0440

IMF WORKING PAPER

WP/90/17

INTERNATIONAL MONETARY FUND

Fiscal Affairs Department

Is There a Need for Harmonizing Capital Income Taxes Within EC Countries?*

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March 1990

Abstract

This paper describes how growing economic integration within the European Community increases the scope for any one EC country to impose adverse externalities on other member countries by manipulating its capital income taxes. After examining several alternatives to concerted tax harmonization, the paper concludes that there is a need to harmonize capital income taxes within the EC as the Community moves toward a unified market with free capital movements and fixed nominal exchange rates. The harmonization process could start by agreeing on the tax base, followed by setting minimum statutory rates.

JEL Classification Numbers:
122; 320

* This paper was prepared for a conference organized by the Kiel Institute of World Economics on "Reforming Capital Income Taxation," held in Kiel, Germany, December 7-8, 1989 and will be published in a conference volume.

** The authors would like to thank Edward Gardner for some of the background materials used and George Kopits for providing helpful comments.

Contents

Summary

This paper explores how the liberalization and integration of markets for capital, goods, and services within the EC affects capital income taxation. It is shown that the liberalized environment with higher resource mobility offers more scope for any one EC country to impose adverse externalities on other member countries. Moreover, the potential welfare losses associated with differential tax treatments across EC countries are likely to grow. Accordingly, there is a need for some kind of coordination of capital income taxation within the EC.

The paper examines several alternatives to concerted tax harmonization, such as applying the residence principle and allowing tax competition to shape tax systems. Tax competition may be welcomed on the grounds that the downward pressure on domestic tax levels would offset some of the built-in pressures to raise public expenditures and would promote greater efficiency in the public sector. In the area of capital income taxation, however, competition is likely to be harmful because it tends to reduce capital income tax rates to sub-optimal levels. This, in turn, negatively affects the revenue, equity, and efficiency objectives of the entire income tax system, especially because benefit taxes often fail to offer a satisfactory alternative. Tax competition may also put certain EC countries at a disadvantage, thereby threatening the process of European integration. Moreover, it may result in undesirable macroeconomic spillover effects by generating sizable capital flows. These flows may threaten the stability of both nominal exchange rates and financial markets and may tempt some EC countries to interfere with free intra-EC trade and capital movements.

The paper concludes that none of the alternatives to concerted tax harmonization produces satisfactory outcomes in a unified market with free capital movements and (relatively) fixed exchange rates. Hence, there is a need to move toward harmonization, which should occur around an efficient tax structure. Harmonization could start by agreeing on the tax base, followed by setting minimum statutory rates.

I. Introduction

Many of the EC countries are now part of the European Monetary System (EMS) arrangement, which requires them to maintain what is essentially a fixed nominal exchange rate policy vis-à-vis other member countries. Over the years, such a policy has forced the EMS countries to harmonize their monetary policies and, as a result, the rates of inflation of the EMS countries have converged significantly during the 1980s (see Tanzi and Ter-Minassian (1987)).

With similar inflation rates and free capital movements, the borrowing rates for prime borrowers in different countries (governments, large enterprises, and financial institutions, etc.) tend to be relatively close. If trade barriers were totally eliminated and taxes that affect the movement of goods and services across EC countries were largely harmonized, then neither the pretax borrowing cost of capital nor commodity taxes and trade barriers would play much of a role in determining the location of production plants by major enterprises within the EMS area. Other factors such as distance from markets, quality of public services, labor costs, regulations, and capital and income taxes would become more important in determining the location decisions by enterprises.

In the situation outlined above, enterprises would lose their national character and would become increasingly European. As a recent newspaper article has put it:

> "The mergers and acquisition movement that started to snowball in Europe three years ago has grown into an avalanche that is remaking the Continent's corporate landscape. That avalanche will likely continue to thunder as companies rush to prepare for the more competitive era that will result as the European Community snaps internal barriers by the end of 1992." 1/

Furthermore, enterprises will become increasingly sensitive to tax factors. For example, a recent survey of 173 large U.K. companies polled by the Institute of Fiscal Studies found that almost 80 percent of these companies indicated that they are usually influenced by tax considerations when deciding where to set up a production plant. 2/

1/ See Steven Greenhouse, "Europe's Buyout Bulge," in the New York Times, Sunday, November 5, 1989, section 3, page 1.
2/ See Devereux and Pearson (1989).

II. On the Concept of Tax Harmonization

Tax harmonization can have different meanings and can be related to different objectives. In line with the Single European Act, this paper defines tax harmonization within the European Community as a process by which the tax systems of the EC countries are aligned with each other so that tax considerations no longer influence the movements of commodities and factors of production (including portfolio capital) within the Community. This process is intended to achieve a more efficient allocation of resources by leveling the playing field across the EC countries.

It should be clear, however, that tax harmonization, *per se*, does not guarantee a more efficient allocation of resources within the Community than in the absence of harmonization. It all depends on the characteristics of the tax systems that result after harmonization has taken place. Perhaps an analogy will help explain this point. Harmonization of monetary policy within the EMS has led Germany to largely determine monetary policy for all EMS countries. Given that German monetary policy had been consistent with a low inflation rate for many years, and that low inflation was assumed to be the predominant objective of monetary policy, it made sense to many observers that German monetary policy would become the norm for other EMS countries.

Tax harmonization, however, is far more complex. It is not obvious that any of the tax systems in the EC countries are obviously preferable to the others as the natural candidate around which to harmonize the other tax systems. The existing systems presumably reflect objectives that are given different weights by different countries. Furthermore, even if both tax rates and tax bases were harmonized, as long as tax enforcement is not equally effective across countries, one could not say that effective (as compared with statutory) harmonization has been achieved. Tax harmonization must also inevitably require some harmonization of expenditure levels and, perhaps, even of expenditure patterns since tax expenditures may substitute for government expenditure and the pattern of government expenditure may be influenced by the level and structure of the tax systems. To increase overall economic efficiency in the Community, tax harmonization must occur around a good tax structure. Otherwise, the benefits achieved by leveling the field *across* EC countries can be offset by additional distortions within each country introduced by the new tax system.

Unlike the case of monetary policy, tax harmonization cannot come about by imposing the current statutory tax system of a country (even of an economically powerful one) on the others. It does not seem realistic, for example, to expect that the Community would accept the German (or the French or the British) tax system as the norm for the rest of the Community. But if this is the case, should harmonization be left to market forces, as argued by some economists and some governments? Or should a supranational body suggest or impose concerted harmonization toward desirable tax systems?

In this paper we shall restrict our discussion to a few major questions regarding the harmonization of taxes on:

(a) the profits of corporations;

(b) cross border portfolio income;

(c) interest income and expense; and

(d) income from housing investment.

The tax treatment of the activities of insurance companies, pension funds, banks, and other financial institutions are also likely to raise important issues as these activities become European rather than national. However, we shall not deal with them in this paper.

III. Corporate Income Taxation

1. Statutory tax rates and tax arbitrage

After the United Kingdom and the United States lowered their statutory rates in 1984 and 1986, respectively, most EC countries reduced their rates as well (Tables 1 and 2). Despite this "spontaneous" harmonization process, substantial differences in tax rates remain, with high rates of 50 percent or higher in Germany and Denmark and low rates of 35 percent in the Netherlands, Spain, and the United Kingdom.

Intra-EC differences in statutory corporate rates create opportunities for tax arbitrage. Although these transactions may not necessarily change real investment decisions, they affect the intra-EC distribution of tax revenue. EC countries presently rely on the separate accounting method to assign taxable profits of multinational corporations to each jurisdiction. Hence, each multinational corporation separately computes taxable profits in each jurisdiction it operates in by using transfer prices applied on transactions between the entity subject to tax and subsidiaries abroad. These prices should, in principle, reflect so-called arm's length prices, that is, prices for transactions between nonrelated parties. If they do not, tax administrations are authorized to adjust the taxable profit accordingly. However, tax administrators often face conceptual difficulties in determining transfer prices, especially regarding trade in specific intermediate products that are not traded on open markets. Thus, corporations may manipulate transfer prices and cost allocation of common expenses (e.g., on research and development) in order to shift

Table 1. Selected Industrial Countries: Main Statutory Corporate Income Tax Rates (Central Government), 1977 and 1989 1/

(In percent)

	1977	1989	Proposed or Announced Rate
EC Countries			
Belgium	48	43	38
Denmark	37	50	35
France	50	39	--
Germany, Fed. Rep. of 2/	56	56	50 (1990)
Greece	39 3/	35 3/	--
Ireland	45	43 4/	--
Italy	25	36	--
Luxembourg	40	36	--
Netherlands	48	35	--
Portugal	36 5/	36.5	--
Spain	36	35	--
United Kingdom	52	35	--
Selected Non-EC Countries			
Australia	50	39	--
Canada	46 6/	38	--
Japan 2/	40	42	37.5 (1990)
New Zealand	45	33	--
Sweden	56 7/	52	30 (1991)
United States	48	34	--

Sources: OECD; Financial Times; Price Waterhouse.

1/ Some countries apply lower rates to small enterprises.
2/ Rates apply to retained earnings.
3/ Rate for industrial companies quoted on the Athens stock exchange.
4/ A 10 percent rate applies to industrial companies until the end of the year 2000.
5/ Includes the complementary tax on retained earnings.
6/ Including basic rate of provincial tax credit (10 percent).
7/ Inclusive of municipal taxes, which were eliminated as of 1985.

Table 2. European Community: Corporate Tax Rates, 1989

(In percent)

	Main Statutory Corporate Income Tax Rate 1/		Net Worth and Capital Based Tax Rate 3/
	Central Government	Central and Local Government 2/	
Belgium	43	43	0
Denmark	50	50	0
France	39	39	0.62 4/
Germany	56/36 5/	62/45 5/	0.13/0.58 6/
Greece	35 7/	35 7/	0
Ireland	10 8/	10 8/	0
Italy	36	46	0
Luxembourg	37 9/	43	0.11/0.88 10/
Netherlands	35	35	0
Portugal	36.5	40	0
Spain	35	36 11/	0
United Kingdom	35	35	0

Sources: International Bureau of Fiscal Documentation; OECD; Price Waterhouse; and various national sources.

1/ Some countries apply lower rates to small enterprises.
2/ Net rates.
3/ Estimates of effective tax rates, excluding local property taxes on land and buildings.
4/ Taxe Professionelle.
5/ Split rate system: first rate applies to retained earnings, second rate to distributed earnings.
6/ Gewerbesteuer and net worth tax. Rates for debt and equity financed capital.
7/ Rate for industrial companies quoted on the Athens Stock Exchange.
8/ Rate for industrial companies, to remain into effect until the end of the year 2000. The standard rate for other companies is 43 percent.
9/ Including a 2 percent surcharge (deductible) for the employment fund.
10/ Net worth tax and business capital tax. Rates for debt and equity financed capital.
11/ Includes the surcharge for the chamber of commerce.

taxable income from high to low tax countries. Multinational firms can move taxable profits across borders also by altering their financial structure so as to take interest deductions in high tax jurisdictions. 1/

The opportunities for these types of tax arbitrage are likely to increase in the near future. The liberalization of capital movements raises the scope for avoiding taxes through pure financial transactions. At the same time, intra-company trade should grow because lower intra-EC trade barriers allow corporations to increasingly separate production from national markets. 2/ Moreover, products for which transfer prices are especially difficult to determine account for an expanding share of intra-company trade. 3/

The ability of multinational corporations to engage in tax arbitrage through financial transactions increases the scope for EC countries to impose adverse externalities that affect the equity, efficiency, and revenue objectives of the fiscal systems in other member countries. In particular, countries lowering their statutory corporate rate erode foreign corporate income tax bases by encouraging multinationals to shift their taxable income. This shifting of profits does not necessarily require a change in the allocation of real investment across countries but may be brought about through pure financial transactions.

In order to avoid a serious erosion of their corporate tax bases, other countries may be forced to reduce their corporate statutory rates. This reduction affects the equity and revenue objectives of the entire income tax system because it puts downward pressure on personal income tax rates in order to reduce incentives facing taxpayers to shelter personal income in the corporate sector. 4/

1/ Legislative remedies against "thin capitalization" (i.e., excessive interest deductions) are generally not fully effective in preventing this kind of tax avoidance. Unrelated parties can also engage in tax arbitrage if tax rates differ across countries. See, e.g., Gordon (1986).

2/ The adoption of the EC company statute and the completion of the internal market will give impetus to the establishment of EC-wide companies, which can use intra-EC differences in corporate tax rates to engage in tax arbitrage.

3/ Intangibles, such as brand names, marketing, and research and development, are prime examples of such products. More generally, the growing complexity of intra-firm transactions makes it increasingly difficult to devise effective administrative rules aimed at mitigating the abuses of transfer pricing.

4/ One of the common trends of recent tax reforms has been to bring the marginal tax rate on personal income taxes more in line with the basic corporate income tax rate (see Tanzi, 1987b).

The tax arbitrage transactions also harm efficiency by complicating the use of the corporate tax as a benefit tax. A country that provides more public services to capital than other countries will find it more difficult to finance these services by charging higher corporate taxes. Through tax competition, this mechanism is likely to result in either an underprovision of public services that benefit capital or the introduction of taxes that do not correspond to benefits received.

As an alternative to lowering their own tax rates, countries may impose capital controls or tighten administrative controls--including transfer price regulations or thin capitalization rules. This tends to increase the costs of complying with corporate tax provisions for EC-wide companies and may also result in double taxation.

2. Corporate tax systems and real investment decisions

Statutory rates are imperfect indicators of how corporate taxes affect investment decisions in EC countries because major intra-EC differences remain regarding both the definition of the tax base (see Table 3) and the degree of enforcement. Another potential determinant of investment incentives in a particular source (or host) country is the treatment of cross-border capital flows by the investor's residence (or home) country. In principle, several EC countries (as residence countries) adhere to the residence principle according to which they levy tax on global corporate income from direct investments--irrespective of whether the income originates at home or abroad. However, corporate taxes in the source country are a major determinant of tax incentives to locate real capital in that country because, in practice, corporate taxes conform closely to the source principle. 1/ Countries typically allow multinationals to defer taxes on the profits of foreign subsidiaries until these profits are repatriated to the home country. 2/ Furthermore, residence countries typically limit the foreign tax credit to the residence country's own tax rate on the same income. Hence, source tax rates determine the tax on international capital income if corporations are in an excess credit position. 3/ Moreover, while most countries attempt to apply the residence principle to the personal taxation of portfolio investments by individuals, they typically do not credit the underlying corporate tax.

1/ See also De La Fuente and Gardner (1990) and Bovenberg, et al. (1989).

2/ However, multinationals can usually not defer residence taxes on income generated by foreign branches.

3/ The U.S. Tax Reform Act of 1986 has increased the number of U.S. multinationals in an excess credit position because it reduced the U.S. tax rate. This has increased the weight of EC corporate taxes in determining effective tax rates for U.S. multinationals that invest in the EC.

Table 3. European Community: Factors Determining the Corporate Tax Base, 1989

	Investment Incentives	Loss Carryover		Capital Cost Recovery Allowances				First Year Convention 1/
				Methods (SL,DB,AD) SL=straight line DB=declining balance AD=accelerated depreciation		Indicative or typical lifetimes, including accelerated depreciation		
		Carry forward	Carry back	Machinery	Buildings	Machinery	Buildings	
Belgium	13 percent deduction	5	0	SL, DB	SL	5	20	Full year
Denmark 2/	--	5	0	SL, DB	SL 3/	7	30	2/3 of the year
France	--	5	0	SL, DB	SL	7	20	Pro-rated 4/
Germany, Fed. Rep. of	--	5	2	SL, DB	SL, DB 3/	7	25	Half year
Greece	--	3	0	SL	SL	7	20	Pro-rated 4/
Ireland	--	no limit	1	AD	SL 3/	-- 5/	13.5	Full year
Italy	--	5	0	AD	AD	8.5	21.3	Pro-rated 4/
Luxembourg	12 percent credit 6/	5	0	SL, DB	SL	5	33.3	Half year
Netherlands	--	8	3	SL, DB	SL	10	33.3	Pro-rated 4/
Portugal	--	5	0	SL	SL	6.7	25	Full year
Spain	5 percent credit	5	0	SL, DB	SL	12.5	33.3	Pro-rated 4/
United Kingdom	--	no limit	1	DB	SL	-- 7/	25	Full year

Note: -- = Not applicable.

Sources: International Bureau of Fiscal Documentation; OECD; Price Waterhouse; and various national sources.

1/ Share of the year over which depreciation is allowed in the first tax year.
2/ Denmark allows depreciation to start at the time the capital is ordered or construction initiated. Also the depreciable base is indexed to the price level.
3/ More than one rate applies over the life of the asset.
4/ Pro-rated from date of acquisition or installation.
5/ Depreciation method is declining balance with a 50 percent depreciation allowance in the first year, 25 percent thereafter.
6/ Machinery only.
7/ Declining balance method with a 25 percent rate.

Table 4 provides corporate tax wedges summarizing the effect of several aspects of the corporate tax systems--including the statutory rate, depreciation allowances, investment credits, wealth and net worth taxes, on the incentives to invest in EC countries. 1/ These wedges, which have been computed by Edward Gardner and Angel de la Fuente as part of a research project carried out in the Fiscal Affairs Department of the International Monetary Fund, are defined as the difference between the cost of capital to the enterprise and the market rate of return on financial assets. The cost of capital corresponds to the marginal rate of return that the firm must earn in order to be able to pay the market rate of return (after paying corporate taxes) to a portfolio investor. Given an integrated capital market, the portfolio investor financing the investment is assumed to be an institutional investor with a nonresident status in each EC country. Accordingly, the wedges account for withholding taxes on dividends distributed to nonresidents as well as for the integration of personal and corporate taxes to the extent that these provisions apply to nonresidents (see Table 5). In line with the "old view" of dividend taxation, the tax treatment of dividends affects the cost of equity capital in proportion to the share of profits distributed as dividends. Moreover, it is assumed that corporate taxes do not correspond to benefits for public goods. For more details, see de la Fuente and Gardner (1990).

The dispersion of tax wedges across various EC countries provides an indication of the extent to which diverging corporate tax treatments can distort the allocation of real capital within the Community. To illustrate, a marginal equity-financed investment in buildings in Germany needs to yield a before-tax return that is more than 11 percent higher than that on a similar investment in Ireland in order to pay the same market return to investors. 2/ Hence, overall EC output could be raised by reallocating capital from Ireland to Germany.

In recent years, tax reforms in many EC countries have aimed at leveling the domestic playing field by reducing the differential tax treatment of assets located domestically. From an EC-wide efficiency point of view, however, the playing field should be leveled not just <u>within</u> a country but also <u>across</u> EC countries in order to ensure that liberalizing international trade and capital flows will improve overall efficiency in the EC. Indeed, the theory of second-best implies that

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1/ These calculations ignore, of course, differences in enforcement. To the extent that tax evasion possibilities differ across countries, the wedges, calculated on the basis of statutory provisions, may not fully reflect reality.

2/ These estimates represent an upperbound to actual intra-EC differences in effective tax wedges. In practice, corporations may partly escape intra-EC differences in tax treatment because they adjust transfer prices and financial arrangements in response to differences in tax systems. Moreover, intra-EC differences in effective tax rates may be correlated with differences in benefits from public services.

Table 4. European Community: Company Tax Wedges by Source of Finance and Type of Asset 1/

	Buildings		Machinery	
	Without harmonization	With tax base harmonization 2/	Without harmonization	With tax base harmonization 2/
Debt financing				
Belgium	-1.17	-1.01	-2.72	-2.99
Denmark	-1.53	-0.70	-2.08	-2.39
France	-0.26	-0.37	-0.50	-1.93
Germany, Fed. Rep. of	-0.48	-0.89	-2.36	-3.74
Greece	-0.70	-0.70	-0.62	-2.39
Ireland	-0.52	-0.16	-0.05	-0.59
Italy	-1.67	-1.04	-1.44	-3.46
Luxembourg	0.51	-0.45	-6.29	-4.80
Netherlands	0.06	-0.70	-1.17	-2.39
Portugal	-0.56	-0.85	-1.64	-2.85
Spain	-0.70	-1.31	-1.77	-3.35
United Kingdom	-0.46	-0.70	-1.25	-2.39
Equity financing				
Belgium	5.23	5.46	2.80	2.21
Denmark	4.15	5.21	2.49	2.44
France	4.15	4.05	3.20	1.44
Germany, Fed. Rep. of	11.59	11.57	7.55	5.64
Greece	4.97	4.94	4.94	2.19
Ireland	0.37	0.88	0.91	0.34
Italy	6.19	8.00	6.61	3.54
Luxembourg	10.04	8.44	-0.74	1.52
Netherlands	6.41	5.21	4.02	2.44
Portugal	6.88	6.36	4.28	2.89
Spain	5.42	4.36	3.78	1.24
United Kingdom	3.97	3.58	2.30	1.02

Source: De La Fuente and Gardner (1990).

1/ Common real interest rate (5.5 percent); inflation rate (2 percent); and rates of economic depreciation (7 percent for buildings, 15 percent for machinery).

2/ Based on an earlier draft proposal by the European Commission as described in Kuiper (1988). This proposal eliminates accelerated depreciation, depreciation of capital not yet in use, and indexation of the depreciable base. For tax purposes, machinery is depreciated at 25 percent (declining balance) which a switchover to straight line (10 percent). The corresponding depreciation rates for buildings are 6 percent (declining balance) and 4 percent (straight line). It would allow enterprises to claim the full amount of depreciation for the first tax year--irrespective of when in the year the investment takes place. Under this scenario, country differences remain with respect to investment tax credits, degrees of integration with personal taxes, and wealth and net worth taxes, besides differences in statutory tax rates.

Table 5. European Community: Degree of Integration of Personal and Corporate Taxation, 1989

	Statuory Corporate Income Tax Rate (in %)	Resident Shareholder: Tax Discrimi-nation Variable 1/	Resident Shareholder: Degree of Integration	Resident Shareholder: Top Marginal Personal Rate on Divi-dend Income (in %)	Resident Shareholder: Payout Rate 2/ (in %)	Non-resident Shareholder: Tax Discrimi-nation Variable	Non-resident Shareholder: Dividend With-holding Tax 3/ (in %)	Non-resident Shareholder: Payout Rate 2/ (in %)	Method of Integration of Personal and Corporate Taxes
	tc	k	$\frac{(100-tc)\ k}{100}$	tp	$\frac{(100-tc)k(100-tp)}{100}$	kl	wt	$\frac{(100-tc)kl(100-wt)}{100}$	
Belgium	43	1.0 4/	0.57	25 4/	43	1.0	15	48	Dividend credit 4/
Denmark	50	1.25	0.63	57	27	1.0	15	43	Dividend credit
France	39	1.5	0.87	57	37	1.5	15	74	Dividend credit
Germany, Fed. Rep. of	56/62 6/	2.27	1.0/0.86 6/	56	38	1.25	15	40	Split rate and dividend credit
Greece	35 7/	1.54	1.0	42 8/	58	1.54	42	58	Dividend deduction
Ireland	10 9/	1.06	0.95	56	42	1.0	0	90	Dividend credit
Italy	36/46 6/	1.56	1.0/0.84 6/	62	32	1.0	15	39	Dividend credit
Luxembourg	37	1.0	0.63	59	26	1.0	15	54	Classical
Netherlands	35	1.0	0.65	72	18	1.0	15	55	Classical
Portugal	36.5/40 6/	1.0 9/	0.635/.60 6/	25 10/	45	1.0	15	51	Dividend credit 10/
Spain	35	1.1	0.72	56	32	1.0	15	55	Dividend credit
United Kingdom	35	1.33	0.86	40	52	1.33	15	73	Dividend credit

Sources: International Bureau of Fiscal Documentation; OECD.

1/ Defined as the opportunity cost of retained earnings in terms of gross dividends foregone. k = 1 under the classical system, k > 1 if personal and corporate tax systems are integrated.

2/ Corporate income tax inclusive of local taxes.

3/ Typical rate under treaty.

4/ If the withholding tax on dividends is taken as a final tax, no dividend credit can be claimed. A dividend credit equal to 50 percent of net dividends can be claimed if dividend income is taxed as regular income (at a top marginal rate of 55 percent). As of 1990, the dividend credit will be eliminated and dividends taxed at the 25 percent withholding tax rate.

5/ The corporate income tax rate on distributed profits is higher than that on retained profits, or 39 percent in 1989, 37 percent in 1990.

6/ First number accounts for central government taxes only. Central and local government income taxes are included in the second number.

7/ Rate on industrial company quoted on the Athens stock exchange.

8/ Final withholding tax rate.

9/ Special rate for industrial enterprises.

10/ If the withholding tax on dividends is taken as a final tax, no dividend credit can be claimed. A 7 percent dividend credit can be claimed if dividend income is taxed as regular income (at a top marginal rate of 40 percent).

removing some distortions (such as capital controls) in an economy where important tax distortions remain does not necessarily improve welfare. An efficient allocation of resources within the EC requires that, in the absence of externalities, before-tax returns are equalized across EC countries. In an integrated EC financial market, however, after-tax returns tend to converge, as investors arbitrage to ensure that their placements yield equal after-tax returns.

The efficiency costs due to differential tax treatments are likely to grow because the integration and liberalization of capital and commodity markets within the EC make locational decisions more sensitive to tax factors. When the creation of the internal market reduces trade barriers, corporations no longer have to produce in the country of sale. Instead, they can choose the location of their production and distribution centers within the EC on the basis of other factors, including the tax treatment. 1/ Furthermore, the integration and liberalization of European capital markets is likely to increase the importance of market signals, and therefore tax factors affecting these signals, in determining investment decisions.

The higher sensitivity of locational decisions with respect to tax factors increases the scope for EC countries to impose adverse spill-over effects on other member countries. 2/ A country may harm the efficiency with which capital is allocated across the EC by reducing its tax rate on investment below, or increasing it above, that in other countries. If effective tax rates on capital are positive, the country lowering its effective rate below that in other countries shifts these welfare losses to other countries by lowering foreign tax revenues; 3/ while marginal investments continue to earn the same after-tax return in all countries, marginal investments in the high-tax countries must yield a higher before-tax return to generate the additional tax revenue. Hence, the capital that moves to the low-tax country yields a lower before-tax return than before and the overall efficiency loss is reflected in lower foreign tax collections.

1/ These tax factors involve not only corporate but also personal taxes. Effective personal tax rates may be important for the locational decisions of corporations that are intensive in highly skilled, and thus more mobile, labor--especially after EC countries start to recognize professional degrees granted in other member countries and lift remaining restrictions on the intra-EC movement of labor.

2/ How sensitive locational decisions within the United States are with respect to cross-states differences in corporate tax rates is subject to some debate. See, e.g., Benson and Johnson (1985) and Papke and Papke (1986).

3/ A country raising its tax rate above that in other countries, in contrast, generally absorbs the global welfare losses itself as domestic investment falls. A country may reduce its effective tax rate by providing investment incentives.

Unilateral changes in corporate taxes may also generate important macroeconomic effects on other member countries by setting in motion intra-EC capital flows. Macroeconomic implications include swings in the terms of trade and real exchange rates accompanied by resource flows between tradable and nontradable sectors. 1/ These developments may adversely affect employment if rigidities in labor markets inhibit intersectoral labor mobility and prevent real wages from adjusting to changes in the value of the marginal product of labor in various sectors. Moreover, movements in real exchange rates could result in trade tensions and tempt countries to interfere with free trade and capital flows. 2/ Large EC countries with market power can influence other countries also by affecting conditions on EC capital markets.

3. Is harmonization desirable?

The section discusses whether concerted harmonization of two major features of EC corporate tax systems, namely the tax base and the tax rate, would be desirable. It also explores several alternatives to concerted harmonization of tax rates. In this connection, it explores the factors that determine the relative desirability of tax competition (i.e., market-based harmonization) and concerted tax harmonization.

Compared to reducing statutory tax rates, manipulating the tax base is a less visible way to attract capital from other countries and to distort the intra-EC allocation of capital. Tax base harmonization would reduce the opportunities to pursue such nontransparent beggar-thy-neighbor policies. 3/ Furthermore, it would decrease compliance costs for corporations operating in several EC countries. This would encourage firms to do business across intra-EC borders, thereby realizing dynamic efficiency gains and economies of scale in the internal market. 4/ A more uniform tax base would also enhance the

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1/ Sinn (1987), Tanzi and Bovenberg (1989), and Dooley and Isard (1989) discuss the international macroeconomic effects of capital income taxes. If nominal exchange rates are fixed, real exchange rates can change on account of international differences in inflation rates.

2/ A certain degree of stability in relative prices, and especially in real exchange rates, may be valued as an international public good because it tends to enhance the information content of relative prices and to contribute to a more stable international monetary system (see, e.g., Frenkel et al. (1988)).

3/ The European Commission is in the process of drafting a proposal to harmonize the determination of the corporate base (see Kuiper (1988)).

4/ In this connection, removing tax obstacles to cooperation between firms incorporated in different EC countries, including the tax discrimination against international mergers and joint ventures, is also important.

efficiency of decision making by contributing to more uniform and transparent accounting measures within the EC. 1/

Harmonizing the tax base in the presence of nonuniform statutory corporate tax rates would maintain the scope for tax arbitrage through pure financial transactions (see Section III.1). 2/ Moreover, nonuniform rates would continue to generate important locational distortions. In particular, Table 4 indicates that tax wedges on equity financed investments would still diverge significantly across EC countries under a plausible base harmonization scenario. 3/ Hence, tax rate harmonization should complement a more uniform tax base in order to significantly reduce locational distortions. Partial harmonization is not very effective in part because some countries that levy relatively high statutory rates provide more generous depreciation allowances to offset the adverse incentive effects of high statutory rates.

As an alternative to tax rate harmonization, a more consistent application of the residence principle has been advocated. This would neutralize the effects of tax rate differentials on locational decisions without requiring countries to harmonize their tax rates. However, administrative complications make the residence principle difficult to implement--just as they inhibit the integration of corporate and personal taxes on retained earnings. 4/ Moreover, opportunities for imposing adverse externalities by attracting the corporate tax base would remain because a residence-based corporate income tax system would provide incentives to move corporate headquarters to low-tax

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1/ Steuerle (1989) emphasizes the link between improvements in financial and tax accounting.

2/ Musgrave (1987) argues in favor of a uniform-rate corporation tax on the basis of interjurisdictional equity considerations. Equal rates would also make it possible to simultaneously attain capital import and capital export neutrality. Sinn (1989) maintains, however, that harmonizing the tax base is more important than achieving more uniform statutory tax rates. Slemrod (1990), in contrast, argues in favor of giving priority to harmonizing statutory rates over the tax base. Uniform statutory rates would eliminate the opportunities for tax arbitrage through pure financial transactions without requiring countries to harmonize their tax bases which, in any case, is difficult to enforce.

3/ This finding is broadly consistent with the results in Devereux and Pearson (1989).

4/ Bird (1988) and Giovannini (1989) propose moving to the residence principle by eliminating deferral of corporate taxes on the retained earnings of foreign subsidiaries. Mutén (1983) describes several practical problems that are associated with the elimination of deferral. Integrating personal taxes and corporate taxes on foreign source income poses similar practical problems. Devereux and Pearson (1989) discuss the advantages and disadvantages of several residence-based corporate tax systems.

countries. 1/ These incentives could become especially important when European integration makes it easier for corporations to change their country of residence.

It has also been suggested that some EC countries could maintain tax rates above those in other member countries if EC countries would adopt a system of unitary taxation, which uses formula apportionment to allocate profits across jurisdictions because such a system would be expected to reduce the incentives facing multinational firms to use accounting devices to shift profits between nations. 2/ However, different tax rates would continue to create distortions because firms would still be able to use accounting devices and change real decisions to influence the factors that enter the formula governing the apportionment. In addition, the appropriate assessment of the factors and the definition of the apportionable unit could give rise to costly negotiations and conflicts. Moreover, the administrative complications of a system of formula apportionment would be formidable in the face of different currencies and intra-EC differences in legal and accounting frameworks. 3/

Tax structures may converge in response to market pressures (i.e., tax competition) rather than concerted harmonization. In particular, countries facing capital flight and the erosion of their tax base due to lower foreign rates may reduce their own tax rates. 4/ In this connection, it is important to distinguish between concerted and

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1/ See, for example, Musgrave (1987) and McLure (1989). A residence-based system of capital income taxation would also distort the international allocation of saving in the presence of international tax rate differentials. Moreover, it would require residence countries to provide unlimited credits for foreign taxes--even if this would involve a rebate. This might tempt source countries to increase taxes on foreign-owned capital because higher source taxes would result in a redistribution of tax revenues in favor of the source country without affecting investment incentives.

2/ See, for example, Bird (1988) and McLure (1989). States within federal countries generally rely on a system of formula apportionment. This system does not compute taxable income in each state but instead allocates nationwide profits of a company across states on the basis of variables that can be more easily measured than income, such as sales, payroll, and assets. Formula apportionment, therefore, provides only a proxy for taxable income. In the United States, apportionment formulas differ across states, thereby introducing the possibility of double taxation. Under unitary taxation, formula apportionment is extended to affiliated entities.

3/ See, for example, Kopits and Mutén (1984), Mutén (1988), and OECD (1979).

4/ Other examples of spontaneous coordination include the introduction of a value-added tax in many countries and a trend toward lower marginal personal income tax rates. See Tanzi (1987b).

market-based harmonization. Whereas it tends to mitigate locational distortions, tax competition may drive tax rates down to sub-optimal levels if countries do not take into account spill-over effects (see, e.g., Giovannini (1989)). 1/ Low corporate taxes affect the entire income tax system: when lower corporate taxes reduce taxes on capital income, also taxes on labor income become more difficult to implement because a large gap between taxes on capital and labor income provides incentives to classify labor income as capital income. Accordingly, fiscal systems may become less efficient than if the EC countries coordinated their capital income taxes because governments are forced either to use more distortionary taxes 2/ or to reduce certain productive public expenditures. Tax competition may also frustrate equity objectives, as governments are no longer able to use fiscal policy to redistribute income from mobile factors to immobile low-income groups and as the tax burden increasingly falls on immobile labor. 3/ Furthermore, unbridled tax competition may harm interjurisdictional equity by putting EC countries with a large stock of public debt and a small resource base in a disadvantageous position. This may tempt these countries to interfere with the process of economic integration within the EC.

Some have argued that tax competition is preferable over formal harmonization by policymakers. 4/ If distortions in the political process 5/ keep overall tax and expenditure levels above their optimal

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1/ This is especially important if benefit taxes cannot be implemented because of the difficulty of matching taxes with marginal benefits from public goods. More generally, Bewley (1981) has shown that tax competition leads to an optimal provision of public goods only under rather restrictive conditions. For example, public goods cannot be produced under increasing returns to scale.

2/ The corporate tax plays an important role in an efficient tax system because it collects taxes on rents earned by factors that are supplied inelastically, such as old capital. Moreover, the corporate tax helps to avoid tax evasion by collecting taxes on equity income at source and by preventing agents from sheltering personal income in corporations.

3/ See, for example, Oates and Schwab (1988). Sinn (1989) argues that redistribution enhances efficiency because it compensates for missing insurance markets. Hence, tax competition would be inefficient because it would prevent governments from satisfying the needs of risk averse EC residents.

4/ See, for example, McLure (1986), Cnossen (1988), and H.M. Treasury (1988).

5/ These distortions may allow bureaucrats and pressure groups to promote their own objectives at the expense of constituencies. These arguments are closely related to the public choice perspective on federalism. This approach suggests that taxes should be levied at a local rather than a central level because factor mobility imposes more adequate constraints on government's ability to extract rents from the private sector. See, for example, Brennan and Buchanan (1983).

levels, tax competition could be welcomed on the grounds that the downward pressure on domestic tax levels would offset some of the built-in pressures to raise public expenditures and would promote greater efficiency in the public sector by forcing governments to more critically examine their expenditures. Indeed, leveling the playing field is not sufficient to produce an efficient fiscal system. The level of the playing field and, more generally, the structure of the harmonized fiscal system should be appropriate.

Another drawback of explicit tax harmonization is that it may prevent countries from experimenting with tax policies that may turn out to be beneficial. It may also inhibit timely adjustments of taxes in response to changing economic circumstances in view of lengthy and costly negotiation processes. 1/ Indeed, if the EC had coordinated corporate tax rates in the early 1980s, it might have been unable to reduce these tax rates in line with the worldwide trend toward lower rates and base broadening.

Whether one prefers tax competition over concerted tax harmonization depends to a large extent on the scope for undertaking beggar-thy-neighbor policy actions and on one's perspective of the level of public expenditure, the working of the political process, and the importance of intra- and interjurisdictional equity objectives. In some cases, the benefits of retaining national discretion to adjust tax policy in accordance with national priorities may outweigh the costs associated with inadequate coordination. 2/ As regards corporate income taxation, however, the case for some kind of concerted harmonization among EC countries seems particularly strong. As discussed above, corporate tax competition may harm overall efficiency, revenue, as well as intra- and interjurisdictional equity. It may also result in undesirable macroeconomic spill-over effects that threaten the stability of EC capital markets and tempt countries to interfere with free intra-EC trade and capital movements.

Several forms of concerted corporate tax rate harmonization, which should be complemented by base harmonization, are conceivable. In analogy of its recent suggestions regarding the standard VAT rate, 3/ the Commission could fix a minimum statutory corporate rate, while allowing EC countries to freely set their rate above that minimum. The minimum rate would set a floor for the contribution of the corporate tax

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1/ See, for example, Siebert (1989).
2/ See Cnossen (1987).
3/ See Commission of the European Communities (1989a).

to equity and revenue objectives. 1/ Rate harmonization toward the minimum rate may involve substantial changes, especially for the countries currently levying high rates. In order to avoid disruptive capital flows within the Community, EC countries should coordinate their corporate tax adjustments. 2/ Minimum rates may differ across EC countries because differences in public expenditures, regulations, tax enforcement, inflation, opportunities to use debt financing, as well as externalities and other market distortions may justify some differences in tax rates.

In view of the global character of capital markets, EC corporate tax policy should depend to a large extent on policy actions taken by non-EC countries. Hence, any harmonization arrangement within the EC should be flexible enough to quickly respond to developments outside the EC.

IV. Taxes on Cross-Border Portfolio Income

The international integration and liberalization of capital markets complicates the collection of personal taxes on capital income earned by EC residents. Interpersonal equity, efficiency, and revenue objectives all support the residence principle according to which residents should pay the same tax on worldwide investment income, irrespective of whether the income originates domestically or abroad. In theory, all EC countries apply the residence principle. In practice, however, the principle is difficult to enforce because it requires cooperation from other countries in the form of exchange of information and administrative assistance. Many host countries do not collect the information and, therefore, cannot pass it on to other countries. Even if host countries were to collect it, bank secrecy laws would often constitute formidable obstacles to the reporting of portfolio capital income to foreign countries. As a result, portfolio capital flows typically bear only the source country tax, which tends to be relatively low.

1/ Political agreement on the minimum rates may be difficult to achieve; countries with small public sectors (reflecting, for example, a relatively low priorities for public goods and equity objectives), low stocks of public debt, and large resource endowments may prefer lower minimum rates than other countries would favor. Any EC country can veto tax proposals. Most other issues, in contrast, are decided by majority voting.

Musgrave (1983) and McLure (1983) argue that corporate taxes should be collected on a central level. Therefore, a minimum rate may be complemented by a long-term target for complete harmonization of statutory rates. Ultimately, a central EC tax authority may collect the corporate tax at a single rate under either a tax or revenue sharing arrangement.

2/ This can be done by strengthening EC surveillance over corporate taxation through exchange of information and peer pressure within the regular ECOFIN meetings.

EC countries presently rely on several methods to collect taxes on portfolio income (Table 6). Belgium, France, Italy and Portugal adopt various forms of withholding, while Denmark, France, the Netherlands, and the United Kingdom use mandatory income reporting to tax authorities. Withholding taxes on interest and dividend payments to foreigners depend on tax treaties. Remaining capital restrictions, especially those applying to short-term and monetary flows, protect revenues in France, Greece, Ireland, Italy, Portugal, and Spain. The planned removal of these restrictions by mid-1990 1/ are likely to make portfolio flows an increasingly important vehicle for tax evasion and avoidance. Evasion may grow further as liberalization and technological advancements enable financial institutions to provide more financial services to foreign residents.

The growing integration of EC capital markets allows source countries to pursue beggar-thy-neighbor policies by encouraging foreigners to move their savings to their jurisdictions. In particular, by either levying low withholding taxes on portfolio income earned by nonresidents or by refusing to provide information to other countries, these countries erode foreign tax bases and attract financial intermediation from other countries. 2/ If domestic firms have access to offshore financial centers, potential distortions in the intra-EC allocation of real capital may be limited to the financial sector. However, changes in the pattern of financial intermediation may have international macroeconomic implications and affect the conduct of monetary policy. 3/

These beggar-thy-neighbor policies also affect both inter- and intrajurisdictional equity. Affluent countries with low levels of public debt and large immobile tax bases (such as natural resources) are able to attract financial intermediation because they can afford lower tax rates on capital income. As regards intrajurisdictional equity, wealthy tax evaders can escape residence taxes by investing their capital abroad while immobile factors, such as unskilled labor, and taxpayers who comply with the tax law are forced to finance an increasing share of public spending.

1/ Greece, Ireland, Portugal, and Spain have been granted temporary exceptions.

2/ The fiscal positions of other countries may worsen further as tax revenue from financial intermediation declines and domestic interest rates on public debt rise. The location of financial activities is also affected by international differences in so-called implicit taxes such as reserve requirements and other regulations.

3/ This is illustrated by the effects of the announcement, introduction, and subsequent repeal of a withholding tax on interest income in Germany.

Table 6. European Community: Rates of Taxation of Portfolio Investment Income of Resident Individuals, 1989

(In percent)

	Bond Interest		Dividends		Top Marginal Rate on Long-Term Capital Gains 1/	Reporting of Financial Investment Income	Declaration in Case of Succession 2/	Restricted Capital Movement of Individuals
	Rate of with-holding	Top marginal income tax rate or with-holding if final	Rate of with-holding	Top marginal income tax rate or with-holding if final				
Belgium	25	25	25	25	0	No	Yes	None
Denmark	0	57	30	57	0 3/	Yes 4/	(Yes)	None 5/
France	26 6/	26	0	57	16 7/	Yes	Yes	Deposits
Germany, Fed. Rep. of	0	56/53 8/	25	56/53 8/	0 9/	No	Yes	None
Greece	0 10/	63	42 11/	42	0	No	(Yes)	All 12/
Ireland	0/32 13/	56	0	56	30 14/	No	(Yes)	Short-term 15/
Italy	12.5	12.5	10	56/53 8/	0	No	(Yes)	Short-term 16/
Luxembourg	0	56	15	56	0	No	No	None
Netherlands	0	72/60 8/	25	72/60 8/	0	Yes 4/	(Yes)	None
Portugal	25	25	25	25 17/	0	No	Yes	All 18/
Spain	0/25 19/	66	25	66	66	Yes	(Yes)	Short-term 20/
United Kingdom	0/25 21/	40	0	40	40 22/	Yes 23/	No	None

Sources: Conseil National du Crédit; IMF; OECD; and various national sources.

1/ Capital gains on ordinary financial transactions.
2/ (Yes), if declaration is not automatic but only upon request by the tax authority.
3/ Stocks held over 3 years and bonds.
4/ Interest only.
5/ All foreign securities must be purchased through an authorized domestic financial intermediary.
6/ Including 1 percent social security contribution.
7/ If transactions do not exceed F288,400, capital gains are exempt.
8/ Current rate and proposed rate for 1990, respectively.
9/ Assets held over 6 months.
10/ In practice most bonds are tax exempt, though some should, in principle be subject to a withholding tax at progressive rates of income tax.
11/ The rate applies to registered and quoted shares.
12/ Except for some ECU denominated bonds.
13/ Zero rate for government bonds.
14/ The acquisition cost is indexed to the CPI, and a 2,000 pound exemption applies.
15/ Bonds with a maturity of less than two years and foreign bank deposits.
16/ All assets with a maturity of less than six months and foreign bank deposits. All foreign securities must be purchased and held through an authorized domestic financial intermediary.
17/ A dividend credit of 7 percent can be claimed if dividend income is globalized with other income.
18/ Investment funds can acquire foreign securities up to a limit.
19/ Zero rate for Treasury notes.
20/ Securities and deposits with maturity of less than one year. All foreign securities must be held through an authorized domestic financial intermediary.
21/ Zero rate for certain public loans.
22/ A 5,000 pound exemption applies. Capital gains taxed on a real rather than nominal basis.
23/ Bank interest only.

Beggar-thy-neighbor policies may jeopardize further deregulation because they may tempt the affected countries to impose controls. 1/ Alternatively, residence countries may reduce capital income tax rates to levels in other countries. This, in turn, may further increase the scope for tax arbitrage. For example, if countries reduce taxes on interest income earned by foreigners below that imposed on domestic residents, they increase the incentives for cross-haulings of capital, which results in excessive financial intermediation. 2/ Moreover, low effective taxes on interest income lead to an excessive reliance on debt financing, which may harm the overall efficiency and stability of the financial system. 3/ Lowering tax rates on capital income in response to foreign tax policies affects the entire tax structure because it raises the costs of maintaining higher tax rates on labor income in view of the difficulties in distinguishing between some types of labor income and capital income.

In a liberalized environment, the taxation of portfolio flows requires international cooperation in order to preserve some degree of autonomy in national tax policy and to prevent beggar-thy-neighbor policies. Cooperation may involve either more effective source taxation through withholding or disclosure of capital income to residence countries through an international exchange of information. In principle, the latter method is preferable because it would not necessitate convergence of tax rates across countries. 4/ However, administrative realities described above complicate the consistent application of the residence principle.

While coordination in this area seems especially urgent, the EC depends on cooperation from non-EC countries in order to effectively tax portfolio capital income earned by EC residents. If more effective taxation of personal capital income is confined to income originating in the EC, financial services could migrate offshore to Switzerland, Liechtenstein, or other tax haven jurisdictions. Hence, tax evaders remain able to shift the tax burden to honest taxpayers who comply with

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1/ France, for example, has threatened on several occasions to maintain some capital controls if other EC countries do not cooperate in enforcing taxes on capital income earned by French residents.

2/ Dooley (1988) describes how residents, who are exposed to domestic taxation, and nonresidents, who have access to explicit or implicit government guarantees not available to residents, can engage in tax arbitrage resulting in large gross capital flows.

3/ Corporate taxes withhold only equity income at source.

4/ See Giovannini (1989). More effective source taxation could complement this approach by ensuring that at least some tax is paid and by encouraging recipients of capital income to identify themselves to the tax authorities. Bird (1988) prefers more effective source taxation in view of administrative difficulties. Note also that, under the residence principle, international tax rate differentials can cause investors to change their country of residence.

the tax law, borrowers who do not have access to offshore centers, and immobile factors. Nevertheless, agreement within the EC may play a useful role in facilitating cooperation on a global scale. 1/ Just as countries coordinate trade policy under GATT, they may have to lay down additional rules of conduct regarding capital income taxation under a multilateral international convention. 2/

V. Interest Incomes and Deductions

Lending and borrowing decisions, both within and across countries, can be distorted by five factors: (a) tax evasion; (b) inflation; (c) the level and progressivity of income tax rates; (d) the way interest income is taxed; and, finally (e) the tax treatment of interest expenses. In this section, we shall ignore tax evasion and briefly examine the other factors. 3/

The rates of inflation in the EC countries participating in the exchange rate mechanism of the EMS have converged in recent years. However, if we consider all EC countries, we still observe significant differences. The current range in inflation rates varies from about 1 percent in the Netherlands to 13 percent in Greece and Portugal. Personal income tax rates also continue to differ significantly in spite of recent or announced reductions. The top marginal rate, for example, ranges from around 40 percent to around 60 percent. The treatment of interest income is more uniform, although in some countries, for example in Italy, final withholding taxes may be imposed on interest incomes (see Table 6). These taxes may be levied at lower rates than the income taxes on other income. However, they are imposed on gross interest incomes, i.e., without the benefit of deductions or personal exemptions.

EC countries continue to differ considerably in their tax treatment of interest deductions, especially with respect to interest paid on mortgage loans (Table 7). Together with significant differences in the personal tax treatment of imputed rental incomes (Table 8) and of

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1/ The EC Commission intends to open negotiations with nonmember countries on these issues either bilaterally or within a multilateral framework such as the OECD. See Commission of the European Communities (1989b).

2/ Countries that sign such a convention may have to subject countries that fail either to provide information or levy a minimum withholding tax to sanctions. Host countries could reduce withholding taxes only if income recipients would present proof that they had reported their income to a residence country that had signed the convention. Coordination in this area could go hand-in-hand with enhanced coordination in the area of regulation of international capital markets.

3/ Detailed discussions of these aspects can be found in (Tanzi (1987a and 1987c)).

Table 7. European Community: The Tax Treatment of Interest Expenses, 1985

Country	Interest on Loans for				
	Investment or business purposes	Home purchases or improvements: Principal residence	Home purchases or improvements: Secondary residence	Consumer purchases	Other purposes
Belgium	TAFD	TAPD(0)	TAPD(0)	ND	ND
Denmark	TAFD	TAFD	TAFD	TAFD	TAFD
France	TAFD(B)	TCFD(C)	ND	ND	ND
Germany, Fed. Rep. of	TAFD	TAFD	ND	ND	ND
Greece	TAFD	TAFD	ND	ND	ND
Ireland	TAFD(B)	TAFD(C)	ND	ND	ND(1)
Italy	ND	TAFD(C)	TAFD(C)	ND	ND
Luxembourg	TAFD	TAPD	TAPD	TAFD	TAFD(C)
Netherlands	TAFD	TAFD	TAFD	TAFD	TAFD
Portugal	ND	TAFD	TAFD	ND	ND
Spain	TAFD	TAFD	TAFD	ND	TAFD
United Kingdom	TAFD(B)	TAFD(C)	ND	ND	ND(1)

Source: OECD, Taxation in Developed Countries (Paris, France, 1987).

Key:
- TAFD — Tax allowance fully deductible (i.e., tax allowance equivalent to the total amount of expenses).
- TAFD(B) — Tax allowance fully deductible for interest on loans for business purposes only.
- TAPD — Tax allowance partially deductible (i.e., tax allowance up to specified percentage of expenses).
- TCFD — Tax credit fully deductible.
- ND — Not deductible (or creditable).
- (C) — Subject to a ceiling or maximum.
- (0) — Fully deductible but only against associated income.
- (1) — Except for certain limited classes of loan.

Table 8. European Community: Imputed Rent on Owner-Occupied Housing Under Personal Income Tax System, 1987

Country	Imputed Rent Included in Taxable Income	Valuation Base 1/	Assessed Rental Rate
			(In percent)
Belgium	Yes	Cadastral value	4
Denmark	Yes	Assessed value under net wealth tax	2.5 to 7.5
France	No	--	--
Germany, Fed. Rep. of 2/	Yes	Assessed value under net wealth tax	1.4
Greece	Yes	Assessed value	4
Ireland	No	--	--
Italy	Yes	Cadastral value	...
Luxembourg	Yes	...	...
Netherlands	Yes	Market value (60 percent)	1.3
Portugal	Yes	Market value	...
Spain	Yes	Value under wealth tax	3
United Kingdom	No	--	--

Source: OECD.

1/ Repair and maintenance costs are generally deductible.
2/ Tax on imputed rent was removed in 1988.

capital gains on the sale of properties, they create a situation whereby, as obstacles to capital movements are removed, financial capital moves on the basis of tax rather than fundamental economic considerations.

Take for example a country with (a) a relatively high marginal tax rate on personal income and liberal deductibility of interest payments; (b) a lenient treatment of (imputed) rental income; and (c) low or no taxes on capital gains on the sale of properties. These factors create strong incentives to invest in housing--especially if some inflation still prevails. Table 9 illustrates this. Given a real (before-tax) rate of interest of 4 percent, it calculates the real after-tax borrowing rate on the basis of various assumptions about the inflation rate and the statutory marginal tax rate at which interest payments can be deducted from taxable income. On the basis of fairly realistic assumptions, the real after-tax cost of borrowing for high-income taxpayers can range from a positive 4 percent to a negative 4 percent.

Since a growing share of the EC population will be able to freely choose the place of residence, at least upon retirement, these tax incentives may also influence decisions on where people retire. Hence, if taxes are not to play a role in capital (and population) movements, some harmonization of the tax treatment of interest deductions and owner-occupied housing would seem necessary.

VI. Conclusions

Is harmonization desirable for capital income taxes? Given the reality of a single market with unrestrained capital movements and free movement of goods and services, the answer to the question is a qualified yes.

Without harmonization of capital income taxes:

1. The allocation of capital across countries would be inefficient because the rate of return to capital across countries would tend to be equalized after and not before taxes. In view of substantial differences in tax wedges across countries, the potential welfare losses associated with the inefficient allocation of capital could be significant.

2. Unilateral fiscal actions, for example, reducing the corporate income tax or changing the tax treatment of interest income or expense, could have major adverse effects on other EC countries. In fact, countries might increasingly use the tax system as an instrument to take advantage of other countries because other policy instruments (such as more capital restrictions, trade restrictions, or an independent monetary policy) would no longer be available. Such developments might lead to retaliation, a weakening of the Community, and an underprovision of some public services.

Table 9. Real Borrowing Rates

(In percent)

Inflation Rates	Marginal Tax Rates 0	10	20	30	40	50	60
0	4.0	3.6	3.2	2.8	2.4	2.0	1.6
1	4.0	3.5	3.0	2.5	2.0	1.5	1.0
2	4.0	3.4	2.8	2.2	1.6	1.0	0.4
3	4.0	3.3	2.6	1.9	1.2	0.5	-0.2
4	4.0	3.2	2.4	1.6	0.8	--	-0.8
5	4.0	3.1	2.2	1.3	0.4	-0.5	-1.4
6	4.0	3.0	2.0	1.0	--	-1.0	-2.0
7	4.0	2.9	1.8	0.7	-0.4	-1.5	-2.6
8	4.0	2.8	1.6	0.4	-0.8	-2.0	-3.2
9	4.0	2.7	1.4	0.1	-1.2	-2.5	-3.8
10	4.0	2.6	1.2	-0.2	-1.6	-3.0	-4.4

Source: See text.

3. Countries may use the tax system to impose their political views in the economic sphere on others. More conservative governments may force tax and expenditure reductions or less progressive taxation in the EC as a whole. For example, a country that sharply decreases the rate of the corporate income tax would force similar reductions on others which, in turn, would most likely lead to lower marginal tax rates on personal incomes. Countries with high public expenditures might also be forced to reduce these expenditures below levels preferred by their electorates.

4. Unilateral changes might bring about potentially disruptive capital movements which would affect real exchange rates and, therefore, make the pursuit of fixed nominal exchange rates more difficult.

Is (capital income) tax competition desirable? The answer depends to a large extent on political views. If one prefers a smaller government, or if one believes that the political process incorporates a bias toward higher taxes and public spending, one would welcome tax competition because it would tend to reduce tax levels and, one hopes, public spending. Furthermore, those who believe that taxes should not be imposed on capital incomes (and many economists today share this view) may also favor tax competition.

Tax competition, however, does introduce an element of compulsion on other countries, especially on those that attach a high priority to equity and revenue objectives. Countries that prefer a high level of public services may also be adversely affected as benefit taxes become more difficult to implement. Tax competition may also lead to less stable tax systems because of changes of government in major countries. For example, a change to a Labor government in the United Kingdom would force other countries to adjust to a different U.K. tax policy. Tax changes are costly and, when they affect many countries, should not be left totally to the discretion of a government.

Thus, given the reality of a unified market with (relatively) fixed exchange rates and free movement of capital and goods, some form of harmonization of taxes, and especially of taxes on capital income, seems desirable. However, it does not follow that <u>any</u> form of harmonization is desirable. In fact, harmonizing tax systems around an inefficient structure could be worse than no harmonization at all. As regards capital income taxation, harmonization could start with an agreement on the tax base. EC countries could then agree on at least a minimum statutory rate. These harmonization agreements could be reassessed at fixed intervals.

References

Benson, Bruce L., and Ronald N. Johnson, "Capital Formation and Interstate Competition," in Taxation and the Deficit Economy: Fiscal Policy and Capital Formation in the United States, ed. by Dwight R. Lee (Pacific Research Institute for Public Policy, San Francisco, California, U.S., 1985).

Bewley, Truman F., "A Critique of Tiebout's Theory of Local Public Expenditures," Econometrica, Vol. 49, No. 3 (May 1981), pp. 713-40.

Bird, Richard M., "Shaping a New International Tax Order," Bulletin for International Fiscal Documentation, Vol. 42, No. 7 (July 1988), pp. 292-99.

Bovenberg, A. Lans, Krister Andersson, Kenji Aramaki, and Sheetal K. Chand, "Tax Incentives and International Capital Flows: The Case of the United States and Japan," International Monetary Fund Working Paper, WP/89/5 (Washington, D.C., U.S., January 1989).

Brennan, Geoffrey, and James Buchanan, "Normative Tax Theory for a Federal Polity: Some Public Choice Preliminaries," in Tax Assignment in Federal Countries, ed. by Charles McLure (Australian National University, Center for Research on Federal Financial Relations, Canberra, Australia, 1983).

Cnossen, Sijbren, "Tax Structure Developments," in Tax Coordination in the European Community, ed. by Sijbren Cnossen (Kluwer Law and Taxation Publishers, Deventer, The Netherlands, 1987).

_____, "More Tax Competition in the European Community?," paper presented at 44th Congress of the International Institute of Public Finance (Istanbul, Turkey, August 1988).

Commission of the European Community, "Tax Measures to be Adopted by the Community in Connection with the Liberalization of Capital Movements," COM(89) 60/3/Revision final (Brussels, Belgium, May 12, 1989a).

_____, "Completion of the Internal Market and Approximation of Indirect Taxes," COM(89) 260 (Brussels, Belgium, May 18, 1989b).

de la Fuente, Angel, and Edward Gardner, "Corporate Income Tax Harmonization and Capital Allocation in the European Community," IMF Working Paper (Washington, D.C., U.S., forthcoming, 1990).

Devereux, Michael, and Mark Pearson, "Corporate Tax Harmonization and Economic Efficiency," Institute for Fiscal Studies Report Series No. 35 (London, United Kingdom, October 1989).

Dooley, Michael P., "Capital Flight: A Response to Differences in Financial Risks," IMF Staff Papers, International Monetary Fund, Vol. 35, No. 3 (Washington, D.C., U.S., September 1988), pp. 422-36.

_____, and Peter Isard, "Fiscal Policy, Locational Decisions, and Exchange Rates," International Monetary Fund Working Paper, WP/89/49 (Washington, D.C., U.S., June 1989).

Frenkel, Jacob A., Morris Goldstein, and Paul R. Masson, "International Coordination of Economic Policies: Scope, Methods, and Effects," International Monetary Fund Working Paper, WP/88/53 (Washington, D.C., U.S., June 1988).

Giovannini, Alberto, "National Tax Systems vs. the European Capital Market," Economic Policy (forthcoming, 1989).

Gordon, Roger H., "Taxation of Investment and Savings in a World Economy," American Economic Review, Vol. 76, No. 5 (December 1986), pp. 1087-1102.

H.M. Treasury, Taxation in the Single Market: A Market-Based Approach (September 1988).

Kopits, George, and Leif Mutén, "The Relevance of the Unitary Approach for Developing Countries," in The State Corporation Income Tax, ed. by Charles E. McLure (Hoover Institution Press, Stanford, California, U.S., 1984).

Kuiper, Willem, "EC Commission Proposes a Directive on the Harmonization of Rules for the Determination of Taxable Profits of Enterprises," European Taxation, Vol. 28, No. 9 (October 1988), pp. 319-29.

McLure, Charles E., "Assignment of Corporate Income Taxes in a Federal System," in Tax Assignment in Federal Countries, ed. by Charles E. McLure (Centre for Research on Federal Financial Relations, the Australian National University, Canberra, Australia, 1983).

_____, "Tax Competition: Is What's Good for the Private Goose also Good for the Public Gander?," National Tax Journal, Vol. 39, No. 3 (September 1986), pp. 341-48.

_____, "Economic Integration and European Taxation of Corporate Income Taxation at Source: Some Lessons from the U.S. Experience," European Taxation, Vol. 29, No. 8 (August 1989), pp. 243-50.

Musgrave, Peggy B., "Interjurisdictional Coordination of Taxes on Capital Income," in Tax Coordination in the European Community, ed. by Sijbren Cnossen (Kluwer Law and Taxation Publishers, Deventer, The Netherlands, 1987).

Musgrave, Richard A., "Who Should Tax, Where, and What?," in Tax Assignment in Federal Countries, ed. by Charles E. McLure (Centre for Research on Federal Financial Relations, the Australian National University, Canberra, Australia, 1983).

Mutén, Leif, "Some Topical Issues Concerning International Double Taxation," in Comparative Tax Studies: Essays in Honor of Richard Goode, ed. by Sijbren Cnossen (North-Holland, Amsterdam, The Netherlands, 1983).

_____, "A New International Tax Order?," Bulletin for International Fiscal Documentation, Vol. 42, No. 11 (November 1988), pp. 471-72.

Oates, Wallace E., and Robert M. Schwab, "The Allocative and Distributive Implications of Local Fiscal Competition" (University of Maryland Working Paper, College Park, Maryland, U.S., June 1988).

Organisation for Economic Cooperation and Development, "Transfer Pricing and Multinational Enterprises" (Paris, France, 1979).

Papke, James A., and Leslie E. Papke, "Measuring Differential State-Local Tax Liabilities and Their Implications for Business Investment Location, National Tax Journal, Vol. 39, No. 3 (September 1986), pp. 357-66.

Siebert, Horst, "The Harmonization Issue in Europe: Prior Agreement or a Competitive Process?" Working Paper No. 377 (Kiel Institute of World Economics, Kiel, West Germany, June 1989).

Sinn, Hans-Werner, "The Policy of Tax-cut-cum-base-broadening: Implications for International Capital Movements," paper presented at 43rd Congress of the International Institute of Public Finance (Paris, France, August 1987).

_____, "Tax Harmonization and Tax Competition in Europe," invited paper presented at the Fourth Annual Congress of the European Economic Association (Augsburg, West Germany, September 1989).

Slemrod, Joel, "Tax Principles in an International Economy," in World Tax Reform, ed. by M. Boskin (International Center for Economic Growth, San Francisco, U.S., 1990).

Steuerle, Eugene, "Capital Income and the Future of the Income Tax," paper presented at International Seminar in Public Economics on the Future of Personal Income Taxation (Erasmus University, Rotterdam, The Netherlands, January 1989).

Tanzi, Vito, "Income Taxes, Interest Rate Parity, and the Allocation of International Savings in Industrial Countries," International Monetary Fund Working Paper, WP/87/53 (Washington, D.C., U.S., August 1987a). Published, in Italian, in Tax Policy and Economy, Antonio Pistone, editor (Padova: Cedam).

_____, "The Response of Other Industrial Countries to the U.S. Tax Reform Act," National Tax Journal, Vol. XL, No. 3 (1987b), pp. 339-55.

_____, "The Tax Treatment of Interest Incomes and Expenses in Industrial Countries: A Discussion of Recent Changes," Proceedings of the 80th Annual Conference on Taxation of the National Tax Association--Tax Institute of America (November 1987c), pp. 128-36.

_____, and Teresa Ter-Minassian, "The European Monetary System and Fiscal Policies," in Tax Coordination in the European Community, ed. by Sijbren Cnossen (Kluwer Law and Taxation Publishers, Deventer, The Netherlands, 1987).

Tanzi, Vito, and A. Lans Bovenberg, "Economic Interdependence and the International Implications of Supply-Side Policies," in A Supply-Side Agenda for Germany, ed. by Gerhard Fels and George M. von Furstenberg (Springer-Verlag, New York, N.Y., U.S., 1989).