

Taxing Capital Income in Hungary and the European Union

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Without higher savings rates, Hungary cannot expect accelerated economic growth. In reforming Hungary's system of taxing capital income, policymakers should strive to level the playing field in financial markets but should not distort incentives to increase savings.



Summary findings

Countries seeking membership in the European Union (EU) cannot look to the EU for a blueprint for reforming their system for taxing capital income. Indeed, it is hard to generalize about tax systems in the EU.

Most member states apply fairly low tax rates to interest payments and discriminate against profit distributions. But tax rates, exemption levels, and methods of tax integration differ greatly within and across countries, and there is almost no harmonization of methods for taxing capital income. Approaches to taxing capital gains vary greatly, and distortions arise from the treatment of various sources of capital income.

In 1993, when the EU began efforts to integrate capital markets, member countries proposed various ways to harmonize capital income taxes, including a proposal to introduce a withholding tax on interest income of residents of member states, with a minimum rate of 15 percent (revised to 10 percent). Under this scheme all interest on bank deposits and government and private bonds would be taxed and there might also be a final withholding tax on residents' interest income. But the proposal was not accepted and the EU Commission decided to maintain the status quo, not to pressure member countries to harmonize company taxes.

But Hungary could look for models in the Nordic countries (especially Norway and Sweden), Austria, and Finland, which have undertaken far-reaching reforms of capital income taxation.

In most EU countries capital gains are either not (directly) taxed or are not taxed systematically. In Finland and Norway identical tax rates are applied to all types of capital income, including capital gains.

The centerpiece of the "Scandinavian model" is a dual income tax, combining a progressive tax on personal income with a flat-rate tax on all types of capital income. The Scandinavian model contrasts sharply with the "comprehensive income taxation" model, under which a single (progressive) tax schedule is applied to income from all sources.

In Austria the treatment of different types of capital income is relatively uniform but the composite tax burden on capital income resembles the highest personal income tax rate rather than a reduced rate. Austria's rate of tax evasion *was* high, but a 10 percent withholding tax applied to all interest-bearing assets has reduced discrimination against honest taxpayers.

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This paper reviews the Hungarian experience with taxation of capital income since the beginning of the transition. It assesses the performance of the tax system, then asks whether lessons can be learned from reforms recently undertaken in European Union countries to improve capital income tax laws. The paper is organized as follows. Section 1 presents a conceptual framework for the taxation of capital income. The next section describes the salient features of the system in operation in Hungary between 1988 and 1996, then assesses the incidence of the tax and the revenue performance of the system. Section 3 briefly reviews capital income taxation in EU countries and describes the reforms undertaken recently in Scandinavian Countries and in Austria. Finally, section 4 makes suggestions for improvements in the Hungarian system inspired by the latter reforms, in the general perspective of harmonizing Hungary's tax system with EU systems.

Hungary was the first transition economy to carry out a major tax reform. Personal income tax and value-added tax systems were introduced in 1988 followed, in 1989, by a unified Enterprise Profit Tax (later renamed Corporate Income Tax). Even though tax administration has coped well with the massive increase in the number of new businesses, the performance of the tax system as a whole has not been entirely satisfactory. Tax policy has been very unstable, with frequent changes in rates combined with numerous targeted tax preferences, for foreign investors in particular, creating a nontransparent system of tax distortions and resulting in revenue losses. For the taxation of income from financial assets, Hungarian authorities have followed a schedular approach treating income from different sources differently. The approach followed is similar, in some respects, to the so-called "dual income tax approach" (more on this below) in which the wage income is progressively taxed while interests, dividends and capital gains are subject to a flat-rate tax. However, it creates distortions by taxing differentially the returns on different types of assets. In our conclusion, we suggest to reform the system along "Scandinavian" lines: this would have the advantage of not requiring a radical departure from the present system while improving the incentive structure. This would probably increase domestic savings and capital inflows, and be a useful contribution in leveling the playing field for the development of capital markets. Such a reform would *not* address the distortion introduced by inflation which acts as an implicit tax on the real return of assets but, barring a move toward taxing real rather than nominal returns (which is not attempted by any existing tax system), this problem would exist regardless of the system one chooses for taxing capital income.

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Section 1 - Conceptual Framework

Capital income includes returns on investment in financial and real assets. Individuals receive income from financial assets, in the form of interest payments (on bank deposits and on private or public bonds), dividends paid out to them as shareholders, or in the form of capital gains. Real assets (such as real estate) generate rents and capital gains. The focus of this paper is on financial assets, though many of the statements applying to financial assets carry over to real assets.

Three different tax legislation affect capital incomes: corporate income tax (CIT), personal income tax (PIT), and withholding tax schemes.² These taxes apply to various degrees to different forms of capital income. The creation of hybrid financial instruments such as zero-bonds (which contain their entire return as capital gains rather than interest) or profit-sharing bonds (which combine fixed interest payments with dividend distributions) can be essentially explained by the need to circumvent the tax legislation.

Corporate and Personal Income Tax

In many countries, capital income is taxed under the corporate and personal income tax. The interaction between the tax systems is clarified in figure 1 (taken from Cnossen) which applies particularly to the taxation of company profits (dividends and capital gains).³ However, as indicated below, it is applicable to the taxation of interest as well.

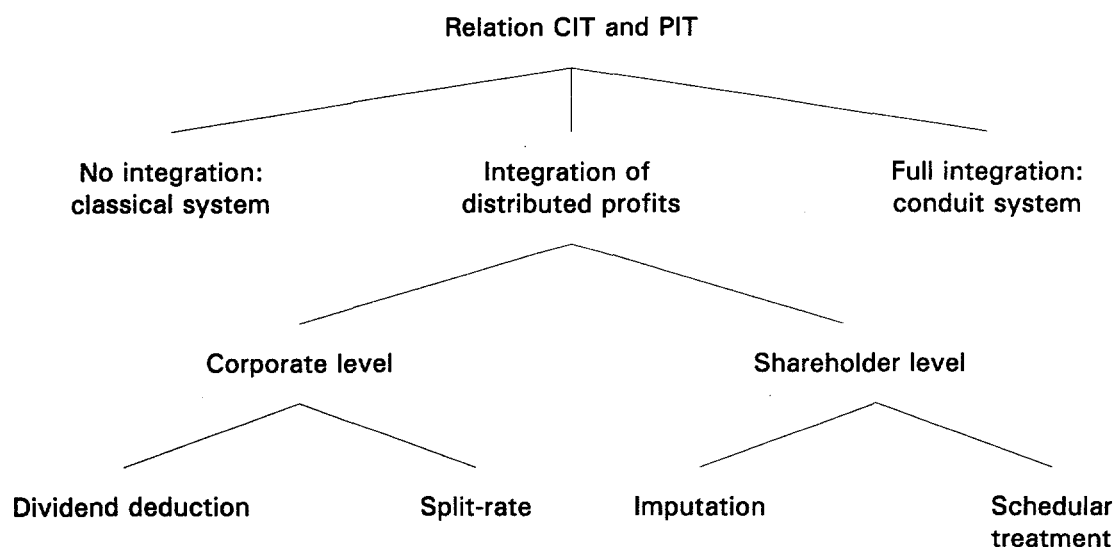
Conceptually, as shown in figure 1, two pure systems are possible. At one extreme, there is no integration at all between corporate and personal income tax. This is the so-called „classical system“ which implies that (distributed or retained) corporate profits are, first, taxed under the corporate income tax, then subject to the personal income tax. The shareholder is not granted credit for CIT paid on dividends against the personal income tax liability.

At the other extreme, in a full integration system, the corporation is regarded as a „conduit“ (pass-through) for company profits. Proponents of this view argue that any separate taxation of corporate profits is unjustified since they are ultimately channeled to the shareholder (in the form of dividend payments or capital gains). This does not preclude the existence of a corporate profit tax, but the latter represents only a prepayment on the personal income tax liability of the shareholder.

² We do not consider here taxes applied on capital *stocks*, such as wealth taxes or property taxes.

³ Cnossen, 1993, and Sorensen, 1995, contain recent overviews on corporate income tax and its relation to the personal income tax.

Figure 1: Taxation of Corporate Profits: Relation of CIT and PIT



Source: Cnossen, 1993.

Dividends

In practice, in tax systems around the world, the integration of the corporate and personal income taxes is limited to dividends. There are two possibilities. Either integration is undertaken at the company level. Complete integration is attained when dividends are fully deductible from taxable profits of the corporation. This is the way corporate interest payments are treated. Partial integration results from distributed profits taxed at a lower rate than retained earnings („split-rate system“). But integration can be attained at the shareholder’s level as well. Under a system of imputation, gross dividends are included in the personal income tax base. Corporate income taxes are regarded as prepayments and can be deducted from the final income tax liability. Under a schedular system, a flat-rate tax applies to dividends (the tax rate being often identical to the lowest marginal rate of the personal income tax). This guarantees partial relief from double taxation, at least for shareholders with a marginal income tax rate above the flat-rate.⁴

⁴ There are many other possible ways to achieve full or partial integration. The latter could be achieved, for example, with all profits taxed at the same corporate income tax rate, but only parts of dividends being included in the base of the personal income tax. Another way for partial or full integration is the “double split-rate method” (effective in Austria until 1989) where the corporate as well as the personal income tax on dividends are applied at reduced rates.

Interest

Interest income is mainly generated from bank deposits, private bonds, and government bonds. Since debtors are normally allowed to deduct interest payments from taxable profits, interest remains unaffected by corporate taxes. Instead, interest payments are included in the income tax base of the creditor exclusively. This is equivalent to an interest-deduction system (lower left box of figure 1), which, in turn, implies integration of interest taxation into the PIT.⁵

As long as corporate income taxes are not entirely removed from dividends, this system results in a favorable tax treatment of interest. This provides an argument for using the imputation system for dividends since, otherwise, dividends would be overtaxed compared to interest income.

Capital Gains

Capital gains -- in particular, unrealized capital gains -- are rarely taxed under the personal income tax. No country has yet tried to include unrealized gains in the personal income tax base systematically. Generally, realized capital gains (i.e., the difference between buying and selling price of an asset) also remain untaxed unless acquisition and sale of a financial asset occurs within a short period and speculation is suspected.

The fact that capital gains go untaxed under the personal income tax does not mean that they remain completely untaxed. Share prices reflect the market value of a firm. If this market value increases one-to-one with retained earnings (profits), capital gains are implicitly taxed by the corporate income tax on retained profits. Depending on the difference between the corporate tax rate on retained profits and the personal income tax rate of the shareholder, an over- or undertaxation of capital gains compared to other types of income emerges.

An equal tax treatment would be realized by a system of full integration (see figure 1). In such a system, capital gains enter the base of the personal income tax and a tax credit is given for corporate taxes on retained earnings. Although full integration has been suggested in several studies, no country has yet applied such a system (Cnossen, 1993, p. 7). There are a number of reasons for this but the main ones are administrative difficulties and the fact the shareholders could be forced to pay taxes although actually no income would have been received.

⁵ The US Treasury proposes an alternative way to tax interest. The „comprehensive business income tax“ abolishes the deduction of interest payments at the corporate level. This implies that payments to equity holders (dividends) and debt holders (interest) are treated equivalently. See US Department of the Treasury, 1992.

Withholding Taxes

Most tax administrations face difficulties in taxing capital income at the individual level. Taxpayers can conceal capital incomes when anonymity and bank secrecy is guaranteed. Because of the increased international integration of capital markets, tax bases easily escape domestic taxation by (legal) tax avoidance or (illegal) tax evasion. Therefore, to reduce the potential for revenue losses, withholding tax schemes for capital income are commonly introduced. Most of the 15 Member States of the EU operate withholding schemes to tax interest and dividend payments (see section 3 below).

Typically, withholding taxes on capital income are flat, applying a uniform tax rate to gross payments. Banks, corporations, the Treasury, and other institutions deduct a fixed share of payments to creditors or shareholders and transfer it to the tax office. This is the reason why withholding taxes are poor instruments to tax capital gains. The evaluation of capital gains, by definition, requires comparing asset values at two different points in time. Therefore the main virtue of a withholding tax disappears since the valuation of capital gains necessitates precisely the type of assessment that a withholding tax tries to do away with.⁶

Withholding taxes are either preliminary or final. In the former case, the withholding tax deducted from capital income is treated as a prepayment. The final tax liability is determined by the personal income tax, once taxpayers file their tax returns and an assessment is made. Assuming that any corporate income tax is also credited, we are back to the „imputation system“ (see figure 1) and, as a result, marginal tax rates on labor and on capital income equalize. Under a final withholding tax, no assessment of capital income under the personal income tax takes place. The tax withheld from capital income is the final tax liability. This implies that capital income is taxed separately from wage income („schedular treatment“ in figure 1) and that the marginal burdens on labor and capital income will, in general, differ.

The Dual Income Tax Approach

The Dual Income Tax approach, which is in application in several countries, has received a lot of interest in academic and political circles recently.⁷ This approach combines progressive taxation of labor income with a flat-rate withholding tax on capital income. The rate of the capital income tax

⁶ Briotti, 1994, p. 68, describes a scheme in which capital gains are determined on the basis of the trend of stock market indices, and then taxed at 15%. No comparison between asset prices when bought and sold is therefore necessary. However, the need for an assessment remains since the period during which the asset was held by the previous owner must be taken into account.

⁷ See Sorensen, 1994, Cnossen, 1995, and Stevens, 1996.

equals the corporate income tax rate (and, in most cases, the lowest marginal rate of the personal income tax). No deductions on earnings-related expenses or exemptions are granted. Final or prepayment withholding taxes are usually in effect.

Scandinavian countries and Austria, as discussed below, were among the first to introduce such a system. Prior to introducing this system, strong distributional and social concerns led these countries to follow the so-called „comprehensive income tax model“. Under the latter, all income is taxed under the same schedule, as it accrues. Income from all sources is added and an appropriate tax rate is then applied (thus guaranteeing that the tax treatment of income is independent from its source). This uniform tax treatment for all types of income makes it impossible to give a favorable treatment to „unearned“ capital income vis-a-vis „earned“ labor income.⁸ The change to a dual income tax system was motivated by two major problems which made the comprehensive income tax model ineffective and inadapted. First, high rates of tax evasion (at least 80% in Austria) on interest income were showing that attempts to tax capital income under the same schedule as labor income did not have the desired distributional impact. Second, the comprehensive income tax system was facing difficulties as global competition and the integration of world capital markets progressed at an accelerated pace.

Section 2 - The Taxation of Capital Income in Hungary

Hungary operates a system in which dividends are first taxed under the corporate income tax and then subject to a final withholding tax. Until 1995, this withholding tax also applied to interest payments. Capital gains, de facto, are not taxed at the individual level. Therefore, the Hungarian system provides for partial integration of distributed profits (coinciding with the lower right-hand corner of Figure 1). The scheme has been subject to frequent, almost annual, changes. This section begins with a description of the provisions of the CIT law, of the withholding tax scheme rules, and of their interaction. It then provides an economic assessment of some aspects of the system: its revenue performance, the impact of inflation on effective tax rates, and distributional effects.

Corporate Income Tax

A uniform corporate income tax („entrepreneurs profits tax“) was introduced on January 1, 1989 as part of the entire tax reform package of 1988/89.⁹ The most significant novelty was the uniform treatment of businesses, without regard to ownership structure (state-owned or private, foreign

⁸ See Goode, 1980, on the comprehensive income tax.

⁹ Under the previous system, schedular taxes varying according to ownership type and favouring state-owned enterprises were applied in combination with ad hoc confiscation of profits. As a result, after tax profits of companies were only a loose indicator of company performance. See Boote/Somogyi, 1991, and Kopits, 1993.

participation) or legal status. A tax rate of 50% (40% for profits up to HUF 3 million) was combined with restrictive rules concerning the tax base. Depreciation, based on historic costs, was linear -- often over periods that exceeded the real economic life of the asset. Loss carry-forward was possible for 2 years only.

Although tax rates were not exorbitantly high by international standards (Briotti, 1994), restrictive definitions of the tax base led to a high effective tax burden (Andersson, 1991). This led Hungarian authorities to introduce a number of far-reaching tax rebates. Enterprises engaged in agriculture, forestry, or retail trade received a reduction of 35% of the tax payment due; while a 65% reduction was granted to company providing cultural, sporting, or educational services. Moreover, to attract foreign capital and know-how, from 1990 on, generous tax incentives were offered to foreign investors. Joint ventures received a tax reduction of 20% of the tax due, provided foreign capital exceeded 20% (or HUF 5 million) of the capital. In case the capital of the JV exceeded HUF 25 million, the foreign share exceeded 30%, and at least half of the revenues of the JV were obtained in manufacturing or tourism/hotel, the reduction amounted to 60% in the first 5 years and 40% afterwards. Complete tax holidays from CIT in the first 5 years of existence and 60% reduction afterwards were granted when the former two conditions were met and the joint venture's activity was in a sector considered to be of economic importance (computer technology, biotechnology, etc).

The adverse effects of the special tax incentives granted to foreign capital soon became clear. First, only small-scale investors were actually attracted by these measures. For large investors, stable economic and political conditions as well as well-developed infrastructure and a reliable judicial system were much more important (Koltay, 1993). These investors took advantage of the preference, but the tax regime was not an element affecting their decision to settle their business in Hungary. Second, the incentives led to an outflow of domestic capital which was then re-imported as „foreign capital“ to take advantage of the tax incentives (Genser/John, 1992). The predictable result was a loss of tax revenue but no significant impact on economic growth. It is generally accepted that granting tax reductions is a poor means of attracting foreign capital (Mintz/Tsiopoulos, 1994).

Hungarian authorities, therefore, soon began to reform the system of corporate income taxation (this reform is still on-going today). In 1990, the tax rate was reduced to 40% (and 35% on the first HUF 3 million of taxable profits). A major reform in 1992 reduced the rate to 36%, uniformly levied on the entire profit, and introduced less restrictive tax base regulations. Loss carry-forward was extended to 5 years, with the possibility of carrying forward indefinitely losses occurring during the first 3 years of a business. Depreciation rates were increased (i.e. depreciation times reduced), leading to depreciation within 3 years (computers, office infrastructure), 5 years (automobiles), 7 years (machine, other assets) and 50 years (buildings). As a result of these measures, effective tax rates were reduced.

To address the concern that state-owned enterprises received a favorable treatment, an additional "dividend tax" on profits of state-owned enterprises was introduced at the beginning of 1992, mimicking dividend payments that private enterprises have to pay out to capital owners (OECD, 1993; the tax was abolished in May 1994). Thereby a level playing field for all enterprises was created and disincentives for state-owned enterprises to be privatized were partly removed.

Further changes were introduced in subsequent years. In 1995, a new CIT scheme was created. Profits were now subject to a basic tax rate of 18%. On distributed profits, a supplementary tax of 23% (tax-exclusive) was levied. The total tax burden on dividends, therefore, increased to $18 + (100 - 18) \cdot 23/123 = 33 \frac{1}{3}$ percent. Tax preferences for joint ventures and other enterprises were maintained but applied only to the basic tax payment of 18%. In late 1996, the Parliament approved another reform of corporate income taxation. The corporate income tax rate was harmonized at 18% for all company profits, no matter whether retained or distributed.

The Hungarian approach of granting very generous special incentives, especially to foreign investors, has been widely criticized. Since it is highly questionable whether the incentives granted actually were having the desired effect, in 1990, all preferences were limited to 10 years (remember that initially some of the tax reductions were granted indefinitely) and, in 1994, were completely abolished. Existing preferences remained in force, so that the last preferences granted under this scheme will expire by 2004.¹⁰

Withholding Tax

Together with the CIT, the tax on personal income determine the overall tax burden on capital income. In 1988, taxation of capital income was reformed as part of the entire package to reform the personal income tax. Dividends and interest payments were subject to a 20% withholding tax on capital income. This flat-rate tax was final. No additional personal income tax was levied on capital income. At the same time, no credit was given for corporate income taxes paid on distributed profits. The Hungarian system, therefore, can be described as a system of partial integration, i.e., corporate income taxes can not be deducted from personal income tax liabilities, which, in turn, consist of a final withholding tax at a relatively low rate.

These rules were effective until the beginning of 1994 when, in a move to increase savings, the tax rate on dividends and interest payments was reduced to 10%. The other features of the system

¹⁰ At the beginning of 1994, new incentives to retain and re-invest profits were introduced, again with an unclear impact on investment decisions of firms. See World Bank, 1995, p. 15.

remained in place. In November 1994, interest on deposits and bonds became completely tax-free but taxes on dividends remained at 10%. Until end 1996, dividends were therefore taxed at 40%, which is the combined effect of the basic corporate income tax of 18%, the supplementary tax on gross profit distributions of 23% and the withholding tax of 10%. On the other hand, personal income faced a maximum marginal income tax rate of 48% plus social security contributions. Hence, owners of unincorporated businesses were able to avoid taxes by declaring very high dividend amounts.¹¹

In 1997, the tax regime for dividends was again reformed. The flat-rate tax on dividends was increased to 20%, up to a limit, to compensate for a concomitant reduction in the corporate income tax rate. The upper limit is that, as long as dividend distributions as a proportion of total company capital do not exceed twice the base rate of the National Bank of Hungary, dividends are taxed at 20%. Dividends exceeding this limit are taxed at 27%. In addition, social security contributions have to be paid on this amount.¹² The 18% corporate income tax and 27% dividend tax add up to a tax rate of 40.14%, similar to the treatment of employment income in the highest bracket under the income tax schedule for 1997 (42%). The reintroduction of a withholding tax on interest payments was subject of extensive discussions in the second half of 1996. Official statements suggested a tax rate of 5 - 10%. Eventually, rules were not changed and interest remained untaxed in 1997. Finally, capital gains used to be subject to the personal income tax. In 1996, the PIT law established a withholding tax of 10% on capital gains (but 0% on discount bonds). Since the ability of the tax office, APEH, to detect capital gains as such is doubtful, their *actual* taxation still depends on the willingness of taxpayers to declare such gains in their annual tax returns. De facto, therefore, capital gains escape personal taxation and they are taxed in the form of CIT levied on retained profits.

Overall Tax Burden

To summarize the changes described above, table 1 shows the evolution of rates of taxes on capital income and the resulting tax burden from 1988 to 1997. The tax burden on dividends (last row) represents the combined effect of corporate income tax and withholding tax. Since interest payments are deductible from corporate profits, the actual tax rate on interest is equal to the withholding tax rate. Capital gains, as explained above, are effectively taxed by the corporate

¹¹ Owners of unincorporated businesses receive labor and capital income, and hold a controlling share in the firm. They can therefore decide whether to take out income from their business in the form of wage, dividend, or capital gains.

¹² An example should clarify how the system works. Suppose that the central bank's rate is 22%, dividend payments are HUF 600.000, and the share capital of the company amounts to HUF 1 million. Therefore, HUF 440.000 (44% of the capital) of dividends payments are subject to the 20% tax rate, and HUF 160.000 are subject to 27% dividend tax plus social security contributions, generating tax revenues of HUF 131.200 plus social security contributions. If all dividends had been taxed at 20%, tax revenues would have been HUF 120.000.

income tax. Therefore, the relevant tax burden is equal to the tax rate on retained profits. The tax burden on dividends declined steadily between 1989 and 1996. This is the result of rate reductions in the corporate income tax and in the withholding tax. Starting at a level of 60% in 1989, the combined rate fell to 40% in 1996 and is projected to fall further in 1997. Interest payments have systematically taxed below this level, thus favoring savings in the form of deposits and bonds rather than shares.¹³

Policy Assessment

Hungarian tax policy has often been criticized for the frequency and *ad hoc* nature of its reforms. This applies particularly to capital income taxation which, as shown above, has gone through almost annual changes creating a climate of instability viewed by some observers as an important impediment to increased investment and growth. In addition to this general criticism, three specific issues --discussed in this section-- are worth examining. First is the revenue raising ability of capital income taxation: given that the revenue performance has been satisfactory, is there still room to increase revenues in the future? Second is the issue of effective tax rate: given that Hungary has been stubbornly stuck with inflation between 20 and 30% per year, to what extent does the tax regime for capital income provide incentives to increase domestic savings? Finally we examine the issue of whether, for reasons of fairness, capital income taxation should be used to create a fairer distribution of after-tax income.

Revenue Performance

Capital income taxation in Hungary has fared well in terms of revenue performance. The system of collection in place makes evasion virtually impossible since the tax amount due is withheld automatically when interests or dividends are paid out to capital owners. The latter always receive net capital income. Table 2 shows households income and tax revenue from such income, distinguishing between interest and dividends.

¹³ This last point needs to be qualified because of inflation (see section 2, below).

Table 1: Hungary: Capital Income Taxes, 1988 - 1997

	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997 (planned)
Corporate Income Tax	not existing	50% (40% on first HUF 3 mio profit)	40% (35% on first HUF 3 mio profit)	40% + 4% supplement	40%	36%	36%	Retained profits: 18%; Distributed profits: 33.3%	Retained profits: 18%; Distributed profits: 33.3%	18%
Withholding Tax on Capital Income	Dividends: 20% Interest: 20%	Dividends: 20% Interest: 20%	Dividends: 20% Interest: 20%	Dividends: 20% Interest: 20%	Dividends: 20% Interest: 20%	Dividends: 20% Interest: 20%	Dividends: 20% Interest: 10% (as of Nov 1: dividends:10%, interest: 0%)	Dividends: 10% Interest: 0%	Dividends: 10% Interest: 0%	Dividends: 20% (27% on „excessive“ dividends), Interest: 0%
Resulting Tax Rate on Dividends		60%	52%	55.2%	52%	48.8%	48.8% (as of Nov 1: 42.4%)	40%	40%	34.4% (40.14% on „excessive“ dividends)

Source: International Bureau of Fiscal Documentation. GET V: Taxation and Investment in Central and East European Countries. Amsterdam (loose leaf).

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Table 2: Hungary: Taxes on Household Income, 1989 - 1994

(in billions of Forint)

	1989	1990	1991	1992	1993	1994 (Budget) *
Household Incomes (cash and in kind)	1,122.0	1,645.5	2,140.5	2,569.9	2,979.8	3,435.9
of which:						
- interest	30.0	40.0	60.0	100.0	100.0	110.0
- dividends	18.0	30.0	40.0	50.0	50.0	50.0
Taxes on Personal Income	98.6	140.5	182.8	225.3	284.6	305.1
of which:						
- on interest	6.0	8.0	12.0	20.0	20.0	11.0
- on dividends	3.6	6.0	8.0	10.0	10.0	10.0

* The Budget Law assumes a tax rate of 10% / 20% on interest / dividends over the entire year. Actually, rates were reduced to 0% / 10% on November 1, 1994.

Sources: Ministry of Finance and World Bank (1995), Appendix Table 5.5.

As shown in table 2, interest and dividends accounted for 4.7% of total household income, on average, between 1989 and 1994. At the same time, taxes on interest and dividends raised 10.2% of total personal income taxes, thus contributing more than proportionally to tax revenues. More importantly, a comparison with total dividend and interest payments unveils that tax revenues equal 20% of the tax base -- in other words, APEH, the tax office, was able to completely exploit the tax base of capital income.¹⁴ This is a very significant result given that rates of tax evasion are very high. According to recent estimates, evasion in Hungary varies between 7% of the tax amount due (corporate income tax) and 25% - 30% (value-added tax, personal income tax).

In 1995, interest received by individuals and interest on government bonds was tax exempt. Accordingly, the Government has foregone potential revenues from taxing this source. These revenue losses can be estimated on the basis of financial savings of households (see table 3). At the end of 1995, financial savings of Hungarian households totalled HUF 2,182 billion. Assuming average interest rates of 20% on forint deposits and bank securities and 3.5 % on foreign exchange deposits, potential tax revenues would add up to HUF 20.7 billion, given a tax rate of 10%. Note that government bonds and bills remain tax exempt. The additional revenue foregone would thus

¹⁴ This experience is common to other countries operating withholding schemes (see below). Ministry of Finance figures do not match National Accounts data. According to the latter, interest income in 1991 - 1994 amounted to HUF 48.9; 70.7; 100.6 and 130.2 billion, respectively. During the same period, corporate dividends totalled HUF 12.6; 15.5; 20.2 and 32.4 billion, respectively. The difference can only be partially explained by the fact that data in table 2 refers to *taxable* payments.

be equal to about 7% of total personal income taxes (HUF 290 billion) or approximately 10% of the general government deficit in 1995 (HUF 214 billion or 3.9% of GDP).

Table 3: Hungary: Stock of Household Savings in 1995

(in billions of Forint, as of December 31, 1995)

	Stock of savings	Potential taxable interest payments
Cash and Sight Deposits	426.4	0
- Forint	380.4	0
- Foreign exchange	46.0	0
Deposits	1,033.7	141.9
- Forint deposits	640.7	128.1
- Foreign exchange deposits	393.0	13.8
Securities	613.3	58.6
- Bank securities	292.8	58.6
- Other (bonds, gvt. bonds, bills, stocks)	320.5	0
Provisions for insurance premiums	74.7	0
Small business deposits	33.9	6.8
TOTAL	2,182.0	207.3

Sources: National Bank of Hungary (Monthly Reports) and own calculations.

Given very high rates of revenue productivity, withholding taxes on capital income can be considered to be a very efficient and reliable tool to raise revenue. In addition, administration is cheap and compliance costs for taxpayers low. Does this mean that the Government should increase tax pressure on capital income? It is important, in this respect, to look at *net tax revenues*. The counterpart of taxing interest received by the creditor is deductibility of interest payments on the part of the debtor, for example a corporation. In other words, while the government gains revenue from personal income tax, it loses corporate income tax revenue. In the extreme, in a closed economy with lending and borrowing taking place between agents facing identical marginal tax rates on capital income, both effects cancel each other out and interest taxation raises zero net revenue.¹⁵

¹⁵ If, in addition, government bonds are sold, the net tax base (as well as net tax revenue) turns positive, as the government collects taxes from bondholders but does not suffer tax losses incurred by deductibility of interest payments.

Available empirical studies show that net tax revenues from capital income are *negative*.¹⁶ For instance, Gordon and Slemrod (1988), based on the US tax system in 1983, estimate that tax revenues would increase if capital income taxes were completely eliminated. For Denmark, the net revenue from taxing capital income in 1986 was estimated to be *minus* 1.6% of net national income (Sorensen, 1994). Mutén (1996) reports that the Swedish government in 1994 did not reduce the tax rate on capital income from 30 to 25% as originally planned though a lower tax rate would have actually *increased* tax revenues. Such an empirical exercise cannot be performed for Hungary, in the framework of this paper, because data requirements are extensive. When there is precise information on this, all available empirical studies arrive at a similar conclusion: the ability to raise additional tax revenue from taxing interest income is very limited.

There are several reasons behind this empirical conclusion. First, given that capital income is taxed under a progressive income tax, net revenues will be negative when agents with high nominal marginal tax rates borrow from agents facing low rates. Second, there is no incentive to forego the deduction of interest payments but a strong incentive to evade taxes on interest income. As a result, net tax revenues will tend to turn negative (even under a flat-rate tax). Third, many countries operate schemes which combine relatively generous rules for interest deductibility with favourable treatments of certain types of capital income (returns on pension saving, owner-occupied housing, etc). This is particularly the case in Scandinavian countries and in the US. As a result, tax arbitrage implies considerable losses for the tax authority.

In Hungary, however, interest paid by businesses has been treated as a deductible expense all along. Accordingly, the introduction of a tax on interest income will undoubtedly lead to an increase of net tax revenues.

Inflation

Inflation has been stubbornly stuck in the 20-30% range in Hungary in the past few years, with the rise in the consumer price index averaging 25.7% between 1990 and 1996. This qualifies in the economic literature as "moderate inflation". Projections for 1997 point at a possible decline to about 12-13% by end year.

Inflation influences the burden of taxpayers via two main channels. First, any progressive tax system that has nominal incomes as tax base will produce "bracket creeping" in periods of moderate to high inflation. This is exactly what happened in Hungary since 1990, with bracket-creeping being a major force underlying the increase in the real tax burden on the employed.

¹⁶ Note that empirical results find that net revenues from taxing *total* capital income, and not from taxing interest only, are negative.

Measures that were taken (such as reduction of tax rates, adjustments of tax bases and tax credits) have compensated only partly for the decline in real net income -- and actually had a regressive effect as changes in tax credits have predominantly facilitated the access to credit for high-income households.¹⁷

Second, owners who do not make adjustments in the nominal value of their assets are hit by inflation. They are forced to set aside part of their interest income to protect the principal from real losses. Taxes are paid out of the remaining *real* capital income. The tax system, however, taxes *nominal* interest payments. The implication is that the resulting effective tax rate (i.e. *real* tax payments as a share of *real* return) is higher than the statutory tax rate. For this reason, inflation is viewed as an implicit tax on return on assets.¹⁸

The effective tax rate on interest is defined as

$$(1) \quad t^{\text{eff}} = \frac{K_1^{r,g} - K_1^{r,n}}{K_1^{r,g} - K_0},$$

where K_0 denotes initial wealth, $K_1^{r,g} = K_0 \cdot \frac{1+R}{1+p}$ equals real gross wealth after one period (with

R for nominal interest and p for inflation rate), and $K_1^{r,n} = K_0 \cdot \frac{1+R \cdot (1-t^{\text{nom}})}{1+p}$ equals real net wealth (with t^{nom} as the nominal, statutory tax rate), respectively. After some transformation, one obtains

$$(2) \quad t^{\text{eff}} = t^{\text{nom}} \cdot \frac{R}{R-p}.$$

For example, in Austria, dividends are taxed under the corporate income tax (34%) and the withholding tax (22%), resulting in an overall tax burden of 48.5%. The nominal tax rate on interest is 22%. However, assuming a nominal return of 6% on financial assets, inflation must not exceed 3.3% to result in the same effective tax rate of 48.5%.

¹⁷ See TARKI (1995). Bracket-creeping always occurs when there is inflation when incomes are taxed with a progressive schedule. Even when an income-earner is fully compensated (say, when an inflation of 10% leads to a rise of nominal income by the same percentage), her disposable income falls since the constant real income is taxed at a higher average tax rate.

¹⁸ This problem remains even when bracket-creeping is eliminated, for example through a flat-rate tax.

For Hungary, table 4 below shows nominal and real interest rates as well as effective tax rates, using equation (2), between 1988 and 1995.¹⁹ Trends in effective tax rates for Hungary are erratic. Real interest rates were negative between 1988 and 1993 (except for 1992). Taxing nominal interest payments resulted in a worsening of disincentives to save. In 1994, savers were able to earn positive real interest for the first time. As shown in table 4, the effective tax rate on interest income amounted to 50% -- compared to a nominal tax rate of 10% ! After abolishing the tax on interest payments in November 1994, the effective tax rate fell to zero.

Table 4: Hungary: Inflation, Interest Rates, and Effective Tax Rates, 1988 - 1995

	1988	1989	1990	1991	1992	1993	1994	1995
Inflation (in percent, CPI)	15.8	16.9	29.0	34.2	22.9	22.5	18.9	28.3
Nominal interest rate ¹	9.0	15.0	27.4	32.5	23.6	16.5	23.6	29.1
Real interest rate ²	- 5.9	- 1.7	- 1.2	- 1.3	0.5	- 4.9	4.0	0.6
Effective tax rate on interest ³	- 26.5	- 149.5	- 349.0	- 363.8	784.3	- 54.8	49.9	0.0

¹ Unweighted average of interest rates on treasury bills and deposits.

² The relation between nominal and real interest rate r is given by $1 + R = (1 + r) \cdot (1 + p)$. For small $r \cdot p$, the expression can be reduced to $R = r + p$ for simplicity.

³ Negative signs do *not* indicate negative effective tax rates (i.e. a subsidy). Rather, they are explained by a negative denominator in (2), which implies a negative tax base but, nevertheless, positive tax payments.

Sources: IMF International Financial Statistics; and own calculations.

As highlighted by the data in table 4, inflation distorts saving by discriminating against assets that are not inflation-proof. Tax policy, in principle, should acknowledge this problem by taxing real rather than nominal returns. Such attempts have rarely been undertaken in the past, mainly because systematic adjustments appear to be difficult and, hence, expensive (Sorensen, 1994, p. 63). Another attempt to account for inflation in the design of the tax system would be to apply reduced tax rates on interest as compared to other types of capital income.²⁰ However, this seems to be an inferior solution because the non-distorting tax differential depends on the actual inflation rate and would, accordingly, be subject to permanent change. In particular, moderate-to-high inflation economies like Hungary would face the need for constant adjustment.

Even though official statements mentioned that revenue considerations rather than „effective tax rate“ considerations were the driving force behind the reform, and even though the tax reduction

¹⁹ In principle, effective tax rates should be calculated using *expected* inflation rates. Lacking better data, we used ex-post outcomes instead. This is justified in case of perfect foresight of savers, or when inflation forecasts by public institutions and actual outcomes coincide.

²⁰ Mutén, 1996, p. 12, mentions that, in 1994, Swedish authorities chose a tax rate of 30% on capital income for this very reason. Under reasonable assumptions on interest rates and inflation, the resulting effective tax rate of about 50% corresponds to the highest marginal PIT rate.

was actually introduced at a time of *falling* inflation, it is possible that the decision of the Hungarian government to reduce and finally abolish the taxation of interest in 1994 was motivated partly by the need to account for inflation. However, the discussions about the reintroduction of interest taxation through the year 1996 (see above) confused agents and once more highlighted the ad hoc nature of tax policy.²¹

To contrast Hungary with other Central European economies, table 5 shows effective tax rates in the Czech Republic, Poland, and Slovakia.

Table 5: Inflation, Interest Rates, and Effective Tax Rates in Transition Economies

	Czech Republic		Poland		Slovak Republic	
	1994	1995	1994	1995	1994	1995
Inflation (CPI)	10.1	9.1	33.3	26.8	13.4	9.9
Nominal interest rate	9.0	9.7	31.1	26.2	10.7	9.0
Effective tax rate on interest	- 130.2	220.3	0.0	0.0	- 59.1	- 153.4

All figures in %. In the Czech and Slovak Republics, nominal tax rates on deposits and securities differ. The effective tax rates correspond to the rate on deposits.

Source: IMF: International Financial Statistics, and own calculations.

In contrast to Hungary, real interest rates were negative in the Slovak Republic and Poland in 1994 and 1995. The patterns of inflation were different, however. The Slovak Republic reported inflation of 13% in 1994 and 10% in 1995, which, in combination with a final withholding tax of 15% on deposits, led to high effective tax rates. In Poland, despite inflation rates of 33% and 27%, respectively, the effective tax burden was zero as interest payments were tax exempt. The Czech Republic had positive real interest rates in 1995. However, because of high inflation and a final withholding tax of 15%, the effective tax burden reached 220%.

This brief analysis shows that, even if tax rates are modest, the higher the inflation rate, the stronger the „leverage effect“ of capital income taxation on interest payments. Authorities have three options to counteract this effect, thus providing incentives to increase national savings. First, of course, bring inflation under control. Second, impose a tax on the *real* value, rather than nominal, of capital income so as to prevent the principal from being eroded by inflation.²² Third, tax interest

²¹ An effective tax rate of 202% would result from a nominal tax rate of 10% in combination with 13% inflation and a real interest rate remaining at its 1995 level of 0.6% -- another indication for the strong impact of inflation, even when nominal tax rates are low.

²² Taxing real income would also prevent bracket-creeping from occurring.

at lower rates or avoid taxing capital income altogether. Each of these measures will reduce effective tax rates and contribute to the removal of disincentives to save.

Fairness

Equity and ability-to-pay considerations play a major role in public discussions on capital income taxation. As Mintz puts it, "perhaps the most important consideration behind the reluctance of governments to abandon the taxation of capital income is fairness."²³ Should capital income, which is concentrated on the richest households, be taxed more heavily, on grounds of fairness, because labor income is heavily taxed and because workers have less opportunities to avoid paying taxes (because of withholding)?

Despite the fact that this is a passionately debated topic, neither theoretical arguments nor empirical evidence militate in favor of reinforcing capital income tax. At a theoretical level, intertemporal equity consideration (life-cycle hypothesis) must be taken into account. When capital income is taxed, people with otherwise identical economic characteristics (in particular, the same present value of lifetime earnings) will pay different amounts of lifetime taxes, depending on the amount and time pattern of savings. In particular, an individual will minimize his/her lifetime tax bill by not saving at all. From an distributional perspective, this obviously is a violation of the principle of horizontal equity since the ability to pay is the same in both cases.²⁴

The available empirical evidence shows that taxing capital income more heavily would only have a negligible distributional impact (in the sense of making income distribution more egalitarian) because the tax base is too small. Evidence from Hungary is provided by a recent study of the structure and distribution of income (see TARKI, 1995).²⁵ Table 6 shows the distribution on income from work, transfers, income from abroad, other income, revenues accounted as expenses, and capital income.

²³ See Mintz (1994, p. 1483). The whole debate on the flat tax is a good example. In the May-June 1996 issue of the magazine "Challenge", for instance, Roberts/Sullivan criticize the flat personal income tax proposal on the grounds that "under the flat tax, many of the wealthiest individuals would pay absolutely no tax. For example, a family whose income consists solely of millions of dollars of dividends, interest, and gains from the sale of stock held for investment would pay zero tax." (p. 25).

²⁴ See Sorensen, 1994, for a simple numerical example. See also Mintz, 1994.

²⁵ The survey is based on a random sample of all 4.1 million income tax returns filed by Hungarian taxpayers in 1994. Declared household income amounted to HUF 1,714.6 billion. The TARKI study was commissioned by the Ministry of Finance and financed by a PHRD grant from the World Bank supporting the Government's public finance reform.

Table 6: Composition of Personal Income According to Tax Returns, 1994

	Amount (HUF billion)	%
Income from work (wages, business income, small farm production, individual activities)	1,385.4	80.8
Transfers	87.6	5.1
Other income, Income from abroad	54.4	3.1
Revenues accounted as expenses	147.9	8.6
Capital income	39.3	2.3
SUM: Total declared income	1,714.6	100.0

Source: TARKI, 1995.

Capital income only makes up 2.3% of total declared income. This is partly explained by the fact that „capital income“, as it appears in tax returns, comprises only interest and dividends on bonds and shares (domestic and foreign) plus the proceeds from the sale of bonds and shares. Interest from ordinary saving accounts does not need to be declared in tax files. It should also be mentioned that tax returns are a poor source for assessing capital income, since the reporting propensity is low. The survey results may therefore not reflect actual capital income in Hungary. For our purposes, however, these results are useful because they indicate the willingness of taxpayers (not) to declare their capital income in tax returns.

The more it is concentrated on wealthy households, the more pronounced is the distributional impact of capital income tax. Table 7 shows how strong the concentration of capital income is in high income households in Hungary. The highest household decile (the richest 10%) earns 81% of total declared capital income, compared to a share of 36% in total income (including capital income). The unevenness of the distribution is highlighted by a Gini coefficient of 0.84, as compared to 0.49 for total income.²⁶

²⁶ Note that the second column consists of total declared income, i.e., *includes* capital income. The Gini coefficient excluding capital income would therefore be lower.

Table 7: Income Shares by Deciles

Decile	Share in total declared income	Share in capital income
1	1.2	0.2
2	2.9	0.1
3	4.0	0.4
4	5.2	0.8
5	6.5	1.4
6	7.8	1.9
7	9.4	2.8
8	11.6	3.8
9	15.4	8.1
10	35.9	80.6
Total	100.0	100.0
Gini-coefficient	0.49	0.84

Source: TARKI, 1995.

Does this build a strong case for taxing capital income, on distributional grounds, since capital income is extremely concentrated on the richest households? No, because the tax base is too small so that using capital income taxation as a tool to make income distribution more egalitarian would not be effective. Consider the highest income decile which earns 35.6% of total income (HUF 610.4 billion). Capital income makes up HUF 31.6 billion, i.e., 5% of total declared income of this decile. Taxing this amount would have a negligible impact on income distribution, regardless of whether taxation is are flat-rated or progressive. The tax base is too small. In addition, progressivity will increase the incentive to avoid or evade taxes, further undermining the already small potential for distributive impact.

As an illustration, we present in table 8 a simulation using the 1994 data. The table shows how average tax rates on total income (that is, labor income plus capital income) of representative households respond to different tax schemes. Total income tax payments for each decile are given assuming that capital income is not taxed (column 4); that capital income is taxed at a flat-rate of 20% (column 5) and that capital income is taxed under the PIT schedule (comprehensive income tax, in column 6).²⁷ These results show that, compared with not taxing capital income at all, a flat-

²⁷ By construction, every decile in table 8 contains the same number of taxpayers (namely 431,598) that is, the total number of tax filers divided by 10. The average income of every decile is easily calculated by dividing the total declared income of the decile (obtained by distributing total income reported in table 6 to the 10 deciles by using the pattern of table 7) by 431,598.

rate tax of 20% or the application of a comprehensive income tax would have a negligible effect on average tax rates. The exception is the highest income decile which would experience an increase of the average tax burden to 37.5% (compared to 35.2% in case of no taxation of capital income). The problem, however, is that the highest income decile undertakes the most „tax-planning” activities and that the benefit of using such a tax on high income earners would be nullified by tax avoidance behavior. Evidence from TARKI and from other sources clearly point to a regressive effect of legal and illegal methods of tax planning.²⁸

Table 8: Hungary: Simulating the Distributional Impact of Various Capital Income Tax Schemes (using 1994 tax return data)

Decile	Income (in HUF)		Income Tax Payments (in HUF) *			Average Tax Rate **		
	Total income	of which: capital income	0% on capital income	20% on capital income	CompIT ***	0% on capital income	20% on capital income	CompIT **
1	49,202	182	0	36	0	0.00	0.07	0.00
2	113,698	91	721	740	740	0.63	0.65	0.65
3	159,564	364	10,300	10,373	10,391	6.46	6.50	6.51
4	207,073	728	22,086	22,232	22,268	10.67	10.74	10.75
5	256,917	1,275	37,975	38,230	38,421	14.78	14.88	14.95
6	311,389	1,730	56,881	57,227	57,486	18.27	18.38	18.46
7	375,386	2,550	78,993	79,503	79,885	21.04	21.18	21.28
8	462,086	3,460	112,950	113,642	114,334	24.44	24.59	24.74
9	612,991	7,357	173,979	175,450	177,216	28.38	28.62	28.91
10	1,424,337	73,374	501,924	516,599	534,208	35.24	36.27	37.51

* Composite of PIT on total income (excl. capital income) plus capital income tax.

** Taxes on income from labor and capital divided by income from labor and capital.

*** Comprehensive Income Tax: capital income is taxed under the personal income tax.

Source: TARKI, 1995; and own calculations.

We can conclude by saying that neither theoretical considerations nor empirical evidence build a strong case for more taxation of capital income for high income earners in Hungary. The simulations above show that the distributive impact would be small. Even if we are optimistic about APEH's tax collection rate, the tax office is severely limited in its ability to collect revenue,

²⁸ For example, the TARKI study shows that 82% of all accounted expenses happen to be in the highest income decile. This source of income is the most unevenly distributed of all. The results show that, first, evasion of income taxes is highest and, second, by far the most tax evasion takes place in the highest income decile (probably as much as 90%).

following recent rulings of the Hungarian Constitutional Court stressing privacy rights of taxpayers (World Bank, 1995).

Before closing this section, reference should be made to the issue of taxation of the self-employed and small enterprises. As already discussed in section I in the context of the withholding tax, owners of unincorporated businesses are, to a certain extent, legally able to minimize their tax bill. This avoidance is due to the fact that labor is heavily taxed as a factor of production in Hungary. In 1994, the total tax wedge on the average worker was 117% of the net wage, 81% of the gross wage, and 54% of employer costs.²⁹ Individuals with earnings above the average wage even faced higher tax wedges. The tax system offered a way to circumvent high tax burdens legally by choosing a special legal status. Owners of unincorporated partnerships (law firms, medical offices, etc.) receive labor as well as profit distributions from their business. The favorable treatment of dividends has opened a loophole allowing to minimize the tax bill by declaring (low-tax-rated) dividends rather than (high-tax-rated) labor remunerations. Recall that dividends are taxed at 40%, whereas tax rates of up to 48% are levied on labor income. In addition, social security contributions must be paid.

Facing a high tax burden, economic agents spend a lot of time and effort in tax planning and other activities that are unproductive for the economy as a whole. This applies to taxpayers seeking self-employed status as well as to corporations adjusting their distribution policy to a distorting tax system. Since self-employed income is harder to monitor than wages and salaries, the switch from the status of employed to self-employed often implies a reduction in compliance as well as increased auditing costs for APEH. The introduction of a limit for profit distribution in unincorporated businesses does not represent an efficient remedy nor a systemic reform of the tax code. It is an *ad hoc* measure which closes a loophole but does not address an underlying problem in the incentive structure.

Section 3 - The Taxation of Capital Income in the European Union

Can Hungary draw lessons from the recent European experience with capital tax reform? Since Hungary aims at accession to the European Union by the turn of the century, adapting its legislation to that of EU countries could be a worthwhile objective. This could be important, not so much because direct taxation --and capital income tax, in particular-- is an area where the *acquis communautaire* is important (as discussed below, this is far from being the case) but, rather, because adapting tax laws to increasingly integrated capital markets in Europe is desirable. Neither

²⁹ See World Bank, 1995, p. 17. The total tax wedge consists of the combined effect of personal income taxes and social security contributions.

the tax regime in individual EU Member States nor EU Commission proposals provide a "blueprint" for a possible reform in Hungary. However, the reform experience of Scandinavian countries and Austria contains interesting lessons for Hungary. In this section, we present an overview of the tax regime in EU Member States and on proposals under discussion in EU institutions. We discuss the recent reforms of capital income taxation implemented in Scandinavian countries and in Austria, which follow the dual income tax approach.

Overview

Table 9 provides an overview of taxes on capital income in the member states in the European Union and in Norway as of 1996. Column 1 shows corporate income tax rates, and columns 2 - 4 show the tax rates on interest, dividends, and capital gains (Rates for capital gains refer to share gains). Tax rates relevant for residents are reported; due to double taxation agreements, rates for non-residents will differ, in general.³⁰ As seen in table 9, there are substantial differences across countries in the tax treatment of capital income. Within countries, tax rates on capital income vary between 0 and 62% in Denmark, and 0 and 74% in the Netherlands. Equal treatment is obtained in Finland and Norway only, where a uniform rate of 28% applies to all types of capital income.

Interest payments are deductible from corporate income tax in all countries. Accordingly, tax rates on interest either reflect the highest rate of the personal income tax or the rate of the withholding scheme (if the latter is in operation). Rates range from 0% in Greece, where acquisition of government bonds is favored by leaving their returns tax exempt, to 62% which is the highest PIT rate in Denmark.

Dividends are taxed between 28 and 74%. The rates reflect the composite effect of corporate income tax, withholding taxes, and PIT, as well as different methods and degrees of integration of corporate and personal income tax. The Netherlands are the only country to apply a classical system of dividend taxation. Dividends are first taxed under the corporate income tax (35%); the net dividend is subject to the personal income tax of the shareholder. Assuming the highest marginal PIT rate of 60%, this implies an effective rate of 74%. On the other hand, double-taxation is eliminated in Germany. Dividends are taxed according to the personal income tax of the shareholder; corporate income taxes and withholding taxes paid on dividends are fully creditable („imputation“). As a result, the marginal tax rates on labor and dividend income equalize.

Most countries operate systems that provide partial relief from double taxation at the *shareholder's level*. Relief can be attained in two ways (see figure 1). First, corporate income taxes on dividends are partially creditable against the PIT of the shareholder, as is the case in the United Kingdom and

³⁰ Systems of corporate and capital income taxation in the EU are discussed in Cnossen, 1993, and Daly, 1994.

Ireland. Second, a reduced tax rate is applied to dividends at the personal level („*schedular treatment*“).³¹ Luxembourg applies only half of the PIT rate of the shareholder; Greece assumes a PIT rate of 0%. Austria, Belgium, Sweden and other countries operate flat-rate withholding systems with relatively low tax rates. Relief from double taxation can be realized at the *corporate level* as well, but no EU country runs such a system. Germany imposes lower taxes on distributed profits than on retained profits („*split-rate system*“). However, this is irrelevant from an economic viewpoint since full integration is provided at the shareholder's level in any way.

Capital gains are rarely taxed at the personal level in the European Union.³² Greece does not tax capital gains at all; other countries limit the taxation to certain cases, such as sales within given periods from accrual („*speculative sales*“) or sales of shareholders holding substantial parts of the capital (normally more than 5%). This is the case in Belgium, France, Germany and the Netherlands. In Denmark, Ireland and the United Kingdom, capital gains are treated as normal personal income and taxed under the personal income tax. Note that Table 9 refers to realized capital gains only. At present, unrealized capital gains are not taxed in any Member Country of the European Union.

Table 9 does not present a complete picture of capital income tax in European countries. First, the table shows only statutory tax rates. When bank secrecy is guaranteed, tax administrations find it hard to collect taxes and evasion is high. This, in particular, applies to countries not operating a withholding scheme. Second, tax exemptions differ markedly between EU member countries. Germany runs a generous model, which exempts DM 6,100 (DM 12,200 for couples) of capital income annually, leaving the capital income of 80% of the population untaxed. Capital gains remain untaxed up to L6,300 in the United Kingdom. On the other hand, Austria and Finland grant no exemptions at all. Third, there is a vast number of exceptions. In Finland, certain saving accounts and bonds are exempted from withholding tax (PIT applies instead). The final withholding tax in Denmark (25%) applies to dividend income up to 33,800 Dkr only. Higher income is taxed according to the personal income tax. If taxed, exceptions are particularly widespread in the taxation of capital gains, where tax bases and rates vary widely across different types of assets.

³¹ Meaning reduced in comparison to the marginal rate of the personal income tax.

³² We consider the treatment of capital gains under personal income and withholding taxes. As mentioned above, apart from that capital gains are taxed at the corporate level.

Table 9: Taxation of Capital Income in the EU

(Tax rates in %)

	Corporate Income Tax	Interest	Dividends	Capital gains	Comments / Notes
Austria	34	25	50.5 ¹ (34% + 25%)	0 ⁹	25% final withholding tax on interest and dividends
Belgium	40.2 (39% + 3% surcharge)	15	49.2 (40.2 + 15)	0 ⁹	15% final withholding tax on interest and dividends. ² Taxpayers may opt for PIT.
Denmark	34	62 ³	50.5 (34% + 25%)	0 ¹⁰	25% final withholding tax on dividends (40% when dividends exceed Dkr 33,800)
Finland	28	28	28	28	28% „National Income Tax“ on capital income (withholding tax on interest).
France	36.6 (33.3 + 10% surcharge)	19.9 ⁴	61.5 ⁶	19.9 ⁵	19.9% withholding tax on interest (15% basic rate plus 4.9% social contributions)
Germany	48.38 (retained) / 32.25 (distrib.) ⁷	57 ⁸	57 ⁸	0 ⁹	25% / 30% withholding tax on dividends / interest (plus temporary surcharge of 7.5%)
Greece	35	15 (0% on government bonds)	0	0	15% final withholding tax on interest. Dividends are taxed under the corporate income tax.
Ireland	38	48 ¹¹	58.1	40 ¹²	Interest and dividends taxed under PIT. CIT on dividends partly creditable.
Italy	53.2 (37% central plus 16.2% local)	12.5 (30% on bank deposits)	59.05 (53.2% + 12.5%) ⁴	15 ¹³	12.5% final withholding tax on interest and dividends (30% on bank deposits).
Luxembourg	34.32 (33% plus 4% surcharge)	51.25 ³	51.15 (34.32% + 25.63%)	0 ⁹	Dividends: first taxed under CIT, then half of the normal PIT rate applies.
Netherlands	35	60 ³	74 ³ (35% + 60%)	0 ¹⁴	Classical system of dividend taxation.
Portugal	39.6 (36% central plus municipal tax of normally 10%)	20 ⁴	47.15 ⁴ (39.6% + 12.5%)	10 ⁴	20% / 12.5% withholding tax on interest / dividends (25% on dividends of unquoted shares)
Spain	35	56 ³	59.96 ¹⁵	20	25% withholding tax on interest and dividends, which is fully credited against the PIT.
Sweden	28	30	49.6 (28% + 30%)	30	30% withholding tax on capital income.
United Kingdom	33	40 ³	49.75 ¹⁶	40 ³	20% withholding tax on interest, fully credited against PIT.
Memo item: Norway	28	28	28	28	28% general income tax

(as of July 1996. Rates applicable to residents).

- ¹ Dividends taxed under personal income tax for low-income earners (who face a PIT rate smaller than 25%).
- ² 25% rate applies to shares issued before 1.1.1994 and bonds issued before 1.3.1990.
- ³ Taxed under PIT (highest marginal tax rate is reported).
- ⁴ Taxpayers may opt for taxation under PIT.
- ⁵ In case of „substantial shareholders“ or „substantial capital gains“.
- ⁶ Combined effect of personal income tax (highest rate: 60.2%) and CIT that is partly creditable against the PIT payment.
- ⁷ 45 / 30 % plus temporary surcharge of 7.5% of the tax amount due. Not taking account of local taxes.
- ⁸ 53% highest marginal PIT rate plus 7.5% temporary surcharge. Not taking account of local taxes.
- ⁹ Capital gains are taxed under PIT when realized by „substantial shareholders“, or within a given period („speculative capital gains“).
- ¹⁰ Taxed under PIT. In case of long-term capital gains (asset has been held for more than 3 years), a 25% final tax rate applies (increased to 40% on gains exceeding DKr 33,800).
- ¹¹ Highest PIT rate. Withholding tax of 27% is creditable against personal income tax due.
- ¹² A reduced rate of 27% applies to capital gains of certain shares.
- ¹³ Capital gains are taxed at a flat-rate of 25 % when realized by „substantial shareholders“, or within a given period („speculative capital gains“).
- ¹⁴ Capital gains are taxed at a flat-rate of 20 % when realized by „substantial shareholders“.
- ¹⁵ Personal income tax rate is applied to net dividend times 1.4 (i.e., tax credit of 40% of net dividend is granted).
- ¹⁶ 33% CIT plus highest personal income tax rate; 25% of the net dividend is creditable against CIT.

Sources: International Bureau of Fiscal Documentation: GET III: The Taxation of Private Investment Income, and GET VI: Taxation of Individuals in Europe. Amsterdam (loose leaf).

With these caveats in mind, we can summarize the basic features of the European capital income tax regime as follows. EU member states apply rather low tax rates to interest payments and discriminate against profit distributions. Capital gains are not taxed in a systematic manner. Most importantly, tax systems in the EU are far from providing an undistorted treatment of various sources of capital income. Tax rates, exemption levels, and methods of tax integration differ widely within as well as across countries. In other words, with respect to capital income taxation, the degree of actual tax harmonization is close to zero in the EU at present. As capital market integration started in 1993 in Europe, EU institutions undertook several efforts to harmonize capital income taxes. The following section describes the most important proposals that were put forward.

Harmonization Efforts

Early EU proposals centered on the introduction of a withholding tax on capital income in the member states of the European Union.³³ Most notable is the February 1989 draft directive of the EU Council. This directive proposed the introduction of a withholding tax on interest income of residents of member states with a minimum rate of 15%. All interest payments, i.e. interest on bank deposits, government and private bonds would be taxed under this scheme. The directive offered the option to use the tax as a final withholding tax on interest incomes of residents as well. The Economic and Social Committee of the EU expressed general agreement with the Council's draft directive in July 1989, but suggested to apply a lower tax rate of 10%. To simplify administration, it proposed the tax exemption of small interest amounts.

Neither the proposal of the Council nor that of the Committee were approved by Member States. Luxembourg vetoed any form of taxation of capital income at source. United Kingdom (which had reservations against steps towards more harmonization in general) and the Netherlands (home country to many parent companies) rejected the proposal as well. In the same vein, the Finance Ministers of the EU (Ecofin) in May 1993 discussed a plan to introduce a uniform 15% withholding tax on interest income of all EU resident but could not agree on a common position.

By late 1996, the EU Commission, asked by Ecofin in December 1993 to develop a new approach, had not yet presented a proposal that all Member Countries could agree on. On the contrary, the „Ruding Committee“ as well as (draft) directives of the Commission stressed maintaining the status quo rather than exerting pressure on EU Member Countries to harmonize company taxes. In general, compared to concrete steps undertaken to harmonize indirect taxation, the European Union appears reluctant to harmonize direct taxation.³⁴

³³ For a discussion of the different EU proposals see Trupiano, 1994.

³⁴ This is in line with the Treaty of Rome (1957) which stresses the need to harmonize taxes on goods and services.

In conclusion, it cannot be said that countries seeking EU membership have a blueprint that they can follow. Neither the practice of capital income taxation in Member Countries nor the discussions within the EU bureaucracy provide a model for capital income taxes in countries in transition. By contrast to supranational developments in the EU, however, there have been some far-reaching reforms in the field of capital income taxation recently in some Member States. The remainder of this section discusses these reforms, undertaken in Nordic countries (the „Scandinavian model“) and in Austria.

Reforms in Nordic Countries

Since the beginning of the 1990s, tax systems in Nordic countries (most notably Norway and Sweden) and in Finland have undergone far-reaching reforms. Although not limited to the reform of capital income taxes, discussions in academic and political spheres centered on this element. It became common place to talk of the „Scandinavian model“ of reforming capital income taxes, although important differences between countries exist.³⁵

The cornerstone of this model is the introduction of a „dual income tax“ combining a progressive tax on personal incomes (labor and self-employed income, transfer income, pensions, etc.) and a flat-rate tax on all types of capital income (interest, dividends and taxable capital gains).³⁶ The rate on capital incomes typically equals the corporate income tax rate as well as the lowest marginal tax rate on personal incomes. The Scandinavian model, therefore, stands in sharp contrast to the „comprehensive income taxation“ model put forward by Schanz/Haig/Simons, according to which a single (progressive) tax schedule is applied to the sum of taxpayer’s income from all sources.

The Swedish reform of capital income taxes was part of a thorough tax reform in 1990/91. In 1991, a flat-rate tax of 30% on interest and dividends was introduced, and the corporate income tax rate was reduced to 30%. Since corporate income tax payments are not credited against capital income taxes, the effective tax rate on dividends is 51%.³⁷ This, nevertheless, implies a substantial reduction compared to the top PIT rate that applied before. Since 1995, the tax on capital income covers capital gains as well. Interest, dividends, and capital gains are now taxed equally.

³⁵ Denmark started its tax reforms as early as 1987. However, the Danish reforms in capital income taxation (taxation remained progressive with top marginal rates reaching 57%) do not qualify Denmark as a „leading reformer“. Since its reform approach was very similar, Finland (although not part of Scandinavia) is often considered part of the „Nordic model“. For thorough discussions of the reforms, see Viherkentae, 1993, and Sorensen, 1994.

³⁶ The systematical inclusion of capital gains is one of the distinguishing features of the Scandinavian reforms.

³⁷ Double taxation of company profits was abolished in 1994, when the corporate income tax only was levied on dividends. This measure was valid for one year only; see Mutén, 1996. After some changes, today tax rates again stand at 30%.

Norway introduced a „general income tax“ in 1992. Under this tax, labor *and* capital income is aggregated and taxed at a uniform flat rate of 28%. Labor income is subject to additional taxes, establishing progressivity of the system. Double-taxation of dividends and capital gains is avoided by entitling the shareholder for corresponding tax credits. Hence, only the corporate income tax (with a tax rate of 28%) affects dividends and capital gains.³⁸ As result, dividends, interest payments, and capital gains are all taxed at the same rate of 28%.

Finland introduced a special tax regime for capital income in 1993. The tax rate on interest, dividends, and capital gains, first set at 20%, has been increased to 25% in 1995 and 28% in 1996. The system of imputation of corporate and personal income taxes, in operation already before, was maintained. Residents must include dividends received (increased by a tax credit of 7/18 of the net dividend) in their taxable income. The income tax due is reduced by the amount of the credit. Since the corporate income tax rate is 28%, a tax rate of 28% on dividends results, and all types of capital income are taxed equally.³⁹

Despite the uniform label of „Nordic model“, differences among the countries remained. For example, Norway does not employ withholding taxes at all, Finland treats interest with a withholding tax, and Sweden applies withholding taxes to interest from bank deposits and to most forms of dividends. The use of withholding taxes is not a necessary ingredient of the Nordic model.

In other respects, the uniform label is well deserved. Finland, Norway, and Sweden apply identical tax rates to all types of capital income.⁴⁰ Moreover, all countries systematically try to include capital gains in the base of capital income taxes. As shown before, capital gains are either not (directly) taxed in countries of the EU, or not systematically. The Nordic model tries to break with this practice, at least *de jure*.

³⁸ The corporate income tax reduces profit distributions from 100 to 72. In addition, the shareholder pays 20.16 (equal to 28% of the net dividend of 72) as personal income tax. The latter amount, however, can be claimed back in the annual tax return.

Norway is the only Nordic country where double-taxation of retained profits through the CIT and the capital income tax on capital gains is ruled out. The so-called RISK-method allows shareholders to increase the capital gains tax cost base by the amount of profits retained.

³⁹ For example, profit distributions of 100 are first taxed under the CIT at 28%. The net dividend of 72 is increased by a credit equaling $7/18 * 72 = 28$. The resulting National Income Tax payment of $0.28 * (72 + 28) = 28$ and the tax credit exactly cancel out. The shareholder, finally, receives a dividend of 72.

⁴⁰ Sweden realized a uniform treatment in 1994 only, when double taxation of dividends was abandoned; see footnote 37.

According to recent data, it appears that the Scandinavian approach is performing well. Parallel to reductions of tax rates, capital income tax revenues in Sweden increased by 2.7% of GDP in 1991 (Sorensen, 1994). According to the Swedish Ministry of Finance, the increase in effective taxation was not accompanied by adverse distributional effects, because capital income is earned predominantly by middle and high-income households. However, it is still too early for a final assessment and there is still a lack of comprehensive studies.

The Austrian Reform

Austria recently reformed the taxation of capital income.⁴¹ On January 1, 1993, a withholding tax was introduced, applying to all interest-bearing assets (saving accounts, private and public bonds). The tax was extended to include dividends in 1994. The tax rate was of 22% (increased to 25% in July 1996). Capital gains are not captured by the withholding tax, but remain taxed under the personal income tax.

In principle, the tax liability is final. The law offers the option to include capital income in the personal income tax assessment. In this case, the withholding tax is treated as a prepayment. The incentive to do so is small, however. First, only taxpayers in the lowest PIT bracket of annual income up to AS 50,000 (approximately \$ 4,500) face a marginal tax rate below 22%.⁴² Second, the tax base is gross capital income, no matter whether the taxpayers chooses the withholding tax or the personal income tax. The switch to the personal income tax, therefore, does not provide additional deductibility of expenses related to the purchase of financial assets.

Even if this is not obvious at first sight, the benefit of this scheme is that it establishes a level playing field for capital income taxation. Since corporate income taxes are not deductible, dividends are effectively taxed at 50.5%. Capital gains are taxed under the PIT, which has a maximum marginal rate of 50%. Interest payments are taxed at 25%, which equals an effective tax rate of 50% with a nominal interest rate of 7% and inflation of around 3.5%. Considering the cumulative impact of CIT, PIT, and the withholding tax as well as inflation, a similar tax treatment of all types of capital income for taxpayers in the highest PIT-bracket emerges.

The new Austrian tax scheme seems to have encountered a positive response from both economic observers and tax practitioners, for several reasons. Revenues from interest taxation increased

⁴¹ The reform of 1993/94 was preceded by long-winded discussions (including rulings of the Austrian Constitutional Court) and a number of gradual steps. A withholding tax of 10% was introduced in 1989, which served as a prepayment to the final personal income tax liability. For an appraisal of the Austrian reform see Genser, 1996.

⁴² The lowest marginal PIT rate equals 10%.

markedly, from AS 34.6 billion in 1989 to AS 51.3 billion in 1994.⁴³ Tax evasion, amounting to at least 80% in 1988 (*before* the introduction of the 10%-withholding tax) and discrimination against honest taxpayers came to an end. Given that tax evasion is progressive, the application of the withholding tax actually resulted in a more equitable distribution. In addition, administrative and compliance costs were reduced.⁴⁴ Finally, neither capital outflows increased nor savings were reduced after the introduction of the final withholding tax in 1993/94.⁴⁵

However, the label „dual income tax“ cannot be attached to Austrian reforms. As shown above, probably the most important feature of the dual approach is to apply a uniform, low tax rate on capital income. In Austria, the treatment of different types of capital income is (relatively) uniform; however, the composite tax burden on capital income resembles the highest personal income tax rate rather than a reduced rate.

Section 4 - Toward a Reform of Capital Income Taxation in Hungary

This section discusses the options that are available to improve the current system of taxation of capital income in Hungary. The essential objectives to be pursued are that the tax regime should not distort incentives to increase in domestic savings (i.e., to minimize allocative distortions) and should facilitate the establishment of a ‘level playing field’ in financial markets. Moreover, in designing a new tax structure, the impact of inflation, as well as distributional and administrative constraints must be accounted for.

Hungary’s per capita GDP in 1993 was 37% of the EU average and two thirds of the per capita GDP of Greece, the least wealthy EU member. Therefore, in the context of EU integration, the central issue for future generations will be the speed of the convergence of the Hungarian per capita GDP to the EU average level. To narrow the gap with other EU countries, accelerated growth in Hungary, requiring high rates of savings, is necessary. Table 10 (taken from Sachs & Warner) compares per capita growth rates and rates of saving and investment in Hungary, Poland, and the Czech Republic with those of the less wealthy Member States of the EU and some fast-growing

⁴³ Recall that in 1989, interest income was taxable under the PIT. A 10% withholding tax was credited against the assessed income tax liability.

⁴⁴ Compliance costs for taxpayers either fell to 0, or, when the filing option was chosen, remained unchanged. At the same time, the reduction of the number of people filing a tax return reduced administrative costs as well.

⁴⁵ This experience was not shared by West Germany, which had to abolish a withholding scheme in July 1989 (half a year after introduction) due to massive capital outflows.

Asian economies.⁴⁶ The table shows that the strong positive correlation between per capita growth and savings and investment rates. To „catch up” with the EU, Hungary would need to produce higher growth rates than Greece, Ireland, Portugal, or Spain. Saving rates of 11% (the level reached in 1994) will not be sufficient to attain this target.⁴⁷

Table 10: Growth, Savings, and Investment in Selected Countries

	Real GDP Growth Per Capita, 1985 - 92	National Saving (% of GDP), 1985 - 91	Investment (% of GDP), 1985 - 91
Chile	5.1	25.9	24.9
South Korea	9.2	35.8	33.5
Malaysia	5.1	33.7	27.9
Singapore	5.7	42.3	33.1
Thailand	7.4	28.8	33.8
Greece	0.8	14.9	19.2
Ireland	3.7	17.0	17.6
Portugal	3.2	20.4	28.5
Spain	2.8	21.6	23.3
Czech Republic (1994)	2.8	21.1	20.0
Poland (1994)	4.8	18.0	19.0
Hungary (1994)	2.7	11.6	21.0

Source: Sachs/Warner, 1996.

Can the tax regime contribute to higher national savings? Neither theoretical analysis nor empirical studies provide a definite answer to this issue. It depends on the impact of several effects which can counteract each other. The income effect of a reduction of the tax rate will be negative (households need to save less to attain a given post-tax capital income) but the substitution effect positive (savings are increased because opportunity costs decreased). Low tax rates might lead to higher net savings, because incentives to deduct interest expenses against high marginal tax rates will be reduced. But even if household savings increase, lower tax rates might reduce government revenue, increase deficits and, hence, reduce national savings.

⁴⁶ National saving equals public plus private saving. Since catching up to, at least, reach the level of the *less wealthy* member countries of the EU is the primary issue, we concentrate on a comparison with Greece, Ireland, Portugal, and Spain.

⁴⁷ Hungarian saving rates increased between 1989 - 1992 (mainly due to precautionary savings), but fell again thereafter. Even in 1992, when savings reached their peak at 13% of GDP, the rate was still considerably lower than in the Asian economies (see Monthly Report of the National Bank of Hungary, 2/1994). Empirical studies show a strong positive and robust relationship across countries between savings and growth. However, this does not imply any direction of causality: whether savings drive growth, growth drives savings, or both simultaneously. (For recent reviews, see Schmidt-Hebbel/ Serven/ Solimano, 1994, and Deaton, 1995).

The empirical evidence is mixed. A direct linkage between a reduction in tax rates and an increase in savings cannot be established in general, as it depends on the choice of the underlying model (see Burgess/Stern, 1993, 796). As stated in a recent OECD study, „there is no consensus over whether a higher rate of return to saving increases saving in the aggregate or reduces it“ (OECD, 1994, 42). However, while taxation might not affect the *level* of savings, it certainly influences the *composition* of savings. The portfolio choice of households will be distorted when the tax system treats different types of financial assets differently. Neutrality can be achieved with a uniform treatment of all assets, for example with a comprehensive income tax or a flat-rate scheme for capital income (OECD, 1994, 190). A clear tax policy implication is that the unequal treatment of capital income should be avoided. Instead tax rates varying between 0% on interest and 40% on dividends plus PIT on capital gains, the playing field for different types of capital income should be leveled as much as possible.

A reformed capital tax framework should improve efficiency in financial markets.⁴⁸ In Hungary, financial markets are very un-developed. The market for bonds is completely dominated by government issues. High levels of public debt are reflected in a relatively large market for government securities, which makes up 30% of GDP (1996). The contribution of corporate bonds is negligible; they are mainly issued by banks and leasing companies. The market for equity is small as well, equivalent to 7% of GDP. Strict capital controls still exist. For example, foreign investors are not allowed to hold private bonds. In addition, foreigners need to apply for a special trading license in case they wish to acquire public bonds with a tenor of less than one year or which were issued before April 1996. Due to these constraints, foreign investors only acquired 1% of government securities (T-bonds) in 1995.

How does the tax system distort incentives? First, in Hungary as in other transition economies, growth depends largely on the build-up of new enterprises. The latter generally have problems providing collateral and therefore depend on equity financing. The Hungarian tax system imposes relatively high costs on equity financing and, hence, discriminates against new enterprises. Second, by favoring debt financing of corporations, the tax system increases the risk of bankruptcy. Another distortion is due to the fact that some entities (such as pension funds under the 1993 law) enjoy preferential tax treatment.⁴⁹ These institutions are able to acquire company shares above the „appropriate“ level, resulting in excessive profit distributions.

⁴⁸ Governments have a number of tools at their disposal to facilitate the development of financial markets. Most important are the extent and structure of government borrowing, regulation and de-regulation of financial markets, and the tax system (Stiglitz, 1991). If the tax system favors certain types of assets and discriminates against others, financial markets will not operate efficiently. Such distortions can entail significant economic costs (Tanzi/King, 1995).

⁴⁹ Benefits received from the (voluntary) funded system created by the law of 1993 are not taxable. Capital income accruing to the fund is not taxable either, in line with the general principle of not taxing interest on savings deposits. Contributions (from workers or from employers) are taxable within the PIT but, for contributions up to HUF200,000

The development and integration of financial markets would be best served by a tax system that does not distort the choice between different types of assets. The actual level of tax rates is of secondary importance -- as long as it is not excessively high. Small open economies must remain internationally competitive and attract capital, and therefore cannot afford to have much higher tax rates than their neighbors. Adverse effects result much more from the differential treatment given to different types of assets, combined with *ad hoc* changes in the tax system done almost yearly since 1988, leading to uncertainty about future reforms.

Options for the Reform of Capital Income Taxation in Hungary

The existing tax system in Hungary introduces distortions across various types of financial assets, and weakens saving incentives. The reforms of 1997, aimed at fighting tax evasion, represent an *ad hoc* change which does not address in a coherent fashion this central issue, i.e. the need for a reduction of distortions. In small open economies facing increasing competition on international capital markets, inadequate tax laws can easily lead to capital outflows. A tax system that levels the playing field for different types of assets and across different economic agents would facilitate foreign investment and domestic savings.

Three *basic options* are available for the reform of capital income taxes. The first option is to move the system closer to a comprehensive income tax. No distinction would be made between capital and labor income anymore, and the marginal tax rate on income from whatever source equalize. Compelling arguments can be put forward against using this approach. An optimal tax setting indicates a lower tax rate on capital, which is a more mobile factor of production than labor. Second, the comprehensive income tax approach is dynamic inefficient because it discriminates against investment in physical and financial capital. There are also practical considerations against this approach. The costs of running a comprehensive income tax would be prohibitive in Hungary, where administrative resources are already stretched to the maximum. Increased capital mobility and fierce international competition forces a small, open economy like Hungary to tax capital income at relatively low rates. Equity and ability-to-pay principles, providing the most important support for comprehensive taxes, become irrelevant when tax evasion is as high as in Hungary.

A second option is to exempt capital income from individual taxation completely.⁵⁰ There would be good economic reasons for such an approach. The solution is administratively simple and not

per year a tax credit of 50% of contributions is given. (Note that annual earnings average HUF500,000 at present). Contributions from employers are not subject to social security taxation.

⁵⁰ Taxation of capital income would still take place because dividends, capital gains, and possibly interest payments are still taxed under the corporate income tax. „Exemption“ only implies that capital income is not taxed at the individual level.

sensitive to inflation. The discrimination between savings in various types of assets would vanish. Moreover, revenue losses would be small and could even be negative, if interest deductibility is abolished. However, for political reasons, such a proposal would be difficult to accept. Acceptance by the general public to forego capital income taxes is very low in virtually all countries. The concern that a small group of rich people would benefit disproportionately would, in all likelihood, dominate public discussions even though, as we have seen above, the distributional impact of capital income taxation is rather small in Hungary.

This opens the door for the third major option, which is the „dual income tax“ approach. The introduction of a low flat-rate tax on capital income would appear to be a viable model for Hungary. The Scandinavian experience has shown that, even in countries with a strongly social-democratic tradition, it is possible to „sell“ the proposal to the public. We would propose the introduction of a corporate income tax of 20 - 25% and a final withholding tax on interest at the same rate. The adoption of the dual income tax approach, for instance, in its Norwegian or Finnish variants, would have several advantages -- including the fact that such an approach is not far removed from the system currently operating in Hungary. Administrative simplicity is another major advantage, given that bottlenecks in Hungary are more severe than in countries where the scheme actually has been introduced. A dual income tax would provide equal treatment to all types of financial assets, and therefore would not distort the workings of financial markets and savings decisions. Admittedly, it is unclear whether this scheme would actually *stimulate* savings -- but this is an empirical issue which holds true for all approaches.

Two problems would remain. First, interest income would be taxed at the same rate as other types of capital income. Hence, distortions due to inflation would not be removed. The preferred first-best solution would be to combine the introduction of this scheme with a shift to taxation of real instead of nominal returns -- but this may not be attainable/feasible given administrative constraints. Note that no country actually taxes real interest income. The tax-exemption of interest, as practiced in Hungary at present, provides a viable short-run solution in face of moderate inflation. In the medium run, however, a dual income tax combined with a determined anti-inflation program is a superior solution. It removes an unjustified preference for saving in interest-bearing assets and increases revenues.

Second, a dual income tax system would prevent *some* forms of tax arbitrage like shifting capital losses to high-tax entities. But it would create arbitrage possibilities of other types, for example to transform labor income into capital income. Standards would need to be worked out on how to split the income of small enterprises into a capital and a labor component. Scandinavian authorities apply an imputed rate of return to company assets. The amount thus obtained constitutes an „appropriate“ return on investment; and residual profits are taxed under the personal income tax.⁵¹

⁵¹ For a general description see Sorensen, 1994. A very thorough treatment of the issue can be found in Sorensen/Hagen, 1996.

Of course, this would involve solving a number of problems, for example whether financial assets should be included in business assets, and the choice of the proper rate of return. But these problems are common to all countries running a tax system where capital is taxed at lower rates than labor. Actual solutions adopted by tax authorities always bear an element of arbitrariness and are often, because of that, the object of long discussions.⁵² In our view, this does not constitute a strong argument against the dual income tax.

Criticism has been raised against advice to introduce tax schemes in countries in transition that work well in theory but that were never realized in practice.⁵³ This criticism, fortunately, does not apply to the dual income tax approach. The proposal has been tested in several European countries with success. The advantages and disadvantages of the system are well known. The adoption of the Norwegian or Finnish model, with a corporate income tax of 20 - 25% and a final withholding tax on interest at the same rate, in our view, would be well-suited for Hungary.

⁵² Sweden is a country with a sophisticated tax administration. Nevertheless, it had to postpone a coherent decision on how to split the income of self-employed for three years. Instead, until 1994, the income remained to be taxed under the personal income tax, with full deductibility of interest payments.

⁵³ See Holzmann, 1992, p. 245.

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