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# Moving Towards Dual Income Taxation in Europe

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The paper summarizes the arguments in favor of a shift from comprehensive to dual income taxation and complements the discussion by an overview on tax reforms which reveal the characteristic features of a dual income tax system. The scope of our analysis is not restricted to the Nordic countries, we also include other European countries, whose tax reform steps can be regarded as a move toward a dual income tax. We focus on problems of running a final withholding income tax regime under individual and household taxation including the most recent dual income tax reforms in the Nordic countries, but nevertheless argue that it may be worthwhile for the Commission to consider dual income taxation as a blueprint for income tax coordination in the EU.

*Keywords:* income tax reform, dual income tax, schedular income taxation

*JEL classification*: H 2, H 24, H 25

## 1. Introduction

Dual income taxation has become an important blueprint for income tax reforms in Europe. Originally constrained to four Nordic countries in the beginning of the 1990s, final withholding taxes on capital income have been introduced in several European countries, e.g. Austria, Belgium, Greece, and Italy, and tax reform proposals in favor of a dual income tax system have been made for Germany and Switzerland.

This evidence backs Sijbren Cnossen's reform agenda for European business taxation (Cnossen 2001, 2004), which contains the EU wide adoption of a dual income tax structure as an important first step.

The paper is organized as follows. We discuss the pros and cons of comprehensive, Schanz/Haig/Simons-type income taxation in section 2 and summarize the characteristic features and the attractiveness of a dual income tax in section 3 and 4. Section 5 portrays the implementation of a dual income tax system in the Nordic countries, while section 6 surveys tax reforms with selective dual income tax features in seven other European

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countries. In section 7 we address problems of running a dual income tax regime in practice. The concluding section 8 summarizes our findings and evaluates the perspectives for a European dual income tax scenario.

## 2. The Pros for and Cons against a Comprehensive Income Tax

The Schanz/Haig/Simons (SHS) type comprehensive income tax has been the fundamental principle of income taxation in the developed world for almost a century.

### 2.1. Attractive Features of SHS Taxation

Tax equity has been a crucial desideratum in tax policy design in democratic societies. Advocates of equitable taxation seem to have agreed that comprehensive income, defined by the concept of accretion which can be traced back to Georg von Schanz and Henry Simons, is a socially acceptable indicator of a citizen's *ability to pay*, which can be calculated in an easy and transparent way and serves as a reliable tax base for an equitable annual income tax. This view is backed economically, as the comprehensive annual income of a tax payer determines potential annual consumption, viz. the ability to spend on consumer goods without forcing this tax payer to reduce the amount of assets held at the beginning of that year.

With comprehensive annual income as the socially agreed indicator of ability to pay, SHS taxation ensures *horizontal equity*. Citizens with equal comprehensive income are equally well off before tax and are liable to the same amount of income tax. Their gross comprehensive income is cut by the same amount of money and they end up equally well off after tax, exhibiting the same level of net comprehensive income after tax. The comprehensive income tax also allows for suitably graduated annual tax payments to ensure *vertical equity* in line with socially agreed after tax distribution patterns.

A final important advantage of comprehensive income taxation is the symmetric treatment of different components of income. The concept is robust against *assignment problems* of income to specific income categories. The same marginal tax rate on all sources of income for a taxpayer implies a *tax neutrality* property. A given optimal income portfolio, characterized by the same rate of return for all income generating activities, will not be changed under a comprehensive income tax, as the net rate of return after tax is the same as well.

## 2.2. Problems of SHS Taxation

Arguments against the SHS standard of income taxation address the fundamental concept as well as the practical implementation of comprehensive income taxation.

A first objection argues that horizontal equity breaks down if equity is regarded as a lifetime rather than a one-period phenomenon. Annual comprehensive income taxation over the lifecycle results in different present value tax burdens of citizens with an equal present value of comprehensive income (and therefore equal ability to pay) if the lifetime patterns of consumption and saving differ. Basically consumption smoothing through saving generates interest income which is taxable under a comprehensive income tax and thereby leads to a higher tax burden compared to a lifetime income pattern which requires less saving and less interest income over the lifecycle. This is a clear *violation of horizontal equity* in a life-cycle perspective. The problem can be avoided under a consumption-based income tax as advocated already by Irving Fisher and Nicholas Kaldor[1].

A second objection argues that horizontal equity breaks down if lifecycle saving can be organized by accumulating either human capital or capital assets. Capital accumulation requires the purchase of investment goods which must be financed out of net earned income. There is no tax allowance for capital accumulation under a comprehensive income tax. *Human capital formation* in educational programs requires investment in time and opportunity costs of foregone earnings which reduce taxable labor income under a comprehensive income tax. The preferential treatment of human capital savers in comparison to capital asset savers who are equally well off in present value comprehensive income terms is another violation of horizontal equity. Again the problem can be avoided under a cash-flow tax, which exempts income invested in capital formation.

A third objection is directed against the neutrality property of taxing all factor returns at the same marginal tax rate. The argument is based on the fundamental lesson of *second-best theory*. If the comprehensive income tax is distorting, then the social welfare loss associated with the revenue requirement may be reduced if the unique SHS income tax wedge on comprehensive income is replaced by an income tax system which allows for different tax wedges on the components of comprehensive income. From an optimal

[1] Kaldor's expenditure tax concept for India and Sri Lanka failed and was rapidly repealed in the 1950s, but the idea has been alive and found prominent supporters under the heading of cashflow taxation (Meade Committee, 1978) or the X-base tax (Bradford 1986, 1989). A full-fledged consumption-based income tax was introduced in Croatia in 1994 (Rose and Wiswesser, 1998), but repealed 2001.

income tax perspective the application of the same tax rate on returns from different factors under a comprehensive income tax regime is an additional restriction, which generally raises the social costs of public funds.

A forth objection against SHS taxation is the incentive for capital income splitting among family members to protect capital income from the progressive tariff schedule.[2] Capital income splitting is not only attractive under individual income tax regimes, when it pays to allocate capital income to the spouse with the lower income tax rate, it also allows to reduce the tax burden under household income tax regimes, if capital income can be shifted to other separately taxed units (e.g., children under the German spouse splitting system). Capital income splitting erodes vertical equity targets and violates horizontal equity of a progressive income system.

The proper calculation of capital income under a comprehensive income tax is a serious problem, as any market-induced increase in wealth within a year has to be assessed as comprehensive income. Income accounting can only rely on proper market values if assets are sold. When the owner keeps the assets *imputed prices* have to be used and this assessment is subject to evaluation errors as well as strategic pricing. Tax payers have an incentive to use the asymmetry in information on asset values to reduce their tax burden and the tax administration is hardly able to control tax evasion through strategic undervaluation of capital gains. As a matter of fact we find deviations from the principle of comprehensive income taxation in tax codes throughout the world, allowing for a deferral of capital gains taxation. Technically this erosion of the SHS standard is called *realization principle*, which means that capital gains remain untaxed until the assets are sold.

Another problem of capital income taxation is the *separation of nominal and real returns* on interest bearing assets. Interest income is regarded as taxable capital income in tax codes referring to the SHS standard, although interest consists of two components which should be treated differently. The compensation for inflation keeps the value of wealth constant in real terms and should not be taxed as comprehensive income. The real interest income increases wealth and thus is taxable capital income. Separating the two components requires the imputation of an economically correct inflation rate. Most tax

[2] Tax engineering by shifting assets among family members is an important operating field for the consulting industry. Tax policy recognized the importance of this tax engineering strategy by specific anti-avoidance measures, e.g. the mandatory inclusion of certain categories of capital income of the spouse or minor children to the taxable income of the main income earner, or the introduction of the Kiddie Tax in the US in 1986 and in Canada in 2000. The US Kiddie Tax implies that from 2006 part of a child's investment income is taxed at the parent's highest marginal tax rate in the US, if the child is under 18 and child's investment income is more than $1700 (Internal Revenue Service, 2005).

codes do not allow for inflation adjustment of nominal values, since interest income is not the only field for such a correction. Technically this deviation from the SHS standard is called *nominal-value principle* which implies that valuation for tax purposes is based on nominal prices, even if they refer to different periods and constant prices would be the economically correct valuation vehicle.

Besides these systematic deviations from the SHS standard, tax legislation used to incorporate further regulations which have become standard elements of tax codes although they contradict to the principle of comprehensive income taxation. Usually these regulations are *tax preferences* which erode comprehensive income. These deviations from the SHS standard include, e.g. the exemption of retained corporate profits at the personal level, the deferral of taxing the rate of return on old age pension saving until pensions are paid out[3], the exemption of capital accumulation in pension funds or in life insurance saving, or the exemption of imputed rent on owner-occupied housing. There are, however, other deficiencies of income tax regimes which contradict the pure SHS standard and lead to overtaxation as, e.g., the double taxation of dividends under a classical corporate income tax, restrictions to loss offsets or limitations to depreciation of assets.

## 3. The Characteristic Features of a Dual Income Tax

The dual income tax[4] is a schedular tax regime which divides total income into capital and labor income and regards them as different tax bases. The *tax-base split* offers an additional degree of freedom for tax policy, which can potentially be used to overcome some of the problems of comprehensive income taxation listed in the previous section.

Under the dual income tax income from different economic activities (doing business, self employment, employment, leasing land) has to be split into a capital and labor income. The allocation is simple for certain traditional income classes which are either capital income or labor income. Capital income includes dividends, interest income, rents, but also rental values as well as capital gains of real capital and property. Labor income consists of wages and salaries, non-monetary fringe benefits, pension payments and social security transfers. Business income earned by business owners working in their own firm (proprietorships, partnerships, or self employed), however, is compound income stemming from capital, which the owner has invested in his own firm, as well as

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[3] It is interesting to note that the German Constitutional Court adjudicated in that taxing old age pension claims upon payment rather than upon accrual in line with the ability to pay principle, ignoring the SHS standard.

[4] See also Boadway (2004), Cnossen (1999), Eggert and Genser (2005), Sørensen (1998, 2005b).

from labor, if the business owner works in his own firm. Business income therefore has to be divided into a capital and a labor component. Capital income is taxed at a flat rate, whereas labor income is subject to progressive tax rates. Costs of earning capital and labor income are tax deductible from both tax bases, the *principle of net returns* is carried over from comprehensive income taxation.

The tax rate on labor income in the lowest income bracket is set equal to the rate on capital income, which intends to avoid tax arbitrage incentives for small scale earners by transforming labor income to capital income.

*Personal allowances* are deductible from labor income and thereby induce an element of indirect progressivity already in the first labor income bracket. There is a general recommendation in dual income tax proposals that personal allowances should not be extended to capital income earners without labor income in order to keep the advantage of a final withholding tax.

For negative capital income there are two options for loss offsets. Offsetting *capital losses* against positive labor income in the same period re-establishes an element of comprehensive income taxation, as the tax base of labor income is reduced and the tax reduction is calculated at the marginal progressive labor-tax rate. Offsetting capital losses by a tax credit which can be deducted from the labor tax bill is equivalent to a loss offset calculated at the first-bracket labor-tax rate and the progressivity of labor taxation is not eroded. Excess credits can be carried forward or backward and offset against future or past tax liabilities.

The dual income tax allows for a very simple and efficient way of fully integrating corporate and personal capital income taxes. Setting the corporation tax rate equal to the dual income tax rate implies that the corporation tax credit exactly covers the dual income tax liability and dividends can be exempt from withholding taxation. But the dual income tax also allows for classical double taxation or for partial imputation. The latter case can be administrated under a final withholding tax regime by accounting for the corporate income tax credit when the dual income tax is withheld. Full integration can also be obtained by exempting dividends at the corporate level and levying the withholding tax upon distribution. Another important feature of equal DIT and corporation tax rates is that the tax deferral incentive vanishes. A corporation tax rate below the dual income tax rate creates an incentive to accumulate income within a corporation even if the pre-tax return is lower than what could have been earned outside the company. In this case an important neutrality feature of the DIT is lost.

## 4. Why Is a Dual Income Tax Attractive?

The dual income tax is attractive because the regime mitigates some problems of the comprehensive income tax, addressed in section 2.1.

Taxing capital and labor income at different rates allows paying attention to optimal taxation requirements, as the tax rates can be adjusted to the welfare costs of tax distortions (see Nielsen and Sørensen, 1997; Sørensen, 2005b).

A lower flat rate on capital income at the personal level stimulates savings by mitigating the double taxation of dividend income from capital investment in comparison to classical double taxation. Moreover dual income taxation intends to create a *level playing field* for capital investment by taxing all capital income at the same flat tax rate.

The switch from a comprehensive income tax regime to the well defined scheduler regime of a dual income tax is facilitated by the fact that income tax codes in most developed countries contain many exemptions from SHS standard which reduce the effective tax rate on capital, cf. section 2.2. But it is important to keep in mind that inconsistencies stemming from widespread tax base erosions can also occur in a dual income tax regime unless the switch from SHS to DIT is accompanied by a process of closing tax loopholes by tax base broadening. The argument in favor of DIT is that closing these loopholes is politically easier, if some difficult-to-tax categories are taxed under a low flat tax rather than under a progressive tax schedule.

The dual income tax recognizes that the scope for progressive capital income taxation is limited. Taxing capital income by a final withholding tax at a flat and low rate significantly reduces tax compliance and collections costs, because there is no requirement of filing regular capital income from interest and dividends.[5]

A flat capital income tax in the residence country will generally reduce the tax rate differential between domestic taxes and foreign source taxes, thereby limiting the incentives for capital flight. While it is true that tax coordination is another way of fighting capital flight among EU countries, one has to keep in mind that DIT remains an attractive option, because it also reduces capital flight incentives by chanelling capital income to the residence country via Non-EU-countries. Low capital income tax rates also mitigate the problem of negative after-tax returns on real wealth under inflation.

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[5] Cost saving would be considerable in Germany, where interest and dividend income is subject to a withholding tax, but income below a savings allowance (Sparerfreibetrag) is exempt, whereas capital income in excess of the savings allowance must be taxed at the personal income tax rate.

Another advantage of dual income taxation which has hardly been addressed in capital income tax reform is the elimination of the incentive for capital income splitting among family members. This incentive is high in countries with individual income taxation, which is the case in the majority of European countries (see table 1). The flat rate on capital income eliminates strategic capital income shifting and allows for dropping the complex national tax rules on reassigning capital income of children or other household members to the main income earner.[6]

The loss in the redistributive power by taxing capital income at a flat rate, which is complained by opponents of DIT, must be traded off against the redistributive gain through more effective taxation of capital income in the residence country as well as against welfare gains through avoided costs of tax engineering, compliance and control. The possibility of strategic or negligent capital income tax evasion through nonfiling no longer exists if capital income is taxed at source by a final withholding tax.[7]

Finally, under a dual income tax flexible adjustment of the tax rate on capital income to changing economic conditions is facilitated within a country as well as multilaterally, e.g., in the EU, since the tariff on labor income may remain unchanged.

Insert Table 1 here

## 5. Implementation of the Dual Income Tax in the Nordic Countries

Table 2 surveys the main properties of the Nordic tax systems. The Nordic countries implemented dual income tax systems in the early nineties, which exhibit some common features (see e.g., Sørensen; 1998; Cnossen, 1999; Lindhe et al.; 2004). Capital income is taxed at a flat rate equal or close to the corporation tax rate and close to the labor tax rate in the first income bracket. Labor income is taxed progressively. Indirect progression enters in the first bracket due to personal exemptions, in the next brackets graduated marginal tax rates are applied to higher labor income levels.[8]

In order to distinguish labor and capital income in practice, an income splitting model was constructed for owners of nonincorporated firms and active shareholders, who work

[6] Column 4 in table 1 provides an overview on the different rules on the assignment of capital income of household members.

[7] There is evidence from Austria which introduced a final withholding tax on capital income in 1994 that tax revenue from capital income in the following years was higher than expected in the budget estimates indicating that less evasion and the broader national tax base overcompensated the lower tax rate on capital income (Genser and Holzmann, 1995).

[8] The gap between the tax load on labor and capital income is even higher, as net labor income is further reduced by mandatory social security contributions.

in their companies as managers or primary workers. For both groups of taxpayers capital income is defined as the imputed return on the stock of business assets and the difference between total business income and imputed returns is classified as labor income. The calculation of the imputed rate of return and thus of capital income differed between the Nordic countries and was changed in recent tax reforms. In Sweden[9] income splitting is mandatory for corporations with active owners, who own a substantial share of their business (e.g., two thirds) and work in their firm for a minimum number of hours per year, whereas Norway abolished mandatory income splitting for active shareholders when the new shareholder income tax was introduced in 2006. In Finland 70% of income from shares in unquoted companies which exceed the imputed return are treated as taxable labor income.

All Nordic countries allow for loss offsets if capital income is negative. Norway, Finland and Sweden allowed for full integration of corporate and personal taxation of capital income in their introductory dual income tax reform but switched back to double taxation with reduced tax rates at the personal level in subsequent tax reforms (SE 1994, FI 2005, NO 2006), Denmark already gave up full integration in the parliamentary discussion on the tax reform act and introduced a reduced personal income tax (PIT) regime in 1987. Norway and Sweden still supplement their dual income tax by a net wealth tax. Finland abolished this net wealth tax in 2006 in the course of eliminating full imputation.

The taxable unit in all Nordic countries is the individuum. Individual income of Norwegian tax payers also includes income of children.

Insert Table 2 here

### 5.1. Norway

The Norwegian tax reform of 1992 introduced a pure dual income tax. The splitting of income into a labor and a capital component was mandatory for proprietorships, self-employed businesses, and closely held companies. Capital income in these businesses was determined by multiplying the value of capital assets by a deemed rate of return on capital. This rate of return was the same for all businesses and was fixed annually by the Ministry of Finance on the basis of the average interest rate on certain government bonds plus a risk premium. Labor income was calculated as the residual difference of business profits minus imputed capital income. Labor income therefore comprised not only

[9] Sweden is the only Nordic country which maintained the distinction between active and passive shareholders.

imputed (or effectively paid) wage income of the owner but also capital income in excess of the deemed rate of return on capital. The rigidity of progressive taxation of earned income was mitigated by special tax preferences, leading to a backward shift of some share of earned income to lightly taxed capital income. These tax preferences included an upper bound for residual profits, above which profits were taxed as capital income and salary reductions which entitled entrepreneurs to deduct a certain percentage of the firms' wage bill from the earned income tax base.

Evidence from tax statistics proved that the rules of imputing capital income have been too generous which led to a major reform of the Norwegian dual income tax concept from 2006. First, the income splitting for closely held companies is abolished. Active and passive shareholders dividends are taxed at the corporation level (28%) as well as at the personal level (28%). Dividend income reflecting the normal rate of return remains untaxed at the personal level by granting a corresponding rate-of-return allowance. The personal income tax on dividends is thus restricted to dividend income exceeding an imputed normal rate of return, which implies double taxation of dividend income of active as well as passive shareholders. Capital income below the rate-of-return allowance gives rise to a carry-forward of unused allowances. Income splitting is maintained for business income of nonincorporated firms. Capital income reflecting the normal rate of return is taxed at a flat rate, whereas the remaining income (including excess returns on capital) is taxed at progressive rates. Special tax preferences for earned income in nonincorporated firms were abolished (see Sørensen 2005a).

### 5.2. Finland

As in Norway, full integration of the corporate income tax required no further taxation of dividends at the personal level.[10] Small companies which are not listed on the stock exchange are considered as closely held companies. Dividends of these companies which exceeded the normal rate of return were taxed at the progressive labor tax rate.

In 2005 a major tax reform reduced the corporate income tax (CIT) rate from 29% to 26% and the withholding tax from 29% to 28%. Moreover the imputation system was replaced by a system which applies a reduced PIT rate for dividends from listed companies and a normal rate-of-return allowance for dividends from unlisted companies. Double taxation of dividends from listed companies is mitigated by exempting 30% of dividend income which implies a flat rate of 19.6 %. Dividend income from nonlisted

[10] In contrast to Norway double taxation was not fully avoided for capital gains on share sales, because the purchase value of shares was not grossed up by the imputed rate of return on capital.

companies is exempt up to a dividend threshold by the normal rate of return allowance. Dividends exceeding the threshold are taxed at 19.6% for capital yields below the normal rate of return and are taxed progressively as excess dividend income for capital yields above the normal rate of return. Reintroducing double taxation of dividends was mitigated by the abolition of the net wealth tax.

### 5.3. Sweden

Sweden introduced a true dual income tax in 1991 but deviated from this system a few years later. Already in 1995 double taxation of dividends was reintroduced, although mitigated by a flat capital income tax rate of 30%. The flat rate is applied to all capital income at the personal level, i.e., to dividends from listed companies, interest income and capital gains. Dividends from unlisted companies are subject to a normal rate of return allowance. Dividend income in excess of the normal rate of return is taxed at the flat rate for passive shareholders, but is taxed progressively as earned income for active shareholders.

### 5.4. Denmark

Denmark was the first country to implement a dual income tax reform as early as 1987, but the government's dual income tax proposal was modified already in the parliamentary process and capital income was never taxed at a single flat rate[11]. The Danish income tax code distinguishes personal income, capital income and income from shares. But only income from shares is taxed at reduced rates, whereas personal and other capital income, in particular interest income, is taxed according to a progressive schedule. Income from shares is double taxed at the corporate and the personal level, although at a reduced rate. This reduced rate is the 28% withholding tax if dividend income is below a threshold and 43% if it is above the threshold. For dividend income liable to the higher tax rate of 43% the withholding tax is credited. A separate schedule is applied to capital gains.

[11] The Danish tax system is a hybrid between a dual income tax and a SHS tax. It operates like a dual income tax system for taxpayers with negative net capital income, whereas it works like a progressive comprehensive income tax for individuals with positive net capital income.

## 6. Implementation of Schedular Income Tax Systems in Other European Countries

Schedular tax structures which tax capital income at a low flat rate but keep the progressive tariff for personal income have been implemented in other developed countries as well. While these tax reforms addressed in the next two subsections got majority support in the respective national parliaments, the discussion on dual income taxation is on the political agenda in other countries as well. Two recent examples are Germany (Spengel and Wiegard, 2004) where the government plans to introduce final withholding taxes on capital income by 2009 and Switzerland (Keuschnigg and Dietz, 2007).

### 6.1. Final Withholding Income Taxes

Austria, Belgium, Italy, and Portugal, as well as three new EU members, the Czech Republic, Lithuania, and Poland, did not introduce a fully fledged dual income tax but a final withholding tax on interest income and dividend income (table 3). Labor income as well as earned business income is subject to a progressive schedule. In contrast to the Nordic countries there is no integration of earned income and negative capital income. Apart from Lithuania there is no basic allowance for low capital income earners, but Austria and Belgium allow for a filing option which implies that filed capital income is taxed as earned income granting access to the basic allowance.

Insert Table 3 here

All seven countries tax dividend income at the corporate and at the personal level. The combined tax burden on dividends by the corporation tax at the company level and by the final withholding tax at the personal level is close to the top personal income tax rate on earned income.

Dual income tax elements generating a lower tax rate on capital income are restricted to interest income, which is subject to the low final withholding tax (table 3) or even partly taxfree in Lithuania. For some years this was also true in Italy and in Austria for a part of business profits, which was calculated as the imputed return on newly injected capital (see Bordignon et al., 2001; and Wagner 2001). In Italy the reduced rate of 19% (instead of 34%) was abolished in 2004, when the imputation system was replaced by a classical system with a reduced personal income tax rate of 12,5%. In Austria the reduced tax rate of 25% became irrelevant, when the standard corporate income tax rate was reduced to 25% (from 34% before) in 2005.

### 6.2. Special Regimes for Capital Income Taxation

Some old and new EU members recently also moved towards a dual income tax structure, although the tax relief for capital income is based on specific regulations which do not show all the features of the traditional Nordic dual income tax (table 4).

The Netherlands implemented a comprehensive tax reform in 2001 which subjects dividend and interest income to a presumptive income tax at the personal level (Cnossen and Bovenberg, 2001). The personal income tax is levied at a rate of 30% on presumptive capital income, which is calculated by applying an imputed return of 4% on the average net value of assets in the tax period. This personal income tax is equivalent to a 1.2% wealth tax on net assets and covers capital income of asset holders from dividends, interest, and royalties. Personal allowances cause an indirect progression of this “Box 3” type investment income. Dividends, interest and capital gains from substantial shareholding are classified as “Box 2” type investment income and are taxed at a flat personal income tax rate of 25%. These flat rates remained unchanged when the Netherlands reduced the CIT rate to 28% in 2006.

Insert Table 4 here

Greece is the only EU15 country which fully exempts dividends at the personal level.[12] Thus, dividends are taxed at the corporate income tax rate of 29% in 2006. For a long time this rate was 35% and only slightly lower than the top personal income tax rate of 40%. The tax relief is more pronounced for interest income, which is subject to a final withholding tax (10% on bonds and bank deposits and 20% on interest of loans and on interest received from abroad).

France only subjects interest income and capital gains to a final withholding tax of 16%, whereas there is no withholding tax on dividends. Similar to the most recent Nordic tax reforms, dividend income is subject to the progressive tariff on earned income but also qualifies for an exemption of 50% of their amount. As a matter of fact dividend income earners are entitled to the basic allowance of personal income tax. Another specific feature of capital taxation in France is the net-wealth tax.

[12] Among the EU25 dividend exemption was also adopted in Cyprus, Estonia, Latvia, and since 2005 also in Slovakia.

The final withholding tax on interest in Slovakia is embedded in a flat tax comprehensive income regime, which taxes income from all sources at 19%. Dividends are exempt at the personal level, but carry the 19% corporate income tax. The only deviation of the Slovakian tax regime from SHS standard is that negative capital income cannot be offset against positive earned income.

In Estonia dividend and interest income are exempt at the personal level. There is, however, a 23% tax rate on dividends at the company level and on capital gains at the personal level. Thus only interest income is taxfree, all other sources of income bear the standard tax rate of 23%.

## 7. Problems of Running a Dual Income Tax

While it is recognized that the Nordic dual income tax has a number of advantages over the hybrid and widely eroded comprehensive income tax systems, there is no doubt that the dual income tax system implemented by the Nordic countries must not be regarded as an ideal solution for income taxation in practice. This is emphasized most prominently by the recent dual income tax reforms in Norway and Finland, the two countries who implemented this regime in its purest form in the 1990s.

One major advantage of dual income tax, the substantial reduction in compliance, collection and control costs has not been exploited fully in the past. The filing option for capital income owners, provisions to offset capital losses, or control requirements to cope with the incentive to transform labor income into capital income give rise to costly methods of tax administration and control and certainly deserve further attention in dual income tax reform steps.

The crucial problem of DIT is the economically sound and strategy proof separation of capital income and labor income. Proper income splitting cannot be exercised in a straightforward way. Tax authorities suffer from information deficits and tax payers have an incentive to overstate their capital income in order to reduce their income tax burden. There is agreement that DIT should define capital income and labor income (or earned income) as the complement to comprehensive income in a transparent way.

Fixing the proper imputation rate is not only an economic problem, as the opportunity costs of capital differ between investors, it is also a political bargaining game between the ministry of finance and lobby groups fighting for higher capital income bases in order to reduce the tax burden.[13]

The traditional DIT-approach of splitting capital and labor income by means of a normal rate of return on business assets discriminated active shareholders and proprietors. Excess returns on assets were treated as progressively taxed earned income for owners of small firms whereas they were treated as low taxed capital income for passive shareholders. To end this discriminatory taxation of excess returns there is a tendency to split capital income further and to tax only normal returns at the DIT rate. Taxing excess capital returns as earned income would imply the reintroduction of general filing and loosing the advantage of a final withholding tax on capital income. The compromise adopted in recent Nordic tax reforms seems to be a triple income tax which taxes excess returns for active and passive shareholders at a flat rate between the dual income tax rate and the top rate of earned income.

Finally problems occur since DIT also is expected to contribute to a level playing field in capital taxation. Tax neutrality is certainly violated by double taxation of dividend income, but also by taxing nominal interest income. Moreover, tax neutrality requires symmetric treatment of positive and negative capital income, i.e. full offset of capital losses. Accounting for capital losses by means of tax credits would clearly complicate tax administration, since limitations of loss offsets might become necessary to avoid the risk of abusing these tax credit instruments. Economically there exists a tradeoff between lowering compliance and administration costs through anonymous withholding at source and carrying over tax payer related tax rules from the current filing system to DIT, in order to secure tax neutrality by a symmetric treatment of positive and negative capital income.

## 8. Concluding Remarks

Starting out in four Nordic countries schedular income taxation has gained support in many European countries. Although evidence in these countries reveals that it is not an easy task to implement a dual income tax structure, there seems to be little political pressure to return to comprehensive income taxation in these countries. Moreover, many of the new EU member counties did not introduce a traditional SHS tax regime in their

[13] Although Norway and Sweden tied the fixing of the normal rate of return to the interest rate of government bonds, the Norwegian experience of granting tax preferences by residual income thresholds and salary reductions are striking examples for successful political lobbying (cf. Christiansen, 2004).
This is also the experience in Croatia, where a deemed rate of return, called protective interest rate, was administered to run the consumption-oriented income tax regime between 1994 and 2001.

tax reforms enacted to adjust to the EU internal market but relied on withholding taxes resembling dual income taxation.

One major advantage of dual income tax is the easy integration of corporate and personal income tax if the tax rates are equal. Although the current picture of integration in Europe exhibits a growing affinity towards double taxation, final withholding taxes on dividend and interest income reduce compliance and control costs.

Incentives for strategic income shifting between capital and labor income can be reduced if the tax rates on labor income in the first income bracket and on capital income coincide. Gains in compliance and collection costs must nevertheless be balanced with the costs of reduced flexibility, if the tax rates of the corporate income tax, the capital income tax and the labor income tax are tied.

Final withholding taxes on capital income do not only close undesirable tax loopholes through capital tax evasion, they also eliminate inequitable tax avoidance strategies through capital income splitting across family members, which are attractive for high income households.

The adoption of dual income tax systems in a pure or partial form generates a new playing field for tax harmonization plans in the EU. Whereas the proposals of the Ruding Committee in the early 1990s on a common European corporate income tax were forcefully rejected by the Commission as well as national governments, the recent income tax reform prove evidence that a stronger alignment of capital income taxation in the enlarged EU27 is regarded beneficial for the internal market. A move towards dual income taxation, which has been stated as a promising starting point for coordinating corporate income taxation in the EU might also enter the agenda of the EU Commission (Cnossen 2004). If the tax rates on capital and labor differ in the EU member states, then coordination steps in capital income taxation should face less opposition in the member states when the national tax rate autonomy on labor income is maintained.

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**Table 1**
*Personal Income Tax Units in Selected Countries (2006)*

| Country | Tax base | Option | Taxation of children's income |
|---|---|---|---|
| AT | Individual | no | taxed separately |
| BE | Individual | Household | Capital income of children and spouses is assigned to taxable income of the spouse with higher income |
| DK | Individual | no | taxed separately |
| FI | Individual | no | taxed separately |
| EL | Individual | no | income of minor children is taxed in the hands of their parents |
| IT | Individual | no | income of minor children is taxed in the hands of their parents |
| NL | Individual | no | income of minor children is taxed in the hands of their parents |
| SE | Individual | no | taxed separately |
| ES | Individual | Household | income of minor children is taxed in the hands of their parents |
| UK | Individual | no | income of children is taxed separately, unless such income stems from money or property settled on the child by a parent |
| PL | Individual | Spouse splitting | income of minor children is added to his parent's income when the latter have the use of this income |
| EE | Individual | no | taxed separately |
| NO | Household | Individual | income of minor children for whom the parents receive child allowances is taxes together with the income of the parent with the higher personal income |
| US | Individual | Household | taxed separately, but investment income of minor children above $1700 is taxed at their parent's rates |
| CZ | Individual | Household | |
| GE | Spouse splitting | Individual | taxed separately |
| FR | Family splitting | no | income of the household comprises that of the spouse and of their unmarried minor children |
| IE | Household | Individual | income of children is taxed separately, unless such income stems from money or property settled on the child by a parent |
| LU | Household | no | income of minor children is taxed in the hands of their parents (except employment income) |
| PO | Household | no | income of minor children is taxed in the hands of their parents |
| CH | Household | no | investment income of minor children is added to his parent's income, while the child's earned income is assessed on himself |

Source: OECD (2005), European Tax Handbook (2006)

**Table 2**

*The Nordic Dual Income Tax (2006 tax rates in %)*

| | Norway | Finland | Sweden | Denmark |
|---|---|---|---|---|
| Implementation of DIT | 1992 | 1993 | 1991 | 1987 |
| Personal income tax rates<br>- capital income<br>- earned income | 28<br>28-40 | 28<br>26,5-50[d] | 30<br>31,6[b]-56,6 | 28/43[a]<br>38,8-47,9[f] |
| Basic allowance for capital income | Yes | No | No | Yes |
| Offset of negative capital income | First bracket | Tax credit | Tax credit | Tax credit[g] |
| Integration of corporate and personal income tax | RRA (rate-of-return allowance) | Listed companies: Reduced PIT rate<br>Unlisted companies: RRA | Listed companies: Reduced PIT rate<br>Unlisted companies: RRA | Reduced PIT rate |
| Corporate income tax rate | 28 | 26 | 28 | 28 |
| Withholding tax for residents (nonresidents)<br>- dividends<br>- interest | No (No)<br>28 (28) | 19,6[e] (28)<br>28 (28) | 30 (30)<br>30 (No) | 28 (28)<br>No (No) |
| PIT on capital gains | 28[c] | 28 | 30 | 28 |
| Net wealth tax | 0,9-1,1 | No | 1,5 | No |
| PIT unit | Household Option for individual taxation | Individual | Individual | Individual |
| Income of children | Included | Taxed separately | Taxed separately | Taxed separately |

Notes: [a] 28% for income from shares (dividends and capital gains on shares) below threshold, 43% else; other capital income is taxes as earned income.
[b] local income tax only; additional federal income tax is due for income levels exceeding a threshold of 306000 SEK
[c] net of retained earnings
[d] for the municipality of Helsinki
[e] 28% on 70% of the dividend income
[f] national income tax (5,48%-15%) plus local income tax (32,9% for the municipality of Copenhagen)
[g] for local tax only

Source: European Tax Handbook (2006)

**Table 3**
*Final Withholding Taxes on Capital Income (2006 rates in %)*

| | Austria | Belgium | Italy | Portugal | Lithuania | Poland | Czech Republic |
|---|---|---|---|---|---|---|---|
| Personal income tax rates<br>- dividend income<br>- interest income<br>- earned income | 25<br>25<br>38,3-50 | 25<br>15<br>26,88-54,25 | 12,5<br>12,5/27<br>23,9-44,9 | 20<br>20<br>10,5-42 | 15<br>0/15<br>27 | 19<br>19<br>19-40 | 15<br>15<br>12-32 |
| Basic allowance for capital income | Filing option | Filing option | No | No | Yes | No | No |
| Offset of negative capital income | No | No | No | No | No | No | No |
| Integration of corporate and personal income tax | Reduced PIT rate | Reduced PIT rate | Reduced PIT rate | Reduced PIT rate | Reduced PIT rate | Reduced PIT rate | Reduced PIT rate |
| Corporate income tax rate | 25 | 34 | 33 | 25 | 15 | 19 | 24 |
| Withholding tax for residents (nonresidents)<br>- dividends<br>- interest | 25 (25)<br>25 (15) | 25 (25)<br>15 (15) | 12,5 (12,5)<br>12,5/27 (12,5/27) | 20 (25)<br>20 (20) | 15 (15)<br>0/15 (0/15) | 19 (19)<br>19 (20) | 15 (15)<br>15 (15) |
| PIT on capital gains | 25 | 33 | 27 | 10 | 15 | 19 | 12-32 |
| Net wealth tax | No | No | No | No | No | No | No |
| PIT unit | Individual | Individual<br>Option for household taxation | Individual | Household taxation | n.a. | Individual<br>Option for household taxation | Individual<br>Option for household taxation |
| Income of children | Taxed separately | n.a. | Included | Included | n.a. | Included | n.a. |

Source: European Tax Handbook (2006)

**Table 4**
*Special Tax Regimes on Capital Income (2006 rates in %)*

| | Netherlands | Greece | France | Slovakia | Estonia |
|---|---|---|---|---|---|
| personal income tax rates<br>- dividend income<br>- interest income<br>- earned income | Box 3: 30 / Box 2: 25<br>Box 3: 30 / Box 2: 25<br>Box1: 34,15-52 | 0<br>10/20<br>15-40 | 6,8-48,1<br>16<br>6,8-48,1 | 0<br>19<br>19 | 0<br>0<br>23 |
| Basic allowance for capital income | for Box 3 | No | Yes | Yes | Yes |
| Offset of negative capital income | No | Yes | Limited | No | No |
| Integration of corporate and personal income tax | Reduced PIT rate | Dividend exemption | Reduced dividend base | Dividend exemption | Dividend exemption |
| Corporate income tax rate | 28 | 29 | 33,3 | 19 | 23 |
| Withholding tax for residents (nonresidents)<br>- dividends<br>- interest | Box 3: 30 / Box 2: 25 (25)<br>No (25) | No (No)<br>10/20 (10/20) | No (15/25)<br>16 (16) | 0 (0)<br>19 (19) | No (No)<br>No (No) |
| PIT on capital gains | Box 3: 30 / Box 2: 25 | 0 | 16 | 19 | 23 |
| Net wealth tax | No[a] | No | 0,55-1,8 | No | No |
| PIT unit | Individual | Individual | Household taxation | Individual | Individual; Option for household taxation |
| Income of children | Included | Included | Included | n.a. | Taxed separately |

Notes: [a] income from savings and investment is taxed as a net wealth tax of 1.2% on net assets. (Box 3)

Source: European Tax Handbook 2006