

Péter Halmosi

The status and current issues of personal income tax systems in developed countries

For employers, personal income tax is perhaps the best-known type of tax. The reason is clear: employers are subjects of this tax both in conjunction with payroll earnings and capital income taxation. With private entities, the involvement of states from this respect is substantially broader in scope. Among the many related aspects, the financing of public tasks, the improvement of a country's competitiveness and the diminishing or elimination of income gaps are just a few key elements.

Personal income tax indeed plays an extremely important role in our lives. To understand the arguments and debates which accompany the transformation of the personal income tax system of a country, we need to review and understand the evolution of the tax form in specific countries. After presenting the developments regarding incomes, this study focuses on the key challenges that governments should take into account and the potential responses to those challenges.

REVENUES FROM PERSONAL INCOME TAX

The ratio of personal income tax within total tax revenues was basically stable between 1965 and 2003. In 1965, it averaged at 26.1 per cent in OECD countries then, following a slight

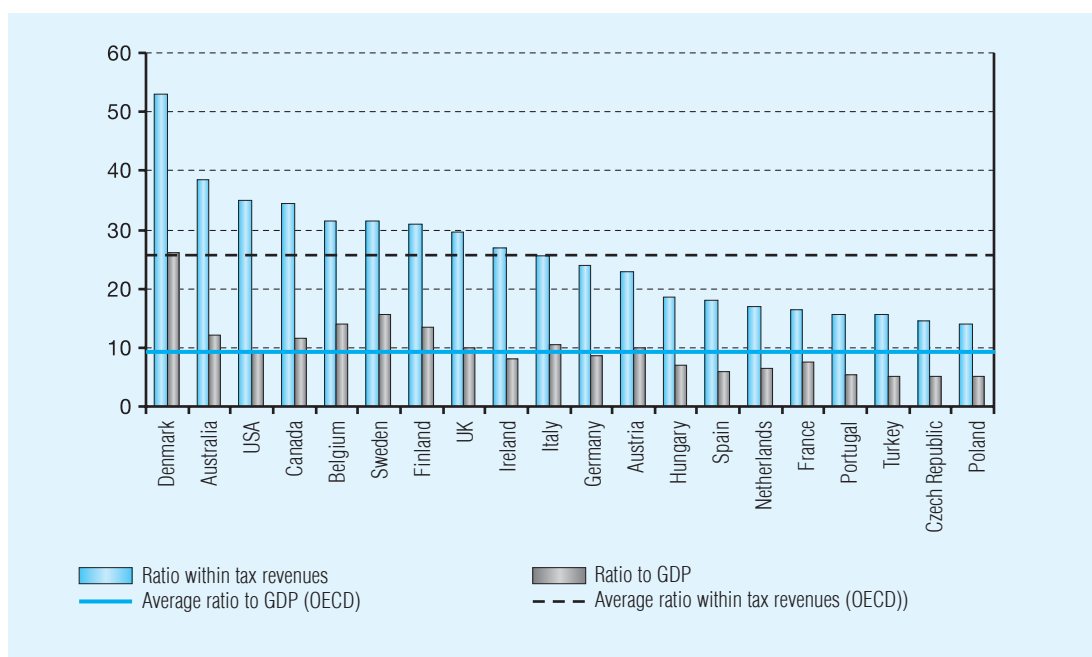
increase, stayed around 30 per cent until the early 1990's. That decade brought about a moderate decrease: personal income tax made up 27 per cent of all tax revenues in 1993 and only 24.9 per cent in 2003 (OECD, 2006).

Looking at the figures of specific countries, the ratio of personal income tax within total revenues showed opposite trends country by country between 1965 and 2003. In Canada, the ratio grew from 22.6 per cent to 40.8 per cent in the 1965–2004 period, while in New Zealand the figure grew from 39.4 per cent (1965) to 61.6 per cent (1980) but then dropped to 41.9 per cent in 2003. In Norway, Sweden and the Netherlands, however, the same ratio decreased significantly in the 1965–2003 period. The reason is that when changing their personal income tax rates, these countries also modified their value added tax and social security contribution charges to compensate for lost public revenues. (See Chart 1)

We arrive at similar conclusions when comparing personal income tax revenues to the GDP. Between 1986 and 2002, the ratio of personal income tax revenues to the gross domestic product decreased from an average of 12.2 per cent to 10.7 per cent worldwide. Contrary to this apparent stability, there were significant differences per geographical regions. In North America, the ratio grew from 11.6 to 11.8 per

RATIO OF PERSONAL INCOME TAX TO TOTAL TAX REVENUES AND THE GDP IN OECD COUNTRIES IN 2003 N

(per cent)



Source: OECD, 2006, page 16

cent only which is very close to the average. In Asia (with the exception of South Korea), a slight decrease occurred: while revenues from personal income tax made up an average of 10.4 per cent of the GDP in 1986–1990, this figure was only 8.8 per cent in 2001–2002. In Eastern Europe, the ratio to the GDP was 6.2 per cent between 1991 and 1995 and then increased to 6.9 per cent in the years 2001–2002. At the same time, the corresponding indicator in Western Europe was around 9 per cent throughout the period concerned. Since 1986, the region with the highest personal income tax to GDP ratio has been the Nordic countries (Denmark, Norway, Sweden and Finland): the figure was 18.3 per cent there in the 1986–1990 period and reduced slightly to 16.8 per cent in 2001–2002 (OECD, 2006).

These fluctuations in personal income tax revenues reflect the different responses of governments to changes in the international eco-

nomical environment. Therefore, it is worth reviewing the considerations that individual countries had to keep in mind in the past decades when reshaping their taxation systems. The presentation of issues pertaining to the entire taxation system is beyond the scope of this study, thus we only discuss matters here which relate to the transformation of personal income tax systems. The simplest way to classify the diverse issues which arise in conjunction with our topic is to group them along conceptual and practical criteria.

THE CONCEPTUAL ISSUES OF TRANSFORMING PERSONAL INCOME TAX SYSTEMS

Regarding any personal income tax system, the following items can be considered conceptual issues:

- increase of horizontal and vertical equality;
- joint or separate taxation of incomes;
- increase of effectiveness regarding personal income tax regulations;
- harmony of financial relations between different levels of government;
- taxation of pension incomes;
- different taxation of earnings and capital gains.

Several IMF and OECD studies point out that decision makers should keep in mind the answer to the aforementioned questions before making any changes to their taxation system. This point needs to be emphasized because changes of this sort also have a significant impact on the behaviour of taxpayers.

Increase of horizontal and vertical equality

By nature, personal income tax is the most suitable type of tax for creating equality across diverse groups of society. Horizontal equality means that tax regulations treat people with identical income the same way, while vertical equality means that the tax burden on people with different incomes is also different. As shown in *Table 1*, equality improved in many countries during the past decades:

In the 1985–1995 period, income inequality increased in 17 out of the 27 countries examined by the OECD, while it only increased in 5

Table 1

CHANGES OF THE GINI COEFFICIENT IN 27 OECD COUNTRIES

	Significant decline	Medium decline	Slight decline	No change	Slight improvement	Medium improvement	Significant improvement
1975–1985	Greece	Finland	Canada		Netherlands	USA	UK
1985–1995		Spain	Australia Denmark	Austria Canada France Greece Ireland	Belgium Germany Luxemburg Japan Sweden	Czech Republic Finland Hungary Netherlands Norway Portugal UK	Italy Mexico New Zealand Turkey
1995–2000		Mexico Turkey	France Ireland Poland	Australia Czech Republic Germany Italy Luxemburg Netherlands New Zealand Portugal UK	Austria Canada Denmark Greece Japan Norway UK		Finnland Seden

Explanation: significant decline/improvement refers to changes exceeding 12 per cent, medium decline/improvement refers to a 7–12 per cent change, slight decline/improvement refers to a 2–7 per cent decline/improvement while “no change” points at a +/-2 per cent change of the GINI coefficient calculated on the 4 reference years and projected on the entire population.

Source: OECD, 2006, page 26

countries during 1995–2000. The growth was caused by the increased change dispersion of the distribution of wage incomes (Förster et al, 2002), deriving from the increase of unemployment which governments tried to offset with various social transfers. For the individual countries, the widening gap between the personal incomes of old and young and people with or without children convey sources of future conflicts. As we will see later on, the mitigation of income differences cannot always be harmonised with other considerations (e.g. competitiveness). Therefore, changes upon the future transformation of taxation systems are less likely to reflect equality. Nevertheless, the consideration of family taxation would be important for the whole of society as it is basically an investment into future generations of employees (Botos, 2005, page 65).

Joint or separate taxation of incomes

When reshaping the personal income tax system, a government needs to decide whether to take over certain elements (e.g. tax rate, tax base) of tax regulations (e.g. laws on corporate income tax, dividends, etc.) from other countries. What fundamentally influences this decision is whether a government wishes to draw revenues from capital gains or from labour earnings. The standardized taxation of various income types was a popular approach worldwide for many years, yet the issues generated by the free flow of capital called for its revision. Research conducted in North America in the 1950's pointed out that designers of local government taxation policies should avoid extremely high tax rates compared to similar settlements because it may spur an exodus of taxpayers from the city concerned (Tiebout, 1956). It is a fact that the mobility of taxpayers increased significantly worldwide in the past decades which the makers of central govern-

ment taxation policies should take into consideration. We believe that this attention to taxation differences increased further after the financial crises of the 1990's. It is also evidenced by the ratio of income tax revenues to consumption tax revenues which averaged at 2.7 per cent worldwide in the 1986–1990 period and dropped to 2.4 per cent in 2002 (Zee, 2005, page 46). What this change suggests is that governments try to reduce burdens on employment.

The principle of joint taxation of different incomes is reflected by single rate or “*flat tax*” tax systems. Used exclusively in tax havens over many years, this method also became popular in Eastern Europe in the 1990's: A *flat tax* system was launched by Estonia and Latvia in 1994, by Lithuania in 1997, by Russia in 2001, by Slovakia and the Ukraine in 2004 and by Georgia and Romania in 2005 (Fuest et al, 2007). The related high hopes, however, have not been fulfilled to an extent that would make flat tax an example to follow also for Western Europe. There is little empirical evidence on the success of the scheme. Studies of individual countries came to different and sometimes contradictory conclusions regarding economic growth, employment and investments (Browning et al, 1985).

Increase of effectiveness regarding personal income tax regulations

What makes the amendment of the rate and base of personal income tax a conceptual issue is the expected response from taxpayers to it. Before enacting any changes, it is advised to investigate at least two factors. When examining labour supply elasticity, a government has to see in advance how employees change their labour supply in response to higher tax burdens. In any way, governments should avoid situations where total labour supply decreases

or shifts towards the underground economy. If certain capital incomes (interest, dividend, capital gains) are taxed under the rate of personal income tax in a country, changes of the tax burden will impact both savings and returns on investments, depending on the extent of interest elasticity. The latter should be checked regularly in each country, since the decrease of savings triggers a drop in investments as well.

Harmony of financial relations between different levels of government

The revenue structure of central and local governments shows significant differences country by country. The principal causes include the federal state system, historical dissimilarities and the different centralization philosophies of central governments (Hetényi, 2006, page 16).

In many countries, personal income tax is divided between central and subnational governments. The reason is, first, that both levels of government are equally involved regarding workforce mobility and, second, that personal income tax may equally serve both levels. In the countries of the world, central and subnational governments disposed over 70.9 and 29.1 per cent of personal income tax revenues respectively in 2000. In that year, in countries that divide these revenues between government levels, the share of local governments in personal income tax revenues was the highest in Sweden (82.7 per cent) and the lowest in South Korea (11.5 per cent). Regarding the division of tax revenues, countries can be assigned into two categories: The first includes countries where both central and local governments impose taxes on personal incomes. In the second group, only central governments are entitled to levy taxes but they transfer a predefined percentage of collected revenues to local governments. The decision between these

two approaches is basically defined by the costs of collecting taxes. In the 1990's, the reduction of tax burdens to improve competitiveness and commitments undertaken in various international agreements (e.g. fiscal convergence) generated fierce fiscal conflicts between central and local governments which also impacted the distribution of personal income tax revenues. These fiscal conflicts between government levels, however, should not keep decision makers away from observing the fact that extended local fiscal autonomy can increase the transparency of local government finances which in turn can reduce conflicts between government levels. Thus the decentralization of rights concerning tax collection may be desirable even if it costs more for the state on the short run.

Taxation of pension incomes

Due to their relatively low amount, pensions are not taxed in most countries or only on certain conditions. E.g. many countries apply the principle that pensioners who enter into employment are required to declare their pension together with their taxable income but do not actually have to pay tax on the pension itself. In this case, however, a part of the pensioner's earnings may be subject to a higher tax rate. As private pension funds already exist in nearly every country today, the potential taxation of future pensions will have to be on the agenda in relation to the taxation of pension fund investments and payments to pension funds. The taxation of pensions is therefore an issue with a much broader scope and it has to be viewed in conjunction with the life-cycle perspective. From a lifecycle standpoint, the relation of individuals to pension funds consists of three phases:

- ① accumulation phase, where the legislation of most countries employs diverse tax allowances to encourage payments;

② investment phase, in which the fund pays taxes on realized returns in accordance with national laws;

③ payout phase.

This way, if a future pensioner exploits tax allowances on the amounts he pays to the pension fund in the accumulation phase, he is actually getting a tax loan from the state as long as the subsequent pension tax will not exceed the allowances. In this scenario, the individual still enjoys major financial benefits. Even when tax allowances are exploited on payments to pension funds, pensions can still be kept exempt of tax if the amount of tax paid by the pension fund on the returns on their investments equals the amount of formerly exploited allowances. Finally, we have to add that if pensions are exempt of personal income tax, early retirement should be made subject to financial sanctions.

Different taxation of earnings and capital gains

In some cases, certain countries apply different regulations on the taxation of interest incomes, dividends and capital gains. Besides the tax immunity of interests gained on central and local government bonds, tax exemptions and allowances provided to households on a social purpose are becoming increasingly frequent. E.g. in some countries, interest payments on mortgage loans are deductible from the tax base of employees in order to support housing savings.

Regarding dividend payments, the integration of profit tax and personal income tax on dividends definitely received special attention from governments in the past decades. One of the key arguments of integration supporters is that corporate taxation must take into consideration the taxation of shareholders. The reason is that the lack of integration between the

two tax types deteriorates the investment willingness of capital owners by increasing the costs of capital. Opponents of integration, however, say that corporations are stand-alone legal entities that are separated from shareholders. As the market value of their equity stake compensates shareholders for double taxation, such taxation will not impact the volume of investments at the end of the day (Zee, 2005). Nevertheless, legislation in some countries does not even allow the avoidance of double taxation regarding dividend incomes. In these countries, various allowances gained ground in recent years. Besides applying favourable personal income tax rates on dividend income, a trade-off scheme emerged where persons who are both employees and shareholders at the same time receive an interest-free loan until the end of the tax year which equals the value of corporate income tax payable after their dividends (see USA, Australia).

Regarding the taxation of capital gains, the most important question which a government should answer is if it wishes to discriminate investments based on their duration. While the importance of positively discriminating gains from long-term investments is increasingly recognized, it is true that the costs of control for the government might be substantial.

PRACTICAL ISSUES OF TRANSFORMING PERSONAL INCOME TAX SYSTEMS

Once a government has taken a stand regarding the conceptual items, it will have to face the following issues when reshaping the personal income tax system of their country:

- number and magnitude of tax rates;
- relations of social security contribution and personal income tax levies;
- inflation indexation of tax brackets;
- range of tax subjects;
- exemptions and allowances.

These questions may seem simple for the first sight, yet their relation to the conceptual elements must also be examined. E.g. when elaborating the system of various allowances and exemptions, governments should make sure that the proposed solution harmonises with their vertical equality objectives.

Number and magnitude of tax rates

Perhaps there is no better proof of the complexity of the number of tax rates that some countries (with Hungary among them) recently introduced exemption thresholds to ensure support to low-income citizens (in Hungary, the threshold is the actual minimum wage, in other countries it is typically set at specific income levels). As the exemption threshold is usually not sufficient for establishing vertical equality, it is advised to use 1 or 2 additional rates. Concerning the magnitude of tax rates, the IMF and the OECD point out two things. First, even the highest rate should be below 50 per cent and second, the highest tax rate must not be far above the rate of corporate tax. The reason is that a significant difference in those tax burdens may encourage people with higher income to transform their earnings into capital gains.

Relations of social security contribution and personal income tax rate band levies

One reason that this topic deserves attention is that debates around tax burdens in recent years proved that the rate of personal income tax cannot be handled separately from that of social security contribution. There are several reasons for treating these rates together: First, social security contribution closely relates to labour earnings and second, unlike with personal income tax, only a single rate exists for

social security contribution in every country which reduces the progressivity of the income tax system. The inseparability of the two levies is also supported by a 2006 OECD study which pointed out that the reduction of personal income tax rates in Japan, Turkey, Canada and the UK between 2000 and 2005 took place with the simultaneous increase of social security contribution rates and the increase actually exceeded the reductions (OECD, 2006, page 18). What it suggests is that these countries try to use social security contribution payments to make up for lost tax revenues.

We can also examine the links between personal income tax and social security burdens from the aspect of different revenue segments. Between 2000 and 2005, for people with an average income, the joint burden of personal income tax and social security contribution decreased by more than 3 per cent in Finland, Ireland and Slovakia and increased by above 2 per cent in Turkey and Japan. During the same years, the joint tax burden for people earning 67 per cent of the average income decreased by more than 5 per cent in France, Hungary and Slovakia and grew by in excess of 3 per cent in Japan and Mexico. For people with earnings of 67 per cent above the average, the tax burden calculated this way went down by 4.8 per cent in Slovakia and by 3.2 per cent in Ireland while it increased by 9.5 and 5.2 per cent in Turkey and Greece respectively in the period concerned. Thus it is clear that the change of tax burdens for specific income segments was significant only in a few countries.

Indexation for inflation

If a government leaves personal income tax brackets unchanged over several years, the marginal tax rate will increase for people with identical real income, since their nominal income will grow at the rate of inflation.

Therefore, in countries with a high inflation rate, tax brackets are indexed to avoid this phenomenon. While this solution is applied in a number of Latin-American countries, it is not likely to be chosen by too many governments in the future since it is easier to maintain vertical equality through various tax allowances.

Range of personal income tax subjects

In countries applying multiple personal income tax rates, most debates about the range of personal income tax subjects is about the individual and the family. Some countries (e.g. Germany, Belgium, Greece and Portugal) attempt to help families by allowing, up to a certain extent, the reallocation of the joint income of married couples between husband and wife. As these systems aggregate incomes, they usually set a higher tax rate on the joint income than on individual incomes in order to prevent tax evasion. Nevertheless, OECD countries shifted towards taxing individuals in recent years which suggests that governments would rather support families through tax allowances and other forms of direct support.

Exemptions and allowances

The most general allowance in relation to personal income tax is when a certain income of the taxpayer is exempt from taxation. With these allowances, first the revenue impact has to be weighted and second, in order to avoid general progressivity, it has to be possible to identify groups of society which the government intends to support for some reason. In the case of targeted aids, however, the government provides support with a special consideration in mind. Typical considerations these days include social or activity-based support

(e.g. subsidies to the purchase of medical aids). As the latter may incur significant administrative expenses, the launch of a voucher scheme should be weighted as an option.

Both general and targeted allowances can be provided in the form of deductions or tax loan schemes as well. In a multi-rate tax system, the value of a tax deduction for the taxpayer is defined by the tax bracket he falls into. The higher the tax bracket, the more valuable the deduction will be for the taxpayer. The tax loan option, however, is available for everyone regardless of tax rate and tax bracket. Albeit there is no consensus among experts on which of the two schemes should be preferred, it is generally believed that deductions should be linked to general allowances and tax loans to targeted allowances.

As shown in *Table 2*, the average of personal income tax rates diminished from 55 per cent to 38 per cent and its lowest rate decreased from 19 per cent to 14 per cent between 1986 and 2002. The decrease of the number of tax rates from 8 to 4 is a sign that tax systems were becoming simpler. In the period concerned, the extent of personal income tax allowances increased from 23 per cent to 36 per cent of per capita income which increased the progressivity of the tax system. The changes enacted in individual countries were extremely diverse, still we believe the underlying challenges should be considered similar in many ways. In the 1980's and 1990's, the need to improve the competitiveness of national economies, the necessity of large supply system reforms due to demographical changes along with the intensified international flow of capital put national governments under multiple pressure. First, they had to come up with the right answer to these challenges by changing the tax system and second, they had to guarantee that the level of tax revenues is sustained. Therefore, the solutions which emerged in this tense situation unavoidably differed in contents, yet the com-

Table 2

PERSONAL INCOME TAX POLICY OF CENTRAL GOVERNMENTS IN SELECTED COUNTRIES										
	Maximum marginal tax rate		Minimum marginal tax rate		Number of tax rates		Maximum marginal „-“ rate of corporate tax		Allowance per annum	
	1986	2002	1986	2002	1986	2002	1986	2002	1986	2002
	per cent				quantity		per cent		per cent of per-capita income, %	
North America	43.7	33.80	23.8	13.0	8	5	-0.7	3.20	13.8	15.7
Canada	37.4	29.00	27.5	16.0	3	4	-0.4	2.88	21.3	22.8
United States	50.0	38.60	20.0	10.0	12	6	-1.0	3.60	6.2	8.6
Asia and Pacific region	62.8	39.80	20.3	13.9	9	4	24.2	9.80	18.5	10.4
Australia	60.0	47.00	25.0	17.0	5	4	14.0	17.00	25.9	16.5
Japan	70.0	37.00	30.0	10.0	9	4	36.7	7.00	15.3	8.4
South Korea	55.0	36.00	6.0	9.0	16	4	25.0	9.00	14.4	8.5
New Zealand	66.0	39.00	20.0	19.5	6	3	21.0	6.00	...	8.2
Western Europe	62.5	48.50	20.0	12.0	8	5	23.8	15.80	18.0	32.8
France	...	52.75	...	7.5	...	6	...	17.32	...	17.1
Germany	56.0	51.17	...	21.06	20.0	24.79	1.8	28.7
Italy	62.0	46.40	12.0	18.25	9	5	26.0	9.63	3.9	30.1
Netherlands	72.0	52.00	18.0	2.95	9	4	29.0	17.50	29.9	60.0
UK	60.0	40.00	30.0	10.0	6	3	20.0	10.00	36.5	28.2
Eastern Europe	...	37.30	...	18.0	...	3	...	11.70	...	42.5
Czech Republic	...	32.00	...	15.0	...	4	...	1.00	...	63.3
Hungary	...	40.00	...	20.0	...	3	...	22.00	...	48.5
Poland	...	40.00	...	19.0	...	3	...	12.00	...	15.7
Norway	45.2	23.90	14.9	12.9	5	3	4.5	-4.90	46.7	70.7
Denmark	39.6	15.00	14.4	5.5	3	3	-10.4	-15.00	74.9	14.0
Finland	51.0	36.00	38.0	13.0	4	5	18.0	7.00	18.5	45.2
Norway	40.0	19.50	3.0	13.5	8	2	12.2	-8.50	...	112.8
Sweden	50.0	25.00	4.0	20.0	...	2	-2.0	-3.00	...	110.7
Average	54.9	37.60	19.1	13.7	8	4	14.9	7.80	22.6	36.0

Source: Zee, 2005, page 48

mon dilemmas of governmental tax policies and the similarities of responses which individual countries came up with should not be overlooked.

DIRECTIONS OF FUTURE CHANGES TO PERSONAL INCOME TAX SYSTEMS

Efforts to make tax systems more effective always incur significant costs. Experts agree

that no general model exists which countries would not have to change amidst sudden changes in the international environment. In recent times, the reduction of tax rates and the expansion of the tax base have been widely applied in tax systems due to the extensive spreading of tax evasion and the need to support individuals in various income groups. The joint or separate taxation of capital gains and labour earnings, an important conceptual element of personal income tax systems, contin-

ues to be subject to vivid debates, with experts from different countries representing different opinions. Nevertheless, due to the changes of the international economic environment, separated or dual personal income tax systems are expected to gain ground. As employees in developed countries are also shareholders at the same time, the issue of horizontal equality will no longer be in the focus of attention. For in a dual system, labour earnings are likely to be transformed into capital gains due to lower personal income tax burdens for the latter which will weaken the horizontal and vertical equality of the tax system. The example of Scandinavian countries which took the lead in launching dual personal income tax systems is not followed by other countries for the time being. Yet in many countries there is a shift towards semi-dual sys-

tems (e.g. personal capital gains are taxed at a lower rate than labour earnings).

Some countries introduced *flat tax* systems in the 1990's which entailed the narrowing of tax allowances. Although the broadening of the tax base increased the transparency of tax systems and governments could spare significant administrative expenses, *flat tax* solutions deteriorated the fairness of tax burden distribution (Erős et al, 2006). The spreading of *flat tax* systems will be substantially determined by the fact that they are not able to prevent the transformation of labour earnings into capital gains, since the integration of social security contributions would lead to a much higher tax rate. Due to the necessity of levying taxes on mobile tax bases, however, most countries will not go for this option.

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