate marginal tax rate of each shareholder, the dividend income of the 30%-shareholder is 'overtaxed' by 47% and that of the 50%-shareholder by 20%.

However, this is not the only possible outcome. Corporate equity income, if retained, may also be undertaxed compared to the marginal PIT rate of the shareholder. If this would happen, the effective tax rate for both shareholders in table 1 would be 20%. In other words, the 30%-shareholder would be undertaxed by $33\frac{1}{3}\%$, but the 50%-shareholder by 60%. Furthermore, if half of profits after CT would be distributed (perhaps, a more realistic assumption than either no or full distribution), the 50%-shareholder would be taxed at an effective rate of 40%, i.e. undertaxed by 20%, while the 30%-shareholder would still be overtaxed by 7%. In a broader (and more correct) view, therefore, the real issue under the conventional CT-regimes is not that dividend income is taxed twice or that the separate CT exhibits a tax bias in favour of retained profits, but that corporate equity income, distributed as well as retained, is not taxed in accordance with the marginal PIT rates of shareholders.

Proponents of the classical system deny the relevancy of the interaction between the CT and the PIT. They point out that ownership and control functions have been completely divorced from each other in the large public corporation and that managers do not take PITs into account when making investment decisions. Opponents of the classical system, on the other hand, have argued – in my view rightly so – that the CT and the PIT on equity income both enter the wedge between the before-tax return of the corporation and the required after-tax return (the reward for saving) that must be paid to shareholders to induce them to put up their capital. This wedge (and, by extension, the required return)

⁸ For the classic treatment of the double-taxation issue, see McLure (1979).

will vary, depending on the choice of financing (retained profits, new equity, or debt) and the corporation's dividend policy (distribution or retention).⁹ Consequently, the double-tax affects entrepreneurial behaviour and violates the principle that economic considerations rather than tax motives should determine the behaviour of entrepreneurs.¹⁰

The economic distortions of the classical system have not gone unchallenged in the *finance* literature as well as the *public* finance literature (Head, 1997). In the finance literature, Modigliani and Miller (M&M) (1958) have argued that, in the absence of tax and bankruptcy costs, the cost of capital will be independent of the pattern of finance. M&M (1963) further argued that, under a CT with interest deductibility, companies will prefer debt to equity provided the PIT rate on interest income is below the CT rate, and vice versa. Stiglitz (1973) maintained the assumptions underlying the M&M studies and argued that, under the US tax rules prevailing at that time, debt was the preferred marginal source of corporate finance so that the CT would not distort investment decisions due to the deductibility of interest. Moreover, even though the tax system does affect the pattern of finance in the model set up by Stiglitz (1973), this does not generate any loss of efficiency due to the M&M assumptions.¹¹

The second challenge comes from the public finance literature. Under the 'traditional view' of dividend taxation, it is assumed that shareholders derive a positive benefit from receiving dividends. Dividends provide a signal to shareholders that all is well with the company and may limit financial discretion and hence potential misuse of funds by management. Under this view, the PIT reduces the dividend pay-out ratio when the effective PIT rate on dividend income exceeds the effective PIT rate on capital gains on shares. Because investors value dividends, this fall in the pay-out ratio increases the company's cost of finance. By contrast, under the 'new view,' the double taxation of retained earnings (through the personal capital gains tax) does distort corporate investment, whereas a tax on the dividends paid out by mature companies does not.¹² Although the issue is far from resolved, most empirical studies tend to support the traditional view (Zodrow, 1991). 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.

⁹ In addition, the size of the wedge will depend on the business form in which the investment is undertaken (the corporate form or the non-corporate form), the tax status of the recipient of the return (taxable or exempt), and the place of the shareholder's residence (within or outside the taxing jurisdiction).

¹⁰ The "double taxation" of dividends has also been viewed as inequitable, especially regarding low-income shareholders, while it has induced wealthy shareholders to shield their capital income in the corporate form and to reap the return on equity in the form of exempt or lowly taxed capital gains.

¹¹ As noted, these assumptions include the absence of bankruptcy costs and the agency costs of monitoring the firm. In commentaries it has been pointed out that debt brings non-tax costs and non-tax benefits in its train. Non-tax costs arise when debt increases the risk of bankruptcy (Gordon and Malkiel, 1981) and non-tax benefits occur when interest payments reduce business cash flow and thus improve managerial efficiency (Jensen and Meckling, 1976).

¹² For more on the traditional vs. new view debate, see Sinn (1991).

On balance, the economic distortions of the classical system are real, although not as large perhaps as sometimes thought.

2.3 Full integration

The economic distortions caused by the classical CT should not occur in a fully transparent, competitive world in which the corporation tax is fully integrated with the PIT of shareholders. The corporation would then serve as a conduit, a pass-through of corporate equity income, which would be taxed fully at the appropriate PIT rate in the hands of the shareholders. Table 1 (column 3) illustrates the workings of full integration. For PIT purposes, it is irrelevant whether or not a corporation distributes profits and, if so, to what extent. Retained as well as distributed profits are fully taxed according to what has been called the ‘partnership method’, that is, they are allocated in proportion to each shareholder’s holding in the corporation’s equity. The CT is simply a prepayment for the PIT. It follows, of course, that effective tax rates are equal to respective bracket rates; there is no overtaxation.

Full integration is one of the normative implications of the accretion concept of income, as formulated by Schanz, Haig, and Simons (S-H-S-concept).¹³ Its advocates point out that ability-to-pay, being an equity notion, can only be related to natural persons. It follows that if income is chosen as the best index of that ability, the equal treatment rule requires that income should be defined all-inclusively. For tax purposes, there should be no difference between corporate profits or other capital income, such as interest and rental income, or labour income, such as wages and salaries, which is solely subject to the PIT. There is no place, therefore, for an extra tax on distributed profits nor, it should be added, for the preferential treatment of profits retained by the corporation and taxed below the marginal PIT rate of shareholders.

Full integration has been considered by the Royal (Carter) Commission on Taxation (1966) in Canada,¹⁴ the US Department of the Treasury (1977 – *Blueprints*; 1992), and the Campbell Committee (1981) in Australia. Under both the voluntary CT- and PIT-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 by the corporation. To prevent double taxation of retentions, the basis for corporate shares would be written up by the amount of the allocation net of the CT. Profit distributions would be considered repayment of capital up to the amount of the written-up basis; further repayments would be treated as taxable capital gains.

These plans, however ingenious, have never left the drawing board, primarily because they are considered impractical (McLure, 1979; US Department of the Treasury, 1992). In particular, it has been pointed out that delays in completing CT assessments would have repercussions on the filing of shareholders’ PIT returns, that it would be difficult to deal with different types of equity, that an undesirable side-effect might be that

¹³ 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), 33 and 386-388.

¹⁴ For a useful recent discussion of the Carter Report’s proposals and their aftermath, see Collins and Edgar (2013).

preferential income items would be passed through to shareholders, and, last but not least, that shareholders might have to pay additional PIT, although no cash had in fact been received.

Further complications arise when cross-border investments are taken into consideration. Under global, fully integrated CTs, the returns on these investments should be taxed currently on the basis of the residence principle in violation of the source entitlement principle, while a credit for the source country's CT would make the residence country a hostage of the source country's tax policy. Residence countries, moreover, typically cannot enforce compliance in filing the (correct) return of foreign-equity income – especially if the source country does not cooperate and profits are retained in the source country.

In the domestic context, New Zealand's full imputation system used to approximate full integration by setting the top PIT rate of 33% at the same level as the proportional CT rate. As a result, the effective tax rate for top-bracket taxpayers was the same regardless of whether corporate source income accrued in the form of retained profits or dividends (or interest, for that matter). McLure (1979) has called this approach 'integration-by-the-backdoor', because shareholders in low-income brackets will push for profit distribution, while high-income shareholders do not benefit from profit retention. Currently, however, the CT rate is 28%, while the top PIT rate still stands at 33%.¹⁵ As a result, the backdoor has been closed.

2.4 Dividend relief systems

Full integration has been characterized as the search for a perfect solution in an imperfect world. Yet at the same time it has been considered important to eliminate or mitigate the economic distortions of the so-called classical system under which corporate distributions are taxed at the corporate level and again at the shareholder level. As a halfway house to the ideal, various dividend relief systems, reviewed below, are possible under which at least distributed profits are taxed in accordance with the shareholder's marginal income tax rate.

- *Imputation system*

The workings of the imputation system are shown in table 1 (column 4). It is assumed that the intention is to provide dividend relief for all shareholders at a rate of 50% measured against the overtaxation under the classical system. This is achieved by requiring the shareholder to (partly) gross up his or her net dividend of \$240 by one-eighth, representing half of the CT attributable thereto. The grossed-up dividend of \$270 is then added to his or her other income and subjected to the progressive PIT. Next, the gross tax, \$81 or \$135, respectively, is credited with the CT with which the net dividend was grossed up in the first place. The balance represents the net tax payable (or refundable). Imputation, therefore, has the same gross-up and tax credit features as a dividend withholding tax. Moreover, the withholding technique works as an anti-evasion

¹⁵ Excluding the contribution for the Accident Compensation Corporation of 1.45% of corporate profits to finance a New Zealand Crown entity responsible for administering the country's universal no-fault accidental injury scheme. The scheme provides financial compensation and support to citizens, residents, and temporary visitors who have suffered personal injuries.

device because nationals holding stock through nominee accounts do not benefit from the relief.

The tax credit under an imputation system can be expressed, as in table 1 (column 4), as a fraction of the net dividend, indicating the usual legal form of the dividend relief, or as a percentage of the CT, showing the extent to which the double tax is mitigated. The tax credit can also be calculated as a percentage of the grossed-up dividend, representing the comparable tax-inclusive PIT rate. If the latter percentage equals the basic PIT rate a tax assessment is not required if the shareholder's other income is also subject to the basic rate. In table 1 (column 4), the imputation credit of one-eighth of the net dividend equals half of the CT, which equals one-ninth of the grossed-up dividend.

Imputation systems are complicated by the need for a compensatory tax at the corporate level on profits distributed out of exempt earnings which have not been subject to the national CT. In turn, the compensatory tax requires rules for the sequence in which profits are presumed to be distributed, generally on a highest-in-first-out (HIFO) basis. Although the imputation systems are meant to promote profit distributions, the compensatory tax, of course, forms an inducement to retain exempt profits in the corporation in order to minimize the CT liability. Further, rules have to be promulgated on the treatment of inter-company dividends, foreign shareholders and foreign direct investment, and refunds for exempt entities.¹⁶

- *Dividend-deduction system*

The most obvious approach to the double-taxation issue is to permit dividends as a deduction from taxable profits (dividend-deduction system), as is the case with interest. Again, table 1 (column 5) shows its workings. To achieve 50% relief, the same as under the imputation system, one-half of profits marked for distribution should be made deductible in determining taxable profits. It is possible, of course, to vary the degree of dividend relief. A full deduction makes the system equivalent to an undistributed profits tax with which the US briefly, and not altogether favourably, experimented in the 1930s. A small deduction moves the system closer to the classical CT.

Unless the goal is to stimulate equity investment by non-residents, a drawback of the dividend deduction systems is that the relief is automatically extended to foreign shareholders (and exempt entities), who do not pay the (additional) national PIT incurred by domestic shareholders.¹⁷ To prevent this, a dividend withholding tax could be

¹⁶ For a more detailed review of these schemes, see Cnossen (1997). Imputation systems used to dominate the CT picture in the European Union (EU), especially in the 1970s and 1980s. Over time, however, they were regarded as overly complicated, while their cross-border implications were held to be discriminatory. Thus, in *Manninen*, the European Court of Justice (2004) held that the Finnish imputation system violated the free movement of capital principle laid down in Article 56 of the EC Treaty. The imputation tax credit was not available to dividends received from foreign corporations. Hence, the Court argued, this deterred taxable persons in Finland from investing in other member states. Finland could remedy the situation by also allowing the credit for foreign dividends, but then it would be giving relief without having collected any tax in the first place.

¹⁷ The US Department of the Treasury (1984) included a proposal for a 50 percent deduction (later reduced to 10 percent) for dividends paid. Interestingly, the automatic extension of the benefit to non-residents was seen to be positive, because the resulting increase in the incentive for inward foreign investment would help finance the US deficit on current account.

introduced (or increased), which would make the dividend deduction system equivalent to an imputation system. Without a withholding complement, the dividend deduction system would jeopardize the effective, one-level taxation of distributed profits. A final objection against the dividend-deduction system is that the CT cannot serve as a means of verifying the correct return of dividend income for the PIT.¹⁸

- *Split-rate system*

Under the split-rate system, distributed profits are taxed at a lower rate than retained profits. Table 1 (column 6) provides an illustration of the split-rate system that taxes distributed profits at a lower rate of 10% (and retained profits at 20%). As under the imputation system and the dividend-deduction system, the dividend relief is 50% compared to the degree of overtaxation under the classical system. Of course, if the rate differential is small, the split-rate system resembles the classical CT, and if the differential is large it again becomes an undistributed profits tax.

A disadvantage of the split-rate system (without a withholding tax complement) is that foreign parent companies with domestic subsidiaries can avoid the higher rate on retained profits by first distributing the subsidiary's earnings and then channelling them back as equity for reinvestment purposes.

- *Equivalency of dividend relief systems*

As shown in table 1 (columns 4-6), all of the three forms of dividend relief can provide the same degree of tax relief expressed as a percentage of the classical degree of overtaxation. In other words, the effective tax rate on distributed corporate profits is the same. In general, this finding holds if:

- (a) the CT rate on undistributed profits under the split-rate system is the same as the uniform CT rate under the dividend-deduction system and the imputation system;
- (b) the net dividend under the split-rate system and the dividend-deduction system is the same as the grossed-up dividend under the imputation system; and
- (c) the CT rate on distributed profits under the split-rate system is equal to $t(1 - q)$ under the dividend deduction system and also equal to $t(1 + r) - r$ under the imputation system, in which t is the uniform CT rate under the dividend-deduction system and the imputation system, q is the dividend deduction as a proportion of the profits before CT and the dividend deduction under the dividend-deduction system, and r is the tax credit as a proportion of the net dividend under the imputation system.¹⁹

¹⁸ Interestingly, in the 1980s, a deduction for dividends paid on *new* share issues received strong support from proponents of the new view, particularly in the US. For instance, Andrews (1979), reporting for the American Law Institute, proposed a limited deduction (determined by applying a risk-free rate of interest) for dividends on new equity, as well as a corporate excise tax on redemptions. Warren (1981, 1991), however, argued that the proposal would not be feasible and concluded that the imputation system was 'preferable in theory and workable in practice.'

¹⁹ For the mathematical proof of the equivalency, see Cnossen (1984).

The most important assumption underlying this result is that payout rates are not affected by the choice of the dividend relief system. This will be the case if corporate managers attach equal weight to taxes at corporate and shareholder level. If they would consider the tax saving at the corporate level more important, then the payout rate under the split-rate system and the dividend-deduction system might be higher than under the imputation system. Further, it is assumed that shareholders under all dividend relief systems are subject to the same average marginal PIT rates weighted in proportion to the total shares outstanding held by each shareholder.

2.5 Ad hoc approaches

Under less structured forms of dividend relief, net dividend income is taxed at a flat PIT-rate in the hands of shareholders, lower than the top marginal PIT rates. Table 1 (column 7) shows the arithmetic of a separate low flat PIT of 43.75%. Clearly, an objection to these forms of dividend relief is that the benefit is distributed regressively with respect to income. A dividend relief from classical overtaxation of one-half for the shareholder in the 50% bracket corresponds to a negative relief of *minus 77%* – in other words, an additional tax of 25% for the 30% PIT bracket shareholder compared with the classical system. Essentially, the goal of dividend relief (the prevention of double taxation) conflicts with the objective of progressivity (tax that rises proportionately faster than income rises). The effect can be mitigated but not eliminated by permitting an exemption equal to one-eighth of the net dividend (column 8). Again, this provides 50% relief to the 50% PIT bracket shareholder, but the 30%-shareholder would then still be overtaxed by 37%.

In spite of these objections, the ad hoc approaches are widely found in OECD member countries.

3 Schedular Income Tax Systems

In a small open economy with perfect capital mobility, any source-based tax on the normal return to capital will be fully shifted onto domestic immobile factors of production through an increase in the pre-tax rate of return required by investors. In this situation, it is simply inoptimal for a small economy to levy any amount of source-based tax on the normal return. In practice, however, corporate capital (real investment) is not perfectly mobile, but the degree of international mobility is high, and this is a key argument for keeping any source-based tax low, absent international tax coordination. Furthermore, capital market innovation in conjunction with tax arbitrage implies that it is not feasible to tax capital income effectively at high progressive rates. If for revenue and distributional reasons, it is not possible to lower the top PIT rate to the level of the lower CT rate, the obvious solution therefore is to tax capital income on a schedular basis. Basically, two variants have been developed that embody this philosophy: the dual income tax (DIT, for short) and the comprehensive business income tax (CBIT, for short).

3.1 Dual income tax (DIT)

The main features of a pure DIT are the following.²⁰

(a) *Income split* All income is systematically separated into either capital income or labour income (also called earned income or personal income). Personal capital income includes interest, dividends, capital gains, imputed returns on capital invested in non-corporate businesses, rents and rental values. Labour income consists of wages and salaries (including the value of the 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 capitalized).

(b) *Tax rates* Capital income, individual as well as corporate, is taxed at the proportional CT rate, while labour income is subject to additional, progressive PIT rates. To minimize tax arbitrage, the tax rate on labour income applicable to the first income bracket is set at the same level as the proportional CT rate.

(c) *Costs of earning income* Costs of earning income are deductible only against income subject to the capital income tax rate (which is the same as the lowest rate on labour income). This implies that mixed expenses, containing an element of personal consumption, have the same tax value for high- and low-income groups.²¹

(d) *Basic allowance for capital income* Capital and labour income can be taxed entirely separately, or the two forms of income can be taxed jointly at the CT rate, while gross labour income is subsequently taxed at additional, progressive PIT rates. The separate taxation of capital income (which accrues mainly to higher-income groups) without permitting a basic allowance makes it possible to impose flat final source taxes.

(e) *Offset of negative capital income against labour income* Joint taxation at the capital income tax rate permits the offset of negative capital income against positive labour income, which may be desirable since the distinction between labour and capital income tends to get blurred at the level of proprietorships and closely-held companies. Accordingly, business profits of unincorporated businesses and closely-held companies do not have to be split into a labour and a capital income component if their total does not exceed the upper limit of the first labour income tax bracket. If capital and labour income are taxed separately, the same effect can be achieved by permitting a tax credit for negative capital income (calculated at the capital income tax rate) against the tax on labour income.

(f) *CT-PIT integration method* The double taxation of distributed profits at the

²⁰ For a review and evaluation of the economic and technical aspects of the dual income tax on which this section draws, see Cnossen (2000) and Sørensen (2010). For earlier analyses, see Sørensen, ed. (1998). The DIT was pioneered in Denmark in 1987, but subsequently the country strayed from the DIT path by moving some way back to a comprehensive income tax.

²¹ This does not apply to partnerships and proprietorships, however, in whose case the mixed expenses are netted out against profits before these profits are split into a capital and a labour income component (see below). Accordingly, this feature discriminates against costs incurred in earning only labour income.

corporate level and the shareholder level can be avoided through a full imputation system. Alternatively but equivalently, double taxation can be avoided by exempting dividend income at the shareholder level. Under either approach, compensatory taxes should guarantee that dividends are not paid out of exempt profits without having borne the CT. Double taxation of retained profits is avoided by writing up the acquisition cost of shares by retained corporate profits net of CT.

(g) *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. Consequently, these rates could represent the final tax liability if capital income is taxed separately from labour income and no basic allowance applies.

(h) *Unincorporated businesses and closely-held companies* The taxable profits of partnerships and proprietorships as well as closely-held corporations, conventionally computed, consist of capital and labour income which accrues jointly. These profits are split into a capital income component and a labour income component (if the sum of the two components exceeds the first bracket of the labour income tax), and taxed on a current basis.²² The capital income component is calculated by applying a presumptive return to the value of the gross assets of the business or to equity. Residual profits are considered as labour income.²³

Generally, the presumptive rate of return is set at the level of the hurdle rate of return (the return at which marginal investments are still worthwhile), that is, the nominal return on medium-term government bonds plus an entrepreneurial risk premium. The amount of the presumptive return can then be calculated by applying the rate to the value for tax purposes of all business assets, called the gross method, or to the equity capital (the value of all assets minus liabilities), referred to as the net method.²⁴ As explained by Sørensen (2010), the choice between the two methods is largely a choice between investment neutrality and minimizing opportunities for tax arbitrage. Tax arbitrage is less of an issue under the gross method, because the presumptive rate of return is applied to a base that is not influenced by the financing structure of the business. In contrast to the net method, however, the gross method encourages investments by unincorporated businesses and

²² This scheme avoids most of the deferral and lock-in effects of the tax that various countries 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.

²³ Interestingly, Iceland determines labour income first based on administratively set minimum wages and considers the remaining profits as capital income. Comparing Iceland's approach to the usual method, Matheson and Kollbeins (2012) conclude that a switch could increase revenue in a generally progressive manner.

²⁴ Under the gross method, the presumptive return is reduced by the interest actually paid to calculate taxable net capital income. The gross return, furthermore, is subtracted from total profits (increased by the interest actually paid) to calculate taxable labour income. Under the net method, in contrast, presumptively determined capital income is subtracted directly from net profits (i.e. net of interest actually paid) to ascertain taxable labour income.

closely-held companies if the government sets the presumptive rate of return above the going interest rate.

(i) *Net wealth tax* If it is considered desirable to tax the ex-ante capital income of residents differentially higher than the ex-ante income on foreign-held stocks and bonds, then a net wealth tax could be imposed on privately-held assets net of liabilities. Owners of wealth are less mobile than wealth itself.

The most contentious issue under the DIT is the distinction between “passive” owners (financing a business but not involved in running it) and “active owners” (owning the business as well as managing it) of closely-held corporations. Obviously, only the profits accruing to active owners has to be split into a capital income component and a labour income component. This difficulty was the main reason why Norway gave up the income-splitting system for closely-held corporations and moved to a system with a rate-of-return allowance (see below) for all shareholders.

3.2 Comprehensive Business Income Tax (CBIT)

The hole in the DIT is the inadequate taxation of interest (and royalties) which is deductible at corporate level, not taxable if accruing to foreign debt holders or exempt entities, and possibly not included in the PIT return of foreign recipients. This hole is plugged under the Comprehensive Business Income Tax (CBIT), proposed by the US Department of the Treasury (1992), which treats interest on par with dividends by not allowing a deduction at corporate level in conjunction with an exemption for both income items at the level of the recipients, be they individuals, corporations or exempt entities.²⁵ This makes the debt-equity distinction irrelevant, and greatly reduces the distinction between retained and distributed profits (depending on the treatment of capital gains). In the US version of the CBIT the rate would be set at the same level as the top PIT rate, so that the business income tax would serve at the final withholding tax on dividend and interest.²⁶ Extending the CBIT to proprietorships and partnerships – more difficult to achieve – would also make the distinction between corporations and non-corporate entities irrelevant for tax purposes.²⁷

The CBIT can be introduced while largely maintaining the current 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 corporations. They would not be eligible for a refund of the CBIT, nor would they have to pay an additional CBIT in the form of a withholding tax or otherwise. Corporations

²⁵ CBIT is similar to a dual imputation system, which treats interest the same as dividends. In other words, interest is not deductible at corporate level, but debt holders are permitted a tax credit for the underlying CT against their PIT (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 corporate profits, but it would be subject to a withholding tax at a rate equal to the CT rate.

²⁶ This alignment of the CBIT rate with the top marginal PIT rate contrasts with the alignment of the capital income tax rate under the DIT with the lower bracket rate of the labour income tax.

²⁷ For probing comparative analyses and evaluations of the DIT, CBIT, as well as an ACE-system (see below), see Sørensen (2007), and Radulescu and Stimmelmayer (2007).

receiving CBIT income simply would not be taxable on such income. To ensure that dividends and interest are not paid out of exempt earnings, a compensatory tax (familiar from imputation systems) 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 corporation's retained profits net of 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 relatively high tax burdens, as would tax haven countries, but new, growing firms, would be taxed less heavily. The CBIT would eliminate the incentives for thin capitalization and the bias against profit distributions. The CBIT is equivalent to a DIT with a final withholding tax on interest payments by businesses. Such a withholding tax could be introduced gradually and pave the way for greater source-based tax coordination. Unlike the DIT, the CBIT has not been introduced in any country, presumably because of its effective taxation of all interest whether paid to domestic or foreign bondholders.²⁸ A further difficulty with the CBIT is that it would require a special tax regime for banks and other deposit-taking financial institutions whose income mainly consist of the difference between interest on money lent and interest on money borrowed – unless one wants to relieve the financial sector of almost the entire CT.

4 Cash-flow based Corporation Taxes

The previous CT systems all tax the opportunity cost of capital – often referred to as normal profits. This implies, however, that the level of saving and investment continues to be below the level that would obtain if there were no taxes on capital income. If it is considered desirable that the CT does not interfere with the level of economic activity, only 'pure profits' or 'economic rents' should be taxed. In the literature, a tax on the pure profits of an investment is associated with cash-flow taxation.²⁹ Under the so-called R-based cash-flow tax, corporations 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, the return on marginal investments, just making a viable economic return, would be not be taxed.³⁰

²⁸ For a discussion, see Collins and Edgar (2010). A similar fate seems to fall on the Business Enterprise Income Tax (BEIT) proposed by Kleinbard (2007). The BEIT entails a cost of capital allowance (COCA) for both equity and debt at business level equal to a normal rate of return. This allowance would be taxable at the level of investors, while above-normal returns would be taxed at business level. For a critique of the BEIT, see Warren (2008) and Collins and Edgar (2010).

²⁹ The Meade Committee (1978) has shown that 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.

³⁰ This would ensure investment neutrality because the government would share symmetrically in all gains and losses under unlimited loss carry-forward and backward provisions. For arguments why cash flow taxation has economic and administrative advantages over a conventional income tax, see McLure and Zodrow (1996).

4.1 Allowance for corporate equity (ACE)

The allowance for corporate equity (ACE) is the best known cash-flow tax on this side of the Atlantic.³¹ The ACE system purports to tax pure profits and pure profits only by providing a deduction from profits, conventionally computed, equal to the product of ‘shareholders’ funds (generally, the corporation’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 inframarginal investments.

Proponents of the ACE allowance³² point out that in present value terms the base of the CT would be 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 would result in a lower amount of shareholders’ funds and hence a lower allowance and vice versa. Second, both corporations 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.

Undoubtedly, the ACE system has attractive neutrality properties. The neutrality conditions, however, are met only if capital markets are perfect. Further, if dividends continue to be taxed under PITs, the ACE system would favour retentions even more strongly over distributions than do partial integration systems. In effect, the ACE system would simply be another form of dividend relief, akin to the dividend-deduction system, but this time confined to a form of primary dividend. To be fully neutral, the ACE system requires the transformation of the PIT into a personal expenditure tax, which exempts all forms of capital income.³³ Under current PITs, the ACE allowance erodes the source entitlement principle. The ACE allowance might be given consideration if express or tacit coordination on taxing capital income cannot be achieved, yet the existing bias against equity is a serious problem.³⁴

³¹ The allowance-for-equity system was conceived by Boadway and Bruce (1984), and given hand and feet by the Institute for Fiscal Studies (1991).

³² See Devereux and Freeman (1991), and Gammie (1991).

³³ Indeed, this kind of reform was recommended by the IFS Capital Taxes Group (1989) in the form of an extended personal equity plan.

³⁴ Belgium exempts the normal return from CT in the form of an ACE, called “notional interest on corporate capital.” The interest is set at the rate payable on 10-year government bonds issued in the previous year; presumably, this rate approximates the normal rate of return on capital. The rate – 2.63% in 2014 but 3.13% for SMEs – is applied to the corporation’s “risk capital,” i.e. its equity shown on the balance sheet. Belgium introduced the ACE system to stimulate the self-financing capability of corporations. In an analysis of the Belgian system, Aus dem Moore (2013) shows that the expected reduction in leverage is confined to large firm. For some time, Croatia had an ACE system (Keen and King, 2002).

In comparing the ACE system with the CBIT, Bond (2001) posits that in a world with increasing mobility of physical capital, the user cost of capital may no longer be the only route through which the CT influences the level of domestic investment. If, as is likely, multinational companies dominate in the earning of economic rents, their discrete location decision would also be influenced by the statutory rate or, more precisely, the Effective Average Tax Rate (EATR) which can be shown to be a weighted average of the statutory tax rate and the Marginal Effective Tax Rate (METR). Under an equal-yield assumption, the statutory rate would have to be higher under the ACE tax, which would distribute corporate tax payments towards relatively profitable companies. By contrast, a lower-rate CBIT would leave profitable multinational companies with lower tax bills. In this situation, a government in an open economy may achieve a higher level of domestic investment by lowering the statutory rate and accepting a broader tax base, even though this results in a higher cost of capital. In a broader and more probing analysis, De Mooij and Devereux (2010) argue that a combination of ACE and CBIT reforms can be designed to be revenue neutral and welfare improving through smaller financial distortions.³⁵

4.2 Mirrlees Review

The extension of the ACE to non-corporate investments is being achieved under the Mirrlees Review's (2012) proposal of a Rate of Return Allowance (RRA) for all capital income; in other words, a reduction of the gross rate of return on all investments in whatever form with a normal rate of return equal to, say, ACE.³⁶ Clearly, the RRA transforms the CT/PIT into an expenditure tax or VAT (see below) which does not tax the normal return either but only the above or inframarginal return, also called business cash flow. This makes the VAT (abstracting from exemptions and differentiated rates) a neutral tax which does not influence the intertemporal consumption choice and hence the decision to save or invest now or in the future. As the Mirrlees Review points out, above-normal returns can be taxed progressively since doing so does not influence savings and investment behaviour.

The goal of neutral capital income taxation can also be achieved by what the Mirrlees Review, following the US Department of the Treasury (1977), calls the *Exempt/Exempt/Taxed* (EET) method and the *Taxed/Exempt/Exempt* (TEE) method. The EET-method exempts savings out of current income as well as the return on the savings, but taxes withdrawals in full. This is the treatment that applies to savings for retirement purposes, such as pensions, for instance. The second approach can be likened to the tax treatment of durable consumer goods, such as cars and houses: the savings for the purchase are taxed, but the return is not subject to the PIT and neither is the sale.

On the assumption of a constant PIT rate and a constant rate of interest (= discount rate), the present value of the tax payments and disposable incomes, separately and jointly, will be the same under both methods. But if these assumptions are relaxed, the TEE method

³⁵ For the UK, the Mirrlees Review has shown that the adoption of ACE financed by a base-broadening of the VAT (food and shelter are exempt in the UK) results in an increase of investment with 6.2% and of wages with 1.7%. Further, employment would increase with 0.2% and GDP with 1.4%.

³⁶ For a detailed proposal to move the current Canadian corporate tax to a rent-based tax, see Boadway and Tremblay (2014).

has the disadvantage that above-normal returns (as reflected in capital gains) are not taxed. The drawback of the EET method is that it is rather sensitive to changes in tax rates which may influence savings propensities. The deduction of an ACE or RRA at the business or individual level does not suffer from these shortcomings. But the problem with these allowances is that they have to be set by government (and are thus subject to pressure by lobby groups) and that the relating assets have to be monitored (Auerbach, 2012).

In practice, the choice for one of these three approaches (ACE/ RRA, EET, TEE) will depend on the kind of asset that is being taxed. ACE seems to be the method of choice to ensure investment neutrality at the business level, while EET, TEE and RRA make it possible to achieve approximate equal treatment at the level of the individual with respect to: (a) pensions (EET: contributions and returns of pension funds exempt from tax but payouts taxed; (b) savings deposits (TEE: taxed when deposits are set aside out of income, but interest and withdrawals exempt under the assumption that deposits do not generate above-normal returns); and (c) investments in shares, bonds and real estate (RRA: taxed when savings are made, returns (including capital gains) that exceed the normal return taxed (taking into account the CT that has already been levied in the case of shares), sales exempt. Under the Mirrlees proposal, the exemption of the normal return paves the way for the integration of the PIT (including capital income) and social security contributions without income ceilings.

4.3 Flat tax

Cash-flow taxation is also achieved under the subtraction-VAT type of origin-based direct tax, which has been proposed in the US (Hall and Rabushka, 1995) in replacement of the current PITs and CTs. Under the 'flat tax,' value added, consisting of wages and business cash flow, is determined by deducting purchases (including investment goods) from sales. Subsequently, wages are deducted and taxed separately at the employee's level, permitting a basic exemption (and effective progressivity). Again, only pure profits would be taxed; the return on marginal investments would be exempted. The flat tax is attractive politically, because businesses will view it as a tax on consumption or wages, while consumers or employees will consider the business cash flow component as a tax on business. 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. The flat tax would also have to consider the treatment of the return on individually held assets, such as real estate.

5 Which Way Forward?

The previous sections have shown that there is quite an array of CT/PIT regimes to choose from. This section sums up the major pros and cons and argues that the DIT probably is the preferred regime.

5.1 Resume of major considerations

Summing up the previous arguments, corporate source income consists of the return on equity (retained and distributed profits) and the return on debt (interest). The return on equity consists of the normal or hurdle rate of return, which the entrepreneur earns on his

marginal investment, and the above-normal or inframarginal return, which can be attributed to favorable head starts, patents, inventions, or some form of natural monopoly – in other words, entrepreneurial advantages not enjoyed by competitors. The normal return equates to the inflation- and risk-adjusted world rate of interest.

Traditionally, the return on equity is taxed in full at the corporate level, while a deduction from taxable profits is permitted for interest. There is agreement in the tax profession that the above-normal return on corporate equity should be taxed (since this does not influence behaviour), but no agreement on the taxation of the normal or hurdle rate of return on capital (which reduces the overall level of investment), whether equity or debt. Accordingly, a distinction can be made between income-based forms of CT, which include the normal return in the tax base, and cash-flow forms of CT, which confine the tax base to above-normal returns or pure profits by permitting the immediate expensing of investment but not allowing a deduction for interest.

Both income-based and cash-flow based systems must face the consequences of the interaction between the CT (which may or may not include the normal return in the tax base) and the PIT (which may double tax the normal return or undo the exemption under the CT cash-flow tax). Under the income-based CT system, the double taxation of distributed profits can be prevented by grossing-up net dividends with the CT attributable thereto (imputation system), by permitting a deduction for dividends paid (dividend-deduction system) or, yet, by not (or partially) taxing these dividends at corporate level (split-rate system). Further, double taxation of retained profits subject to capital gains tax at shareholder level can be prevented by permitting shareholders to write up the base of their shares with the amount of retained corporate profits net of CT attributable to their holdings. Under a schedular approach, corporate source income along with other capital income is taxed separately from labour income under the DIT, or no deduction is allowed for interest at the corporate level under the CBIT, while this interest is not taxed at the level of the recipient.

Taxation of the normal return on equity (interest already being deductible) can be prevented under cash-flow forms of CTs by allowing a deduction from corporate profits, conventionally computed, of a presumptive rate of interest on equity under the ACE system. The same result would be achieved under a flat tax, which permits the deduction of wages (subsequently individualized) from value added, and thus only taxes business cash flow (as does a VAT, in addition to wages). Cash-flow forms of CT must be extended to PITs if the ACE credit is not to become a discriminatory form of taxing retained profits at a lower rate than distributed profits or other forms of capital income. This can be achieved comprehensively under a personal expenditure tax whose base is confined to consumption or an ACE-equivalent RRA at individual level as proposed by the Mirrlees Review.

5.2 What is the preferred CT-regime?

Nearly all CT/PIT regimes in the OECD area tax the normal return on capital either on a source basis through the CT or on a residence basis under the PIT (OECD, 2014). These country practices find support in the tax literature, which has argued that the optimality arguments for not taxing the normal return on capital do not appear to be persuasive if bequests are not taxed and present and future consumption are not weakly separable

(Salanié, 2003). Further, it is pointed out that the distortion on account of the taxation of the normal return is small and that market imperfections may make the taxation of capital income attractive. Also, capital income could be a proxy for human capital which is not taxed (Nielsen and Sørensen, 1997) or a substitute for an age-dependent tax on labour income (Jacobs, 2013). Banks and Diamond (2010) argue that taxing capital income reduces wealth accumulation and so encourages labor supply (because leisure is a normal good).

Reviewing the arguments, the following more or less practical considerations seem to dominate the choice of the most appropriate CT regime (Zodrow, 2006).

- The CT rate applicable to corporate source income, as well as other capital income, should be moderate and uniform. A moderate rate is favorable to highly mobile international capital, yet taxes firm-specific and especially location-specific rents.
- A moderate but uniform rate reduces distortions of the form in which business is conducted (proprietorships, closely-held or publicly-held corporations), how the business is financed (equity or debt) and which payout policy (dividends or profit retention) is pursued. The moderate rate should reduce the lock-in effect of a tax on realized capital gains and make adjustments for the effects of inflation less urgent.
- The uniform rate should make tax arbitrage less attractive, because the tax saving is smaller from converting highly taxed income (dividends, for instance) into lowly taxed income (capital gains, for instance – even when abstracting from the tax deferral aspect). International tax avoidance activities, such as the manipulation of transfer prices, would be less lucrative.
- Moderate taxation minimizes clientele effects that occur under a progressive capital income tax, which induces high-income earners to specialize in holding assets whose returns accrue in tax favoured forms. These effects distort ownership patterns. Further, patterns of saving and investment are distorted under a progressive capital income tax if a large portion of private savings is channelled into tax-favoured investments (owner-occupied housing and retirement savings accounts), but other forms of capital income are taxed highly.
- Capital income should be taxed separately from labour income, so that it is not held hostage to the high, progressive PIT (including social security contributions) on labour income. In fact, a separate capital income tax provides governments with an additional policy tool to respond to changes in international capital mobility and the tax policy of other countries.
- The taxation of corporate profits allows the use of the treasury-transfer argument (meaning that the exemption of corporate profits would favour the treasury of the recipient's country if that country taxes the return in full) and maintains the backstop function for the personal income tax (by discouraging the use of the corporate form to shelter labour income from the higher PIT).

- Preferably, the taxation of corporate source income in individual countries should be in line with foreign tax regimes and attuned to business and accounting practices.

These considerations point towards a DIT or a CBIT which is a DIT with a final withholding tax on interest at the corporate level fixed at the CT rate.³⁷ CBIT's drawback is that it increases capital costs and dampens debt-financed (foreign) investment. By contrast, actual DITs do not tax the interest on inbound capital, which does not seem advisable in the absence of international coordination. DIT also seems to have the edge since it includes capital income other than business profits more obviously in its base. A major advantage, too, is that there is actual experience with it, as described below.

5.3 Experience with DIT in the Nordic countries

In the early 1990s, the DIT was successfully introduced in Norway, Finland and Sweden.³⁸ As shown in table 2, corporate profits and other capital income are taxed at the same rate in Norway, but other capital income is taxed somewhat higher in Finland and Sweden. The labour income tax rates are progressive in all three countries and include local taxes, social security contributions if not deductible from income, and church taxes, if applicable. Finland and Sweden tax capital and labour income entirely separately, permitting the imposition of flat final source taxes, as is actually done in Finland. In Norway, the two forms of income are taxed jointly at the CT rate, enabling the application of basic allowances to both kinds of income. No tax is withheld on interest paid on inbound capital or on royalties paid on foreign patents. Only Norway imposes a net wealth tax.

[Table 2 about here]

The most interesting features concern the treatment of corporate profits, distributions and retentions, and that of closely-held companies and unincorporated businesses. In Norway, the double taxation of profit distributions of publicly-held companies used to be prevented under a full imputation system. To prevent the double taxation of retentions, the cost base of shares was stepped up by corporate profits net of CT for capital gains tax purposes. But in the course of the years it was argued that there was no economic reason for mitigating the double tax on above-normal returns on capital. Accordingly, Norway introduced the "shielding method" in 2006 (in other words, a RRA) under which only the normal return on capital, called the risk-free return, is exempt from the additional PIT (see Sørensen, 2005).

The risk-free return is calculated by applying a fixed interest rate (equivalent to the after-tax return on 3-months government bonds) to the cost base of shares. The risk-free return is deductible in calculating the amount of dividends and capital gains, if realized, subject

³⁷ These and other arguments can also be found in Brooks (2007), who notes that the inequity of a low rate DIT can be mitigated by the enactment of a gift and estate tax [or the imposition of a net wealth tax].

³⁸ For an update on developments in Norway, see Christiansen (2004) and for an analysis of the Finnish system (OECD, 2008).

to PIT. Unused risk-free allowances are added to the base for calculating future allowances. In this way, unused allowances are effectively carried forward with interest and tax is levied only on realized income exceeding the accumulated sum of unused allowances. These rules are important for the neutrality properties of the system. Further, interest and royalties are subject to the capital income tax rate. So is the imputed return on the value of privately-held immovable property, but there is no tax on the imputed rental value of owner-occupied housing. Generally, therefore, Norway does not distinguish between capital and labour income, but between the normal return on capital (which is taxable at the capital income tax rate) and all other income.³⁹

As pointed out by Sørensen (2010), imposing an additional layer of tax on above-normal returns eliminates the incentive for income shifting under the DIT in a manner that does not distort investment incentives. As a result, the current Norwegian treatment obviates the need to make a distinction between active shareholders (earning labour income in addition to receiving dividends) and passive shareholders in closely-held companies, which had become a contentious issue (Alstadsaeter, 2007).⁴⁰ Since the capital income tax is confined to normal returns, generally, the ‘shareholder income tax’ is neutral with respect to investment and financing decisions and does not induce shareholders to postpone realization of their shares (lock-in effect) in order to defer capital gains tax, even though the tax is levied only on realization. The weakness of the Norwegian shareholder income tax is that it does not allow full loss offsets in all circumstances. This may deter risky investments in innovative activities.⁴¹

Finland permits a basic exemption of 15% for dividend income at the level of holders of quoted shares and taxes the remaining profit distribution as well as realized capital gains at the capital income tax rate of 30/32%. The distinction between quoted and unquoted shares obviates the need to separate closely-held companies from publicly-held companies. On the other hand, Sweden requires active shareholders who own and manage their closely-held company to divide profits into a capital and a labour income component. Interestingly, unincorporated businesses in Sweden are taxed under the fence model, that is, the labour income tax applies only withdrawals. Table 2 has some details.

6 Concluding Comments

On the basis of a review of various CT+PIT-regimes, this paper concludes that the DIT is to be preferred. It is best attuned to the reality of capital mobility and is not held hostage by the tax on labour. Levied at a uniform, flat rate, it minimizes opportunities for tax arbitrage.

³⁹ See Kleinbard (2010), who notes that Norway now has flat tax on all income combined with a progressive surtax on gross labour income.

⁴⁰ It still is for Finland, as shown by Pitttilä and Selin (2011). The distinction between labour and capital income is still relevant for unincorporated businesses, but only if the sum exceeds the first bracket of the labour income tax schedule.

⁴¹ Interestingly, the Mirrlees Review (2010) proposes to exempt the normal return through a RRA, while the Norwegian DIT taxes it, albeit at the lower capital income tax rate.

Norway has the most consistent and neutral version of the DIT by making a distinction between the normal return on capital and all other income.⁴² Other countries have also introduced DIT elements in their tax systems as the overview by Eggert and Genser (2005) and Genser and Reutter (2007) shows. Thus, Austria, Belgium and Italy levy final flat rate withholding taxes on capital income, while the Netherlands and Greece tax capital income presumptively or exempt dividend income from PIT. The German Council of Economic Experts (2003), Sinn (2004), and Spengel and Wiegard (2004) have proposed variants of the DIT for Germany. Keuschnigg and Ditz (2007) did so for Switzerland and Griffith, Hines and Sørensen (2010) touch on the issues in the Mirrlees Review. Kleinbard (2010) provides a very thorough analysis of the DIT in the US context.

The case for introducing a DIT in Canada has been made by Sørensen (2007a) who emphasises that the lower rate on capital income would strengthen incentives for saving and investment. As a first step, he suggests that a separate low flat tax rate could be imposed on personal capital income, but without including imputed returns to business assets of the self-employed in the base. Following, and after considering the various methods of income-splitting that are found in the Nordic countries, the self-employed could be given the option to include an imputed return to their business assets in the capital income tax base. Further, the flat rate on capital income should be aligned with the CT rate to promote consistent taxation of all returns to capital. Specifically, nominal capital gains should be taxed in their entirety and the imputation system could be abolished. Collins and Edgar (2010) briefly discuss the DIT that Sørensen (2007a) suggests for Canada, but a full treatment has not yet been undertaken. Will Neil Brooks pick up the gauntlet?

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⁴² Income from immovable property forms an exception to this rule, since it is taxed at progressive rates if privately held.

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Table 1. Forms of Corporation Tax (in CAN\$ unless otherwise indicated)

Form of CT	Classical system		Full integration		Dividend relief systems						Schedular approaches			
					Imputation		Dividend deduction		Split CT rate		Lower, flat PIT rate		Dividend exemption	
Degree of CT-PIT integration (CT = 20%) (1)	None (2)		Full (3)		$\frac{1}{8}$ of net dividend (4)		50% of profits before tax (5)		10% CT on distributions (6)		43.75% PIT on dividend (7)		$\frac{1}{8}$ of net dividend (8)	
A. Corporate level														
1. Profits before CT	300		300		300		300		300		300		300	
2. Dividend deduction							150							
3. Net profits							150							
4. CT	60		60		60		30		30		60		60	
B. Shareholder level														
5. PIT rate	<u>30%</u>	<u>50%</u>	<u>30%</u>	<u>50%</u>	<u>30%</u>	<u>50%</u>	<u>30%</u>	<u>50%</u>	<u>30%</u>	<u>50%</u>	<u>30%</u>	<u>50%</u>	<u>30%</u>	<u>50%</u>
6. Net-of-CT dividend	240	240	240	240	240	240	270	270	270	270	240	240	240	240
7. Imputed CT			60 60		30 30									
8. Grossed-up dividend			300 300		270 270									
9. PIT	72	120	90	150	81	135	81	135	81	135	105	105	63	105
10. Credit for imputed CT			60 60		30 30									
11. Net PIT			30 90		51 105									
C. Combined tax burden														
12. Total tax	132	180	90	150	111	165	111	165	111	165	165	165	123	165
13. Effective tax rate	44%	60%	30%	50%	37%	55%	37%	55%	37%	55%	55%	55%	41%	55%
14. Overtaxation	47%	20%	0%	0%	23%	10%	23%	10%	23%	10%	83%	10%	37%	10%
15. Tax relief	0%	0%	100%	100%	50%	50%	50%	50%	50%	50%	-77%	50%	21%	50%

Glossary and definitions

CT = corporation tax; PIT = personal income tax

Effective tax rate = total tax as percentage of profits before CT

Overtaxation = (effective tax rate minus PIT rate) as percentage of PIT rate

Tax relief = (classical overtaxation minus overtaxation under particular CT) as percentage of classical overtaxation

Source: Author's calculations; figures may have been rounded. The degree of CT-PIT integration for the lower, flat PIT rate and the (partial) dividend exemption has been calculated on the assumption that the tax relief should be 50% for the 50%-bracket shareholder, equal to the relief under the dividend relief systems.

Table 2. Dual Income Taxes in Norway, Finland and Sweden, 2010

Particulars	Norway	Finland	Sweden
<i>Year of introduction</i>	1992	1993	1991
a. <i>Tax rates (%)^a</i>			
Corporate profits	27	20	22
Other capital income	27	30/32	30
Labour income ^b	27–47.2/50.4	21.82–52.57	31.86–56.86
b. <i>Costs of earning income</i>	Deductible at basic rate	Deductible at basic rate	Deductible at basic rate
c. <i>Basic allowance for capital income</i>	Yes	No	No
d. <i>Offset of negative capital income against labour income</i>	In first bracket	Through tax credit at basic rate	Through tax credit at basic rate
e. <i>CT-PIT integration method</i>	Shielding method	Basic exemption	No integration
f. <i>PIT on corporate profits (%)</i>			
Distributed profits	27% on dividends in excess of risk-free return calculated as cost base of shares times fixed interest rate (after-tax return on 3-month government paper)	<i>Quoted shares</i> Exemption of 15% of dividends, remaining 85% taxed as capital income <i>Unquoted shares</i> 25% taxed as capital income up to 8% ceiling; remaining dividend exempt up to €150.000; excess exempt up to €15.000, remainder taxed as capital income	<i>Quoted shares</i> 30% <i>Unquoted shares</i> See below
Retained profits	27% on realized capital gains in excess of (accumulated) unused risk-free amounts	30/32% on realized capital gains	25% on realized capital gains
g. <i>Withholding taxes (%)^c</i>			
Dividends			
Portfolio	15	15	15
Direct investment	0; 10; 15	0; 10; 15	0; 10; 15
Interest	–	–	–
Royalties	–	0	–
h. <i>Mandatory income splitting</i>			
Closely-held companies ^d	27% CT + 27% PIT on 72% of distributed profits minus risk-free amount	See above under unquoted shares	Active shareholders: 20% on profits deemed to be return on equity + labour income tax on balance up to SEK 5,121.000 in 2014 Passive shareholders: 25%
Partnerships and proprietorships	27% on risk-free amount + 27–50.4% on profits in excess of risk-free amount	20% of net capital is considered capital income, remainder is labour income	30% on 'interest' on equity + 22% on retained profits + labour income tax rate on withdrawals with credit for earlier 22%
i. <i>Net wealth tax</i>	1%	None	None

Source: Author's compilation from IBFD on line, which lists Eivind Furuseth as the author for the Norwegian CT/PIT system, and Laura Ambagtsheer-Pakarinen for Finland and Sweden's CT/PIT systems.

^aIncluding local taxes if levied, but ignoring some low taxes or exemptions for special jurisdictions, persons or income items.

^bIncluding non-deductible social security contributions which increase marginal tax rates.

^cNon-residents in treaty countries.

^dIn Norway, these rules apply to all shareholders, not just to shareholders in closely-held companies.