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Globalization, Tax Competition and the Future of Tax Systems [1]

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Abstract

This paper discusses the implications for tax systems of globalization of capital markets and of economies. It shows the extent to which particular taxes are affected by the globalization process. It speculates on future developments in this area and on tax competition.

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Contents

Summary

In recent years, the integration and globalization of economies and financial markets have accelerated. While the textbook assumption of a closed economy may have been useful in years past, it has become progressively more anachronistic. Today, individuals may be able to choose among many countries in deciding where to work, to shop, to invest their financial capital, to allocate the production activities of the enterprises they control, and so on. In these decisions, they take into account the impact of taxes, especially as long as the tax systems of different countries continue to diverge as much as they do today.

The current tax systems of many countries are largely the product of a period (before, during, and immediately after the Second World War) when economies were closed and capital movements were much limited. Because they do not reflect yet, or fully, recent economic development, there is ample scope for individuals to exploit these differences and for some countries to try to take advantage of opportunities to attract taxable bases from other countries to them. As tariffs on imports fall, the incentives to compete through special tax treatments of particular activities increase. We thus observe a process that, at times, has been described as "tax degradation," whereby some countries change their tax systems to raid the world tax base and export their tax burden.

This process forces countries to reform their tax systems in directions that may not always be welcome.

The paper outlines some important economic developments that lead to the proliferation of spillover effects associated with taxation; provides examples of growing difficulties in taxing incomes and consumption originating from the growing integration of world economies; shows how tax systems have begun to change in response to these pressures; and speculates on future developments.

I. Introduction

In recent years the world has been enjoying the benefits coming from a progressive integration of the world economies. Economies that had been autarkic and closed have opened up and are being integrated in a truly world economy. A global capital market has come into existence allowing huge movements of capital which are promoting interest rate parity at world level.

The benefits from this process of globalization are many and some are obvious: (a) world resources are better allocated; thus, output and standards of living rise; (b) because of the greater access to foreign goods, individuals enjoy a greater range of choice in goods and services; (c) because the cost of travel has fallen significantly (in time and money), many individuals are able to visit far away places; (d) the amount and range of information available to individuals has increased enormously while the cost of getting information has fallen dramatically.

The significance of these benefits can be easily appreciated. But, as is often the case, these developments also bring some negative aspects. Globalization can create or aggravate, potential problems. It is, thus, important to control these negative developments so that they are prevented from becoming large enough to cast a bad light on the process of globalization and to provoke policies aimed at reversing the recent trends. In my talk today I will focus on the implications for tax systems.[2]

II. Globalization and Tax Policy

Globalization implies that many *national* policies come to have effects beyond a country's borders. It, thus, tends to create frictions between the developments described above and traditional, national policies or institutions which, to a large extent, still reflect the closed-economy environment and thinking that existed when they were first developed or created. This conflict characterizes many policy areas and is becoming particularly strong in taxation. The ongoing debate on taxation within the European Union is evidence of this conflict. In my presentation, I will argue that this is an issue with worldwide significance.

The tax systems of many countries came into existence or developed at a time when trade among countries was greatly controlled and limited and when large capital movements

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[2]See for discussions of these issues, Jacob A. Frenkel, Assaf Razin, and Efraim Sadka, *International Taxation in an Integrated World* (Cambridge, Mass: MIT Press, 1991); and Vito Tanzi, *Taxation in an Integrating World* (Washington, D.C.: The Brookings Institution, 1995).

were almost nonexistent.[3] At that time, trade flows among countries were reduced by high tariffs or by physical restrictions to the movement of goods, and capital flows were forbidden or, at least, were greatly controlled. In that environment, most enterprises operated largely within the borders of the countries in which they had originated and most individuals earned their incomes from activities or investments carried out in the countries in which they had their legal residence. Trade flows, the profits of enterprises, personal incomes and consumption, and net wealth, could all be taxed by the countries' authorities without conflicting claims by other countries' authorities and without concerns about taxes paid to other jurisdictions.

In the environment described above the application of what is sometimes called the "territoriality principle," which gives a country the right to tax all incomes and activities within its territory, did not cause conflict or difficulty. Tax policies by any one country could be pursued without much concern or much thought about how they would affect other countries. Equally, the tax policies of other countries were of only marginal, if any, interest to a country's policymakers because they did not affect the behavior of its citizens. Until recent years the study of taxation reflected this environment and was, thus, almost exclusively the study of taxation in a closed economy as is evident from most standard textbooks and articles.

Globalization and the progressive integration of world economies have been changing all this. In the present environment the actions of many governments have come to be greatly constrained or influenced by the actions of other governments, and spillover-effects across frontiers generated by taxation have become common and important. This has opened the possibility for some countries to take advantage of this new situation by attracting to them a larger share of the world tax base, thus exporting some of their tax burden. A full treatment of these aspects is beyond the scope of this paper. However, a few examples dealing with different taxes will illustrate some of the relevant aspects.

Sales Taxes

With increasing frequency, some countries are trying to entice foreign consumers to do some shopping in their territories.[4] The enticement is provided by keeping their excise and sales taxes low (especially) on easily transportable and expensive commodities. In this way they can "export" some of their tax burden thus reducing other countries' tax revenue while increasing their own. These actions are particularly advantageous for small countries which

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[3]For example, global income taxes were much influenced by Henry Simons' classic book, *Personal Income Taxation* (University of Chicago Press) written in 1938. Value-added taxes were influenced by Maurice Lauré's book written in 1952 and by the subsequent introduction of such a tax in France.

[4]For example, airports are becoming more and more huge shopping centers and major shopping outlets are being created close to tax frontiers.

may be able to attract buyers from larger neighbors.[5] For these smaller countries the elasticity of tax revenue with respect to changes in their tax rates may be particularly high because of the possibility of cross-frontier shopping. Cross-frontier shopping has been increasing as a result of more open frontiers, better information, more international advertising, lower transportation costs, greater mobility of individuals, mail order shopping, and technological and policy developments such as the use of internet and of credit cards to pay for cross-border purchases.

This process has also reduced the degree of freedom of some countries in imposing the taxes they want to impose. For example, when a Canadian province tried to increase taxes on cigarettes to discourage smoking, it had to give up because the demand for cigarettes shifted across the border towards less-taxed and, thus, cheaper American cigarettes.[6] There is increasing evidence from research studies that this cross-frontier shopping, caused by tax rate differentials, is growing in importance. Under present and likely future circumstances this trend can be assumed to continue.

Taxes on Enterprise Income

Many enterprises have become "multinational" and, in some cases, have almost lost their original national identity especially in an economic sense. Some of these enterprises have established integrated production processes in different countries. For example, they may produce raw materials in countries A and B convert them into intermediate products in countries C and D and use them to produce finished products in country E from which these products are exported to other countries. The technology and the design for the finished products may be developed in still other countries. The production of a given, final product often uses physical or intellectual inputs produced by the enterprise's branches or subsidiaries located in several countries. The capital, and even some of the labor, used in the production processes may also come from other countries. It, thus, becomes increasingly more difficult to identify the country of origin of a product.

Available statistics indicate that a significant and growing part of the current world trade is actually trade among different parts of the same multinational enterprises. For example, intra-firm trade, excluding intra-transnational corporation trade in services, is estimated to have increased from about 20 percent of world trade in the early 1970s to around one-third in the early 1990s,. (*Source*: The United Nations 1994 World Investment Report.)

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[5]This kind of competition is also common within federal states such as the United States and Brazil.

[6]It should be noted that the effects of globalization are not symmetric between raising and reducing tax rates. The pressure is normally toward tax rate reduction and thus lower revenue for the countries so affected.

The trade in services is likely to have increased much faster.[7] This situation raises the question of how to allocate the total profits of a multinational enterprise among its various parts located in different countries.

Like all taxpayers, multinational enterprises have an incentive to lower their (worldwide) tax liabilities. They can promote this objective in various ways. The first is by locating their operations in countries where the statutory tax rates are low or where more generous tax incentives are provided. The benefits that can accrue to a country from having more investment and, thus, more profits allocated to it will inevitably induce some countries to try to take advantage of the situation. Tax competition among countries will induce some governments to legislate lower tax rates or to provide more generous tax incentives than other countries in order to attract foreign investment.[8] When capital is mobile and the country is small, the revenue cost to the country that provides tax incentives can be low or even negative if it succeeds in attracting foreign investment from other countries. If the country has high unemployment, the foreign capital can be combined with workers who would have been unemployed. The benefits in terms of employment generated by foreign investment can thus be high. Because the hired workers will pay income taxes on their wages, or sales taxes on the purchase they make with the wages received, the total tax benefits to a country associated with incentives that attract foreign investment may be significant even when the tax incentives or the lower tax rate reduce the revenue from the taxes on the profits of the domestic enterprises.

Secondly, to some extent, enterprises can manipulate, for tax purposes, the costs of the inputs that they import from their affiliates located in other countries ("transfer prices"). These inputs, which can represent a large proportion of the value of the final product, are often produced by the foreign affiliate of the company specifically for a given final product. Therefore, there is no genuine, objective, market-determined value that can be used in establishing their true cost. Through the manipulation of transfer prices the multinational enterprises can shift taxable profits to subsidiaries located in jurisdictions where effective tax rates are low and away from jurisdictions where effective tax rates are high. These shifts do not require specific movements of real capital but only the movement of taxable profits.[9] The

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[7]Telecommunication allows increasingly to draw on services from abroad through the internet.

[8]This same kind of competition has become particularly intense within the United States where states compete through tax incentives that tend to reduce the base for the taxes on enterprises. It should be noted that incentives can include outright awarding of grants and/or provision of infrastructure that are not reflected in corporate tax statistics.

[9]There is some evidence from the behavior of affiliates of U.S. multinational corporations that higher profits are reported in countries with the lowest effective tax rates. See U.S. Department of Commerce, Bureau of Economic Analysis, *U.S. Direct Investment Abroad, Operations of U.S. Parent Companies and Their Affiliates*, Revised 1992 Estimates,

increase for tax purposes in the price of the imported inputs has been made more attractive by the lowering of customs duties that has taken place in recent years. Because of this, a higher import price will lower taxable profits without increasing the tax liabilities from import duties.

The net effect of the manipulation of the transfer prices is a reduction in the total (worldwide) tax liabilities of the multinational enterprises and some reallocation of total tax liability among the relevant countries. Some are likely to lose more revenue than others and some countries will gain from these actions. The manipulation of transfer prices has become a significant problem which is leading to an erosion of tax revenue. The tax administrators of various countries have shown growing concern about this problem. The technical characteristics of modern products (planes, cars, electronics and intangibles) make the control of transfer prices by the tax authorities, particularly difficult.[10] At times, the tax authorities have been forced to rely on presumptive estimations of these prices, thus changing the nature of the tax on profits. When this is the case, the corporate income tax is no longer a genuine income tax. This discussion has emphasized the manipulation of the prices of real inputs. However, the assignment of costs to trademarks, headquarters expenses, expenses for research and developments, and loans among different parts of the same multinational enterprise also create opportunities for manipulations aimed at reducing the total tax burden on the enterprise.

The tax administrations of some countries are allocating increasing administrative resources to what, over the long run, may turn out to be a futile attempt to deal with this problem. The employees of the tax administrations who may be poorly paid face an army of highly paid, well-trained and sophisticated accountants, lawyers, and tax experts who argue the interests of the enterprises. The use of these valuable resources to contain tax avoidance or to comply with administrative requirements imposed by the tax administrations must be considered a dead weight for the economies. Furthermore, it is also likely that tax competition is inducing some countries to show less enthusiasm than others in dealing with this problem.

There is now growing evidence that tax considerations are important factors in the location decisions of many multinational enterprises. Even though much foreign investment is still made for reasons that have little to do with taxes, lower effective tax rates do influence the decision of many enterprises on whether or not to locate within a given country and also whether to report a higher share of their worldwide profits in that country. Ireland has been a location favored by many enterprises because of its generous tax provisions and low tax rates. In a recent survey of investment decisions by American multinationals it was reported that, in a sub-group of 18 countries, Ireland had the lowest effective tax rate and the highest rate of

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Washington, D.C.: U.S. Government Printing Office, June 1995. Of course, much foreign investment goes to countries with valid economic reasons to make the investment.

[10]For example, a modern plane can use millions of parts, many of which made specifically for that plane.

return on assets. It was also reported that, although total US-owned assets in Ireland were less than one-sixth of the total U.S. assets in Germany, the reported total profits were about the same.[11] Tax competition aimed at attracting foreign capital is a development that deserves more attention than it has received so far.

Taxes on Individual Incomes

In recent years there has been an explosive growth in the incomes that individuals derive from investments made, or from activities carried out, in other countries.[12] With the increase in personal mobility and in information technology, and with the increasing freedom to invest personal savings abroad, the total or global incomes of many individuals now contain a large *and growing* component of foreign-earned income. These individuals are likely to under-report (or, often, not report at all) the incomes earned abroad when they, realistically, assume that the tax administration of their country of residence will be unable to ascertain or discover these foreign-earned incomes.[13]

Exchange of information among the tax authorities of different countries is limited and is often unable to prevent the nonreporting of these incomes and the tax evasion associated with it. In fact, the non-existence of treaties requiring cooperation in exchanging information and, when treaties exist, conflicting objectives among the tax authorities of different countries, guarantee that in many cases this needed information will not be provided.[14] As a

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[11]See Martin A. Sullivan, "The Luck of the Irish? Profits and Taxes of U.S. Multinationals Abroad" in *Tax Notes*, May 20, 1996, pp. 1119-1120; see also Michael P. Devereux and Rachel Griffith, "Taxes and the Location of Production: Evidence from a Panel of U.S. Multinationals," paper presented at the 52nd Congress of the International Institute of Public Finance, Tel-Aviv, August 26-29, 1996. Table 2 below reports a corporate tax rate of 40 percent for Ireland. However, many industrial corporations are taxed at a rate of 10 percent.

[12]One indicator of this can be seen in the sharp increase in portfolio investment income derived from overseas investments. IMF statistics indicate that for the world as a whole this investment increased from $447 billion in 1988 to $768 billion in 1994. Another indicator of the surge in transnational financial transactions is that cross-border security transactions expanded from less than 10 percent of major industrial countries' GDP in 1980 to well in excess of 100 percent of GDP in 1992. *Source*: IMF, *World Economic Outlook*, May 1995.

[13]For example, tens of billions of US$ of Latin American capital escaped taxation in Latin America by being deposited abroad, especially in the United States, in nonresidents' accounts which were not taxed by the United States.

[14]See Vito Tanzi, *Taxation in an Integrating World*, *op. cit.*, pp. 78-89. See also OECD, *Tax Information Exchange between OECD Member Countries: A Survey of Current Practices* (Paris: 1994).

consequence, official statistics do not fully report these incomes and some countries can benefit, at the expense of other countries, if they can attract financial capital from other countries. For example, several countries, including the United States, allow foreigners to have savings accounts that are tax free. This situation leads to revenue losses for the world at large and to changes in the allocation of tax revenue among countries and among individuals within countries. It may also lead to changes in the statutory tax systems of some countries when the countries' policymakers attempt to compensate for the losses on income taxes by increasing the rates of other taxes.

The existence of tax-haven countries facilitates tax avoidance and tax evasion. In recent years there has been a proliferation of countries and territories which impose low or even zero tax rates and which encourage individuals and enterprises to use them to establish a tax address to which incomes earned in other countries, can be channeled.[15] The tax-haven countries benefit by the fees or the low taxes that they impose on the financial capital channeled to them and that would not have been channeled to them in the absence of tax considerations. The countries from which the capital originates experience losses in revenue and a decreased control over their tax bases. Many hedge funds or other investment funds have established official residence in low-tax or in tax-haven countries. The extent to which those who invest in these funds report to their own tax authorities the incomes they receive on their investments is an open question. The total deposits reported by some of these tax-haven countries or territories are enormous especially when compared to the size of their economies or the number of their inhabitants.

Finally, new financial market instruments (such as derivatives and other exotic instruments) are creating complex problems for tax administrations and further possibilities for tax competition. The problems relate to questions such as: what is the transaction being taxed? Who is the taxpayer? When should income or loss be taken into account and how much? And how much profit should be reported to a particular jurisdiction? As a consequence, tax administrators are having increasing difficulties in identifying incomes, in

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[15]See Caroline Doggart *Tax Havens and Their Uses* (London: The Economist Intelligence Unit, 1993) for a description and listing of tax havens. See also Joel Slemrod "Tax Haves, Tax Bargains and Tax Addresses: The Effect of Taxation on the Spatial Allocation of Capital," in *Reforming Capital Income Taxation*, edited by Horst Siebert, 23-42, Tübingen: J.C.B. Mohr, 1990).

allocating them to particular countries, and in taxing them.[16] These difficulties are even greater when the firms that handle these operations operate from tax-haven territories.

Problems associated with the taxation of financial assets can only grow in time. In the taxation of financial incomes, policies are lagging behind the rapid technical developments. As financial markets become more integrated and more complex, and as capital movements intensify,[17] the ability of the national tax administrations to deal with these issues in a satisfactory manner is unlikely to keep pace with these developments.

III. The Future of Tax Systems

The developments mentioned above, and others not discussed in this paper, are having and will continue to have an impact on the tax systems and on the tax revenues of countries. However, this impact is not yet fully understood, and, as a consequence, it is difficult to assess quantitatively. Recent newspaper reports have indicated that the tax revenue of particular countries has been lower than forecasted, even when other developments (such as cyclical developments) were taken into account. Some finance ministers have expressed concerns about these presumed revenue losses which are particularly unwelcome at a time when a reduction in fiscal deficits remains an important objective for the economic policy of many countries. Additionally, some countries have experienced sudden capital outflows when they have attempted to introduce, in isolation, particular changes in tax policy, such as tax withholding for particular kinds of capital income.

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[16]See in particular Charles T. Plambeck. H. David Rosenbloom and Diane M. Rinz, "Tax Aspects of Derivative Financial Instruments: General Report" in *Cahiers de Droit Fiscal International*, pp. 653-90 (1996);Julian S. Alworth, "Taxation, Financial Innovation and Integrated Financial Markets: Some Implications for Tax Coordinators in the European Union, Part I; Portfolio Investments," paper presented at 52nd Congress of the International Institute of Public Finance, Tel Aviv, Israel, August 26-29, 1996; and Myron Scholes and Mark Wolfson, *Taxes and Business Strategy* (Englewood Cliffs: Prentice Hall, 1992).

[17]It is estimated that daily capital movements exceed one trillion U.S. dollars. Alworth reports that "At end-March 1995 the outstanding national value of over-the-counter contracts [in trading instruments] amounted to a staggering $40,700 billion and at end-December 1996, the notional value of exchange trade contracts were a further $9,200 billion," *op. cit.*, p. 6. It must be extremely difficult to determine the (taxable) incomes, if any, associated with these movements and to allocate them to specific countries. In most cases these capital movements do not leave any trace in terms of actual movement of money. Only the size of accounts may change. For a discussion of this issue, see Melvyn King, "Tax Systems in the 21st Century," paper presented at the 50th Congress of the International Fiscal Association, Genera, 5 September 1996.

Fear of tax base migration has made some countries hesitant to adjust the rates of their taxes or even to tax dividends and interest incomes thus reducing the margin of maneuver for policymakers and changing the incidence of the tax system. For example, there are now many Latin American countries that no longer tax dividends and interest incomes on the belief that the taxation of these incomes would encourage capital flight. Concerns have also been expressed about the impact of current trends on the incidence of the tax system (and, therefore, on its equity) and on fiscal deficits if it forces countries to reduce tax rates in order to remain internationally competitive. Tax competition has become a fact of life for many countries and the net effect of such a competition is or will be a reduction in tax revenue for many countries and a forced change in the structure of their tax systems. In Europe this process is at times defined as "tax degradation".

Those economists, and there are many of them, who feel that tax reduction is always a good thing, because governments are inherently wasteful, will welcome the downward pressure that the competitive forces mentioned above are having or will have on both tax rates and tax revenue. Those who worry about fiscal deficits or who feel that the downward pressure on tax revenue will reduce the governments' ability to finance necessary or inflexible spending will not see this as a welcome development. In either case, the important result is that spillover effects that cross national frontiers arising from differences in tax systems, are being created.

Before attempting to speculate on the impact that the trends mentioned above can have on the future of tax systems, it may be useful to take a quick look at the statistics for the OECD countries to see whether the behavior of these statistics reveals any trends which may herald future developments. In other words, do the OECD statistics reveal some obvious effects on tax revenue and tax structure originating from the processes of globalization and tax competition?[18]

One of the fears associated with tax competition has been that total tax revenue would be negatively affected thus leading to macroeconomic difficulties for some governments or forcing others to reduce essential or politically sensitive public spending. For example, a common view has been that tax competition would reduce governments' ability to continue financing the welfare state. The available data reveal that so far there is no evidence that *total* tax revenue, expressed as a share of GDP, has been negatively affected. For total OECD that share, in fact, rose by 4.3 percentage points between 1980 and 1994. For the European countries in the OECD, the increase was of about the same magnitude. For the 15 countries of the European Union it was even higher. With the exception of Luxembourg, Norway, and the United Kingdom, each country experienced increases in the ratio of total taxes to GDP between 1980 and 1994. Of course, these statistics may be consistent with the possibility that

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[18]It should be mentioned that the full effects of tax competition may be felt in changes in the structure of particular taxes rather than in broad changes in the structure of total tax revenue.

falls in some taxes were more than compensated by increases in other taxes. It is also possible that the total tax levels might have grown even more in the absence of tax competition.

In general there has been little buoyancy in the *share of taxes on corporate income* in GDP. Over the 1980-1994 period, this share went down for many countries. For example, it went down in Austria, Canada, France, Germany, Japan, Norway, the United States, and some other countries. It is, of course, difficult to determine whether this fall was due to (a) policy decisions unrelated to globalization and tax competition, such as rate reductions or the provision of tax incentives given for reasons other than tax competition; (b) tax competition which may have led to base migration or may have forced some countries to reduce tax rates; (c) or to the erosion of the tax base caused by use of transfer prices on the part of enterprises or accommodating practices on the part of some tax administrations. Over the period considered, many countries reduced the statutory tax rates on corporate income while trying, in principle, to widen the tax base. These policy changes, however, were not necessarily the consequence of tax competition but of the prevailing thinking about the structure of taxation. Table 1 provides information on the corporate income tax rates for the 1985-95 period.

Revenue from *taxes on personal income* shows a mixed behavior--rising in some countries and falling in others. For example, over the 1980-94 period, the share of these taxes into GDP fell in the United States, Germany, Luxembourg, Netherlands, Norway, and the United Kingdom and rose in some other countries.[19] Unfortunately, there are no good statistics that would allow a separation of taxes on wages and salaries from taxes on other personal incomes such as dividends, interest and other nonwage incomes. If they were available, such a distinction would be revealing and useful.

Social security contributions increased significantly in all OECD countries. Both employers' and employees' contributions rose in percentages of GDP but the employees' contributions rose a bit faster. The increase in social security taxes demonstrates that government financing is being shifted to wages. Also, *taxes on property* showed a mild tendency toward increases.

Taxes on general consumption, which are mostly value-added taxes, rose in all countries with the exception of Belgium, France, and the Netherlands. On the other hand, taxes on specific goods and services were much less buoyant. In fact they fell in the majority of OECD countries.

Given the developments described in the previous section, a key question is how they can be expected to affect the tax systems of the countries. This is a complex question a full answer to which would require a lot more time and space than is possible here. In this brief

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[19]The fall in the share of labor income in national income which has characterized some countries (such as Germany) in recent years may be partly responsible for the fall in revenue from personal income taxes in some countries.

Table 1. Corporate Tax Rates in Selected OECD Countries			
	1985	1990	1995
Belgium 1/	45	41	40.2
Denmark 2/	50	50	34
Finland 3/	57	42	25
France 4/	50	37	33.3
Greece 5/	49	40	40
Iceland 6/	51	48	33
Ireland 7/	50	40	40
Italy 8/	46	46	52.2
Netherlands 9/	43	42	33
Norway 10/	51	51	28
Portugal 11/	50	40	39.6
Spain	35	35	35
Sweden	57	30	28
Great Britain 12/	45	35	33
Turkey 13/	49`	47	42.8
Germany 14/	56	50	58.9/46.1
USA 15/	51	39.	40
Austria	55	30	34

Source: Krister Andersson, *The Mobility of Capital* (Sweden: Ministry of Finance, 1995)

Notes:

1/ A lower tax rate applies to corporations where 50 percent or more is owned by an individual person. The tax rate includes a "crisis fee" of 3 percent (beginning 1994).
2/ The corporation must pay preliminary tax during the year in order to avoid a higher tax rate. No taxes to local authorities such as municipalities, etc.
3/ Municipal taxation was abolished in 1993.
4/ Long-term capital gains are taxed at 18 percent under the condition that the income is included in a long-term reserve in the balance sheet.
5/ The tax rate is used for corporations that are not listed on the exchange. For other corporations the tax rate is 35 percent. The tax rate is reduced by 5 percent for corporations paying tax at the time of filing returns.
6/ The tax rate refers to corporations with limited responsibilities. For other corporations the ta rate is 41 percent.
7/ A number of corporations within industry enjoy a tax rate of 10 percent.
8/ Corporate tax rate of 36 percent plus local tax of 16.2 percent.
9/ The first FL 100,000 are taxed at a rate of 40 percent.
10/ The tax rate consists of an 11 percent local tax together with a 17 percent tax to the tax equalization fund.
11/ Includes a local tax of 3.6 percent.
12/ For corporations with taxable incomes of £300,000 or less (circa 3.5 million kronor), the tax rate is 25 percent.
13/ The tax consists of a 25 percent corporate tax rate, 20 percent source tax on net income after corporate taxes, plus an added tax of 7 percent.
14/ For these two tax rates, the first applies to nondistributed earnings and the second for distributed earnings. Both tax rates include a corporate tax of 45 and 30 percent, respectively, together with a further tax of between 12 and 25 percent. Since January 1, 1995 an extra tax of 7.5 percent of the corporate tax rate has been added to distributed as well as nondistributed incomes.
15/ Federal tax rate of 35 percent, individual state and local taxes (which can vary between 0.7 percent and 10 percent).

presentation, the answer can be provided only in broad terms. There are two aspects to these developments that merit mention. The first is the effect on tax systems coming specifically from globalization and economic integration. The second is the effect of tax competition. Although in practice these two aspects become intermingled, analytically they are separate ones. In the discussion that follows, an attempt is make to keep in mind this distinction.

Let us consider first the taxes on consumption. When individuals had little mobility and, perhaps, little information about taxes in neighboring countries, and when fiscal borders were difficult to cross, large tax differentials could exist with relative impunity. However, as borders become more open and customs administrations increasingly see their role more as facilitators than as controllers of trade flows; as mobility increases; and as information becomes more available, a progressively larger share of consumption becomes potentially more mobile. This is especially true for products that have high value and little weight and volume. For these products significant differences in tax rates will cause a progressively larger migration of the tax base, in the sense that a growing number of individuals will be tempted to do their shopping where the tax rates, and thus the prices of the products, are lowest. This implies that differences in the tax rates, on products with high value and small weight and volume, can have progressively greater effects on the revenue that the countries receive from taxing these products.

It would be reasonable to expect that the countries which initially had higher rates would be under greater pressure, *ceteris paribus*, to reduce them. The general fall in the revenue from excises over the 1980-94 period reported above is in line with this reasoning. High excises on so-called luxury products have generally been reduced over the years and now most of the revenue from excises come from three categories of products--petroleum, tobacco, and spirits. For these products, although some cross-border shopping is possible and takes place when the distances are not great, this possibility is limited so that some rate differences may continue to exist even in an open world.[20]

It is, of course, much more difficult for general consumption to move because it includes nontradable goods, low-value, high-weight, and large-volume goods, and perishable goods. For general sales taxes it can be expected that significant rate differences can survive a globalizing world and even tax competition except perhaps where a large share of a country's population lives close to an easily crossed frontier.[21]

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[20]Some Canadian provinces have an excise tax on gasoline that increases with the distance from the U.S. border.

[21]However, rate differences may influence the location decisions of pensioners who may choose their residence in low-price (low-tax) countries. It may also influence the location of shopping outlets.

Table 2 provides information as of January 1, 1996 on the rates of VATs in OECD countries. For the standard rate, there is now a spread of up to 20 percentage points between the countries with the highest rate of 25 percent (Denmark and Sweden) and the countries with the lowest rates (Canada with 7 percent, Japan with 5 percent, and Switzerland with 6.5 percent).[22] There are also major differences in the reduced rates of the VATs. Apart from Switzerland, which is in the heart of Europe, Canada and Japan are not very close to potential customers from other countries. Within the European Union, there are strong pressures to bring some harmonization in the rates of the VATs and of the main excises. In this general area tax competition can be expected to be strong for excises, and especially for those related to particular products, and, perhaps, less strong for VATs.

Over the long run, the countries' tax systems will continue showing differences in tax rates for the VATs although the differences are likely to become smaller as the mobility of the population and of shopping in general rises. The large differences in the rates at which some specific products were taxed in the past are likely to disappear and, because of tax competition, the rates are likely to become low.[23]

Consider next the taxes on income starting with those on corporate income. As the Ruding Report pointed out, differentials in effective tax rates on corporate income can be expected to encourage significant capital movements and, as a consequence, to be exploited by some countries to induce capital flows toward them.[24] These movements will involve real capital as well as reallocation of taxable profits accompanied by movements of real capital. Therefore, tax competition is likely to induce some countries to reduce their effective tax rates in order to attract capital to them. Of course, most foreign direct investment is promoted by factors other than taxation. These factors include location of natural resources, access to large markets, existence of a skilled labor force, political stability, absence of corruption and so on. However, *at the margin* some enterprises will exploit existing differences in effective tax rates; and some countries will exploit the benefits that may come from maintaining these differences. When transfer prices can be manipulated, the effect of differentials in statutory tax

[22]The spread is actually 25 percentage points if one adds the United States to the table. The U.S. does not have a VAT but many states and municipalities levy retail taxes. Because of retail taxes, the rate difference between the United States and Canada is much lower than 7 percentage points.

[23]See also Hans-Werner Sinn, "Tax Harmonization and Tax Competition in Europe," *European Economic Review*, Vol. 34, No. 2/3, May 1990, pp. 489-504.

[24]See also Vito Tanzi, *Taxation in an Integrating World*, *op. cit.*

Table 2. Current Rates of VAT in the OECD
(To include Czech Republic, Hungary and Poland)

Country	Reduced rate	Standard rate	Higher rate
Austria 1/	10/12	20	-
Belgium	0/1/6/12	21	-
Canada	0	7	-
Denmark	-	25	-
Finland	0/6/12/17	22	
France	2.1/5.5	20.6	-
Germany	7	15	-
Greece 2/	4/8	18	-
Iceland	14	24.5	-
Ireland	0/2.5/10/12.5	21	-
Italy	4/10/16	19	
Japan 3/	-	3	
Luxembourg	3/6/12	15	-
Mexico	0/10	15	-
Netherlands	6	17.5	-
New Zealand 4/	-	12.5	-
Norway	0	23	-
Portugal 5/	5/12	17	-
Spain	4/7	16	-
Sweden	6/12	25	-
Switzerland	2	6.5	-
Turkey	1/8	15	23/40
United Kingdom 6/	0/2.5/8	17.5	-

Source: OECD; position as at 1st January 1996.

1/ 16% applies in the Austrian tax enclaves Mittelberg and Jungholz.
2/ Tax rates are reduced by 30% in some remote areas.
3/ 3% until 31st March 1997; 5% from 1 April 1997.
4/ For long-term stay in a commercial dwelling GST at standard rate is levied on 60% of the value of the supply.
5/ A reduced rate of 12% applies to restaurant services and certain food stuffs from 1 July 1996 (from 1st October 1966 extends to other foodstuffs).
6/ The standard rate is applied to a reduced value on imports of certain works of art, antiques and collectors items, resulting in an effective rate of 2.5%.

rates may be on the allocation of taxable profits rather than on the allocation of real capital. In this case taxable profits may move without any corresponding movement in real capital.[25]

Within the United States, tax competition among the 50 states has been directed at providing tax incentives that reduce the taxable base of enterprises thus reducing effective tax rates. This has happened in spite of the fact that the base of the federal corporate income tax influences the bases of the state corporate income taxes. The attempt has been to attract real investment because of its beneficial employment effects. However, within the United States, differences in statutory tax rates have been generally limited and the allocation of profits among parts of the same enterprise located in different states is done by use of formulas. Thus, transfer prices play no role. Among countries, tax competition may be directed at (a) lowering the statutory tax rates; (b) shrinking the tax base through various incentives; and (c) the vigor with which tax administrations control the allocation of costs among the components of a multinational enterprise. Over the long run tax competition is likely to impose a downward bias to revenue from corporate income taxes. In fact it is possible that tax competition has already been responsible for at least part of the lack of buoyancy in revenue from the profit of the enterprises.

Some authors have raised the possibility that over the long run the taxes on corporate income may be driven towards zero. It is more likely that they may be reduced towards lower statutory rates. The country-specific reasons for investing in particular countries will still play an important role. It is an open question whether the current determination of tax liabilities, which attempts to allocate profits to the various parts of a multinational enterprise on the basis of cost accounting will survive. It is conceivable that taxes based either on the value of assets or on other criteria may replace the taxes as now determined. In this sense the taxes on corporate income, as we now know them, may in fact be driven to zero.[26]

The effects of tax competition and globalization on personal income taxes are likely to be particularly strong over the long run. For several decades the driving concept in the taxation of personal income has been the global income tax. Accordingly, all the incomes of individuals, regardless of source, were put into a basket and were taxed jointly with progressive rates that could reach very high levels. The weakness of this approach in the current world is that it may subject incomes from capital sources (interest, dividends, profits, etc.) to very high marginal tax rates. For example, employees who receive high salaries but

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[25]Of course, when real capital moves because of tax differences, there is misallocation of resources on a worldwide bases. When only taxable profits move, there may be a reallocation of tax revenue without necessarily a misallocation of real resources.

[26]In a comment on this paper, Roger Gordon has argued that it is likely that corporate income taxes will be replaced by destination-based VATs. However, VAT rates are already high in many countries and trade liberalization will make it progressively more difficult to impose destination-based VATs.

earn also incomes from the investment of their savings may be subjected to high tax rates on these marginal incomes. The opportunities which now exist for investing these savings abroad and the difficulties that the tax administrations have in enforcing compliance for foreign-source incomes, will be powerful forces that will drive down the tax rates on these incomes.

It is thus likely that the concept of the *global* income tax, a la Simons, especially when applied with high marginal tax rates, will not survive. Most likely countries will go back to a schedular approach to taxation whereby, perhaps, wages and salaries will continue to be taxed at progressive rates while capital incomes may come to be taxed at proportional and relatively low rates to withstand foreign tax competition. This approach has recently been introduced by the Nordic countries and in some form has existed in other countries such as Italy.[27] An alternative may be the route of the flat tax which has received a lot of attention in the United States. Both of these are possibilities but my view is that the option adopted by the Nordic countries is more likely to materialize. Both of these options indicate a move away from the ability-to-pay basis for taxation.

In recent years, and especially within the United States, there has been a strong movement to replace taxes on income with taxes in consumption. The fact that consumption is not much taxed in the United States makes such a replacement quantitatively plausible, at least in principle. However, other countries already have major taxes on consumption. Therefore, it does not appear realistic to believe that these countries will or could replace the revenue that they now collect from taxing income with increased taxes on consumption. Tax competition would probably make it very difficult to accomplish this substitution quire apart from administration or political obstacles to taxes based on consumption (other than value-added taxes). Therefore, the Nordic countries' solution appear the most likely development even though, theoretically, it may not be the most desirable. [28]

We saw earlier that social security taxes on both individuals and enterprises have grown in importance over the years. This trend reflects the generous pension commitments made by governments to pensioners, the growth of pensioners and the fact that these taxes mostly fall on the less mobile factor of production, namely labor. These taxes are much less

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[27]For the reform introduced in Nordic countries, see Peter Birch Sorensen, "From Global Income Tax to the Dual Income Tax: Recent Tax Reforms in the Nordic Countries," 1, *International Tax and Public Finance* (May): 57-79. See also Leif Mutén, Peter Sørensen, Kåre P. Hagen and Bernd Genser, *Towards a Dual Income Tax?* (London: Kluwer Law International, 1996).

[28]The discussion on whether the tax base should be income or consumption has a long history. Hobbes, Mills, Einandi, Kaldor, and Meade all contributed to it. For a recent discussion of some of these issues within the U.S. context see Henry J. Aaron and William G. Gale, editors; *Economic Effects of Fundamental Tax Reform* (Washington, DC.: Brookings Institution Press, 1996).

sensitive to tax competition. However, to the extent that part of their incidence may fall on the enterprises (because of the existence of minimum wages and other constraints that reduce the possibility of shifting them on labor), they may reduce the demand for labor and may also encourage both enterprises and workers to engage in underground economic activities. Short of major pension reforms, it is unlikely that these taxes can come down significantly over future years, although concern for unemployment may bring some reduction in them.[29]

Finally, taxes on real properties are likely to rise because of the relative immobility of the tax base. This would reverse a trend that in recent decades saw a fall in the contribution of these taxes to total tax revenue.

IV. Concluding Remarks

This paper has dealt with a particularly difficult issue. The impact of globalization on various aspects of economic activities is only now beginning to be understood. The Brookings Institution, a leading research institution in the United States, has recently attempted to study these aspects in a systematic way. It has published 21 book-length monographs related to globalization.

The connection between globalization and taxation is particularly complex because of its interconnection with tax competition and because of the large number of actors. Globalization increases the scope for tax competition because it provides countries with an opportunity to export part of their tax burden to other countries. Some countries will use or even abuse this opportunity. Tax competition may magnify the inevitable effects of globalization. However, the complexity of the likely reactions of the countries makes the end result difficult to forecast. The fact that there is no world organization with the explicit responsibility to provide a sort of surveillance on the behavior of countries in tax matters makes tax competition more likely.[30]

The world is waking up to the realization that tax competition is not always a good thing. In fact it may create difficulties for countries by (a) eventually leading to lower tax revenue; (b) by changing the structure of tax systems in directions not desired by policymakers; and (c) by reducing the progressivity of tax systems thus making them less equitable. Up to some point these changes may be attractive especially to economists who are

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[29]See Howell H. Zee, "Taxation and Unemployment," IMF Working Paper 96/45 (May 1996).

[30]The author has suggested elsewhere that a World Tax Organization may be necessary. See Vito Tanzi, "Does the World Need a World Tax Organization?", paper presented at the 52nd Congress of the International Institute of Public Finance, Tel-Aviv, August 26-29, 1996. See also Vito Tanzi, "Forces that Shape Tax Policy" in *Tax Policy in the XXI Century*, edited by Herbert Stein (New York: John Wiley and Sons, 1988).

skeptical of governmental activities and who are concerned with efficiency. However, there is no guarantee that these changes will not go too far.

The limited evidence available indicates that so far the effect of globalization and tax competition on *total* tax revenue has been limited. However, the impact on *tax structures* is more evident. This impact is likely to accelerate with the passing of time. It is only a question of time before the level of taxation begins to reflect the forces at work.