Adjusting National Tax Policy to
Economic Internationalization:
Strategies and Outcomes

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Abstract

Competitive pressures in corporate and personal income taxation have increased the marginal economic and political costs of taxation during the last 25 years. This contributed to the fact that since the mid-1980s, capital income and total tax revenues as well as public expenditures (all as percentage of GDP) of the 18 most advanced OECD countries have, on average, no longer shown a medium-term upward trend. However, contrary to widespread beliefs, the OECD-18 averages for these three variables do not show a downward trend, either. How can this medium-term stability of capital income tax revenues, total tax revenues and public expenditures be explained? On the basis of an investigation of the nature of adjustment pressures and strategies, the paper highlights two explanations. First, competitive pressures on the tax mix, the revenue mix, and the budget size have partly been offset by countervailing – domestic and international – pressures. Second, given strong budgetary constraints on general cuts in effective income tax rates, most governments have pursued three revenue-preserving adjustment strategies that take the precise nature of competitive pressures into account. Governments have pursued a policy of tax-cut-cum-base-broadening, differentiated their income tax treatment according to differences in competitive pressures, and combatted international tax avoidance and evasion with legal and administrative measures. These strategies have been successful in limiting revenue losses. However, increased (explicit) differentiation of income tax treatment does conflict with established principles of neutral and just taxation. Thus, competitive pressures have resulted, in part, in a changed and more controversial structure of taxation rather than large-scale revenue losses.

Zusammenfassung

Durch den internationalen Steuerwettbewerb sind die marginalen ökonomischen und politischen Kosten der Einkommensbesteuerung in den letzten 25 Jahren gestiegen. Dies hat dazu beigetragen, daß die Einnahmen aus Kapitaleinkommen, die Gesamteinnahmen aus Steuern und Abgaben sowie die öffentlichen Ausgaben seit Mitte der achtziger Jahre im Durchschnitt der 18 fortgeschrittensten OECD-Staaten keine eindeutig steigende Tendenz mehr aufweisen. Der OECD-18 Durchschnitt für diese drei Variablen weist allerdings auch keine fallende Tendenz auf. Wie ist diese mittelfristige Stabilität von Steuereinnahmen und Staatsausgaben zu erklären? Auf der Grundlage einer Untersuchung unterschiedlicher Mechanismen des Steuerwettbewerbs und unterschiedlicher Anpassungsstrategien werden insbesondere zwei Erklärungen angeführt. Erstens gab es sowohl innerstaatliche als auch internationale Einflußfaktoren, die einen dem Steuerwettbewerb entgegengesetzten Druck auf die Steuer- und Einnahmenstruktur sowie auf das Niveau der öffentlichen Ausgaben ausgeübt haben. Zweitens haben die meisten Regierungen angesichts angespannter öffentlicher Haushaltslagen Anpassungsstrategien gewählt, welche die nationale „Wettbewerbsposition" verbessern können, ohne zu großen Einnahmeausfällen zu führen. Sie haben die Steuersätze gesenkt und gleichzeitig die steuerliche Bemessungsgrundlage erweitert; sie haben die tarifliche Besteuerung unterschiedlicher Einkommensarten der Unterschiede im Wettbewerbsdruck entsprechend differenziert; und sie haben internationale Steuervermeidung und -hinterziehung durch rechtliche und administrative Maßnahmen bekämpft. Durch diese Anpassungsstrategien konnten die Einnahmeverluste zwar begrenzt werden, jedoch widerspricht vor allem die zunehmende steuerliche Differenzierung zwischen unterschiedlichen Einkommensarten etablierten Prinzipien neutraler und gerechter Besteuerung. Die bisherigen Auswirkungen des Steuerwettbewerbs zeigen sich mithin zum Teil eher in umstrittenen Veränderungen der Struktur der Einkommensbesteuerung als in umfangreichen Einnahmeverlusten.

Contents

1   Introduction[1]

Recent studies in political science have found that despite increased economic internationalization, neither capital (income) tax revenues, nor total tax revenue nor public expenditures in advanced OECD countries have shown an *average* downward trend, and that higher degrees of global market integration have not systematically translated into lower capital tax revenues, total tax revenues, or public expenditures (Garrett 1998a; 1998b; 1998c; Quinn 1997; Swank 1997). These results are striking. After all, the basic logic of tax competition is convincing, and competitive pressures figure prominently in public debates about tax reform in many countries. Unfortunately, the existing literature is less informative when it comes to explaining systematically *why* we see so little change on the aggregate level of tax revenues and public expenditures. Common explanations are that adjustment pressures are less strong than many assume, partly because non-tax factors – such as tax-financed public goods in the widest sense – offset the comparative disadvantages of high-tax countries. There is some truth to this view. But it is both imprecise and incomplete.

This paper tries to give a more complete explanation for the apparent lack of large aggregate effects of competitive pressures by taking a closer look at both aggregate budgetary outcomes and the precise nature of adjustment pressures and policies in the 18 most advanced OECD countries (omitting Iceland and Luxembourg) since the 1970s. I argue that there have been significant and increasing downward pressures on effective tax burdens, especially on corporate and personal income, and (in turn) on tax revenues and public expenditures. However, two (complementary) arguments explain why these pressures have not led to obvious changes in the revenue mix or the level of public expenditures.

First, the downward pressures on capital income tax revenues, total tax revenues and public expenditures have partly been offset by countervailing – domestic and international – pressures. Pressures to cut effective tax rates on capital income have been balanced by pressures to reduce the tax burden on more "immobile"

tax bases, notably labor. These countervailing pressures have risen both due to international competition in product markets and the severe employment crisis of the last two decades (especially within the EU). Similarly, downward pressures on total tax revenues and public expenditures have partly been offset by parallel downward pressures on public deficits (induced by the debt crisis and the Maastricht criteria) and upward pressures on public expenditures (induced mainly by increasing demands for social expenditures). Given these countervailing forces, the medium-term *stability* of average capital income tax revenues, total tax revenues, and public expenditures (each as a percentage of GDP) in these 18 countries has to be seen partly a *result* of competitive pressures.

Second, given these budgetary constraints for general cuts in effective corporate and personal income tax rates, policy makers have pursued three complementary adjustment policies, which are associated with much smaller (or no) revenue losses. First, given that competitive pressures have not only been due to taxpayers' exit options, but also to new options for international tax avoidance and evasion, countries have taken *legal and administrative measures* to counteract such behavior. Second, given that the size of competitive pressures varies strongly both within and between within the corporate and personal income tax base, many governments *differentiated their tax treatment* accordingly and focussed tax cuts on the tax bases most sensitive to international tax differentials. Finally, given that both international investment flows and options for international tax avoidance partly depend on statutory tax rates, governments have pursued a policy of *tax-cut-cum-base-broadening*, especially in corporate taxation.

I discuss these three alternative strategies in some detail – their general logic, the available evidence on their successfulness, and the determinants of cross-country differences in pursuing these differences. Since these strategies have been partly neglected in the existing literature on the political economy of tax competition, this discussion is at times explorative and preliminary. Yet the discussion also suggests that these three policy strategies have led, in part, to new trade-offs between different goals of national tax policy. Such "second order effects" of competitive pressures are most obvious with regard to greater differentiation in the tax treatment of different income sources.

The rest of this paper is divided into 5 section. Section 2 elaborates the general explanatory framework and gives a stylized description of the relationships between adjustment pressures, strategies, and outcomes. Section 3 explores the different adjustment strategies in detail and discusses possible second order effects on national tax policy. Section 4 offers an interpretation of the aggregate developments in public budgets, considering the effects of both competitive pressures and domestic economic factors. The paper concludes with Section 5.

2 An extended explanatory framework

Policy makers care about the *costs* of revenue-raising. Both taxation and deficit financing give rise to *economic* and *electoral* costs. As to taxation, these costs come in two main forms. First, taxation creates economic inefficiencies (dead-weight losses), which hinder the achievement of economic policy goals like growth or employment. Second, policy makers want to be re-elected, and thus try to minimize the electoral costs associated with high tax burdens.[2] These costs of revenue-raising increase with the size of the tax burden and the public debt.

Policy makers try to design the tax mix, revenue mix, and level of public expenditures so as to balance the marginal costs of taxation against the marginal benefits (both economic and electoral) of public expenditures.[3] Ideally, i.e., in equilibrium, marginal costs and benefits would be equalized. Of course, this is a formidable task for policy makers, especially when the (often uncertain) long-term effects of policies are considered.[4] Yet, for my purposes, it is not important to what extent an equilibrium exists in the real world or to what extent this equilibrium approach can explain the existing cross-country differences in tax systems and expenditure levels. The crucial assumption is rather that policy makers generally do recognize and respond to significant increases in the marginal costs of taxing certain tax bases – and that they respond in a way that minimizes revenue losses and (by extension) costly expenditure cuts.

Applying these assumptions to the effects of increasing economic integration leads to a basic model of tax policy adjustment that seems to underlie many empirical studies of tax policy adjustment. This model is sketched by the five *blank* boxes in figure 1. As to adjustment pressures, the emphasis is on the increased *exit-threat* of mobile resources, most notably capital and a small number of mobile high-income earners. The growing mobility of these resources, it is argued, leads to a sharp increase in the marginal *economic* costs of taxing them. High taxation would lead to their expatriation (capital flight), so that immobile factors (labor) would end up bearing the burden in the form of lower labor productivity and lower real wages (see, e.g., Tanzi 1995).

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2   For a fully developed model of taxation, which focuses on the marginal economic and political costs of taxation, see Hettich and Winer (1999). For a careful historical case study from a similar perspective, see Gillespie (1991).

3   In the following, I neglect benefit-maximizing changes in the *structure* of public expenditures (see Schulze and Ursprung 1999).

4   In the following I largely neglect *dynamic* aspects of different financing choices, especially with respect to public deficits.

Adjustment pressures		Adjustment policies		Adjustment outcomes		Countervailing forces
Cost competition	Institutions, non-tax factors	Effective cuts for immobile tax bases	−	Revenue share of immobile tax bases	−	Unemployment shadow economy etc.
Exit threat		General effective cuts for mobile tax bases	−	Public expenditures	+	Aging crisis de-industrialization etc.
Avoidance and evasion		Differential tax cuts Statutory tax cuts Legal Measures	−	Public deficits	−	Public debt Maastricht etc.

Figure 1   An extended framework for analyzing national tax policy adjustment

As a consequence, policy makers will cut effective tax rates on corporate and personal income – and (where the latter is concerned) especially on high-income earners, who are relatively more mobile and / or receive a larger share of income from capital. Such tax cuts lead to revenue losses, which, everything else being equal, can lead to three possible outcomes: [5]

(1)   The revenue share from immobile tax bases increases *(tax mix change)*, and / or
(2)   public deficits rise relative to tax revenues (*revenue mix change*), and / or
(3)   public expenditures decrease (*budget size change*).

If none of these effects is visible, so the argument goes, it has to be concluded that the adjustment pressures – i.e., the increase in marginal costs – are much weaker than many believe, either because exit is still too costly or because non-tax factors are more important.

I argue that such a conclusion would be premature. This becomes clear when two extensions are added to the simple framework in figure 1. The first extension simply amounts to recognizing that there have been *countervailing pressures* on the

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5   Note that revenue losses are not always inevitable. When countries differ in size, a small country may actually increase its tax revenues – due to an inflow of foreign tax bases – by reducing the effective tax rate on mobile tax bases. In the following, however, I will largely concentrate on a government that has to trade a reduction of tax revenues from mobile tax bases against retained or increased attractiveness for mobile resources. For a short overview of formal models of tax competition, see Schulze and Ursprung (1999).

three aggregate policy outcomes just mentioned.[6] With respect to the *revenue share of immobile tax bases*, these pressures are both domestic and international and mostly concern labor taxes (see shaded boxes in the upper row of figure 1). Policy makers have had increasing incentives to cut labor taxes (which include social security taxes and, in part, both personal income taxes and consumption taxes) in order to reduce unit labor costs. In addition, there have been increasing downward pressures on taxes on (immobile) property, especially to the extent that they fall on businesses. These downward pressures on immobile tax bases have counteracted a shift in the tax mix towards immobile tax bases.

There have also been well known countervailing pressures on *public deficits and expenditures* (depicted in the bottom right of figure 1). Potentially exploding public debt burdens and – in Europe – the Maastricht criteria for "entry" into Euroland have strongly increased the marginal costs of deficit financing. In addition, increasing demands for expenditures – partly due to such factors as demographic change or structural unemployment – have put upward pressures on public expenditures. In turn, both of these forces counteracted changes in the revenue mix and the budget size.

In sum, stability in the three aggregate outcome variables – tax mix, revenue mix, budget size – partly reflects an *overall* increase in the marginal costs of revenue raising and the marginal benefits of public spending rather than the absence of competitive pressures.

Moreover, in the real world of boundedly rational and myopic policy makers and voters, change may be absent – at least temporarily – even if the *long-term* marginal *economic* costs of taxation have become considerably higher than the long-term marginal benefits of expenditures. Change might not happen because the *short term electoral* costs of large-scale expenditure cuts may be seen as prohibitive – especially for left-wing parties in office.

My second extension of the analytical framework complements the first and is depicted in the two shaded boxes in the lower left of figure 1. I argue that, given the strong countervailing forces on public budgets just mentioned, governments have pursued three more *revenue-preserving adjustment strategies.* To understand the logic behind these strategies, one has to paint a somewhat richer picture of competitive pressures. Three observations – to be explained in more detail below – are essential. First, competitive pressures have not only resulted from taxpay-

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6   Similar arguments have been made by Genschel (1999) and Steinmo and Swank (1999) in work in progress. Since I received the draft by Swank and Steinmo only towards the final stage of working on this paper, the extensive econometric evidence presented in their paper is only partly reflected in the following. Note, however, that in sections 3 and 4, I reflect on some of the indicators used by Steinmo and Swank.

ers' growing opportunities (given the legal framework of international taxation) to expatriate mobile resources. They also have been due to a rising number of loopholes in the international institutional framework, which create plenty of opportunity for (lawful) international *tax avoidance* and (fraudulent) *evasion* (depicted in the lower left box in figure 1). Second, the strength of each type of competitive pressures *varies strongly* both within and between the corporate and personal income tax base. Some parts of the tax base have become very sensitive to international tax differentials, while others are still fairly unresponsive. Third, especially in the area of corporate taxation, both types of competitive pressures are partly driven by *statutory* tax rates as such – as opposed to effective tax rates, which also reflect the definition of the tax base.

From these three observations follow three adjustment strategies, more sophisticated than cuts in general effective tax rates on corporate and personal incomes and therefore resulting in lower revenue losses:

(1)   Combining *statutory tax cuts* with a broadening of the tax base,
(2)   *differentiating* between different types of incomes and focussing tax cuts on the most mobile parts of the tax base, and
(3)   combating international tax avoidance and evasion through *legal and administrative measures.*

To the extent that countries have successfully pursued these policies, they have reduced the need to cut general effective tax rates (see figure 1). These adjustment strategies have thus allowed governments to defend their revenue base and/or increase their attractiveness for direct investment while simultaneously maintaining a high revenue yield and thus high public expenditures. In turn, they have reduced the trade-off between possible long-term *economic* benefits of tax cuts and short-term *electoral* losses.

Yet this reconciliation of the two goals of competitiveness and revenue-raising has led, in part, to different trade-offs in national tax policy. This is most obvious with respect to the policy of increased differentiation of income tax treatment. On the one hand, responding to differences in taxpayers' reactions to taxation by differentiation is no new tendency in the political economy of tax systems (cf. Hettich and Winer 1999: ch. 3). On the other hand, very explicit forms of differentiation – i.e., imposing different statutory tax burdens on different types of incomes – that have resulted, in part, from competitive pressures may contradict traditional notions of tax *justice* – thus leading to electoral costs – and/or principles of *neutral* taxation – thus leading to economic (efficiency) costs.

The rest of the paper uses this extended framework to analyze the empirical evidence on policy outputs and outcomes of the 18 most advanced OECD countries.

The different parts of the argument are also elaborated along the way. For ease of exposition, I start with the second extension in section 3 by taking a comparative look at *adjustment pressures* and *strategies*. Section 4 then analyzes the development of the main *aggregate policy outcomes* since 1970.

3   Revenue-preserving strategies of tax policy adjustment

The argument proceeds in two steps. Sections 3.2 to 3.5 explore the four main strategies of tax policy adjustment in greater detail: their logic, the determinants of their usage in different countries, and their possible second order effects. First, however, section 3.1 provides the basis for such a discussion by briefly sketching the institutional framework for taxing international income flows. This discussion shows that this framework provides at least some buffer against competitive pressures, that competitive pressures partly arise from taxpayers' options for international tax avoidance and evasion, and that the sensitivity of the capital income tax base to international tax differentials is very heterogeneous.

3.1   Adjustment pressures

In principle, the institutional framework for taxing international flows of corporate and personal income could reduce the competitive pressures arising from economic integration. Income can be taxed according to two different principles, the *source principle*, and the *residence principle*. Under the residence principle a country taxes all its residents on their total income, regardless of whether it derives from domestic or foreign sources. Under the *source principle*, a country taxes the returns from all sources of income within its territory, regardless of whether they belong to residents or non-residents. Broadly speaking, mobility in the income tax base creates problems for national tax policy only if income is effectively taxed under a source-based system. Under a residence-based system, countries can still tax the world-wide income of their residents. In this case, (honest) taxpayers would have to emigrate in order to reduce their tax burden. Investing abroad would not make a difference.

In practice, most countries have adopted a combination of residence- and source-based taxation (see, e.g., Zee 1998). Residents are taxed on their world-wide income and non-residents are taxed on their income generated from domestic sources. Therefore, *juridical* or *international double taxation* is possible whenever income from domestic sources accrues to non-residents. In order to avoid such a

result, the country of residence most commonly provides relief from double taxa-
tion by either granting *tax credits* against domestic tax liabilities of foreign taxes
paid or *exempting* foreign-source income. Consistent application of the tax credit
method (full credit) re-establishes the residence principle, because the tax burden
on foreign income is lifted or lowered to the domestic level. Consistent applica-
tion of the exemption method (full exemption) re-establishes the source principle.
In practice, most countries impose ceilings on foreign tax credits and limits on
tax-exempt foreign-source income, so that the system of international taxation is a
mixed one, granting taxing rights to residence as well as source countries. The
relative taxing rights of residence and source countries, however, are different
depending on the kind of income involved. The rights to tax business (active) in-
come are almost universally granted to the source country. In contrast, the rights
to tax portfolio investment (passive) income are generally shared between the
source and residence countries – with ceilings imposed on the tax rates on such
income in the source country under the model tax convention of the OECD
(1996b).

While this institutional framework partly works as a buffer against competitive
pressure, there clearly are incentives for the expatriation of mobile resources (di-
rect investment). In addition, in a global economy, there are ways to side-step this
institutional framework by shifting income into low-tax jurisdictions or evading
taxes internationally. To explore these two issues further, I look at corporate and
personal taxation separately.

3.1.1   Corporate taxation

Given the institutional framework just sketched, multinational enterprises
(MNEs) have a *tax* incentive to invest abroad whenever their final tax burden is at
least partly determined by the tax rate of the *source country*. There are two basic
cases. First, some countries, like Germany, usually exempt repatriated income of
foreign branches or subsidiaries so that the tax in the source country is the only
tax to be paid. Second, even when a country, like the U.S., uses the credit method,
this usually does not fully restore the residence principle in an economic sense –
for two reasons.[7] For one thing, credit countries invariably do not pay refunds
when their taxpayers pay a foreign income tax at a rate that is *higher* than the do-
mestic rate (OECD 1996b: Article 23B). Nor do they allow the excess foreign tax to

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7   *Institutional differences* between countries with regard to taxing international income
    flows have been almost completely neglected in quantitative studies of the political
    economy of tax competition. Yet they may be part of the reason why econometric
    studies usually find no significant relationship between indicators of *capital mobility*
    and indicators of *tax policy outcomes (revenues)*.

offset taxes imposed on domestic income (Arnold and McIntyre 1995: 44). As a result of such limitations on the credit, foreign income is typically taxed at the foreign effective tax rate whenever the foreign rate is higher than the domestic rate. Second, income of foreign *subsidiaries* is assessed differently than domestic income (and foreign income from branches or "permanent establishments"). Whereas domestic income is taxed continuously as it is produced, income from a foreign subsidiary is taxed only upon distribution, i.e., when the foreign subsidiary pays out a dividend to the parent company. As long as no dividend is paid, the payment of domestic taxes on the foreign-source income is *deferred*. During this time, the foreign income is only subject to the corporate tax of the source country. Again, the result of such tax deferral is different tax rates for domestic and foreign investments.

In sum, enterprises do often have a tax incentive to invest abroad. But are they really sensitive to tax differentials? It is here that *differences within* the corporate tax base are important. To put the point in somewhat simplified terms, *manufacturing investment* does react to tax differentials, but the impact of such differentials on the locational choice is often rather small, non-tax factors more important (Leibfritz, Thornton and Bibbee 1997: 31; Ruding Report 1992). By contrast, tax-factors are much more important for the location of *financial and commercial activities*. In general, companies that exercise specific (mostly financial) and centralized activities solely or mainly for the benefit of a MNE react strongly to tax differentials. Examples include co-ordination centers, distributions centers, financial holding companies, or offshore banking centers (Owens 1993: 27).

This leads me to discuss companies' options for *international tax avoidance*. As already noted, multinational companies can shift profits from high-tax into low tax jurisdictions, thus reducing the incentive to relocate production facilities in response to cross-national tax differentials (another reason why such investment reacts only moderately to tax differentials). In other words, the tax base of MNEs might migrate even though mobile resources do not. Two well-known tax avoidance techniques are the manipulation of *transfer prices* and *thin capitalization*. Transfer prices are the prices charged in intra-company transactions. They can be manipulated to shift company profits from high-tax to low-tax countries. Since intra-company trade makes up more than 50 percent of international trade in goods and services, transfer pricing is a serious problem for tax administrators (Owens 1993; Tanzi 1998). "Thin capitalization" means allocation of debt to affiliates in high-tax countries. In general, a parent company can inject equity or issue loans to finance a subsidiary, or the subsidiary can pay for itself out of retained earnings. Since interest expenses are deductible from taxable profits while dividends are not, it is a standard practice to load a subsidiary in a high-tax country with debt. The associated deductible interest expenses will help to keep the sub-

sidiary's taxable profits low, and the interest payments can then be collected (and deferred) by a holding company in a low-tax regime. In general, exploiting the possibility of *deferral* is another way for MNEs to avoid taxes. They can set up so-called *base companies* in a low-tax regime that collect the income from foreign subsidiaries. Passive investment income – interest, dividends, rent, royalties, etc. – is stored in the base company in order to prevent its distribution to the parent company, because, once distributed, it would become taxable in the parent's country of residence.[8]

3.1.2 Personal income taxation

As in corporate taxation, the sensitivity of different types of personal income in the tax base to international tax differentials varies strongly. Most labor income is on the unresponsive end of the continuum. It is very difficult for income from labor to evade taxes, because in most countries it is withheld at the source by the employer. And wage earners usually find it too costly to emigrate for tax reasons. One exception is the highly paid executive or professional.

By contrast, *income from financial assets*, especially interest income, often finds it easy to evade internationally. If the residence country could ensure effective taxation, it would tax portfolio investment income remitted from abroad – often under the general progressive income tax schedule – and give a tax credit for the foreign withholding tax paid abroad.[9] However, both the absence of international exchange of information and bank secrecy laws usually prevent effective enforcement. Thus, considerable portions of portfolio capital flows bear only the withholding tax in the source country, thus creating an incentive for governments to reduce tax rates both on residents and non-residents.[10]

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8   For more extensive and detailed exposition of techniques of international tax planning, see Giovannini (1989) and Arnold (1995).
9   Withholding tax rates in source countries are established in domestic tax laws, but usually reduced in double taxation treaties. Nowadays, treaty rates on interest and dividends vary between 0 and 15 percent, while non-treaty rates vary between 0 and 40 percent (Zee 1998: 592).
10 It has been rightly argued that, while international tax evasion is clearly significant, it should also not be exaggerated (BMF 1999: 27 – 28). For one thing, not all types of investment are well suited to international tax evasion. Evading foreign dividend income is often not worthwhile, because it bears both foreign corporate and withholding taxes, which are not creditable at home in the case of tax evasion. In addition, households are much more likely to make foreign investments through intermediaries, which are subject to stringent accounting rules (OECD 1994: 175). Finally, *domestic* tax evasion is still an alternative in many countries. All three points are important qualifications. With respect to the last point, however, I argue below that competitive

Finally, the sensitivity of capital income from *unincorporated businesses* and *immobile assets* to international tax differentials is somewhere in between the two extremes, but often still rather small. There may be incentives to invest abroad, especially in countries like Germany that often exempt such foreign income. On the other hand, there are generally few options for international tax avoidance and evasion, and the probability of relocation or emigration due to tax factors is limited.

Having clarified the precise nature of adjustment pressures in the area of income taxation, the next four sections discuss the main adjustment strategies in more detail.

3.2   Adjustment strategy I: Cutting general effective tax rates

Let us start with *corporate taxation* and look at the development of *general effective* corporate tax rates over time. Unfortunately, it is impossible to construct indicators of effective tax rates for the corporate sector as whole. Effective rates are not only more difficult to measure than statutory rates, but they also vary widely across different sectors, different kinds of investments, or different ways of financing. In fact, part of my argument is about the major differences in effective tax rates within the corporate tax base. Thus, any indicator of effective tax rates should only be seen as a crude proxy of the average corporate tax burden in different countries. Even with these caveats in mind, however, adequate data are hard to find. While quite a few investigations were recently undertaken – partly initiated by government agencies concerned about tax competition – most of them do not cover extended periods of time (see, e.g., Baker & McKenzie 1999).

Two of the most useful and widely used indicators are given in table 1. The table displays one microeconomic and one macroeconomic estimate of *average* effective tax rates for different years and periods and for ten and thirteen countries, respectively.[11] The *microeconomic* indicator constructs average effective tax rates on

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pressures have been partly responsible for greater difficulty and lower success in reducing domestic tax evasion.

11   Much of the economic literature focuses on *marginal* effective tax rates (not shown), which measure the effective tax rate applying to an investment project that earns an after-tax rate of return just sufficient to make the initial outlay worthwhile. From a theoretical point of view, while marginal effective tax rates determine the volume of investment at a particular location, the locational decision of (rational) investors is determined by the *average* effective tax rate.

Table 1   Average effective corporate tax rates[a], 1979–1994

	Microeconomic indicator			Macroeconomic indicator		
	1979	1994	Change (%)	1970–1978	1979–1986	1987–1994
Australia	29	19	−33	38	35	39
Belgium	n.a.	n.a.	n.a.	37	37	29
Canada	23	20	−13	27	17	16
Denmark	n.a.	n.a.	n.a.	n.a.	62[c]	45
Finland	n.a.	n.a.	n.a.	30	24	33
France	24	14	−41	27	43	25
Germany	21	20	−5	n.a.	43[e]	28[e]
Ireland	19	5	−72	n.a.	n.a.	n.a.
Italy	13	19	48	141	52	63
Japan	24	25	2	37	45	51
Netherlands	n.a.	n.a.	n.a.	21	21	23
New Zealand	n.a.	n.a.	n.a.	n.a.	9[d]	13
Norway	n.a.	n.a.	n.a.	20	47	30
Sweden	n.a.	n.a.	n.a.	56	38	53
Spain	19	20	6	n.a.	n.a.	n.a.
United Kingdom	24	18	−27	44	54	52
United States	22	20	−11	34	26	29
Average[b]	22	18	−18	40	35	35

n.a. = not available

a   To nearest percentage point; see text for explanation of the indicators.
b   Unweighted average; own calculations excluding Denmark and New Zealand for the macroeconomic indi-
    cator.
c   Unweighted average for the years 1983–86.
d   Unweighted average for the years 1982–86.
e   Data on Germany are taken from Genser, Hettich and Schmidt (1999); averages are for the years 1980–86
    and 1987–95.

Sources: Chennells and Griffith (1997); Swank (1998); Genser, Hettich and Schmidt (1999).

the basis of detailed information about a country's tax system. As a result, while
these estimates are very precise, they are also highly dependent on the assump-
tions made about the particular investment project (see Chennells and Griffith
1997; Devereux and Griffith 1998). The *macroeconomic* indicator of average effec-
tive corporate tax rates expresses corporate tax revenues as a percentage of the
operating surplus of the corporate sector. Although this indicator has increas-
ingly been used in the political science literature, it is not suitable for an interna-
tional comparison of the *levels* of effective corporate tax burdens (see Ganghof

1999a). Any interpretation of this data should be done in conjunction with other indicators and should focus on the *time-path* of the estimated tax rates.[12]

Despite these caveats, the two indicators *taken together* clearly show that, on average, there was not a very strong downward trend in effective tax rates between 1979 and 1994. While microeconomic tax rates decreased by 18 percent during this period, macroeconomic estimates show no average downward trend at all. This evidence suggests that competitive pressures on effective corporate tax rates have so far been rather moderate. The *average* change, however, provides limited information in light of large cross-country differences (see table 1). The microeconomic rates went down markedly in Australia, France, the UK, and especially in Ireland, but they went up in Japan, Spain, and quite sharply in Italy.[13] The macroeconomic rates declined strongly in countries such as Norway, Belgium, Denmark, France, and Germany. In France and Germany, they dropped precipitously between 1980 and 1996 – by 49 and 57 percent, respectively (see Genser, Hettich and Schmidt 1999). On the other hand, they increased strongly in countries such as Sweden and Italy.

It is certainly no coincidence that Italy shows large increases on both indicators. Italy's dept problem led to a continuous rise in total tax revenues, which included corporate taxes. In general, both the average stability of general effective corporate tax rates and the cross-countries differences are partly explained by countervailing pressures on public budgets. The correlation between the change of the (microeconomic) effective tax rates and the increase of the total tax burden in the ten countries covered is 0.61. But this brings us to the second main argument of this paper, which is elaborated in section 4.

As a final caveat, note that corporate tax reform and tax competition did not, of course, disappear from the agenda of OECD countries after 1994. At the time of writing, a number of countries have approved additional cuts in effective tax rates. Even Italy – the most obvious outlier in table 1 – started a major overhaul of the corporate tax system in 1997, which reduced the effective corporate tax burden (Bordignon, Giannini and Panteghini 1999; Giannini 1997). Nevertheless, while effective corporate tax rates surely have a ways to go before reaching a new

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12 Even this is quite difficult, however, since a number of countries' macroeconomic estimates are extremely volatile, which makes it hard to see any trends (Ganghof 1999a). Note in addition that while the macroeconomic estimates in table 1 generally come from Swank (1998), the figures for Germany come from Genser, Hettich and Schmidt (1999). These authors use correct estimates of Germany's corporate operating surplus that are incorrectly reported in OECD National Accounts.

13 Note that the Irish (microeconomic) effective tax rate applies to the manufacturing sector and reflects the preferential tax rate of 10 percent.

(temporary) equilibrium, so far one cannot speak of a race to the bottom with respect to *general* effective corporate tax rates.

Let us finally take a brief look at changes in general *personal income tax* schedules. As is well known, personal income tax systems have also become flatter, top marginal tax rates have been reduced, and the tax base has been broadened by measures like limiting exemptions or taxing fringe benefits. With regard to *effective* tax rates, these reforms, on average, benefited high-income earners more than low-income recipients, which would be consistent with the simple tax competition model. Between 1978 and 1995, average effective tax rates rose considerably at the low end of the earnings scale, but typically increased only modestly or fell for high-income earners (even though patterns varied widely from country to country at the high end) (OECD 1998c: 161).

Yet empirical evidence suggests that it was *not* mainly competitiveness considerations that drove personal income tax reforms, but rather a changed philosophy of tax policy and widespread skepticism on the effectiveness of progressive rate schedule (Messere 1997; Owens 1993: 31; Sandford 1993: 20). Unfortunately, quantitative comparative investigations of changes in *effective* personal income tax rates are rare and often neglect important factors. One of these factors is geographic, cultural and linguistic "proximity" between countries. Where the non-tax costs of changing one's domicile decrease, tax differentials become more important. For instance, Canada has for a long time been constrained by U.S. personal income tax policy (Bird and Mintz 1994), and the Canadian policy debates of the last two decades have unambiguously involved arguments to the effect that unmatched rate reductions in the U.S. might generate an outflow of professional and other higher-income labor from Canada (Albert, Shoven and Whalley 1992: 10; OECD 1997: 71–106).

3.3   Adjustment strategy II: Cutting statutory tax rates

The first revenue-preserving alternative to *effective* cuts of general income tax rates has been cuts in the *statutory* rate plus a simultaneous broadening of the tax base. This policy of tax-cut-cum-base-broadening has been pursued in both personal and corporate income taxation. Yet only with respect to corporate taxation is there clear evidence that competitive pressures have been one of the major driving forces behind this policy. As I have just noted, reforms of personal income tax schedules have mainly been motivated by domestic considerations (Owens 1993: 31; but see Hallerberg and Basinger 1998).

Focussing on corporate taxation, the empirical evidence is clear. As shown in table 2, between 1986 and 1998 almost all 18 OECD countries significantly cut *statutory* tax rates, sometimes by almost 50 percent (although this did not lead to cross-country convergence). The average *total* corporate tax rate (i.e., including profit taxes at subnational levels) decreased from 48 to 37 percent, the median rate from 50 to 36 percent. But what does this policy have to do with tax competition? After all, most countries used base broadening to make these reforms more or less revenue-neutral (Garrett 1998c: 90). The answer is that statutory rates as such have important effects on the location of both real investment and the mobile tax bases of MNEs (Ganghof 1999b; Hallerberg and Basinger 1998). Three competitive mechanisms are of special importance.

The first two mechanisms concern competition for real investment. First, companies that have to make locational decisions and are facing very complex tax codes use statutory rates to some extent as proxies for effective rates, because they lack more detailed information – either about effective rates or about the extent to which their future investment profile will enable them to make use of tax relief provisions (e.g., depreciation allowances or investment tax credits) (BMF 1999: 12). Statutory rates thus have an important *signaling function* for investors. Second, recall that in some countries, like the U.S., a domestic parent can claim a *foreign tax credit* for repatriated profits of a foreign subsidiary and that this tax credit is usually limited to the domestic statutory tax rate. Thus, a U.S. parent pays the U.S. rate on foreign profits as long as the foreign statutory rate is lower than in the U.S. If the foreign rate is higher, however, the firm ends up paying the foreign tax. MNEs thus have an incentive to locate subsidiaries in countries with a tax rate lower than or equal to the domestic rate. Governments in turn have an incentive to keep their rate in line with other countries. Considerations like this were especially important with respect to the U.S. tax reform of 1986. The third mechanism does not concern investment competition, but has to do with international tax avoidance and evasion. Statutory rates directly affect the (re-)location of income by MNEs through techniques like thin capitalization and transfer pricing.

Due to these mechanisms, even countries that wanted to maintain a given effective tax rate had an incentive to restructure their corporate tax system by reducing statutory rates and broadening the tax base (Slemrod 1990). Case studies show that this type of reasoning played a considerable role in the tax reforms of many, albeit not all, OECD countries "responding" to rate cuts in Great Britain in 1984 and the U.S. in 1986 (for an overview, see Ganghof 1998). This does not mean, however, that competitive pressures were the only or even most important driving forces behind the tax-cut-cum-base-broadening reforms. In fact, in many countries, domestic considerations were probably more important. Governments turned towards a new philosophy of taxation, aiming primarily at the allocative neutrality of tax systems (for a summary, see Steinmo and Swank 1999).

Table 2   Statutory corporate tax rates in 18 OECD countries (%)[a], 1986 and 1998

	1986	1998	Change (percentage points)
Australia	49	36	−13
Austria[b]	55	34	−21
Belgium[c]	45	40	−5
Canada[d]	52	45	−7
Germany[e]	63	56	−7
Denmark	50	34	−16
Finland	49	28	−21
France[f]	45	42	−3
Ireland	50	38	−12
Italy[g]	46	41	−5
Japan[h]	53	46	−7
Netherlands	42	35	−7
New Zealand	48	33	−15
Norway	51	28	−23
Sweden	52	28	−24
Switzerland[i]	34	34	0
United Kingdom	35	31	−4
United States[j]	51	41	−10
Mean	48	37	−11
Median	50	36	−9
Coefficient of Variation	0.14	0.19	

a   To nearest percentage point; rates given are "normal rates", including subnational tax rates and temporary surcharges; in the case of progressive rate schedules, top marginal rates are given; when rates on distributed and non-distributed profits differ, the latter are given.

b   Progressive rate schedule until 1989. Local tax was abolished effective 1994.

c   Rate for 1998 includes "crisis surcharge" of 3%.

d   Rates include local tax averaged over all provinces.

e   Rates apply to non-distributed profits only. Figures include the (profit-related part of the) local Enterprise Tax (at an approximate rate of 16%). The local tax is deductible from the corporate income tax base. Figure for 1998 also includes a surcharge of 5.5%.

f   Rate for 1986 applies to non-distributed profits only. Figure for 1998 includes a corporate tax rate of 33.3% and a surcharge of 25%.

g   Rate for 1986 includes local profit tax (ILOR) partly deductible from the corporate income tax base (IRPEG). The rate for 1998 includes a local tax on value added (IRAP) set at 4.25%, which replaced ILOR. After adjusting for the different tax base of IRAP, the Cologne Institute for Business Research estimates the top marginal tax burden on corporations to be 58%.

h   Rate includes local Corporate Enterprise Tax (deductible from tax base of national Corporation Tax) as well as Corporation Inhabitant Tax.

i   Progressive schedule until 1997. Rate includes (progressive) subnational taxes (based on canton and city of Zurich).

j   Rate includes local tax rate for the state and city of New York.

Sources: Coopers & Lybrand; German Ministry of Finance (BMF); Cologne Institute for Business Research (Institut der deutschen Wirtschaft); author's calculations.

Quantitative studies also find evidence for both international and domestic determinants of changes in statutory corporate tax rates. Hallerberg and Basinger (1998; 1999), Wagschal (1999a; 1999b) and Ganghof (1999b) used cross-sectional designs to investigate the role of economic and political factors in explaining the magnitude of tax cuts in OECD countries after 1986. Steinmo and Swank (1999) analyze the development of tax rates using a pooled data set for OECD countries from 1981 to 1995.

Hallerberg and Basinger (1998) as well as Ganghof (1999b) find that higher tax rates in 1986 (the assumed starting year for the tax reform wave) were significantly related to larger tax cuts – indirect evidence for the importance of competitive considerations. As to domestic factors, both studies find that higher real GDP growth was significantly associated with smaller tax cuts, which points towards domestic considerations. In addition, Steinmo and Swank (1999) find that lower rates of domestic investment were significantly related to lower marginal corporate tax rates and that increases in structural unemployment were significantly associated with declines in marginal rates.

There is also evidence that domestic budgetary stress made even statutory (as opposed to effective) tax cuts more difficult. Steinmo and Swank (1999) find that higher public debt was significantly associated with higher corporate tax rates. The prime example for this type of constraint is Italy, which had been the only country to *increase* – from 46 to 53 percent – its general government tax rate after 1986. Only in 1997 did Italy manage to start a major corporate tax reform and reduce the statutory rate by abolishing the local profit tax (see table 2). Similarly, Ganghof (1999b) finds that higher growth of the total tax ratio during the adjustment period was significantly related to smaller cuts in marginal tax rates – a result that is strongly influenced by the high tax cases Italy and Germany, however.

One mechanism underlying the relationship between *statutory* tax rates and budgetary constraints may be that, everything else being equal, tax-cut-cum-base-broadening reforms in fact reduce domestic real investment (cf. Sinn 1989; 1997). Both the tax cut and the abolition of investment incentives, depreciation allowances etc. reduce the tax advantage of real investments compared to financial investments. Therefore, even for governments that aim at a more neutral tax system, such a policy may be difficult to pursue if the economic situation is bad or if governments see no budgetary room to compensate (by reducing *effective* corporate tax burdens or *unit labor costs*) for the adverse effects on real investments. Such considerations played a role in German tax reform, for instance (Weichenrieder 1996).[14]

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14   In addition, the constraining effect of domestic budgetary tension on statutory corporate tax cuts may result from a strong alignment between corporate and personal

Finally, there is disagreement about whether partisan and institutional factors explain international variation in the magnitude of statutory tax cuts. Hallerberg and Basinger (1998; 1999) as well as Wagschal (1999a; 1999b) – focussing on *central* government rates – find that the number of domestic veto players (e.g., strong second chambers) had a negative effect on the scope of tax reforms. Hallerberg and Basinger also find that left governments pursued deeper statutory rate cuts. By contrast, Ganghof (1999b) argues that *total* government tax rates (including subnational rates) were the strategic variables for governments. On the basis of that assumption he finds that neither the number of domestic veto players nor the partisan composition of the government had a considerable and statistically significant effect on the scope of tax reforms. [15]

In sum, the policy of tax-cut-cum-base-broadening has been an important aspect of recent tax reforms. It has been driven both by competitive pressures and domestic economic considerations. At the same time, domestic budgetary tension seems to have made even statutory tax cuts more difficult.

3.4   Adjustment strategy III: Differential tax cuts

In contrast to the policy of tax-cut-cum-base-broadening, the strategy of differentiating tax treatment for different incomes has received almost no mention in the political science literature on tax policy adjustment. Yet the basic logic is perfectly obvious. If the force of competitive pressures varies strongly across different segments of the corporate and personal income tax base, and if countries cannot afford the revenue losses associated with large-scale effective tax cuts for *both* mobile and immobile factors, they may only be able to achieve effective tax cuts by focusing those cuts on the most mobile tax bases. The most obvious form of differentiation would be between labor incomes and capital incomes within the personal income tax.

But such a *schedular* tax treatment of different kinds of incomes stands in sharp contrast to the time-honored ideal of *comprehensive income taxation,* which has been the guiding idea of taxation in most OECD countries (Messere 1993: 224, 237–238). According to this principle, no difference should be made between different forms of income, because they all contribute to a taxpayers' *ability to pay.* Different types of incomes should be taxed jointly under a common progressive tax rate schedule. Increased differentiation between different forms of incomes

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income tax rates. See the example of Germany in the next section.

15   Note that these results are robust with respect to possible *additional* veto players in countries with subnational profit taxes (Ganghof 1999b: 466, fn. 13).

may thus go against traditional notions of tax justice. Moreover, it may lead to new domestic options for tax avoidance and arbitrage and reduce the allocative neutrality of the tax system.

In the following, I survey different forms of increased differentiation in corporate and personal income taxation and explore possible conflicts between them and established goals of income taxation. Due to the lack of systematic comparative investigations of these topics, the discussion is often unavoidably anecdotal, additional research is necessary. I deal with corporate and personal income taxation in turn.

3.4.1   Corporate taxation

In corporate taxation, differentiation has generally taken the form of *preferential tax regimes* that side-step the general tax system. These regimes offer greatly reduced effective corporate tax rates, which may even be negotiated, to some extent, between the company and the tax authorities at the time of application.[16] These regimes are targeted at the geographically mobile business activities mentioned in section 3.1.1. While there are no useful quantitative data available on these regimes, their number and scope clearly increased in the last two decades – partly due to competitive bidding (see Baker & McKenzie 1999). For example, many OECD countries have set up special regimes for holding companies, and long-established holding locations like Switzerland recently felt compelled to increase the attractiveness of their regimes (Bonoli and Mach 2000). Many high-tax countries established preferential regimes or extended existing ones. For instance, France recently extended its headquarter regime (de Drouas 1996), and Denmark introduced one of the world's most attractive holding company regimes, effective 1999 (Baker & McKenzie 1999: 86). This type of competition also forced countries that have traditionally been opposed to any kind of competitive tax policy to match the favorable tax and financial regimes offered by other countries. For example, Australia established a special regime for banking activities in order to avoid having a large portion of its financial activity go offshore to Asian low-tax regimes (McMullen 1994: 21).

In recent years, preferential regimes have received a lot of attention – especially in Europe – as cases of "harmful tax competition" (for an overview, see CEPS 1999; OECD 1998a). Two aspects, in particular, make them seem "harmful". First, the

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16 Note that the attractiveness of a particular regime may not only stem from low corporate income taxes, but also from such features as low capital gains taxes or a country's favorable network of international tax treaties (with low withholding taxes on international income flows as a corollary).

companies attracted by preferential tax regimes often play a crucial role in multi-nationals' international tax avoidance behavior. They are the low-tax platforms for the (combined) application of techniques such as thin capitalization, transfer price manipulation, or deferral. Preferential regimes thus not only attract mobile resources (direct investment); they also make it easier for multinational corporations to reduce their tax burden in high-tax jurisdictions. Second, many preferential regimes disregard international tax principles, lack transparency, apply only to foreigners, and shelter the domestic economy from the economic effects of the regime (Easson 1998).

Country-specific evidence suggests that preferential tax regimes may have significant effects on foreign direct investment (for Germany, see Spengel 1998: 16; Weichenrieder 1996). But their effects – both in terms of tax revenues and investment flows – are very difficult to quantify and have not yet received a lot of attention in econometric studies. In addition, little is known about what explains cross-country differences in the reliance on preferential regimes. It is nevertheless clear that preferential tax reductions have been an increasingly important policy, helping defend or increase the attractiveness of a country for mobile (financial) companies (and thus possibly even attracting foreign tax bases) while avoiding the major revenue losses that come from large tax reductions for the bulk of the domestic corporate tax base.

3.4.2 Personal income taxation

That differentiation in corporate taxation takes the form of preferential regimes is perfectly obvious. It is hard to think of *systematic* reasons for differential tax treatment of the most mobile kinds of companies, so differentiation takes the form of exceptions. The same thing also happens for personal income taxation, though on a smaller scale. The most obvious example of preferential tax treatment is the special tax reduction (whether low, flat tax rate or large allowance) for executives of multinational companies temporarily residing in a country hosting an MNE branch, an exemption that exists in many OECD countries. In fact, these so-called *expatriate regimes* are often integral parts of corporate *headquarter regimes*, because headquarters imply a large share of foreign expatriates. Anecdotal evidence shows that personal income tax levels for executives may determine locational choices, so that company's competition for top executives translates into tax competition for foreign direct investment. It would be interesting to know to what extent political factors account for the fact that countries like Sweden or Germany have been reluctant to introduce such regimes, but, again, systematic evidence on this is lacking.

Yet in personal taxation this type of preferential tax treatment for certain mobile *groups of taxpayers* is the exception. Since differences in mobility partly correspond to different *types of incomes*, a more systematic form of differentiation is possible, pushing tax systems towards a schedular income tax, which, in its purest form, is the exact opposite of a *comprehensive* (or global) income tax. I shall first briefly sketch different types of differentiation within personal income taxation and then speculate about possible conflicts between these types and the goals of tax justice and allocative neutrality.

There are two basic approaches towards differentiation. The first approach is to remove *some* forms of capital income from the ambit of the personal income tax without changing the general approach towards personal income taxation. The most obvious example is *income from financial assets*, especially interest from bank deposits. Since financial income is *most* sensitive to international tax differentials, governments have an incentive to cut or abolish withholding taxes on interest for residents and non-residents. Table 3 suggests that many governments have at least partly followed this logic. By 1996 only 7 of 20 OECD countries levied withholding taxes on the interest income (from bank deposits) of *non-residents*. More importantly for my point, 10 of the 20 countries moved towards low, flat-rate final withholding taxes on the interest income of *residents* – outside the ambit of the progressive personal income tax. Growing competitive pressure has been one of the driving forces behind these reforms (see, e.g., Müssener 1996).[17]

Another example of the first approach is the differential reduction for *unincorporated businesses* (which are generally taxed under the progressive personal income tax). In 1994 the German government lowered the top marginal personal tax rate for *business* income (i.e., income of unincorporated businesses) to 47 percent, whereas the *general* top personal income rate stayed at 53 percent. The tax reform passed in 1999 will reduce the former rate to 43 percent (by 2000) and the latter to 48.5 percent (by 2002). At the time of writing, Germany's Social Democrat-Green government is planning large-scale cuts for taxes on *retained* profits of unincorporated businesses. They would be taxed at a flat rate of 25 percent (aligned with the *corporate* tax rate on retained profits), whereas profit withdrawals and other types of personal income would still be subject to the general progressive rate schedule. Similar rules already exist in Denmark, for example (OECD 1996c: 74). Under the so-called "company scheme" Danish households' income from unincorporated business activities is subject only to the corporate tax rate, provided household accounts keep the proceeds separate from their other assets. Only when money is extracted from the company scheme it is taxed (again) at a rate equal to the difference between household marginal taxes and the corporate tax rate.

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17   Other aims include mitigating the lack of adjustment to inflation.

Table 3   Taxes on interest from bank deposits, 1980 and 1996

	Tax rates on residents: top personal income tax rate (TP) or final withholding (FW)[a] (%)				Tax rate on non-residents (%)
	1980		1996		1996
Austria	62	TP	25	FW	0
Belgium	72	TP	15	FW	0
Canada	63[c]	TP	49[c]	TP	25[b]
Denmark	70	TP	62	TP	0
Finland	n.a.	n.a.	28	FW	n.a.
France	25	FW	19	FW	0
Germany	56	TP	57	TP	0
Greece	63[d]	TP	15	FW	15[b]
Ireland	60	TP	48	TP	0
Italy	13[e]	FW	30	FW	30
Japan	20	FW	20	FW	15
Luxemburg	57	TP	51	TP	0
Netherlands	72	TP	60	TP	0
Norway	n.a.	n.a.	28	FW	n.a.
Portugal	70[d]	TP	20	FW	20
Spain	66	TP	56	TP	25[b]
Sweden	50	TP	30	FW	0
Switzerland	43[c]	TP	42[c]	TP	35
United Kingdom	75	TP	40	TP	0
United States	74[c]	TP	44	TP	0

n.a. = not available.

a   To nearest percentage point.
b   Various reduced rates and exemptions.
c   Tax rate varies by state, province, or canton of residence.
d   Rate for 1985.
e   Many different rates applicable. The rates given are "typical".

Sources: Owens (1993); German Ministry of Finance; Coopers & Lybrand (various years): *International Tax Summaries*.

The second approach towards schedular taxation is more consistent. Between 1991 and 1993, the three Nordic countries Sweden, Norway, and Finland changed their general tax system towards a so-called *Dual Income Tax* (DIT), which treats *all* kinds of capital income equally for tax purposes, while at the same time entirely separating the taxation of capital and labor income. Capital income is taxed at a proportional tax rate between 25 and 30 percent, while labor income is still

taxed progressively and at markedly higher marginal rates (Sørensen 1998). This switch towards the DIT system has explicitly been treated as a response to globalization and tax competition (see, e.g., Tikka 1993: 93). However, there were many other motivations, too, such as reducing the distortional effects of progressive income taxation in an inflationary environment, to strengthen private savings incentives, and to limit the scope for *domestic* tax arbitrage and avoidance (Sørensen 1998).

These forms of schedular taxation are obviously most well-suited to reconciling the two goals of *revenue-raising* (from less vulnerable types of incomes) and *competitiveness* (with respect to the most sensitive tax bases). However, this "solution" may conflict with the goals of *justice* and / or *neutrality*. In the following, I want to take a closer look at both the Dual Income Tax and Germany's reform experience in order to explore possible trade-offs.

The DIT-approach towards differentiation seems to have avoided conflicts with the neutrality goal of tax policy. In fact, one major goal of the DIT system was to *increase* the neutrality of capital income taxation by avoiding the kinds of differences in marginal effective tax rates on different types of savings and investment that are inevitable under a *real-world* conventional income tax (see, e.g. Cnossen 1995; Sørensen 1998). At the same time, although *effective tax rates* have strongly declined for some of the most mobile forms of capital incomes, *total revenues* from capital income taxation either stayed constant or even rose after the DIT reforms (see table 5, as well as Sørensen 1998: 4; Tikka 1993; Zimmer 1993).

The reason for this result is that some forms of capital incomes had always been taxed leniently – or even negatively – under the old income tax.[18] Therefore, the switch to the DIT *increased* the tax burden on some forms of capital income, e.g., capital gains and income from owner-occupied housing, that are less vulnerable to competitive pressures (cf. Sørensen 1998). This type of tax base broadening accounts for the reconciliation of the two goals of competitiveness and revenue-raising.[19] Thus, in the Nordic countries differentiation in tax treatment did not *increase*, but *change* in a way that made the tax system more robust under international pressure.

Yet the DIT is not without its problems. First, whereas the neutrality goals may have been strengthened, the same cannot be said unambiguously with respect to

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18 This observation can be made in many OECD countries. In fact, in a number of countries *total tax revenues* from personal capital income were estimated to be *negative* (Cnossen 1995: 300–301).

19 This type of shift of the effective tax burden from "mobile" to "immobile" tax bases *within* the capital income tax base (both personal and corporate) may, in part, explain the stability of *total* capital income tax revenues in many countries.

tax justice. In theory, it is true, the switch to the DIT system has not necessarily increased the injustice of the tax system (Nielsen and Sørensen 1997; Sørensen 1998). From a political economy perspective, however, *voters' views* on tax justice are more important. In fact, negative views towards the DIT system were part of the reason why Denmark moved back towards a comprehensive income tax in 1993, although the idea of the DIT system actually originated in Denmark and had to some extent been implemented as early as 1987. "[I]t had proved difficult to gain popular acceptance of a tax system which taxes large positive income from wealth at a considerably lower marginal rate than income from labor" (Sørensen 1998: 23).

The second problem is that the DIT system may not reconcile the three goals of competitiveness, revenue-raising, and neutrality in the future. If competitive pressures in the area of interest taxation increase, further cuts may either lead to revenue losses or have to be restricted to interest income, thus compromising al-locative neutrality (cf. Viherkenttä 1996: 136).

A similar trade-off is already apparent in Germany's experience with differentia-tion. To make a long story short, the crucial problem is the following: When the German government introduced a lower top marginal tax rate for business in-come, it mainly did so *not* out of fear that unincorporated businesses would leave the country, but rather owing to neutrality considerations. Since 1977 the neutral-ity of taxation with respect to the *legal form of business organizations* had been guaranteed by aligning the corporate tax rate on profit retention with the top per-sonal income tax rate. This alignment is especially important in Germany, be-cause around 85 percent of all businesses are not incorporated. With the down-ward pressure on statutory corporate tax rates, the alignment came increasingly under pressure.

In 1990, the corporate-personal tax alignment was loosened for the first time. The corporate tax rate on retained profits fell from 56 to 50 percent while the top per-sonal rate fell only to 53 percent. When the next corporate tax cuts – from 50 to 45 and then to 40 percent – were passed in 1994 and 1999, the government faced a difficult choice. Leaving the top personal rate where it was would have made the differential between the two rates much more severe. On the other hand, simul-taneous cuts in the top personal rate by 5 percentage points each time were re-garded as impossible to finance, given domestic budgetary tension. The way out of this dilemma was to restrict the cut of the top personal rate to *business incomes*, thus trading less discrimination between incorporated and unincorporated busi-nesses against differentiation (and therefore more inequality) *within* the personal income tax system. The top rate for business income fell to 47 in 1994 and 45 per-cent in 1999 (scheduled to be reduced to 43 percent in 2000), while the normal top

marginal personal tax rate stayed at 53 percent until 1999 (scheduled to be reduced to 48.5 percent by 2002).

Yet this approach was exhausted after the 1999 tax reform. Given high local profit taxes, the *total* statutory corporate tax rate on retained profits was still above 50 percent – considered too high by "international standards" (see table 2). Therefore, at the time of writing, the Red-Green (SPD-ecological party) government is planning to cut the *federal* corporate tax rate on retained profits from 40 to around 25 percent. As before, simultaneous cuts in marginal personal tax rates are considered to be too costly. But further differential cuts for unincorporated businesses would not work either. For one thing, the rate differential *within* the personal income tax would become too large. In addition, the Federal Fiscal Court argued that this specific form of discrimination was unconstitutional. As a result, the government is now trying to push through a reform that only discriminates in favor of unincorporated businesses' *retained* profits by taxing them at the low corporate tax rate on profit retention. Extracted profits and other types of personal income would still be subject to the general progressive rate schedule. Not surprisingly, the majority of economists rejects this reform proposal, because it would probably make the allocation of capital less efficient by locking in profits.

In sum, there seems to be a three-way trade-off in Germany's overall system of income taxation among the goals of competitiveness, revenue-raising, and neutrality, a trade-off largely driven by tax competition in *corporate* taxation. It is ironic that this trade-off exists even though adjustment in corporate taxation could focus on cuts in *statutory* (as opposed to effective) tax rates and thus be, to a large extent, revenue-neutral. The reason for this form of "spillover" is that the kind of base-broadening that would be needed to make simultaneous cuts in *personal* income taxation revenue-neutral are much more difficult (or even impossible) to achieve.[20]

To be sure, the specific three-way trade-off in Germany exists because of how country-specific factors – the large share of unincorporated businesses and the existence of local profit taxes – interact. Moreover, in theory, there *are* ways to escape the trade-off. One I have already mentioned: Extensive base broadening in personal income taxation. Another way out would be to reform or abolish the local profits tax. However, pursuing these solutions is made difficult by *domestic* factors – economic, institutional, legal, and political. Thus it is the *combination* of

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20 This implies, conversely, that the economic link between corporate and personal tax rates explains much of Germany's difficulty bringing down the statutory corporate tax rate (see section 3.3). Since Germany did not want to abandon the goal of a "level playing field" between incorporated and unincorporated businesses entirely, the fiscal constraints in personal income taxation limited the scope of corporate cuts.

competitive pressures *and* domestic constraints that makes it so difficult for the German government to design a tax reform that would reconcile the major goals of tax policy. It remains to be seen whether the government will eventually find a way to escape the three-way trade-off. But whatever the choice will be, the constraining effect of intensified tax competition is obvious.

In sum, all the varieties of differentiation that have (at least in part) been induced by competitive pressures seem to have a potential to create severe tensions in a given country's income tax policy. Both the precise form of differentiation and the resulting trade-offs vary across countries. Since this variation is partly due to political and institutional factors, and given how important the emerging trade-offs are in economic terms, systematic comparative investigations into the political economy of differentiation seem overdue.

3.5 Adjustment strategy IV: Legal and administrative counteraction

The third revenue-preserving policy alternative to making general cuts in effective tax rates has been to pass or strengthen anti-avoidance rules and increase administrative action against international tax evasion. The most important *specific* anti-avoidance rules deal with the problems of deferral, thin capitalization, and transfer pricing (which were explained in section 3.1.1). In all three areas, the starting point for understanding the problem and effective countermeasures is the so-called *arm's length/separate accounting basis of taxation* (hereafter "AL/SA") utilized by all OECD countries. AL/SA recognizes related corporations as separate entities for tax purposes, with intra-firm transactions booked as though the legal persons were unconnected and dealing with each other at arm's length (OECD 1996a: 10).

As to transfer pricing and thin capitalization, the problem is to make sure that MNEs adhere to the arm's length standard. *Transfer pricing* rules require related parties to use specific methods for calculating transfer prices for tax purposes. *Thin capitalization* rules deny deductions for interest paid by a resident corporation to a non-resident shareholder to the extent that the corporation is "excessively" debt-financed (Arnold and McIntyre 1995). The problem of *deferral* is not so much poor implementation of the AL/SA standard as the standard itself. In the absence of anti-avoidance legislation, it would be easy for a resident taxpayer in an AL/SA system to avoid domestic taxation on the resident's foreign income by interposing a corporation in a low-tax (preferential) regime to receive such income instead of remitting it to the home country. Therefore, under *Controlled Foreign Company (CFC) regimes* resident taxpayers controlling a foreign company are required to recalculate the income of the foreign company and pay tax on the

latter's retained earnings calculated according to the tax code of the residence state. This is only done in "abusive" situations, which are defined differently in different countries. Generally speaking, the resident may be taxable only if the non-resident company is subject to an exceptionally *low effective tax rate* (e.g., in a preferential tax regime) and only on its *passive income* (OECD 1996a).

In *personal* income taxation, where the problem is international tax *evasion*, the main option governments have for dealing with this problem *unilaterally* is to strengthen enforcement of existing legislation and prosecute tax evaders. Germany, for example, has pursued this option by making large-scale, country-wide investigations of German banks and persecuting bank employees and managers for aiding and abetting international tax evasion.

There is evidence that such legal and administrative measures can be quite effective in defending a country's revenue base against resourceful taxpayers and preferential tax regimes (see, e.g., Ruding Report 1992: 123; Weichenrieder 1996). Therefore, all advanced OECD countries seem to have adopted at least some of these measures. Yet there are two generic limitations. First, rising marginal costs of administration (which show up on the expenditure side of the budget) reduce the benefits of such measures and create a dead weight for the economy (Tanzi 1998). Second, successful countermeasures increase the effective tax burden of MNEs and thus their incentives to relocate. This limitation is exemplified by recent concerns about the tightness of CFC legislation in New Zealand and Germany (Becker 1997; Devereux 1996; see also Owens 1997: 43).

4   Countervailing pressures on tax mix, revenue mix, and budget size

The discussion in section 3 has shown that governments have also pursued other adjustment policies besides cutting effective income tax rates in general. This should have led to smaller revenue losses. Yet these alternative strategies have had their limitations, too, and some countries *have* implemented general effective tax cuts, especially in corporate taxation. As a consequence, there have been competitive pressures on the tax mix, the revenue mix, and budget size. At the same time, however, there have also been growing countervailing pressures on these three aggregate variables, both domestic and international. In the following, I investigate these countervailing pressures in more detail and review the available data. The next section looks at the tax mix, section 4.2 at the revenue mix and budget size.

% in GDP
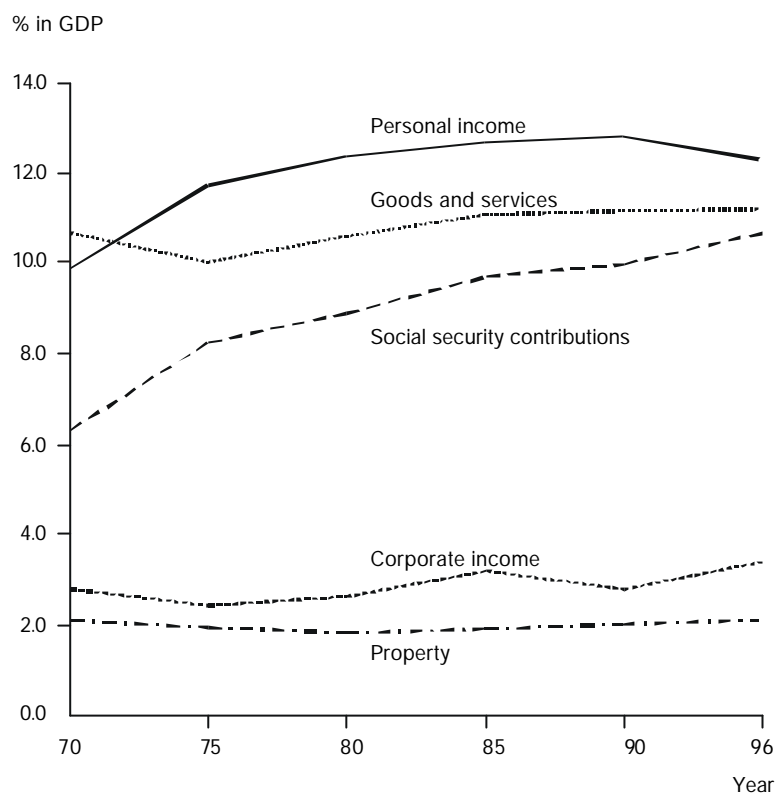
Figure 2   Average tax ratios of 18 OECD countries in 1970, 1975, 1980, 1985, 1990, and 1996 (intervening years are not covered)

Note: Unweighted averages.

Source: OECD (1997): *Revenue Statistics 1965–1996*, Paris: OECD.

% in total tax receipts
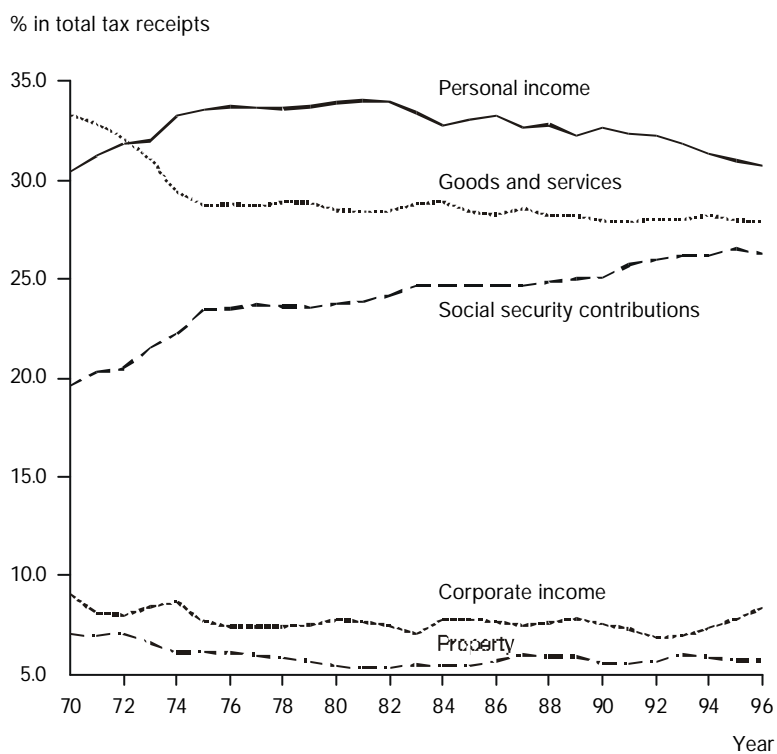
Figure 3   Average tax mix of 18 OECD countries, 1970–1996

Notes: Unweighted averages.

Source: OECD (Paris, 1997): *Revenue Statistics 1965–1996*, Paris: OECD.

4.1 Changes in the tax mix

4.1.1 The evidence

Figures 2 and 3 display average revenues (OECD-18) from the major types of taxes as percentages of GDP and total taxation, respectively, between 1970 and 1996. Tax ratios and tax structure paint a similar picture. What we see is a considerable shift in the tax mix towards social security contributions and payroll taxes. Their average share of total taxation rose by around one-third from 19.6 percent in 1970 to 26.3 percent in 1996. While this growth seems consistent with decreasing relative marginal costs for charging taxes on labor, over half the growth (3.9 percentage points) occurred in the five years from 1970 to 1975 – at a time when capital was still rather immobile – and mainly constituted a shift away from other "immobile" tax bases – excises and property taxes. Therefore, this shift had more to do with the growth of the welfare state than with growing tax competition. Between 1975 and 1996, the shift towards social security contributions was more moderate (a rise of 2.8 percentage points). In addition, this shift came increasingly at the expense of the personal income tax, whose share fell from 34 to 30.7 percent between 1981 and 1996. Since the personal income tax is to a large extent a tax on wage income, the shift towards labor may be even more moderate than the shift to social security contributions suggests.

The shares of the other three major types of taxes remained more or less the same (figures 2 and 3, tables 4 and 5). The share of taxes on goods and services fluctuated at around 28.5 percent, the corporate income tax share at 7.5 percent, and the property tax share around 5.5 percent. Cross-national deviations from this average picture are small enough for the average to be a meaningful summary of the overall development.[21]

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21 However, significant country-country differences with respect to the corporate tax share should be noted (table 5). Between 1985 and 1996, this share remained more or less stable in some countries, decreased markedly in others (e.g., Japan, Norway and Germany), and increased markedly in still others (Australia, Ireland). While these differences may be explained by a multitude of factors, one particular factor merits attention. A growing corporate income tax share may not always be the result of *increasing* effective tax rates, but might be due to an *inflow* of taxes from foreign sources in response to *decreasing* tax rates. For example, Ireland's corporate income tax revenues increased strongly between 1985 and 1996: from 1.2 to 3.2 percent of GDP and from 3.2 to 9.6 percent of total taxation (table 5). While this increase is partly due to the Irish economy's rapid growth since 1987, it may also be due to an inflow of foreign tax bases in response to very low (preferential) tax rates.

Table 4   Percentage of tax receipts from relatively "immobile" tax bases in
             total tax receipts and GDP[a], 1985 and 1996

	Social security contributions and payroll taxes as % of				Property taxes as % of				Taxes on goods and services as % of			
	Total taxation		GDP		Total taxation		GDP		Total taxation		GDP	
	1985	1996	1985	1996	1985	1996	1985	1996	1985	1996	1985	1996
Australia	5	7	1	2	8	9	1	1	33	28	10	9
Austria	38	41	16	18	2	2	2	3	33	29	14	13
Belgium	32	32	15	15	2	3	1	1	25	27	12	12
Canada	13	16	5	6	9	10	3	4	32	25	11	9
Denmark	5	4	2	2	4	3	2	2	34	33	17	17
Finland	18	26	7	12	3	2	1	1	34	30	14	15
France	45	45	20	21	4	5	2	2	30	27	13	13
Germany[b]	7	41	14	16	3	3	1	1	26	28	10	11
Ireland	17	15	6	5	4	5	2	2	44	40	16	13
Italy	35	34	12	15	3	5	1	2	25	26	9	11
Japan	30	37	8	10	10	11	3	3	14	15	4	4
Netherlands	44	40	20	17	4	4	2	2	26	29	11	12
New Zealand	1	1	0	0	7	6	3	2	23	35	8	12
Norway	21	23	9	10	2	2	1	1	38	38	16	16
Sweden	29	32	14	17	2	4	1	2	27	23	13	12
Switzerland	32	37	10	13	8	7	3	2	19	18	56	6
United Kingdom	18	17	7	6	12	11	5	4	31	35	12	13
United States	25	26	7	7	11	11	3	3	19	17	5	5
OECD 18[c]	25	26	10	11	5	6	2	2	28	28	11	11
OECD total[c]	24	26	9	10	5	5	2	2	34	33	11	12

a   To nearest percentage point.
b   United Germany since 1991.
c   Unweighted average.
Source: OECD (Paris, 1997): Revenue Statistics 1965–96.

Thus, the change in the tax mix (since 1975) seems very moderate. However, this
picture is imprecise and may be biased – for two reasons. First, there are no com-
parable time-series on the relative shares of capital and labor within revenues
from the personal income tax, and thus it is unclear to what extent the shift from
personal income tax to social security contributions is a shift from capital to labor.

Table 5   Percentage of tax receipts from relatively "mobile" tax bases in total tax receipts and GDP

| | Personal income taxes as % of | | | | Corporate income taxes as % of | | | |
| | GDP | | total taxation | | GDP | | total taxation | |
	1985	1996	1985	1996	1985	1996	1985	1996
Australia	13.6	12.8	45.2	41.2	2.8	4.7	9.4	15.0
Austria	9.7	9.2	22.9	20.9	1.5	1.6[a]	3.5	3.7[a]
Belgium	16.4	14.3	35.0	31.0	2.6	3.1	5.4	6.8
Canada	11.7	13.9	35.2	37.7	2.7	3.3	8.2	8.9
Switzerland	10.7	11.1	34.9	32.0	1.8	1.9	6.0	5.6
Germany	10.9	9.4	28.7	24.7	2.3	1.4	6.1	3.8
Denmark	24.6	27.8	50.2	53.2	2.4	2.4	4.9	4.6
France	5.7	6.4	12.8	14.1	2.0	1.7	4.5	3.8
Finland	17.0	16.9	41.7	35.0	1.4	3.2	3.5	6.7
Italy	11.4	10.5	26.7	25.1	3.2	4.0	9.2	9.2
Ireland	11.4	10.5	31.3	31.3	1.2	3.2	3.2	9.6
Japan	6.8	5.7	24.7	20.2	5.8	4.7	21.0	16.4
Norway	9.7	10.7	22.5	26.0	7.4	4.3	17.2	10.5
Netherlands	8.6	7.6	19.4	17.5	3.1	4.1	7.0	9.5
New Zealand	20.1	15.6	59.8	43.5	2.8	3.5	8.3	9.8
Sweden	19.4	18.4	38.7	35.3	1.7	2.9	3.5	5.6
United Kingdom	10.3	9.3	27.4	25.9	4.6	3.8	12.5	10.5
United States	9.9	10.7	37.8	37.6	2.0	2.7	7.5	9.6
OECD 18	12.7	12.3	33.1	30.7	3.2	3.4	7.8	8.4

a   Figure for 1995.

Source: OECD (Paris, 1997): Revenue Statistics, 1965–96.

Second, the picture does not reflect changes in the shares of capital and labor incomes within national income.

Two types of indicators try to account for such changes by dividing the total tax revenue of a given country into labor, consumption, and capital/other factors of production and expressing these revenue components not as shares of GDP or total taxation, but of the underlying aggregate tax base (taken from National Accounts Statistics) (see table 6). Mendoza and colleagues compute *"average effective tax rates"* on capital, labor and consumption while Eurostat gives *"implicit tax*

rates" on labor, consumption, and other factors of production (i.e., mainly capital) (Eurostat 1998; Mendoza, Milesi-Ferreti and Asea 1997; Mendoza, Razin and Tesar 1994).[22]

However, both indicators cannot adequately solve the first problem – the lacking breakdown of capital and labor shares in personal income tax revenues. Mendoza and colleagues simply *assume* that personal capital and labor incomes are taxed at the *same* effective rate in *all* countries and that these effective rates do *not* vary over time. This assumption may lead to biased estimates in many countries (see Ganghof 1999a; Ruggeri, Laroche and Vincent 1997). Eurostat *does* estimate the breakdown between capital and labor for each country *individually* (on the basis of estimates of national administrations) but is not able to adjust this estimate for all countries over time. Thus, both measures are plagued by significant (and possibly systematic) measurement error and are not well suited to capture changes within the structure of the personal income tax over time. Of course, the resulting bias in the breakdown of personal income tax revenues into capital and labor shares also affects the adjustment for changes in the tax base. In sum, the validity of descriptive inferences based on these two indicators seems questionable.

Fortunately, however, it turns out that both measures, while sometimes giving very different estimates for particular countries, paint a broadly similar *average* picture, which also conveys the same message as simple tax structure data (see tables 4 and 5). While the effective tax rate on capital increased only slightly or even remained constant between the mid-1970s and the mid-1990s, the effective tax rate on labor grew more strongly. This *relative* shift from labor to capital is more pronounced in the Eurostat estimates, which are probably more precise, but only available for EU countries. Thus, taken together the available data suggest that there has been a shift in the tax structure from capital to labor since the mid-1970s – mainly due to increasing social security contributions – but that this shift has so far been fairly moderate.

4.1.2 Interpretation

There is a straightforward explanation for the shift towards social security contributions. These contributions are not directly vulnerable to international tax evasion and avoidance since they are withheld at source. Governments may even have to act in order to keep them from rising because they are directly linked to social expenditures, the demand for which has increased strongly due to demo-

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22 Note that the effective tax rates on capital/other factors of production include not only capital *income* taxes but also, for example, taxes on immovable property. For a more detailed discussion of these indicators, see Ganghof (1999a).

graphic change and rising unemployment. At the same time, the electoral costs of growing social security contributions may be low compared to other taxes because they are still, at least partly, perceived as insurance contributions.

Table 6   Average/implicit tax rates on capital/other factors of production and labor, 1975–1995

	Average effective tax rates				Implicit tax rates			
	Capital		Labor		Other factors		Labor	
	1975–85	1985–94	1975–85	1985–94	1976–85	1986–95	1976–85	1986–95
Australia	42	45	18	19	n.a.	n.a.	n.a.	n.a.
Austria	20	21	38	41	40[a]	41	39[a]	41
Belgium	35	33	37	40	40	36	39	44
Canada	38	44	22	28	n.a.	n.a.	n.a.	n.a.
Denmark	42	42	35	41	31	39	39	45
Finland	32	41	31	38	14[a]	21	40[a]	48
France	25	25	37	43	45	45	37	43
Germany	29	26	35	37	51	41	37	41
Italy	22	28	28	32	23	32	32	41
Ireland	n.a.	n.a.	n.a.	n.a.	25	22	25	31
Japan	35	44	17	21	n.a.	n.a.	n.a.	n.a.
Luxemburg	n.a.	n.a.	n.a.	n.a.	44	45	33	30
Netherlands	30	31	43	46	35	34	47	51
Norway	38	37	34	35	n.a.	n.a.	n.a.	n.a.
Sweden	45	58	46	48	32[a]	42	53[a]	55
Switzerland	24	25	26	26	n.a.	n.a.	n.a.	n.a.
United Kingdom	60	52	25	21	61	49	28	26
United States	42	40	21	23	n.a.	n.a.	n.a.	n.a.
Average[b]	35	37	31	34	37	37	38	41
Standard Deviation	10	11	8	9	13	9	8	9

n.a. = not available.

a   1980–85.
b   Unweighted average.
Sources: Average effective tax rates: Swank (1998); implicit tax rates: Eurostat (1998).

The fact that the shift has been so moderate is more puzzling. Part of the answer I have already given: Institutions and non-fiscal factors have reduced the pressure on national taxation. In addition, countries took advantage of the precise form of

these pressures by pursuing revenue-preserving adjustment policies. Now I shall elaborate the second part of my account.

There have been parallel forces, both domestic and international, that have increased the marginal economic costs of taxing *"immobile"* tax bases – taxes on labor, (immobile) property, and goods and services – and thus prevented a more pronounced shift in the tax structure. In part, the international forces also have to do with competition – specially, with cost competition. Governments are concerned about the competitiveness of "national" companies in international product markets and thus have an incentive to limit the tax burden on *factors of production*. Therefore, both taxes on labor and on business property have also come under pressure.

Let us first look at *labor taxes.* Three types of taxes are, in effect, taxes on labor. Social security contributions, personal income taxes on wages, and (to a large extent) consumption taxes are all labor taxes. These levies drive a wedge between employers' real labor costs (real product wage) and workers' real take-home pay (real consumption wage). Therefore, to the extent that workers successfully resist reductions in their real consumption wage as a response to labor taxes, real labor costs increase. This rise in labor costs, in turn, reduces the demand for labor, the competitiveness of firms in international product markets, and a country's attractiveness for real investment (Leibfritz, Thornton and Bibbee 1997: 33–35; Tanzi 1995: 108). Can we also detect a marked tax-induced increase in labor costs for employers empirically? There is no unambiguous consensus in the literature, but it seems clear that the *total tax wedge*, constituted by all kinds of labor taxes together, has at least a *short-run* effect on labor costs, which may in fact last quite long (see Leibfritz, Thornton and Bibbee 1997: 33–46; Nickell and Layard 1999: 40–41). In any event, many policy makers clearly believe that labor taxes, especially social security contributions, are crucial, and this has led to pressure to reduce or contain them (cf. Genschel 1999).

Similarly, *property taxes*, even to the extent that they fall on *immobile* property, have also come under pressure.[23] Whereas options for avoiding or evading taxes on immovable property on an international scale are severely limited, taxpayers may change their residence partly in response to high taxes on immovable property. In addition, taxes on business property increase factor costs. Many governments therefore gave serious consideration to abolishing certain *property taxes* altogether (Messere 1997: 300). Countries like Austria, Germany, and France abol-

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23 Property taxes are here defined to comprise taxes on immobile property, net wealth taxes, inheritance and gift taxes, and taxes on financial and capital transactions (OECD 1998b).

ished or considerably reduced property taxes (especially net wealth taxes) on businesses – and, to some extent, also on individuals.

Finally, *taxes on goods and services* are relevant not only as part of the tax wedge between consumption and production wage, but also because of how they are subject to competitive pressures stemming from cross-border shopping and bootlegging. This problem, however, is a relatively small one, since consumption taxes are generally levied where the consumption takes place (according to the *destination principle*) and not where goods and services are produced (*origin principle*) (Messere 1994). As a consequence, all products compete on the basis of net (pre-tax) producer prices rather than gross (after tax) consumer prices, which ensures that no product is at a competitive disadvantage because it was produced in high-tax country. The situation is somewhat different within the European Union. In 1993 the EU switched to the origin principle for final consumer purchases (with some exceptions).[24] This creates incentives for legal tax arbitrage in the form of cross-border shopping. But private importation of goods is mainly important for goods subject to high domestic excise taxes. Even sizeable general consumption tax differentials have not led to considerable cross-border shopping (Ratzinger 1997: 469).

Yet this distinction between *general consumption taxes* (value-added taxes) and *taxes on specific goods and services* (mostly excises and import duties) opens the door towards seeing that consumption tax revenues have at least partly been influenced by internationalization. In fact, just as the tax competition view of the world would predict, in the OECD world the average revenue share of the generally robust *general* consumption taxes increased markedly between 1970 and 1996, from 13.5 to 17.8 percent. In the same period, the share of specific consumption taxes fell from 20.4 to 12.9 percent. This is partly explained by *negative fiscal drag*. Since most excises are specific, inflation erodes their real value unless governments adjust the tax rates (which increases the political costs of taxing excises) (Messere 1997: 306). Yet internationalization has played a role as well. Import duties were lowered in the course of trade liberalization, and excises are more vulnerable to cross-border shopping and smuggling than general consumption taxes are.[25]

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24   Sales transactions between firms remain subject to the destination principle. In addition, the scope of the origin principle is further diminished. Sales by firms engaged in long-distance selling, purchases of "new means of transportation" (i.e., cars), and purchases of VAT-exempt firms are exempted from the origin principle.

25   Note also that, depending on the size and location of a country, even general consumption taxes might be affected by competitive pressures. Small countries with large borders to "low-tax" neighbors may shy away from consumption tax increases. As a case in point, recent policy debates in Austria (whose general consumption tax revenues *declined* from 21.0 to 19.1 percent of total taxation between 1985 and 1995)

Now consider the *domestic* pressures to lower labor taxes, which may have been just as important (if not more so) in preventing more pronounced shifts in the tax mix. These pressures also follow from the effects of the tax wedge between the consumption and production wage. But from a domestic perspective the problem is not one of competitiveness, since all national firms face more or less the same cost increase. The problem is rather that the tax wedge effect is probably more severe in the low-wage service sector (see Scharpf 1999). The reason is that market-clearing wages in less productive services may be at or near the effective reservation wage, so that the tax burden *cannot* be shifted into the consumption wage of employees. Thus, a high tax wedge leads to unemployment – a problem whose significance has increased due to the secular trend towards the service economy. And the tax wedge leads to an ever bigger shadow economy.

Finally, there is also a more political side to the domestic downward pressures on immobile tax bases. Since social security contributions and consumption taxes are in effect rather regressive, raising them may go against the equity demands of many voters, leading to considerable electoral costs. For all of these reasons, there has been increasing pressure to reduce the tax burden on labor (cf. Genschel 1999).

4.1.3   What would have happened in the absence of competitive pressures?

In sum, rising downward pressures on mobile tax bases increased significantly but were partly offset by both domestic and international pressures to reduce taxes on "immobile" tax bases. This implies that capital income tax revenues would probably have *increased* (in both absolute and relative terms) in the absence of competitive pressures. While this counterfactual claim can certainly not be quantified, it can be made more concrete by way of example.

As argued above, capital incomes had for a long time provided relatively little revenue for public budgets in most countries – partly due to lenient taxation, exemption, or even subsidization of certain forms of capital incomes, and partly due to *domestic* tax evasion. Therefore, in the 1980s and 1990s, when many governments tried to make capital income taxation (and personal income taxation in general) more neutral and just, the implied broadening of the tax base and

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focussed on options for shifting the revenue burden away from labor. However, policy makers were skeptical about an alternative rise in indirect taxes, since the Austrian standard VAT rate of 20 percent is higher than in major neighboring countries, notably Germany (which increased its rate in 1997 from 15 to 16 percent) (see OECD 1998d).

heightened tax enforcement could have led to significantly *higher* incomes from taxing capital.[26]

One example is the series of Dual Income Tax reforms discussed in section 3. These reforms did not lead to lower tax revenues, though not because the effective tax rate on certain types of capital income increased, but rather because *more* capital income had to bear the *low* capital income tax rate. In the absence of competitive pressures, this tax rate might have been set at a higher level.

Other examples are the experiences of Germany and Austria. Austria was one of the countries that removed the taxation of interest from the ambit of the progressive income tax in 1993, thus reducing the marginal tax rate from 62 to 22 percent (25 percent since 1996; see table 3). This cut, however, did not lead to large revenue losses, partly because few taxpayers had *paid* the higher tax rates before – due to both personal tax allowances and domestic tax evasion (Genser 1999: 205; Koman and Wörgötter 1995: 17).[27]

The German government did stick to high marginal tax rates on capital income, but – urged by the German constitutional court – wanted to reduce domestic tax evasion for reasons of tax justice. It therefore introduced a withholding tax on interest payments in 1989 – abolished in April of the same year – and again in 1993. These withholding taxes were only pre-payments to the progressive personal income tax, so that their introduction would have *increased* capital income tax revenues in a closed economy by cutting back on domestic tax evasion. However, when the government announced the introduction of these withholding taxes, taxpayers responded with massive tax flight to countries like Luxembourg (whereas much of the capital was re-channeled into Germany). International tax evasion was thus simply substituted for domestic evasion.[28] In both cases, the importance of competitive pressures is obvious, but the predicted revenue effects are largely lacking; and in both cases combating domestic tax evasion would probably have led to higher tax revenues if the exit option had not existed.

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26 For a counterfactual argument along similar lines, see Genschel (1999).

27 In addition, recall that especially small countries may actually increase their revenues from mobile tax bases after cutting tax rates (in a targeted manner), because the inflow of tax bases may over-compensate the reduced revenues from the existing tax bases. In the area of personal capital income taxation, Austria experienced such an inflow of foreign tax bases after cutting the tax rate on interest income (Schuster 1998).

28 Note that the introduction of a withholding tax as a prepayment for the progressive income tax has solved the problem of domestic tax evasion only partly. Due to German bank secrecy, many (high-income) taxpayers have still had an incentive not to report their interest income. The German withholding tax has thus partly worked like a *final* withholding tax as well. Moreover, even since 1993 a large portion of interest incomes has been exempted from tax due to substantial allowances.

Leaving the counterfactual world, there is another important implication of my argument. When marginal (economic) costs of taxation increased significantly for *both* mobile and immobile tax bases – due to competitive and domestic economic forces – this should have led to strong downward pressures on total tax burdens and public expenditures as well as to upward pressures on public deficits – just as the simple tax competition view would predict. The next section takes a closer look at these three variables.

## 4.2   Changes in budget size and revenue mix

Figure 4 plots average total expenditures, total tax revenues and public sector deficits for 16 OECD countries between 1970 and 1997.[29] Table 7 displays periodic averages for these three variables. A casual look at the data conveys three messages. First, until the early 1980s *average* total tax revenues, public deficits, and public expenditures rose more or less continuously. Second, after the early 1980s there was no clear *average medium-term* trend anymore towards rising public expenditures. Instead, periods of declining average expenditures (1983–89 and 1993–1997) were interrupted by a recessionary period (1989–1993) in which average expenditures shot up. Third, the average total tax ratio virtually stagnated after the mid-1980s.

I argue that if countervailing pressures on public expenditures and deficits are taken into account, the medium-term stability of these three budgetary variables does not contradict the existence of considerable competitive pressures. On the contrary, competitive pressures contributed to this stability.

Until the early 1980s, the average OECD-16 government obviously did not consider the marginal costs of revenue-raising a strong constraint on public expenditures. Expenditures rose continuously and taxes had to follow. Yet taxes rose more slowly, leading to shift in the revenue mix towards deficit financing. Increasing marginal costs of taxation probably contributed to this shift. In any event, by the early 1980s governments had become aware of the rising economic costs of deficit financing. The high real interest rates of the 1980s combined with the already large stock of public debt to create a potentially explosive debt burden. Internationalized financial markets attached interest rate premiums on countries with high public deficits (Garrett 1998a). And in the 1990s the bottleneck of the Maastricht criteria added to the costs of high public deficits for EMU

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29 New Zealand and Switzerland were omitted due to a partial lack of data. Note also that in figure 4 public deficits do not equal the difference between expenditures and tax revenues, because non-tax revenues are neglected.

Total governments outlays
and total tax receipts as % of GDP

Public deficits
as % of GDP
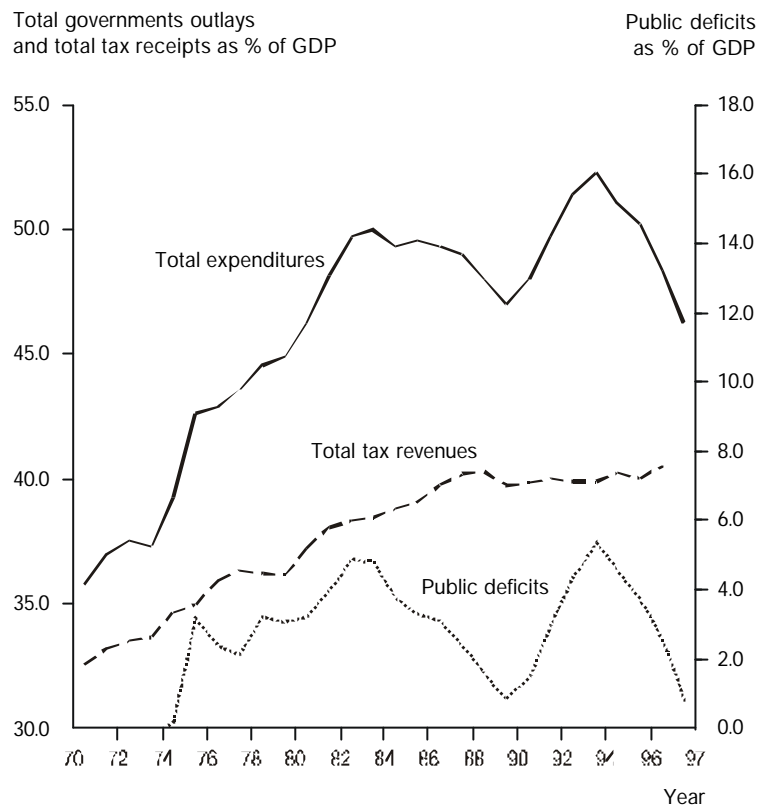
Figure 4   Average total government outlays, total tax receipts,
and public deficits in 16 OECD countries, 1970–1997

Notes: Unweighted averages.

Sources: OECD (1998): *Health Data Base*, Paris: OECD;
OECD (Paris, 1997): *Revenue Statistics 1965-1996*, Paris: OECD;
OECD (Paris, 1998): *Economic Outolook*, Paris: OECD.

candidates. As a result, there were increasing pressures on governments either to cut spending or increase taxes – or to do both.

Yet increasing taxes was not any easier. High unemployment, sluggish growth, and competition in international product markets increased the marginal costs of taxing labor and consumption; and tax competition, especially in the area of corporate and interest taxation, was a strong constraint on higher tax revenues from capital. The average total tax burden thus virtually stagnated after the mid-1980s. Other factors certainly played a role as well. Low growth reduced tax receipts while simultaneously putting upward pressure on social spending; and increasing the tax burden would have entailed high short-term macroeconomic and electoral costs in the perception of many policy-makers.[30] Still, the importance of increasing marginal costs of taxation and capital income tax competition is undeniable – especially within the European Union (cf. OECD 1998b: 148–162; 1999).

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30 But see the literature on non-Keynesian effects of fiscal contractions, starting with Giavazzi and Pagano (1990).

Finally, rising costs of revenue-raising created downward pressure on public ex-
penditures. At the same time, however, demands for public spending also con-
tinued to rise. This has been attributed partly to the economic integration itself,
which is thought to generate market dislocations that, in turn, prompt higher
demands for social insurance (Garrett 1996; 1998b). Other (complementary) ex-
planations stress endogenous developments like the secular shift towards the
service economy or population aging (Iversen and Cusack 1998; Pierson 1998).
The result was *medium-term* stability in both average public expenditures and
deficits after the early 1980s (see figure 4 and table 7).[31]

In sum, fiscal trade-offs have become much more severe. The economic costs of *all*
forms of revenue-raising have risen – partly owing to economic internationaliza-
tion – but the demand for government spending has generally risen as well. As a
consequence, real-world tax reformers faced difficult electoral trade-offs. Cuts in
effective tax rates on capital (and labor) have increasingly been predicated on ex-
penditure cuts. However, policy makers had to fear *short-term electoral* losses,
even if they believed that spending and tax cuts would boost growth, employ-
ment, and thus electoral support over the *long run.* Thus, governments' ability to
play the tax competition game depended to a large extent on their *willingness and
capacity* to cut expenditures.

This perspective throws an interesting light on the large cross-country differences
in fiscal policy outcomes shown in table 7. Comparing averages for the periods
1980–88 and 1989–97, the data show that some countries markedly reduced public
expenditures and – to a lesser extent – total taxes, while others increased both
spending and revenues. These differences translated into different profiles of
policy adjustment. Consider the extreme cases of Ireland and Italy that prove to
be outliers on many indicators of tax policy change discussed above.

Irish policy makers lowered the public sector share in GDP from 52 to 36 percent
between 1985 and 1997 (cf. table 7). As a consequence, they were able simultane-
ously to reach three goals crucial to Ireland's competitive strategy. First, they
strongly reduced public deficits and, in turn, the public debt – the overriding ob-
jective of Irish fiscal policy after a failed stabilization attempt starting in 1982.
Second, the government passed major income tax cuts that facilitated Ireland's
consensual wage moderation since 1987 (OECD 1989: 17). Finally, the govern-

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31 Two points should be noted. First, the medium-term stability of *average* public ex-
    penditures and deficits certainly does not imply that there was an absolute limit on
    spending and debt. This is demonstrated by countries like Belgium or Italy, which
    continued to run high public deficits well into the 1990s (cf. Hallerberg 1999). Second,
    although the average total tax burden stagnated after the mid-1980s, tax increases did
    contribute, on a cyclically adjusted basis, to budget consolidation in some countries
    (OECD 1998b: 152).

Table 7   Percentage of total government outlays, total tax revenues, and public deficits in GDP, 1970–1997

	Total government outlays % of GDP [a]			Total tax receipts % of GDP [a]			Public deficits % of GDP		
	1970–79	1980–88	1989–97	1970–79	1980–88	1989–96	1970–79	1980–88	1989–97
Australia	32	37	38	26	30	30	−0.1	1.7	1.8
Austria	41	49	50	38	41	42	0.7	3.1	3.4
Belgium	50	61	55	40	46	45	4.7	9.5	5.1
Canada	38	45	48	31	33	36	0.8	4.9	4.6
Denmark	47	60	60	43	48	50	−1.5	2.8	1.5
Finland	36	43	55	37	40	46	−3.8	−2.6	2.1
France	42	51	54	37	43	44	0.3	2.2	3.6
Germany	45	48	50	36	38	38	1.7	2.3	2.6
Ireland	40	51	40	32	37	35	6.6	10.5	1.7
Italy	37	51	55	27	34	41	8.6	11.1	8.6
Japan	25	32	33	22	28	29	1.7	1.9	0.6
Netherlands	50	62	56	42	45	45	1.6	5.2	3.4
Norway	42	46	50	40	43	41	−3.1	−5.6	−2.0
Sweden	50	64	66	45	51	52	−2.6	2.4	3.7
United Kingdom	43	46	43	34	37	35	2.4	2.4	4.0
United States	32	36	36	27	26	27	1.0	2.7	2.3
Average	41	49	49	35	39	40	1.2	3.4	2.9
Standard Deviation	7	9	9	7	7	7	3.2	4.2	2.2
Coefficient of Variation	0.17	0.19	0.18	0.19	0.18	0.18	2.72	1.23	0.75

a   To nearest percentage point.

Sources: OECD (Paris, 1998): Health Data Base; OECD (Paris, 1997): Revenue Statistics 1965–96; OECD (Paris, 1998): Economic Outlook.

ment was able to reach the first two goals without increasing the effective tax burden on capital, which would have contradicted Ireland's strategy of attracting foreign investment through low tax rates and preferential tax regimes (cf. Aust 1999; Cunningham 1996).[32]

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32   Note that Ireland had relied on tax increases in the first failed stabilization period. This failure sent a strong signal that any second attempt had to rely on expenditure cuts rather than tax hikes.

At the other extreme, Italy's governments had – until very recently – been unable to bring down burgeoning public expenditures, and, as a consequence, had to deal with a huge public debt burden. At the same time, belonging to Euroland from the start was one of the overriding objectives of Italy's economic policy. Thus, Italy had virtually no other choice than to keep increasing the total tax burden (OECD 1996d: 91–92) – *even though* competitive pressures on capital income taxation were not absent in Italy (Bordignon, Giannini and Panteghini 1999; Giannini 1997).

While these examples have to be supplemented by more rigorous data analysis, [33] they suggest that variation in (effective) tax cuts for "mobile" tax bases may be explained more by differences in governments' capacities (and willingness) to cut expenditures than by differences in competitive pressures. To the extent that this explanation is true, we would expect more countries to *simultaneously* pursue budget consolidation and tax cuts in the future. This is already apparent in many countries' recent policy debates. For example, Austria aims at reducing the high burden on labor, but since shifting to taxes on capital and consumption is regarded as difficult – partly due to competitive pressures (see fn. 25) – tax reform is inseparable from the heated debate about budget consolidation. Similarly, the new Red-Green government in Germany (following Lafontaine's resignation as Minister of Finance) is pursuing major expenditure cuts in order to create fiscal leeway for cutting *both* public deficits and the tax burden on businesses.

Many advanced welfare states thus do seem to face "permanent austerity" (Pierson 1998). While this situation has certainly been driven to a large extent by domestic factors, the contribution of competitive pressures is nevertheless obvious.

5   Conclusion

Competitive pressures in corporate and personal income taxation have increased the marginal costs of taxation during the last 25 years and contributed to the *medium-term stability* of average budgetary outcomes among the 18 most advanced

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33 Fortunately, this is already forthcoming. Steinmo and Swank (1999) find that domestic economic forces (e.g., high structural unemployment, low investment) have put downward pressures on *both* capital *and* labor tax burdens (as measured by the average effective tax rates of Mendoza and colleagues), thus constraining a shift from capital to labor. In addition, their evidence suggests (not surprisingly) that higher government spending and public sector debt are significantly related to higher total tax burdens, thus counteracting pressures for tax reductions.

OECD countries since the early 1980s. Three types of factors explain why the in-creased mobility of the tax base has not led to an average downward trend of capital (income) tax revenues, total tax revenues, or public expenditures.

First, the *institutional framework of international taxation* and the importance of *non-tax factors* for international investments have reduced the responsiveness of mo-bile tax bases to international tax differentials. Second, governments have re-duced the revenue losses associated with tax policy adjustment by pursuing a policy of *tax-cut-cum-base-broadening*, by *differentiating* their tax treatment and *tar-geting tax cuts* to the most mobile segments of the income tax base, and by com-bating international tax avoidance and evasion through *legal and administrative measures*. Third, the remaining pressures on the tax mix, the revenue mix, and the budget size have partly been offset by *countervailing – domestic and international – pressures.*

The aggregate revenue effects of competitive pressures may well continue to grow – in the absence of more international co-operation – as an increasing num-ber of economic actors get more sophisticated at taking advantage of interna-tional tax differentials, especially within Euroland. This does not mean, however, that capital tax competition may eventually turn out to be the death blow for the welfare state – simply because taxes on capital have long contributed a minor share to public revenues in most countries. Only if labor mobility were to grow vastly or if the EU were to shift fully toward the *origin principle* in taxing goods and services would large-scale revenue losses have to be feared.

This limited fiscal importance of capital tax competition, however, should not keep political scientists from studying the politics of tax policy adjustment more closely. I have presented evidence that the revenue-preserving policy strategies pursued by many OECD governments – especially increased differentiation in in-come tax treatment – partly conflict with established principles of neutral and just taxation. Thus, given strong budgetary constraints on general cuts in effective in-come tax rates, the impact of competitive pressures has, in part, been a changed and more controversial *structure* of taxation rather than large-scale *revenue losses*. The preliminary evidence presented in this paper suggests that it would be worthwhile to investigate the political economy of these structural changes in more detail.

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