Dual Income Tax

The Dual Income Tax System – An Overview

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OECD countries rely to varying degrees on personal income taxes to raise revenues in a fair and efficient way. Yet, despite the many differences in policy and institutional settings, their income tax systems share some common features. Tax policy specialists agree on the problems that these features give rise to, but there is no consensus on the appropriate reforms that should be undertaken. Moreover, the record of major reforms is decidedly mixed. Commissions in many countries have presented proposals for far-reaching reform of the personal tax system – an example being the adoption of a personal consumption tax system – but these have been rarely adopted in practice. A notable exception is the dual ("Nordic") income tax system, which as an explicitly schedular system represents a significant departure from the commonly used principle of comprehensive income taxation.[1] To put the tax system in perspective, it is useful first to review the basic features of income tax systems that are based on the comprehensive principle and to outline the difficulties. This will serve as a basis for presenting the main features of the Nordic system, which is largely motivated by addressing the problems of comprehensive income taxation and its oft-proposed counterpart, personal consumption taxation.

Comprehensive income as the basis for taxation

Most countries' tax systems pay at least lip service to the principle of comprehensive income taxation. They define a single measure of taxable income from all sources, and then apply a single rate schedule. However, some fundamental administrative and economic problems preclude the full application of the comprehensive income principle. Consider each in turn

Administrative problems

A pure comprehensive income tax system is difficult, if not impossible, to implement. Some elements of comprehensive income are hard for households to measure let alone for tax authorities to verify. Examples include the following: imputed income from assets of various sorts, such as housing and other consumer durables, and insurance policies; accrued capital gains on financial and personal assets; the return on human capital accumulated (as opposed to endowed); the return on personal business investments; real versus nominal returns on financial assets; the value of the non-market use of time for leisure or household production; and gifts and inheritances received, possibly net of those given.

The fact that actual income tax systems inevitably end up excluding some sorts of income and taxing others preferentially (e.g., capital gains) leaves arbitrage – or evasion – opportunities to households, and these undermine the integrity of the tax system. Moreover, under a progressive income tax system, horizontal equity problems can arise if it is difficult to implement an effective income averaging system: income fluctuations per se increase one's tax liability. The consequence of these administrative problems is that income tax systems cannot replicate the comprehensive income tax ideal.

Economic Problems

A comprehensive income tax system treats all sources of income the same. Yet, standard public finance principles suggest that there should generally be differential treatment of different sources (and uses) of income. The broadest distinction of sources of income is between labor income and

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[1] Comprehensive reviews of the Nordic tax system and its effects may be found in Sørensen (1994), Nielsen and Sørensen (1997) and Sørensen (1998).

capital income, or equivalently on the uses side between present consumption and future consumption. A tax on labor and capital income combined is roughly equivalent to a system that taxes future consumption more heavily than present consumption. The reason is that saving out of current income is double-taxed: once when the income is earned and again when the return on that saving is earned. On efficiency grounds, it is hard to justify such a system. On the contrary, a reasonable case can be made for taxing present and future consumption at the same rate, which in simple terms can be achieved by zero taxation of capital income to eliminate the double taxation. Such a result requires particular assumptions about the form of intertemporal preferences, especially involving the separability of consumption decisions from labor-leisure choices over time. Even if these assumptions are not satisfied, there is no general presumption about which way they will be violated, that is, whether the efficient tax on capital income should be positive or negative. The principle of insufficient reason suggests zero capital income taxation on these grounds. In any case, there would be little justification for taxing capital income at the same rate as labor income.

Similar considerations apply on equity grounds. If the government were perfectly informed, it would want to base its redistributive taxation on exogenously given wealth of households – their endowed human wealth (native ability) and endowed asset wealth. The inability to observe these endowments implies that some imperfect indicator of wealth must be used as a tax base. Labor income would be a good index of native ability if labor supply were fixed and there was no human capital investment, and capital income would be a good index of inherited wealth if households kept the stock of their inherited wealth intact. But even in this ideal case, one may not want to tax labor and capital income at the same rate: a common progressive tax on all inherited wealth would generally entail a different rate of tax on labor and capital income. In fact, labor income reflects variable effort as well as the return on investment in human capital, and capital income includes the return on life-cycle savings, so the optimal relation between labor and capital income taxation becomes a complicated second-best problem. If inherited asset wealth is dealt with by an inheritance tax, there is presumption for preferential taxation of capital income: the same separability conditions that entail zero capital taxation on efficiency grounds will also lead to zero capital income taxation on equity grounds. To the extent that inheritances could not be taxed, the case for taxing capital income would be enhanced.

Other arguments can be mobilized for providing preferential treatment of capital income. To the extent that saving is for retirement (life-cycle smoothing), a case can be made for sheltering capital income from taxation. For one thing, households may undersave for their retirement either because of myopia or because they anticipate transfers inversely related to their wealth in retirement. As well, lifetime averaging arguments might suggest some sheltering of saving for retirement, in the absence of general averaging provision in the tax system. Also, capital income might be much more mobile internationally than labor income, in which case national governments may prefer to treat it preferentially. And, along the same lines, it may be easier to evade.

Personal consumption taxation

One option for avoiding many of these problems is to adopt a personal consumption tax system by eliminating the taxation of capital income altogether. The latter can be achieved by treating assets on either a designated or a tax-prepaid basis, allowing households the discretion to choose subject to the fact that for some assets one type of treatment may be more suitable than another. Designated treatment involves deducting savings from income, and including the principal and accumulated returns in the tax base when they are consumed. This is suitable for household business assets and human capital accumulation. Tax-prepaid treatment simply involves excluding capital income from the tax base, and is suitable for assets whose returns are difficult to measure (e.g. housing).

Consumption taxation avoids most of the administrative problems of comprehensive income taxation, a major exception being taxing the use of nonmarket time. It essentially leaves capital income out of the tax base thereby avoiding the preferential treatment of present versus future consumption. However, it has its own problems. Even though it may not be desirable to tax capital income at the same rate as labor income, by the same token, it may not be desirable to exclude it altogether. Thus, given the inability to tax leisure

or household production, it would be desirable on both efficiency and equity grounds to impose a tax on capital income to the extent that future consumption and non-market labor are complementary, which might be a reasonable presumption. As well, a personal consumption tax is to a large extent equivalent to a tax on labor income, and as such inherited wealth is not taxed. A case can be made for taxing capital income as a presumptive way of taxing inheritances and gifts. Of course, to the extent that a personal consumption tax can be supplemented by a tax on inheritances, this problem is avoided, although there is then the further issue of whether the tax should be on gross or net inheritances.

Finally, there may be political economy arguments leading to capital income taxation. Even fully rational and benevolent governments might tax capital income for time consistency reasons. At any time there is a stock of wealth that has already been accumulated, and it will be perfectly rational for governments that cannot commit to future tax rates in advance to impose relatively high tax rates on capital income. As well, public choice principles suggest that the political system leads to the taxation of capital income as a way of redistributing to voters in the majority. Since these arguments for taxing capital income typically conflict with optimal taxation principles, it might be argued that putting in place a tax structure that constrains the ability of the government to tax capital income – such as a consumption tax system – might lead to less capital income taxation.

Compromise tax systems

The combination of the problems with a comprehensive income tax, which taxes all sources of income on a par, and a consumption tax system, which avoids taxing capital income altogether, leads one to a compromise system in which capital income is taxed less than labor income, but is nonetheless taxed. As we have seen, economic theory offers little concrete advice about the appropriate extent of differential taxation. Here we simply take as given the case for some preferential treatment of capital income, and consider the issues that arise in designing such a system.

First, it should be noted that even in countries where the comprehensive income tax principle is respected, capital and labor income are already treated differently. The overall tax structure includes a mix of taxes of which personal taxation is only one component. Other major components include general sales and payroll taxes, which are effectively equivalent to proportional consumption taxes (the sales tax treating assets as designated and the payroll tax treating them on a tax-prepaid basis). Thus, the combination of income, sales and payroll taxes provides preferential treatment to capital income. There are some other forms of taxation that partly undo this favorable treatment of capital income, such as property taxes, which especially affect housing, and various forms of taxes on business income, which affect owners of shares in businesses to the extent that integration with the personal tax does not offset it. However, the typical tax mix does not treat asset income in a systematic way. As noted above, income taxes tend to provide favorable tax treatment to certain types of assets to the exclusion of others, leading to inefficiencies and inequities as well as to compliance and enforcement problems.

These features of existing tax systems highlight some issues that arise in designing a tax system intended to provide preferential treatment to capital income. One is the question of the comprehensiveness of the capital income component of the tax base. On broad economic efficiency and equity grounds, one might think that income from assets of all sorts should be included on an equivalent basis. However, two considerations militate against that. First, it may still be desirable to encourage saving for retirement for reasons mentioned earlier. There may also be social reasons for providing preferential tax treatment to owner-occupied housing and perhaps to personal businesses. Second, the administrative difficulties of taxing (real) asset incomes remain: some forms of asset income are difficult to measure on an imputed or accrued basis and to index to inflation. Potentially these problems could be addressed as they are in existing hybrid income tax systems, that is, by providing preferential treatment to certain types of assets. Of course, once this is done, households will have an incentive to hold assets in a tax-sheltered form, whether that is the intention of the preferential treatment or not.

Another question concerns the rate structure. Given that different tax rates are to apply to capital and labor income, how should tax progressivity differ between the two tax bases? The choice of a rate structure involves both value judgments about

vertical equity and economic judgments about the efficiency or incentive consequences of marginal tax rates. On purely equity grounds, one might expect progressivity to be higher the more the tax base reflects household endowments rather than rewards for discretionary actions. Progressivity of the labor income tax would be higher the less responsive are labor earnings to after-tax wages, and the greater is the differential in native abilities among the population. Responsiveness here would take into account not only variable labor supply, but also effects on occupational choice, labor market participation, migration and tax evasion. There might also be effects on human capital investment, but these are offset by the facts that human capital investment that takes the form of forgone earnings is effectively tax deductible, and resource costs of education are largely paid by the state. Similarly, the capital income tax would be more progressive the less responsive is asset accumulation to the after-tax return to saving, the more difficult it is to avoid or evade taxes, and the more unequal is asset ownership in the population. The case for progressive capital income taxation is significantly mitigated by the existence of wealth or wealth transfer taxes, such as taxes on bequests or inheritances, given that progressivity is ultimately intended to address inequalities in endowed wealth.

One further complicating factor concerns the variability of different sources of income. In the case of labor income, this variability might be predictable, as in the case of seasonal work, or it might reflect riskiness associated with uncertainty of employment or earnings. A progressive tax system discriminates against variable income and causes problems of horizontal inequity as well as adverse incentive effects. These may be mitigated by the social insurance system or potentially by income averaging for tax purposes, but it is typically difficult for workers to self-insure against uncertain incomes. In the case of capital income, variability is more likely to arise from uncertainty alone. To the extent that capital markets are efficient, much of the uncertainty of asset returns can be undone by pooling risks, but some residual uncertainty will remain, and it will differ from asset to asset. Again, a progressive tax system will discourage the demand for risky assets and will lead to horizontal inequity, but one might expect that the problem is less severe for capital income than for labor income, whose variability is especially harmful to the most vulnerable workers.

Taking all of these considerations into account, one might reasonably argue that the tax on labor income should be more progressive than the tax on capital income, especially in the presence of taxes on wealth transfers between generations and a strong social safety net for the most unfortunate workers.

Another issue that arises in a tax system that treats labor and capital income differentially is the incentive to report labor income as capital income. This is particularly a problem for unincorporated businesses where the distinction between capital and labor income is ambiguous: business owners put their own equity capital into the firm as well as providing managerial or entrepreneurial input. Owners will have an incentive to report low salaries and to overstate the profits of the firm (which themselves are difficult to impute). The problem of dealing with personal business income is one that plagues virtually every tax system, whether it is designed according to comprehensive income principles, consumption tax principles, or some combination of the two.

A related problem concerns the relation between the personal and the corporation tax systems. One of the main functions of the latter is to act as a withholding device against personal income earned within a corporation, which is otherwise difficult to tax on an accrual basis at the personal level. To achieve this, it is necessary to credit shareholders with the corporate tax that has been withheld once the funds are taken out of the corporation as dividends or realized capital gains. This can be done by the so-called imputation method, whereby credits are made available on dividends or capital gains, by an exemption method whereby dividends or realized capital gains are simply subject to a lower tax rate, or by crediting payouts at the corporate level.

In an open economy, the imputation method has an advantage in terms of being better able to restrict integration to domestic shareholders. Integration is made more difficult both by progressivity in the personal taxation of capital income and by the differential tax treatment of different types of assets. In either case, it is virtually impossible for the corporation to withhold at the correct rate for all its shareholders. The relation between the personal and corporate tax also applies to interest income. Interest income can readily be taxed at the personal level, so most corporate tax systems deduct interest payments from the tax base. But, differ-

ences in personal and corporate tax rates will influence shareholders' preferences for debt versus equity financing. Again, this problem is difficult to overcome if interest income of different persons is taxed at different rates because of progressivity or preferential treatment.

Finally, tax compliance may be more difficult with capital income than with labor income. It relies more on self-reporting (as opposed to withholding at source), and verification may be more difficult for the authorities, especially if foreign assets are held. This problem can be mitigated by requiring financial institutions – including foreign ones, by international agreement – to withhold taxes on capital income paid to creditors. This too will be administratively more difficult if different households pay different tax rates on capital income.

The dual "Nordic" income tax system

The Nordic tax system represents a particular approach to achieving a compromise between the taxation of capital income and labor income (or, more generally, non-capital income to the extent that it includes pensions and other forms of transfers). It is a compromise that has some attractive features from a tax administration point of view.

The Nordic system is a dual income tax system in which capital income is taxed according to a separate tax schedule than labor income. The basic features of the ideal dual income tax system – not all of which have been fully implemented in the Nordic countries – are straightforward. Two tax bases are reported, one for capital income, and one for other sources of household income. The former includes, in principle, capital income of all types from all assets, including interest, dividends and capital gains from financial assets, imputed rent on housing, accrued returns on pension savings, and profits from personal businesses. Thus, the capital income base is broader than existing hybrid income tax systems, which typically shelters some forms of capital income. Capital income is then taxed at a uniform proportional rate equivalent to the lowest marginal tax rate on other income.

The non-capital income category includes earnings as well as pensions and transfers from government. It is taxed according to a progressive rate structure, which incorporates any credits and deductions used to achieve horizontal and vertical equity. The corporation income tax rate is then set at the personal capital income tax rate and is fully integrated with the latter using the imputation or some other method.

Taken in the context of the broader tax system – which includes a general tax on consumer purchases and payroll taxes – the dual income tax system results in capital income tax rates that are significantly lower than tax rates on other income, and much less progressive. And, although it is not part of the dual income tax system, a useful complement is a tax on wealth transfers between generations, perhaps defined on a net basis.

The Nordic income tax system has a number of advantages compared with hybrid income tax systems. The taxation of all sources of asset income at a common rate avoids the inter-asset distortions while still encouraging household saving. The preferential tax treatment of capital income can be defended both on efficiency and equity grounds, especially in a context in which capital income is mobile internationally. Compliance is simplified for households, and the incentive to engage in wasteful tax planning and arbitrage are reduced. As well, the tax is simpler for revenue authorities to administer.

The absence of a progressive rate structure might be regarded as a disadvantage on equity grounds, but that is offset by some other considerations. First, if a wealth transfer tax accompanies the Nordic system, vertical equity goals can be achieved. Second, to the extent that capital income reflects life-cycle savings behavior, a proportional tax works in favor of horizontal equity since it does not discriminate against those who choose to save more. Third, a proportional rate structure avoids penalizing those who hold risky assets. Finally, given that capital income is highly mobile, the effects of a progressive rate structure can be to some extent undone by avoidance and evasion by households with large amounts of wealth. In any case, once a dual income system is in place, it would be feasible to implement a progressive rate structure for capital income.

Some outstanding issues

The Nordic income tax system remains an ideal, like the comprehensive income and personal consumption tax systems. An attempt to implement it

would encounter a number of issues, some of which we highlight in this final section. The first of these is the problem of measuring all elements of the capital income base. The same problems arise as in the comprehensive income base. The imputed returns from some assets are difficult to measure, including housing equity and the returns from personal business. Capital gains should in principle be included on an accrual basis, as should the returns to pension wealth. And, all capital income components – especially interest and capital gains – should be fully indexed for inflation.

Next, some types of asset income are not included even in the ideal dual tax system. One example of this is consumer durables other than housing. Another is the return to human capital accumulation. In both cases, they would effectively be treated on a consumption tax basis, so would not be taxed.

Measurement problems are less severe for labor income, but not absent. Earnings from the labor contribution to personal businesses are difficult to measure since they are indistinct from profits: both appear as the income of the business. In accounting for this source of labor income, personal business owners would have an incentive to count as much income as possible as capital income unless they are in the lowest income tax bracket. In addition to this being inequitable, it can affect the decision to incorporate. Labor income of the self-employed might also be prone to understatement.

One major advantage of the dual income tax system is the ease with which the corporate and personal taxes can be integrated. The use of a common corporate and personal tax rate on capital income facilitates this. Nonetheless, some problems can arise. If the personal tax rate on capital income is constrained to be the same as the lowest labor income tax rate, this constrains the ability of the corporate tax to respond to capital tax competition. If corporate tax rates are competed down internationally, net capital inflows would fall if the corporate tax rate could not be lowered. If the corporate tax rate were allowed to fall below the minimum labor income tax rate, the advantages of the dual income tax system would require that the personal tax on capital rate fall as well, and that might be regarded as inequitable.

Proportionality of the capital income tax schedule is also contentious. The Nordic income tax system calls for a proportional tax on capital income, whereas nothing in principle prevents a progressive tax structure being employed, even if it detracts from simplicity. The case for a progressive rate structure can be countered by a couple of factors. To the extent that a tax on inheritances is in place, the case for redistributing asset income is weakened, as we have mentioned. As well, the gain from a progressive capital tax structure on equity grounds can be relatively little. The mobility of the capital income tax base, the fact that much variability of capital income reflects life-cycle effects, and the relatively small amounts of revenue generated from increasing capital income tax rates at the upper end all suggest that the gain from progressivity may not offset the loss in simplicity. This will especially be the case if the labor income tax schedule is effective at redistributing to those who are most in need. For example, a set of fully refundable income-contingent tax credits can be highly effective at targeting transfers to those at the bottom of the income distribution even under an otherwise modestly progressive rate structure.

Finally, the dual income tax structure can have advantages in a federal context. There are sound arguments for allowing lower-level governments access to direct taxes on personal labor income jointly with the central government, while retaining capital income taxes at the center. The dual income tax makes this possible. The same argument might be extended to an economic union context where there is no autonomous central government. If all nations adopted a dual income tax, it would be possible – and desirable – for capital income taxes to be coordinated among nations, while leaving labor income taxes uncoordinated.

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