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Dual Income Tax Option for New Zealand

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Abstract

The paper starts out with a review of the current status of capital income taxation in New Zealand and its consequences on the economic performance. In comparison with recent tax reforms in Europe the strengths and weaknesses of comprehensive income taxation and dual income taxation are reviewed. Based on political desiderata for an income tax reform for New Zealand are formulated and implemented into a dual income tax system which deviates from traditional European blueprints. Core elements of the dual income tax proposed are an ACE type corporate income tax, which exempts the normal return to corporate equity, and a structure of corporate and dual income tax, which equates the effective tax burden on labour income and on capital income exceeding the normal rate of return.

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

JEL: H2, H24, H25

1. Introduction

In the last two decades dual income taxation has become an important blueprint for income tax reform in Europe. The era of dual income taxation started out in Denmark (Sørensen, 1988) and in three other Nordic countries in the beginning of the 1990s. Since then dual income tax elements, in particular the introduction of special flat tax rates on interest income, dividends and other sources of capital have been adopted by several European countries, e.g. Austria, Belgium, Greece, Italy, the Netherlands, and most recently also Germany (see Genser and Reutter, 2007).

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The success story of dual income taxation which led to the spreading of the concept to many EU countries in the last two decades has been blurred by reform steps in Norway and Finland in 2005 and 2006, which brought about a deviation from the "pure" form of dual income taxation the two Nordic countries had introduced 15 years before. It must also be admitted that Sweden changed its dual income tax regime only one year after its first introduction, and the Danish tax reform already underwent a modification during the parliamentary negotiations in the late eighties. Nevertheless dual income taxation has become an influential guideline for national tax policy in Europe and a veritable challenge to the Schanz/Haig/Simons (SHS) standard of comprehensive income taxation that dominated tax policy design in the second half of the 20th century.

The paper is organized as follows. We discuss the New Zealand system of capital income taxation in section 2 and compare it with the current state of capital income taxation in OECD countries in section 3. In section 4 we review the lessons from tax theory on capital income taxation in a small open economy. Section 5 tries to balance pros and cons of dual income taxation in contrast to the traditional standard of comprehensive, Schanz/Haig/Simons-type income taxation. Political desiderata of an income tax reform in New Zealand are formulated in section 6. In section 7 we design a capital income tax system for New Zealand, which makes use of the experience of European countries that have implemented dual income tax features during the last two decades. Problems of implementation, administration, and control are addressed in section 8. Section 9 concludes.

2. Capital Income Taxation in New Zealand

Capital income taxation in New Zealand is firmly embedded in a comprehensive income tax regime following the Schanz/Haig/Simons standard. The characteristic features of the New Zealand system of capital income taxation date back to tax reforms in the late 1980s. Benge and Holland (2010, 290ff.) identify five major principles of the current capital income tax system

i) Rate Alignment:

The top personal and corporate income tax rates should be the same in order to avoid strategic income tax deferral by retaining company profits and the associated lock-in effect.

ii) Reasonably flat personal income tariff:

"Reasonable flatness" comprises a relatively low top income tax rate and no zero rate threshold.

iii) Broad income tax base:

Striving for broadness implied the abolition of accelerated depreciation and other incentive schemes, as well as shifting from realization to accrual taxation for certain forms of capital returns. Two exemptions which still persist are the exemption of capital gains and the exemption of imputed rental income on owner occupied housing.

iv) Imputation:

Avoidance of double taxation of dividends is ensured by full imputation of corporate income tax payments for personal income tax liabilities on dividend income.

v) Worldwide income taxation:

New Zealand residents are liable to income tax with their foreign earnings, but international double taxation is prohibited or alleviated by unilateral foreign credits or by specific bilateral measures in about 40 double taxation treaties.

Rate alignment was perfect between 1989 and 1999, but since 2000 the top personal income tax (PIT) rate used to be higher than the corporate income tax (CIT) rate (see Table 2.1). The income tax reform of 2010 reduced the PIT/CIT rate gap to 5 %.

The flatness of the PIT schedule underwent several changes in the last two decades. The rate gap between the first bracket and the top bracket rate has been increased from 9 percentage points in 1988 to 26,5 in 2009 (Table 2.1). The effective rate gap was even higher as Table 2.1 does not account for tax credits, e.g., the credit for an annual income below 9980$.

Tax base broadening has been extended in 2010 by abolishing tax allowances for depreciation of buildings and for depreciation loading on new plant and equipment, as well as by limiting the deductibility of interest expenses in cases of "thin capitalization" (see Gemmell, 2010, Table 1). Numerous tax concessions for specific sectors or accelerated depreciation have already been abolished in previous reform steps, moreover, there is no deductibility of work-related expenses like, e.g., home offices for teachers.

Table 2.1: Statutory Personal and Corporate Income Tax Rates in NZ

	1987/88	1988/89	1989/90	1997/98	2000/01	2008/09	2009/10	2010/11	2011/12
PIT rates	48 30 15	33 24(28) 15	33 24(28) 15	33 19.5(21) 15	39 33 19,5(21) 15	39 36 33 27 21 16,75 13,75	38 33 21 12,5	35 31,5 19,25 11,5	33 30 17,5 10,5
CIT rate	48	28	33	33	33	30	30	30	28

Notes:
[1] rates in parentheses are statutory rates adjusted for low income rebates (LIR)
2 In 2008/09 and in 2010/11 tax rate changes within the tax year produced transitional tax rates reflecting an average of the prior and the succeeding year. This was also the case in 1996/97 and in 1998/99.
Source: Inland Revenue Department (2010)

Imputation of CIT on the PIT liability avoids double taxation of dividend income earners. There is however still an incentive for retaining profits at the company level if the personal PIT rate exceeds the CIT rate. This is reflected in a substantial rise of imputation credits in closely-held companies after the tax reform of 2000 (Benge and Holland, 2010, Table 13.1). The income tax regime has offered an opportunity of using other vehicles to

shelter personal capital income from higher PIT rates, e.g., earning capital income as trustee income or as investor in portfolio investment entities.

From an international perspective the current New Zealand tax system is generally regarded as well developed and fiscally efficient (see, e.g., Chen and Mintz, 2010, 2). The tax reforms since the 1980s have accounted for the position of the country as a small open economy and particularly its tight economic relations to Australia. The increasing globalization of markets is changing the economic environment and is affecting the efficiency of the tax system. Most OECD countries realize problems with their capital income tax system and try to fix the problems by tax reforms that lower the tax rates and close loopholes used as tax shelters.

Table 2.2 Marginal Income Tax Rates 2011/12 for Different Forms of Saving

Investment entity	Marginal tax rate
Interest	10.5%, 17,5%, 30%, 33%
Dividends	10.5%, 17,5%, 30%, 33%
Capital gains	0
Trust, currently distributed	10.5%, 17,5%, 30%, 33%
Trust, retained	33%
Portfolio Investment Entity	10,5%, 17,5%, 28%
Superannuation funds	28%
Life insurance	28%
Owner-occupied housing	0

Source: Inland Revenue Department (2010), own update for tax reform 2010

The capital income tax system of New Zealand can be characterized by relatively low statutory tax rates on capital income (at least since 1988) but there are rate differentials between different forms of capital income which give rise to tax arbitrage and allocation inefficiencies. Table 2.2 updates an overview by the Tax Working Group (TWG, 2010,

29; Gemmell, 2010, 69) which reveals the variety of statutory rates. The presentation is biased in the sense that the reinforcing effect of rate dispersion stemming from the withdrawal of tax credits, e.g. the working for families tax credit, is neglected.

The broad variety of marginal tax rates on capital income translates into a broad span of gross return rates in the capital market equilibrium where net return rates coincide. These different gross return rates are costly because of misallocation of capital and because of resource consuming tax engineering activities. Moreover the gains from income tax arbitrage are concentrated on wealthy citizens with a high share of asset holding and capital income. This finding is by no means new and it has been discussed in the forefront of past tax reforms, in particular in the comprehensive study of the Tax Working Group (2010). But the political outcome of the reform debate was nevertheless an income tax reform which followed the tax-cut-cum-base-broadening tendency but did not level the playing field for capital returns (see Table 2.2).

3. Capital Income Taxation: An International Perspective

Tax revenue in New Zealand was 33.7% of GDP in 2008, which is below the average figure of all OECD countries (34.8%) and significantly lower than the average for the 20 EU countries within the OECD (38.3%).

The overall tax structure of New Zealand exhibits two major deviations from the OECD average. First, personal and corporate taxes on income and profits are about 20% of GDP which is more than 50% higher than the OECD or EU average (see Table 2.3). Second, New Zealand is one of the few OECD countries which do not levy social security taxes in order to finance its social transfer system. These social security taxes are 9% of GDP across the OECD and almost 12% in the EU. These significant structural differences, however, largely vanish if income taxes and social security contributions are consolidated as taxes on capital and labor income, but the figures are still significantly lower for New Zealand (20.4%) than for the OECD (21.5%) or for the EU (24,1%).

Another remarkable feature of the New Zealand tax system is the revenue from GST/VAT (8.6% of GDP in 2008) which is not only above the OECD average (6.8%) but

also higher than the EU average (7,8%). These figures in Table 3.1 reveal a high fiscal efficiency of the New Zealand GST because the higher GST ratio in New Zealand has been obtained with a standard GST rate of 12.5% which is much lower than the EU average of 19.5%. New Zealand makes less use of other taxes on goods and services besides the GST and the aggregate figures on all these taxes for New Zealand (11.4%) do not deviate from the corresponding figures of the OECD (10.8%) or the EU (11.7%).

Table 3.1 Fiscal Structure of the New Zealand Tax System (in% of GDP)

	1990 NZ	1990 OECD	2000 NZ	2000 OECD	2008 NZ	2008 OECD
Income&Profits (1000)	22.0	12.5	19.9	12.7	20.4	12.5
- PIT (1100)	17.7	10.4	14.3	9.5	13.7	9.0
- CIT (1200)	2.4	2.6	4.1	3.5	4.4	3.5
Social Security (2000)	-	7.6	-	8.9	-	9.0
Property (4000)	2.5	1.8	1.8	1.9	1.9	1.8
Goods&Services (5000)	12.4	10.5	11.5	11.3	11.4	10.8
- VAT/GST (5110)	8.3	5.9	8.3	6.8	8.6	6.8
Other	3.9	4.6	2.5	4.4	2.0	4.0
Total	36.9	33.1	33.2	35.5	33.7	34.8

Source: OECD (2010)

In the 1990s the New Zealand tax regime was acknowledged as a well developed and efficient tax system in the OECD (OECD, 2000, Section IV). By 1989 New Zealand had reduced its CIT rate to 33% which then was a very low rate by OECD standards. Base broadening nevertheless kept CIT fiscally very lucrative (Table 3.1). Rate alignment made PIT a tax regime with an extremely low marginal top rate of 33% for labour income, but also for capital income at the personal level, since full CIT imputation ruled out double taxation of dividends. Finally the New Zealand GST has been acknowledged as very efficient implementation of VAT.

The favourable performance of the New Zealand tax system dropped back in the first decade of this century when international tax trends changed the country's relative position within the OECD. On the one hand the globalization of capital markets forced small open economies to reduce their CIT rates and the OECD average fell well below the 33% of New Zealand. On the other hand the tax reform of 2000 proved alignment as politically unsustainable and the top PIT rate was raised to 39%. Being still a low rate on labour income within the OECD, this tax hike also increased the tax burden on capital returns by six percentage points. This move ran counter the worldwide tendency of cutting the tax rates on saving and led to a series of subsequent measures which aimed at reducing tax rates on certain forms of saving, e.g. the KiwiSaver. Within this retirement savings programme the maximum PIT rate on returns from portfolio investment entities (PIE) and from superannuation funds was capped by a ceiling of 28% (see Table 2.2).

Contrary to the tax policy goal of many OECD countries which tried to reduce capital income tax rates and to level the playing field for private investors, New Zealand increased the tax rates on capital income and expanded the room for capital return arbitrage. Moreover the unlevelling of the playing field for savers was intensified by working for families tax credit measures which reduced the tax burden of the needy but exacerbated the marginal tax rates on capital returns for tax payers in higher brackets whose WfF tax credits are cut with rising income. The situation was alleviated with the reduction of the top PIT rate in the tax reform of 2010, but the PIT rates on capital income still do not generate a level plying field today (see Table 2.2).

These findings are in line with recent analyses by the Tax Working Group (2010, chap. 1 and 2), by Benge and Holland (2010), or by the Treasury (2009), and these studies also contain proposals how to reform the tax system, in particular capital income taxation. While there is agreement that the changing international environment puts pressure on the New Zealand capital income tax regime these tax studies do not seem to pay proper attention to the problems of national saving. The New Zealand economy faces problems of a low domestic savings rate, of net foreign liabilities which add up to more than 80% of GDP, of relatively low labour productivity and growth rates below the OECD average (see Savings Working Group, 2011). The core problem of this negative performance set is low domestic saving and one of the working group's crucial policy recommendations is a long term rise in the national savings rate. Household and company savings are affected by tax policy and thus in my view the national savings target has to be regarded as a second source of pressure on capital income taxation.

4. Lessons for Capital Income Taxation in a Small Open Economy

Capital income tax reforms in many countries have paid tribute to the globalization of the capital market which is characterized by a significant rise in the international mobility of capital, by capital tax competition among countries, and by strategic tax engineering of multinational firms to keep their capital tax bills low.

Theoretically capital taxation for small open economies faces an environment, in which the international supply of capital is perfectly elastic. The international interest rate determines the domestic capital market equilibrium in a small open economy. International capital flows in as long as the marginal domestic net-of-source-tax rate of return exceeds the international interest rate. On the other hand domestic capital will flow out, when ever the marginal after-tax rate of return of a domestic investment is lower than that of an investment in the international capital market.

If a source-based income tax on domestic returns from mobile capital is introduced or increased then capital will flow out of the country until in the new equilibrium the net-of-tax return equals the world interest rate. Owners of mobile capital will not bear any

burden from such a source-based tax. On the other hand the outflow of capital will reduce the productivity of immobile domestic factors, viz. labour and land, and thus the capital tax burden is shifted to these immobile factors. From an optimal taxation perspective this indirect taxation of immobile factors is inferior to a direct taxation of these immobile factor returns and the optimal marginal income tax rate on perfectly mobile capital is zero (see Gordon, 1986, or Razin and Sadka, 1991).

The "zero source tax" result is based of the assumption that capital is invested in a perfectly competitive market and only earns the market interest rate. Companies investing abroad however often earn company specific rents and their returns exceed the market interest rate. These rents are infra-marginal capital income and the tax burden on these rents is not reflected in the marginal but in the average tax rate on capital income in the source country (see Devereux and Griffith, 1998, 2003). As internationally mobile firms can decide where to locate and invest, average tax rates affect these location decisions and the international competition for foreign capital investments puts a pressure on average source tax rates in the recipient countries. If relocation is costless, which is a plausible assumption for decisions on capital widening investments or replacement investments, a source-based capital tax which induces a re-location will again shift the tax burden on immobile domestic factors. From an optimal taxation perspective taxing firm-specific rents of mobile capital generates efficiency losses and should be avoided as well.

Both theoretical arguments call for zero or at best low tax rates on mobile capital. But international investors do not only earn company-specific rents but also location-specific rents. As these rents fade if capital flows out there seems to be a possibility to tax these immobile rents. Capturing a share of this rent by source-based capital income taxation may nevertheless be limited if the company responds by shifting substantial shares of these rents to subsidiaries in low tax countries. Even though location rents are immobile profits they can escape taxation in the source country through tax engineering strategies, e.g., transfer pricing, thin capitalization or overhead-cost sharing.

The chance of earning a high share of tax revenue from capital income in a small open economy by high company tax rates was limited in the past and it has been further

reduced by the increasing globalization of capital investments in the last decades. Moreover the welfare costs of a tax induced shortage of capital made countries ready to reduce their capital tax rates to avoid productivity gaps and downward pressures on wages and immobile-factor rentals. The expected yield of capital income taxes has been further damaged by international tax competition. Reducing rather than increasing capital tax rates offers a double dividend strategy for welfare gains. Lower tax rates induce capital inflows which increase the domestic tax base for capital income. Capital income tax revenue goes up and generates a first dividend as long as the tax base responds elastically to tax rate cuts. The second dividend is due to the increase of labour productivity and wage income.

Lowering capital income taxes thus is a best response in a tax-competition game and there is empirical evidence that the OECD countries behaved in this way. There was a downward movement of corporate income taxes as well as of personal income taxes on capital income. Both taxes are components of the total effective tax burden on capital income from dividends. The corporate income tax burden however is neutralized if there is full imputation at the personal level. Since double taxation of dividends is widespread among the OECD countries, lowering the corporate income tax also reduced the effective capital income tax burden for the capital owner. Under full imputation a reduction of the capital income tax rate requires lowering the personal income tax rate. Although there is empirical evidence that this has been the case in many OECD countries in the last years, such a personal income tax cuts are costly under a comprehensive income tax regime because the tax rate cut affects all sources of income and cannot be targeted at capital income. So the tax policy maker, who intends to maintain the principle of comprehensive income taxation on the one hand but to strive for lower tax rates on capital income on the other, has to trade off these welfare gains with substantial revenue losses from lower tax rates on other factor income. Evidence across countries shows that besides lowering income tax rates a frequent tax policy consequence has been to give capital income a preferential status in contradiction to the principle of comprehensive income.

5. 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.

5.1 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. 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. 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.

5.2 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 interpersonal horizontal equity* in a life-cycle perspective[1]. The problem can be avoided under a consumption-based income tax, as advocated already by Irving Fisher and Nicholas Kaldor[2].

[1] The Mirrlees Review addresses this problem an allocational distortion of intertemporal consumption under a more general header of savings neutrality. The authors define a neutrality principle which has a two-fold focus: i) neutrality over the total amount of individual saving and the timing of saving over the life cycle, and ii) neutrality over different types of assets and savings vehicles (see Mirrlees, 2011, section 13.2)

[2] 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 programs requires investment in time, which incurs opportunity costs of foregone earnings. As potential labor 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 labor income in real (or financial) capital formation or gross labor 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 an expenditure 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 SHS income tax, which only allows for one 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.

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.[3] Capital

[3] Tax engineering by shifting assets among family members is an important operating field for 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.

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.

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 non-separation of nominal and real returns on interest bearing assets. Nominal interest income is regarded as taxable capital income in tax codes, although interest consists of two components which should be treated differently under the SHS standard. The compensation for inflation keeps the value of wealth constant in real terms and should not be taxed as comprehensive income. Only real interest income increases wealth and thus should be 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, the exemption of capital accumulation in pension funds or in life insurance saving, the exemption of imputed rents in owner-occupied housing, the exemption of realized capital gains on certain assets, etc. There are, however, other deficiencies of income tax regimes which contradict the pure SHS standard and lead to over-taxation as, e.g., the double taxation of dividends under a classical corporate income tax, restrictions to loss offsets, limitations to depreciation of assets, etc.

In spite of these problems the SHS standard is still regarded as the political ideal in many countries and it survived the economic challenges from expenditure tax and cash-flow tax advocates, although less due to superior economic arguments but rather by political support. Tax law experts, supported by law courts, pointed at transitional problems and equity gaps, and they were willing and able to combine legally the principle of comprehensive income taxation with additional principles, like the nominal value principle or the correspondence principle[4], irrespective of their economic inconsistency.

5.3. The Characteristic Features of a Dual Income Tax

The dual income tax[5] 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

[4] The German Constitutional Court has established the correspondence principle which states that the deduction of a certain part of income from comprehensive income of taxpayer A is permitted if this part is a component of comprehensive income of taxpayer B, e.g. the maintenance expense of a divorced husband to his former wife. In his decision on the income tax exemption of accrued pension claims the Court made use of this correspondence principle and decided that leaving accruals of individual wealth on pension claims untaxed under the German income tax code does not contradict the principle of comprehensive income taxation, since the old age pension system ensures that the implicit income contained in the pension claims is taxed when the pension claims are paid out. This view ignores that tax deferral reduces the tax burden in present value terms and violates horizontal equity if two agents invest in different savings vehicles.

[5] See also Boadway (2004), Cnossen (1999), Eggert and Genser (2005), Genser and Reutter (2007), Sørensen (1998, 2005b, 2007a).

additional degree of freedom for tax policy, which can potentially be used to overcome some of the problems of comprehensive income taxation addressed in section 5.2.

Under the dual income tax income from different economic activities (doing business, self employment, employment, leasing land) has to be split up into 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, capital gains, rental income, or royalties. 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 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 by imputation. Moreover capital income also comprises imputed returns on capital invested in owner occupied housing.

Under a dual income tax capital income is taxed at a flat rate, whereas labour income is subject to a progressive tax schedule. To ensure that both income fractions add up to total income the usual procedure is imputing the capital income component and to define labour income as the residual. Since the division in capital and labour income may not exhaust all income elements, e.g. transfer income or rents, the residual income has been tagged “earned income”, but given that the major part is labour income both notions are used synonymously. In order to calculate the tax bases appropriately costs of earning capital and labor income are tax deductible, the *principle of net returns* is carried over from comprehensive income taxation.

In its pure form the Nordic dual income tax aligned the first bracket rate of the progressive tax schedule with the flat rate on capital income. Such a dual income tax regime can be interpreted as a flat rate on total income with a progressive surtax on labour income.

Personal allowances are deductible from labor income and induce an element of indirect progressivity already in the first labor income bracket. There is no general recommendation if personal allowances should be granted to capital income earners

without labor income. But rate alignment allows for a simple extension of personal allowances to capital income earners, either by optional filing of capital income or by transforming personal allowances to an income tax credit which is paid out as a transfer payment.

Negative capital income gives rise to a income tax credit which can be offset against tax liabilities on positive returns from other capital assets. If total capital income is negative in a period there are two options offsetting excess tax credits. On the one hand they can be carried forward or backward and offset against future or past capital income. On the other hand the tax credits can be offset against the tax liability on labor income in the same period. This looks like re-establishing an element of comprehensive income taxation, but tax crediting across the two income classes is only a clearing device and leaves the progressivity of labor taxation untouched.

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. Double taxation of dividends can be avoided or mitigated, if the corporation tax on distributed earnings is reduced by tax allowances at the company level, e.g., by an allowance for equity (ACE) or other by a dividend allowance. If partial or full imputation are applied 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 aligning the corporation tax rate and the dual income tax rate. The corporation tax credit then exactly covers the dual income tax liability and no further imputation is required.

5.4. Why Is a Dual Income Tax Attractive?

The dual income tax system is attractive because this regime allows for avoiding several problems of a true comprehensive income tax system[6].

From an optimal taxation perspective the option of taxing capital and labor income differently is superior because applying the same tariff to both sources of income implies the provision for an additional constraint which will generally reduce the degrees of

[6] This subsection restates and extends the set of arguments of Genser and Reutter (2007, xx).

freedom for the optimal tax regime and become irrelevant at best if the constraint turns out not binding in the optimum. Economically different rate schedules allow for an independent adjustment of the tax rates on capital and labour to the welfare costs of the respective distortions (see Nielsen and Sørensen, 1997; Sørensen, 2005b).

One particular distortion is the non-neutral definition of tax bases for capital and labour income. Capital income comprises capital rentals as well as realized and accrued capital gains on assets. Labour income, on the other hand, does not comprise human capital gains, viz., the increase of individual human wealth, but is restricted to returns to human capital. Basically labour income is calculated on a cashflow basis, whereas capital income is calculated on an accrual basis. This fundamental difference cannot be overcome, as human capital cannot be traded because it is non-separable from the individual, whereas capital assets are traded in the capital market. The resulting tax distortion can be balanced by differential taxation of capital and labour income under a dual income tax, while equal tax rates under a comprehensive income tax cannot account for this distortion.

As already noted in section 5.1, the income tax codes in most developed countries contain various other restrictions which generate deviations from the true SHS standard. While little can be done to cope with these problems under the principle of comprehensive income taxation a dual income tax system offers more room to mitigate some undesirable consequences. As a matter of fact the Nordic countries and several other European states enacted tax reforms which can be interpreted as moves toward a dual income tax system (see Genser and Reutter, 2007).

The nominal value principle leads to an overtaxation of interest income, as the nominal income tax base includes the compensation for inflation, which should not be taxed as comprehensive income. A low marginal tax rate on capital income reduces overtaxation.

International capital mobility sets an incentive to domestic assets holder to shift their assets across the border and to have the returns taxed in low tax countries. This revenue loss from capital flight can be reduced if domestic capital returns are subject to a low marginal rate.

Asset management strategies allow for a transformation of capital returns into forms which offer tax preferences. Low marginal tax rates on capital income reduce political opposition against tax base broadening to close the tax loopholes, but they also reduce the distortions if capital income escapes income taxation. Dual income taxation helps to ensure portfolio neutrality[7], viz. a *level playing field* for capital investment, by taxing all capital income at the same low flat tax rate.

The realization principle for taxing capital gains provides disincentives to distribute returns to capital and to reallocate them toward more productive uses. This detrimental lock-in effect can be mitigated by taxing distributed returns at lower tax rates.

Equalizing the marginal income tax rates on capital income reduces the incentives for tax arbitrage by assigning capital returns to household members or silent partners with a lower tax rate (see Genser and Reutter, 2007)

The dual income tax rate is determined by a political decision. One possible value is setting the tax rate to zero. Not taxing capital returns implements an expenditure tax, as a special case of a dual income tax. Thus the dual income tax might be welcome by advocates of expenditure taxation as a stepping stone in a multi-step process towards a neutral income tax regime.

While it is true that a dual income tax rate of zero avoids distortions on consumption over the life cycle under certain assumptions, there are non-fiscal arguments that optimal dual income tax rates should be positive. An income tax on capital returns may enhance welfare if distortions from other taxes can be mitigated, e.g. if investment in human capital is distorted by credit constraints (see, e.g., Lochner and Monge-Naranjo, 2002) or if no insurance markets exist for individual education and employment risk (see, e.g., Anderberg and Andersson, 2003), or if savings turn out sufficiently correlated with unobservable individual characteristics of earnings abilities and allow for an indirect taxation of individual endowments (see, e.g., Banks and Diamond, 2010).

Finally a flat tax on capital income simplifies tax administration because withholding taxes do already collect the final amount of capital income taxes and filing of capital

[7] Portfolio neutrality might be seen as an appropriate specification of the second requirement of the neutrality principle referred to in footnote 1.

income becomes unnecessary. The welfare gain from avoided tax engineering costs and reduced compliance and control costs under a dual income tax must, however, be traded off for a loss in redistributive power by taxing capital income at a flat rate. But this trade off has to account for the evidence on strategic or negligent capital income tax evasion through non filing. There is evidence that the introduction of low withholding taxes on capital income instead of regular tax rates on filed capital income has increased and stabilized capital income tax revenue rather than reducing it (see Genser and Reutter, 2007, or Sørensen, 2010, 84).

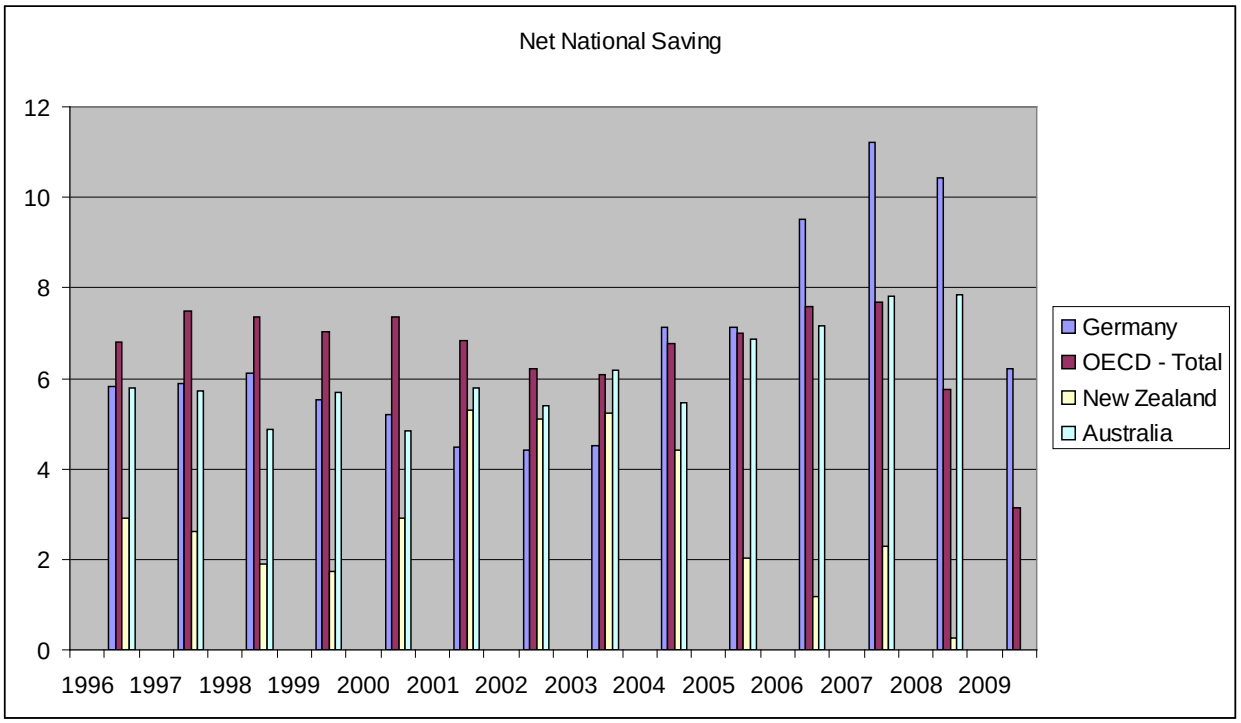
6. Political Desiderata for a Dual Income Tax Reform in New Zealand

The Nordic countries implemented dual income tax systems in the early nineties, when there was political consensus that progressive taxation of capital income performed poorly. These countries are prosperous, small open economies, with a highly developed social security system and large public sectors financed by high taxes on income and consumption. Although at the completion of the internal European market in 1993 only Denmark was a member of the EU the Nordic countries were aware of the forceful internationalization of the European as well as the global capital markets and the increasing international mobility of capital. But at that time the roadmap for EU membership of Sweden and Finland was already fixed and Norway was affected by the economic liberalization in much the same way as the EU member states due to its close economic relations to the other Nordic countries and to the EU in spite of its political decision to stay out.

New Zealand is also a small open economy affected by the globalization of commodity and capital markets, but it is in a different position in many respects. The public sector is much smaller and the tax revenue to GDP ratio of 34% is well below the EU average and only about three quarters of the average of the Nordic countries. As a matter of fact the statutory income tax rates are much lower than in the Nordic countries and there is less pressure to cut capital income tax rates. Moreover New Zealand has a long tradition in avoiding double taxation of dividends by full imputation of the corporation tax.

In spite of relatively low taxes on asset returns New Zealand the performance of savings reveals problems. National savings have been significantly lower than the average savings in the OECD over the last two decades with a national savings to GDP ratio fluctuation between -1.5% and 5.5% (see Fig. 6.1). The low savings ratio is a combination of low and fluctuating private saving (savings/GDP ratio between -6.0% and 5.5%) and a government savings ratio which has been positive for most of the time. There has however been net government borrowing in the first half of the nineties and after the recent financial crisis since 2009. The New Zealand national savings performance differs markedly from the European situation where public indebtedness jeopardizes the provision of public services and medium term growth.

Figure 6.1 Net National Saving in New Zealand in Comparison



Source: OECD (2010) Gross National Accounts at a Glance, online database

In contrast to the OECD average the net national saving rate in New Zealand has its parallel in an underdevelopment of its national financial system. This has been the

conclusion of the Capital Market Development Task Force (2009) who argue that this must be regarded as one of the reasons why the business sector is "unlikely to receive the full range of financial services throughout their stages of development" (New Zealand Treasury, 2010, 15) in order to stimulate growth and labour productivity and the private sector has to rely on foreign borrowing.

A capital income tax reform in New Zealand therefore should be targeted towards five desiderata:

(i) keeping the tax to GDP ratio within the traditional range of 35% in order to balance the budget

(ii) raising the national savings quota to levels between 6% and 8% which correspond to the OECD average

(iii) setting incentives for capital inflows to stimulate growth and labour productivity

(iv) leveling the playing field for domestic savings to stimulate domestic capital supply

(v) closing tax loopholes in order to support equity targets which are mirrored in the traditional comprehensive income tax system.

These desiderata require a painful tradeoff under a comprehensive income tax, since solving the savings problems requires lower effective tax rates on capital returns while equity and fiscal sufficiency targets foreclose lower income tax rates or a further erosion of the comprehensive income tax base.

This tradeoff is less strenuous under a dual income tax. Although the tax rates on corporate income, on personal capital income, and on labour income in the first bracket had been equal in first dual income tax systems in Norway and Finland, this alignment of tax rates is not imperative.

For New Zealand a reduction of the corporate income tax (desideratum iii) seems advisable, in line with the optimal taxation tenet to abstain from source taxes on the normal return to mobile capital. On the other hand excess returns from pure corporate profits should be taxed (desideratum i) at the corporation level, taking into account however that firm specific profits are elusive whereas location specific rents are an immobile tax base.

Private saving can be stimulated by a lower tax rate on capital returns (desideratum ii). Under a dual income tax the tax rates on capital and labour income can be set independently, viz., reducing the tax rate on capital income appropriately without changing the labour tax schedule (in line with desideratum i).

As specific savings promotion schemes often affect only the savings portfolio without stimulating total saving, capital income taxation should be neutral and non-distortive and provide a level playing field (desiderata iv and v). This requires an equal capital income tax rate on all forms of savings that earn the normal market return. Excessive returns due to rents and windfall profits can be taxed at a higher rate in line with distribution targets.

Double taxation of normal capital returns distorts the level playing field (desideratum iv) and should be avoided.

Tax rates on mobile capital must be set at a low level in order to limit revenue losses through capital flight (desideratum i).

A flat capital income tax offers the opportunity of reducing the administration and compliance costs by making use of withholding taxes at source. The revenue potential of tax collection cost reduction should be used at the best (desideratum i).

7. A Dual Income Tax System for New Zealand

On a superficial technical level a dual income tax is a personal income tax based on two disjoint tax bases which are taxed according to two different tax schedules. This personal income tax regime can be combined with various forms of corporate income taxes in much the same way as a comprehensive income tax system. Which combination fits best has to be decided by the tax policy maker in line with his tax objectives in much the same way as he has do choose appropriate tax schedules for capital and labour income.

The original Nordic DITs in Norway and Finland combined a conventional CIT with a DIT under full imputation. Alignment of the CIT and DIT rates implied that CIT fully covered the DIT liability on dividends at the personal level. CIT became the final income tax burden on dividends irrespective of the actual rate of return, viz. if the dividend

reflected the normal rate of return or if it contained pure profits. Capital gains from share sales were treated alike, shareholders were allowed to step up the acquisition value of shares by retained earnings which had already been taxed by CIT and only the capital gain exceeding the stepped up purchasing price was subject to DIT. This favourable treatment of excess returns was not granted to non-incorporated firms and to closely-held companies, as their capital income was calculated by imputation based on the normal rate of return. Excess returns to capital therefore were taxed progressively as labour income.

The DIT reforms in Finland (2005) and Norway (2006) kept the conventional CIT but changed the treatment of dividends at the personal level. Imputation of CIT has been abolished but dividend income up to the normal rate of return has become exempt from DIT whereas excess returns have remained liable to DIT. Exempting the normal return at the personal level does however not require income tax filing but can be administered as a withholding device at the company level. Technically the dividend for each shareholder is split up in a normal dividend and an excess dividend and only the excess dividend is subject to DIT which is withheld at source. Excess dividends are double-taxed under these new DIT regimes, by the CIT on gross dividends and by a withholding DIT on the dividend payment net of CIT. Excess dividends therefore are not taxed as labour income but are subject to a compound CIT/DIT flat rate. Discriminatory over- or undertaxation of excess capital returns is avoided by closing the gap between the CIT/DIT rate and the top rate on labour income. This alignment reduces the degrees of freedom in rate setting. A corresponding approach applies for taxing capital gains from share purchases. Stepping up the purchasing price of shares by the normal rate of return ensures that normal capital gains are only taxed by CIT whereas excess capital gains are double-taxed.

When the German Council of Economic Advisors prepared a study on a DIT reform option for Germany in 2006 (Wiegard et al., 2006) the recommendation for the integration of CIT and DIT replicated the Norwegian DIT reform on the one hand, but also discussed the symmetric case of subjecting dividends to DIT at the personal level, but exempting the normal rate of return from CIT at the company level. This proposal of a CIT has been advocated independently of any dual income tax considerations by the Institute of Fiscal Studies in the early nineties under the header ACE, allowance for

corporate equity[8] (IFS, 1991). This combination of DIT with an ACE-type corporate income tax system was taken up by Peter Sorenson in a Report for the Australian Treasury (Sørensen and Johnson 2009) and he argues that such a capital income tax system does not only accomplish the desirable features of the standard DIT but also supports capital export neutrality in the international capital market. The reason for this neutrality property is that replacing the conventional CIT by an ACE-based CIT transforms the source-based capital tax to a residence-based capital tax which does not distort global efficiency in perfect international capital market.

7.1 Implementing a Corporate Income Tax with Allowance for Equity

Proposals for reforming traditional CIT systems by including ACE have not received broad political support although some countries experimented with ACE elements. A full fledged ACE was introduced in Croatia in 1994, but repealed by 2001. Italy in 1997 and Austria in 2000 introduced an ACE on newly injected equity in line with corporate income tax reforms (Genser and Reutter, 2007) and most recently Belgium moved to a dual ACE (Gerard 2006). So there is some experience with ACE systems which make imputed capital costs for equity deductable from the corporate income tax base and put equity financing on equal footing with debt financing. In its economic effects an ACE based CIT is equivalent to a cash-flow tax on corporate income, which drives the marginal tax rate on capital income to zero and makes the tax non-distorting.

The implementation of an ACE-type CIT requires the consistent calculation of the ACE-base and the determination of an appropriate normal rate of return for all companies.

The calculation of the ACE base is a standard accounting job. The equity base for a tax year is calculated as the equity base for the previous year increased by taxable profits before deduction of the ACE and the net inflow of new equity minus the outflows which diminish equity, viz. corporate income tax payments, dividend payments, net acquisition of new shares in other companies, and net equity provided to foreign branches. One

[8] The allowance for corporate equity is one of the concepts developed to implement a tax system which is neutral with respect to investment decisions and financial decisions, as advocated by the Meade committee (Meade 1978). Other possibilities to achieve neutrality for business decisions are a cashflow tax system implying expensing of investments or an allowance for corporate capital (Boadway and Bruce, 1984).

important feature of ACE is that different choices on depreciation entries become irrelevant because any accelerated of deferred depreciation on business profits is fully neutralized by a compensating change in ACE, which is the economic rationale for investment neutrality.

The appropriate normal return rate has to be set by the tax authority. Equivalence to a cash-flow tax which ensures investment neutrality is achieved if the normal return rate is equal to the shareholders' discount rate for future tax savings through ACE. This is evident from calculating the present value of future tax base deductions through ACE. Investing ΔE increases the allowance by $r\Delta E$ in future year and the net present value of future tax base deductions for the investor is $\Delta X = r\Delta E/\rho$. Setting $r = \rho$ thus implies $\Delta X = \Delta E$ the amount deductable under expensing for a cash-flow tax. In a perfect capital market the discount rates of investors should be equal to the market rate of return. If cost recovery for investment is risky, e.g., if the company goes bankrupt, the investor's discount rate ρ and ACE include a risk premium. But these risk premiums can be reduced by appropriate measures concerning loss offsets, bankruptcy or tax rate changes. If risk can be excluded, then the average, short-term government bond rate is a good candidate for the risk-free normal return rate. The final decision however is the business of the tax policy maker.

As for any tax reform a crucial issue is its implementation. Introducing an ACE, which exempts the normal return to capital from corporation tax and therefore also avoids double taxation, must go hand in hand with the abolition of corporate income tax credits. But it might be difficult to provide transparent and consistent values for corporate equity in the initial year. There is an incentive for inflated starting values for the ACE base to reduce the future tax base. This has also been the reason why Austria and Italy restricted ACE to newly injected corporate equity. If this approach is used for New Zealand, the desired neutrality effects would still be attained, but abolishing imputation will overburden the returns on old equity. Sørensen argues that this "discriminating" treatment of the existing capital stock might nevertheless be reasonable because the dual income tax reform reduces the tax burden on normal capital returns (Sørensen 2009, 106f). But if this compensation is regarded insufficient phasing in ACE gradually by setting the

starting value of the corporate equity base to zero could be mitigated by a stepwise phasing out of CIT credits on old equity.

For the treasury the shift to ACE is associated with a loss in corporate income tax revenue because the tax base shrinks. This loss is compensated on the other hand by the one-shot or stepwise abolition of CIT credits. Besides the tax base effect there is of course a tax rate effect as well, which is likely to generate another tax revenue loss, as the reason for the capital income tax reform is the adjustment of the national CIT rate to the tax environment in the global capital market. It should be emphasized that deciding on the best strategy for implementing ACE is a trade of between fiscal needs and distributive equity. The tax burden on old equity from abolishing CIT credits is lump-sum and non-distorting. Allocation gains can only be reaped from injecting new equity which is exempt from CIT under ACE.

7.2 Implementing a Dual Income Tax on Capital Returns at the Personal Level

The flat rate on capital income should be applied to all categories of capital income in order to meet the level playing field desideratum, viz., dividends, interest, capital gains, royalties and rental income from capital assets, superannuation returns but also capital income included in compound economic activities, as returns on capital invested in non-incorporated business or in owner-occupied housing.

As the tax rate is flat imputed capital returns can be taxed at source, irrespective of the capital owner. If CIT credits on dividends are phased out in steps, imputation should take place at source by reducing the tax bill for withholding DIT.

The appropriate DIT base for interest and dividend income is straightforward. DIT can be withheld at source by companies on their dividends and financial institutions on their interest paid out. Withholding DIT would also be the best way to tax returns from superannuation, although it has to be decided if DIT should be levied only when pensions are paid or if DIT should become liable while pension claims are accumulated by imputing a fictitious annual payout/repay mechanism.

If withholding cannot be applied, capital income must be filed. For royalties and rental income to individuals an annual tax return is required, but the calculation of the tax base should be easy.

The core problem of dual income taxation has been the splitting of compound business income earned by self-employed and non-incorporated firms. Basically there are two ways to divide total business income into a capital component and a labour component.

The traditional Nordic way was to impute a capital income component by multiplying business capital with a normal rate of return. This imputed capital income is subject to the flat DIT rate. Residual business income after the deduction of imputed capital income is taxed under the progressive labour tax schedule. Splitting has not been compulsory in so far, as firms have been offered the option to tax all their business income as labour income. Although this splitting mechanism has its merits as a simple and transparent device, the system suffered from difficulties in checking the appropriateness of the splitting base and the choice of the normal rate of return.

One frequently addressed problem is the choice between two reasonable methods of treating interest payments on business debt in imputing capital income, viz. applying the gross assets method or the net assets method. The gross assets method defines capital income as the difference between imputed capital returns and interest paid on business debt. The net assets method defines capital income as imputed capital returns on business capital net of business debt. While the results of these two methods coincide if the normal rate of return is equal to the interest rate on business debt, they differ if the rates differ. Moreover the gross assets method is no longer investment neutral, whereas the net asset method sets incentives to shift consumption credits to the business sector in order to reduce the tax bill. On the other hand there has always been dispute and political pressure to include a high risk premium into the imputation rate.

The Norwegian tax reform of 2006 implemented another solution. Instead of splitting the tax base, business income was calculated and taxed according to the progressive labour schedule, but this tax liability was then reduced by a personal rate-of-return allowance, which reestablishes a tax burden equivalent to imposing a lower flat rate on capital

income. The calculation of this rate of return allowance however requires the same inputs as the splitting mechanism, viz. an allowance base and a normal rate of return.

Income splitting was also mandatory for closely-held companies. If these small-scale companies were treated analogously to widely-held, listed companies they would have been offered an incentive to declare a share of the active owner's labour income as dividend income to keep the tax burden low. The tax code stipulated rules how to separate widely- and closely-held companies but these rules offered room for strategic changes in the ownership structure, e.g., by taking in silent partners, in order to qualify as a widely-held company without splitting obligation[9]. The rules for splitting were the same as for non-incorporated firms and created the same problems. The restriction of preferential capital income taxation for widely-held companies after the Norwegian tax reform of 2006, however, changed the scope of strategic tax avoidance for closely-held companies. With the flat rate restricted to the normal rate of return and double-taxation of excess dividends the effective tax rate on excess dividends slightly exceeded the top bracket labour tax rate the incentive for transforming labour into capital income vanished. Mandatory splitting is no longer necessary for closely held companies therefore if the tax rate gap between labor income and excess dividends is sufficiently small. With m being the top rate on labor income, τ the CIT rate and t the flat rate on capital income this tax rate gap $m - (\tau + t(1 - \tau))$ can be set sufficiently close to zero in order to ban strategic falsification of income.

The exemption of capital gains is a strong incentive to look for savings programmes which make use of these tax-free capital returns. Although capital gains are taxable income under a comprehensive income tax, many countries offer preferential treatment or exemption to capital gains due to difficulties in implementing operational and enforceable rules for capital gains taxation. It was one crucial objective of dual income tax reforms to close this tax loophole and to avoid the negative consequences of lock-in effects on capital efficiency. Basically the problems are twofold. The final value of

[9] Splitting avoidance is documented by Norwegian statistics. When the number of small businesses increased from 290,000 in 1995 to 320,000 in 2003, the number of those subject to mandatory splitting fell, viz. self-employed from 190,000 to 170,000 and closely held companies from 45,000 to 40,000, whereas the number of widely-held companies increased from 60,000 to 100.000 (see Thoresen and Alstadsaeter, 2010).

capital gains only materializes once the asset is sold. So a reliable tax base for appropriate taxation only is available ex-post and if taxation is postponed to the date of sale there is an economic gain from tax deferral. There is however a possibility of correcting the tax bill for deferred payment, viz. through a fictitious annual imputation of the capital gain over the holding period. Thus the tax revenue loss from deferred payment can be charged when capital gains are filed at the end of the holding period. Second the tax liability on capital gains must be corrected for tax prepayments because retained profits are taxed annually at the company level. Accounting for these "advance tax payments" on capital gains appropriately requires that the company taxes are individualized for each shareholder. One method which has already been tested in Norway until 2005 is stepping up the purchase price of an asset by imputing the annual capital gain subject to CIT at the company level. The information required for the individual tax payer is the imputed retained profit per share which could be transmitted to each shareholders together with the annual notice on dividends.

Capital gains on unlisted shares, in particular capital gains of the active owner, can be treated alike. The stepping up procedure correctly accounts for the taxation of capital gains at the company level, but it is not able to differentiate between the capital gains reflecting normal rates of return and excess returns. Assuming that capital gains reflect excess returns there is a case for double taxing capital gains at the company and at the personal level, which could be done either ex post or annually by extending the withholding tax on excess dividends to retained earnings.

The problem of undertaxation of capital gains in excess of normal returns does not occur for non-incorporated firms, as the imputation of normal capital returns implies that potential capital gains are automatically regarded as excess returns and taxed as labour income.

Finally there is the question how to treat capital returns on unlisted foreign shares or on immovable property. Leaving them untaxed until these assets are sold would again be a strong investment incentive and generate undesirable lock-in effects. These assets might be regarded as candidates for an annual taxation under the risk-free return method (RFRM). Under RFRM the investment risk is shifted to the asset holder as he is taxed on

expected rather than actual returns. There is however the possibility to share the risk if the tax burden is recalculated ex post after selling the asset. Then again the capital gains tax can be netted out with the tax prepayments made over the holding period.

Special attention should also be paid to returns from owner occupied housing, given that private housing property is one of most attractive savings vehicles in New Zealand (see Savings Working Group, 2011). Postponing tax payments until realization would again give rise to lock-in effects which distort the capital market. An appropriate annual tax would be an imputed rate of return in line with RFRM applied to other real property. The crucial problem however is setting the deemed rate of return. The major difference to real property speculation is that owner occupied housing offers an annual return, the value of housing service. From an economic perspective a decision is efficient if the expected marginal return on housing investment equals the marginal opportunity costs. The value of marginal housing returns is services minus housing depreciation, the risk premium, and the tax payment on imputed housing returns. The marginal opportunity cost of housing investments is the risk-free market interest rate, net of tax. If the imputed rate of returns is set equal to zero, then deductible interests on housing credits reduce the opportunity cost of housing investment and lead to inefficient overinvestment in housing. This situation is characteristic of many OECD countries. Efficiency can be regained, if the imputed rate of return on housing capital is set equal to the risk-free market interest rate for housing credits. Then the tax terms cancel out and efficiency would be regained. This calculation method is a typical RFRM concept, implying that the risk of housing investment is shifted to the owner. If this risk premium is very high and residents are sufficiently risk averse, demand for accommodation will shift from owner occupied housing to rented housing and the household savings portfolio will change. For tax policy implementation it should be noted that imputing a RFRM on housing capital and taxing this return with a flat rate is equivalent to a more familiar way of taxing housing property, viz. levying a flat rate property tax equal to the product of the risk-free interest rate times the dual income tax rate. The dual income tax on owner occupied housing can thus be collected by a conventional flat rate property tax. This property tax should however be separated from usual local property taxes which are collected in order to pay rates as a fair contribution to the costs of local infrastructure.

7.3 Setting the Tax Rate

The dual income tax structure consists of two flat rates, the corporate income tax rate τ and the capital income tax rate t, and the tax rate vector of the progressive schedule on labour income M = (m_1,. m_2, …). These tax rates are fixed in the respective tax codes according to the preferences of the political majority.

From an economic perspective the tax rates in a dual income tax system can be chosen independently trading off fiscal revenue requirements, equity targets, and allocative distortions. In principle this trade off can be formalized and solved in an appropriate optimal tax approach.

The dual income structure presented above contains an anti-avoidance constraint which requires that the double taxation of excess dividends (or capital gains) should coincide with the top marginal income tax rate on labour income. This constraint

$$\tau + t(1 - \tau) = m$$

reduces the degree of freedom in tax rate setting, implying that for a given progressive income tax schedule the two flat rates τ und t must be chosen jointly.

Starting out from the traditional alignment of the CIT rate and the top PIT rate, viz., τ = m, t should be zero. Recalling the tax designs when DIT systems were first introduced in the Nordic countries alignment was proposed for the CIT rate τ and the DIT rate t. In this case t is determined by the economic feasible solution of the quadratic equation $t^2 - 2t + m = 0$,

$$t = 1 - \sqrt{1 - m}$$

For the current top PIT rate m = 0,33 we would get t = τ= 0,181, a CIT rate well below the current rate of 0,28.

An appropriate starting point for rate design would nevertheless be the labour income tax schedule, which had a top rate of 39% before the most recent tax reform. Table 7.1

contains possible combinations of CIT and DIT which are consistent with a top PIT rate of 40% according to the feasibility constraint

$$t = \frac{0,4 - \tau}{1 - \tau}.$$

Table 7.1 CIT and DIT Rates for a Top PIT Rate of 40%

CIT rate τ	0,18	0,20	0,22	0,225	0,24	0,25
DIT rate t	0,282	0,25	0,231	0,225	0,211	0,20

CIT and DIT alignment generates a tax rate of 22.5%. But there is no convincing economic argument in favour of taxing excess returns of retained company earnings and normal dividend returns at the same rate. Making use of the degree of freedom is attractive because there is room to adjust CIT rates to changing conditions in the international capital market or to consider an alignment of the DIT rate with the first or second bracket PIT rate in order to avoid tax arbitrage incentives or to facilitate tax administration.

Mintz (2010) recently pointed at the global trend of lowering CIT rates and proposed a further reduction of the CIT rate to 25% to improve New Zealand's position in the global capital market. Introducing a DIT structure would allow such a policy with a DIT rate of 20% and without changing the PIT schedule and without reducing the effective tax rate on excess dividends for domestic investors. A DIT rate of 20% may also be regarded as a cautious entry towards subjecting traditionally untaxed capital gains and returns from owner occupied housing. Moreover the DIT rate can be aligned with the first or the second bracket PIT rate, and reduce the incentive of filing capital income for low income earners whose marginal labour income tax rate falls short of the DIT rate.

8. Implementation, Administration, and Control of a Dual Income Tax

Implementing a dual income tax implies abandoning comprehensive income taxation. Political support for such a change in the fundamental principles is not easy to get, even if there are good economic arguments for such a change. Public economics offers many examples for the political inertia of existing policy programmes over new and superior solutions.

Europe however provides evidence that dual income tax systems received majority support, in contrast to past challenges to SHS taxation, e.g., expenditure taxation or cash-flow taxation. One reason for this political outcome may have been that the transition from comprehensive income taxation to dual income taxation seems very smooth and many familiar tax rules carry over to the new tax regime.

Political resistance to dual income taxation was certainly higher, when income splitting was regarded an indispensible element of the new tax regime. The acceptance of dual income taxation in other European countries is related to the cognition that dual income taxation can be implemented without the necessity to introduce income splitting as well.

The dual income tax structure portrayed in the last section should be implementable without triggering sharp political headwind. The tax system keeps basic elements of the traditional comprehensive income tax system, the calculation of tax bases in line with traditional accounting standards, the integration of income taxation at the company level and the personal level, the progressive tax schedule on labour income, the alignment of marginal tax rates on capital rents and high levels of labour income, the closing of loopholes in capital income taxation. The decisive new feature of taxing economically relevant capital returns at a flat rate can be achieved without explicit income splitting, because appropriate capital return allowances and balanced double taxation rules are able to reproduce an equivalent result.

The advantage of this dual income tax design is that it should be able to fulfill traditional public preferences on equitable income taxation but also offers sufficient flexibility to cope with efficiency objectives in the global capital market. This flexibility is crucial in order to avoid the untenable shifting of the tax burden to the immobile tax bases in order to meet fiscal revenue targets.

A decisive advantage of the dual income tax is its potential for simplifying tax administration and tax compliance. The flat rate on capital income offers a broad scope of withholding taxes at source without the necessity of filing. Final withholding taxes also reduce monitoring costs which can be concentrated on entities that pay out capital returns, viz. dividends and interests.

It is true that withholding cannot be applied universally but taxing capital returns of non-incorporated business, of owner-occupied housing, or of superannuation schemes does not provoke higher compliance or collection costs than under a comprehensive income tax regime. The database for both tax regimes is the same.

The most demanding form of capital income taxation is capital gains taxation. But there is no doubt that capital gains taxation has been the Achilles heel of comprehensive income taxation in all countries and the frequent pragmatic solution of tax policy has been widespread exemption. So it must rather be seen a merit of dual income taxation to propose a solution to the neglected loophole of comprehensive income taxation, although it comes at a cost, compliance costs for tax payers who have to keep records as well as administration cost to tax authorities.

There is however a possibility that deviations from the standard of comprehensive capital income taxation are taken over to a dual income tax regime, e.g. refraining from taxing returns on owner-occupied housing from capital gains rigorously. But reducing the costs of taxing hard-to-tax capital returns by simplified presumptive rules seems easier under a dual income tax than under a progressive comprehensive income tax.

9. Concluding Remarks

“The overall aim of New Zealand’s tax policy is to finance government expenditure at the lowest possible economic cost while meeting the government’s distributional objectives (The Treasury 2010, 30).” This formulation of the general goal coincides with the ultimate welfare economic target of optimal taxation.

The paper summarizes economic objections against the widely held view that comprehensive income taxation is a principle which supports this welfare goal. It also highlights the fact that the practical implementation of comprehensive income taxation violates the underlying principle and is an additional source of efficiency losses and social costs. The recent report of an independent Savings Working Group (SWG 2010) identifies inefficiencies which are associated with intended as well as unintended impacts of the current New Zealand tax system, viz. a low national savings rate, a high level of foreign debt, low labour productivity and low GDP growth.

Based on recent tax policy trends in Europe the paper proposes a shift from comprehensive income taxation to dual income taxation as a reform option which may help to avoid capital market problems as well as improving the flexibility of New Zealand's tax policy to respond to challenges of the global environment.

The economic advantage of the tax reform proposal is that it leaves two fiscally important pillars of the traditional New Zealand tax system untouched, GST and the moderately progressive tax schedule on labour income. The dual income tax links a combined flat tax structure on capital income at the company and the individual level to the traditional New Zealand tax structure. The decisive new elements are an allowance for corporate equity in company taxation, a flat tax rate on capital income which reduces the tax load on normal capital returns but taxes excess capital income in line with top labour income. Thus dual income taxation reestablishes the traditional alignment of capital and labour income, but this alignment is achieved by double taxing excess returns to capital at the company and the individual level, rather than imputing corporate income tax to high capital income taxes.

Lower tax rates on normal capital returns are efficiency increasing because the opportunity costs of intertemporal consumption smoothing diminish. Lower flat rates on normal capital returns should also prove helpful in gaining political support for broadening the tax base of capital income and for abolishing intended as well as unintended tax preferences. Apart from allocational gains from a level playing field for individual savings decisions there will also be efficiency gains from stopping tax engineering activities to invest capital in low taxed assets. Closing these loopholes

should also contribute to social equity since the costs of tax arbitrage by portfolio reallocation favour wealthy investors.

Finally dual income taxation offers substantial efficiency gains by avoiding administration and compliance costs. The flat rate structure allows for collecting the final tax burden on capital income by withholding taxes.

I am aware of traditional reservations against dual income taxation due to apprehensions that such a tax regime shifts the tax burden to the poor and favours the rich, that tax revenue losses will jeopardize public expenditure programmes and that collection and compliance costs will rise. While there is some truth in all of these concerns empirical evidence on dual income taxes at work have shown that a balanced view makes dual income taxation a serious and promising tax policy option for small open economies integrated well integrated in the world capital market.

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Old text elements

A common problem in schedular systems is the misdeclaration of income. In order to distinguish labor 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 labor 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 labor 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 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

Norway

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

and self-employed businesses, and also for closely held companies. Capital income in these businesses is determined by multiplying the value of capital assets by a deemed rate of return on capital. This rate of return is the same for all businesses and it 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 is calculated as the residual difference of business profits minus imputed capital income. Labor income therefore comprises not only imputed (or effectively paid) wage income of the owner but also capital income in excess of the deemed rate of return on capital. As a matter of fact, the residual income component is called earned income rather than labor income to reflect this compound character of the residual income component. The rigidity of progressive taxation of earned income is mitigated by special tax preferences, leading to a backward shift of earned income to lightly taxed capital income. These tax preferences include an upper bound for residual profits, above which profits are taxed as capital income and salary reductions which entitle entrepreneurs to deduct a certain percentage of the firms wage bill from the earned income tax base. Evidence from tax statistics on income of active shareholders proved that the rules of imputing capital income were too generous which led to a reform of the Norwegian dual income tax concept from 2006. The problem of eroding earned income of active shareholders by increasing the number of passive shareholders in small scale corporations was solved by taxing dividends exceeding a deemed rate-of-return allowance as earned income. Moreover full imputation of the corporate income tax was abolished and double taxation of corporate profits at the company level and the shareholder level generated a reduced PIT rate regime, which taxes dividends up to the rate-of-return allowance at the flat CIT rate but dividends (or realized capital gains) in excess of this allowance are taxed as earned income (see Sørensen 2005a). On the other hand dividends below the rate-of-return allowance give rise to a carry-forward of unused allowances.

Finland

As in Norway, full imputation of the corporate income tax required no further taxation of dividends at the personal level up to 2004. 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. Taxation of small companies differs, as those not listed on the stock exchange are considered as closely held companies. Dividends exceeding the normal rate of return are taxed at the progressive labor tax rate. In 2005 a major tax reform reduced the tax rates and replaced the imputation system by a reduced PIT rate system. The corporate income tax (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[10]. Reintroducing double taxation of dividends was further mitigated by the abolition of the net wealth tax.

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 labor income and taxed at the progressive labor 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.

[10] 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.

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. From 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, 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 (Keuschnigg/Dietz 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

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 the personal level. Dividends are subject to the corporation tax at the company level and 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 3) or even partly taxfree in Lithuania. For some years this was also true in Italy and in Austria for a share 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.

5.2. Special Regimes for Capital Income Taxation

Some old and new EU members 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 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 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 29,6% in 2006.

Insert Table 4 here

Greece is the only EU15 country which exempts dividends at the personal level.[11] 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.

The final withholding tax regime in Slovakia is a flat tax comprehensive income regime, which taxes income from all sources at 19%. As in Greece dividends are exempt at the personal level, but carry the 19% corporate income tax. The only deviation from SHS taxation is that negative capital income cannot be offset against positive earned income.

In Estonia dividend and interest income are exempt at the personal level, reflecting a consumption oriented income tax regime. There is, however, a 23% tax rate on dividends

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

at the company level and on capital gains at the personal level. Only interest income is taxfree, all other sources of income bear the standard tax rate of 23%.

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. 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.

One major problem of operating a dual income tax is the separation of business income into capital and labor 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[12]. 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 labor income as residual profits is also a procedure open to criticism. Residual labor income does not only comprise a return on labor but includes economic rents, risk premiums, 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).

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

[12] 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.

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 labor 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. Moreover, many of the new EU member counties did not introduce a traditional SHS tax regime in their 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. Although the current picture of corporate income taxation in Europe exhibits a growing affinity towards classical double taxation rather than implementing full integration, final withholding taxes on dividend and interest income reduce compliance and control costs and tax evasion through improper filing.

Incentives for strategic income shifting between capital and labor income can be reduced if the labor 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 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 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 labor 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 labor 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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Table 1: Personal Income Tax Units in EU 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), German Ministry of Finance (2005), European Tax Handbook (2006)

Table 2: The Nordic Dual Income Tax (2006 tax rates in percent)

	Norway	Finland	Sweden	Denmark
Implementation of the dual income tax	1992	1993	1991	1987
Personal income tax rates - capital income - earned income	 28 28-40	 28 26,5-50[e]	 30 31,6[b]-56,6	 28/43[a] 38,8-48,3
Basic allowance for capital income	Yes	No	No	Yes
Offset of negative capital income	First bracket	Tax credit	Tax credit	First and second bracket
Integration of corporate and personal income tax	Reduced PIT rate	Reduced PIT rate	Reduced PIT rate[c]	Reduced PIT rate
Corporate income tax rate	28	26	28	28
Withholding PIT - dividends - interest	 No 28	 19,6[f] 28	 30 30	 28 0
PIT on capital gains	28 [d]	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 dividend income below threshold, 43% else
[b] local income tax only; additional federal income tax is due for income levels exceeding a threshold of 306000 SEK
[c] since 1994
[d] net of retained earnings
[e] for the municipality of Helsinki
[f] 28% on 70% of the dividend income

Source: European Tax Handbook (2006)

Table 3: Final Withholding Taxes on Capital Income (2006 rates in percent)

	Austria	Belgium	Italy	Portugal	Lithuania	Poland	Czech Republic
Personal income tax rates - dividend income - interest income - earned income	 25 25 38,3-50	 25 15 26,88-54,25	 12,5 12,5/27 23,9-44,9	 20 20 10,5-42	 15 0/15 27	 19 19 19-40	 15 15 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 dividend base
Corporate income tax rate	25	34	33	25	15	19	24
Withholding tax on - dividends - interest	 25 25	 25 15	 12,5 12,5/27	 20 20	 15 0/15	 19 19	 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 Option for household taxation	Individual	Household taxation		Individual Option for household taxation	Individual Option for household taxation
Income of children	Taxed separately		Included	Included		Included	

Source: European Tax Handbook (2006)

Table 4: Special Tax Regimes on Capital Income (2006 rates in percent)

	Netherlands	Greece	France	Slovakia	Estonia
personal income tax rates - dividend income - interest income - earned income	 30 (Box 3)/25 (Box 2) 30 (Box 3)/25 (Box 2) 34,15-52	 0 10/20 15-40	 6,8-48,1 16 6,8-48,1	 0 19 19	 0 0 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 personal income tax rate	Dividend exemption	Reduced dividend base	Dividend exemption	Dividend exemption
Corporate income tax rate	29,6	29	33,3	19	23
Withholding tax - dividends - interest	 30 (Box 3)/25 (Box 2) No	 No 10/20	 No 16	 0 19	 No No
PIT on capital gains	30 (Box 3)/25 (Box 2)	0	16	19	23
Net wealth tax	1,2[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		Taxed separately

Notes: [a] levied as presumptive personal income tax. (Box 3)

Source: European Tax Handbook 2006

Grafik 2: Körperschaftsteuersätze 2009 – Standardsätze (ohne Zuschläge und Steuern der nachgeordneten Gebietskörperschaften)