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PREVENTION OF AN ENTREPRENEUR'S INCOME SHIFTING
IN A NORDIC DUAL TAX

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Prevention of an entrepreneur's income shifting in a Nordic dual tax

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Abstract

Nordic dual taxes earned income at a progressive rate schedule while income from capital at a proportional rate. In the Finnish system transformation of taxable income from labour to income from capital is prevented by splitting entrepreneurial income to presumptive income from capital, based on net business assets, and by taxing the rest as earned income. The multi-period implication of the split rule is analysed, taking the opportunity return on the net assets into account, and how it blocks income shifting. Capital income dividends from non-listed companies on average are economic income from capital. However, high opportunity wage professionals, whose marginal tax rate on earned income exceeds the double-tax rate on undistributed corporate profits, potentially benefit from using non-listed companies as piggy banks. Their alleged tax planning is critically assessed.

JEL classification: H 25, H 26

Key words: dual tax, income shifting, entrepreneur, tax planning

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1. Introduction

Taxation of capital income separately from labour income in the Nordic dual income tax (DIT) is widely claimed to give rise to transformation of taxable income between the two tax bases, because the top marginal tax rate (MTR) on labour income typically exceeds the proportional tax on capital income. The problem is not specific to the Nordic dual tax, but is discussed and tackled in every income tax system. A common means to its prevention is to integrate corporate and personal income taxation of closely-held companies so that the combined rate of the corporation tax and personal dividend tax on distributed profits matches the top MTR of wage income, and similarly for the combined corporation tax and capital gains tax on undistributed profits.

In the Nordic dual tax¹, the rule that splits an entrepreneur's taxable dividends or income from unincorporated businesses into personal capital income and earned income functions similarly and blocks income shifting between the two tax bases. Many do not understand the multi-period implications of the split rule, because they do not account for the relevant opportunity return on net business assets, the basis of the split. Such a policy analysis is carried out here, explaining why transformation of labour income to economic income from capital is impossible over time. Therefore single-period considerations of the split rule will ultimately lead astray.

This article concentrates on an entrepreneur's tax planning and how it is restricted in the current DIT of Finland. Therefore the argumentation relies partially on examples the parameter values of which are from the 2007 tax regime. Otherwise the examples are perfectly general. The next section briefly discusses the state of income transformation in the previous tax systems. Section 3 outlines the DIT reform in 1993. Section 4 surveys the replacement of the imputation system with partial double taxation of dividends in 2005. Section 5 describes the main rules that prevent the income shifting problem to materialize in an entrepreneur's attempt to do so. Section 6 critically investigates alleged tax planning practices of high opportunity wage professionals using borrowing and section 7 deduces a consistent tax minimizing strategy for them in the current tax regime, resulting in a potential use of a non-listed company as a piggy bank. Section 8 shortly

¹ Each Nordic country has its own application of DIT. It was developed in the beginning of the 1980's and first implemented in Denmark (Sørensen 1988), but the Danes were also the first to abandon it. Alstadsæter (2007) records the history of DIT both in Scandinavia and elsewhere and also thoroughly surveys theoretical and empirical literature on it.

reviews pertinent literature on entrepreneurs' behaviour and section 9 concludes with a discussion on why the recorded growth of dividends during the dual tax cannot be regarded as evidence on income shifting.

2. From deductibility of dividends to imputation system

Despite partial deductibility of distributed dividends from the corporation tax base at the end of the 1980's, the double-tax rate of distributed profits was about 75 per cent, higher than the top MTR (= 64 per cent) of wages and well above the average tax rate (ATR = 27 per cent) of ordinary income in 1990. Thus the necessary income for an entrepreneur's family living was received as a wage from the corporation. The tax code still includes the same detailed paragraphs which prevent hidden dividend distributions in the form of wages to the family members.

Because the top MTR on wage income was less than the double-tax rate on dividends, even the wealth tax was paid by the entrepreneurs from taxable labour income and not out of post-tax dividends as in case of passive portfolio investors. In a going concern, all tax incentives in 1990 distorted the means of entrepreneurial compensation in favour of wages and salaries against dividends, i.e. economic income from capital was transformed into legal labour income.

However the total effective tax burden on entrepreneurial compensation was the lowest if an entrepreneur sold her company. Businesses could widely retain profits without paying any tax because of generous tax depreciation and write-off schemes for investments in real capital and inventories. And, they were forced to invest in real estate and machinery to hedge against rampant inflation and the taxman, the so-called tax pressure investments. That is why businesses could hide their true profitability, both profits and losses. Long-term capital gains were not part of the owners' taxable income, but the taper relief of realized capital gains was made more stringent since 1989. Thus entrepreneurs favoured capital gains over the other means of compensation.

Finland experienced a deep economic crisis in the beginning of the 1990's, with the seasonally adjusted GDP contracting by 13 per cent from the beginning of 1990 to the middle of 1993. During those years Finland operated an imputation system, i.e. pre-tax dividend income,

dividends grossed-up with imputation credits, was taxed at the same progressive rate schedule as wage income. Hence the imputation system is a natural solution for preventing income transformation which also is one of the reasons why it was brought into force by so many countries. During the deep depression of 1991-1993 most businesses were loss making and highly indebted. The strengthening of the risk bearing ability of businesses, their balance sheets, was a more focal problem than income shifting.

3. Dual income taxation

Therefore DIT was introduced from the beginning of 1993, maintaining the imputation system. DIT replaced global income taxation, where taxable income is subject to a single progressive tax schedule, with taxation of capital and labour income separately. Personal income is divided into income from capital and earned income, say, labour income, pensions and social benefits. Only earned income is taxed at a progressive schedule while income from capital is taxed at a proportional rate without any exemption threshold. Rental income, realized gains on real estate, realized capital gains and dividends from listed companies are always treated as income from capital. Interest income on bank deposits and publicly traded bonds is subject to a source tax at the rate on capital income, interest from other sources being taxed as personal capital income. DIT involved a cut of the corporation tax rate to 25 per cent, chosen the same as the tax rate on personal capital income.

In case of entrepreneurs, taxation of earned and capital income is integrated to prevent transformation of taxable income. An entrepreneur's income represents partly return on capital invested and partly compensation for entrepreneurial effort and ability. Therefore incomes from unincorporated businesses and dividends from non-listed companies, with no distinction between active and passive owners in the Finnish system, are split into income from capital and earned income. Using a presumptive rate of return on net business assets, the split rule defines the maximum that is capital income for tax purposes. The rest of dividend receipts from non-listed companies or entrepreneurial income from unincorporated businesses are taxed as earned income. The tax rate on capital income dividends consequently decreased the most because of DIT while earned income dividends together with labour income remained subject to progressive taxation.

DIT included a long list of measures that broadened the tax base of corporations, unincorporated businesses and personal capital income. Typically, all schemes that represented accelerated tax depreciation and write-downs of inventories were removed. They were replaced by a temporary investment tax credit during the years of crisis. Also, all realized nominal holding gains of assets, as real estate and controlled companies, were fully included into taxable income. Taxation of registered unincorporated companies as separate tax-paying entities ended, i.e. the splitting of their income in two and taxing each half at the progressive rate schedule of ordinary income. In the household sphere, allowance for capital income was eliminated. Instead, all nominal running yields on capital as well as nominal realization gains on all assets were included into the tax base of income from capital. Hence the relative tax burden of realized capital gains on corporate holdings increased the most because of heavier double taxation.

These measures helped to remove subsidy elements and to raise the average effective tax rate on capital income, increasing progressivity of the whole tax system since income from capital tends to be earned by individuals in the upper end of income distribution. Because marginal tax rates on most categories of capital income were reduced to the proportional rate on capital income, the dispersion of marginal tax rates of investment projects was reduced, improving efficiency of resource allocation. The distortions caused by inflation remained, but because inflation rates have been considerably lower since 1993 than previously, it is no longer regarded as a problem by most policy watchers. The effective tax rate on real interest income can still be extremely high as demonstrated by the cell on money-market funds in Table 1 below.

4. Toward double taxation of dividends

DIT was adopted only three years after Finland effectuated the imputation system that fully credited corporation tax for dividend recipients. The system became under enormous political pressure as soon as the economy started to strengthen and dividends to grow. The media saw dividends non-taxed and not to have been paid out of pre-corporation tax income. Neither did the media ever recognize that dividends from non-listed companies were partially taxed as earned

income at a high ATR of about 52 per cent.² Though the tax rate on capital income was raised, there clearly was an ideologically motivated aim "to lay a tax on dividends". Because Finland did not grant imputation credits for dividends received by an individual from abroad, the European Court ruling that the practice is against free movement of capital within the EU consequently was the formal reason to change the system of dividend taxation.

Close reading of the memoranda that led to the 2005 reforms reveals three rationales, (i) to maximize tax revenues and the size of welfare state by (ii) pragmatically responding to toughening tax competition and by (iii) encouraging entrepreneurship. The imputation credits of dividends were lifted. The tax rate on capital income was lowered to 28 per cent and the corporation tax rate to 26 per cent. Part of the package was that dividends from listed companies were made partially (70 per cent) taxable at the household level (the case of non-listed companies is analysed in section 5) and the rudimentary annual wealth tax was lifted. The new personal tax rate on dividends of listed companies is thus 0.70 times 28 per cent, i.e. 19.6 per cent. The total tax rate on distributed corporate profits is

$$26\% + (1 - 0.26)19.6\% = 40.5\%$$

and the instantaneous total tax rate on undistributed corporate profits

$$26\% + (1 - 0.26)28\% = 46.7\%$$

without considering the effects of inflation, deferral of realization and taper relief of long-term (over 10 years) holding gains.

In conclusion, the 2005 reduction of the corporation tax rate also reduced the pre-tax cost of capital for investments in Finland. Small portfolio investors experienced their tax rate on dividends to increase, for which those previously subject to wealth tax were approximately compensated by its elimination. In the aggregate, tax incentives for savings and share ownership were diminished but the relative attractiveness of Finland as a residence of wealthy did not change. But, is income from capital leniently taxed in respect of earned income in Finland? On average earned income has in recent years been less heavily taxed than income from capital. In the year of 2000 (2005) the statutory capital income tax rate was 29 (28) per cent while the

² All statistical details of this article are own calculations, based on either the *Statistics on income and property* of Statistics Finland or on the *Tax statistics* of the Finnish Tax Administration.

average tax rate on earned income, including dividends and interest receipts taxed as earned income, was 26.5 (26.0) per cent.

Table 1. Thresholds of the 2007 tax rate schedule on earned income in respect of the average tax rate (ATR) on certain categories of income from capital in Finland

Annual earned income in euros	ATR per cent	Category of income from capital
33000	26.0	Dividends from non-listed companies up to 90000 euros
37000	28.0	Legal tax rate on personal income from capital
83600	40.5	double-tax rate on capital income dividends from <ul style="list-style-type: none"> a. non-listed companies over the 90000 limit and b. listed companies
178000	46.7	Double tax rate on realized capital gains
Never attained, the highest marginal tax rate 53.8% and the highest ATR 52%	56	Effective tax rate on real gains of money market funds (nominal return 4% taxed at 28%, inflation =2 %)

Table 1 gives additional information about the year 2007 situation and reports the respective level of annual earned income at which its ATR corresponds to the tax rate on the specified categories of capital income. Earned income is subject to both the municipal (local) and state income taxes. Because of the introduction and phasing-out ranges of certain allowances, including allowance for earned income, the effective tax rate schedule on earned income contains 16 different income brackets (Ylä-Liedenpohja 2007, Table 3).³ Extrapolating the 2005 distribution of taxable earned income into 2007, about 50 per cent of taxpayers (annual earnings over 21000 euros, the

³ I do not regard an individual's mandatory premium of the earnings related pension as a tax, but as saving.

taxpayers' average taxable earned income will be about 25000 euros) face a MTR over 40 per cent on earned income. In 2007 only 5 per cent of income earners face a MTR over 50 per cent, but due to the phasing out of the allowance for earned income, the MTR of top incomes is less than the highest MTR.

5. Prevention of income shifting

The split rule defines the maximum that is capital income for tax purposes, based on presumptive income from net business assets, i.e. the value of assets minus debt. The current presumptive rate of return, 9 per cent for non-listed companies, is applied to the accounting year-opening value of net assets, and dividends are distributed in Finland on the basis of the past accounting profits though the new 2006 company law allows for interim dividends. Because the presumptive rate is a nominal post-corporation tax concept, it corresponds to the Dimson-Marsh-Staunton (2002) average rate of equity premium of 5 per cent on international equities plus the equilibrium short rate of nominal interest equal to the steady-state rate of growth of the nominal GDP. Hence on average the reward for an entrepreneur's risk-taking will be taxed similarly as a household's passive investments in listed companies.

However, 70 per cent of excess dividends over the maximum are taxed as earned income. Their share has recently been exceptionally high in anticipation of the end of the imputation system: 42.4 per cent of dividend receipts from non-listed companies and 21.9 per cent (a higher proportion of 29.5 per cent in 2004) of the total of the 2005 dividend receipts by households were classified as earned income because those dividends were distributed on the basis of the year 2004 accounting profits. It was the last year when, without paying equalization tax, the companies could utilize their past corporation taxes on undistributed profits to match the imputation credits on distributed dividends. In earlier years, about 15-18 per cent of all dividend receipts by households were taxed as earned income.

In case of unincorporated businesses (sole proprietors and partnership members), taxable capital income is based on the presumptive rate of return of 20 per cent (or 10 per cent if so demanded), the rest being taxed as earned income, and it is applied to the year-opening value of net business

assets. In addition, these businesses can add 30 per cent of their employees' wage bill to their net assets in the split. No deductibility of debt interest in unincorporated businesses is allowed on that part of debt which accounts for negative net worth because it reflects personal borrowing.

The first 90000 euros of capital income dividends from non-listed companies are non-taxed. This upper limit is individual specific, i.e. her share of net business assets corresponds to one million euros. Any exceeding amount of capital income dividends is taxed as dividend income from listed companies. Therefore dividends from listed companies channelled via non-listed companies were made partially taxable income to effectuate an identical tax rate on dividends as if the shares were directly owned by individuals.

Two deductions from the net assets of a non-listed company, with identical rules for unincorporated companies, are made before the split: (i) any loans made to the shareholders or their family members as well as (ii) the value of any houses or apartments which are used by the shareholders or their family members. Borrowing from the company is taxable income from capital (collateral must be pledged) and must be paid back within five years. Thereafter repayment of such loans will no longer be deductible from capital income which effectuates double taxation of such undistributed profits.

The nature of income transformation is best understood if it is approached as an economic problem, respecting for its intertemporal aspect: how slowly the maximum dividend taxed as capital income will grow over time when an entrepreneur leaves her post-corporation tax labour income as undistributed profit in her company, how high is the opportunity cost in international financial markets of the funds left in the company in comparison to the presumptive rate of return on the net assets in the split, and how high is the realistic opportunity wage of an entrepreneur who works for her company.

Consider an example of the income transformation problem. Imaging an entrepreneur paying herself a wage in year $t=1$ so that the MTR of the last euro does not exceed the corporation tax rate of 26 per cent. Such an annual wage amounts to only 13600 euros in 2007. The rest of the reward for her labour is taxed in the corporation so that each pre-tax euro adds to the net assets of

her company with 74 eurocents, 9 per cent of which or 6.67 cents she can raise as a capital income dividend on the basis of year $t=2$ accounts so that the company has the remaining 67.33 cents for investments. But, the long-term nominal opportunity return in financial markets of the funds in the company tills is the presumptive post-tax rate of return 9 per cent so that the past undistributed wages do not help to increase this year's maximum dividend taxed as income from capital. Thus "labour income" transformed into capital income dividends is economic income from capital; an entrepreneur cannot channel post-corporation tax labour income into capital income dividends. The argument holds both for an entrepreneur considering an entry as well as for an old entrepreneur having net asset in her company accumulated from taxable profits during the previous tax regimes. On the other hand, the opportunity to earn capital income dividends up to 90000 euros without double taxation contributes to dividend shifting: dividends from non-listed companies will be substituted for dividends from listed companies. Therefore financial capital of the household sector tends to be reallocated from passive portfolio investments to entrepreneurial non-listed companies.

6. Tax planning with borrowing

If the owner borrows in her personal account to invest into equity of her company to increase the fraction of dividends taxed as capital income, such interest expenses are deducted against her capital income. Any surplus of interest expenses is credited at the tax rate of capital income against her tax liability of earned income. Prior to 2005 such interest expenses were deducted from her dividend receipts before the split was done as well as such loans were deducted from the net asset value of her equity stake. Let us study the implications of the new restrictions.

Because the borrowing rate of interest has been very low in recent years in respect of the presumptive rate of return on net assets, there is second-ear evidence of the following tax behaviour among entrepreneurs selling professional services. Suppose an entrepreneur borrows one million euros at 5 per cent to invest in equity (a higher equity stake would trigger personal dividend tax) which her company keeps in its checking account at zero interest. Our entrepreneur can now raise 90000 euros of capital income dividends. She has 50000 euros to pay her interest expense, leaving 40000 euros for her living in addition to her wage. But, she also has 14000

euros of tax credit (at 28 per cent on the interest deduction) to shelter personal income tax. Because dividend is non-taxed, the tax credit will be reimbursed only if she has at least the same tax liability for earned income. Therefore she raises an additional dividend of 44785 euros, 70 per cent of which is taxed as earned income and 30 per cent is non-taxed. Together with her wage this additional dividend creates the required tax liability of 14000 euros.⁴ In the end, our entrepreneur pockets 84785 euros from the dividends plus her annual wage 13600 euros, i.e. 98385 euros, without her paying any personal taxes. The total of the dividend (=134785) must be paid out of pre-corporation tax income of 182142 euros, but the wage is deductible and therefore she need to additionally invoice only for 10070 euros in her company. Her wage is thus subsidized and the society only collects revenue from corporation tax on the pre-tax distributions.

The trick of this example is that the funds from the equity stake are invested to yield zero interest. Hence one may rightly question whether it represents income shifting in its economic sense. In a formal model of investments in risky real capital, Alstadsæter (2007) shows the split rule to alter the risk profile of such investments towards less risky real capital to simultaneously minimize an entrepreneur's risk exposure and tax liability. That is, the split contributes to shift income from the tax base of labour income to the tax base of capital income. However, her model does not allow for an entrepreneur's investment behaviour in financial markets.

From this point of view, the above example contains a very poor piece of investment advice which makes the tax advice worth not paying. To earn each year a tax benefit of 14000 euros from interest deductibility, the company loses post-corporation tax income of 90000 euros by not having utilized the full set of investment opportunities from diversification across all asset categories that would guarantee her company the true expected long-term return in international financial markets. Could her company invest its equity of one million in this way and on average earn 90000 euros post-tax each year, it would fill an individual's non-taxed quota of dividends as capital income. The role of her company with one million of equity is thus totally redundant. The same tax benefit from interest deductibility can be directly obtained by borrowing on her personal account and by investing the funds in international financial markets (the true problem is the

⁴ This and all other references to the effective 2007 tax rate schedule on earned income follow from Ylä-Liedenpohja (2007, Table 3).

collateral required by the lender) without paying any corporation tax in the process. The lender reports to the taxman that the loan is for investment purposes and eligible for interest deductions.

7. Non-listed companies as piggy banks

Continue the previous example to deduce an entrepreneur's best remuneration strategy. She sets up her company with the minimum required equity stake (neglect its investment return), pays herself a wage up to the amount in which its MTR rises to the equality of the MTR on dividends taxed as earned income:

$$MTR = 0.26 + (0.74)(0.7)MTR$$

Solving it for MTR (=0.539) she finds two things. First, its right hand side, the MTR on earned income dividends, lies above the MTR of earned income in each income band of the 2007 effective rate schedule. Hence it is no longer optimal to distribute dividends taxed as earned income which are dominated by wages and salaries as entrepreneurial compensation. This result is unambiguous in the 2007 tax system in contrast to the conjecture by Hietala and Kari (2006). Second, because the benchmark double-tax rate on capital gains is 46.7 per cent in Table 1, the MTR of wages must not exceed it. Borrowing from her company and not paying back such loans leads to the same benchmark rate of double taxation.

Therefore our entrepreneur's tax minimizing remuneration strategy is to pay herself a wage, if she is productive enough, up to 34000 euros a year at which threshold the MTR of the 2007 effective rate schedule jumps to about 48 per cent, including the net-of-deductibility effect of the employer's social security premium, but the tax disadvantage of wage income is minor up to 61400 euros.⁵ If her earning capacity is higher, the consequent post-corporation tax income adds to the net assets of her company. And, chooses she a higher consumption than her wage and maximum capital income dividend together allow for, she borrows from her company.⁶ At the end of her earning career she sells the company and pockets any exceeding post-corporation tax

⁵ The amount of wage is always net of the obligatory pension premium which in case of an entrepreneur need not be related to the actual wage but is based on the insured labour income, mutually agreed with the insurance company.

⁶ Individual preferences for current and future consumption differ which explains the observed structure of companies selling professional services. The professionals own such a company via their personally owned holding companies within which they can arrange their own remuneration practices.

undistributed profits over her borrowings as post-tax capital gains. If the owner lends to her company, this distribution channel has an effective ATR of real interest income of a similar size as capital gains because of taxation of nominal interest income; cf. the cell of money-market funds in Table 1. In fact, if our entrepreneur operates as a sole proprietor, she faces a lower effective MTR (EMTR) than the MTR of wages because the presumptive taxable income from capital is 20 per cent on net assets:

$$EMTR = 0.2(0.28) + 0.8MTR$$

It means that the EMTR schedule always lies below the MTR schedule beyond 28 per cent, encouraging entrepreneurship in the form of unincorporated business.

It is often suggested that winding up a company offers tax benefits over its sale as a going concern. When an incorporated company is dissolved, it pays corporation tax (reports a tax loss) if the arm's length value of its assets exceeds (is less than) their book value. The owner pays capital gains tax on any difference that the market value of the assets she receives from the dissolved company exceeds her equity stake or in case of capital loss deducts it against capital gains in her personal investment activity. Hence, saves her company in financial claims and in investment products the full nominal return of which is subject to corporation tax, such savings will ultimately be double-taxed after dissolving. So, her benchmark MTR is again that of capital gains, 46.7 per cent above. But, decorates she the office with “business assets” as pieces of art and antiques which produce her an implicit return non-taxed in the corporation and which are hard to value at the instant of winding up, she may receive the assets at their book value without any personal tax on capital gains if the book value is low enough not to attract a tax audit. Hence the winding up of companies offers little of tax benefits if not at all in comparison to selling companies as going concerns.

The conclusion is that an entrepreneur's benchmark MTR is the double-tax rate on capital gains up to which entrepreneurial compensation pays off in the form of wages. But, the taxes on any higher entrepreneurial productivity and invoicing ability are minimized if an entrepreneur uses her non-listed corporation as a piggy bank to accumulate post-corporation tax labour income, the tax benefits of which are summarized in the appendix.

The predictions of these thoughts are that we should observe: (i) earned income dividends to have ended after the lifting of imputation credits and the recent reductions of the MTRs on earned income, (ii) more wages paid to the owners and perhaps more borrowing from the companies and (iii) an increased fraction of new enterprises choosing to operate as unincorporated businesses if the MTR facing the top 5 per cent of income earners will further decline.

8. Literature

A fair amount of research on behavioural effects of the incentive for income shifting in non-listed companies has been carried out. Kari (1999) showed that the split of dividends in the Finnish dual income tax system creates an incentive for overinvestment, if the company is permanently in the regime of paying dividends taxed as earned income. The finding was replicated by Lindhe, Södersten and Öberg (2002). Overinvestment is however eliminated when financial investments are an alternative way of padding net assets, the basis of presumptive taxable income from capital, as shown by Kari (1999) and more recently by Kari and Karikallio (2007) with empirical evidence on such behaviour. Kannainen, Kari and Ylä-Liedenpohja (2007) showed that, if the presumptive rate of return corresponds to the risk-adjusted market rate of interest, long-run investment of a non-listed company is not affected by the split rule. Kari (1999) also showed that the split rule causes an incentive to artificially inflate asset values and book equity by using tax depreciation charges that will not match full economic depreciation.

Kari, Karikallio and Pirttilä (2007) documented firm-level dividend behaviour in anticipation of the new more stringent dividend tax regime in 2005, i.e. increased pay-out ratios. Pirttilä and Selin (2006) studied the introduction of dual income taxation amidst the depression years of 1992-1995 by focusing on the owners of non-listed companies, misleadingly calling them self employed, and found that the reform did not change their total income but increased the fraction of taxable income from capital.⁷ That is, of course, an expected result because the dual tax drastically reduced the tax price of capital income dividends for old entrepreneurs whose companies had net assets. The authors interpret this as evidence on income shifting. Their study

says nothing of whether a new entrepreneur after her entry has been able transform labour income into taxable capital income. Lindhe, Södersten and Öberg (2002) also analysed the work incentive of an entrepreneur in her company and showed that the more generous the presumptive rate of return on capital, *ceteris paribus*, the less the owner works for her company because the income effect only matters, i.e. the less the scope for the potential income transformation problem. Kanniainen, Kari and Ylä-Liedenpohja (2007) suggested that the Finnish dual tax promotes entrepreneurship via start-ups of high expected profitability, slightly confirmed by statistics when income from farming and forestry are excluded.

9. Summary and discussion

The dual tax system of Finland since 2005 was analysed in this paper with a special scrutiny of the potential income shifting from the tax base of labour income into taxable income from capital. Dividends from non-listed companies are split into taxable capital income and earned income on the basis of their net assets. The rule prevents income shifting in the current tax regime when an entrepreneur's investment opportunities in financial markets are taken into account. On average capital income dividends match the opportunity cost of the net assets of non-listed companies. Therefore there is no room left for income shifting from labour income to capital income dividends. The only problem are entrepreneurs in professional services who have a clearly much higher opportunity wage than an average entrepreneur and who face top marginal tax rates on labour income. Their tax minimizing strategy, after satisfying individual consumption needs, is to use non-listed companies to accumulate savings from post-corporation tax income. Such piggy-bank behaviour transforms rewards from labour into future taxable capital gains, which anyhow will be double taxed at a very high tax rate.

To offer equal opportunities for saving for all households⁸, one means would be to launch a tax incentive for savings by deducting any positive net purchase of assets up to a certain maximum from earned income, but by adding the deduction to taxable capital income. Every one facing a

⁷ They added earned income dividends back to their measure of capital income. The employer's social security tax must be paid on the wages paid to the owners, but not on dividends taxed as earned. Therefore the latter was the tax favoured channel of entrepreneurial compensation over wages.

marginal tax rate on earned income over the proportional tax rate on capital income would benefit from such a scheme, not only the top 5 per cent of income earners who potentially benefit from incorporating themselves and using their companies as piggy banks. The purpose of such a maximum is to limit the savings incentive for a range of income earners who are in the process of climbing up their career and income ladder.⁹ The truly top managerial compensations would still be taxed at the top marginal tax rate on earned income. The compensations are currently so huge that those jobs would attract talented candidates without a fear that they would choose careers mimicking a university professor's net income. From a tax economics point of view it is efficient to tax these individuals at current high marginal tax rates because of their voluntary career choice.

The analysis of dual income tax also reveals two avenues to promote entrepreneurship. The effective tax rate on income from unincorporated businesses is less than the tax rate on earned income above the threshold at which the legal tax rate on personal capital income is reached. And, taxation of capital income dividends from non-listed companies only once, subject to an individual maximum, contributes to the reallocation of financial capital from passive portfolio investments towards entrepreneurial non-listed companies.

Dual income tax broadened the tax bases of all enterprise forms and personal capital income, but simultaneously reduced the corporate tax rate and the tax rate on personal capital income. Incorporated companies honestly disclose their true profitability and cash flows from the corporate to the household sector are today visibly taxable in contrast to the system of the 1980's. However income transformation of high income individuals is more often hinted today than two decades ago.

Consistent economic reasoning seldom overcomes a deep-rooted view of comparing the top marginal tax rate on earned income to the statutory tax rate on income from capital and asserting that an entrepreneur can label her income into a more leniently taxed category, without

⁸ The tax system of Finland does not allow for other schemes to deduct saving from taxable income except for 5000 euros a year of voluntary pension premia.

⁹ Alternatively, the threshold at which the marginal tax rate on earned income jumps above the double-tax rate on capital gains could be rescaled up to, say, 200000 euros.

recognizing the legal constraints and the fact that it is the taxman who does the split, not the entrepreneur. Equally simplistic is to regard the growth of dividends during the dual tax era as an evidence of income shifting from earned income to capital income as is often implicated in studies of income distribution, in particular. Dual tax reduced the tax price of capital income dividends for the household recipients in contrast to the previous tax regimes, but the dividend receipts of the state of Finland have grown even faster, 17-fold from 1993 to 2002, than those of the households, 9-fold during the same years. Therefore the reason behind the growth of dividend receipts is not income shifting in the economic meaning of income.

As explained in section 3 above, dual tax has improved efficiency of real investment and usage of real capital which contributes to the growth of dividends in mature industries.¹⁰ The companies are no longer forced to invest in real assets as a hedge against inflation and the taxman. The other, efficiency enhancing factor is the true opening up of the Finnish economy after lifting all restrictions of foreign ownership from the same date as dual tax has been in force, selling stakes in the state-owned companies and joining the single market of the EU, with the consequent elimination of inefficiencies because of the international required real rate of return in all business activities. But, as the analysis of section 6 above shows, the growth of dividend receipts from non-listed companies may indicate purchase of bad investment advice, loss of investment returns which are not covered by tax savings from transforming rewards of labour into capital income dividends.

¹⁰ The old pillars of the Finnish economy, pulp and paper, wood products, metal and engineering industries are all mature industries. It is equilibrium behaviour that such industries return cash flows to the owners for which dividends is a tax favoured channel over repurchases of shares in the Finnish system.

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Appendix: A non-listed company as a piggy bank

Denote r = the (post-corporation tax) rate of return in international financial markets. Thus the assumption is that the company itself does not invest in other non-listed companies but in financial products sold to the public. Consider the accumulated amount after n years when saving from post-corporation tax (at 26 per cent) income with compound return is realized at date n at which date corporation tax is paid on the realized gain and the owner pays capital income tax (at 28 per cent) on the realized gains:

$$(1 - 0.26)(1 + r)^n(1 - 0.26)(1 - 0.28)$$

Saving in the household from post-MTR income in the same financial product accumulates to the following amount, post-capital income tax:

$$(1 - MTR)(1 + r)^n(1 - 0.28)$$

The gain of saving in the piggy bank is thus

$$\frac{(1 - 0.26)^2 - (1 - MTR)}{1 - MTR} = \frac{MTR - 0.4524}{1 - MTR}$$

For the top MTR=0.537 in 2007, the gain is $0.0846/0.463=0.183$ or 18.3 per cent. As explained in the text, there is no gain from incorporation for the levels of earned income below 61400 euros, for 95 per cent of income earners in 2007.