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## The politics of tax structure

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## MPIfG Working Paper 06/1, January 2006

### The Politics of Tax Structure

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An earlier version of this paper was presented at the Yale Conference on Distributive Politics, April 29-30, 2005. The paper is now under review for an edited volume to be published by Cambridge University Press. I would like to thank the conference participants, especially Kathleen McNamara and Michael Wallerstein, as well as the in-house referees, Andreas Broscheid and Armin Schäfer, for helpful comments and discussions. All remaining errors are mine.

#### Abstract

Governments that wish to redistribute through budgetary policy do so mostly on the spending side, not on the taxation side of the budget. The taxation side is nevertheless important, partly because less efficient tax *structures* seem to be associated with lower taxation and spending *levels*. Hence political conflicts over spending levels may partly be fought as conflicts over tax structure. The paper provides a coherent perspective on the politics of tax structure. Specific topics include the (ir-)relevance of tax mixes, policy change in income taxation, the importance of tax competition, and the role of political institutions.

#### Zusammenfassung

Wenn der staatliche Haushalt zur Umverteilung genutzt wird, so geschieht dies vor allem auf der Ausgabenseite und nicht auf der Einnahmenseite. Die Einnahmenseite ist trotzdem bedeutsam, weil es offenbar einen Zusammenhang gibt zwischen der Effizienz der *Steuerstruktur* und dem *Steuerniveau*. Daraus folgt, dass politische Auseinandersetzungen über Ausgabenniveaus teilweise als Auseinandersetzungen über die Steuerstruktur geführt werden können. Das Papier entwickelt eine kohärente Perspektive zur Analyse von Steuerstrukturpolitik. Zu den behandelten Themen gehört die (Ir-)Relevanz des Steuermix, der Politikwandel in der Einkommensbesteuerung, die Bedeutung des Steuerwettbewerbs und die Rolle politischer Institutionen.

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## Introduction

Governments that wish to redistribute through budgetary policy do so mostly on the spending side, not on the taxation side of the budget. The taxation side is nevertheless important, partly because a less efficient tax structure seems to be associated with lower taxation and spending levels. Hence political conflicts over spending levels may partly be fought as conflicts over tax structure (for example, Przeworski 1999: 43). A recent example of this logic is the *Wall Street Journal* editorial (November 20, 2002) that complained about the low income tax burden of a US taxpayer earning \$12,000. These "lucky duckies" benefit so much from the progressive income tax structure that they pay little in income tax: "It ain't peanuts, but not enough to get his or her blood boiling with tax rage." If much less progressive income taxation could somehow be entrenched, so the argument goes, this would increase voters' overall resistance to taxation and thus reduce tax levels.

While in this example tax structure "efficiency" refers to the electoral costs of taxation (cf. Hettich/Winer 1999), the general logic extends to economic and administrative costs. In continental European welfare states, for instance, which suffer from a high tax burden on low-skilled labor, progressive taxation of wages may be a matter of economic efficiency (Scharpf 2001). Similarly, the *vertical* distribution of the tax burden is only one dimension of tax equity and efficiency. The *horizontal* dimension has to do with the relative tax burdens on different types rather than levels of income. Along this dimension it is widely believed that moderate tax burdens on (certain types of) capital are efficient, both in general and within the income tax system (for example, De Long/Summers 1991; Przeworski/Wallerstein 1988; Lindert 2004).

For example, the "social democratic" welfare states of Finland, Norway, and Sweden operate so-called dual income taxes (DITs) which discriminate against wages in very systematic and visible ways: while capital income is taxed at a uniform low and proportional rate of 25-30% (or even lower), wages are taxed progressively up to top rates of almost 60%. Many observers find this difficult to square with those countries' traditional redistributive ambitions. Former Conservative Prime Minister of Norway Kaare Willoch (1995: 179), for instance, laments that while "social democrats once felt that financial income should be taxed more severely than income from work, they have now changed their minds"; and he is puzzled that the new tax policy goes together with continuing "demands for a large public sector." But these two observations may be causally linked rather than contradictory. For if moderate capital taxation increases the overall (that is, electoral, economic, and administrative) efficiency of tax structure, it also tends to increase the level of public spending.

In this paper I explore the politics of tax *structure* in comparative perspective, drawing on both quantitative and historical evidence. My focus is mainly on advanced EU and OECD countries and on the potential *tradeoffs between vertical and horizontal tax structure efficiency*. These tradeoffs seem most salient in income tax policy: If horizontal efficiency does indeed require moderate and proportional taxation of (some) capital income, whereas vertical efficiency (and equity) considerations require progressive taxation of wages, the resulting tax rate differentials will give high-income taxpayers great incentives to transform highly taxed income into lowly taxed income. Trying to avoid this is difficult and costly in administrative terms, which in turn tends to decrease political support for tax rate differentiation. Finding a balance between horizontal and vertical tax structure

efficiency is thus inherently difficult. I will explore the tradeoffs involved and show that this exploration can inform and connect a number of separate literatures on the political economy of taxation. Moreover, I will analyze how corporate tax competition has exacerbated domestic tradeoffs and how political institutions figure in the domestic politics of income tax structure.

The next section clarifies some basic concepts. Section 3 treats differentiated income taxation as an implication of the more general need to moderate the tax burden on capital income. Section 4 highlights basic tradeoffs in income taxation and interprets the tax reforms of the 1980s and 1990s as efforts to find systematic and efficient forms of differentiated income taxation. Section 5 shows how tax competition has exacerbated the economic and administrative problems of differentiated income taxation. Section 6 explores the politics of differentiated income taxation and the role of political institutions.

## Definitions

In the political science literature the terms "income tax" and "consumption tax" are typically understood in an *institutional* sense, following the usage in, say, the OECD Revenue Statistics: An income tax is a direct tax on corporations and individuals, while consumption taxes are indirect taxes (for example, value-added taxes). However, there is also an *analytical* meaning of these terms, which is unrelated to the method of implementation. A consumption or expenditure tax in this analytical sense can be implemented as a direct and progressive tax on corporations and individuals.[1]

So what is the analytical difference between income and expenditure taxes? Answering this question requires an analytical distinction between two types of what we typically call "capital income" (Slemrod/Bakija 2004: 203-204). The normal return to capital is the return to deferring consumption, the (risk-free) return to wealth. If I buy a machine, I want this investment to generate at least the return I would have received from buying government bonds. The normal return is the return that can be earned on a marginal investment in capital, which is competed down to a fairly low level. Above-normal returns go beyond that level. They include various things, for example, returns to innovation, returns to establishing a monopoly in some market, or returns to entrepreneurial skill. Bill Gates's income from his share of Microsoft profits would typically be labeled "capital income," but most of it consists of above-normal returns.

Based on this distinction, we can characterize, roughly, three analytical types of taxes: A *wage tax* taxes neither normal nor above-normal returns; an *expenditure tax* exempts the former but taxes the latter; and an *income tax* taxes both. All three, of course, also tax wages.[2] These distinctions are important because economic theory suggests that - at least in closed economies - above-normal returns can be taxed without distorting investment decisions, whereas taxation of normal returns discourages saving and investment (for example, Przeworski/Wallerstein 1988). Many also believe that there is an equity rationale for taxing normal returns at a concessionary rate or not at all. Since the *normal return* is a reward for the saver's willingness to postpone consumption, taxing it (highly) would result in over-taxation of individuals with a relatively high savings propensity. In contrast, *above-normal returns* often represent windfall gains which ought to bear a high tax rate. Proponents of direct expenditure taxes (that is, exemption of normal returns) also emphasize that these can achieve exactly the same overall degree of progressivity as income taxes.[3]

## Efficient tax structure and differentiated income taxation

There is widespread agreement that tax structures and tax levels are interrelated; more efficient tax structures are associated with higher tax levels (Hettich/Winer 1999). "Structure" is here meant to include both the mix of different types of taxes and the internal structure of particular taxes. "Efficiency" is understood broadly, referring to the economic, political (electoral), and administrative costs of taxation. Some authors highlight the causal arrow from levels to structures. The argument is that, at least in democracies, a high taxation level enforces an efficient tax structure (Lindert 2004). Others highlight the opposite causal arrow: changes in tax efficiency entail changes in taxation and spending levels (Becker/Mulligan 2003; Kato 2003).

There is less agreement about what makes for an efficient tax structure. For instance, some see flat tax rates as crucial to tax structure efficiency (for example, Becker/Mulligan 2003), while others make efficiency-based arguments in favor of (directly) progressive taxation (for example, Frank 1999; Layard 2005; Røed/Strøm 2002). If there is an exception to these kinds of disagreements, it probably concerns the normal return to capital: Since the economic, political, and administrative costs of taxing capital income seem to increase quickly, large welfare states may be predicated on moderate capital income taxation. Following Przeworski and Wallerstein (1982, 1988), many political scientists adopted this perspective. It was argued that left-wing governments generally kept the tax burden on (normal) capital income low in order to reconcile efficiency on the taxation side of the budget with equity on the spending side (for example, Garrett/Lange 1991). In economics, Lindert (2004) advanced a similar argument as one explanation of the relatively good economic performance of large tax/welfare states. While these arguments focus on the *average* effective tax burden on capital, a focus on *marginal* rates leads to parallel results: taxing (normal) capital income with graduated and high marginal tax rates seems inherently problematic (Slemrod 1990).

[click on table to enlarge view]

Table 1 Selected tax data for EU and OECD countries

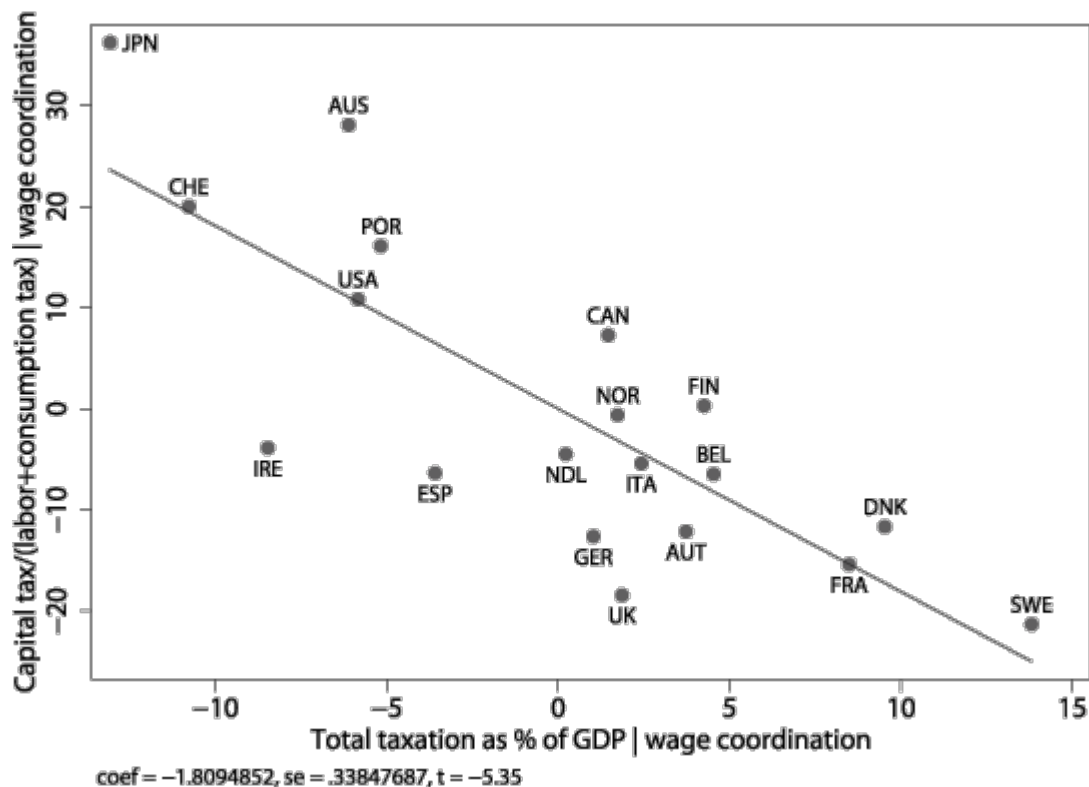
Country	Taxes as % of GDP 1995–2002	Average effective tax rates 1995–2000/2002			Top income tax rate 2004		Threshold top personal rate 2003		Income tax as % of GDP 1995–2002	
		Capital (total)	Capital income	Labor	Consumption	Corporate	Personal	% of average production worker's wage	Corporate	Personal
<b>EU-15</b>										
Belgium	46	27	17	44	22	34	54	95	3	14
Denmark	50	31	20	41	33	30	62	93	3	26
Germany	41	24	19	40	18	39	47	163	1	10
Greece	38	17	12	37	18	35	40	197	3	5
Spain	35	25	17	29	16	35	45	265	3	7
France	45	36	19	43	18	35	58	209	3	7
Ireland	32	27	20	29	26	13	42	208	3	9
Italy	43	28	20	41	18	37	46	317	3	11
Luxemburg	41	29	21	29	23	30	39	107	6	8
Netherlands	41	27	19	34	23	35	52	156	4	7
Austria	44	25	21	40	22	34	50	208	2	10
Portugal	35	28	18	33	20	28	40	602	3	6
Finland	47	31	26	44	29	29	53	191	4	14
Sweden	52	29	20	48	29	28	56	173	3	17
United Kingdom	36	31	22	25	22	30	40	150	3	10
<b>Other</b>										
USA	29	26	n.a.	24	6	39	39	932	2	12
Japan	27	26	n.a.	24	7	42	50	429	4	8
Canada	36	37	n.a.	30	14	36	44	261	4	13
Australia	30	32	n.a.	22	12	30	47	123	5	12
Norway	43	25	n.a.	36	27	28	55	284	6	11
Switzerland	30	28	n.a.	32	10	24	41	n.a.	3	10
New Zealand	35	n.a.	n.a.	24	18	33	39	154	4	15

Notes: N.a. = not available. All values are rounded to nearest percentage point. The OECD averages are for shorter periods (end year 2000 or 2001). Sources: Revenue and average tax rate data for EU-15 come from Eurostat (2004), for other countries from OECD (2004b). Statutory tax rate data are assembled from various sources, specified in Ganghof (2006 forthcoming). Thresholds are own computations based on OECD (2004c).

These arguments imply that the ratio of capital taxes to labor and consumption taxes decreases systematically with the total tax burden. To show that this is the case in

advanced OECD countries, I combine data from Eurostat (2004) and Carey/Rabesona (2002) for the period 1995 to 2002 (Table 1).[4] Figure 1 shows the correlation between the total tax burden (revenue as % of GDP) and the capital/(labor+consumption) ratio after controlling for the degree of wage coordination. This control is included because it has been argued that in countries with corporatist decision-making, the efficiency costs of labor income taxes are reduced so that labor is taxed more heavily (Summers/Gruber/Vergara 1993; cf. Cusack/Beramendi 2003).[5] As expected, the ratio of capital taxes to labor and consumption taxes clearly decreases with total taxation.

Figure 1 The impact of total tax levels on the relative importance of capital taxation



Notes: Unweighted averages for the period 1995–2002.  
Sources: See text and Table 1.

How do we get from the assumption that tax efficiency requires a moderate overall level of capital taxation to the observation of differentiated forms of income taxation? Some political scientists seem to think we do not get there at all because they understand tax *structure* efficiency solely in terms of tax *mixes*. Their argument, as I understand it, is this: Since "progressive" property and income taxes fall heavily on capital, whereas "regressive" consumption and social security taxes do not, a high share of the latter in a country's tax mix is conducive to building and maintaining large tax/welfare states (Wilensky 2002: 392; Kato 2003: 199).[6] I think this argument is flawed precisely because it ignores the variability of the internal structure of income tax. Low income taxation is only one of two ways of keeping the capital income burden moderate; the other is differentiated income taxation which systematically discriminates against wages *within* the income tax system.

Consider the comparison between France and Denmark (all values are unweighted averages for the period 1995-2002 - see Table 1): France seems to have a very

"regressive" tax mix (Kato 2003: 94-110), with a corporate and personal income tax burden of only 9.8% of GDP. In contrast, Denmark has a huge income tax burden of 28.8% of GDP. Based on the argument from tax mixes, the large size of Denmark's tax/welfare state is a major puzzle (Kato 2003: 197). Yet Denmark's outlier status disappears once we focus on the underlying tax burdens on capital and labor (Ganghof 2007 forthcoming). Despite its low income tax burden, France has an average tax rate on capital (income and stocks) of 35.5%, the *highest* in the EU, whereas Denmark has one of only 30.5%. The reason for this is Denmark's highly differentiated income tax: Employed labor is taxed at an average effective rate of 41%, with a top marginal rate that exceeds 60% and sets in *below* the earnings level of an average production worker (Table 1). In contrast, many important types of capital income are taxed at marginal rates of 30% or lower, which contributes to an average effective tax burden on capital *income* of only 20.1% (France: 18.8%).

Hence the difference between Denmark and France does not lie in the level of capital taxation but rather in the progressivity of wage taxation. In France the dominant form of direct wage taxation is payroll taxes, while in Denmark it is income taxes. Payroll taxes, regarded as taxes, are typically regressive because they do not have basic tax allowances, which reduce the relative tax burden on low-income earners, but do have ceilings on contributions, which reduce the relative tax burden on high-income earners. Therefore, countries with "small" income taxes such as France or Austria have also adopted differentiated income taxes that apply fairly high marginal tax rates to wages while treating sensitive types of capital income under separate and much lower rates. In these countries, the income tax partly fulfills a kind of *progressivity adjustment function* for wage taxation at large. Since a large share of labor taxation takes the form of payroll taxes and consumption taxes, income taxes with graduated rates and a large basic allowance can provide a progressive counterweight.

This argument can also help to explain the fact, highlighted in Ganghof (2005b, 2006 forthcoming), that the *total tax burden* (as % of GDP) is a much better predictor of top personal income tax rates than the *income tax burden* (as % of GDP). The logic is as follows: The difference between high-tax and low-tax countries is mainly accounted for by direct or indirect taxes on labor incomes (cf. Figure 1) and a high labor tax burden implies higher top personal income tax rates on labor incomes - either directly (if the share of income taxes in total taxes is large) or indirectly (if income taxes are relatively small but more progressive).

### **Tradeoffs and trends**

In this section I use the assumption of fairly tight constraints on the taxation of (normal) capital income to offer a stylized interpretation of the post-war development of income taxes in advanced OECD countries. I argue that policy change can be understood as the result of efforts to move towards more efficient forms of tax rate differentiation. This will allow us to better understand the nature of existing income tax regimes, such as the Nordic dual income taxes, as well as the effects of tax competition (to be discussed in the next section). Because my interpretation differs somewhat from the "standard" view in political science, I summarize this view first.

Political science explanations of income tax reforms in the 1980s and 1990s highlight the importance of ideational changes. Swank and Steinmo (2002: 645) speak of a "paradigm shift," Kato (2003: 14) of a "reversal of the ideal of progressive income taxation." These

accounts focus mainly on the *structure* of capital income taxation. Privileges for business investment are interpreted as efforts of "micro-management" on the supply-side (Steinmo 2003) and tax privileges for personal savings (pensions, owner-occupied housing) as "hidden" welfare provision (Howard 1997; Ervik 2000). Policymakers, so the argument goes, learned that these manipulations of the structure of capital taxation were inefficient, so that the tax reforms of the 1980s and 1990s leveled the playing field and made income taxation more "market-conforming" (Swank 1998; Garrett 1998b).

While there is much truth to this view, it underestimates the extent to which tax privileges for capital income were due to the aim of reducing the *level* of capital income taxation and the fundamental administrative problems of taxing many types of capital income. As a result, it also underestimates the extent to which the very same basic tradeoffs continue to structure the politics of taxation. To elaborate on these points, I start by reviewing, in a stylized way, what I consider to be the basic tradeoff faced by policymakers.[7]

As already explained, there are two ideal-type "income" taxes: truly uniform income taxes, which tax all types of incomes jointly and equally, and direct *expenditure taxes*, which exempt the normal return on capital. On the assumption that taxing all normal returns on capital is very costly, politically acceptable versions of both ideal-types are likely to have very different tax rate schedules. If policymakers followed the income tax ideal closely, tax rates would have to be moderate. Marginal income tax rates would be leveled down to the lowest common denominator - defined by what is acceptable for the most "sensitive" (that is, costly-to-tax) types of capital income. In fact, given the inherent administrative problems of taxing certain types of capital income with graduated rates, a truly uniform income tax would most likely have a flat tax rate, with or without a sizeable basic tax allowance (Slemrod 1990; Slemrod 1997). In contrast, if policymakers followed the expenditure tax model, a progressive rate structure would perhaps imply lower economic efficiency costs because normal returns are exempt. In addition, more progressive taxation of above-normal returns and wages would be necessary to make up for this exemption in equity and revenue terms. Given real-world constraints on capital income taxation, therefore, policymakers who want to implement a "market-conforming" income tax that does not intervene in the structure of savings and investment face the basic choice between a *flat income tax* and a *progressive expenditure tax*.

This choice is a difficult one because both ideal-types maximize certain dimensions or notions of tax efficiency and equity at the expense of others (Ganghof 2006, forthcoming). It is not surprising, therefore, that policymakers in OECD countries eschewed a clear decision and instead tried to combine elements of both types of taxes. The problem was that the resulting "hybrids" or "compromises" (Aaron/Galper/Pechman 1988) were ad hoc and proved to be very inefficient. Two examples: One type of direct expenditure tax at the business level, the so-called cash-flow tax, allows investment outlays of businesses to be deducted immediately, thereby exempting the normal return on capital. However, if this "expensing" of investment outlays - or less extremely: greatly accelerated depreciation of assets - is combined with the income tax feature of interest deductibility, as done in the past by some OECD countries, the tax rate on the normal return to debt-financed investment becomes *negative*. This leads to significant distortions in the structure of investments.

Something similar happened with respect to owner-occupied housing, especially in the Nordic countries: If mortgage interest payments are deductible, a feature of a pure income tax, but the resulting implicit rent earned by owner-occupiers is taxed at a low level or not at all, an expenditure tax feature such as housing investment is highly subsidized



(Sørensen 1998). This unsystematic combination of features of income and expenditure taxes compromised the efficiency, equity, and revenue goals of income taxes. For instance, it was estimated that in 1986 Danish taxation of personal (household) capital income resulted in a revenue *loss* of 1.6% GDP, which was roughly balanced by the revenue from corporate taxation (Ganghof 2007 forthcoming). Denmark's huge income tax was thus largely a tax on wages and transfers.[8]

While the tax reforms of the 1980s and 1990s responded, in part, to these kinds of pathologies, the underlying dilemma did not simply disappear: If policymakers were unwilling to implement pure income or expenditure taxes, they had to look for a more systematic and practicable hybrid approach. I argue that this is what most advanced OECD countries did. One of the best results of this search is the dual income tax (DIT) model implemented in Finland, Norway, and Sweden, as well as, temporarily, in Denmark and Italy.[9] I shall begin by briefly characterizing this model (Sørensen 1998; Cnossen 2000), as this will facilitate the subsequent discussion of the effects of corporate tax competition.

The DIT model combines features of flat income taxes and progressive expenditure taxes in straightforward ways (Ganghof 2006 forthcoming: chapters 3 and 4). Capital income is generally taxed at moderate uniform proportional tax rates between 25% and 30%, while wages are taxed with graduated rates up to top rates of around 60%. The above-normal returns of businesses (as approximated by tax administrations) are, in part, taxed together with wages - as they would be under an expenditure tax. The reason is this: In order to split business income into its capital and labor components, tax administrations typically impute a "normal return" on the invested capital and tax all residual income as wages.

In the Nordic countries, these splitting regimes are only applied to unincorporated businesses and small corporations in which (some of) the owners are active as managers. However, the Italian version of the DIT, introduced in 1998, applied the splitting regime to *all* businesses (but only to the *increase* in their net equity after the base year) (Bordignon/Giannini/Panteghini 2001). Firms' normal returns were taxed at 19%, their residual profits either at the corporate rate of 37% or at personal income tax rates of up to 46%.[10] After a transitional period, therefore, an ideal DIT of the Italian type would be a systematic compromise between a flat income tax and a progressive expenditure tax: The government would not manipulate the structure of savings and investments, but by varying the tax rate on normal returns it could approximate any position on the notional continuum between a pure income tax and a pure expenditure tax. The latter is approximated if the (top) tax rate on normal returns is reduced to zero, the former if this rate is aligned with the top rate on labor and above-normal returns.

As this discussion shows, policy learning in OECD countries can be described as a historical trial-and-error search for feasible compromises between two *ideal-types* rather than a shift between incommensurable *paradigms*. The alternative interpretation is fruitful in that it highlights oft-neglected observations and questions: If policymakers and experts have found more efficient ways of differentiating the tax burden, why has there been such a strong downward trend in marginal tax rates on wages and above-normal returns (cf. Wallerstein/Przeworski 1995)? Why has the Italian dual income tax recently been abolished rather than exported to other countries? The next section deals with these types of questions.

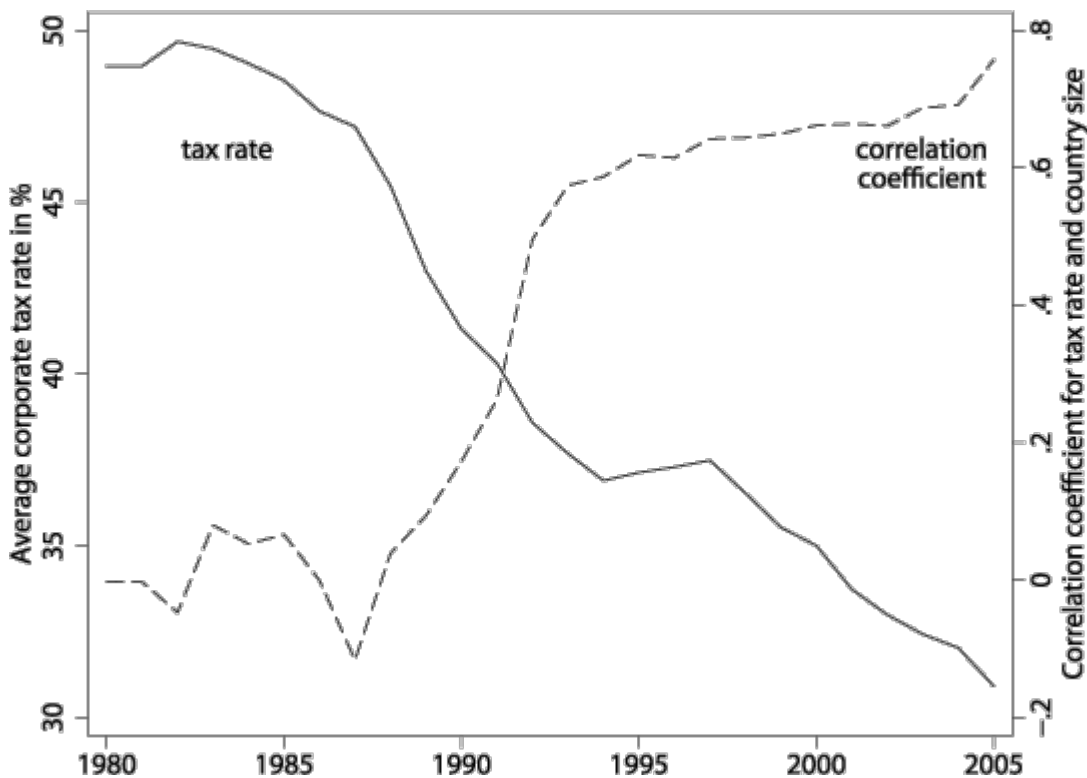
## The "spillover problem" and the role of tax competition

One of the main purposes of corporation tax is to function as a "safeguard" for personal income tax, and this function is best fulfilled if the corporation tax rate is not below the top rate on wages, or at least not too far below. However, corporate tax competition is strongest with respect to statutory tax rates and the rates on above-normal returns. As a result, tax competition tends to spill over into personal income taxation, increasing the costs of high marginal tax rates on less mobile capital income and wages. It has thus contributed to the downward trend in personal income tax rates.

Let me first discuss tax competition. Political scientists have generally been skeptical about tax-competition explanations of corporate tax rate cuts, on both empirical and theoretical grounds. The empirical objection is that corporate tax revenue (as % of GDP) has not fallen in most OECD countries (for example, Garrett 1998a). The theoretical objection is that if countries compete on tax rates on normal returns to capital, income taxation in open economies is not fundamentally different than in closed ones. Expenditure taxes can still reconcile equity and efficiency goals (Wallerstein/Przeworski 1995). Yet both arguments, while correct, provide no challenge to the tax-competition explanation proposed here. First, corporate tax revenue as a percentage of GDP tells us little about competitive dynamics since it is influenced by several factors other than statutory corporate tax provisions (share of profits in GDP, relative size of the corporate sector). Second, there is evidence that countries have competed mainly on statutory tax rates as well as effective rates on above-normal profits (that is, inframarginal investments).[11] The first type of competition is mainly driven by the profit-shifting behavior of multinational firms (Hines Jr. 1999; Haufler/Schjelderup 2000), the second by competition for highly profitable investments among such firms (Bond 2000; Devereux/Griffith/Klemm 2002). Since very profitable investments, by definition, generate a high share of above-normal returns, tax allowances are less important. Revenue-neutral reforms that cut both statutory tax rates and allowances therefore shift the tax burden from more profitable to less profitable businesses. Such reforms imply higher taxation of normal returns of domestic firms, but in small open economies this negative effect may be mitigated by the lower statutory rates on inward investment (Bond 2000: 173).

There is robust evidence that the strong downward trend in corporate tax rates since the mid-1980s has been driven to a large extent by tax competition (for an overview see Griffith/Klemm 2004). The simplest way to see this is to look at the relationship between tax rates and country size. Economic theory predicts that small countries will have lower tax rates in equilibrium because their own capital stock/tax base is small relative to potential inflows (Bucovetsky 1991). The data pattern presented in Figure 2 is in line with this prediction. The downward trend in corporate tax rates in advanced OECD countries is associated with an increasing correlation between tax rates and country size ( $\ln[\text{population}]$ ). Hence while the absolute convergence of corporate tax rates as measured by the standard deviation has been moderate, the obvious pattern of *conditional* convergence (Sala-i-Martin 1996) is consistent with the theory of asymmetric tax competition.[12]

Figure 2 Corporate tax rates and their correlation with country size in 21 advanced OECD countries, 1980–2005



Notes: The sample includes the cases included in Table 1 except Luxembourg. The average is unweighted. Correlation coefficient = Pearson's  $r$ .

Sources: Population: World Bank (2003), corporate tax rates: Ganghof (2006 forthcoming).

Qualitative evidence supports this conclusion. In many countries, policymakers clearly would have maintained generous investment incentives for businesses (for example, accelerated depreciation rules) had it not been for competitive pressures on statutory corporate tax rates. Examples include Australia, Canada, Denmark, and Germany (Ganghof 2006 forthcoming). In addition, there is evidence that tax competition has created a bias *against* pure expenditure taxes, as these would require higher statutory corporate rates in order to achieve some given revenue level. In the United Kingdom this was one major argument against expenditure taxes (Isaac 1997: 313). Croatia did operate a pure direct expenditure tax between 1994 and 2001, but eventually decided to abandon this system and lower the corporate rate from 35% to 20% (Keen/King 2003).

How can falling corporate tax rates create problems for income taxation as a whole? Consider first why there are corporation taxes at all. After all, every tax falls eventually on individuals. One main reason is that corporation tax functions as a safeguard for personal income tax (Mintz 1995). If the retained profits of incorporated businesses went untaxed, much personal income tax could be avoided. For the same reason, tax designers and international institutions strongly recommend that "personal and corporate income taxes have the same top marginal rate" (Stotsky 1995: 282) or "not differ materially" (Tanzi/Zee 2000: 310). If the corporate tax rate is much below the top personal rate, high-income taxpayers have a large incentive to shift their income into the corporate sector (cf. Gordon/Slemrod 2000; Fuest/Weichenrieder 2002; Wallerstein/Przeworski 1995: 428).

These recommendations do not distinguish between income and expenditure taxes because taxation of above-normal returns is sufficient to complement taxation of wages. A pure wage tax, by contrast, which also exempts above-normal returns, does create significant

problems for tax administrations:

Under a wage tax, relabeling your labor compensation as capital income would be an easy avenue to escape taxation altogether. The difficulty of distinguishing what is labor income and what is capital income is an important reason that a pure wage tax would end up being highly inequitable and costly to enforce. (Slemrod/Bakija 2004: 204)

This implies that enforcement costs also tend to be high when the marginal tax rates on both normal and above-normal returns are well below the marginal rates on wages.

Hence by putting pressure on the taxation of above-normal returns at the corporate level, tax competition makes it more difficult for corporation tax to fulfill its safeguarding function for personal income taxation. Tax competition raises the costs of imposing high marginal tax rates on wages and on the above-normal returns of unincorporated businesses. The tax reform experiments in Croatia and Italy exemplify this problem. When Croatia introduced a progressive expenditure tax in 1994, the Ministry of Finance proposed a corporate rate of 35% to align it with the top rate on personal income. Tax competition motivated the parliamentary majority to set it at 25%, but, as expected, the gap between the two top rates led to significant tax avoidance problems (Rose/Wiswesser 1998: 272). The corporate rate was raised to 35%, but given tax competition it was only a question of time until it had to fall again. When it did (to 20% in 2001), the expenditure tax approach was abolished altogether (Keen/King 2003). The Italian experience is similar. The Italian-style dual income tax had itself been a concession to tax competition: the tax rate on normal profits was set at 19% rather than zero - as under a pure expenditure tax - so that the tax rate on above-normal returns could be lower, given a revenue target (Bordignon/Giannini/Panteghini 2001). As in Croatia, however, the preferential taxation of normal profits was recently abolished in return for a slightly lower corporate tax rate.

It is not surprising, therefore, that Nordic-style dual income taxes do not tax above-normal returns more highly at the corporate level. The consequence, though, is that high-income earners, especially the owners of unincorporated businesses and small corporations, have greater incentives to transform wages into capital income (Hagen/Sorensen 1998). The resulting tax avoidance increases the administrative and political costs of differentiated income taxation and thus creates additional pressure to reduce marginal rates on personal income.

I do not intend to exaggerate the problem. There surely are ways to deal with a large tax rate gap between corporate and personal income taxation. Perhaps the most systematic one is to retain the basic logic of the Italian-style dual income tax but to shift the taxation of above-normal returns from the level of the corporation to the level of the shareholder (Sørensen 2006 forthcoming). The idea is to include in the tax base of the progressive income tax the difference between realized income from shares (dividends and realized capital gains) and normal returns. Norway recently introduced a variant of such a system (Ganghof 2006 forthcoming: chapter 6). The problem, however, is that taxing shareholders' above-normal returns leads to great administrative complexity. In Norway a centralized, computerized register of all Norwegian personal shareholders was created to keep track of the (adequately) adjusted values of shares and of the utilization of tax allowances for normal profits. Moreover, the Norwegian model nevertheless required further cuts in the top marginal tax rates.

Hence while there are ways of making a large tax rate gap between corporate and personal taxation work, they are costly. As a result, the decks seem to be stacked in favor of flatter

income taxes. We can already see this empirically. In Eastern European transition economies flat income taxes rather than progressive expenditure taxes are spreading. Such taxes were adopted in Estonia (1994: 26%, to be reduced to 20% in 2007), Latvia (1995: 25%), Russia (2001: 13%), Serbia (2003: 14%), Ukraine (2004: 13%), Slovakia (2004: 19%), Romania (2005: 16%), and Georgia (2005: 12%) and are likely to be adopted in further countries, such as Poland.[13] While flat income taxes are now also much more seriously discussed in advanced OECD countries such as Germany and Italy, the higher overall tax burdens on labor have mitigated against a radical flattening of income tax schedules (see section 3). Nevertheless, there is evidence that corporate tax cuts have contributed to cuts in the marginal income tax rates of individuals. Elsewhere I present case-study evidence for a number of countries, including Australia, Denmark, Germany, and New Zealand (Ganghof 2006 forthcoming; Ganghof/Eccleston 2004). Here I perform a simple cross-sectional regression analysis.

If low corporate tax rates increase the costs of maintaining high personal rates, we can expect a systematic positive association between corporate and top personal tax rates (cf. Slemrod 2004). I test this hypothesis with a simple OLS regression for the year 2004. The sample (N = 38) includes all OECD members and all actual and prospective EU members (that is, including Bulgaria, Romania, and Turkey).[14] Tax rates are for general government and are taken from a variety of sources (Ganghof 2006 forthcoming: Appendix). I include two important control variables (cf. Slemrod 2004). Total taxation as a percentage of GDP serves as a proxy of countries' overall average effective tax rate on wages. This average tax burden influences personal income tax rates either directly (if high total taxes go together with high income taxes) or indirectly - if income taxes are low but serve as a progressive counterweight to the extensive reliance on payroll taxes and indirect consumption taxes. The variable also accounts for the possibility that low overall taxation may be a common cause of low corporate and personal tax rates. The second control variable is GDP per capita.

Table 2 The impact of corporate tax rates on top personal income tax rates  
in EU (actual and prospective) and OECD member countries,  
2004

Independent variables	Dependent variable Top personal income tax rate, 2004	
	Corporate tax rate	.35 (.13)
Total tax revenue as % of GDP	.58 (.17)	.59 (.15)
GDP per capita (in 10,000 USD)	2.61 (.85)	3.66 (.82)
Constant	5.06 (6.12)	4.80 (5.43)
Excluded outliers	None	Luxembourg
Adj. R-squared	.62	.71
N	38	37

Notes: OLS estimation, standard errors in parentheses. All taxation data are for general government. The tax rate data are for 2004, the other data for the latest available year.

Sources: Tax revenue is taken from Eurostat (2004) for EU members, from OECD (2004b) for the remaining OECD countries, and from IMF country reports for the rest. GDP per capita is taken from World Bank (2003).

The simple model performs surprisingly well. It accounts for around 60% of the variation in top income tax rates - 70% if Luxembourg is dropped as an outlier - and suggests that higher (lower) corporate tax rates are systematically associated with higher (lower) top

personal tax rates. Hence if we treat corporate tax rates as the exogenous variable - a reasonable assumption given strong tax competition - the results suggest that lower corporate tax rates do indeed tend to pull down personal rates on high wages and above-normal capital income.

The point of this preliminary analysis is not to enter into the grand debates about the domestic effects of globalization, but to highlight two important observations. First, the politics of income tax structure has an international dimension. EU member states that want to maintain high marginal income tax rates on wages and above-normal returns would probably benefit greatly from a minimum EU corporate tax rate (Ganghof/Genschel 2006 forthcoming). Second, tax policy instruments like progressive expenditure taxes look more attractive "on paper" (Przeworski 1999: 43) than in real-world open economies. This contributes to limiting the differences between the policy preferences of left-wing and right-wing parties at the domestic level.

### **The domestic politics of differentiated income taxation**

It follows from the above discussion that domestic political struggles about tax policy are to a large extent struggles about the *progressivity of wage taxation* in the tax system at large. In this section I focus on these struggles and argue that straightforward left-right differences exist but that they are often not very large. By extension, the importance of veto institutions is generally also reduced. But there are exceptions. I will focus on Germany, where different powerful veto points and tax competition *interacted* in ways that forced a Social Democratic-led government to pursue regressive tax reforms.

Left-wing parties are more likely than right-wing parties to prefer more progressive income taxation of wages even if this implies a large tax rate gap between corporate and personal taxation and thus significant administrative costs. This preference is, in part, based on efficiency considerations: Progressive income taxes generally fall less heavily on low-wage earners than payroll taxes and indirect consumption taxes, which may mitigate the employment problems of the low-skilled (Scharpf 2000; Kemmerling 2005). Hence progressive and differentiated income taxation is one major way of targeting tax reductions to the low-skilled rather than cutting wage taxes across the board, which is costly in revenue terms. Right-wing parties, in contrast, are more likely to choose lower and flatter income taxes. As a result, it is possible to explain many features of income tax reforms in terms of the interaction of institutional power and partisan preferences. Elsewhere I provide systematic quantitative and qualitative evidence for this claim (Ganghof 2005a, 2006 forthcoming). Here I only give examples, focusing on changes in top personal income tax rates.

In countries like France, Greece, New Zealand, and the United States, the alternation of right-leaning and left-leaning governments was systematically associated with the fall and rise of top personal income tax rates. In countries like Norway or Sweden, veto players - or merely influential players - *outside* the government also played an important role. Swedish Social Democrats implemented deeper cuts in the top personal tax rate when they needed the support of the Liberals in the late 1980s/early 1990s, but later increased the top rate again to 57% with the support of the left-wing parties in parliament. Similarly, the Norwegian Labor Party used its power as an opposition party vis-à-vis a small centrist minority government to increase the top personal rate to 55% in 2000.

As already noted, however, the differences between the policy preferences of left-leaning

and right-leaning governments are typically not very large. In Finland, for instance, the economic constraints of the 1990s were so tight that the policy preferences of left-wing and right-wing parties converged strongly. Marginal tax rates on capital had to be low and tax relief for wages was desirable, but the combination of budget deficits, population ageing, and unemployment required that the effective tax burden on capital *increase* significantly and that tax relief for wages be targeted on low wages - through lower income tax rates at the bottom and an earned-income tax credit. Similarly, centre-right coalitions in Austria and the Netherlands accepted high marginal tax rates on wages in order to maintain a significant degree of wage tax progressivity (compare Table 1). In all of these cases there is little evidence that the relevant right-wing actors deliberately pursued "inefficient" tax policies in order to reduce the level of taxation.

One case in which the specific *interaction* of economic, partisan, and institutional factors did have a rather drastic effect on legislative outcomes is Germany. When a left-leaning coalition of Social Democrats and Greens took office in 1998, Germany's total tax level was not particularly high (around 42% of GDP) but its tax structure was rather inefficient. The statutory corporate tax rate, like other marginal rates on capital, was extremely high by international standards (around 57% including local taxes, compare Figure 2), and there was broad partisan consensus that it had to fall quickly and drastically. On the other hand, the top personal rate was only slightly above the EU average (57% as compared to 53%) and the average effective tax burden on capital was rather low (Table 1). This was partly due to the country's strong reliance on regressive payroll taxes (18% of GDP), which also financed expenditures unrelated to social insurance and which caused a heavy tax burden on lower wages. Finally, there was an urgent need to put the public finances in order.

One would have expected a Social Democratic-led government to deal with this situation by following a strategy similar to that of governments in Scandinavia or the Netherlands: First, implement some kind of differentiated or dual income tax, which greatly reduces marginal tax rates on capital while maintaining or even increasing the revenue raised from capital and higher wages. Second, reduce the tax burden on low wages, for example, by introducing a sizeable basic allowance into the system of payroll taxes (cf. Scharpf 2001). The last thing one would have expected was large *general* cuts in the marginal tax rate on very high incomes - capital and labor incomes - and a large reduction in an already moderate income tax burden. Yet this is precisely what happened. The government cut income tax rates across the board and tried hard to limit the tax rate gap between corporate and personal taxation. Hence the top personal tax rate fell to 44% in 2005, which is low by international comparison, the corporate rate to 39%, which is still high by international comparison. The government puts the overall net tax reduction achieved by its tax reforms between 1998 and 2005 at almost €60 billion. This amounts to around 3% of GDP and is roughly equal to Germany's structural budget deficits (in 2002).

A critical contributory cause of this puzzling outcome is Germany's combination of strong bicameralism and a far-reaching constitutionalisation of tax policy (Ganghof 2006 forthcoming). The initial tax reform strategy of the Social Democrats was indeed quite similar to the one sketched above, but the government had to deal with two very powerful veto players. The first is the upper house (*Bundesrat*), in which the government lost its majority soon after getting into office. This gave veto power to an opposition that firmly rejected the idea of differentiated income taxes. That the oppositional Christian Democrats adopted this stance may seem surprising, given its own welfare state legacy, as well as the pragmatic policies of Christian and Conservative parties in other countries. It is explained to a large extent by the existence of a second powerful veto player: the Federal Constitutional Court. Under the intellectual leadership of former judge and tax expert Paul

Kirchhof, the Court deliberately removed central aspects of tax policy from the realm of democratic politics.[15] In respect of income taxation, it was widely and plausibly believed that the Court would not accept any significant gap between the corporate tax rate and the top rate on personal income. In fact, after Professor Kirchhof had left the Court in 1999, he immediately became Germany's leading proponent of a 25% flat tax and explicitly claimed that different tax burdens on labor and capital are, in principle, unconstitutional.[16] The implicit veto threat of the Constitutional Court was backed by the Federal Fiscal Court in April 1999. It considered one type of differentiated income tax to be unconstitutional, one on which the Red/Green government had based its initial tax reform step: To cut the corporate rate without discriminating against unincorporated businesses, these businesses got a cut in the top personal tax rate as well; the top rate for other personal income, notably wages, remained unchanged. After the Fiscal Court's decision, this simple model of differentiated income taxation was dead, and in the end the government could only achieve bicameral agreement on a significant reduction of the corporate tax rate by cutting income taxes across the board (for more detail see Ganghof 2006 forthcoming: chapter 7).

In sum, the puzzling outcome of German tax reforms is explained by the complex interaction of economic, partisan, and institutional factors: Strong tax competition rendered the legal status quo so unattractive that Social Democrats could not simply veto any policy change, as they had done during their time in opposition. At the same time, their preferred reform strategy - differentiated, revenue-neutral tax rate cuts - was unacceptable to the relevant veto players. The result was not only neoliberalism *by surprise* (Stokes 2001) but also neoliberalism *by default*.

## Conclusions

Large welfare states seem to require moderate capital taxation. Moderation can be achieved in two ways: shifting the tax burden onto payroll taxes and indirect consumption taxes (*low income taxation*) or privileging capital income within the income tax (*differentiated income taxation*). One elegant variant of the second option is a direct expenditure tax that fully exempts the normal return on capital, while taxing above-normal profits together with wages.

Compared with low income taxation, differentiated income taxation tends to lead to more progressive taxation of wages, which may have both equity and efficiency advantages. However, large tax rate differentials between different types of incomes are associated with economic, administrative, and political costs. High-income taxpayers can find ways to transform high taxed incomes into low taxed incomes, and, partly as a result, voters may resent visible forms of differentiated income taxation. Low capital income taxation can thus spill over into wage taxation and pull down marginal tax rates at the upper end of the wage scale. Tax competition exacerbates this problem by putting pressure on corporate tax rates on above-normal profits. It thus undermines governments' ability to use corporation tax as a safeguard for progressive personal income tax.

At national level, political conflicts are to a large extent about the overall progressivity of wage taxation. Left parties prefer more progressive taxation, even if this increases administrative complexity and implies visible discrimination against wages within the income tax. Left-right differences, however, are often not large, as governments face similar constraints. There is little evidence that right-wing governments or veto players deliberately opt for inefficient tax structures in order to create downward pressure on the



overall tax level. As the German case shows, however, particular interactions of economic, partisan, and institutional factors may lock countries into rather inefficient tax structures, at least temporarily.

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## Endnotes

1

I use the terms "expenditure tax" and "consumption tax" interchangeably.

2

For the purposes of this paper I ignore compensation for inflation and returns to risk-taking, which need not be taxed under either income or consumption taxes.

3

For critical discussions of these and other arguments see Murphy/Nagel (2002) and Avi-Yonah (2004).

4

Most data on average effective tax burdens on capital, labor, and consumption available for larger sets of countries, including that of Carey/Rabesona (2002), does not adequately reflect many forms of tax relief for capital income. This can lead to highly misleading data patterns. The Eurostat data seem more reliable because Eurostat has access to national sources on the breakdown of personal income tax revenue into its capital and labor components. These data are only available for EU-15 member states and the period 1995-2002. Since the Eurostat estimates are at least roughly comparable to those of Carey/Rabesona, however, I combine the Eurostat data with these OECD data (for the period 1995-2000).

5

Wage coordination scores (for the period 1995-2000) are taken from OECD (2004a: 151).

The estimated equation (OLS) is this:  $CapitalTax/(Labor+ConsumptionTax) = 135.42 - 6.87WageCoordination - 1.81TotalTaxation$ . Adj. R-squared = .77.

6

Here and throughout I assume that payroll taxes and indirect consumption taxes are largely shifted backwards onto wages. Note also that the arguments of Wilensky and Kato are partly based on the *visibility* of income and property taxes. I will not comment on this mechanism here.

7

For a more detailed analysis of tradeoffs and the resulting conceptions of policy change, see Ganghof (2006 forthcoming: chapters 3 and 4).

8

Similar estimates for the US are provided by Gordon/Slemrod (1988) and Gordon et al. (2004).

9

The DIT model has influenced tax reforms in many countries, although only a few countries have so far implemented this model consistently (Ganghof 2005b). The model is now also advanced as the most adequate model of pragmatic tax reform for developing countries (Bird/Zolt 2005).

10

The underlying model of expenditure taxation is of a "pre-paid" kind. Rather than exempting savings but taxing returns (post-paid or cash-flow expenditure tax), savings are taxed but normal returns are exempt. On the resulting alternative to cash-flow taxes see Boadway/Bruce (1984), as well as IFS Capital Taxes Group (1991).

11

Some studies also find evidence for competition on effective tax rates on normal profits (that is, "effective marginal tax rates") - see especially Devereux et al. (2004).

12

Ganghof (2005a) uses regression analysis to investigate the relationship between country size and tax rates; Ganghof (2005b) shows that the relationship between tax rates and country size also holds for a much larger sample of countries.

13

Note that in some of these countries the corporate tax rate is higher than the flat tax rate on personal income.

14

Extending the sample is difficult because standard data sources such as World Bank (2003) only report tax rate and revenue data for *central* government (cf. Slemrod 2004).

15

In the English summary to a recent article, Kirchhof (2003: 50) states: "The democratic hope that the parliamentary process - the decision-making of the representatives of all taxpayers - will guarantee a moderate and consistent tax law has not been fulfilled. For this reason, the fundamental rights of taxpayers in Germany are increasingly becoming the primary measure of legislation."

In autumn 2005 Kirchhof joined the election campaign of the Christian Democrats as Shadow Finance Minister. His flat-tax proposal became one of the crucial campaign topics.

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**Table 1 Selected tax data for EU and OECD countries**

Country	Taxes as % of GDP 1995–2002	Average effective tax rates 1995–2000/2002			Top income tax rate 2004		Threshold top personal rate 2003		Income tax as % of GDP 1995–2002	
		Capital (total)	Capital income	Labor	Consumption	Corporate	Personal	% of average production worker's wage	Corporate	Personal
<b>EU-15</b>										
<b>Belgium</b>	46	27	17	44	22	34	54	95	3	14
<b>Denmark</b>	50	31	20	41	33	30	62	93	3	26
<b>Germany</b>	41	24	19	40	18	39	47	163	1	10
<b>Greece</b>	36	17	12	37	18	35	40	197	3	5
<b>Spain</b>	35	25	17	29	16	35	45	265	3	7
<b>France</b>	45	36	19	43	18	35	58	209	3	7
<b>Ireland</b>	32	27	20	29	26	13	42	208	3	9
<b>Italy</b>	43	28	20	41	18	37	46	317	3	11
<b>Luxemburg</b>	41	29	21	29	23	30	39	107	8	8
<b>Netherlands</b>	41	27	19	34	23	35	52	156	4	7
<b>Austria</b>	44	25	21	40	22	34	50	208	2	10
<b>Portugal</b>	35	28	18	33	20	28	40	602	3	6
<b>Finland</b>	47	31	26	44	29	29	53	191	4	14
<b>Sweden</b>	52	29	20	49	29	28	56	173	3	17
<b>United Kingdom</b>	36	31	22	25	22	30	40	150	3	10
<b>Other</b>										
<b>USA</b>	29	28	n.a.	24	6	39	39	932	2	12
<b>Japan</b>	27	26	n.a.	24	7	42	50	429	4	6
<b>Canada</b>	36	37	n.a.	30	14	36	44	261	4	13
<b>Australia</b>	30	32	n.a.	22	12	30	47	123	5	12
<b>Norway</b>	43	25	n.a.	36	27	28	55	284	6	11
<b>Switzerland</b>	30	28	n.a.	32	10	24	41	n.a.	3	10
<b>New Zealand</b>	35	n.a.	n.a.	24	18	33	39	154	4	15

Notes: N.a. = not available. All values are rounded to nearest percentage point. The OECD averages are for shorter periods (end year 2000 or 2001).

Sources: Revenue and average tax rate data for EU-15 come from Eurostat (2004), for other countries from OECD (2004b). Statutory tax rate data are assembled from various sources, specified in Ganghof (2006 forthcoming). Thresholds are own computations based on OECD (2004c).