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**The Dual Income Tax: Implementation  
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# **The Dual Income Tax: Implementation and Experience in European Countries**

**Bernd Genser<sup>\*</sup>**

## **Abstract**

The paper summarizes the arguments in favour 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. Although there are problems of implementing and running a dual income tax system, we 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

JEL: H2, H24, H25

## **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 favour 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

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features of a dual income tax in section 3. Section 4 portrays the implementation of a dual income tax system in the Nordic countries, while section 5 surveys tax reforms with selective dual income tax features in some other European countries. In section 6 we address problems of running a dual income tax regime in practice. The concluding section 7 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 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 higher level of comprehensive income, revealing a higher ability to pay, leads to a higher tax payment, which implies that the difference in net comprehensive incomes is smaller than

the difference in gross comprehensive incomes. The desirable gross/net reduction has to be agreed upon by social consensus.

A final important advantage of comprehensive income taxation is the symmetric treatment of different components of income. Starting out from a given level of comprehensive income, a marginal increase of any income component also increases comprehensive income by the same marginal amount and therefore the marginal tax rate on any income component is the same. 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**

There are, however, arguments against the SHS standard of income taxation. The objections raised 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 life cycle 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 savings and consumption pattern differs. 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 life cycle. 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<sup>1</sup>.

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<sup>1</sup> 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/Wiswesser, 1998), but repealed 2001.

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 programmes requires investment in time, which incurs opportunity costs of foregone earnings. As potential labour income is not taxed under a comprehensive income tax, the total amount of potential gross earnings can be invested in human capital formation. For the individual worker comprehensive income taxation implies either to invest net labour income in real (or financial) capital formation or gross labour income in human capital formation. 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 which is invested in capital formation and taxes income only when it is used for consumption.

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 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.

Although SHS taxation requires the proper calculation of all income components which enter comprehensive income, the concept is robust against *assignment problems* of income to specific income categories. With respect to comprehensive income it is irrelevant if a farmer's income from selling processed vegetables is regarded as income from farming or if it is already entrepreneurial income, shifting of income elements between income categories does not change the total income. The same is true for the debatable case if old-age pension entitlements based on employment contracts and wage income in the past are counted as employment income or as capital income.

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 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 the exemption of retained corporate profits at the personal

level, the deferral of the taxation of old age pension claims until pensions are paid out<sup>2</sup>, the exemption of capital accumulation in pension funds or in life insurance saving, the exemption of capital gains in owner-occupied housing, etc. 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, limitations to depreciation of assets, etc.

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

The dual income tax<sup>3</sup> is a schedular tax regime which divides total income into capital and labour 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 labour income. The allocation is simple for certain traditional income classes which are either capital income or labour income. Capital income includes dividends, interest income, rents, but also rental values as well as capital gains of real capital and property. Labour 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 from labour, if the business owner works in his own firm. Business income therefore has to be divided into a capital and a labour component. Capital income is taxed at a flat rate, whereas labour income, on the other hand, is subject to progressive tax rates. Costs of earning capital and labour income are tax deductible from both tax bases, the *principle of net returns* is carried over from comprehensive income taxation.

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<sup>2</sup> It is interesting to note that tax deferral of pension claims is not regarded as a violation of the SHS standard and the ability to pay principle in the view of experts in tax law, and the discussion of a consistent treatment of old-age benefits in Germany have led the Constitutional Court to define a „correspondence principle“, stating that old age savings income should be taxed only once over the lifecycle. This view ignores the problem of tax burden differentials in present value terms and does not recognize the conflict with the SHS principle.

<sup>3</sup> See also Boadway (2004), Cnossen (1999), Eggert and Genser (2005), Sørensen (1998, 2005b).

The tax rate on labour 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 labour and capital income earners.

*Personal allowances* are deductible from labour income and thereby induce an element of indirect progressivity already in the first labour income bracket. There is no general recommendation in dual income tax proposals if the personal allowances should be extended to capital income earners without labour income.

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

The dual income tax is compatible with various forms of corporate and personal capital integration. Separate taxation at both levels re-establishes classical double taxation, partial or full imputation of implies that the corporate income tax on distributed profits becomes a prepayment of the dual income tax on capital. Under full imputation, dual income tax administration can be simplified by choosing the corporation tax rate equal to the dual income tax rate. The corporation tax credit then exactly covers the dual income tax liability.

### **3.1. 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 labour 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). As already noted in section 2.2, the income tax codes in most developed countries contain many exemptions from the principle of comprehensive

income taxation but nevertheless politicians allege to follow the SHS standard in their tax policy. Most exemptions have been implemented in the past in a way, which pretends to maintain redistributive capital income taxation on the one hand and to master the challenges by the economic and administrative environment on the other. The result of these incompatible objectives is a low level of tax revenue combined with high compliance and collection costs.

The dual income tax is a well defined alternative variant of a schedular system. It intends to create a *level playing field* for capital investment by taxing all capital income at the same flat tax rate. 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 lower rate significantly reduces tax compliance and collections costs. Cost saving would be considerable in Germany, where capital income below a savings allowance (Sparerfreibetrag) is exempt, but capital income in excess of the savings allowance is taxed at the personal income tax rate. A proportional dual income tax, however, can be levied as a final source tax without any filing requirement. A flat capital tax has the additional advantage of reducing the tax rate differential between domestic taxes and source taxes in foreign countries, thereby limiting the incentives for capital flight. In addition, lower tax rates also reduce the problem of negative after-tax returns on real wealth under inflation. Finally, a flexible adjustment of capital income taxation to changing economic conditions as well as multilateral coordination, e.g., in the EU, is possible under dual income tax.

**Table 1: The Nordic dual income tax (2004 tax rates in percent)**

	Norway	Finland	Sweden	Denmark
Implementation of the dual income tax	1992	1993	1991	1987
Personal income tax rates				
- capital income	28	29	30	28/43 <sup>a</sup>
- earned income	28-47,5	29,2-52,2	31,5 <sup>b</sup> -56,5	38,1-59
Basic allowance for capital income	Yes	Yes	Yes	Yes
Offset of negative capital income	First bracket	Tax credit	Tax credit	First and second bracket
Integration of corporate and personal income tax	Full imputation	Full imputation	Reduced PIT rate <sup>c</sup>	Reduced PIT rate
Corporate income tax rate	28	29	28	30
Withholding PIT				
- dividends	0	0	30	28
- interest	28	29	30	0
PIT on capital gains	28 <sup>d</sup>	29	30	28
Net wealth tax	0,9-1,1	0,9	1,5	No

Notes: <sup>a</sup> 28% for dividend income below threshold, 43% else

<sup>b</sup> local income tax only; additional federal income tax is due for income levels exceeding a threshold of ca. €32000

<sup>c</sup> since 1994;

<sup>d</sup> net of retained earnings.

Source: BMF (2005)

#### **4. Implementation of the Dual Income Tax in the Nordic Countries**

Table 1 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 labour tax rate in the first income bracket. Labour 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 labour income levels.<sup>4</sup>

A common problem in schedular systems is the misdeclaration of income. In order to distinguish labour and capital income in practice, an income splitting model was constructed. Active owners, who are working in their firms as managers or primary workers are forced to split their business income into a labour and a capital component. Basically, capital income is defined as the imputed return on the stock of business assets and the difference between business income and imputed returns is classified as labour income. The calculation of the imputed rate of return is defined in national tax codes and differs between the Nordic countries. Income splitting is mandatory for sole proprietorships and partnerships, but also 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.

All Nordic countries allow for integration of capital and labour income, if capital income is negative. There is also integration of corporate and capital income, although there are considerable differences between the four Nordic countries, ranging from full integration in Norway and Finland to substantial double taxation in Sweden and Denmark. A final characteristic feature of the Nordic countries (with the exception of Denmark) is that dual income tax is supplemented by a net wealth tax.

##### *Norway*

The Norwegian tax reform of 1992 introduced a pure dual income tax. The splitting of income into a labour and a capital component is mandatory for all proprietorships and

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<sup>4</sup> The gap between the tax load on labour and capital income is even higher, as net labour income is further reduced by mandatory social security contributions.

self-employed businesses, and also for closely held companies, if the active owner possesses more than two thirds of the firm. Capital income in these businesses is determined by multiplying the value of capital assets by a fixed rate of return on capital. This imputed rate of return is the same for all businesses and it is set equal to the interest rate on five year government bonds plus a premium of 4%. Labour income is calculated as the residual difference of business profits minus imputed capital income. Labour income therefore comprises not only imputed (or effectively paid) wage income of the owner but also capital income in excess of the nationwide rate of return on capital. As a matter of fact, the residual income component is called earned income rather than labour income to reflect this compound character of the “labour income” component. The rigidity of progressive taxation of earned income is mitigated by special tax preferences. There exists an upper bound for residual profits, above which profits are taxed as capital income. Moreover, entrepreneurs are entitled to make a salary reduction of 20% of their wage bill from the residual profits, which increases the share of lower taxed capital income. Although the dual income tax concept has been maintained there are problems with mandatory splitting of active shareholders in closely held companies. One solution to the problem of distinguishing between active and passive shareholders is the introduction of a shareholder income tax on excess capital income from 2006. (See Sørensen 2005a)

### *Finland*

As in Norway, full imputation of the corporate income tax requires no further capital at the personal level for dividends. Whereas no double taxation exists for distributed profits, it is not fully avoided for capital gains on share sales, because the purchase value of shares is not grossed up by the imputed rate of return on capital, as this is the case in Norway. Taxation of small companies differs as all companies which are not listed on the stock exchange are considered as closely held companies. Dividends exceeding the normal rate of return are taxed at the progressive labour tax rate. In 2005 a major tax reform reduced the tax rates and replaced the imputation system by a reduced PIT rate system. The CIT rate was reduced from 29% to 26%, the withholding tax on dividends and interest from 29% to 28%. Double taxation of dividends is mitigated by exempting

43% of dividend income distributed by listed companies. Dividend income from nonlisted companies qualifies for an additional exemption. There is a dividend allowance of 9% of the companies' net wealth up to a dividend threshold of € 90000 and only dividend income exceeding the 9% return margin and the threshold is subject to double taxation<sup>5</sup>.

### *Sweden*

Sweden introduced a true dual income tax in 1991 but deviated from this system only a few years later. Already in 1995 a classical system of corporate income taxation with double taxation of dividends was reintroduced, although mitigated by a reduced income tax rate of 30%. The reduced rate is applied to all capital income at the personal level, i.e. to dividends, interest income and capital gains. Income splitting for proprietorships and closely held companies is based on an imputed return, which is calculated by adding a premium of five percentage points to the interest rate on 10 years government bonds. If actual returns are higher than the imputed return the residual is treated as labour income and taxed at the progressive labour tax rate. Dividends below the imputed rate of return are exempt from capital income tax and only bear the corporate income tax burden of 28%. The system includes further complexities, as capital gains of active shareholders are partly taxed at the progressive rate, while passive shareholders are subject to the proportional capital tax.

### *Denmark*

Denmark was the first country to implement a dual income tax as early as 1987, but the government's dual income tax proposal was modified in the parliamentary process and dividend income was never taxed at a single flat rate. Moreover, dividend income is double taxed at the corporate and the personal level, although at a reduced rate. Since 1994 dividends are subject to a 28% withholding tax, which is final for dividend income below the threshold and which credited against the higher tax rate of 43% for dividend income above the threshold. The Danish income tax code distinguishes personal income,

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<sup>5</sup> For dividend income exceeding the €90000 threshold but below the 9% margin the capital income tax rate of 28% applies, dividend income from nonlisted companies exceeding the 9% margin is taxed as earned income at progressive rates.

capital income and income from shares. But only income from shares is taxed at the reduced rates, whereas personal and capital income, in particular interest income, is taxed according to the progressive schedule. A separate schedule is applied to capital gains.

## **5. 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/Wiegard 2004) and Switzerland (Dietz/Keuschnigg 2005) although it remains to be seen, how these proposals will perform in the tax reform competition in both countries.

### **5.1. Final Withholding Income Taxes in Austria, Belgium and Italy**

Austria, Belgium and Italy did not introduce a fully fledged dual income tax but a final withholding tax on interest income and dividend income (Table 2). Labour income as well as earned business income labour income is subject to a progressive schedule. For a couple of years a further dual income tax element was in force in Austrian and Italian corporate and noncorporate income taxation but abolished again recently. In contrast to the Nordic countries there is no integration of earned income and negative capital income, but Austria and Belgium allow for a filing option for low capital income earners, which implies that filed capital income is taxed according to the progressive earned income tax schedule.

**Table 2: Final Withholding Taxes on Capital Income (2004 rates in percent)**

	Austria	Belgium	Italy
Tax reform	1994	1993	1991
Personal income tax rates			
- Final withholding tax	25	15/25	12,5/27
- Earned income	21-50	26,88-54	24,15-46,15
Basic allowance for capital income	Filing option	Filing option	No
Offset of negative capital income	No	No	No
Integration of corporate and personal income tax	Reduced PIT rate	Reduced PIT rate	Reduced PIT rate
Corporate income tax rate	34/25 <sup>a</sup>	34	33
Withholding tax			
- dividends	25	25	12,5
- interest	25	15	12,5/27
PIT on capital gains	25	33	27
Net wealth tax	No	No	No

Notes: <sup>a</sup> reduced rate on returns on newly injected capital.

Source: BMF (2005)

All three countries tax dividend income at the corporate and the personal level. The corporation tax on dividends is supplemented by a final withholding tax on dividends at the personal level. The combined tax burden on equity profits is therefore 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 2) and, at least for some years in Italy and in Austria, to a share of business profits, which was calculated as an 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. 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. At the same time, the minimum tax rate on earned income was raised to 38,3% (from 21%) whereas the 25% flat rate on capital income remained unchanged.

## **5.2. Special Regimes for Capital Income Taxation in Greece and the Netherlands**

The Netherlands and Greece recently also moved towards 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 Nordic dual income tax (Table 3).

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 presumptive personal income tax is levied at a rate of 30% on capital income, which is calculated by applying an imputed return of 4% on the average net value of assets in the tax period. The imputed 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 at the personal level of this “Box 3” type investment. 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 31,5% (from 34,5%) and raised the first bracket PIT rate to 34,4% (from 33,4%) in 2005.

**Table 3: Special Tax Regimes on Capital Income (2004 rates in percent)**

	Netherlands	Greece
Tax reform	2001	1993
personal income tax rates		
- dividends	30 (Box 3)/25 (Box 2)	0
- interests	30 (Box 3)/25 (Box 2)	10/15
- earned income	33,4-52	15-40
Basic allowance for capital income	for Box 3	No
Offset of negative capital income	No	No
Integration of corporate and personal income tax	Reduced personal income tax rate	Dividend exemption
corporate income tax rate	34,5	35
Withholding tax		
- dividends	30 (Box 3)/25 (Box 2)	No
- interest	No	15
PIT on capital gains	30 (Box 3)/25 (Box 2)	No
Net wealth tax	1,2 <sup>a</sup>	No

Notes: <sup>a</sup> levied as presumptive personal income tax.

Source: BMF (2005)

Greece is the only EU15 country which exempts dividends at the personal level.<sup>6</sup> Thus, dividends are taxed at the corporate income tax rate of 35% which is 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 15% on bank deposits).

## **6. 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. There have been a series of amendments to improve the dual income tax systems and further reform steps are called for.

One major problem of operating a dual income tax is the separation of business income into capital and labour income. Calculation of capital income by imputing an average return on business assets is a crude measure and does not pay proper attention to the opportunity costs of capital<sup>7</sup>. Moreover, the prescription of the imputation rate by the tax code has to be regarded as the outcome of a political bargaining game and is only loosely connected to economic theory. But multiple imputation rates will certainly intensify the bargaining process and reduce transparency, rather than generate economically desirable results.

Defining labour income as residual profits is also a procedure open to criticism. Residual labour income does not only comprise a return on labour but includes economic rents, risk premia, and windfall profits which usually are considered as capital returns. Thus the question arises if these components of residual income should qualify for preferential taxation as well. The Norwegian experience of residual income thresholds and salary deductions is a striking example for the scope of successful political lobbying for preferential tax treatment (Christiansen, 2004).

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<sup>6</sup> Among the EU25 dividend exemption was also adopted in Cyprus, Estonia, Latvia, and since 2005 also in Slovakia.

<sup>7</sup> This is also the experience in Croatia, where a protective interest rate was administered to run the consumption-oriented income tax regime between 1994 and 2001.

While a level playing field for highly mobile capital investment is a crucial desideratum, nonintegration of corporate income tax and personal income tax, preferential treatment of capital returns and nominal interest taxation provoke tax arbitrage and investment distortions. At the same time, however, capital tax arbitrage is less of a problem under dual income tax as a matter of a lower tax rate.

Finally 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, the possibility for labour income earners to offset capital losses, or the different treatment of domestic and foreign capital income are costly methods of tax administration and certainly deserve further attention in dual income tax reform steps.

## **7. 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.

One major advantage of dual income tax is the easy integration of corporate and personal income tax. Although the current picture of corporate income taxation in Europe exhibits a clear affinity towards classical double taxation (mitigated by a low corporate income tax rate and a reduced personal income tax rate) Finland and Norway show that imputation can be administered in a reasonable way, if corporate income tax credits and withholding taxes on interest fully cover the capital income tax at the personal level.

Incentives for strategic income shifting between capital and labour income can be reduced if the labour income tax rate in the first income bracket and the capital income tax rate 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 first bracket labour income tax are tied.

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 nineties on a common European corporate income tax were

forcefully rejected by the Commission as well as national governments, the recognition that a stronger alignment of capital income taxation in the enlarged EU 25 might prove beneficial for the internal market will be on the agenda of the Ecofin Council. A move towards dual income taxation has been stated as a promising starting point for coordinating corporate income taxation in the EU (Cnossen 2004). If the tax rates on capital and labour differ in the EU member states, then coordination steps in capital income taxation should face less opposition in the member states because the tax rate autonomy on labour income, which is far more sensitive with respect to country specific fiscal and distributional objectives, remains unaffected and might even be extended to subfederal levels without provoking capital flight.

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