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Corporate Taxation
of Foreign Direct Investment
Income 1991-2001

Kwang-Yeol Yoo

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Abstract/Résumé

Corporate Taxation of Foreign Direct Investment Income 1991-2001

This paper constructs indicators of tax burden on FDI in order to review their trends and cross-country patterns. Over the 1990s, the overall tax burden on inward FDI (measured by the effective marginal tax rates) fell by 8 percentage points, reflecting corporate tax reforms in some OECD countries. Nevertheless, a large variation across host countries still remains. With the effective tax rates on inward FDI differing across host countries by as much as 28 percentage points for marginal FDI and by as much as 21 percentage points for infra-marginal FDI in 2001, a cross-country comparison of tax burden indicators shows that, irrespective of the tax burden indicators chosen, Canada, Iceland and Japan are persistently ranked as high-tax host countries over the 1990s. It is also found that there is more variation in the tax burdens faced by a parent company operating in different host countries than in the tax burdens faced by subsidiaries from different home countries operating in the same host country.

JEL classification: F21, F23, G31, H25, H32, H87.

Keywords: Inward (outward) FDI, marginal (infra-marginal) investment, effective marginal (infra-marginal) tax rates, withholding tax, treatment of foreign-source income, tax planning

Imposition sur les sociétés du revenu de l'Investissement Direct Étranger (l'IDE)

Cette étude construit les indicateurs de la charge fiscale sur l'IDE afin d'examiner leurs tendances et les caractéristiques par pays. Pendant les années 90, la charge fiscale globale sur les entrées d'IDE (mesurée par les taux marginaux effectifs d'imposition) a diminué de 8 points de pourcentage, reflétant des réformes de l'imposition du revenu des sociétés dans certains des pays de l'OCDE. Néanmoins, une grande diversité demeure entre pays d'accueil. Les taux marginaux effectifs d'imposition sur les entrées d'IDE différaient selon les pays d'accueil d'environ 28 points de pourcentage pour l'IDE marginal et d'environ 21 points de pourcentage pour l'IDE infra-marginal en 2001. Une comparaison internationale des indicateurs de charge fiscale montre que, quels que soient les indicateurs choisis, le Canada, l'Islande et le Japon figurent systématiquement parmi les pays d'accueil à forte fiscalité au cours des années 90. On a également pu constater que les charges fiscales auxquelles doit faire face une société-mère variaient plus, lorsque celle-ci opérait dans différents pays d'accueil, que les charges fiscales auxquelles doivent faire face des filiales de différents pays d'origine opérant dans le même pays d'accueil.

Classification JEL: F21, F23, G31, H25, H32, H87

Mots-clés: Entrées (sorties) l'IDE, l'IDE marginal (infra-marginal), les taux marginaux (effectifs) d'imposition, retenues à la source, traitement des revenus de source étrangère, planification fiscale

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CORPORATE TAXATION OF FOREIGN DIRECT INVESTMENT INCOME 1991-2001

by

Kwang-Yeol Yoo¹

1. Introduction

1. Corporate taxation is one of the factors that determine the rate of return on FDI. By creating a wedge between its pre-tax and post-tax rate of return, taxation can discourage FDI flows. At the same time, the differences in tax treatment of FDI across host countries can also affect the cross-country distribution of FDI. Tax policies have converged to some extent over the past decades, but differences in corporate tax systems across OECD countries remain wide. In a world of increasing capital mobility, these differences in tax burden may influence investment decisions by attracting FDI to locations where the *pre-tax* cost of producing goods is higher but the production cost is lower in the presence of relatively low tax burden, possibly resulting in tax-induced distortions in the allocation of capital flows.

2. This paper documents the existing differences in overall tax burdens on the activities of foreign affiliates of multinational enterprises (MNEs) in OECD countries. The next section identifies the major determinants of the tax burden on FDI and describes the methodology used to construct tax burden indicators. This is followed by an analysis of the trends and cross-country patterns in effective tax rates. It should be noted at the outset that the proposed indicators are designed to reflect differences in tax codes, but cannot account for successful attempts by MNEs to avoid or defer tax obligations. Therefore the indicators are likely to represent an upper bound on the effective tax rates faced by MNEs. The final section summarises findings.

2. Description of the corporate income tax system and the effective tax rates on FDI

3. This section describes alternative measures of tax burdens on FDI, and sketches how the effective tax rates on FDI are constructed. Further details on data and methodology can be found in the appendices. The tax burden on FDI is usually determined by three distinct elements of tax policy: *i*) the domestic corporate tax systems of home and host countries, *ii*) the taxation of cross-border flows of income, *iii*) the interaction of tax systems of home and host countries. Since these three elements differ substantially across OECD countries, their interaction results in a matrix of *bilateral* effective tax rates among OECD countries.

1. Kwang-Yeol Yoo is an economist in the Structural Policy Analysis Division of the OECD Economics Department. The author would like to thank Giuseppe Nicoletti, Sveinbjörn Blöndal, Jorgen Elmoskov, Michael Feiner, Christopher Heady and colleagues in the OECD Economics Department and OECD Centre for Tax Policy and Administration for their valuable comments. This paper also benefited from comments by members of the Working Party No. 1 of the Economic Policy Committee and the Working Party No. 2 on Tax Policy Analysis and Tax Statistics of the Committee on Fiscal Affairs. Tax parameters used to calculate the tax burden indicators were carefully reviewed by the WP2 of the CFA in order to ensure their accuracy.

2.1. *Alternative measures of the tax burden on FDI*

4. Studies on taxation and FDI have developed several indicators in order to identify how taxation affects the pattern of cross-border investment. The most commonly-used *bilateral* indicators are *i*) the effective marginal tax rate (EMTR), *ii*) the effective average tax rate (EATR), and *iii*) the average tax rate (ATR) based on the tax revenues actually collected from MNEs. The first two indicators are *forward-looking* in the sense that they intend to assess tax burden for a *prospective* investment project, while the third one measures the realised tax liabilities on one *existing* capital stock. A similar *ex post* effective tax rate has been constructed by relating realised tax revenues directly to the relevant macroeconomic variables that are available from the national accounts and the OECD revenue statistics.²

5. The first two indicators exploit various system features embodied in the corporate income tax code. They take into account differences both in the *tax base* and the *tax rate* by considering depreciation allowances or tax incentives for various types of investment, the valuation method for inventories, withholding taxes on cross-border income flows, and other aspects of international tax treaties. Specifically, they measure the difference between the pre-tax rate of return on investment earned by the host-country company and the post-tax rate of return earned by origin-country MNEs, and thus serve as suitable indicators for a *hypothetical investment project*. The crucial difference between the EMTR and the EATR is that the former applies to a *marginal* investment project that earns the minimum required rate of return after tax, whereas the latter applies to an *infra-marginal* investment project that earns some economic rent, *i.e.* a project that earns after-tax pure profits. The EMTR was constructed by King and Fullerton (1984) and OECD (1991) for domestic and cross-border investment respectively, and was used in empirical analysis by earlier studies such as Slemrod (1990). The EATR was recently developed by Devereux and Griffith (1999) and extended by the European Commission (2001) for cross-country comparisons of tax burdens on FDI.

6. The micro-level ATR is very different in nature from the above two measures. It is calculated as aggregate taxes paid to the host country relative to the pre-tax earning and profits earned in the host country, both of which are available from tax return or accounting data. Thus, it measures the tax rate a firm actually pays on the income from all of its past investment stream and by construction reflects a wide range of investments of varying age, duration, asset composition and financing sources. International comparisons based on the ATR, however, are difficult due to differences in accounting definitions and the timing of tax payments. In addition, while the micro-level ATR accounts for MNEs' attempt to avoid or defer tax payments through so called "tax-planning" activities to some extent, recent evidence indicates that various tax-reducing alternatives to dividend repatriation, such as royalty payments to the parent and "triangular" or "multiple-tier" transactions between the parent and related foreign affiliates, cannot be captured in this simple ATR measure.³ Swenson (1994) and Collins and Shackelford (1995) used the ATR for their regression analyses of FDI.

7. This paper applies the forwarding-looking approach. This reflects not only the reality that the forwarding-looking indicator is the only feasible measure for all OECD countries, but also the complication associated with capturing or modelling various tax-planning strategies of MNEs. This paper presents both the EATR and EMTR. However, within the forward-looking approach, this paper treats the EATR as a better tax burden measure for FDI. This is due to the recognition that a MNE expects to earn an economic rent on its investment by exploiting some firm-specific advantage but, due to economies of scale

2. Mendoza *et al.* (1994), and recently Carey and Tchilinguirian (2000) used this approach in analysing the effect of taxation on saving, investment and employment. While this measure is relatively straightforward to construct, it is multilateral in nature and does not distinguish between the tax revenues collected from domestic and multinational firms.

3. See, for example, Grubert (1998), Grubert and Mutti (1991), and Altshuler and Grubert (2002).

in production, it will choose to build *one* plant among alternative locations. Under this circumstance, the choice between alternative locations depends on the EATR since the MNE is likely to choose the location where the highest post-tax profits can be earned, while the optimal level of production on the chosen location depends on the EMTR.

2.2. Conceptual framework for the EATR and the EMTR

8. The EMTR and EATR depend on a number of simplifying assumptions. Specifically the effective tax rate on investment depends on the type of assets purchased (since different types of assets are subject to different depreciation allowance schemes) and on the source of finance (since the returns paid out as dividends, interest or capital gains may be taxed differently). Inflation also affects the effective tax rate since depreciation allowances are not indexed and nominal interest payments can be deducted as operating expense against the tax base. Cross-border investment may be subject to two forms of additional taxes: a host country's withholding tax and a home country's tax on foreign-source income. Withholding taxes may be levied on payments of dividends or interest from the subsidiary to the parent company. The country where the parent company is located may also levy the corporate income tax on the parent firm's receipts of dividends and interest from its foreign subsidiaries. As noted above, whether this leads to additional taxes on foreign-source income depends on whether the home country has adopted an *exemption* system or a *credit* system for foreign-source income, and, in the latter case, it depends on whether the tax paid abroad is bigger or smaller than the total tax liability of the parent firm.

9. This paper assumes that three types of financing are available to both a parent company and a foreign subsidiary. Thus, seven types of financing are jointly possible for FDI -- *i*) a subsidiary uses retained earnings; *ii*)-*iv*) a subsidiary raises new equity from the parent and the parent finances the subsidiary's equity issuance from retained earnings, new equity or debt; *v*)-*vii*) a subsidiary raises debt from the parent and the parent finances this from retained earnings, new equity or debt. Devereux and Griffith (1999) showed that the economic rent on a FDI project, denoted as R , is divided into three parts: *i*) the rent attributable to FDI financed by retained earnings (R_n^{RE}), *ii*) the additional cost of a parent raising external finance (F_j), and *iii*) the additional cost of a subsidiary raising finance from a parent (F_n). Thus the rent accruing to FDI is given by $R_n = R_n^{RE} + F_j + F_n$ where the values of R_n^{RE} , F_j and F_n differ across the source of finance and are affected by withholding tax rates on cross-border payments of dividends and interests and by whether home countries adopt the exemption system or credit system. The EATR is measured as the difference between the pre-tax economic rent (R^*) and the post-tax economic rent (R) per unit of investment for a given pre-tax rate of return (p), divided by the net present value of pre-tax income stream. That is:

$$EATR = \frac{R_n^* - R_n}{\left(\frac{p}{1+r}\right)}, \text{ where } r \text{ denotes a real interest rate}$$

The derivation of the EMTR, on the other hand, requires the value of p -- this is often called *cost of capital* -- that produces zero post-tax economic profit (R). The EMTR is the difference between the cost of capital and the post-tax rate of return as a proportion of the cost of capital.

10. In this paper, FDI is assumed to consist of three types of assets (machinery, plant and building, and inventories), with the economic depreciation and the present value of depreciation allowances differing across the types of assets. Given that intangible assets such as patents are increasingly important forms of

cross-border investment, omitting such assets may bias tax burden indicators.⁴ Further assumptions are that investors are exempt from personal income taxes, and that inflation and rates of return on alternative investment for shareholders are uniform across countries, in order to single out the effect of different tax regimes on FDI.⁵ The technical assumptions associated with the calculation of the EATR for a cross-border investment project are described in detail in Box 1, and further details on the EMTR and the EATR formula are set out in Appendix 1. Data or information necessary to construct the EATR or the EMTR are drawn from the OECD tax database, the European Tax Handbook (various years) and other tax databases such as Price Waterhouse (1997), KPMG Taxfacts (1998) and Ernst and Young (2002), and they are summarised in Appendix 2.

Box 1. Assumptions underlying the calculation of the effective tax rates

The approach taken in this paper is to consider a parent manufacturing company that undertakes investment in the host country through a wholly-owned subsidiary.¹ Further assumptions are made in order to characterise a hypothetical investment project and define economic conditions under which it is materialised.

- A real rate of after-tax return of 5 per cent on marginal investment (for the calculation of effective *marginal* tax rates) and a pre-tax rate of return of 20 per cent on infra-marginal investment are assumed (for the calculation of the effective *average* tax rates), respectively. These assumptions are in line with OECD (1991) and the European Commission (2001). The exchange rate is assumed to be constant.
- A uniform inflation rate of 2.5 per cent (the OECD average inflation rate in 2001) is assumed to hold across OECD countries.
- The effective tax rates across seven types of joint financing between a parent and a subsidiary firm are averaged using the same weights as in OECD (1991). The sources of finance for a parent company are assumed to be 55 per cent from retained earnings, 10 per cent from new equity, and 35 per cent from debt. Financing sources for a subsidiary are assumed to be 33 per cent from retained earning, 33 per cent from new equity from parent, and 33 per cent from debt from the parent.
- The effective tax rates across three types of assets are averaged using the following weights: 28 per cent for building, 50 per cent for plant and machinery, and 22 per cent for inventories, as in OECD (1991).

-
4. European Commission (2001) assumed five types of assets, including financial assets and intangible assets. This requires information on depreciation allowance scheme for intangible assets. At present, the information is not available for all Member countries from the OECD tax database or other sources in a reliable manner and thus the same assumption as in OECD (1991) was maintained in this paper. Nevertheless, the sensitivity analysis in European Commission (2001) broadly confirms that there is no significant difference in qualitative results by assuming three or five types of assets. However, to the extent that royalty payments often work as an alternative to repatriation of taxable dividends, omitting intangible assets implies that tax-planning of MNEs cannot be adequately modelled. See Grubert (2001) for the way in which US MNEs can shield foreign-source royalty income from U.S. tax. An issue of rents accruing from intangible assets was partly addressed by considering the EATRs on infra-marginal investment.
 5. In addition to the complexity that personal income taxation in the home country brings into the calculation of the bilateral effective tax rates, the fact that shareholders may face different effective tax rates and may often be non-resident makes the consideration of personal income rather irrelevant for FDI decisions. Moreover, this study is designed to identify the impact of differences in corporate tax systems on multinationals' behaviour with an eye to illustrating relevant policy options. It is also often the case that a large group of shareholders such as pension funds are tax exempt on dividend income or capital gains.

- The economic depreciation rates are assumed to be 12.25 per cent for plant and machinery, 3.61 per cent for building and 0 per cent for inventories, as in OECD (1991).
- All investments undertaken are assumed to be profitable, thus the possibility of carrying loss or unspent credits forward is ignored.

The features of the *domestic* tax system taken into account in this paper are the statutory tax rate and the taxable base. The statutory corporate tax rate represents overall or combined tax rates, including local profit taxes and surcharges, but excludes the property tax. In calculating the taxable base, depreciation allowances and additional tax allowances or credits — as long as they are general and significant — are taken into account. Many OECD countries also have tax incentives specific to certain underdeveloped regions or specific to certain spending items such as R&D or spending by SMEs. In general, these incentives are not incorporated in the calculation. When the corporate tax codes offer more than one option in calculating capital allowances or do not provide the details on capital allowances, certain assumptions are introduced to facilitate the calculation and international comparison.² Some countries operate special corporate reserve schemes in which contributions to the reserves are deductible from taxable income. Because of their complexity, these reserve provisions are not taken into account.³ Also, tax-planning activities of a multinational company in order to exploit the differences in tax systems across countries are not taken into account. These assumptions are broadly in line with OECD (1991) and European Commission (2001). This paper constructed both the EMTR and the EATR for 1996 and 2001. The estimated bilateral EMTRs and EATRs as of 2001 are shown in Tables 3 through 7. The *simple* average values of host-country or home-country effective tax rates are presented in the last column or the last row of the tables, and are used in this paper for analysing cross-country patterns. But employing other weighting schemes may change the result.⁴ The values of the tax parameters applied for the calculation of the effective tax rates on FDI are provided in Appendix 2.

1. Sensitivity analysis has shown that changes in assumptions to account for some characteristics of non-manufacturing firms do not affect the results substantially. See the next section.
2. For example, when the choice between declining-balance (DB) and straight-line (SL) is optional (or the switch between these two methods is optional during the asset life), the DB scheme and the corresponding rate are chosen. When the DB scheme is complex or no DB rate is known, however, the SL scheme and its rate are used. When multiple rates are shown for various types of assets, a typical or representative rate is chosen. In the absence of relevant information in the available tax codes, seven years of useful life for machinery along with the assumption of “until fully depreciated” is taken. When the optional choice between LIFO (last-in, first-out), average cost method or FIFO (first-in, first-out) is allowed for the purpose of inventory valuation, the tax minimising possibility *i.e.* the LIFO (or average cost method) is chosen against the average cost method (or FIFO).
3. For example, Sweden allows the establishment of a profit periodisation reserve and a replacement reserve from which contributions are tax-deductible. In practice, this can significantly reduce the effective tax rates.
4. Using FDI weights creates the problem of endogeneity between FDI and effective tax rates, so this weighting scheme is not used in this paper. Using FDI weights, however, does not seem to change the country ranking significantly.

11. While the estimated tax indicators succinctly summarise the major features of the tax system, a few shortcomings associated with the estimation of tax indicators are noteworthy. First, tax indicators do not take into account the possibility of a multinational to reallocate taxable income across different countries with a view to minimising its tax burden. International investors indeed have access to alternative methods of financing FDI, arranging transactions between related parties located in different countries and changing the timing of repatriation of income to a parent company.⁶ To the extent that tax-planning by

6. Numerous studies have pointed out that the financial incentives of the MNEs to shift profits from one host country to the other are large. For example, Weichenrieder (1996) and Grubert (1998) confirmed a frequent reliance on intra-company loans for financing foreign affiliates in high corporate tax countries in order to exploit a favourable tax treatment for debt-financing. The phenomenon that firms manipulate prices used in intra-firm transactions with a view to reducing total tax liabilities has been confirmed by Grubert and Mutti (1991), Hines and Rice (1994), Harris (1993), Rousslang (1997) and Clausing (1998). Hines and Hubbard (1990) showed that multinationals also adjust the timing of their dividend repatriations from foreign subsidiaries. Recently Desai, Foley and Hines (2002), after reviewing affiliate-level data on the behaviour

MNEs reduces the tax wedges across host countries, the estimated tax indicators will overestimate the cross-country difference in the tax burdens on FDI. Second, tax indicators do not reflect a full range of special investment incentives. Many OECD countries have a number of tax incentives specific to certain underdeveloped regions or specific to certain spending categories such as R&D or spending by SMEs. However, in some countries, the conditions that entitle investors to take advantage of these incentives are often general and the estimated EATR may overestimate the tax burden in those countries (Table 1).⁷ Thus the estimated tax indicators should be interpreted with caution especially when the difference in the effective tax rates between countries is relatively small. Finally, the tax burden indicators are based on economic assumptions that are tailored to manufacturing, though a large and increasing share of FDI actually concerns non-manufacturing industries. Sensitivity analysis, however, suggests that adapting the indicators to meet non-manufacturing characteristics may not change the results substantially (see below). As noted earlier, the calculations below do not cover income from intangible assets.

[Table 1. Selected examples of corporate tax incentives in OECD countries; 2001]

3. EMTR and EATR on cross-border income of foreign affiliates

3.1. Main findings for key cases

12. Over the past decade, the overall tax burden on cross-border activities of foreign affiliates has declined. When measured by the EMTR on *inward* FDI (*i.e.* the EMTR faced in each host country by a foreign investor from the average OECD country), the tax burden on average fell by 8 percentage points over the 1990s (Figure 1, panel A). The EATR followed a similar pattern over the second half of the 1990s, *i.e.* the period for which data are available to calculate such rates (Figure 1, panel B). The decline in tax burden on activities of foreign affiliates is partly due to corporate tax reforms in European countries, including those of Germany and Italy in recent years, and rate cuts by Nordic countries in the early 1990s, although tax-base broadening has partially offset the effect of the statutory rate cut on the overall tax burden (Table 2). Eastern European countries also cut the statutory corporate income tax rate substantially over the same period.

[Figure 1. The effective tax rates on inward and outward FDI]

[Table 2. Evolution of the overall statutory corporate tax rates, including local taxes]

13. Despite a trend decline in the tax burden on FDI, a large variation in the tax burden faced by the average investor across *host countries* still remains (Figure 1, panels A and B). For example, the effective tax rates on inward FDI differed across host countries by as much as 28 percentage points for *marginal*

of US companies, suggested that the previous US evidence on the impact of taxation may underestimate the effect of taxation on the behaviour of multinationals. This was based on their empirical finding that the investment pattern of indirectly-owned affiliates of US multinationals was considerably more sensitive to local tax rates than was the investment pattern of directly-owned foreign affiliates. At the same time, efforts have been made to curb aggressive tax planning activities of MNEs – such as the practice of allocating taxable profits to low-tax countries by manipulating prices in intra-firm transactions (*transfer-pricing*) and the practice of allocating company debt and the associated reduction for interest payments to subsidiaries in high-tax countries (*thin capitalisation*). In addition, many countries also responded to these issues by formulating very complex tax codes. Those include deferral of taxes on foreign-source income, apportionment rules of a parent's expenses, and special rules on foreign sales corporations. See Gresik (2001) for details.

7. For example, Greece, Turkey, Hungary, Czech Republic, Poland and Korea maintain tax holidays and/or sizeable tax credits for investment (or FDI) only, although those incentives are often confined to certain regions or industries (Table 1).

FDI and by as much as 21 percentage points for *infra-marginal* FDI in 2001 (Tables 3 and 4). However, the dispersion of tax burdens on inward FDI across host countries has narrowed somewhat for marginal FDI, and to a larger extent for *infra-marginal* FDI (Figure 1, panel A and B). This limited convergence of tax burdens resulted mainly from progress made in co-operating bilaterally or multilaterally, in the context of the OECD and the EU, in order to harmonise tax policies on cross-border activities, with an eye to limiting the over-taxation of cross-border FDI income flows.⁸ Nevertheless, it is also noteworthy that, in a *given* host country, the effective tax rates faced by foreign subsidiaries also vary widely, depending on the origin of the investor country, due to the cross-country differences in withholding tax rates on cross-border flows of dividends and interest income vis-à-vis partner countries, and the interaction of home and host countries' tax systems. The difference between the maximum EATR and the minimum EATR in a given host country ranged from 9 to 31 percentage points in OECD countries in 2001 (Figure 2, panel B, and Table 3). Similar differences between the maximum and the minimum rates were observed for the EMTR on inward FDI for a given host country (Figure 2, panel A, and Table 4).

[Table 3. The effective average tax rates on cross border investment, 2001]

[Table 4. The effective marginal tax rates on cross border investment, 2001]

[Figure 2. Variation of the effective tax rates on inward FDI applied by host country, 2001]

14. Similarly, depending on the country where a parent company is resident, the effective tax rates on *outward* FDI (*i.e.* the tax burden faced in the average OECD host country by a foreign investor from each OECD country) varied *on average* by 12 percentage point for both marginal FDI and *infra-marginal* FDI in 2001 (Figure 1, panels C and D). However, this average figure conceals substantial variation of the effective tax rates on outward FDI originated from the same home country. Indeed, the comparison of *bilateral* effective tax rates on inward and outward FDI indicates that there is more variation in the tax burdens faced by a parent company operating in different host countries than in the tax burdens faced by subsidiaries from different home countries operating in the same host country (Figures 2 and 3). This suggests that host-country taxation is much more important to international investors than home-country taxation,⁹ and the wide variation in a host country's tax treatment of FDI is responsible for this phenomenon.

[Figure 3. Variation of the effective tax rates on outward FDI applied by home country, 2001]

15. A closer look at tax burden indicators on foreign affiliates further reveals how corporate tax policies differ among OECD Member countries. Irrespective of the tax indicator chosen, Canada, Iceland and Japan are persistently ranked as high-tax host countries over the 1990s (Figure 4). On the other hand, tax reforms in Italy (1998) and Germany (2001) reduced their effective tax rates on inward FDI towards

8. For example, the OECD Model Tax Convention and the Guidelines on Transfer Pricing helped OECD Member countries to extend the network of bilateral double taxation treaties and harmonise certain aspects of taxation on multinational activity. On the other hand, the European Union took several steps in order to remove tax obstacles within its internal market. Those measures include notably the Parent-Subsidiary Directive (for the elimination of double taxation on cross-border dividend payments between parent and subsidiary companies located in EU regions) and the Arbitration Convention (for the provision of a dispute resolution procedure in the area of transfer pricing). In addition, some countries like New Zealand and Australia in the early to mid-1990s unilaterally exempted cross-border flows of dividends and/or interest income from tax under certain conditions in order to offset the negative effect of high withholding taxes on FDI inflows.

9. In other words, the current tax regime in OECD countries is a mixture of (income) source-based and (parent) residence-based taxation, with more weight on income source-based taxation.

the OECD average level over the same period, and New Zealand introduced measures to offset high withholding treaty tax rates on cross-border income in mid-1990s.¹⁰ As of 2001, the EATR on inward FDI was relatively high in Japan and Turkey (at above 40 per cent), followed by Canada, Iceland and the United States. In Australia, Denmark, Finland, Hungary, Ireland, Sweden, Switzerland and the United Kingdom, the EATR on inward FDI was relatively low at below 30 per cent (Figure 4, panel B, and Table 3).¹¹ It appears that relatively high EATRs are associated with high withholding taxes (Iceland, and to a lesser extent Canada and Turkey) or high statutory corporate tax rates (Japan and Turkey). The EATR on outward FDI, on the other hand, was relatively high in Turkey, Japan, New Zealand (at above 36 per cent), while in Denmark, Finland, Sweden and the Netherlands it was relative low (Figure 5 panel B, and Table 3). The adoption of the credit system in high-tax countries (Japan and Turkey) and/or the limited network of bilateral tax arrangements *vis-à-vis* OECD member countries (New Zealand, and to a lesser extent Turkey) seem responsible for relatively high EATRs on outward FDI.

[Figure 4. Change in the effective tax rates on inbound FDI measured relative to OECD average]

[Figure 5. Change in EMTR and EATR on outbound FDI measured relative to the OECD average]

3.2. *Further findings and sensitivity check*

16. Other findings drawn from the comparison of bilateral tax burden indicators (mainly the EATRs) are summarised below.

- *EATR on FDI by type of subsidiary's finance.* In terms of corporate financing, 22 out of 30 OECD countries' tax systems favour inward FDI financed by debt from the parent (which secures financial resources by a combination of a loan, equity issuance and its retained earnings) over FDI financed by equity from the parent (which secures financial resources by a combination of a loan, equity issuance and its retained earnings) or a subsidiary's retained earning (Figure 6 and Tables 5-7). In the remaining countries (except Ireland and Hungary), the difference between the effective tax rate on FDI financed by a parent's loan and the effective tax rate on FDI financed by an alternative tax-efficient mode is minor. The tax advantage of debt-finance from a parent originates from the deductibility of interest payments from the taxable base, especially in the cases in which a host country

10. Since 1998, business income in Italy is subject to a dual rate. A reduced rate of 19 per cent (23.25 per cent including 4.25 per cent of regional tax) applies on the portion of income derived from the increase in the equity capital of the company, as compared with the equity capital existing at the end of 1996. The German tax reform (effective as of the beginning of 2001) cut the headline corporate tax rate to 25 per cent. It was in part financed by the broadening of the tax base, including the abolition of the split rate system on distributed profits and retained earnings, and the replacement of the full imputation system by a shareholder relief system with respect to corporate profit taxation. In the context of cross-border taxation, New Zealand introduced the foreign investor tax credit (FITC, 1996) and approved issue levy (AIL, 1992) regime for the favourable treatment of dividends and interest income associated with FDI, respectively. In order to reflect the FITC regime in New Zealand, this paper models the effect of the FITC as a 33 per cent corporate tax rate and zero withholding tax on dividends.

11. The difference in country rankings between the EMTR-based indicator and the EATR-based indicator could be interpreted as the different tax treatment for marginal FDI and infra-marginal FDI. For example, Turkey is ranked as a low-tax country for marginal FDI but as a high-tax country for infra-marginal FDI. This is primarily due to the combination of large capital allowances (at least 40 per cent extra allowances are provided in addition to ordinary capital allowances) and a high statutory tax rate. For marginal FDI that has a smaller size of taxable profits, the importance of capital allowances is relatively high. On the other hand, for infra-marginal FDI, the statutory tax rate becomes much more important since the value of the capital allowances to investors diminishes with a rise in taxable profits.

has a higher corporate tax rate than a home country (and this partly explains why debt finance is not favoured in Hungary and Ireland where the corporate tax rate is fairly low). However, tax savings from interest deductibility could be offset by the withholding tax on cross-border payments of interests. This offsetting force is stronger if the home country has a credit system and its tax rate is relatively high. This appears to explain why debt finance does not always have an absolute advantage over other financing modes in *cross-border* investment. This paper did not find any evidence that equity finance is taxed at a rate higher than finance by retained earnings, though equity finance is in general subject to the withholding tax on dividends paid by a subsidiary to a parent.¹²

[Figure 6. The EATRs on inward FDI by financing source, 2001]

[Table 5. The effective average tax rates on manufacturing FDI when the subsidiary is financed by a loan from the parent, 2001]

[Table 6. The effective average tax rates on manufacturing FDI when the subsidiary is financed by new equity from the parent, 2001]

[Table 7. The effective average tax rates on manufacturing FDI when the subsidiary is financed by retained earnings, 2001]

- *EATR on FDI by assets.* Bilateral EATRs suggest that FDI in machinery is taxed lightly compared with FDI in buildings or inventory (Figure 7). This is because the domestic corporate tax codes generally encourage machinery investment by providing a relatively large depreciation allowance or tax credit. However, unlike the case of financing, cross-border taxation does not further distort the choice between the types of assets purchased.

[Figure 7. The EATRs by the type of assets, 2001]

- *EATR on FDI by exemption vs. credit system.* Differences in the treatment of foreign-source income have implications for the patterns of the EATRs on *outward* FDI. A multinational from a credit-system country in general faces a higher effective tax rate on its outward investment than its counterparts from exemption-system countries (Figure 8), unless a multinational firm is able to fully offset *the* effects of home country taxation through tax-planning. This is because a MNE from an exemption-system country does not have to pay tax on its foreign-source income at home in addition to taxes paid to a host country, while MNEs from credit-system countries are only able to credit foreign tax payments against their overall tax liabilities to a home country.¹³ On the other hand, the dispersion of the effective tax rates on outward FDI (measured by its standard deviation) is on average larger in exemption countries (Figure 8).¹⁴ This can be explained by a built-in buffer operating under the credit system that effectively reduces the variation of after-tax

12. This is probably due to the fact that a relatively large number of countries, including the EU member states, exempt foreign-source dividend income and the fact that some countries, like Austria and Italy, provide tax advantage to equity finance (see Table 1).

13. However, Altshuler and Grubert (2002) indicated that the availability of various strategies other than dividend repatriation enables US multinationals to avoid additional US tax which is applicable under the current credit system.

14. An observed large variation of the EATRs on outward FDI in some *credit-system* countries can be attributed to large variation of the withholding tax rates *vis-à-vis* partner countries.

income repatriated by a foreign subsidiary through additional home country tax on cross-border income.

[Figure 8. The EATRs on outward FDI — exemption vs. credit system countries, 2001]

17. As noted earlier, the tax burden indicators depend upon a number of simplifying assumptions. Sensitivity analysis based on the changes in some of the main parameters fed into the EMTR and EATR formulae suggest that, in general, outcomes are not qualitatively affected by changes in economic assumptions.

- At low levels of the *pre-tax rate of return or profitability*, the EMTRs and EATRs are closely related. However, the EATR tends to have a closer relation to the statutory tax rate in the host country when the level of pre-tax rate of return rises (Figure 9). At high levels of pre-tax profitability, the EATR is often even higher than the statutory rate, due to the existence of withholding taxes on cross-border payments of income and different treatment of foreign-source income across home countries. A higher EATR with a rise in the pre-tax rate of return indicates that the value of various tax incentives to foreign investors diminishes, as the size of profits relative to the investment cost grows larger. For more profitable projects, the difference in effective tax rates across different types of finance, assets and countries becomes much narrower. Nevertheless, the qualitative conclusions drawn earlier still hold, as varying the level of profitability does not alter the relative position of the countries significantly. In any event, the statutory corporate tax rate turns out to be highly correlated with the EATRs, implying that the statutory rate is one of major factors in determining the tax burden on FDI in a large number of OECD countries (Figure 10).

[Figure 9. The EATRs on inward FDI by the level of profitability]

[Figure 10. Correlation of the host-country statutory rates and the EATRs, 2001]

- Estimates of the EMTRs and the EATRs on FDI, using *alternative weights on asset composition*, are very highly correlated with the benchmark indicators (Table 8).¹⁵ The correlations between the new and benchmark bilateral indicators are in the range of 0.87-1.0, with a majority of measured correlations being 0.98. The experiment on alternative asset weights is intended to capture the tax burden on non-manufacturing FDI in light of the fact that a large part of available data on FDI covers non-manufacturing sectors. Due to a lower weight on machinery that often benefits from favourable tax treatment, the new measures of the EMTRs and EATRs on FDI tend to be higher than benchmark measures.
- Assuming higher *inflation* raises both the EMTRs and the EATRs (Table 8). In general, higher inflation (thus higher nominal interest) reduces the tax burden on debt-financed FDI through a rise in deductible operating expenses. However, this effect is more than offset by a fall in the net present value of depreciation allowances since they are usually not indexed.¹⁶ In addition, higher inflation affects the effective tax rates differently *depending*

15. It is assumed that FDI consists of 40 per cent machinery, 40 per cent buildings and 20 per cent inventories. In addition, for Canada and Ireland, the standard corporate tax rates of 42.1 and 20 per cent are applied respectively instead of the 34.1 and 10 per cent rates on manufacturing that were used to estimate the benchmark indicators.

16. For Iceland and Mexico, the depreciation base is indexed to inflation.

on the method used to evaluate inventories. For example, FDI in host countries that have a FIFO (first-in, first-out) system are subject to a higher inflation tax on their inventories than FDI in host countries that adopt the LIFO (last-in, last-out) or average cost method.

- With a rise in *the real interest rate*, the EATRs tend to decline (Table 8). The fall in the EATR is mainly due to the assumption of 20 per cent pre-tax rate of return, and this means that taxable income from FDI is smaller in the face of a higher interest rate and thus is subject to a lower tax burden as shown in Figure 9. On the other hand, the *EMTR*, which will have zero after-tax return anyway, does not change much with a rise in the real interest rate.

[Table 8. Selected sensitivity analyses]

18. As noted earlier in this paper, there are a number of tax burden measures on investment. As shown in Carey and Tchilinguirian (2000), the estimated macro-level average tax rates (ATRs) on capital differ substantially, depending on which measure is used as capital income, *i.e.* net operating surplus or gross operating surplus (Figure 11).¹⁷ On the basis of gross operating surplus measures of the ATRs, the comparison of the EATR on FDI and the ATR on capital suggests that FDI is in general taxed at a higher rate than domestic investment (Figure 11, panel B).¹⁸ The presence of withholding taxes that often lead to over-taxation of FDI partly explains this phenomenon. Moreover, in countries where taxes paid by resident foreign affiliates account for a large share of total tax receipts, a lower level of ATR on capital relative to the EATR suggests that tax-planning by multinationals takes place in order to minimise the overall tax burden.

[Figure 11. The EATRs on inward FDI and the ATRs on capital, 1996]

4. Summary and conclusion

19. This paper developed two sets of *forward-looking bilateral* tax burden indicators: the effective marginal tax rates (EMTR) and the effective average tax rates (EATR). Both measures exploit the system features of corporate tax codes in OECD countries and allow for the interaction of home and host country taxation. However, the former is relevant for a *marginal* investment project that yields the minimum post-tax rate of return, while the latter is relevant for an *infra-marginal* investment project that yields post-tax pure profits. These indicators were used to identify trends and cross-country patterns in bilateral and multilateral FDI taxation. The main conclusions are summarised below:

- The overall tax burden on cross-border activities of MNEs, measured by the EMTR on *inward* FDI (*i.e.* the EMTR faced in each host country by a foreign investor from the

17. In principle, the ATR based on net operating surplus measures the underlying tax burden more accurately since it excludes the charges for depreciation of fixed assets. In reality, however, the way individual countries measure depreciation charges in the National Accounts vary a lot mainly due to the differences in service lives. For example, the OECD average of the ATRs was 13 percentage points higher and the variation in ATRs across countries were two times higher over 1991-1997 when net operating surplus was used to proxy capital income. Therefore Carey and Tchilinguirian (2000) used ATRs based on gross operating surplus for cross-country comparisons, though these measures tend to overestimate capital income.

18. Direct comparison between the two measures is problematic, since Carey and Tchilinguirian's (2000) *ex post* measure of ATR on capital included taxes paid by foreign affiliates resident in domestic (host) country and reflected tax-planning activities in order to minimise the tax burden by resident firms. In addition, the ATR on capital covers taxes on capital held by households and unincorporated enterprises.

average OECD country), fell on average by 8 percentage points over the 1990s. Corporate tax reforms in some OECD countries contributed to a trend decline of the overall tax burden.

- The variation in the tax burden faced by the average investor *across host countries* remains wide. However, limited convergence of tax burdens across host countries has been achieved via bilateral and multilateral cooperation aimed at harmonising tax policies on cross-border activities.
- There is more variation in the tax burdens faced by a parent company operating in different host countries than in the tax burdens faced by subsidiaries from different home countries operating in the same host country. This confirms a common perception that host-country taxation is much more important to multinationals than home-country tax treatment of foreign-source income.
- Tax burdens on inward FDI were relatively high at above 40 per cent in Japan and Turkey. They were followed by Canada, Iceland and the United States. Relatively higher EATRs appear to be associated with high withholding taxes (Iceland, to a lesser extent Canada and Turkey) or high statutory corporate tax rates (Japan and Turkey).
- A MNE from a credit-system country in general faces a higher effective tax rate on its outward investment than its counterparts from exemption-system countries, unless it is able to fully offset the effects of home-country taxation through tax-planning. On the other hand, the dispersion of the effective tax rates on outward FDI is on average larger in exemption countries because a built-in buffer operating under the credit system reduces the variation of after-tax income repatriated by a foreign subsidiary through additional home-country tax on cross-border income.
- The EATR tends to have a closer relation to the statutory tax rate in the host country when the level of pre-tax rate of return rises. At low levels of the pre-tax rate of return, the EMTRs and EATRs are closely related. However, at high levels of pre-tax rate of return, the EATR is often even higher than the statutory rate, due to the existence of withholding taxes on cross-border payments of income and different treatment of foreign-source income across home countries.

Table 1. Selected examples of corporate tax incentives in OECD countries (2001)^a

Australia	Dividends paid to non-resident companies are exempt from the dividend withholding tax when they are paid out of profits taxed at the Australian corporate tax rate (<i>i.e.</i> dividend is franked).
Austria	National interest payments on the increase of equity capital is deductible as an operating expense from corporate tax base and this part of profits are subject to tax at 25% at the corporate level. The interest rate to be used for the calculation is the average rate in the secondary market plus 0.8 percentage points.
Canada	Investment deduction of up to 9% of the acquisition cost of assets were abolished as of 2001.
Czech Republic	A 34.1% (including the sub-national rate) tax rate applies to manufacturing and processing income. Corporations are entitled to investment allowance of 10% of the purchase price of machinery and equipments. As of 2000, income tax exemption of 10 years (or 5 years for existing firms) is available for investments over CZK 350 million (USD 9 million) when they are made in processing industries, and machinery investment is at least 40%, and it satisfies environmental requirements etc.
Greece	Tax exemption of 40-100% of the acquisition costs of the relevant assets is available depending on the area (no exemption in Area A to 100% in Area D). Accelerated depreciation was abolished in 1998.
Hungary	A 100% reduction in corporate income tax is granted for major investments of at least HUF 10 billion (USD 40 million) in manufacturing sectors for the first 10 years subject to the condition that at least 500 new jobs are created. A 50% tax credit for 5 years is available for investment over HUF 1 billion (USD 4 million) in expanding manufacturing facilities which results in an increase in net turnover by 5% of the original investment. 3% corporate income tax is applied to offshore companies. Other regional investment incentives also exist.
Germany	Accelerated depreciation of up to 10% is available in the year of innovation and in the following 9 years for modernisation or maintenance in eastern German regions.
Ireland	A 10% tax rate applies to manufacturing companies until 2010.
Italy	Reduced rate of 19% applies on the portion of the income derived from an increase in equity capital. The depreciation rate for the first year is reduced by a half.
Korea	Tax credit of 10% of investment amount is available for machinery and facility investment. But corporate taxpayers are subject to 15% minimum tax. The FDI on a large number of high-tech projects are eligible for the 7-year tax holidays and 50% tax reduction in the next 3 years from the first profitable year.
Luxembourg	If total amount of investment in a year exceeds LUF 6 million, tax credit will be 6% on the first LUF 6 million and 2% on the amount over LUF 6 million. In addition, the companies are entitled to tax credit of 12% of supplementary investment in certain tangible assets, where supplementary investment is defined as difference between the accounting value of those assets and the reference value which is average value attributed to the same assets 5 year ago.
New Zealand	The foreign investor tax credit effectively reduces combined New Zealand corporate tax and non-resident withholding taxes on dividends to 33 per cent. The approved issued levy regime sets the non-resident withholding tax rate on debt to 1.34% where the borrower and lender are operating at arms-length.
Poland	Income derived from 19 special economic zones (established for a period of 20 years) is exempt up to the amount of investment expenditure. If the expenditure exceeds a certain threshold (which varies across economic zones), income is fully exempt for 10 years.
Portugal	Investment tax credit amounting to 5% of investment cost is available for new fixed assets except buildings. In addition, investment more than 1 billion Escudos (PTE) that are deemed to be of a strategic interest to the Portuguese economy are eligible for 5-20% contractual investment tax credit for a maximum of 10 years.
Slovak Republic	100% tax credit for the first 5 years and 50% tax credit in the next 5 years are granted if cash injection for equity capital is above EUR 4.5 million (3 million for high-unemployment regions) and a company's main activity is the production of goods which have not been previously produced in the Slovak Republic or are destined for exports. In these cases, at least 60% of foreign capital participation is required.
Spain	Investment in the Basque region is subject to a reduced corporate income tax rate of 32.5%.
Turkey	Investment allowance is available from 40% (developed regions) of qualifying investments to 100% (first degree priority regions or investment more than USD 50 million). For qualifying investments exceeding USD 250 million, the allowance is 200%. If profits are not sufficient, it can be carried forward indefinitely.
United Kingdom	It should be noted, however, that the exempt income is subject to withholding tax (19.8% including 10% surcharge) Industrial and commercial buildings in enterprise zones are eligible for an initial investment allowance of 100%.

^a) Only tax allowance and credit that are generally applicable to investment in manufacturing sectors and that are believed to be common and significant are considered in the calculation of tax burden indicators. See appendix 2 for tax parameters used to estimate the effective tax rates. This table also reports some of investment tax incentives in certain regions or in certain fields that are not taken into account the construction of tax burden indicators. Moreover, some countries (*e.g.* Sweden) operate special reserve schemes in which contributions to the reserves are deductible from taxable income. In part due to the complexity of the scheme, these tax-free reserve provisions are not considered and reported in this table.
Source: European Tax Handbook (various years), Price Waterhouse (1997), Ernst and Young (2002), KPMG Taxfacts (1998).

Table 2. Evolution of the overall statutory corporate tax rates, including local taxes^a
per cent

	1991	1996	2001
Australia	39	36	30
Austria	39	34	34 ^d
Belgium	39	40.2	40.2
Canada	35.7 ^c	35.6 ^c	34.1 ^c
Czech Republic	-	39	31
Denmark	38	34	30
Finland	40.2	28	29
France	34/42 ^b	36.7	35.3
Germany	56.5/44.3 ^b	57.4/42 ^b	38.9
Greece	46	40	37.5
Hungary	-	18	18
Iceland	45	33	30
Ireland	10 ^c	10 ^c	10 ^c
Italy	47.8	52.2	40.3 ^e
Japan	50	49.9	41.4
Korea	37.4	31.1	30.8
Luxembourg	39.3	39.1	37.5
Mexico	-	34	35
Netherlands	35	35	35
New Zealand	33	33	33
Norway	50.8	28	28
Poland	-	40	28
Portugal	39.6	39.6	35.2
Spain	35.3	35	35
Sweden	30	28	28
Switzerland	38.4	39.8	25.3
Turkey	49.2	43	44.5
United Kingdom	34	33	30
United States	38.3	39.5	39.5

a) Overall corporate income tax rates include local profit taxes and surcharges. When local profit tax differs across jurisdictions, a typical local rate is chosen. Surcharges are also included here. Where a progressive rate structure applies (e.g. Switzerland), the top marginal rate is shown.

b) Rate on retained earning/distributed profits. A split rate system was abolished in France (1992) and Germany (2001).

c) For manufacturing industries only.

d) 25% rate is applied for the profits amounting to a notional interest on additions to own capital since 2000.

e) As of 1998, business income is subject to a dual rate (so called "dual income tax regime"). A reduced rate of 19% (23.25% including 4.25% of regional tax) applies on the portion of income derived from the increase in equity capital.

Source: OECD Tax Database, European Tax Handbook (various years), Price Waterhouse (1997); Ernst and Young (2002), KPMG Taxfacts (1998), OECD (1991).

Table 3. The effective average tax rates on cross border investment, 2001^a

	Effective average tax rates in manufacturing FDI when the subsidiary is financed by one third loans from the parent, one third equity from the parent and one third retentions by the subsidiary														
	Australia	Austria	Belgium	Canada	Czech Republic	Denmark	Finland	France	Germany	Greece	Hungary	Iceland	Ireland	Italy	Japan
to / from *															
Australia	27.5	28.9	27.5	27.5	28.2	27.3	27.3	28.6	28.8	34.1	26.9	27.3	26.6	37.5	37.6
Austria	38.1	30.9	38.3	35.2	35.2	29.3	30.5	30.7	30.8	32.7	34.7	44.0	28.6	30.9	36.3
Belgium	40.8	32.7	41.0	40.9	40.9	32.6	33.7	33.5	34.0	32.8	37.7	40.8	32.5	34.0	35.7
Canada	39.1	39.3	40.6	36.3	36.3	33.4	34.6	40.6	40.6	45.1	33.0	33.4	39.0	45.3	37.3
Czech Republic	29.6	32.8	37.3	32.8	27.6	35.7	33.9	33.9	31.1	42.2	29.1	41.9	28.8	42.3	36.2
Denmark	26.7	26.8	28.3	26.8	27.6	26.7	28.0	27.2	28.2	33.5	26.3	26.7	26.0	28.3	37.1
Finland	35.2	26.1	32.3	32.3	27.7	25.9	27.2	27.4	27.4	33.6	28.6	26.8	25.2	27.5	37.2
France	38.7	30.1	31.5	35.9	35.8	30.0	30.0	33.8	31.3	32.2	32.5	32.9	29.3	31.4	35.8
Germany	40.9	32.8	34.1	41.1	35.5	32.7	32.6	33.8	32.1	32.9	35.0	35.4	32.0	34.1	41.3
Greece	31.8	31.0	32.4	31.4	30.9	30.9	30.8	32.1	32.3	32.9	30.4	31.8	35.9	32.4	34.8
Hungary	28.3	25.0	26.6	21.4	29.0	21.3	21.2	22.7	23.0	34.8	30.4	31.9	20.5	33.7	38.3
Iceland	39.6	39.7	41.1	30.6	54.7	27.4	27.4	31.7	31.9	39.8	39.1	43.7	44.8	44.8	40.0
Ireland	9.6	9.8	11.6	9.8	28.0	9.6	9.6	11.2	11.5	34.0	9.2	27.1	11.6	11.6	37.5
Italy	39.4	31.0	32.4	39.6	39.5	30.9	30.9	32.1	32.3	31.2	36.2	46.3	30.2	46.5	37.0
Japan	42.4	39.9	41.1	39.9	39.8	39.7	39.7	35.5	41.1	45.3	39.3	45.0	39.0	46.5	37.0
Korea	31.7	28.5	33.3	31.8	25.1	31.7	28.3	29.7	30.0	28.4	24.6	38.3	27.7	36.7	32.3
Luxembourg	44.6	30.4	31.8	33.3	33.2	30.2	30.2	31.4	31.7	30.5	32.7	44.6	29.5	31.8	34.2
Mexico	31.0	31.1	32.5	31.1	48.7	31.0	30.9	32.2	32.4	33.4	30.5	31.0	30.2	40.5	37.0
Netherlands	38.5	30.0	31.4	32.9	29.9	29.9	29.8	31.1	31.3	32.3	32.3	29.9	29.2	31.4	36.0
New Zealand	31.0	31.1	32.5	31.1	49.9	31.0	30.9	32.2	32.4	35.1	30.5	31.0	30.2	40.5	38.5
Norway	36.5	30.5	32.0	36.6	30.4	27.3	27.3	28.6	31.9	39.8	33.0	29.0	26.6	43.0	39.1
Poland	35.1	32.1	33.6	35.2	28.8	28.8	28.8	30.1	30.3	35.3	31.5	28.8	31.2	39.9	37.7
Portugal	42.3	27.3	28.7	42.4	33.2	27.1	27.1	28.4	28.6	29.5	32.8	42.3	27.0	28.7	42.7
Slovak Republic	36.9	34.0	32.4	34.0	30.8	36.9	30.8	35.1	32.3	37.1	30.4	36.9	27.0	47.0	38.8
Spain	39.1	30.6	32.0	39.2	33.4	30.4	30.4	31.7	31.9	32.9	32.9	44.8	29.7	32.0	36.6
Sweden	33.9	24.5	26.0	27.7	27.0	24.3	24.3	25.6	25.9	33.0	27.1	26.1	23.6	26.0	36.6
Switzerland	31.8	25.3	30.2	25.3	27.0	21.9	21.9	23.3	26.8	33.0	28.1	26.1	27.8	38.8	36.5
Turkey	40.0	40.1	40.6	40.1	54.6	39.1	39.1	40.3	40.5	40.2	35.9	40.0	45.4	45.2	36.7
United Kingdom	26.9	27.1	28.4	27.1	27.8	26.9	26.9	28.2	28.4	33.7	26.5	26.9	26.2	28.4	37.3
United States	41.6	36.3	37.6	36.3	36.2	36.2	36.1	37.3	37.5	50.0	35.8	36.2	35.5	44.2	39.3
Home country ETR ^c	35.2	30.5	32.0	32.8	34.7	29.6	29.2	30.4	30.9	35.5	31.1	34.6	30.5	35.7	37.3

a) The effective average rates show the degree to which the corporate tax systems scale down the real post-tax rate of return that must be earned on so called an infra-marginal investment.

They are measured as the difference between pre-tax and post-tax economic rent for a given pre-tax rate of return (20% is assumed here) as a proportion of the net present value of pre-tax income stream.

See Deveureux and Griffith (1999) for discussion of this methodology.

b) Additional assumptions are as follows:

- All rates are averaged across 7 types of finance and 3 assets. Weights for assets are 28 % for building, 50% for plant and machinery, 22% for inventories.
 - Weights for source of finance are 55% for retained earnings, 10% for new equity, and 35% for debt for parent company while, for subsidiary, 33% for retained earnings, 33% for new equity from parent, and 33% for debt from the parent are used. See table 5.4 in OECD (1991)

- Economic depreciation rates are 12.25% for plant and machinery, 3.61% for building and 0% for inventories.

c) A host country ETR or ETR on inward FDI is defined as the effective tax rate for a cross-border investment into a specific country while a home country ETR or ETR on outward FDI is defined as the effective tax rate for a cross-border investment from a specific country.

Source: OECD

Table 3. The effective average tax rates on cross border investment, 2001^{a)} (Cont.)

Effective average tax rates in manufacturing FDI when the subsidiary is financed by one third loans from the parent, one third equity from the parent and one third retentions by the subsidiary
Assumptions: no personal income taxes, 5% of real interest rate, 2.5% inflation (2001 OECD average) and 20% of pre-tax real rate of return on investment^{b)}

to / from *	Korea	Luxembourg	Mexico	Netherlands	New Zealand	Norway	Poland	Portugal	Slovak Republic	Spain	Sweden	Switzerland	Turkey	UK	USA	Host country ETR ^{c)}
Australia	28.1	27.6	31.8	27.5	27.4	27.3	27.3	32.0	27.3	27.5	27.3	27.2	40.4	27.3	35.9	29.5
Austria	35.2	29.6	44.2	29.5	44.1	38.1	35.1	29.5	35.1	29.5	29.6	32.1	44.5	29.3	34.5	34.1
Belgium	40.9	32.8	35.5	32.8	40.9	32.5	38.0	32.8	35.3	32.8	32.5	37.9	37.0	32.6	35.7	35.6
Canada	39.2	36.5	36.5	33.6	39.2	39.1	39.1	45.0	36.2	39.3	33.3	33.3	45.4	36.3	35.6	38.0
Czech Republic	29.6	29.8	42.1	26.7	42.0	29.5	29.5	32.8	29.5	29.7	26.4	29.4	42.4	29.6	34.4	33.3
Denmark	27.4	27.0	31.2	26.9	29.4	26.6	26.6	26.9	26.7	26.9	26.6	26.5	39.9	26.7	35.3	28.5
Finland	32.2	26.2	31.3	26.1	35.3	25.9	25.9	26.1	25.9	26.1	25.9	25.8	40.0	26.8	35.4	29.1
France	35.8	30.3	30.2	30.2	38.8	29.9	32.8	30.2	35.7	30.2	29.9	32.7	39.2	30.0	34.1	32.7
Germany	38.2	32.9	35.6	32.9	41.0	35.4	35.4	32.9	35.4	32.9	32.6	35.3	41.4	32.7	35.8	35.3
Greece	30.9	31.1	31.3	31.0	31.5	30.8	30.8	31.3	30.8	31.3	30.8	30.7	37.8	30.9	33.0	31.8
Hungary	28.8	21.6	32.6	21.5	32.0	26.3	26.3	32.7	27.2	21.5	21.2	24.6	41.1	28.1	36.6	27.6
Iceland	39.6	39.8	39.7	27.6	39.7	27.3	30.4	39.7	53.6	39.7	27.3	30.3	40.5	30.4	36.0	37.0
Ireland	27.9	9.9	31.7	9.8	29.9	25.3	25.3	9.8	26.2	9.8	9.5	9.4	40.3	27.1	35.8	19.2
Italy	36.6	31.2	39.6	31.1	39.5	39.4	36.5	31.1	39.4	31.1	30.8	39.3	39.9	30.9	34.1	35.2
Japan	40.8	37.3	34.6	37.2	42.5	37.0	39.7	45.2	45.0	39.9	39.7	39.6	40.2	39.7	40.0	40.4
Korea	28.6	28.6	25.9	28.5	31.8	31.6	25.0	28.5	50.2	28.5	28.3	28.2	35.3	25.1	30.4	30.5
Luxembourg	36.0	30.4	44.8	30.4	44.7	33.0	33.0	30.4	33.1	30.4	30.2	30.1	45.1	30.2	33.4	34.0
Mexico	31.0	33.4	31.1	31.1	31.1	30.9	30.9	31.3	47.5	31.1	30.9	30.8	31.5	31.0	35.3	33.1
Netherlands	35.7	30.1	30.0	31.1	38.6	29.8	29.8	30.0	29.8	30.0	29.8	29.7	38.8	29.9	34.2	31.8
New Zealand	31.0	31.2	32.8	31.1	30.9	30.9	30.9	33.0	48.8	31.1	30.9	30.8	41.3	31.0	36.8	33.8
Norway	36.5	30.7	33.4	27.5	36.6	30.3	30.3	33.6	30.3	33.6	27.3	30.2	41.8	30.4	37.4	32.8
Poland	28.8	29.1	35.3	25.9	35.2	28.7	33.1	35.3	28.8	29.0	28.7	28.6	40.6	28.8	36.0	31.9
Portugal	33.2	27.4	42.4	27.3	42.4	33.1	33.1	27.3	48.9	27.3	27.0	33.0	42.8	27.1	33.5	33.3
Slovak Republic	36.9	31.1	37.0	28.0	37.0	30.7	30.7	37.1	33.3	31.0	27.7	30.6	41.5	30.8	37.1	34.1
Spain	36.2	30.7	33.5	30.6	44.9	36.1	33.3	30.6	33.3	31.0	30.4	36.0	45.3	30.4	36.5	34.3
Sweden	30.7	24.6	30.7	24.5	34.0	24.3	27.4	24.5	25.2	24.5	21.8	24.2	39.4	26.1	34.8	27.8
Switzerland	28.5	22.2	30.7	22.1	31.9	25.1	25.1	30.8	25.2	28.7	21.8	21.8	45.5	26.1	34.8	28.4
Turkey	39.2	40.2	40.2	36.5	40.1	39.9	36.2	40.2	49.0	40.2	39.1	39.8	40.1	39.1	39.5	40.6
United Kingdom	27.7	27.0	31.5	26.9	29.7	26.9	26.9	27.1	26.9	27.1	26.7	26.6	40.1	36.2	35.6	28.7
United States	38.9	36.4	36.4	36.4	41.7	38.8	36.1	39.1	36.1	39.1	36.1	36.0	42.1	36.2	35.6	38.1
Home country ETR ^{c)}	33.8	29.9	34.9	28.7	37.0	31.4	31.3	32.1	35.3	30.3	28.9	30.6	40.7	30.4	35.4	32.7

a) The effective average rates show the degree to which the corporate tax systems scale down the real post-tax rate of return that must be earned on so called an infra-marginal investment.

They are measured as the difference between pre-tax and post-tax economic rent for a given pre-tax rate of return (20% is assumed here) as a proportion of the net present value of pre-tax income stream.

See Devereux and Griffith (1999) for discussion of this methodology.

b) Additional assumptions are as follows:

- All rates are averaged across 7 types of finance and 3 assets. Weights for assets are 28 % for building, 50% for plant and machinery, 22% for inventories.

- Weights for source of finance are 55% for retained earnings, 10% for new equity, and 35% for debt for parent company while, for subsidiary, 33% for retained earnings, 33% for new equity from parent, and 33% for debt from the parent are used. See table 5.4 in OECD (1991)

- Economic depreciation rates are 12.25% for plant and machinery, 3.61% for building and 0% for inventories.

c) A host country ETR or ETR on inward FDI is defined as the effective tax rate for a cross-border investment into a specific country while a home country ETR or ETR on outward FDI is defined as the effective tax rate for a cross-border investment from a specific country.

Source : OECD

Table 4. The effective marginal tax rates on cross border investment, 2001^a
 Effective marginal tax rates in manufacturing FDI when the subsidiary is financed by one third loans from the parent, one third equity from the parent and one third retentions by the subsidiary
 Assumptions: no personal income taxes, 5% of real interest rate, 2.5% inflation (2001 OECD average)^b

to / from *	Australia	Austria	Belgium	Canada	Czech Republic	Denmark	Finland	France	Germany	Greece	Hungary	Iceland	Ireland	Italy	Japan
Australia	20.5	22.5	20.5	21.2	20.0	19.9	19.9	21.9	22.4	27.1	17.5	20.0	14.9	29.5	29.7
Austria	28.2	22.3	28.6	25.9	19.5	19.3	19.3	21.5	22.1	24.0	24.4	32.1	16.5	22.3	27.6
Belgium	25.1	14.7	25.6	25.2	14.0	13.8	13.8	16.5	17.3	15.3	20.5	25.1	13.4	17.5	20.1
Canada	29.7	30.1	31.4	27.5	24.7	27.3	27.3	26.3	31.3	34.0	23.3	24.7	29.4	34.2	29.0
Czech Republic	17.9	21.4	25.4	21.4	23.4	17.7	17.7	22.4	20.2	28.2	16.2	27.6	15.1	28.5	24.7
Denmark	18.1	18.7	20.8	18.7	19.2	18.0	18.0	20.0	20.6	25.1	16.5	18.1	15.3	20.8	27.8
Finland	25.9	18.5	20.5	24.1	19.9	18.0	16.7	19.8	20.3	25.3	19.6	18.9	15.2	20.6	27.9
France	26.2	17.5	19.8	24.1	23.7	16.9	16.9	19.5	19.5	20.4	18.9	20.5	13.8	19.7	24.6
Germany	28.4	19.3	21.7	28.8	22.7	18.7	18.5	20.9	19.8	19.8	20.9	22.5	15.5	21.7	29.6
Greece	18.9	15.6	18.2	17.4	15.1	14.9	14.7	17.3	18.0	12.9	12.9	18.9	19.9	18.2	21.5
Hungary	20.2	18.6	20.1	16.4	20.6	15.9	15.8	17.4	17.9	23.7	20.8	21.9	13.5	23.4	25.2
Iceland	30.3	30.7	31.8	24.2	36.9	20.7	20.6	25.3	25.7	31.0	29.3	31.4	31.4	33.6	31.3
Ireland	8.5	9.0	10.8	9.1	17.3	8.5	8.4	10.1	10.6	19.6	6.8	16.9	3.2	10.8	20.9
Italy	20.2	8.3	11.6	20.8	20.4	7.5	7.3	10.4	11.3	9.0	14.9	26.6	3.2	33.2	18.5
Japan	28.9	26.6	28.4	26.6	26.2	26.1	26.0	21.0	28.2	32.0	24.7	31.3	23.7	33.2	18.5
Korea ^c	15.0	15.0	15.0	15.0	15.0	15.0	15.0	15.0	15.0	15.0	15.0	15.0	15.0	15.0	15.0
Luxembourg	27.7	12.6	15.4	16.9	16.4	11.9	11.8	14.4	15.2	13.2	14.4	27.7	8.3	15.4	18.8
Mexico	22.5	23.0	25.1	23.0	36.5	22.5	22.3	24.4	24.9	25.9	20.8	22.5	19.7	32.2	29.6
Netherlands	27.2	18.7	21.0	22.2	18.3	18.2	18.0	20.2	20.8	21.9	20.2	18.2	15.2	21.1	25.8
New Zealand	31.8	26.2	28.1	26.2	40.1	25.7	25.6	27.4	27.9	30.2	24.3	25.7	23.3	34.3	33.0
Norway	31.8	28.2	29.6	32.1	27.9	25.2	25.1	26.7	29.5	34.0	28.8	26.7	22.9	35.6	33.9
Poland	28.0	26.3	27.8	28.4	23.6	23.5	23.4	25.0	25.4	28.7	24.7	23.5	23.9	31.4	30.3
Portugal	21.6	5.0	8.1	22.1	13.1	4.2	4.0	7.0	7.8	9.0	11.2	21.6	3.5	8.1	22.8
Slovak Republic	31.8	30.2	29.5	30.2	27.7	31.8	27.5	31.0	29.4	32.4	26.3	31.8	22.5	37.2	33.5
Spain	29.1	21.1	23.3	29.5	24.0	20.5	20.4	22.5	23.1	24.1	22.4	33.0	17.7	23.3	27.9
Sweden	22.9	15.1	17.3	18.3	17.4	14.5	14.4	16.5	17.1	22.8	16.2	16.4	11.6	17.3	25.4
Switzerland	21.5	17.1	21.3	17.1	18.2	13.5	13.4	15.4	18.8	22.8	17.9	17.3	16.9	26.1	25.1
Turkey	0.9	1.7	3.5	1.8	19.2	-0.7	-0.9	2.3	3.1	2.4	-10.0	0.9	11.5	10.3	-4.1
United Kingdom	19.1	19.6	21.5	19.6	20.1	19.1	18.9	20.9	21.5	25.9	17.4	19.1	16.3	21.5	28.5
United States	29.8	24.5	26.6	24.6	24.2	24.0	23.9	25.8	26.4	36.3	22.5	24.0	21.4	32.6	28.4
Home country ETR ^d	23.5	19.1	21.3	21.8	22.9	17.9	17.5	19.5	20.4	23.4	18.6	22.4	16.9	24.0	25.3

a) The effective marginal tax rates show the degree to which the corporate tax systems scale up (or down) the real pre-tax rate of return that must be earned on a marginal investment, given that a household can earn 5 per cent real rate of return on a demand deposit. In the absence of personal income tax, it is defined as the difference between pre-tax rate of return and real interest rate as a proportion of the pre-tax rate of return.

See OECD (1991) for discussion of this methodology.

b) Additional assumptions are as follows:

- All rates are averaged across 7 types of finance and 3 assets. Weights for assets are 28 % for building, 50% for plant and machinery, 22% for inventories.

- Weights for source of finance are 55% for retained earnings, 10% for new equity, and 35% for debt for parent company while, for subsidiary,

33% for retained earnings, 33% for new equity from parent, and 33% for debt from the parent are used. See table 5.4 in OECD (1991)

- Economic depreciation rates are 12.25% for plant and machinery, 3.61% for building and 0% for inventories.

c) In the case of Korea, 15% minimum tax is applied whenever applicable.

d) A host country ETR or ETR on inward FDI is defined as the effective tax rate for a cross-border investment into a specific country while a home country ETR or ETR on outward FDI is defined as the effective tax rate for a cross-border investment from a specific country.

Source : OECD

Table 4. The effective marginal tax rates on cross border investment, 2001^a (cont.)

Effective average tax rates in manufacturing FDI when the subsidiary is financed by one third loans from the parent, one third equity from the parent and one third retentions by the subsidiary
 Assumptions: no personal income taxes, 5% of real interest rate, 2.5% inflation (2001 OECD average)^b

to / from *	Korea	Luxembourg	Mexico	Netherlands	New Zealand	Norway	Poland	Portugal	Slovak Republic	Spain	Sweden	Switzerland	Turkey	UK	USA	Host country ETR ^d
Australia	20.9	20.9	25.1	20.6	20.4	19.7	19.7	25.3	19.9	20.6	19.7	19.2	31.4	20.0	28.5	22.1
Austria	25.9	20.6	32.5	20.2	32.4	28.0	25.5	20.2	25.7	20.2	19.8	22.3	33.3	19.5	25.9	24.4
Belgium	25.2	15.3	19.2	14.9	25.5	13.7	21.8	14.9	18.3	14.9	13.7	21.5	22.1	14.0	19.8	18.6
Canada	29.8	28.2	27.9	25.3	30.0	29.5	29.5	33.8	27.3	30.2	24.5	24.2	34.5	27.4	27.5	28.7
Czech Republic	18.0	18.9	28.0	15.1	27.8	17.6	17.6	21.5	17.7	18.5	14.0	17.2	28.8	17.9	23.2	21.1
Denmark	19.0	19.2	23.0	18.8	21.2	17.9	17.9	18.8	18.0	18.8	17.9	17.5	29.7	18.1	26.5	20.0
Finland	23.7	19.0	23.4	18.6	26.2	17.7	17.7	18.7	17.8	18.6	17.7	17.3	29.6	18.9	26.7	20.9
France	23.7	18.0	17.6	17.6	26.5	16.6	20.3	17.6	23.5	17.6	16.6	19.9	27.6	16.9	22.7	20.2
Germany	25.8	19.8	23.2	19.4	28.7	22.3	22.3	19.5	22.4	19.4	18.4	21.9	29.9	18.7	23.7	22.2
Greece	15.0	16.1	17.1	15.7	17.8	14.6	14.6	17.0	14.7	17.1	14.6	14.1	25.0	14.9	19.1	16.9
Hungary	20.5	16.8	22.5	16.5	22.1	18.9	18.9	22.6	19.5	16.5	15.7	17.7	26.4	20.0	24.5	19.6
Iceland	30.4	31.0	30.8	21.4	30.6	20.5	23.5	30.8	36.5	30.8	20.5	23.2	31.8	23.7	28.8	28.2
Ireland	17.2	9.5	18.8	9.2	18.1	16.1	16.1	9.2	16.5	9.2	8.2	7.9	21.8	16.9	20.3	13.2
Italy	16.9	9.0	20.9	8.5	20.6	20.0	16.5	8.6	20.1	8.5	7.1	19.6	22.1	7.5	14.2	14.1
Japan	27.4	23.7	19.4	23.4	29.2	22.5	25.9	31.8	31.3	26.7	25.9	25.6	27.8	26.1	27.2	26.8
Korea ^c	15.0	15.0	15.0	15.0	15.0	15.0	15.0	15.0	18.9	15.0	15.0	15.0	15.0	15.0	15.0	15.1
Luxembourg	20.0	12.8	28.2	12.8	28.0	16.0	16.0	12.8	16.1	12.8	11.6	11.1	29.0	11.9	17.7	16.7
Mexico	22.6	25.9	18.9	23.1	22.9	22.2	22.2	23.4	35.8	23.1	22.2	21.8	24.4	22.5	27.9	24.6
Netherlands	24.8	19.2	28.0	26.3	27.5	17.9	17.9	18.9	18.0	18.9	17.9	17.5	28.4	18.2	24.0	20.5
New Zealand	25.8	26.6	30.3	25.8	32.0	25.5	25.5	28.2	39.6	26.3	25.5	25.2	35.0	25.7	31.7	28.2
Norway	31.9	28.5	28.5	21.3	28.3	23.3	27.6	30.4	27.7	30.4	25.0	27.3	35.3	27.8	32.9	29.3
Poland	23.6	24.3	28.5	21.3	28.3	23.3	27.6	28.5	23.4	24.1	23.3	23.0	31.9	23.5	29.3	25.9
Portugal	13.1	5.7	22.2	5.2	22.0	12.7	12.7	12.7	25.9	5.2	3.8	12.3	23.1	4.2	14.4	12.1
Slovak Republic	31.8	28.3	32.2	25.5	32.0	27.4	27.4	32.2	23.8	28.1	24.7	27.1	35.1	27.6	32.5	29.8
Spain	26.8	21.6	24.5	21.2	33.3	26.5	23.7	21.2	23.8	20.3	20.3	26.2	34.1	20.5	27.7	24.6
Sweden	20.6	15.6	20.9	15.3	23.2	14.3	17.5	15.3	15.4	15.3	13.9	13.9	27.2	16.4	24.2	17.9
Switzerland	19.3	14.6	21.2	14.2	21.8	16.4	16.4	21.3	16.5	19.8	13.2	0.0	29.1	17.3	24.0	18.9
Turkey	-0.5	2.4	1.9	-5.6	1.5	0.5	-7.4	2.0	13.7	1.9	-1.1	0.0	30.4	-0.7	1.3	1.8
United Kingdom	19.9	19.9	23.9	19.6	22.1	18.8	18.8	19.8	18.9	19.7	18.6	18.2	31.2	24.0	27.3	20.9
United States	27.3	25.0	24.7	24.7	30.1	27.0	23.8	27.8	23.9	27.7	23.8	23.4	31.2	24.0	26.2	26.2
Home country ETR ^d	22.3	19.3	23.1	17.6	24.7	19.3	19.5	20.9	22.3	19.2	17.2	19.0	28.7	18.4	23.7	21.0

a) The effective marginal tax rates show the degree to which the corporate tax systems scale up (or down) the real pre-tax rate of return that must be earned on a marginal investment, given that a household can earn 5 per cent real rate of return on a demand deposit. In the absence of personal income tax, it is defined as the difference between pre-tax rate of return and real interest rate as a proportion of the pre-tax rate of return.

See OECD (1991) for discussion of this methodology.

b) Additional assumptions are as follows:

- All rates are averaged across 7 types of finance and 3 assets. Weights for assets are 28 % for building, 50% for plant and machinery, 22% for inventories.
- Weights for source of finance are 55% for retained earnings, 10% for new equity, and 35% for debt for parent company while, for subsidiary, 33% for retained earnings, 33% for new equity from parent, and 33% for debt from the parent are used. See table 5.4 in OECD (1991)
- Economic depreciation rates are 12.25% for plant and machinery, 3.61% for building and 0% for inventories.

c) In the case of Korea, 15% minimum tax is applied whenever applicable.

d) A host country ETR or ETR on inward FDI is defined as the effective tax rate for a cross-border investment into a specific country while a home country ETR or ETR on outward FDI is defined as the effective tax rate for a cross-border investment from a specific country.

Source : OECD

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Table 5. The Effective average tax rates on manufacturing FDI when the subsidiary is financed by a loan from the parent, 2001^a

Assumptions: no personal income taxes, 5% of real interest rate, 2.5% inflation (2001 OECD average) and 20% of pre-tax real rate of return on investment^b

to / from *	Australia	Austria	Belgium	Canada	Czech Republic	Denmark	Finland	France	Germany	Greece	Hungary	Iceland	Ireland	Italy	Japan
Australia	27.0	29.6	29.6	27.0	27.1	26.1	25.8	28.3	29.2	33.8	23.3	26.1	21.4	37.5	37.8
Austria	35.6	30.9	30.9	36.6	33.1	27.4	27.2	29.6	30.6	32.1	30.1	41.1	22.7	30.9	36.2
Belgium	36.9	29.9	37.9	37.9	37.2	29.0	28.8	31.1	32.0	30.7	31.6	36.9	26.2	32.4	34.2
Canada	36.4	37.3	39.8	31.6	33.9	31.0	33.5	33.2	39.5	43.4	28.3	31.0	33.6	44.1	36.9
Czech Republic	27.8	31.6	37.1	31.6	26.5	33.5	27.6	32.9	31.0	41.0	25.0	39.2	23.1	41.7	36.2
Denmark	25.4	26.4	28.9	26.4	26.8	24.9	25.2	27.7	28.6	33.2	22.7	25.4	20.8	29.0	37.3
Finland	33.5	25.8	28.4	31.6	26.8	24.9	27.3	27.2	28.1	33.5	25.0	25.7	20.3	28.4	37.5
France	35.7	28.5	30.9	33.9	33.2	27.5	27.3	31.5	30.5	31.1	27.5	30.3	23.0	30.8	35.2
Germany	37.3	30.3	32.8	38.2	32.2	29.4	29.2	30.0	29.3	31.1	29.3	32.0	24.9	32.8	39.8
Greece	30.5	28.8	31.3	30.0	28.1	27.8	27.6	30.0	30.9	25.0	25.0	30.5	28.6	31.3	33.9
Hungary	28.8	26.6	29.4	23.5	29.6	22.5	22.3	24.9	25.9	36.1	34.5	32.0	17.8	35.7	40.0
Iceland	37.3	38.3	40.8	29.9	51.4	26.1	25.9	31.2	32.1	39.1	10.4	28.6	37.1	44.3	40.0
Ireland	13.2	14.2	17.1	14.2	29.6	13.2	13.0	15.7	16.7	36.1	10.4	28.6	17.1	17.1	40.0
Italy	36.1	29.0	31.5	37.1	36.4	28.1	27.8	30.2	31.1	29.8	30.7	42.6	23.5	44.2	36.0
Japan	38.3	36.6	39.0	36.6	35.9	35.7	35.5	32.7	38.7	42.5	33.0	40.8	31.2	44.2	32.4
Korea	29.6	27.4	33.1	30.5	23.6	29.6	26.3	28.8	29.7	28.0	20.7	35.7	21.9	36.3	33.3
Luxembourg	40.9	28.2	30.7	30.9	30.2	27.3	27.0	29.4	30.4	29.0	27.3	40.9	22.7	30.7	33.3
Mexico	28.5	29.4	32.0	29.4	45.3	28.5	28.2	30.7	31.6	32.3	25.6	28.5	23.7	39.5	36.4
Netherlands	35.6	28.4	30.9	31.1	27.7	27.5	27.2	29.6	30.5	31.3	27.4	27.5	22.9	30.9	35.4
New Zealand	29.0	29.9	32.4	29.9	49.4	29.0	28.7	31.2	32.1	34.3	26.2	29.0	24.3	39.9	38.3
Norway	34.9	30.3	32.9	35.9	29.6	26.5	26.3	28.8	32.5	39.4	29.3	28.1	21.8	42.9	39.6
Poland	33.5	31.6	34.2	34.4	28.0	27.7	27.5	30.0	31.0	35.3	27.8	27.7	25.8	40.0	38.2
Portugal	39.0	25.6	28.1	39.9	30.6	24.7	24.4	26.9	27.8	28.4	27.7	39.0	21.9	28.2	41.6
Slovak Republic	35.1	33.2	33.1	33.3	29.8	35.1	29.3	34.5	32.7	36.8	26.7	35.1	22.0	46.4	39.1
Spain	36.1	28.9	31.5	37.1	30.9	28.0	27.8	30.2	31.1	31.8	27.9	41.5	23.4	31.5	36.0
Sweden	32.3	24.5	27.1	27.4	26.2	23.6	23.3	25.8	26.7	33.0	23.7	25.2	18.9	27.1	37.1
Switzerland	30.8	25.7	31.4	25.7	26.6	21.8	21.5	24.1	28.0	33.3	25.0	25.6	23.1	39.3	37.4
Turkey	35.4	36.2	37.9	36.3	49.9	34.5	34.3	36.7	37.6	37.0	29.2	35.4	39.6	42.4	34.3
United Kingdom	25.7	26.6	29.0	26.6	26.7	25.7	25.5	27.9	28.9	33.5	22.9	25.7	21.1	29.0	37.5
United States	37.8	33.5	36.0	33.6	32.8	32.6	32.4	34.7	35.6	47.3	29.9	32.6	28.1	42.3	37.8
Home country ETR ^c	33.0	29.3	32.0	31.6	32.7	27.7	27.1	29.5	30.7	34.6	26.7	32.4	24.7	35.4	37.1

a) The effective average rates show the degree to which the corporate tax systems scale down the real post-tax rate of return that must be earned on so called an infra-marginal investment.

They are measured as the difference between pre-tax and post-tax economic rent for a given pre-tax rate of return (20% is assumed here) as a proportion of the net present value of pre-tax income stream.

See Deveureux and Griffith (1999) for discussion of this methodology.

b) Additional assumptions are as follows:

- All rates are averaged across the three types of assets. Weights for assets are 28% for building, 50% for plant and machinery, 22% for inventories.

- Economic depreciation rates are 12.25% for plant and machinery, 3.61% for building and 0% for inventories.

c) A host country ETR or ETR on inward FDI is defined as the effective tax rate for a cross-border investment into a specific country while a home country ETR or ETR on outward FDI is defined as the effective tax rate for a cross-border investment from a specific country.

Source: OECD

Table 5. The Effective average tax rates on manufacturing FDI when the subsidiary is financed by a loan from the parent, 2001^a (cont.)

Assumptions: no personal income taxes, 5% of real interest rate, 2.5% inflation (2001 OECD average) and 20% of pre-tax real rate of return on investment^b

to / from *	Korea	Luxembourg	Mexico	Netherlands	New Zealand	Norway	Poland	Portugal	Slovak Republic	Spain	Sweden	Switzerland	Turkey	UK	USA	Host country ETR ^c
Australia	26.9	27.8	31.2	27.2	26.8	25.6	25.6	31.4	25.8	27.2	25.6	25.0	41.0	26.1	35.9	28.6
Austria	33.1	29.2	42.2	28.6	41.8	35.1	32.4	28.6	32.6	28.6	26.9	29.0	44.5	27.4	34.2	32.4
Belgium	37.1	30.7	32.8	30.1	37.6	28.6	33.8	30.2	31.4	30.1	28.6	33.2	36.1	29.0	33.8	32.4
Canada	36.6	35.4	34.9	32.2	37.1	35.9	35.9	42.9	33.5	37.5	30.6	30.0	45.0	33.7	34.9	35.8
Czech Republic	28.0	29.6	40.4	26.1	39.9	27.4	27.4	31.9	27.6	29.0	24.5	26.7	42.6	27.8	34.2	31.8
Denmark	26.3	27.2	30.6	26.6	28.6	25.0	25.0	26.7	25.2	26.6	25.0	24.4	40.5	25.4	35.3	27.7
Finland	30.8	26.7	30.9	26.1	34.2	24.5	24.5	26.1	24.7	26.1	24.5	23.8	40.7	25.7	35.6	28.3
France	33.2	29.2	28.7	28.7	36.4	27.1	29.8	28.7	32.7	28.7	27.1	29.2	39.0	27.5	33.2	30.5
Germany	34.8	31.1	33.1	30.5	37.9	31.6	31.6	30.6	31.8	30.5	28.9	30.9	40.5	29.4	34.2	32.4
Greece	28.0	29.6	29.9	29.0	30.1	27.4	27.4	29.9	27.6	29.9	27.4	26.7	37.3	27.8	31.8	29.4
Hungary	29.4	24.3	33.6	23.7	32.7	26.6	26.6	33.8	27.6	23.7	22.1	24.6	43.1	28.6	38.1	28.7
Iceland	37.5	39.1	38.5	27.3	38.0	25.6	28.4	38.5	50.1	38.5	25.6	27.8	41.1	28.9	36.0	35.5
Ireland	29.4	15.0	33.6	14.4	31.6	26.6	26.6	14.5	27.6	14.4	12.8	12.1	43.1	28.6	38.1	22.3
Italy	33.6	29.8	37.3	29.2	36.8	35.7	33.0	29.2	35.9	29.2	27.6	35.1	39.4	28.1	32.9	32.5
Japan	36.9	34.8	31.7	34.3	38.9	32.7	35.3	42.0	40.6	36.8	35.3	34.6	38.9	35.7	37.8	36.8
Korea	28.2	25.2	27.6	27.6	30.2	29.1	23.0	27.7	46.7	27.6	26.0	25.4	35.8	23.4	30.2	29.0
Luxembourg	32.9	32.3	42.0	28.4	41.6	29.5	29.5	28.5	29.8	28.4	26.8	26.2	44.2	27.3	32.2	31.2
Mexico	28.7	32.3	28.6	29.7	29.2	28.0	28.0	29.9	43.8	29.7	28.0	27.4	31.9	28.5	34.4	31.0
Netherlands	33.1	29.2	28.6	30.1	36.3	27.0	27.0	28.6	27.2	28.6	27.0	26.4	38.7	27.5	33.4	29.7
New Zealand	29.2	30.7	31.7	27.7	35.6	28.5	28.5	31.9	48.0	30.1	28.5	27.9	41.5	29.0	36.3	32.3
Norway	35.1	31.1	33.1	26.1	34.2	27.3	28.9	33.3	29.1	33.3	26.1	28.2	42.7	29.3	37.7	32.1
Poland	27.9	29.5	34.7	26.1	34.2	27.3	28.9	34.7	27.5	28.9	27.3	26.6	41.5	27.7	36.3	31.1
Portugal	30.6	26.4	40.1	25.8	39.6	29.9	29.9	34.7	45.1	25.8	24.2	29.3	42.3	24.7	32.5	31.0
Slovak Republic	35.2	31.3	36.2	27.9	35.8	29.0	29.0	36.3	30.5	30.7	26.3	28.4	42.3	29.5	37.2	33.0
Spain	33.6	29.8	31.9	29.2	42.2	33.0	30.3	29.2	24.1	24.7	27.6	32.3	44.8	28.0	35.6	32.1
Sweden	29.6	25.3	30.4	24.7	33.0	23.1	26.0	24.8	24.1	24.7	21.3	22.5	46.2	25.2	35.1	27.3
Switzerland	28.0	23.5	30.7	22.9	31.5	24.3	24.3	30.9	24.5	28.9	21.3	22.5	46.2	25.6	35.4	28.2
Turkey	34.7	37.0	36.5	32.9	36.0	34.9	31.3	36.5	44.0	36.5	34.1	34.3	40.7	34.5	36.6	36.4
United Kingdom	26.5	27.3	30.9	26.7	28.8	25.2	25.2	26.9	25.5	26.9	25.1	24.4	40.7	35.5	35.5	27.9
United States	35.4	34.3	33.8	33.8	38.5	34.8	32.2	36.4	32.4	36.3	32.2	31.5	41.1	32.6	34.9	34.9
Home country ETR ^c	31.8	29.5	33.6	27.8	35.2	28.9	28.8	31.1	32.9	29.4	26.6	27.7	40.9	28.4	35.0	31.1

a) The effective average rates show the degree to which the corporate tax systems scale down the real post-tax rate of return that must be earned on so called an infra-marginal investment. They are measured as the difference between pre-tax and post-tax economic rent for a given pre-tax rate of return (20% is assumed here) as a proportion of the net present value of pre-tax income stream.

See Devereux and Griffith (1999) for discussion of this methodology.

b) Additional assumptions are as follows:

- All rates are averaged across the three types of assets. Weights for assets are 28 % for building, 50% for plant and machinery, 22% for inventories.

- Economic depreciation rates are 12.25% for plant and machinery, 3.61% for building and 0% for inventories.

c) A host country ETR or ETR on inward FDI is defined as the effective tax rate for a cross-border investment into a specific country while a home country ETR or ETR on outward FDI is defined as the effective tax rate for a cross-border investment from a specific country.

Source : OECD

ECO/WKP(2003)19
Table 6. The effective average tax rates on manufacturing FDI when the subsidiary is financed by new equity from the parent, 2001^a

Assumptions: no personal income taxes, 5% of real interest rate, 2.5% inflation (2001 OECD average) and 20% of pre-tax real rate of return on investment^b

to / from *	Australia	Austria	Belgium	Canada	Czech Republic	Denmark	Finland	France	Germany	Greece	Hungary	Iceland	Ireland	Italy	Japan
Australia	39.8	25.6	26.4	25.6	27.1	26.1	26.2	26.8	26.5	33.8	27.6	26.1	28.6	37.8	37.8
Austria	39.8	25.6	26.4	25.6	27.1	26.1	26.2	26.8	26.5	33.8	27.6	26.1	28.6	37.8	37.8
Belgium	43.6	32.1	28.1	39.2	35.7	27.8	28.0	28.6	28.3	31.1	37.3	47.7	30.4	28.1	35.3
Canada	41.3	40.8	41.6	43.1	43.4	32.6	32.7	33.2	32.9	31.6	41.4	43.6	35.0	32.8	34.8
Czech Republic	29.4	33.0	38.0	33.0	37.4	33.6	37.6	34.3	41.7	48.0	35.1	33.6	43.8	47.8	36.9
Denmark	25.4	24.9	25.8	24.9	26.5	37.6	25.6	26.2	25.9	33.2	26.9	25.4	27.9	25.8	37.3
Finland	36.9	24.1	24.9	32.3	26.8	24.6	25.4	25.4	25.1	33.5	30.2	25.7	27.1	24.9	37.5
France	40.9	28.9	29.7	36.6	37.0	29.4	29.5	33.2	29.7	31.1	34.7	33.2	31.8	29.5	35.2
Germany	43.6	32.0	32.7	43.1	36.1	32.5	32.6	33.2	31.6	31.6	37.6	36.2	34.9	32.7	42.2
Greece	30.5	30.0	30.8	30.0	30.4	30.5	30.6	31.2	30.9	32.0	32.0	30.5	40.7	30.8	33.9
Hungary	28.9	23.8	24.8	19.1	29.6	19.6	19.8	20.6	20.3	36.1	43.9	33.6	22.2	34.2	40.0
Iceland	42.4	41.9	42.7	29.7	62.4	26.1	26.2	31.0	30.6	41.4	43.9	51.4	51.4	47.7	40.9
Ireland	5.9	5.3	6.6	5.3	29.6	5.9	6.0	7.0	6.7	36.1	7.4	28.6	6.6	6.6	40.0
Italy	40.9	28.9	29.6	40.4	40.8	29.3	29.5	30.1	29.8	28.4	38.5	50.2	31.8	49.0	35.7
Japan	45.2	41.2	41.9	41.2	41.5	41.6	41.8	35.1	42.0	47.9	43.1	48.8	44.1	49.0	32.4
Korea	33.5	28.7	34.0	33.0	24.8	33.5	29.3	30.1	29.8	28.0	26.4	42.1	31.7	38.3	32.4
Luxembourg	49.0	29.4	30.2	33.2	33.6	29.9	30.0	30.6	30.3	29.0	35.2	49.0	32.3	30.2	33.3
Mexico	30.3	29.8	30.5	29.8	54.1	30.3	30.4	31.0	30.7	32.3	31.8	30.3	32.8	41.4	36.4
Netherlands	40.8	28.7	29.5	32.6	29.1	29.2	29.3	29.9	29.6	31.3	34.6	29.2	31.7	29.5	35.4
New Zealand	30.1	29.6	30.3	29.5	53.8	30.1	30.2	30.8	30.4	34.3	31.6	30.1	32.6	41.2	38.3
Norway	38.1	29.4	30.3	37.6	29.8	25.8	25.9	26.6	30.4	41.2	35.5	28.1	28.4	45.0	39.6
Poland	36.7	32.0	32.9	36.2	28.2	28.3	28.5	29.1	28.8	35.7	34.0	28.3	35.1	41.3	38.2
Portugal	46.4	26.0	26.8	45.9	34.4	26.5	26.6	27.3	27.0	28.4	35.9	46.4	28.9	26.8	45.0
Slovak Republic	38.6	34.0	30.8	34.0	30.3	38.6	30.6	35.3	30.9	37.6	32.0	38.6	28.9	50.4	39.1
Spain	41.3	29.3	30.1	40.8	33.5	29.8	29.9	30.5	30.2	31.8	35.1	49.0	32.3	30.1	36.1
Sweden	35.4	22.4	23.3	26.5	26.2	22.8	23.0	23.7	23.4	33.0	28.5	25.2	25.3	23.3	37.1
Switzerland	33.1	23.9	29.2	23.9	26.6	20.1	20.2	21.0	25.0	33.3	30.3	25.6	31.3	40.6	37.4
Turkey	43.3	42.8	42.5	42.8	62.3	42.2	42.3	42.9	42.6	42.4	39.9	43.3	51.8	48.4	37.2
United Kingdom	25.7	25.2	25.8	25.2	26.7	25.7	25.8	26.5	26.2	33.5	27.2	25.7	28.2	25.8	37.5
United States	44.3	36.5	37.2	36.5	36.9	37.0	37.1	37.6	37.3	54.3	38.5	37.0	39.4	46.0	39.3
Home country ETR ^c	36.6	29.7	30.6	32.8	35.7	29.2	28.8	29.3	29.4	35.7	33.2	35.8	33.5	35.5	37.5

a) The effective average rates show the degree to which the corporate tax systems scale down the real post-tax rate of return that must be earned on so called an infra-marginal investment. They are measured as the difference between pre-tax and post-tax economic rent for a given pre-tax rate of return (20% is assumed here) as a proportion of the net present value of pre-tax income stream. See Devereux and Griffith (1999) for discussion of this methodology.

b) Additional assumptions are as follows:

- All rates are averaged across the three types of assets. Weights for assets are 28 % for building, 50% for plant and machinery, 22% for inventories.
- Economic depreciation rates are 12.25% for plant and machinery, 3.61% for building and 0% for inventories.

c) A host country ETR or ETR on inward FDI is defined as the effective tax rate for a cross-border investment into a specific country while a home country ETR or ETR on outward FDI is defined as the effective tax rate for a cross-border investment from a specific country.

Source : OECD

Table 6. The effective average tax rates on manufacturing FDI when the subsidiary is financed by new equity from the parent, 2001^a (cont.)

Assumptions: no personal income taxes, 5% of real interest rate, 2.5% inflation (2001 OECD average) and 20% of pre-tax real rate of return on investment.^b

to / from *	Korea	Luxembourg	Mexico	Netherlands	New Zealand	Norway	Poland	Portugal	Slovak Republic	Spain	Sweden	Switzerland	Turkey	UK	USA	Host country ETR ^c
Australia	26.9	25.1	31.2	25.4	25.7	26.3	26.3	31.4	26.2	25.4	26.3	26.7	41.0	26.1	35.9	28.6
Austria	35.7	26.9	47.1	27.2	47.3	40.0	36.0	27.2	35.9	27.2	29.1	32.4	45.9	27.8	33.3	33.9
Belgium	43.5	31.6	35.6	31.9	43.2	32.8	40.1	31.9	36.3	31.9	32.8	40.5	36.1	32.6	35.1	36.2
Canada	41.2	36.6	36.9	33.0	40.9	41.6	41.6	48.3	37.6	40.7	33.9	34.2	47.2	37.5	34.9	39.3
Czech Republic	29.3	28.5	45.2	24.7	45.5	29.7	29.7	32.9	29.6	28.8	25.6	30.0	44.0	29.4	34.2	34.0
Denmark	26.3	24.5	30.6	24.8	28.6	25.7	25.7	24.8	25.6	24.8	25.7	26.0	40.5	25.4	35.3	27.5
Finland	32.7	23.6	30.9	23.9	36.5	24.8	24.8	23.9	24.7	23.9	24.8	25.1	40.7	25.7	35.6	28.3
France	37.0	28.5	28.8	28.8	40.6	29.6	33.5	28.8	37.2	28.8	29.6	33.8	39.1	29.4	33.2	32.5
Germany	39.8	31.6	35.6	31.9	43.2	36.4	36.4	31.9	36.3	31.9	32.7	36.8	41.8	32.5	35.0	35.7
Greece	30.4	29.6	29.9	29.9	30.1	30.8	30.8	29.9	30.6	29.9	30.8	31.1	37.3	30.5	31.8	31.2
Hungary	29.4	18.7	33.6	19.0	33.2	26.6	26.6	33.8	27.6	19.0	19.9	24.9	43.1	28.6	38.1	27.4
Iceland	42.3	41.4	41.8	25.5	42.0	26.4	30.4	41.7	61.4	41.8	26.4	30.8	41.1	30.2	36.0	38.5
Ireland	29.4	4.9	33.6	5.2	31.6	26.6	26.6	5.2	27.6	5.2	6.1	6.5	43.1	28.6	38.1	17.8
Italy	37.0	28.4	40.3	28.7	40.5	41.2	37.3	28.7	41.0	28.7	29.6	41.5	39.1	29.3	32.0	34.7
Japan	43.0	37.2	33.9	37.5	44.9	38.3	41.9	48.2	48.9	41.0	41.9	42.2	39.9	41.6	40.5	42.2
Korea	28.3	28.3	25.2	28.6	33.1	33.7	25.2	28.6	57.8	28.6	29.4	29.8	35.8	24.9	30.2	31.5
Luxembourg	37.4	28.3	28.6	29.3	48.6	34.0	34.0	29.3	33.8	29.3	30.1	30.5	47.2	29.9	32.6	34.5
Mexico	30.2	32.3	48.4	29.7	29.9	30.5	30.5	29.9	52.8	29.7	30.5	30.9	28.4	30.3	34.4	32.8
Netherlands	36.8	28.3	28.6	29.7	40.4	30.3	30.3	28.6	29.3	28.6	29.5	29.8	38.7	29.2	33.4	31.4
New Zealand	30.0	29.1	31.7	29.4	37.7	30.3	30.2	33.3	30.0	33.4	26.1	30.5	42.7	29.9	37.7	32.7
Norway	38.0	29.0	33.1	25.2	37.7	28.6	30.2	36.0	28.5	27.7	28.6	28.9	41.5	28.3	36.3	32.0
Poland	28.2	27.4	36.1	23.5	36.3	34.7	34.7	34.7	55.4	25.9	26.7	35.0	44.7	26.5	33.3	34.3
Portugal	34.4	25.6	45.8	25.9	46.1	34.7	34.7	37.9	33.8	29.8	26.6	31.1	42.3	30.4	37.2	34.4
Slovak Republic	38.5	29.5	38.0	25.7	38.2	30.7	30.7	37.9	33.8	29.8	30.0	38.1	47.2	29.8	36.3	34.6
Spain	37.4	28.9	33.0	29.2	48.7	37.7	33.9	29.2	24.1	22.2	20.3	23.4	40.3	25.2	35.1	27.0
Sweden	31.1	21.9	30.4	22.2	35.1	23.1	27.3	22.2	24.1	22.2	20.3	23.4	48.7	25.6	35.4	28.1
Switzerland	28.7	19.2	30.7	19.5	32.7	24.7	24.7	30.9	24.6	28.1	42.4	43.8	48.7	42.2	41.1	43.7
Turkey	42.1	42.4	42.7	37.9	42.9	43.5	38.7	42.7	55.3	42.7	42.4	43.8	48.7	25.6	35.4	28.1
United Kingdom	26.5	24.5	30.9	24.8	28.8	25.9	25.9	25.0	25.8	25.1	25.7	26.1	40.7	35.5	35.5	27.7
United States	40.5	36.1	36.4	36.4	43.9	40.9	37.2	40.0	37.1	40.0	37.2	37.6	42.5	37.0	37.0	39.2
Home country ETR ^c	34.6	28.3	35.4	27.1	38.5	31.9	31.7	31.5	36.8	29.3	28.6	31.3	41.5	30.2	35.3	32.8

a) The effective average rates show the degree to which the corporate tax systems scale down the real post-tax rate of return that must be earned on so called an infra-marginal investment.

They are measured as the difference between pre-tax and post-tax economic rent for a given pre-tax rate of return (20% is assumed here) as a proportion of the net present value of pre-tax income stream.

See Devereux and Griffith (1999) for discussion of this methodology.

b) Additional assumptions are as follows:

- All rates are averaged across the three types of assets. Weights for assets are 28 % for building, 50% for plant and machinery, 22% for inventories.

- Economic depreciation rates are 12.25% for plant and machinery, 3.61% for building and 0% for inventories.

c) A host country ETR or ETR on inward FDI is defined as the effective tax rate for a cross-border investment into a specific country while a home country ETR or ETR on outward FDI is defined as the effective tax rate for a cross-border investment from a specific country.

Source : OECD

Table 7. The effective average tax rates on manufacturing FDI when the subsidiary is financed by retained earnings, 2001^a

to / from *	Australia	Austria	Belgium	Canada	Czech Republic	Denmark	Finland	France	Germany	Greece	Hungary	Iceland	Ireland	Italy	Japan
Australia	29.8	30.8	29.8	29.8	29.8	29.8	29.8	30.6	30.7	34.7	29.8	29.8	29.8	37.1	37.2
Austria	39.0	33.5	39.0	39.0	36.9	32.7	32.7	33.4	33.5	34.9	36.9	43.2	32.7	33.5	37.4
Belgium	42.0	36.2	42.0	42.0	42.0	36.2	36.2	36.9	36.9	36.2	40.1	42.0	36.2	37.0	38.1
Canada	39.7	39.7	40.6		37.6	35.6	37.6	36.3	40.5	43.9	35.6	35.6	39.7	43.9	38.1
Czech Republic	31.4	33.7	36.9	33.7		36.0	31.4	34.5	32.3	40.6	31.4	40.6	31.4	40.6	36.0
Denmark	29.2	30.1	29.2	29.2	29.8		29.2	30.0	30.1	34.1	29.2	29.2	29.2	30.1	36.7
Finland	35.3	28.3	29.2	33.0	29.6	28.3		29.1	29.2	33.9	30.6	29.0	28.3	29.2	36.5
France	39.3	33.1	33.9	37.3	37.3	33.1	33.1		33.8	34.5	35.2	35.2	33.1	33.8	37.0
Germany	42.0	36.2	36.9	42.0	38.1	36.2	36.2	36.8	36.2	36.2	38.1	38.1	36.2	36.9	42.0
Greece	34.3	34.3	35.1	34.3	34.3	34.3	34.3	35.0	35.1	34.3	34.3	34.3	38.3	35.1	36.8
Hungary	27.3	24.5	25.6	21.7	27.8	21.7	21.7	22.6	22.8	32.2		30.1	21.7	31.3	34.9
Iceland	38.9	38.9	39.9	32.2	50.1	29.9	29.9	33.0	33.1	38.9	38.9		42.6	42.6	38.9
Ireland	9.7	9.7	11.0	9.7	25.0	9.7	9.7	10.9	11.0	29.7	9.7	24.2		11.1	32.5
Italy	41.3	35.3	36.1	41.3	41.3	35.3	35.3	36.0	36.1	35.3	39.3	46.0	35.3		39.3
Japan	43.7	41.8	42.6	41.8	41.8	41.8	41.8	38.8	42.5	45.5	41.8	45.5	41.8	46.3	
Korea	31.9	29.4	32.9	31.9	26.8	31.9	29.4	30.3	30.4	29.2	26.8	37.0	29.4	35.5	32.1
Luxembourg	43.9	33.6	34.4	35.6	35.6	33.6	33.6	34.3	34.4	33.6	35.6	43.9	33.6	34.4	36.1
Mexico	34.1	34.1	34.9	34.1	46.8	34.1	34.1	34.8	34.9	35.7	34.1	34.1	34.1	40.7	38.1
Netherlands	39.2	32.9	33.7	35.0	32.9	32.9	32.9	33.6	33.7	34.5	35.0	32.9	32.9	33.8	37.0
New Zealand	33.8	33.8	34.7	33.8	46.6	33.8	33.8	34.6	34.6	36.6	33.8	33.8	33.8	40.5	39.0
Norway	36.4	31.9	32.8	36.4	31.9	29.6	29.6	30.4	32.8	38.7	34.2	30.9	29.6	41.0	38.1
Poland	35.0	32.7	33.6	35.0	30.3	30.3	30.3	31.2	31.3	35.0	32.7	30.3	32.7	38.4	36.7
Portugal	41.4	30.2	31.1	41.4	34.6	30.2	30.2	31.0	31.0	31.8	34.6	41.4	30.2	31.1	41.4
Slovak Republic	36.9	34.7	33.4	34.7	32.5	36.9	32.5	35.5	33.3	36.9	32.5	36.9	30.2	44.2	38.0
Spain	39.7	33.5	34.4	39.7	35.6	33.5	33.5	34.3	34.3	35.1	35.6	43.9	33.5	34.4	37.7
Sweden	33.8	26.6	27.6	29.0	28.6	26.6	26.6	27.4	27.5	33.0	29.0	27.9	26.6	27.6	35.6
Switzerland	31.5	26.4	30.0	26.4	27.7	23.8	23.8	24.7	27.4	32.2	29.0	27.1	29.0	36.7	34.9
Turkey	41.3	41.3	41.5	41.3	51.7	40.7	40.7	41.4	41.5	41.3	38.7	41.3	44.7	44.8	38.7
United Kingdom	29.4	29.4	30.2	29.4	30.1	29.4	29.4	30.2	30.3	34.3	29.4	29.4	29.4	30.2	36.9
United States	42.7	38.9	39.7	38.9	38.9	38.9	38.9	39.6	39.7	48.4	38.9	38.9	38.9	44.3	40.8
Home country ETR ^c	36.0	32.4	33.3	34.1	35.6	32.0	31.7	32.3	32.6	36.1	33.5	35.6	33.3	36.1	37.3

a) The effective average rates show the degree to which the corporate tax systems scale down the real post-tax rate of return that must be earned on so called an infra-marginal investment.

They are measured as the difference between pre-tax and post-tax economic rent for a given pre-tax rate of return (20% is assumed here) as a proportion of the net present value of pre-tax income stream.

See Devereux and Griffith (1999) for discussion of this methodology.

b) Additional assumptions are as follows:

- All rates are averaged across the three types of assets. Weights for assets are 28 % for building, 50% for plant and machinery, 22% for inventories.

- Economic depreciation rates are 12.25% for plant and machinery, 3.61% for building and 0% for inventories.

c) A host country ETR or ETR on inward FDI is defined as the effective tax rate for a cross-border investment into a specific country while a home country ETR or ETR on outward FDI is defined as the effective tax rate for a cross-border investment from a specific country.

Source : OECD

Table 7. The effective average tax rates on manufacturing FDI when the subsidiary is financed by retained earnings, 2001^a (cont.)

Assumptions: no personal income taxes, 5% of real interest rate, 2.5% inflation (2001 OECD average) and 20% of pre-tax real rate of return on investment are assumed^b

to / from *	Korea	Luxembourg	Mexico	Netherlands	New Zealand	Norway	Poland	Portugal	Slovak Republic	Spain	Sweden	Switzerland	Turkey	UK	USA	Host country ETR ^c
Australia	30.4	29.8	33.1	29.8	29.8	29.8	29.8	33.2	29.8	29.8	29.8	29.8	39.2	29.8	36.0	31.4
Austria	36.9	32.7	43.2	32.7	43.2	39.0	36.9	32.7	36.9	32.7	32.7	34.8	43.2	32.7	36.2	36.1
Belgium	42.0	36.2	38.1	36.2	42.0	36.2	40.1	36.2	38.1	36.2	36.2	40.1	39.0	36.2	38.1	38.2
Canada	39.7	37.6	37.6	35.6	39.7	39.7	39.7	43.9	37.6	39.7	35.6	35.6	43.9	37.6	36.9	38.8
Czech Republic	31.4	31.4	40.6	29.1	40.6	31.4	31.4	33.7	31.4	31.4	29.1	31.4	40.6	31.4	34.8	34.2
Denmark	29.7	29.2	32.5	29.2	31.2	29.2	29.2	29.2	29.2	29.2	29.2	29.2	38.7	29.2	35.4	30.5
Finland	33.0	28.3	32.2	28.3	35.3	28.3	28.3	28.3	28.3	28.3	28.3	28.3	38.5	29.0	35.2	30.6
France	37.3	33.1	33.1	33.1	39.3	33.1	35.2	33.1	37.3	33.1	33.1	35.2	39.3	33.1	35.8	34.9
Germany	40.0	36.2	38.1	36.2	42.0	38.1	38.1	36.2	38.1	36.2	36.2	38.1	42.0	36.2	38.1	38.0
Greece	34.3	34.3	34.3	34.3	34.3	34.3	34.3	34.3	34.3	34.3	34.3	34.3	38.8	34.3	35.6	34.8
Hungary	27.6	21.7	30.5	21.7	30.1	25.7	25.7	30.6	26.4	21.7	21.7	24.5	37.0	27.1	33.6	26.6
Iceland	38.9	38.9	38.9	29.9	38.9	29.9	32.2	38.9	49.4	38.9	29.9	32.2	39.3	32.2	36.0	37.0
Ireland	24.8	9.7	27.9	9.7	26.4	22.8	22.8	9.7	23.5	9.7	9.7	9.7	34.8	24.2	31.1	17.6
Italy	39.3	35.3	41.3	35.3	41.3	41.3	39.3	35.3	41.3	35.3	35.3	41.3	41.3	35.3	37.3	38.2
Japan	42.6	40.0	38.1	40.0	43.7	40.0	41.8	45.5	45.5	41.8	41.8	41.8	41.8	41.8	41.8	42.3
Korea	29.4	29.4	27.4	29.4	31.9	31.9	26.8	29.4	46.2	29.4	29.4	29.4	34.3	26.8	30.7	30.9
Luxembourg	37.7	35.7	43.9	33.6	43.9	35.6	35.6	33.6	35.6	33.6	33.6	33.6	43.9	33.6	35.6	36.2
Mexico	34.1	35.7	34.1	34.1	34.1	34.1	34.1	34.2	46.0	34.1	34.1	34.1	34.1	34.1	36.9	35.6
Netherlands	37.1	32.9	32.9	32.9	39.2	32.9	32.9	32.9	32.9	32.9	32.9	32.9	39.1	32.9	35.8	34.3
New Zealand	33.8	33.8	35.1	33.8	36.4	33.8	33.8	35.2	45.8	33.8	33.8	33.8	40.9	33.8	37.8	35.7
Norway	36.4	31.9	34.0	29.6	36.4	31.9	31.9	34.2	31.9	34.2	29.6	31.9	40.0	31.9	36.9	33.6
Poland	30.3	30.3	35.0	28.0	35.0	30.3	30.3	35.0	30.3	30.3	30.3	30.3	38.8	30.3	35.5	32.6
Portugal	34.6	30.2	41.4	30.2	41.4	34.6	34.6	30.2	46.3	30.2	30.2	34.6	41.4	30.2	34.6	34.7
Slovak Republic	36.9	32.5	36.9	30.2	36.9	32.5	32.5	36.9	35.6	32.5	30.2	32.5	40.0	32.5	36.8	34.8
Spain	37.7	33.5	35.6	33.5	43.9	37.7	35.6	33.5	35.6	33.5	33.5	37.7	43.9	33.5	37.7	36.3
Sweden	31.4	26.6	31.3	26.6	33.8	26.6	29.0	26.6	27.3	26.6	26.6	26.6	37.7	27.9	34.3	29.2
Switzerland	29.0	23.8	30.5	23.8	31.5	26.4	26.4	30.6	26.4	29.0	23.8	26.6	41.7	27.1	33.6	28.8
Turkey	40.7	41.3	41.3	38.7	41.3	41.3	38.7	41.3	47.8	41.3	40.7	41.3	47.8	40.7	40.7	41.6
United Kingdom	30.0	29.3	32.7	29.3	31.4	29.4	29.4	29.4	29.4	29.4	29.3	29.3	38.9	38.9	35.6	30.7
United States	40.8	38.9	38.9	38.9	42.7	40.8	38.9	40.8	38.9	40.8	38.9	38.9	42.7	38.9	40.2	40.2
Home country ETR ^c	35.1	31.9	35.7	31.1	37.3	33.3	33.3	33.6	36.1	32.3	31.5	32.9	39.8	32.6	36.0	34.1

a) The effective average rates show the degree to which the corporate tax systems scale down the real post-tax rate of return that must be earned on so called an infra-marginal investment. They are measured as the difference between pre-tax and post-tax economic rent for a given pre-tax rate of return (20% is assumed here) as a proportion of the net present value of pre-tax income stream.

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b) Additional assumptions are as follows:

- All rates are averaged across the three types of assets. Weights for assets are 28 % for building, 50% for plant and machinery, 22% for inventories.

- Economic depreciation rates are 12.25% for plant and machinery, 3.61% for building and 0% for inventories.

c) A host country ETR or ETR on inward FDI is defined as the effective tax rate for a cross-border investment into a specific country while a home country ETR or ETR on outward FDI is defined as the effective tax rate for a cross-border investment from a specific country.

Source : OECD

Table 8. Selected sensitivity analyses

	EATR on inward FDI						EMTR on inward FDI							
	Base case ^a	Real interest rate			Inflation		Alternative asset weights ^b	Base case ^a	Real interest rate			Inflation		Alternative asset weights ^b
		7.5%	10%	5%	7.5%	5%			7.5%	10%	5%	7.5%		
													7.5%		10%	5%
Australia	29.5	27.6	25.7	30.8	31.8	29.6	22.1	21.3	21.1	25.3	27.6	22.3		
Austria	34.1	31.7	29.4	34.6	34.9	34.5	24.4	24.4	24.7	26.0	27.1	25.6		
Belgium	35.6	32.1	28.8	35.6	35.6	35.7	18.6	19.8	20.8	19.0	19.0	18.9		
Canada	38.0	34.9	31.9	39.5	40.7	44.5	28.7	27.3	26.7	32.7	35.9	36.0		
Czech Republic	33.3	30.6	27.9	34.8	36.1	33.8	21.1	21.2	21.5	25.8	29.4	23.1		
Denmark	28.5	26.4	24.4	29.7	30.7	28.6	20.0	19.4	19.4	23.4	26.1	20.2		
Finland	29.1	26.9	24.8	30.2	31.2	29.1	20.9	20.0	19.8	24.3	26.9	21.2		
France	32.7	29.8	27.2	33.4	34.0	32.8	20.2	20.3	20.6	22.5	24.1	21.0		
Germany	35.3	32.4	29.5	35.5	35.4	35.7	22.2	22.9	23.4	22.9	22.9	23.7		
Greece	31.8	29.0	26.4	32.0	32.0	31.8	16.9	18.1	19.2	17.5	17.7	15.6		
Hungary	27.6	25.8	24.0	29.4	31.1	27.7	19.6	18.6	18.2	22.6	25.0	20.6		
Iceland	37.0	34.3	31.8	38.6	40.1	37.4	28.2	27.0	26.5	32.6	35.9	29.0		
Ireland	19.2	18.0	16.8	20.2	21.2	24.2	13.2	12.4	12.0	16.1	18.6	17.8		
Italy	35.2	31.2	27.5	35.1	35.0	35.4	14.1	15.9	17.2	13.9	13.3	15.4		
Japan	40.4	36.8	33.2	40.7	40.9	40.7	26.8	26.9	27.2	28.2	29.1	28.1		
Korea	30.5	27.0	23.7	31.0	31.4	31.6	15.1	15.2	15.4	15.4	15.9	15.5		
Luxembourg	34.0	30.8	27.8	34.2	34.2	34.6	16.7	18.6	19.8	17.6	17.8	19.4		
Mexico	33.1	31.1	29.2	33.6	33.9	33.2	24.6	24.9	25.3	26.3	27.3	24.4		
Netherlands	31.8	29.3	26.9	31.9	31.8	32.3	20.5	20.9	21.2	20.9	20.7	22.4		
New Zealand	33.7	31.6	29.6	35.1	36.3	33.8	28.1	26.6	26.0	31.5	34.0	28.5		
Norway	32.8	31.0	29.2	34.2	35.3	33.0	29.3	27.4	26.4	32.7	35.3	30.0		
Poland	31.9	30.1	28.3	32.6	33.2	32.1	25.9	25.2	25.0	28.2	29.8	26.5		
Portugal	33.3	29.9	26.7	33.7	33.9	33.9	12.1	15.0	16.7	13.8	14.8	15.2		
Slovak Republic	34.1	32.3	30.6	35.3	36.3	34.1	29.8	28.6	28.0	33.1	35.5	29.9		
Spain	34.3	31.8	29.4	34.6	34.8	34.7	24.6	24.5	24.6	25.8	26.4	25.9		
Sweden	27.8	25.5	23.2	28.9	29.7	28.1	17.9	17.4	17.3	21.1	23.7	19.0		
Switzerland	28.4	26.1	23.9	28.8	29.1	28.7	18.9	18.5	18.4	20.3	21.3	20.3		
Turkey	40.6	35.3	30.2	41.0	41.3	41.4	1.8	9.5	13.3	5.4	8.0	7.2		
United Kingdom	28.7	26.7	24.8	29.9	30.9	28.9	20.9	20.2	20.0	24.2	26.8	21.4		
United States	38.1	34.9	31.9	38.3	38.4	38.8	26.2	26.2	26.5	27.2	27.6	28.7		
average	32.7	30.0	27.5	33.4	34.0	33.4	21.0	21.1	21.4	23.2	24.8	22.4		

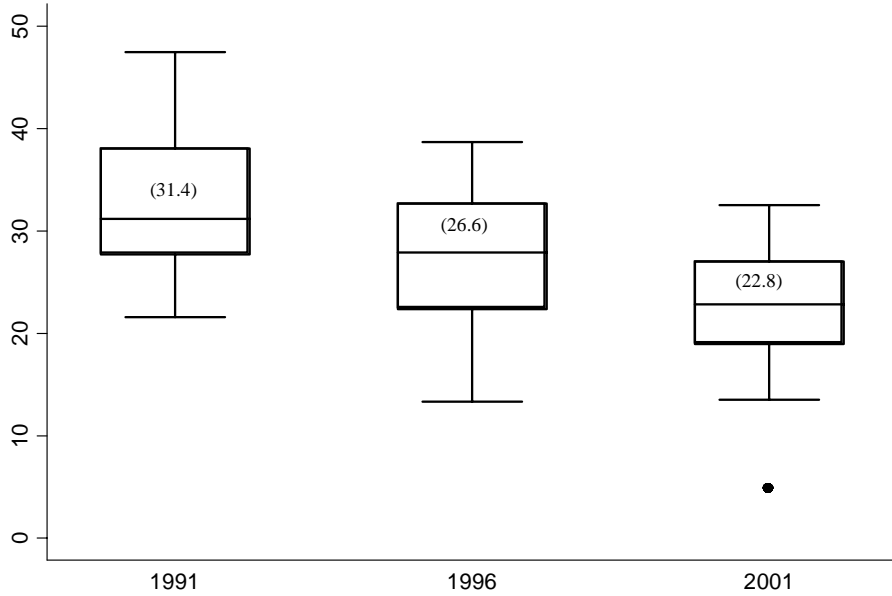
a) Assumes 5 per cent interest rate, 2.5 per cent inflation, 20 per cent profitability (EATR only) and the composition of machinery, buildings and inventories as 50:28:22 per cent.

b) Assumes 40 per cent for machinery, 40 per cent for buildings and 20 per cent for inventories with the application of the standard corporate tax rate for Canada and Ireland.

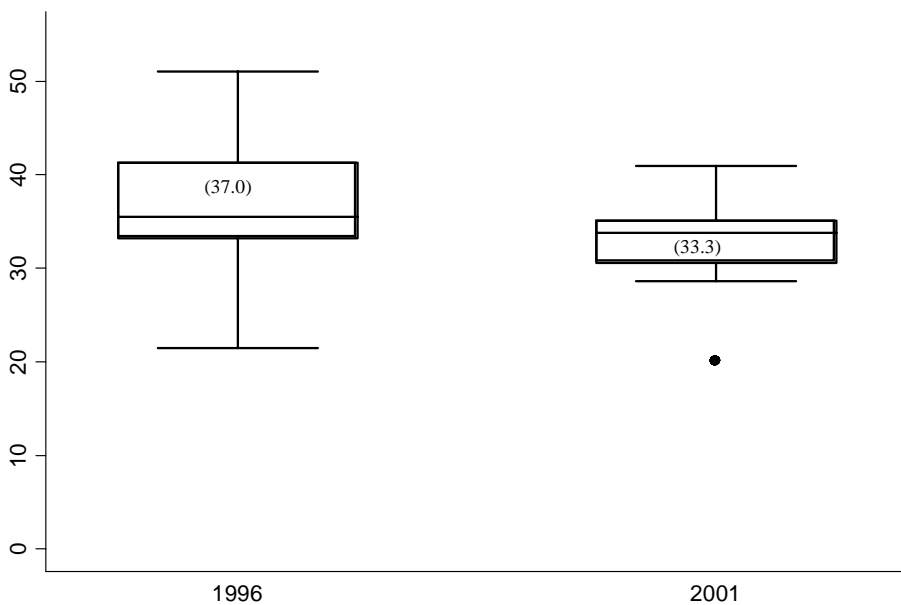
Source : OECD

Figure 1. **The effective tax rates on inward and outward FDI¹**

Panel A. Effective marginal tax rates on inward FDI²



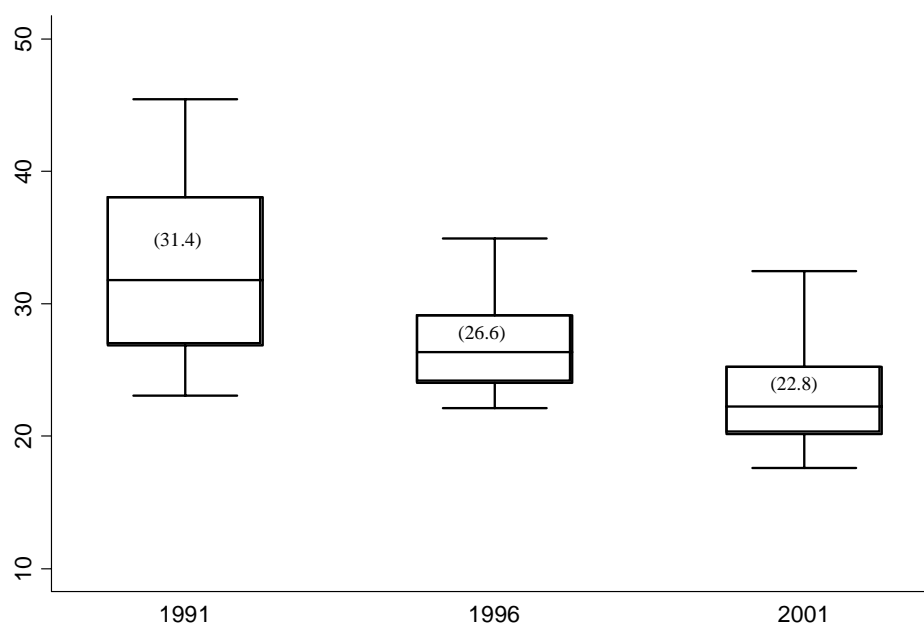
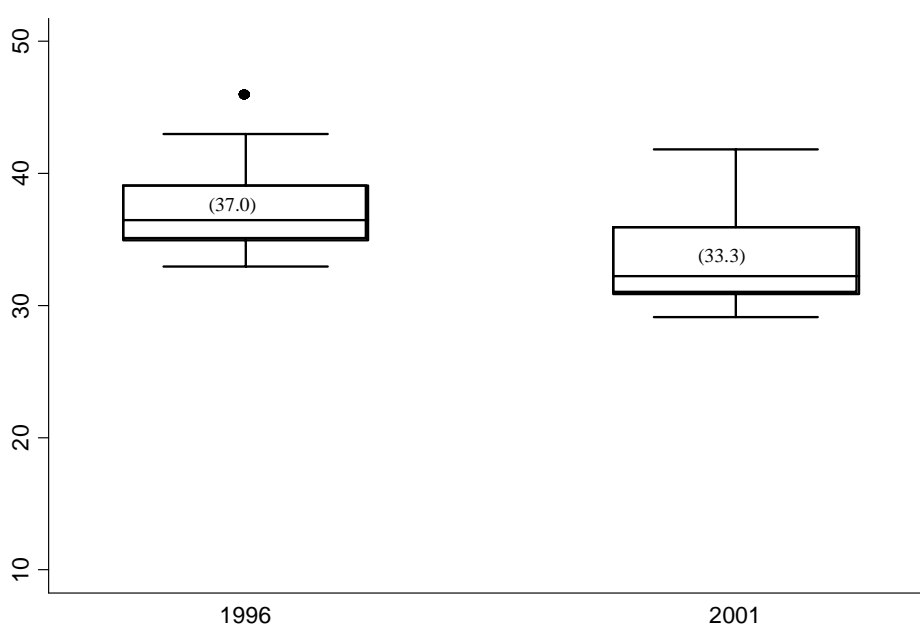
Panel B. Effective average tax rates on inward FDI²



1. An effective tax rate on inward FDI refers to the rate applied to investors in the average investor country on income earned in a host country. An effective marginal rate applies to a marginal investment that earns the minimum rate of return after tax, while an effective average rate applies to an infra-marginal investment that earns some economic rent i.e. a project that earns more than the minimum required after-tax rate of return.

2. The box plot shows, in each year, the median OECD value of the effective tax rate imposed on inward FDI (the horizontal line in the box), the third and second quartiles of the cross-country distribution (the edges of each box) and the extreme values (the two whiskers extending from the box). Averages are provided in parentheses. Dots identify outlier observations. 2001 figures are based on 4.5 per cent inflation to ensure the consistency.

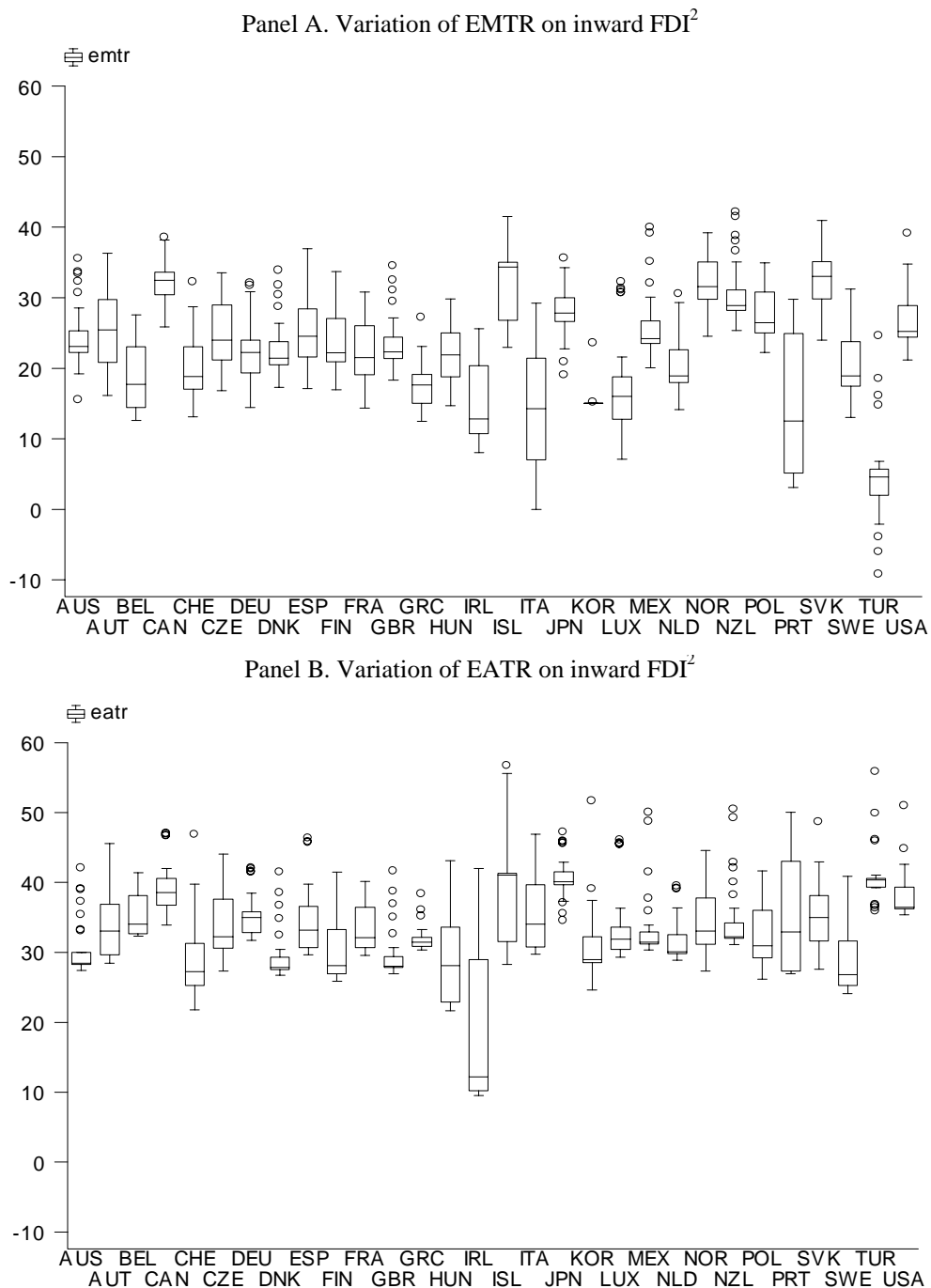
Source : OECD

Figure 1. **The effective tax rates on inward and outward FDI¹**(cont.)Panel C. Effective marginal tax rates on outward FDI²Panel D. Effective average tax rates on outward FDI²

1. An effective tax rate on outward FDI refers to the rate applied by a home country for investing in the average host country. An effective marginal rate applies to a marginal investment that earns minimum rate of return after tax, while an effective average rate applies to an infra-marginal investment that earns some economic rent i.e. a project that earns more than the minimum required after-tax rate of return.
2. The box plot shows, in each year, the median OECD value of the effective tax rate imposed on outward FDI (the horizontal line in the box), the third and second quartiles of the cross-country distribution (the edges of each box) and the extreme values (the two whiskers extending from the box). Averages are provided in parentheses. Dots identify outlier observations. 2001 figures are based on 4.5 per cent inflation to ensure the consistency.

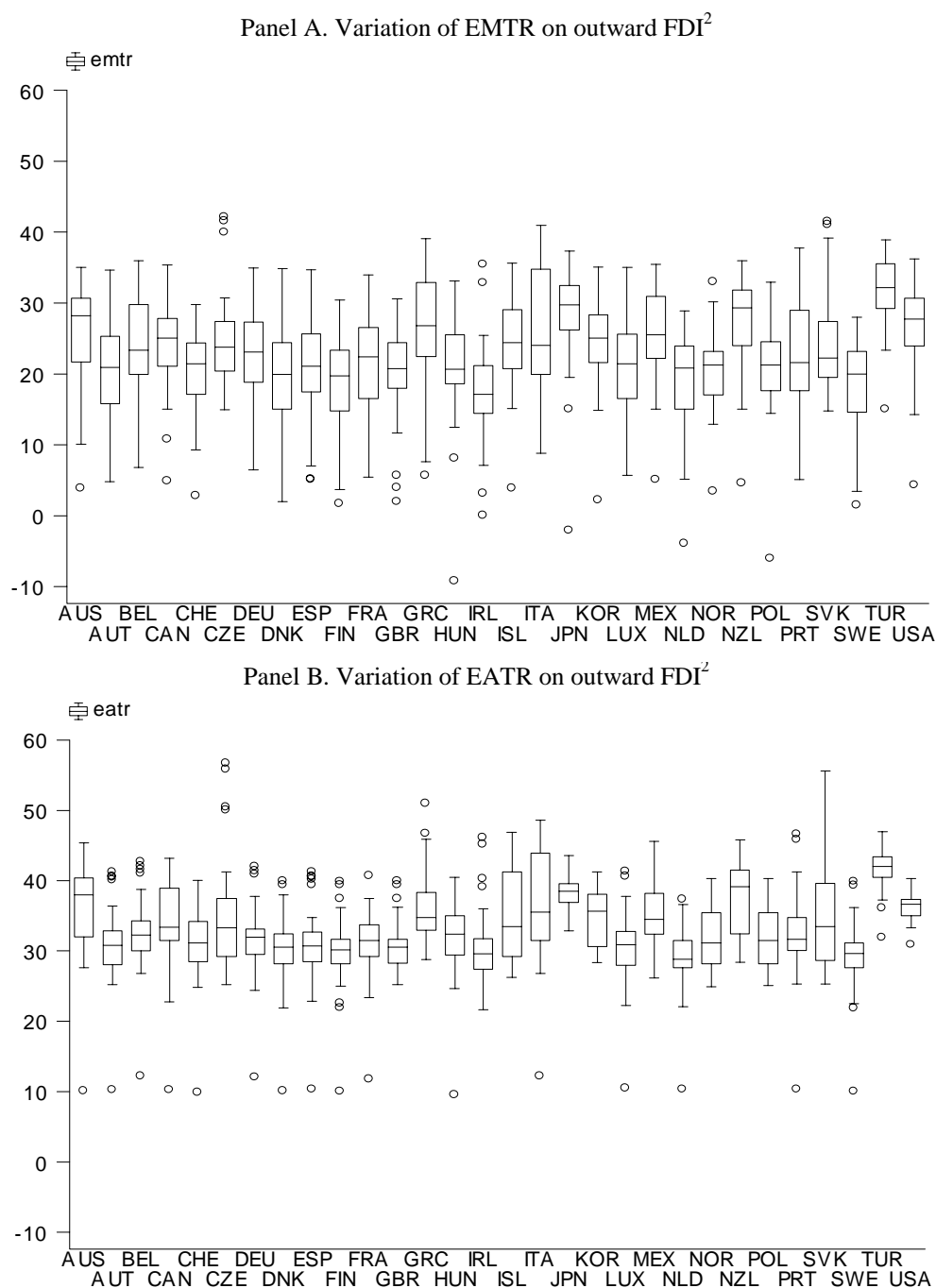
Source : OECD

Figure 2. Variation of the effective tax rates on inward FDI applied by host country, 2001¹



1. An effective tax rate on inward FDI refers to the rate applied to investors in the average investor country on income earned in a host country. An effective marginal rate applies to a marginal investment that earns the minimum rate of return after tax, while an effective average rate applies to an infra-marginal investment that earns some economic rent i.e. a project that earns more than the minimum required after-tax rate of return.
2. The box plot shows, for each host country, the variation of EMTR or EATR imposed on the investment from other countries. The median value of the effective tax rate is depicted by the horizontal line in the box, the third and second quartiles of the cross-country distribution by the edges of each box and the extreme values by the two whiskers extending from the box. Dots identify outlier observations.

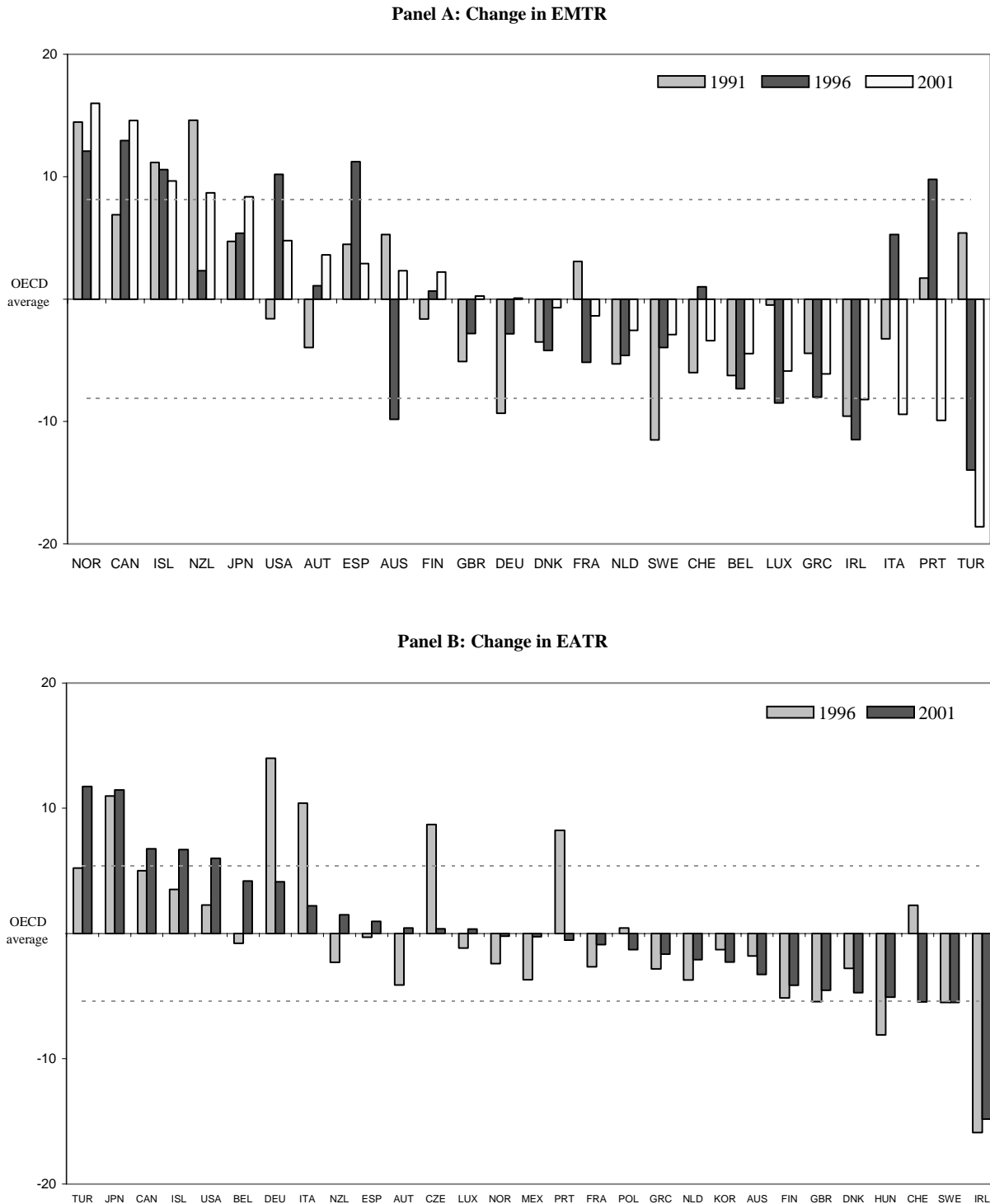
Source : OECD

Figure 3. Variation of the effective tax rates on outward FDI applied by host country, 2001¹

1. An effective tax rate on outward FDI refers to the rate applied by a home country for investing in the average host country. An effective marginal rate applies to a marginal investment that earns minimum rate of return after tax, while an effective average rate applies to an infra-marginal investment that earns some economic rent i.e. a project that earns more than the minimum required after-tax rate of return.
2. The box plot shows, for each investor country, the variation of EMTR or EATR faced by its residents in other countries. The median value of the effective tax rate is depicted by the horizontal line in the box, the third and second quartiles of the cross-country distribution by the edges of each box and the extreme values by the two whiskers extending from the box. Dots identify outlier observations.

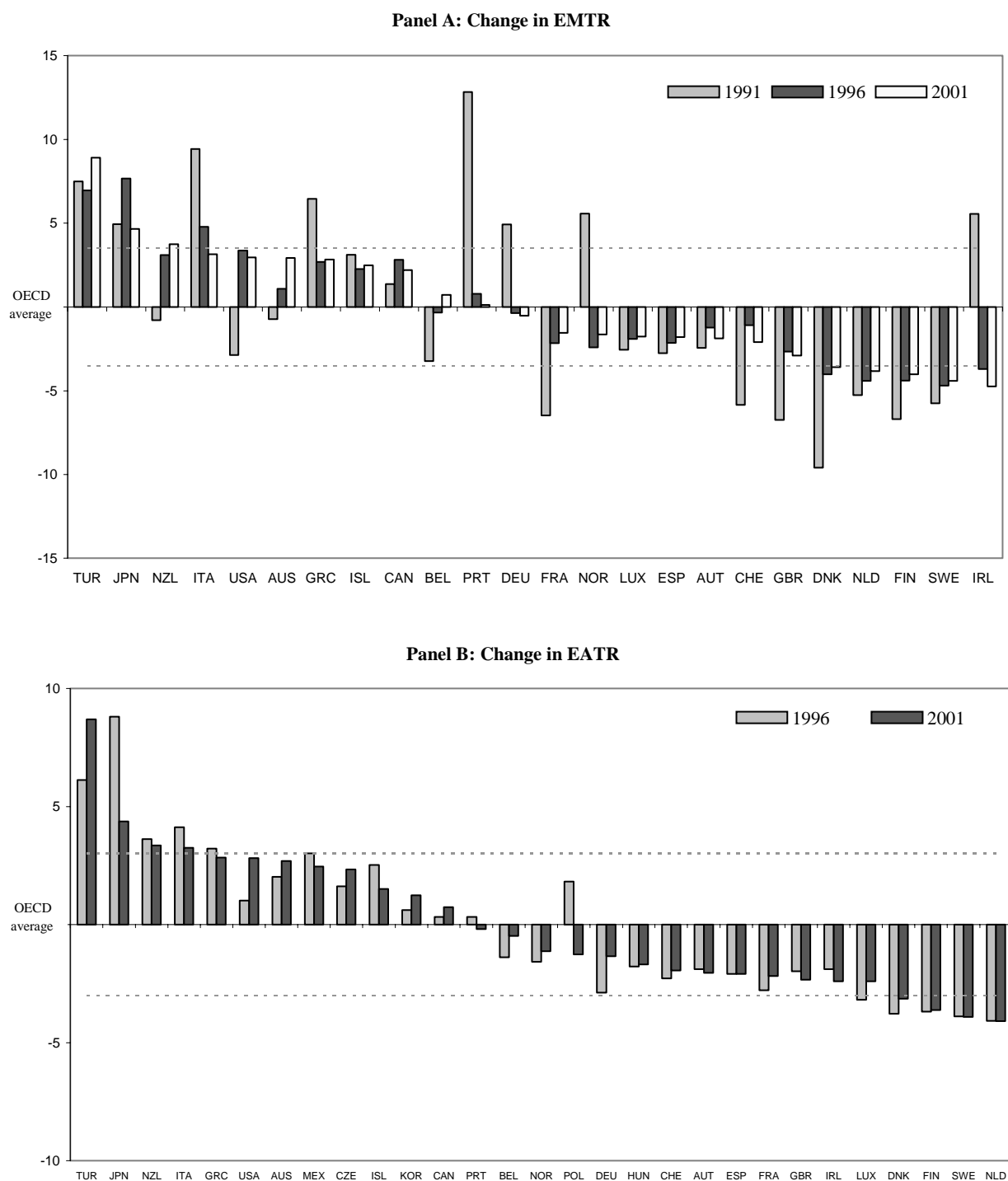
Source : OECD

Figure 4. Change in effective tax rates on inward FDI measured relative to the OECD average¹



1. An effective tax rate on inward FDI refers to the rate applied to investors in the average investor country on income earned in a host country. An effective marginal rate applies to a marginal investment that earns the minimum rate of return after tax, while an effective average rate applies to an infra-marginal investment that earns some economic rent i.e. a project that earns more than the minimum required after-tax rate of return. The rate is measured as a deviation from the OECD average. Dotted lines in the graphs indicate the interval of one standard deviation (2001).
 Source : OECD

Figure 5. Change in effective tax rates on outward FDI measured relative to the OECD average¹



1. An effective tax rate on outward FDI refers to the rate applied by a home country for investing in the average host country. An effective marginal rate applies to a marginal investment that earns minimum rate of return after tax, while an effective average rate applies to an infra-marginal investment that earns some economic rent i.e. a project that earns more than the minimum required after-tax rate of return. The rate measured as a deviation from the OECD average. Dotted lines in the graphs indicate the interval of one standard deviation (2001).
Source: OECD

Figure 6. The EATRs on inward FDI by financing source, 2001¹

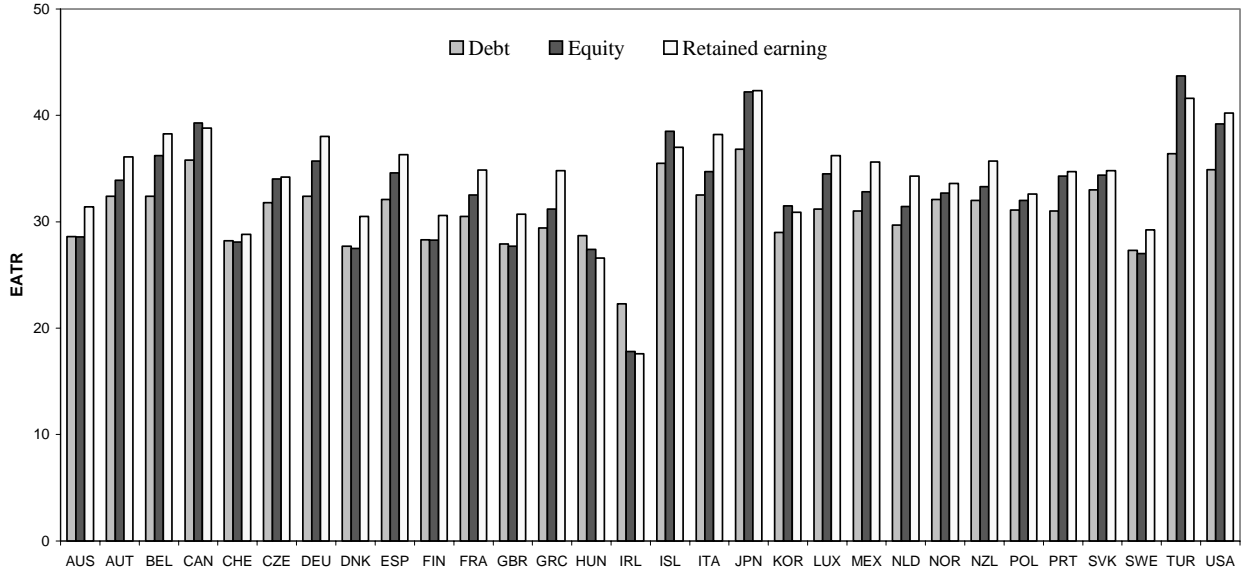
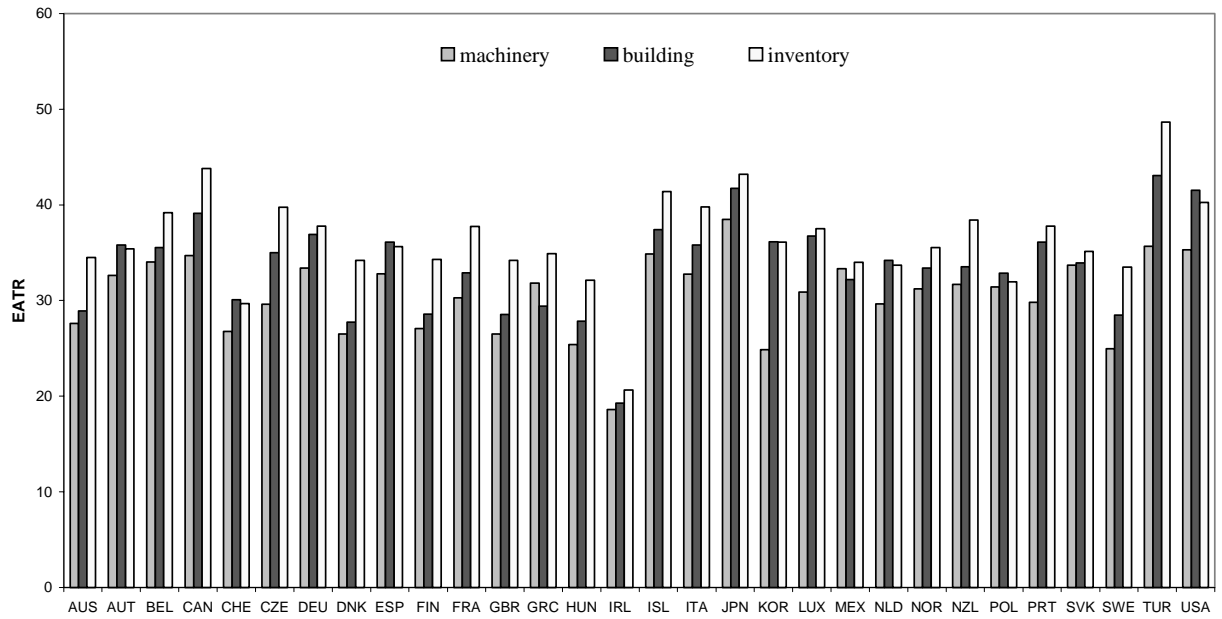


Figure 7. The EATRs by the type of assets, 2001¹



1. An effective average tax rate on inward FDI refers to the rate applied by a host country to the average investor country's infra-marginal investment that earns some economic rent i.e. a project that earns more than the minimum required after-tax rate of return.
Source: OECD

Figure 8. The EATRs on outward FDI - exemption vs. credit system countries, 2001¹

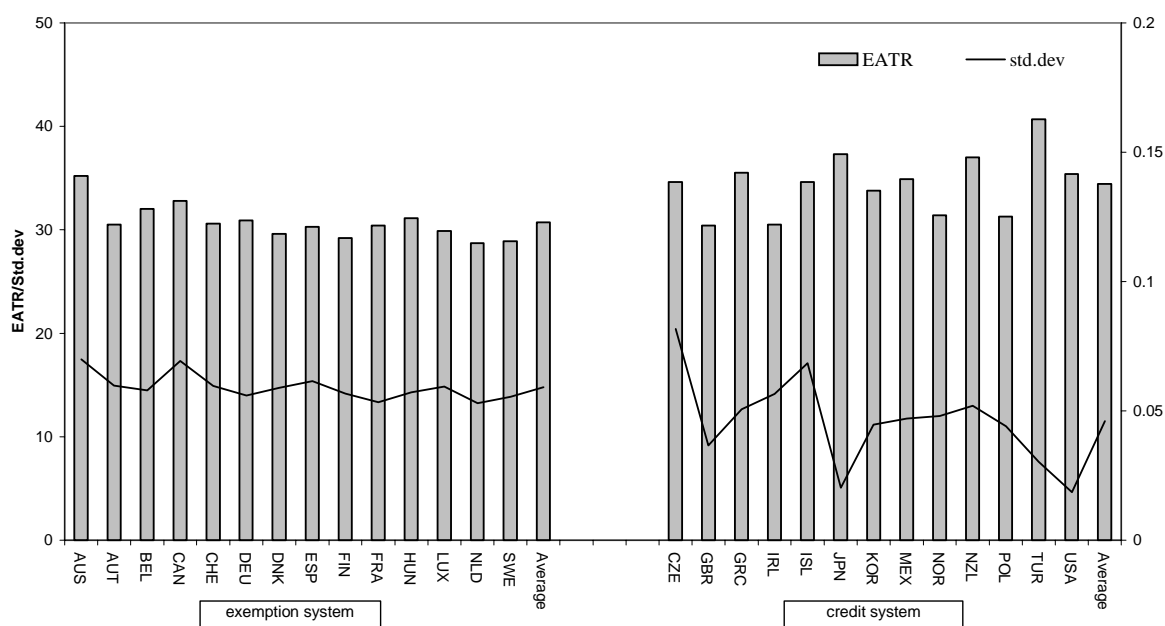
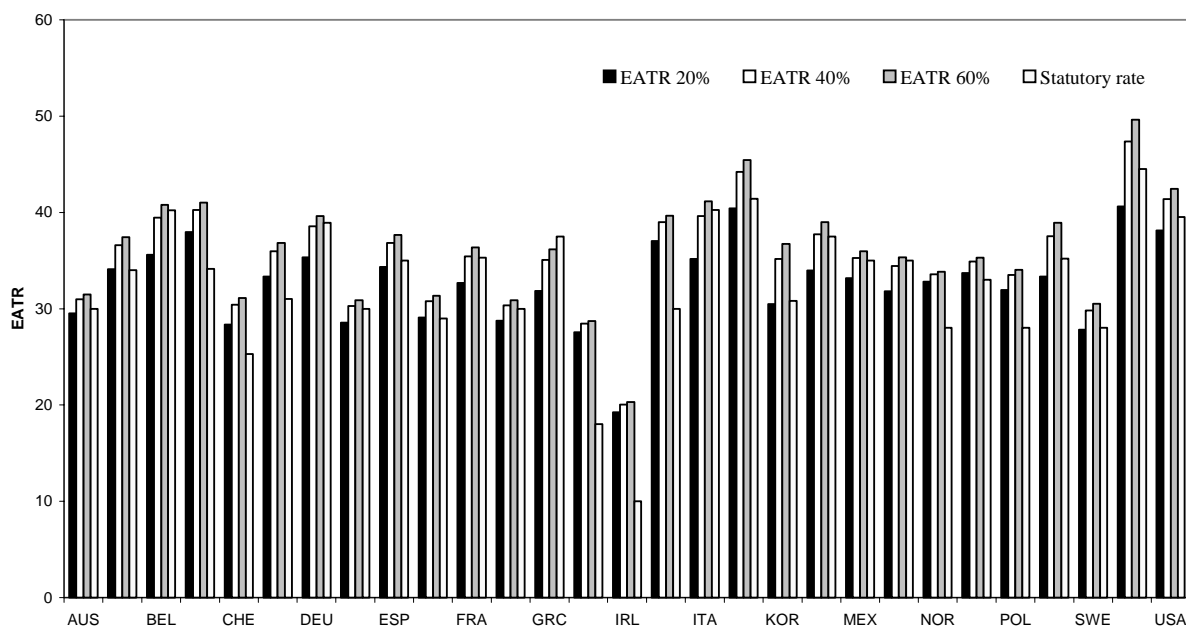


Figure 9. The EATRs on inward FDI by the level of profitability, 2001²

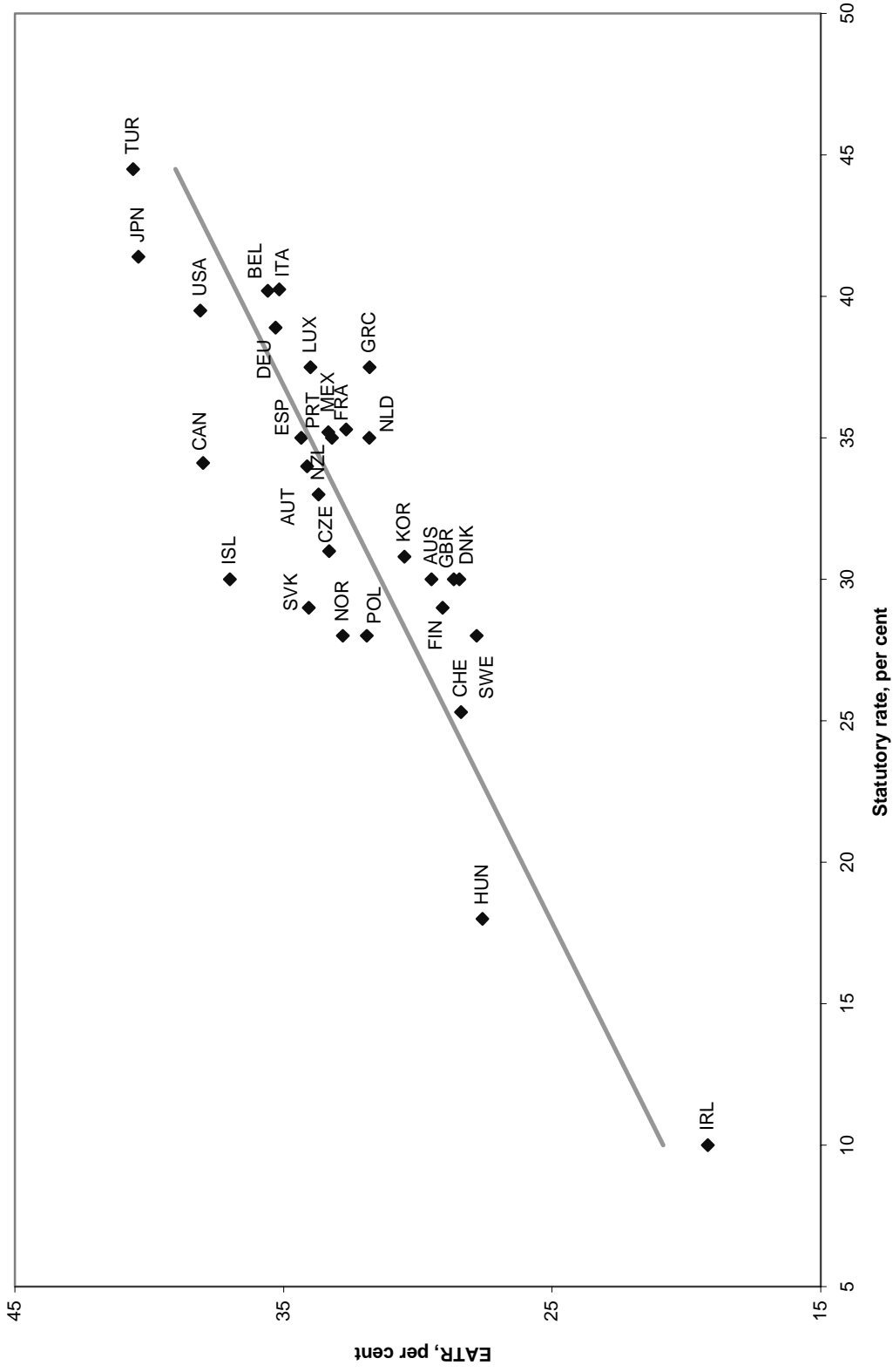


1. An EATR on outward FDI refers to the rate applied by a home country for an infra-marginal investment in the average host country. Exemption system countries exempt tax on foreign-source income while credit system countries grant tax credits for foreign taxes paid by subsidiaries. Italy and Portugal are excluded since they exempt taxes for EU countries, but partially exempt or provide credits for non-EU countries.

2. An effective average tax rate on inward FDI refers to the rate applied by a host country to the average investor country's infra-marginal investment that earns some economic rent i.e. a project that earns more than the minimum required after-tax rate of return. The profitability is defined as pre-tax real rate of return on investment.

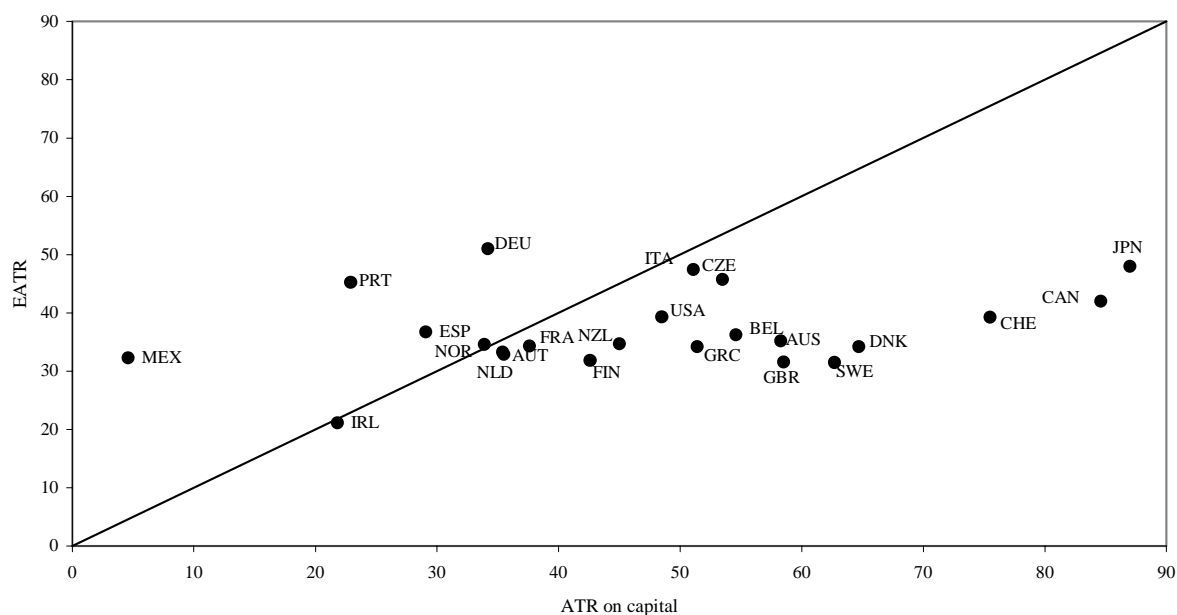
Source : OECD

Figure 10. Correlation of the host-country statutory rates and the EATRs, 2001

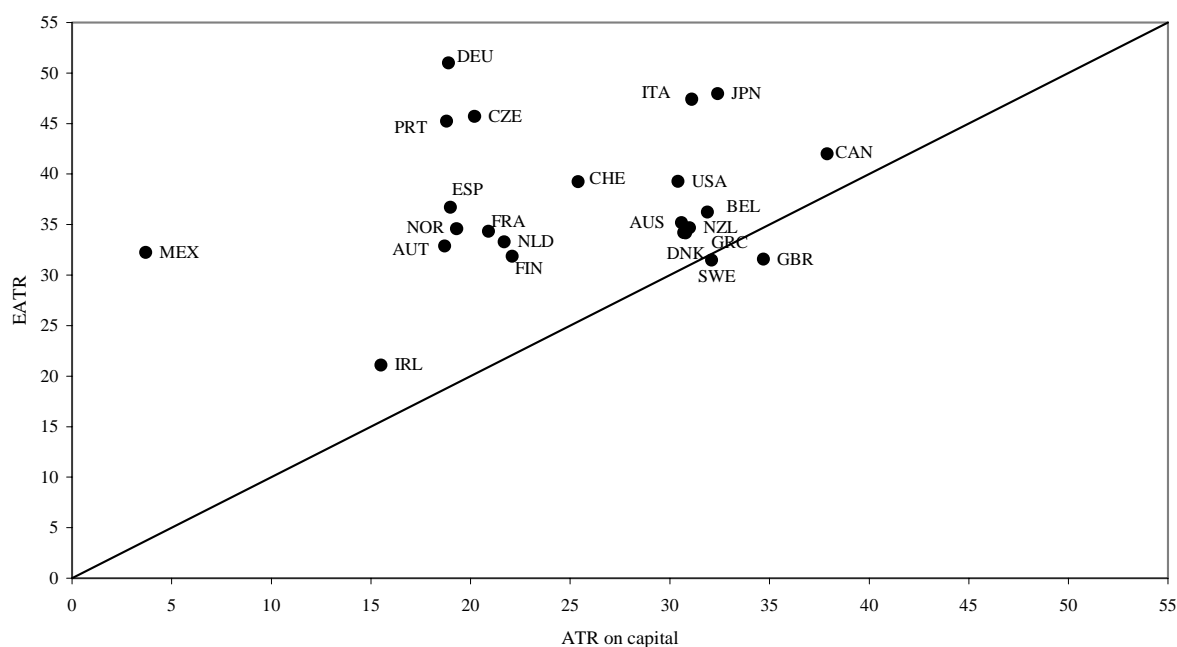


Source : OECD

Figure 11. The EATRs on inward FDI and the ATRs on capital, 1996¹
 Panel A: Carey *et al* (2000)'s ATR based on net operating surplus



Panel B: Carey *et al* (2000)'s ATRs based on gross operating surplus



1. An effective average tax rate on inward FDI refers to the rate applied by a host country to the average investor country's infra-marginal investment that earns some economic rent i.e. a project that earns more than the minimum required after-tax rate of return. Average tax rates (ATR) on capital relates realised tax revenues directly to net operating surplus, using the National Accounts and OECD Revenue Statistics.

Source: Carey and Tchilinguirian (2000) and OECD

Appendix 1: The methodology of calculating the EMTR and EATR on FDI

20. This appendix summarises the methodology developed by Devereux and Griffith (1999) and used in this paper to calculate the effective marginal and average tax rates on foreign direct investment (FDI).

A1. Foreign direct investment in the absence of taxation

21. The approach assumes that a subsidiary is wholly-owned and fully-financed by a parent firm. Suppose that the subsidiary finances an investment project by reducing its dividends to the parent by one unit. The parent in turn reduces its dividend payment to the shareholders by one unit. In period $t+1$, the value of its new investment is equal to $(1 - \delta)(1 + \pi_n)$, where δ and π_n represent the depreciation rate of assets and the inflation rate in the host country (n), respectively. At the same time, the investment made in period t generates a return of $(p + \delta)(1 + \pi_n)$ in period $t+1$ where p is defined as the pre-tax real rate of return on investment. Thus the subsidiary pays a dividend of $E(1 + p)(1 + \pi_n)$ to a parent where E denotes the bilateral exchange rate. In the absence of tax, the net present value of one unit of investment to the shareholders (R^*), therefore, can be written as follows:

$$R^* = -1 + \frac{E(1 + p)(1 + \pi_n)}{1 + i} \quad (1)$$

where $(1 + i) = (1 + r)(1 + \pi)$ where π is the inflation rate in the home country, and r denotes a real interest rate on alternative investment. Assuming the purchasing power parity (PPP) holds, i.e. $E = (1 + \pi)/(1 + \pi_n)$, R^* simplifies to $(p - r)/(1 + r)$.

22. Similarly, it can be shown that, in the presence of uniform inflation and real interest rate across trading countries, the pre-tax net present value of investment or pre-tax economic rent to shareholders is independent of the sources of finance and is the same as in the expression (1).

A2. Introducing host country taxation on FDI

23. Investment is usually entitled to depreciation allowances and therefore the net cost of investment to the subsidiary is reduced by $\tau_n \phi$ where τ_n and ϕ represent the statutory corporate tax rate of the host country and depreciation allowances for tax purposes, respectively. Following King and Fullerton (1984), and denoting by ρ the shareholder's discount rate and by N the number of years for which a depreciation allowance can be claimed, the net present value of depreciation allowances for one unit of investment in the host country can be written as:¹⁹

19. The value of cross-border investment to the shareholders in the home country is expressed in terms of home country currency and E shows up in most of the calculations. Since it is assumed that E in period t is normalised to 1, and that PPP holds and that the inflation rate is uniform across countries, E drops out from the formula.

$$A_{DB} = \frac{\tau_n \phi (1 + \rho)}{\phi + \rho} \text{ for declining balance schedules, and}$$

$$A_{SL} = \frac{\tau_n \phi (1 + \rho)}{\rho} \left(1 - \frac{1}{(1 + \rho)^N}\right) \text{ for straight line schedules.}$$

24. If, after M years, a switch from the declining balance system to the straight line system for a further N years is made, the net present value of depreciation allowances is:

$$A_B = A_{DB} \left[1 - \frac{(1 - \phi)^M}{(1 + \rho)^M}\right] + A_{SL} \left(\frac{1}{(1 + \rho)^M}\right)$$

25. The net present value of depreciation allowances differs across the type of assets purchased. Abstracting from personal income tax implies that the shareholder's discount rate (ρ) is equal to the nominal interest rate (i).

A3. *Introducing international taxation*

26. FDI is subject to an additional layer of taxation associated with the cross-border payment of dividends and interest income repatriated by the subsidiary in the host country to the parent in the home country (j).

27. The total tax due on the repatriation of one unit of dividends from the subsidiary to the parent is defined by σ . This may include a host-country withholding tax levied on dividends (c_n) plus any additional tax imposed by the home country. The existence of the additional home country tax depends on the home country's tax treatment of foreign-source dividend: exemption, credit with limitation or deduction. That is:

$$\begin{aligned} \sigma &= c_n && \text{exemption} \\ &= \max \left\{ \frac{\tau_j - \tau_n}{1 - \tau_n}, c_n \right\} && \text{credit with limitation} \\ &= \tau_j (1 - c_n) + c_n && \text{deduction} \end{aligned}$$

28. Similarly, the total tax due on interest payments from the subsidiary to the parent is defined by ω . This may include a host-country withholding tax levied on interest income ($\bar{\omega}_n$) plus any additional tax imposed by the home country. Since interest payments are deductible from taxable income as operating expenses, the overall host-country tax due on debt-financed investment tends to be smaller than that on equity-financed investment. The existence of the additional home country tax again depends on the home country's tax treatment of foreign-source interest: exemption, credit with limitation or deduction. That is:

$$\omega = \bar{\omega}_n - \tau_n \quad \text{exemption}$$

$$\begin{aligned}
&= \max\{\tau_j, \overline{\omega_n}\} - \tau_n && \text{credit with limitation} \\
&= \tau_j(1 - \overline{\omega_n}) + \overline{\omega_n} - \tau_n && \text{deduction}
\end{aligned}$$

A4. *Foreign direct investment in face of the home and host country taxation*

29. The economic rent generated from one unit of cross-border investment given the home and host country taxation can be derived as follows. The economic rent or net present value of one unit of investment (R) can be split into three parts: (i) the rent attributable to the investment in the subsidiary financed by retained earnings (R_n^{RE}); (ii) the additional cost of the parent raising external finance (F_j) or the rent associated with new equity or debt financing of the parent firm; (iii) the additional cost of the subsidiary raising finance from the parent (F_n) or the rent associated with new equity or debt financing of the subsidiary from the parent. Thus the economic rent earned from one unit of investment by the subsidiary is given by $R_n = R_n^{RE} + F_j + F_n$. The following explains each part of economic rents according to the financing sources.

A4.1. *Finance by retained earning of subsidiary and parent (R_n^{RE})*

30. Consider the case in which the subsidiary finances its investment by retained earnings and the parent finances its reduced dividend income by reducing dividends paid to the shareholders. Since the tax rate on the cross-border payment on dividend is σ and the net present value of allowances is $(1 - A_n)$, the net cost of investment to the shareholder in period t is given by $\gamma_j(1 - \sigma)(1 - A_n)$ where γ_j denotes the tax discrimination factor between new equity and retained earning. Abstracting from personal income tax implies that the tax discrimination factor (γ_j) is equal to unity. The net return from one unit of investment is given by $(1 - \tau_n)(p + \delta)(1 + \pi_n)$, and the value of investment in period $t+1$ remains $(1 - A_n)(1 - \delta)(1 + \pi_n)$. Both of these should then be adjusted for the exchange rate and the tax due on repatriated dividends to the parent. Where the exchange rate in period t is normalised to 1, and PPP holds, and the inflation rate is uniform across countries, the net present value of one unit of investment to the parent company can be written as:

$$\begin{aligned}
R_n^{RE} &= \gamma_j(1 - \sigma) \left\{ -(1 - A_n) + \frac{(1 - \tau_n)(p + \delta)(1 + \pi_n) + (1 - A_n)(1 - \delta)(1 + \pi_n)}{1 + \rho} \right\} \\
&= \gamma_j(1 - \sigma) \left\{ \frac{(1 - \tau_n)(p + \delta)(1 + \pi_n) - (1 - A_n)[(1 + \rho) - (1 - \delta)(1 + \pi_n)]}{1 + \rho} \right\}
\end{aligned} \tag{2}$$

31. While the depreciation allowances (A_n) are adequately taken into account for machinery and buildings, R_n^{RE} should be modified in the case of investment in inventories in order to reflect the situation that any increase in the value of inventories due to inflation is taxed under FIFO method. Thus an

additional term is added for investment in inventories when inventories are valued by FIFO method (2a). This is in compliance with OECD (1991) and EC (2001).

$$R_{INV}^{RE} = R_n^{RE} - \frac{\gamma_j(1-\sigma)}{(1+\rho)} \times \frac{\tau_n \pi_n}{(1-\tau_n)(1+\pi_n)} \quad (2a)$$

A4.2. Finance by the parent (F_j)

32. In the case of equity finance by the parent, the net cost or the amount of new equity raised for one unit of investment is $(1-\tau_n\phi_n)$ in period t . Compared to the case of retained earnings, the shareholders contribute $(1-\tau_n\phi_n)$ in new equity, but instead receive a net income of $\gamma_j(1-\tau_n\phi_n)$ through higher dividends. In period $t+1$, the shareholders receive $(1-\tau_n\phi_n)$ as a repurchase of equity. Compared to the case of retained earnings, this implies that dividends paid in period $t+1$ are lower by this amount and that the shareholders receive lower net income of $\gamma_j(1-\tau_n\phi_n)$ through lower dividends. In the case of debt finance by the parent, the shareholders do not have to give up dividends in period t . However, the parent should repay $(1-\tau_n\phi_n)(1+i)$ in period $t+1$. Since interests paid by the parent are deductible from the home country taxation, the debt finance reduces the net income to the shareholders by $\gamma_j(1-\tau_n\phi_n)(1+i(1-\tau_j))$, in comparison to the case of retained earnings. Thus after rearranging terms, the additional rent associated with the parent's finance (F_j), compared to the case of retained earnings, can be written as:

$$\begin{aligned} F_j &= 0 && \text{if the parent finances by retained earning} \\ &= \frac{-\rho(1-\gamma_j)(1-\tau_n\phi_n)}{1+\rho} && \text{if the parent finances by new equity} \\ &= \frac{\gamma_j(1-\tau_n\phi_n)(\rho-i(1-\tau_j))}{1+\rho} && \text{if the parent finances by debt} \end{aligned} \quad (3)$$

A4.3. Finance by the subsidiary (F_n)

33. In the case in which the subsidiary issues new equity to the parent in period t , the difference between the net cost to the parent in this case, $(1-\tau_n\phi_n)$, and the net cost in the case of retained earnings, $(1-\sigma)(1-\tau_n\phi_n)$, represents the additional cost associated with equity finance by the subsidiary at a cost of $\gamma_j\sigma(1-\tau_n\phi_n)$ to the shareholders. Therefore, the additional rent associated with new equity by the subsidiary can be summarised after rearranging the terms as:

$$F_n = 0 \quad \text{if the subsidiary finances by retained earning}$$

$$= \gamma_j \sigma (1 - \tau_n \phi_n) \left\{ \frac{-\rho}{1 + \rho} \right\} \quad \text{if the subsidiary finances by new equity} \quad (4)$$

The economic rent in the case of debt finance by the subsidiary can be expressed in a similar fashion:

$$F_n = \frac{\gamma_j (1 - \tau_n \phi_n)}{(1 + \rho)} \{ \sigma [(1 + i(1 - \tau_n)) - (1 + \rho)] - \omega i \} \quad \text{if the subsidiary finances by debt}$$

A5. *The effective marginal tax rates (EMTR) on FDI*

34. The EMTR applies to marginal investment with zero post-tax economic rent or profit ($R_n = 0$). Thus the calculation of the EMTR requires the estimation of *the cost of capital* (\tilde{p}). The cost of capital is defined as the *pre-tax rate of return* that is necessary to produce a zero post-tax economic rent or a predetermined post-tax rate of return on alternative investment. This is achieved by finding the value of p for which $R_n = 0$. It is straightforward to show that this value of p is:²⁰

$$\tilde{p} = \frac{r\gamma_j(1 + \sigma)(1 - A_n) + \delta\gamma_j(1 + \sigma)(\tau_n - A_n) - (F_j + F_n)(1 + r)}{\gamma_j(1 + \sigma)(1 - \tau_n)} \quad (5)$$

35. The EMTR is the percentage difference between the cost of capital (\tilde{p}) and the post-tax rate of return (*i.e.* the assumed post-tax rate of return on alternative investment in the absence of personal income and capital gains tax) as a proportion of the cost of capital. That is:

$$EMTR = \frac{\tilde{p} - r}{\tilde{p}} \times 100 \quad (6)$$

A6. *The effective average tax rate (EATR) on FDI*

36. The EATR applies to infra-marginal investment with positive post-tax economic rent or profit. It is measured as the difference between the pre-tax economic rent (R^*) and the post-tax economic rent (R_n) for a *given* level of the pre-tax rate of return. Fixing the pre-tax rate of return makes it possible to derive the corresponding pre-tax and post-tax economic rents. The denominator is carefully chosen to represent the net present value of the income stream in the absence of tax, $p/(1 + r)$, because R^* , a natural candidate for the denominator, is not defined for investment projects whose pre-tax rents are zero in the absence of tax (*i.e.* $R^* = 0$). That is to say:

20. Similarly the cost of capital for investment in inventories when inventories are valued by FIFO is adjusted such that $\tilde{p}_{inv} = \tilde{p} + \tau_n \pi_n / [(1 - \tau_n)(1 + \pi_n)]$

$$EATR = \frac{R_j^* - R_j}{\frac{P}{(1+r)}} \times 100 \quad (7)$$

Appendix 2: 1991, 1996 and 2001 tax parameter data

Tax parameter data, 1991^a

	Overall corporate tax rate	Machinery				Buildings				Inventory valuation				
		Depreciation Method	Rate for DB	Rate for SL	Length of first/second period	Extra allowance rate	Tax credit	Depreciation Method	Rate for DB		Rate for SL	Length of first/second period	Extra allowance rate	Tax credit
Australia	39.0%	DB	18.0%	..	ufd ^e	..	..	..	SL	..	2.5%	ufd	..	FIFO
Austria	39.0%	SL	..	12.5%	ufd	20.0%	..	..	SL	..	4.0%	ufd	20.0%	FIFO
Belgium	39.0%	DB or SL ^d	40.0%	20.0%	2/ufd	1+inflation	..	..	DB or SL ^d	10.0%	5.0%	7/ufd	1+inflation	FIFO
Canada	35.7% ^b	DB	25.0%	..	ufd	..	..	..	DB	4.0%	..	ufd	..	FIFO
Denmark	38.0%	DB	30.0%	..	ufd	..	..	..	SL (2 rates)	..	6/2%	10/ufd	..	FIFO
Finland	40.2%	DB	30.0%	..	ufd	..	..	..	DB	9.0%	..	ufd	..	FIFO
France	34/42% ^c	DB or SL ^d	35.7%	5.5%	5/ufd	..	..	..	SL	..	5.0%	ufd	..	FIFO
Germany	56.5/44.3% ^c	DB or SL ^d	30.0%	10.0%	4/ufd	..	..	..	SL (2 rates) ^f	10.0%	5.0%	4/3	..	LIFO
Greece	40% ^b	SL	..	20.0%	ufd	..	..	..	SL	..	8.0%	ufd	..	LIFO
Iceland	45.0%	SL	..	12.0%	ufd	..	..	..	SL	..	2.0%	ufd	..	LIFO
Ireland	10% ^b	DB (2 rates)	50/12.5%	..	1/ufd	..	..	..	SL (2 rates)	..	50/4%	1/ufd	..	FIFO
Italy	47.8%	SL (2 rates)	..	17.5/10%	3/ufd	..	..	..	DB	5.0%	..	ufd	..	LIFO
Japan	50.0%	DB or SL ^d	30.0%	10.0%	4/2 ^f	..	..	..	DB or SL ^d	6.6%	2.2%	18/11 ^f	..	LIFO
Luxembourg	39.4%	DB	30.0%	..	ufd	..	..	..	SL	..	4.0%	ufd	..	FIFO
Netherlands	35.0%	SL	..	12.5%	ufd	..	..	..	DB	6.6%	..	ufd	..	LIFO
New Zealand	33.0%	DB	10.0%	..	ufd	..	..	..	SL	..	2.0%	ufd	..	FIFO
Norway	50.8%	DB	30.0%	..	ufd	..	..	..	DB	7.0%	..	ufd	..	FIFO
Portugal	39.6%	DB	31.3%	..	ufd	..	..	..	SL	..	5.0%	ufd	..	LIFO
Spain	35.3%	DB	20.0%	..	ufd	5.0%	..	..	DB	..	7.5%	ufd	..	FIFO
Sweden	30.0%	DB	30.0%	..	ufd	..	..	..	SL	..	3.3%	ufd	..	FIFO
Switzerland	30.3% ^h	DB	30.0%	..	ufd	..	..	..	DB	8.0%	..	ufd	..	LIFO
Turkey	49.2%	DB or SL	25.0%	13.3%	7/ufd	..	..	..	DB or SL	8.0%	2.8%	13/ufd	..	FIFO
United Kingdom	34.0%	DB	25.0%	..	ufd	..	..	..	SL	..	4.0%	ufd	..	FIFO
United States	38.3%	DB or SL	28.6%	9.1%	3/ufd	..	..	..	SL	..	3.2%	ufd	..	LIFO

a) Reproduced from OECD (1991).

b) Rates for the manufacturing sectors.

c) Rates on retained earnings/distributed profits.

d) Switchover at the optimal point is compulsory.

e) Until fully depreciated.

f) Up to 95 per cent of the asset value is depreciated.

g) Germany allows for depreciation of assets at 10 per cent for 4 years, 5 per cent for a further 3 years and 3.5 per cent thereafter.

h) The tax regime is progressive according to the rate of return on assets. The figure shown in the table are based on companies earning the average rate of return (13 per cent)

Tax parameter data, 1991 (cont.)^a

Home country	B. Home country's treatment of foreign-source dividend and interest income		Non-Treaty countries		Non-treaty OECD countries
	Treaty countries	interest income	dividend	interest income	
Australia	exemption	credit	credit	credit	Greece, Iceland, Luxembourg, Portugal, Spain, Turkey
Austria	exemption	credit	exemption	credit	Iceland
Belgium	exemption of 90%, deduction on rest ^b	credit ^c	exemption of 90%	credit	Iceland, Turkey
Canada	exemption	credit	credit	credit	Greece, Iceland, Luxembourg, Portugal, Turkey
Denmark	exemption ^d	credit ^e	credit	credit	Greece, Turkey
Finland	exemption	credit ^f	credit	credit	Iceland
France	exemption of 95%, deduction on rest ^b	credit	exemption of 95%	credit	
Germany	exemption	credit	credit	credit	Iceland, Portugal
Greece	credit	credit	credit	credit	
Iceland	credit	credit	deduction	deduction	
Ireland	credit	credit	deduction	deduction	Greece, Iceland, Portugal, Spain, Turkey
Italy	credit	credit	credit ^g	credit	Iceland, Turkey
Japan	credit	credit	credit	credit	Iceland, Portugal
Luxembourg	exemption	credit	exemption	credit	Australia, Greece, Iceland, Japan, New Zealand, Portugal, Switzerland, Turkey
Netherlands	exemption	credit	exemption	deduction	Iceland, Portugal
New Zealand	credit	credit	credit	credit	Austria, Greece, Iceland, Luxembourg, Portugal, Spain, Turkey
Norway	credit	credit ^e	deduction	deduction	Greece
Portugal	credit	credit	deduction	deduction	Australia, Canada, Greece, Ireland, Japan, Iceland, Luxembourg, Netherlands, New Zealand, Sweden, Turkey, USA
Spain	credit ^h	credit ⁱ	credit	credit	Iceland, Ireland, Greece
Sweden	exemption	credit	credit	credit	Belgium, Luxembourg, Portugal, Turkey
Switzerland	exemption	credit	exemption	deduction	Luxembourg, Turkey, Iceland
Turkey	credit	credit	credit	credit	Iceland, Portugal
United Kingdom	credit	credit	credit	credit	Iceland
United States	credit	credit	credit	credit	Portugal

a) Reproduced from OECD (1991).

b) For Belgium, France, and Italy, a weighted average of those for exemption and deduction has been applied. France exempts dividends from Ireland and Sweden.

c) Belgian interest income from abroad is subject to a tax payment of 24/85 on the net income received.

d) Denmark has a foreign tax allowance and this allowance is modelled as involving a reduction in the foreign statutory corporate tax rate of 4.75 per cent providing the project is equity financed. The exceptions are Belgium, Greece, Sweden (no allowance), and Finland and the US (a half allowance)

e) Denmark exempts interest payments from Portugal and Spain.

f) Finland exempts interest payments from Spain

g) Norway exempts interest income from Belgium, France, Germany, Ireland, Portugal, Sweden, the UK and the US.

h) Spain exempts dividends from Switzerland

i) Spain exempts interest payments from Portugal

j) Exemption of 60 per cent for parent companies

Tax parameter data, 1991 (cont.)

from / to	Australia	Austria	Belgium	Canada	Denmark	Finland	France	Germany	Greece	Iceland	Ireland	Italy	Japan
Australia	15.0	15.0	15.0	15.0	15.0	15.0	15.0	15.0	NT	0.0	15.0	15.0	15.0
Austria	15.0	15.0	0.0	15.0	10.0	10.0	15.0	25.0	25.0	NT	0.0	15.0	10.0
Belgium	15.0	15.0	15.0	15.0	15.0	10.0	10.0	15.0	15.0	NT	15.0	15.0	15.0
Canada	15.0	15.0	15.0	15.0	15.0	15.0	10.0	15.0	NT	NT	15.0	15.0	10.0
Denmark	15.0	10.0	15.0	15.0	0.0	0.0	0.0	10.0	NT	0.0	0.0	15.0	10.0
Finland	15.0	10.0	10.0	15.0	0.0	0.0	0.0	10.0	13.0	0.0	0.0	10.0	10.0
France	15.0	15.0	10.0	10.0	0.0	0.0	0.0	0.0	25.0	NT	10.0	15.0	10.0
Germany	15.0	25.0	15.0	15.0	15.0	10.0	0.0	0.0	25.0	5.0	15.0	10.0	15.0
Greece	NT	42.0	25.0	NT	NT	42.0	42.0	25.0	NT	NT	NT	25.0	NT
Iceland	NT	NT	NT	NT	0.0	0.0	NT	5.0	NT	NT	NT	NT	NT
Ireland	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	NT	NT	NT	0.0	0.0
Italy	15.0	15.0	15.0	15.0	15.0	10.0	15.0	32.4	25.0	NT	15.0	NT	10.0
Japan	15.0	10.0	15.0	10.0	10.0	10.0	10.0	10.0	NT	NT	10.0	10.0	NT
Luxembourg	NT	5.0	0.0	5.0	0.0	5.0	0.0	0.0	0.0	NT	0.0	0.0	NT
Netherlands	15.0	5.0	5.0	10.0	0.0	0.0	5.0	10.0	5.0	NT	0.0	0.0	5.0
New Zealand	15.0	NT	15.0	15.0	15.0	15.0	15.0	15.0	NT	NT	15.0	15.0	15.0
Norway	15.0	15.0	15.0	15.0	0.0	15.0	5.0	0.0	NT	0.0	0.0	15.0	15.0
Portugal	NT	15.0	15.0	NT	15.0	10.0	10.0	15.0	NT	NT	NT	15.0	NT
Spain	NT	10.0	15.0	15.0	10.0	10.0	15.0	10.0	NT	NT	NT	10.0	10.0
Sweden	15.0	0.0	15.0	15.0	0.0	0.0	0.0	5.0	0.0	0.0	5.0	10.0	10.0
Switzerland	15.0	5.0	10.0	15.0	0.0	5.0	5.0	10.0	5.0	5.0	10.0	15.0	10.0
Turkey	NT	0.0	0.0	NT	NT	0.0	0.0	0.0	NT	NT	NT	NT	NT
United Kingdom ^b	0.0	-6.2	0.0	-6.2	-6.2	-6.2	-6.2	15.0	NT	-6.2	-6.2	-6.2	-6.2
United States	15.0	5.0	5.0	10.0	5.0	5.0	5.0	10.0	30.0	5.0	5.0	10.0	10.0

a) Non-treaty rates.

b) The UK does not levy withholding tax on the payment of dividends at home or abroad. The non-resident parent company, however, is entitled to repayment of a proportion of tax credit under the tax treaty.

Source: OECD (1991)

Tax parameter data, 1991 (cont.)

C. Host country's withholding tax on cross-border payments of dividend from direct investment, per cent	Luxembourg	Netherlands	New Zealand	Norway	Portugal	Spain	Sweden	Switzerland	Turkey	UK	USA	NT ^{a)}
from / to												
Australia	NT	15.0	15.0	15.0	NT	NT	15.0	15.0	NT	15.0	15.0	30.0
Austria	5.0	5.0	NT	15.0	15.0	10.0	10.0	5.0	25.0	5.0	5.0	25.0
Belgium	10.0	5.0	15.0	15.0	15.0	15.0	15.0	10.0	NT	5.0	5.0	25.0
Canada	10.0	10.0	15.0	15.0	NT	15.0	15.0	15.0	NT	10.0	10.0	25.0
Denmark	5.0	0.0	15.0	0.0	10.0	10.0	0.0	0.0	NT	0.0	5.0	30.0
Finland	5.0	0.0	15.0	0.0	10.0	10.0	0.0	5.0	15.0	5.0	5.0	25.0
France	5.0	5.0	15.0	5.0	15.0	10.0	0.0	5.0	15.0	5.0	5.0	25.0
Germany	15.0	15.0	15.0	15.0	15.0	15.0	15.0	15.0	NT	15.0	10.0	25.0
Greece	NT	35.0	NT	NT	NT	NT	42.0	35.0	NT	42.0	42.0	42.0
Iceland	NT	NT	NT	0.0	NT	NT	0.0	5.0	NT	NT	5.0	20.0
Ireland	0.0	0.0	0.0	0.0	NT	NT	0.0	0.0	NT	0.0	0.0	0.0
Italy	15.0	0.0	15.0	15.0	15.0	15.0	10.0	15.0	NT	5.0	5.0	32.4
Japan	NT	10.0	15.0	10.0	NT	10.0	10.0	10.0	NT	10.0	10.0	20.0
Luxembourg	2.5	0.0	NT	5.0	0.0	0.0	5.0	NT	NT	0.0	5.0	15.0
Netherlands	NT	15.0	15.0	10.0	NT	5.0	0.0	0.0	10.0	5.0	5.0	25.0
New Zealand	15.0	15.0	15.0	15.0	NT	NT	15.0	15.0	NT	15.0	15.0	30.0
Norway	NT	NT	NT	10.0	15.0	10.0	0.0	5.0	20.0	15.0	15.0	25.0
Portugal	10.0	10.0	NT	10.0	10.0	15.0	NT	10.0	NT	12.0	NT	25.0
Spain	5.0	0.0	15.0	0.0	NT	10.0	10.0	10.0	NT	10.0	10.0	20.0
Sweden	NT	0.0	15.0	5.0	10.0	10.0	5.0	5.0	NT	0.0	5.0	30.0
Switzerland	NT	0.0	15.0	5.0	10.0	10.0	5.0	5.0	NT	5.0	5.0	35.0
Turkey	NT	10.0	NT	0.0	NT	NT	0.0	NT	0.0	0.0	NT	0.0
United Kingdom ^{b)}	-6.9	-6.9	0.0	-1.3	0.0	0.0	-6.9	-6.9	0.0	0.0	-6.9	0.0
United States	5.0	5.0	15.0	15.0	NT	10.0	5.0	5.0	NT	5.0	5.0	30.0

a) Non-treaty rates.

b) The UK does not levy withholding tax on the payment of dividends at home or abroad. The non-resident parent company, however, is entitled to repayment of a proportion of tax credit under the tax treaty.

Source: OECD (1991)

Tax parameter data, 1991 (cont.)

D. Host country's withholding tax on cross-border payments of interest income, per cent ^a		Australia	Austria	Belgium	Canada	Denmark	Finland	France	Germany	Greece	Iceland	Ireland	Italy	Japan
from / to														
Australia		10.0		10.0	10.0	10.0	10.0	10.0	10.0	NT	NT	10.0	10.0	10.0
Austria		0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	NT	0.0	0.0	0.0
Belgium		10.0	10.0		10.0	10.0	10.0	10.0	10.0	10.0	NT	15.0	10.0	10.0
Canada		15.0	15.0	15.0		15.0	15.0	10.0	15.0	NT	NT	15.0	15.0	10.0
Denmark		0.0	0.0	0.0	0.0		0.0	0.0	0.0	NT	0.0	0.0	0.0	0.0
Finland		0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0
France		0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Germany		0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0
Greece		NT	10.0	15.0	NT	NT	10.0	10.0	10.0		NT	NT	10.0	NT
Iceland		NT	NT	NT	NT	0.0	0.0	NT	0.0	NT		NT	NT	NT
Ireland		10.0	0.0	15.0	30.0	0.0	0.0	0.0	0.0	NT	NT		10.0	10.0
Italy		10.0	10.0	15.0	15.0	15.0	15.0	15.0	0.0	10.0	NT	10.0		10.0
Japan		10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	NT	NT	10.0	10.0	
Luxembourg		NT	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	NT	0.0	0.0	NT
Netherlands		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	NT	0.0	0.0	0.0
New Zealand		10.0	NT	10.0	15.0	10.0	10.0	10.0	10.0	NT	NT	10.0	10.0	15.0
Norway		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	NT	0.0	0.0	0.0	0.0
Portugal		NT	10.0	15.0	NT	15.0	15.0	10.0	10.0	NT	NT	NT	15.0	NT
Spain		NT	5.0	15.0	15.0	10.0	10.0	10.0	10.0	NT	NT	NT	12.0	10.0
Sweden		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Switzerland		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Turkey		NT	10.0	NT	NT	NT	10.0	10.0	NT	NT	NT	NT	NT	NT
United Kingdom		10.0	0.0	15.0	10.0	0.0	0.0	0.0	0.0	0.0	NT	0.0	10.0	10.0
United States		10.0	0.0	15.0	15.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	15.0	10.0

a) When the treaty rate on cross-border payment of dividends or interest income is higher than corresponding domestic rates, the domestic rate applies.

b) Non-treaty rates.

Source: OECD (1991)

Tax parameter data, 1991 (cont.)

from / to	Luxembourg	Netherlands	New Zealand	Norway	Portugal	Spain	Sweden	Switzerland	Turkey	UK	USA	NT ^b
Australia	NT	10.0	10.0	10.0	NT	NT	10.0	10.0	NT	10.0	10.0	10.0
Austria	0.0	0.0	NT	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Belgium	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	5.0	10.0	10.0
Canada	15.0	15.0	15.0	15.0	NT	15.0	15.0	15.0	NT	10.0	15.0	25.0
Denmark	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Finland	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
France	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Germany	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	NT	0.0	0.0	0.0
Greece	NT	10.0	NT	NT	NT	NT	10.0	10.0	NT	0.0	0.0	46.0
Iceland	NT	NT	NT	0.0	NT	NT	0.0	NT	NT	NT	0.0	0.0
Ireland	0.0	0.0	10.0	0.0	NT	NT	0.0	0.0	NT	0.0	0.0	30.0
Italy	10.0	10.0	15.0	15.0	15.0	12.0	15.0	12.5	NT	10.0	15.0	15.0
Japan	NT	10.0	20.0	10.0	NT	10.0	10.0	10.0	NT	10.0	10.0	20.0
Luxembourg		0.0	NT	0.0	NT	0.0	0.0	NT	NT	0.0	0.0	0.0
Netherlands	0.0		0.0	0.0	NT	0.0	0.0	0.0	0.0	0.0	0.0	0.0
New Zealand	NT	10.0		10.0	NT	NT	10.0	10.0	NT	10.0	10.0	15.0
Norway	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Portugal	NT	NT	NT	15.0		15.0	NT	10.0	NT	10.0	NT	25.0
Spain	10.0	10.0	NT	10.0	15.0		15.0	10.0	NT	12.0	10.0	25.0
Sweden	0.0	0.0	0.0	0.0	NT	0.0		0.0	NT	0.0	0.0	0.0
Switzerland	NT	0.0	0.0	0.0	0.0	0.0	0.0		NT	0.0	0.0	0.0
Turkey	NT	10.0	NT	10.0	NT	NT	NT	NT		10.0	NT	10.0
United Kingdom	0.0	0.0	10.0	0.0	10.0	12.0	0.0	0.0	15.0		0.0	25.0
United States	0.0	0.0	10.0	0.0	NT	10.0	0.0	5.0	NT	0.0		30.0

a) When the treaty rate on cross-border payment of dividends or interest income is higher than corresponding domestic rates, the domestic rate applies.

b) Non-treaty rates.

Source: OECD (1991)

Tax parameter data, 1996

	Overall corporate tax system		Machinery				Buildings				Inventory valuation		
	rate ^a	Rate for DB	Rate for SL	Length of first/second period	Extra allowance rate	Tax credit	Depreciation Method	Rate for DB	Rate for SL	Length of first/second period		Extra allowance rate	Tax credit
Australia	36.0%	21.4%	..	ufd ^c	..	..	..	4.0%	25.0	..	..	FIFO
Austria	34.0%	..	14.3%	7.0	12.0%	..	..	3.0%	33.3	12.0%	..	LIFO
Belgium	40.2%	28.6%	14.3%	2.5/ufd	..	..	..	5.0%	9.6/ufd	..	..	LIFO
Canada	35.62% ^h	30.0%	..	ufd	..	..	..	4.0%	ufd	..	..	FIFO
Czech Republic	39.0%	..	6.7%	15.0	10.0%	..	..	2.2%	45.0	..	..	FIFO
Denmark	34.0%	30.0%	..	ufd	4% ^e	..	..	6.0/2.0%	10/20	..	..	FIFO
Finland	28.0%	30.0%	..	ufd	..	..	..	7.0%	ufd	..	..	FIFO
France	36.7%	35.7%	..	ufd	..	..	..	5.0%	20.0	..	..	avg cost
Germany	57.4%/42%	30.0%	..	ufd	..	..	..	4.0%	25.0	..	..	LIFO
Greece	40% ^b	..	15.6% ^f	6.4	..	..	..	10% ^f	10.0	..	..	LIFO
Hungary	18.0%	..	14.3%	7.0	..	..	..	2.0%	50.0	..	..	avg cost
Iceland	33.0%	..	14.3%	7.0	..	..	..	6.0%	16.7	..	..	FIFO
Ireland	10% ^h	..	15.0%	6.7	..	..	..	4.0%	25.0	..	..	FIFO
Italy	52.2%	..	20.0%	5.0	..	..	..	5.0%	20.0	..	..	LIFO
Japan	49.9%	31.9%	..	ufd	..	..	..	3.5%	ufd	..	..	LIFO
Korea	31.1%	33.0%	..	ufd	..	..	..	3.3%	30.0	..	..	LIFO
Luxembourg	39.1%	30.0%	..	ufd	3.0%	..	..	4.0%	25.0	..	..	LIFO
Mexico	34.0%	..	10.0%	10.0	..	..	..	5.0%	20.0	..	..	LIFO
Netherlands	35.0%	30.0%	..	ufd	..	..	..	3.0%	33.3	..	..	LIFO
New Zealand	33.0%	18.0%	..	ufd	..	..	..	4.0%	ufd	..	..	FIFO
Norway	28.0%	20.0%	..	ufd	..	..	..	5.0%	ufd	..	..	FIFO
Poland	40.0%	..	10.0%	10.0	25.0%	..	..	2.5%	40.0	25.0%	..	LIFO
Portugal	39.6%	18.8%	..	ufd	..	..	..	5.0%	20.0	..	..	LIFO
Spain	35.0%	24.0%	..	ufd	..	..	..	3.0%	33.3	..	..	LIFO
Sweden	28.0%	30.0%	20.0%	2.45/ufd	..	..	..	4.0%	25.0	..	..	FIFO
Switzerland	39.8%	30.0%	..	ufd	..	..	..	4.0%	ufd	..	..	LIFO
Turkey	43.0%	40.0%	..	ufd	30.0%	..	..	8.0%	ufd	30.0%	..	LIFO
United Kingdom	33.0%	25.0%	..	ufd	..	..	..	4.0%	25.0	..	..	FIFO
United States	39.5%	28.6%	14.3%	2.5/ufd	..	..	..	2.6%	59.0	..	..	LIFO

a) Includes sub-national profit taxes and surcharges. The sub-national rate represents that of the most populated city. Where a progressive rate structure applies (e.g. Switzerland), the top marginal rate is used.

b) Rates for non-resident legal corporations.

c) Until fully depreciated.

d) The DB rate is two times of the SL rate with optimal switchover in 2.5 (for machinery) and 9.6 (for buildings) years of asset life.

e) It takes account of advance allowances up to 30 per cent with a maximum 15 per cent for each year

f) Accelerated depreciation allows the application of the normal rate increased by 25 per cent.

g) The tax code states that a switchover from DB to SL takes place when the SL depreciation rate of 20 per cent on all assets results in a lower book value.

h) The corporate tax rates for manufacturing sectors

Source: OECD Tax database 1996, European Tax Handbook (1997), Price Waterhouse (1997)

Tax parameter data, 1996 (cont.)

Home country	Treaty countries		Non-Treaty countries		Non-treaty OECD countries ^{a)}
	dividend	interest income	dividend	interest income	
Australia	exemption	credit	credit	credit	Greece, Iceland, Luxembourg Portugal, Turkey, Mexico
Austria	exemption	credit	exemption	credit	
Belgium	exemption of 95%	credit	exemption of 95%	credit	
Canada	exemption	credit	credit	credit	
Czech Republic	credit	credit	credit	credit	Greece, Iceland, Portugal, Turkey
Denmark	exemption	credit	credit	credit	
Finland	exemption	credit	credit	credit	Mexico
France	exemption of 95%	credit	exemption of 95%	credit	Mexico
Germany	exemption	credit	exemption	credit	
Greece	credit	credit	credit	credit	
Hungary	exemption	credit	exemption	credit	
Iceland	credit	credit	credit	credit	
Ireland	credit	credit	deduction	deduction	Greece, Iceland, Turkey, Mexico
Italy	exemption of 95% ^{b)}	credit	exemption of 60%	credit	
Japan	credit	credit	credit	credit	
Korea	credit	credit	credit	credit	
Luxembourg	exemption	credit	exemption	credit	
Mexico	credit	credit	credit	credit	
Netherlands	exemption	credit	credit	credit	
New Zealand	credit	credit	exemption	deduction	Iceland, Portugal
Norway	credit	credit	credit	credit	
Poland	credit	credit	credit	credit	
Portugal	exemption of 95% ^{b)}	credit	credit	credit	
Spain	exemption	credit	exemption	credit	
Sweden	exemption	credit	exemption	credit	
Switzerland	exemption	credit	exemption	deduction	
Turkey	credit	credit	credit	credit	Turkey
United Kingdom	credit	credit	credit	credit	
United States	credit	credit	credit	credit	

a) In case the tax regime of a country does not differentiate treaty countries from non-treaty countries in terms of tax treatment of foreign-source income, whether the country has treaties with other partner countries or not is not important and a list of non-treaty countries for these countries is not reported here.

b) For the EU countries only

Source: OECD Tax database 1996, European Tax Handbook (1997), Price Waterhouse (1997)

Tax parameter data, 1996 (cont.)

C. Host country's withholding tax on cross-border payments of dividend, per cent ^a	from / to	Australia	Austria	Belgium	Canada	Czech Republic	Denmark	Finland	France	Germany	Greece	Hungary	Iceland	Ireland	Italy	Japan	
Australia ^b		15.0															
Austria		15.0	15.0	15.0	15.0	15.0	15.0	15.0	15.0	15.0	30.0	15.0	30.0	15.0	15.0	15.0	15.0
Belgium		15.0	0.0	15.0	15.0	15.0	0.0	10.0	0.0	0.0	0.0	10.0	22.0	0.0	0.0	0.0	0.0
Canada		15.0	15.0	15.0	15.0	15.0	0.0	0.0	0.0	0.0	0.0	10.0	15.0	0.0	0.0	5.0	5.0
Czech Republic		5.0	10.0	15.0	10.0	15.0	15.0	5.0	10.0	5.0	25.0	5.0	25.0	5.0	15.0	10.0	10.0
Denmark		15.0	0.0	0.0	15.0	15.0	0.0	0.0	0.0	0.0	0.0	5.0	0.0	0.0	0.0	10.0	10.0
Finland		15.0	10.0	0.0	10.0	0.0	0.0	0.0	0.0	10.0	13.0	5.0	0.0	0.0	10.0	10.0	10.0
France		15.0	0.0	0.0	10.0	5.0	0.0	0.0	0.0	0.0	0.0	5.0	5.0	0.0	0.0	10.0	10.0
Germany		15.0	5.0	5.0	15.0	5.0	5.0	5.0	0.0	5.0	5.0	5.0	5.0	5.0	5.0	15.0	15.0
Greece		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Hungary		15.0	10.0	10.0	5.0	5.0	5.0	5.0	5.0	5.0	10.0	0.0	20.0	5.0	10.0	10.0	10.0
Iceland		20.0	20.0	20.0	20.0	20.0	0.0	0.0	5.0	5.0	20.0	20.0	20.0	20.0	20.0	20.0	20.0
Ireland		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Italy		15.0	15.0	0.0	15.0	15.0	0.0	10.0	0.0	0.0	0.0	10.0	32.4	0.0	0.0	10.0	10.0
Japan		15.0	10.0	10.0	10.0	10.0	10.0	10.0	0.0	10.0	20.0	10.0	20.0	10.0	10.0	10.0	10.0
Korea		15.0	10.0	15.0	15.0	5.0	15.0	10.0	10.0	10.0	25.0	5.0	25.0	10.0	10.0	10.0	10.0
Luxembourg		25.0	0.0	0.0	5.0	5.0	0.0	0.0	0.0	0.0	0.0	5.0	25.0	0.0	0.0	5.0	5.0
Mexico		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Netherlands		15.0	0.0	0.0	5.0	0.0	0.0	0.0	0.0	0.0	0.0	5.0	25.0	0.0	0.0	5.0	5.0
New Zealand ^c		15.0	30.0	15.0	15.0	30.0	15.0	15.0	15.0	15.0	30.0	30.0	30.0	15.0	15.0	15.0	15.0
Norway		15.0	15.0	5.0	15.0	15.0	0.0	0.0	5.0	5.0	20.0	10.0	0.0	0.0	15.0	5.0	5.0
Poland		15.0	10.0	10.0	15.0	5.0	5.0	5.0	5.0	5.0	20.0	10.0	20.0	10.0	10.0	10.0	10.0
Portugal		25.0	15.0	15.0	25.0	25.0	15.0	10.0	0.0	15.0	15.0	25.0	25.0	15.0	15.0	25.0	25.0
Spain		15.0	0.0	0.0	15.0	15.0	0.0	10.0	0.0	0.0	0.0	15.0	25.0	0.0	0.0	10.0	10.0
Sweden		15.0	5.0	0.0	15.0	0.0	0.0	0.0	0.0	5.0	0.0	5.0	0.0	5.0	10.0	10.0	10.0
Switzerland		15.0	5.0	10.0	15.0	5.0	0.0	0.0	15.0	5.0	5.0	10.0	5.0	10.0	15.0	10.0	10.0
Turkey		22.0	22.0	15.0	22.0	22.0	15.0	15.0	15.0	15.0	22.0	11.0	22.0	22.0	16.5	11.0	11.0
United Kingdom ^d		0.0	0.0	-6.9	-1.3	0.0	-6.9	-6.9	0.0	0.0	0.0	0.0	0.0	0.0	-6.9	0.0	0.0
United States		15.0	5.0	5.0	6.0	5.0	5.0	5.0	5.0	5.0	30.0	5.0	5.0	5.0	5.0	10.0	10.0

a) When the treaty rate on cross-border payment of dividends or interest income is higher than corresponding domestic rates, the domestic rate applies.

b) When the dividend is franked (i.e. paid out of profits taxed at the Australian company tax rate), the dividend is not subject to the withholding tax.

c) In New Zealand, the foreign investor tax credit and the imputation system for corporate taxes effectively reduces combined corporate tax and non-resident withholding taxes to 33 per cent.

d) The UK does not levy withholding tax on the payment of dividends at home or abroad. The non-resident parent company, however, is entitled to repayment of a proportion of tax credit under the tax treaty.

Source: OECD Tax database 1996, European Tax Handbook (1997), Price Waterhouse (1997)

Tax parameter data, 1996 (cont.)

from / to	Korea	Luxembourg	Mexico	Netherlands	New Zealand	Norway	Poland	Portugal	Spain	Sweden	Switzerland	Turkey	UK	USA
Australia ^b	15.0	30.0	30.0	15.0	15.0	15.0	15.0	30.0	15.0	15.0	15.0	30.0	15.0	15.0
Austria	10.0	0.0	22.0	0.0	22.0	15.0	10.0	0.0	0.0	0.0	5.0	22.0	0.0	5.0
Belgium	15.0	0.0	15.0	0.0	15.0	0.0	10.0	0.0	0.0	0.0	10.0	5.0	0.0	5.0
Canada	15.0	10.0	10.0	6.0	15.0	15.0	15.0	25.0	15.0	15.0	15.0	25.0	10.0	6.0
Czech Republic	5.0	5.0	25.0	0.0	25.0	5.0	5.0	25.0	25.0	0.0	5.0	25.0	5.0	5.0
Denmark	15.0	0.0	25.0	0.0	15.0	15.0	5.0	0.0	0.0	0.0	0.0	15.0	0.0	5.0
Finland	10.0	5.0	15.0	0.0	15.0	0.0	0.0	10.0	10.0	0.0	0.0	15.0	5.0	5.0
France	10.0	0.0	0.0	0.0	15.0	5.0	5.0	0.0	0.0	0.0	5.0	15.0	0.0	5.0
Germany	10.0	5.0	5.0	5.0	15.0	5.0	5.0	5.0	5.0	5.0	5.0	15.0	5.0	5.0
Greece	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Hungary	5.0	5.0	20.0	5.0	20.0	10.0	10.0	15.0	5.0	5.0	10.0	10.0	5.0	5.0
Iceland	20.0	20.0	20.0	20.0	20.0	0.0	20.0	20.0	20.0	0.0	5.0	20.0	20.0	5.0
Ireland	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Italy	10.0	0.0	32.4	0.0	15.0	15.0	10.0	0.0	0.0	10.0	15.0	15.0	5.0	5.0
Japan	12.0	5.0	20.0	5.0	15.0	5.0	10.0	20.0	10.0	10.0	10.0	10.0	10.0	10.0
Korea	10.0	10.0	0.0	10.0	15.0	15.0	5.0	25.0	10.0	10.0	10.0	15.0	10.0	10.0
Luxembourg	10.0	0.0	25.0	0.0	25.0	5.0	5.0	0.0	0.0	0.0	0.0	25.0	0.0	5.0
Mexico	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Netherlands	10.0	0.0	0.0	0.0	15.0	0.0	0.0	0.0	0.0	0.0	0.0	5.0	0.0	5.0
New Zealand ^c	15.0	30.0	30.0	15.0	15.0	15.0	30.0	30.0	30.0	15.0	15.0	30.0	15.0	15.0
Norway	15.0	5.0	25.0	0.0	15.0	5.0	5.0	10.0	10.0	0.0	5.0	20.0	5.0	15.0
Poland	5.0	5.0	20.0	0.0	20.0	5.0	5.0	15.0	5.0	5.0	5.0	10.0	5.0	5.0
Portugal	25.0	15.0	25.0	15.0	25.0	10.0	25.0	0.0	10.0	15.0	10.0	25.0	10.0	25.0
Spain	10.0	0.0	25.0	0.0	25.0	10.0	15.0	0.0	10.0	10.0	10.0	25.0	0.0	10.0
Sweden	10.0	5.0	5.0	0.0	15.0	0.0	5.0	0.0	10.0	0.0	15.0	15.0	0.0	5.0
Switzerland	10.0	0.0	5.0	0.0	15.0	5.0	5.0	10.0	10.0	0.0	0.0	35.0	5.0	5.0
Turkey	16.5	22.0	22.0	11.0	22.0	22.0	11.0	22.0	22.0	16.5	22.0	0.0	16.5	22.0
United Kingdom ^d	0.0	-6.9	0.0	-6.9	0.0	-1.3	0.0	0.0	0.0	-6.9	-6.9	0.0	0.0	-6.9
United States	10.0	5.0	5.0	5.0	15.0	15.0	5.0	10.0	10.0	5.0	5.0	30.0	5.0	5.0

a) When the treaty rate on cross-border payment of dividends or interest income is higher than corresponding domestic rates, the domestic rate applies.

b) When the dividend is franked (i.e. paid out of profits taxed at the Australian company tax rate), the dividend is not subject to the withholding tax.

c) In New Zealand the foreign investor tax credit and the imputation system for corporate taxes effectively reduces combined corporate tax and non-resident withholding taxes to 33 per cent.

d) The UK does not levy withholding tax on the payment of dividends at home or abroad. The non-resident parent company, however, is entitled to repayment of a proportion of tax credit under the tax treaty.

Source: OECD Tax database 1996, European Tax Handbook (1997), Price Waterhouse (1997)

Tax parameter data, 1996 (cont.)

from / to	Australia	Austria	Belgium	Canada	Czech Republic	Denmark	Finland	France	Germany	Greece	Hungary	Iceland	Ireland	Italy	Japan
Australia	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0
Austria	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Belgium	10.0	15.0	0.0	15.0	10.0	15.0	15.0	15.0	15.0	15.0	15.0	15.0	15.0	15.0	10.0
Canada	15.0	15.0	15.0	10.0	10.0	15.0	10.0	10.0	15.0	25.0	10.0	25.0	15.0	15.0	10.0
Czech Republic	10.0	0.0	10.0	10.0	0.0	0.0	0.0	0.0	0.0	10.0	0.0	25.0	0.0	0.0	10.0
Denmark	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Finland	10.0	0.0	10.0	10.0	0.0	0.0	0.0	10.0	0.0	10.0	0.0	0.0	0.0	15.0	10.0
France	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Germany	10.0	0.0	15.0	15.0	0.0	0.0	0.0	0.0	10.0	10.0	0.0	0.0	0.0	10.0	10.0
Greece	35.0	0.0	15.0	35.0	10.0	8.0	10.0	10.0	10.0	10.0	10.0	35.0	35.0	10.0	35.0
Hungary	10.0	0.0	15.0	10.0	0.0	0.0	0.0	0.0	0.0	10.0	0.0	18.0	0.0	0.0	0.0
Iceland	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Ireland	10.0	0.0	15.0	27.0	0.0	0.0	0.0	0.0	0.0	27.0	0.0	27.0	0.0	10.0	10.0
Italy	10.0	10.0	15.0	15.0	0.0	15.0	15.0	10.0	10.0	10.0	0.0	15.0	10.0	10.0	10.0
Japan	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	20.0	10.0	20.0	10.0	10.0	12.0
Korea	15.0	10.0	15.0	15.0	10.0	15.0	10.0	10.0	10.0	25.0	0.0	25.0	0.0	0.0	0.0
Luxembourg	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Mexico	15.0	15.0	15.0	4.9	15.0	15.0	15.0	4.9	4.9	15.0	15.0	15.0	15.0	4.9	15.0
Netherlands	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
New Zealand ^b	10.0	15.0	10.0	15.0	15.0	10.0	10.0	10.0	10.0	15.0	15.0	15.0	15.0	10.0	15.0
Norway	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Poland	10.0	0.0	10.0	15.0	10.0	0.0	0.0	0.0	0.0	10.0	10.0	20.0	10.0	10.0	10.0
Portugal	25.0	10.0	15.0	25.0	25.0	25.0	15.0	12.0	15.0	25.0	25.0	25.0	15.0	15.0	25.0
Spain	10.0	5.0	15.0	15.0	0.0	10.0	10.0	10.0	10.0	25.0	0.0	25.0	0.0	12.0	10.0
Sweden	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Switzerland	10.0	5.0	10.0	15.0	0.0	0.0	0.0	10.0	0.0	10.0	10.0	0.0	0.0	12.5	10.0
Turkey	13.2	13.2	13.2	13.2	13.2	13.2	13.2	13.2	13.2	13.2	10.0	13.2	13.2	13.2	13.2
United Kingdom	10.0	0.0	15.0	10.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	10.0	10.0
United States	10.0	0.0	15.0	10.0	0.0	0.0	0.0	0.0	0.0	30.0	0.0	0.0	30.0	15.0	10.0

a) When the treaty rate on cross-border payment of dividends or interest income is higher than corresponding domestic rates, the domestic rate applies.

b) The approved issued levy regime in New Zealand sets the effective impost on debt to 1.34% where the borrower and lender are operating at arms-length.

Source: OECD Tax database 1996, European Tax Handbook (1997), Price Waterhouse (1997)

Tax parameter data, 1996 (cont.)

from / to	Korea	Luxembourg	Mexico	Netherlands	New Zealand	Norway	Poland	Portugal	Spain	Sweden	Switzerland	Turkey	UK	USA
Australia	15.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	15.0	10.0	10.0	10.0	10.0	10.0
Austria	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Belgium	15.0	15.0	15.0	10.0	10.0	15.0	10.0	15.0	15.0	10.0	10.0	15.0	15.0	15.0
Canada	15.0	10.0	25.0	10.0	15.0	15.0	15.0	25.0	15.0	15.0	15.0	25.0	10.0	10.0
Czech Republic	10.0	0.0	25.0	0.0	25.0	0.0	10.0	25.0	0.0	0.0	0.0	25.0	0.0	0.0
Denmark	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Finland	10.0	0.0	28.0	0.0	10.0	0.0	0.0	15.0	10.0	0.0	0.0	15.0	0.0	0.0
France	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Germany	0.0	0.0	15.0	0.0	10.0	0.0	0.0	15.0	10.0	0.0	0.0	15.0	0.0	0.0
Greece	35.0	35.0	35.0	10.0	35.0	10.0	10.0	35.0	35.0	10.0	10.0	35.0	0.0	0.0
Hungary	0.0	0.0	18.0	0.0	18.0	0.0	10.0	10.0	0.0	0.0	10.0	10.0	0.0	0.0
Iceland	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Ireland	0.0	0.0	26.0	0.0	10.0	0.0	10.0	15.0	0.0	0.0	0.0	27.0	0.0	0.0
Italy	10.0	10.0	15.0	10.0	10.0	15.0	10.0	15.0	12.0	15.0	12.5	15.0	10.0	15.0
Japan	12.0	10.0	20.0	10.0	20.0	10.0	10.0	20.0	10.0	10.0	10.0	15.0	10.0	10.0
Korea	10.0	10.0	10.0	10.0	10.0	15.0	10.0	25.0	10.0	10.0	10.0	10.0	10.0	12.0
Luxembourg	0.0	15.0	0.0	4.9	15.0	15.0	15.0	15.0	4.9	4.9	4.9	15.0	4.9	4.9
Mexico	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Netherlands	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
New Zealand ^b	10.0	15.0	15.0	10.0	10.0	10.0	15.0	15.0	15.0	10.0	10.0	15.0	10.0	10.0
Norway	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Poland	10.0	10.0	20.0	0.0	20.0	0.0	0.0	10.0	0.0	0.0	10.0	10.0	0.0	0.0
Portugal	25.0	25.0	25.0	25.0	25.0	15.0	25.0	15.0	15.0	25.0	10.0	25.0	10.0	10.0
Spain	10.0	10.0	15.0	10.0	25.0	10.0	0.0	15.0	0.0	15.0	10.0	25.0	12.0	10.0
Sweden	0.0	0.0	15.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Switzerland	10.0	10.0	15.0	5.0	10.0	0.0	10.0	10.0	10.0	5.0	0.0	35.0	0.0	5.0
Turkey	10.0	13.2	13.2	13.2	13.2	13.2	10.0	13.2	13.2	13.2	13.2	13.2	13.2	13.2
United Kingdom	10.0	0.0	15.0	0.0	10.0	0.0	0.0	10.0	12.0	0.0	0.0	15.0	0.0	0.0
United States	12.0	0.0	15.0	0.0	10.0	0.0	0.0	15.0	10.0	0.0	5.0	30.0	0.0	0.0

a) When the treaty rate on cross-border payment of dividends or interest income is higher than corresponding domestic rates, the domestic rate applies.

b) The approved issued levy regime in New Zealand sets the effective impost on debt to 1.34% where the borrower and lender are operating at arms-length.

Source: OECD Tax database 1996, European Tax Handbook (1997), Price Waterhouse (1997)

Tax parameter data, 2001

A. The corporate tax system		Overall corporate tax rate ^a	Machinery					Buildings					Inventory valuation ^u	
			Depreciation Method	Rate for DB	Rate for SL	Length of first/second period ^b	Extra allowance rate	Tax credit	Depreciation Method	Rate for DB	Rate for SL	Length of first/second period ^b		Extra allowance rate	Tax credit
Australia	30.0%	DB	21.4%	..	ufd	..	..	SL	..	4.0%	25.0	..	..	FIFO
Austria	34% ^b	SL	..	14.3%	7.0	..	..	SL	..	3.0%	33.3	..	..	LIFO
Belgium	40.2%	DB or SL	28.6%	14.3%	2.5/ufd ^p	..	..	DB or SL	10.0%	5.0%	9.6/ufd ^t	..	..	LIFO
Canada	34.12% ^d	DB	30.0%	..	ufd	..	..	DB	4.0%	..	ufd	..	..	FIFO
Czech Republic	31.0%	SL ⁱ	..	16.7%	6.0	10.0%	..	SL	..	3.3%	30.0	..	..	FIFO
Denmark	30.0%	DB	25.0%	..	ufd	..	..	SL	..	5.0%	20.0	..	..	FIFO
Finland	29.0%	DB	25.0%	..	ufd	..	..	DB	7.0%	..	ufd	..	..	FIFO
France	35.3% ^c	DB	32.1% ^m	..	ufd	..	..	SL	..	5.0%	20.0	..	..	avg cost
Germany	38.9%	DB	30.0%	..	ufd	..	..	SL	..	4.0%	25.0	..	..	LIFO
Greece	37.5% ^c	SL	..	14.3%	7.0	9	..	SL	..	12.0%	8.3	..	..	LIFO
Hungary	18.0%	SL	..	14.3%	7.0	..	..	SL	..	2.0%	50.0	..	..	avg cost
Iceland	30.0%	SL	..	14.3%	7.0	..	..	SL	..	3.0%	33.3	..	..	FIFO
Ireland	10% ^d	SL	..	15.0%	6.70	..	..	SL	..	4.0%	25.0	..	..	FIFO
Italy	40.3% ^e	SL (2 rates) ^j	..	12.5%/25%	1/3.5	..	..	SL (2 rates) ^j	..	3.5%/7%	1/13.79	..	..	LIFO
Japan	41.4%	DB	31.5% ⁿ	..	ufd	..	..	DB	7.0%	..	ufd	..	..	LIFO
Korea	30.8%	DB	33.0%	..	ufd	..	10% ^f	SL	..	3.3%	30.0	..	..	LIFO
Luxembourg	37.5%	DB	30% ^o	..	ufd	..	3% ^s	SL	..	4.0%	25.0	..	..	LIFO
Mexico	35.0%	SL	..	10.0%	10.0	..	..	SL	..	5.0%	20.0	..	..	LIFO
Netherlands	35.0%	DB	30.0%	..	ufd	..	..	SL	..	3.0%	33.3	..	..	LIFO
New Zealand	33.0%	DB	18.0%	..	ufd	..	..	DB	4.0%	..	ufd	..	..	FIFO
Norway	28.0%	DB	15.0%	..	ufd	..	..	DB	2.0%	..	ufd	..	..	FIFO
Poland	28.0%	SL ⁱ	..	10.0%	10.0	..	..	SL	..	2.5%	40.0	..	..	LIFO
Portugal	35.2%	DB	31.3%	..	ufd	..	..	SL	..	5.0%	20.0	..	..	LIFO
Slovak Republic	29.0%	SL ⁱ	..	8.0%	12.5	..	..	SL	..	2.5%	40.0	..	..	avg cost
Spain	35.0%	DB	24.0%	..	ufd	..	..	SL	..	3.0%	33.3	..	..	LIFO
Sweden	28.0%	DB or SL ^k	30.0%	20.0%	2.45/ufd	..	..	SL	..	4.0%	25.0	..	..	FIFO
Switzerland	25.3%	DB	30.0%	..	ufd	..	..	DB	4.0%	..	ufd	..	..	LIFO
Turkey	44.5% ^f	DB	40.0%	..	ufd	40% ^q	..	DB	8.0%	..	ufd	40% ^q	..	LIFO
United Kingdom	30.0%	DB	25.0%	..	ufd	..	..	SL	..	4.0%	25.0	..	..	FIFO
United States	39.5% ^g	DB or SL	28.6%	14.3%	2.5/ufd ^p	..	..	SL	..	2.6%	39.0	..	..	LIFO

Source: OECD Tax database 2001, European handbook (2001) and Ernst&Young (2002).

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Notes:

Tax allowances and credit that are generally applicable to investment in manufacturing sectors and that are believed to be common and significant are considered in measuring the present value of overall investment incentives. Therefore region-specific or functional incentives, such as R&D and SMEs, are not explicitly taken into account.

- a) Includes sub-national profit taxes and surcharges. The sub-national rate represents that of the most populated city (e.g. the province of Ontario for Canada, Berlin for Germany and Zurich for Switzerland). Rates for Canada and Ireland are those for the manufacturing sector. Where a progressive rate structure applies (e.g. Switzerland), the top marginal rate is used.
- b) Fictitious interest payments (on the increase of equity capital) – a notional interest on additions to own capital that is deductible as an operating expense from corporate tax base – are subject to tax at 25% at the corporate level. The interest rate to be used is the average rate in the secondary market plus 0.8 percentage points.
- c) Comes from the European Tax Handbook (2001).
- d) For the manufacturing sector. In Ireland, only 95% of book value in machinery is subject to depreciation allowance.
- e) As of 1998, business income is subject to a dual rate (so called "dual income tax regime"). A reduced rate of 19% (23.25% including 4.25% of regional tax) applies on the portion of income derived from the increase in the equity capital of the company as compared with the equity capital existing at the end of the taxable year on 30 September 1996
- f) 33 per cent corporate income tax rate (including 10% surcharge) and 16.5 per cent non-creditable withholding rate (on net income after CIT) results in overall CIT rate of 44.5%. See European Tax Handbook (2001).
- g) Includes the sub-national CIT rate of 6.6% (deductible from federal CIT). This is also the average of maximum CIT rates of sub-national governments. See European Tax Handbook (2001).
- h) *Sw m* indicates mandatory switchover from declining balance (DB) to straight line (SL). DB or SL indicates the choice of method allowed. If the depreciation rate depends on the useful life of the asset, and no period for depreciation is available, 7 years of useful life is assumed for the calculation of the depreciation rate for machinery. The DB rate is derived by multiplying 1.5, 2, 2.25 or 3 (depending on country tax code) to SL rate (14.3%).
- ifd stands for "until fully depreciated" for DB methods.
- i) SL method is assumed for the calculation of the net present value of depreciation allowance since the details on the DB scheme are not available.
- j) The depreciation rate for the first tax year is reduced by a half and the length of second period assumes "until fully depreciated".
- k) The tax code states that a switchover from DB to SL takes place when the SL depreciation rate of 20 per cent on all assets results in a lower book value.
- l) The depreciation rate in Australia depends on the useful life of assets, thus 7 years of useful life is applied and the DB rate is drawn by multiplying 1.5 times of SL rate (14.3%).
- m) The DB rate comes from the SL rate of 14.3% (i.e 7 years of useful life) times 2.25 (the coefficient applied when the useful life is longer than 6 years)
- n) The DB rate comes from the SL rate of 14.3% (i.e 7 years of useful life) times 2.2.
- o) The DB rate is three times of maximum SL rate (10%).
- p) 7 years of useful life for machinery means the DB rate of 28.6% and SL rate of 14.3% with optimal switchover in 2.5 years of asset life.
- q) In Greece, 40-100% tax exemption on investment is allowed depending on the area A-D (A:0, B:40, C:70 or D: 100). No exemption is taken as a baseline. Accelerated depreciation was abolished in 1998. In Turkey, investment allowance of 40% (developed region) to 100% (first-degree priority region or investment over US \$50 million) is available. The minimum rate (40%) is taken as baseline. Investment allowance is subject to 19.8% withholding tax. To qualify for 40% allowance, TRL 600 billion (500,000 US dollars) worth of investment required. For other regions, the eligible amount is scaled down to 2/3 or 1/3 of TRL 600 billion in 2001. The rate is 200% for investment over US \$250 million.
- r) 10% of investment amount on facility and equipment is given as tax credit. But all corporate taxpayers is subject to 15% minimum tax.
- s) 6% tax credit up to LUF 6 million and 2% tax credit beyond LUF 6 million are provided.
- t) The DB rate is two times of the SL rate (5%) with optimal switchover in 9.6 years of asset life.
- u) Inventory valuation method is chosen to reflect the most tax burden minimising option available to investors.

Tax parameter data, 2001 (cont.)

Home country	Treaty countries		Non-Treaty countries		Non-treaty OECD countries ^a
	dividend	interest income	dividend	interest income	
Australia	exemption	credit	credit	credit	
Austria	exemption	credit	exemption	credit	
Belgium	exemption of 95%	credit	exemption of 95%	credit	
Canada	exemption	credit	credit	deduction	Gre, Por, Tur
Czech Republic	credit	credit	deduction	deduction	Ice, Mex, NZ, Tur
Denmark	exemption	credit	exemption	credit	
Finland	exemption	credit	exemption	credit	
France	exemption of 95%	credit	exemption of 95%	credit	
Germany	exemption of 95%	credit	exemption of 95%	credit	
Greece	credit	credit	credit	credit	
Hungary	exemption	credit	exemption	credit	
Iceland	credit	credit	credit	credit	
Ireland	credit	credit	deduction	deduction	
Italy	exemption of 95% *	credit	exemption of 60%	credit	Gre, Ice, Tur
Japan	credit	credit	credit	credit	* For EU countries only
Korea	credit	credit	credit	credit	
Luxembourg	exemption	credit	exemption	credit	
Mexico	credit	credit	credit	credit	
Netherlands	exemption	credit	exemption	credit	
New Zealand	credit	credit	credit	credit	
Norway	credit	credit	credit	credit	
Poland	credit	credit	credit	credit	
Portugal	exemption *	credit	credit	credit	
Slovak Republic	credit	credit	deduction	deduction	* For EU countries only
Spain	exemption	credit	exemption	credit	Ice, Kor, Mex, NZ, Por
Sweden	exemption	credit	exemption	credit	
Switzerland	exemption	credit	exemption	deduction	
Turkey	credit	credit	credit	credit	Tur
United Kingdom	credit	credit	credit	credit	
United States	credit	credit	credit	credit	

a) In case the tax regime of a country does not differentiate treaty countries from non-treaty countries in terms of tax treatment of foreign-source income, whether the country has treaties with other partner countries or not is not important and a list of non-treaty countries for these countries is not reported here.

Source: OECD (1991), European Handbook (2001), Ernst and Young (2002).

Tax parameter data, 2001 (cont.)

C. Host country's withholding tax on cross-border payments of dividend, per cent ^a	from / to	Australia	Austria	Belgium	Canada	Czech Republic	Denmark	Finland	France	Germany	Greece	Hungary	Iceland	Ireland	Italy	Japan
Australia ^b		15.0	15.0	15.0	15.0	15.0	15.0	15.0	15.0	15.0	30.0	15.0	30.0	15.0	15.0	15.0
Austria	15.0		0.0	0.0	15.0	10.0	0.0	0.0	0.0	0.0	0.0	10.0	25.0	0.0	0.0	0.0
Belgium	15.0	0.0		15.0	15.0	15.0	0.0	0.0	0.0	0.0	0.0	10.0	15.0	0.0	0.0	5.0
Canada	15.0	15.0	15.0		10.0	10.0	5.0	10.0	5.0	15.0	25.0	5.0	5.0	15.0	15.0	10.0
Czech Republic	5.0	10.0	15.0	10.0		15.0	15.0	5.0	10.0	5.0	25.0	5.0	25.0	5.0	15.0	10.0
Denmark	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Finland	15.0	0.0	0.0	10.0	0.0	0.0		0.0	0.0	0.0	0.0	5.0	0.0	0.0	0.0	10.0
France	15.0	0.0	0.0	10.0	0.0	10.0	0.0	0.0		0.0	0.0	5.0	5.0	0.0	0.0	0.0
Germany	15.0	0.0	0.0	15.0	0.0	5.0	0.0	0.0	0.0		0.0	5.0	5.0	0.0	0.0	15.0
Greece	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0
Hungary	15.0	10.0	10.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	10.0		20.0	5.0	10.0	10.0
Iceland	20.0	20.0	20.0	5.0	20.0	20.0	0.0	0.0	5.0	5.0	20.0	20.0		20.0	20.0	20.0
Ireland	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	22.0	0.0	0.0	0.0
Italy	15.0	0.0	0.0	15.0	15.0	15.0	0.0	0.0	0.0	0.0	0.0	10.0	27.0	0.0		10.0
Japan	15.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	0.0	10.0	20.0	10.0	20.0	10.0	10.0	
Korea	15.0	10.0	15.0	15.0	5.0	5.0	15.0	10.0	10.0	10.0	5.0	5.0	25.0	10.0	10.0	10.0
Luxembourg	25.0	0.0	0.0	5.0	5.0	5.0	0.0	0.0	0.0	0.0	0.0	5.0	25.0	0.0	0.0	5.0
Mexico	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Netherlands	15.0	0.0	0.0	5.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	5.0	0.0	0.0	0.0	5.0
New Zealand ^c	15.0	30.0	15.0	15.0	30.0	30.0	15.0	15.0	15.0	15.0	30.0	30.0	30.0	15.0	15.0	15.0
Norway	15.0	5.0	5.0	15.0	5.0	5.0	0.0	0.0	0.0	5.0	20.0	10.0	0.0	0.0	15.0	5.0
Poland	15.0	10.0	10.0	15.0	15.0	5.0	5.0	5.0	5.0	5.0	15.0	10.0	5.0	10.0	10.0	10.0
Portugal	25.0	0.0	0.0	25.0	10.0	10.0	0.0	0.0	0.0	0.0	0.0	10.0	25.0	0.0	0.0	25.0
Slovak Republic	15.0	10.0	5.0	10.0	5.0	5.0	15.0	5.0	10.0	5.0	15.0	5.0	15.0	0.0	15.0	10.0
Spain	15.0	0.0	0.0	15.0	5.0	5.0	0.0	0.0	0.0	0.0	0.0	5.0	25.0	0.0	0.0	10.0
Sweden	15.0	0.0	0.0	5.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	5.0	0.0	0.0	0.0	10.0
Switzerland	15.0	5.0	10.0	5.0	5.0	5.0	0.0	0.0	0.0	5.0	5.0	10.0	5.0	10.0	15.0	10.0
Turkey	16.5	16.5	15.0	16.5	16.5	16.5	15.0	15.0	15.0	15.0	16.5	10.0	16.5	16.5	15.0	10.0
United Kingdom ^d	0.0	0.0	-0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-0.3	0.0
United States	15.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	30.0	5.0	5.0	5.0	5.0	10.0

a) When the treaty rate on cross-border payment of dividends or interest income is higher than corresponding domestic rates, the domestic rate applies.

b) When the dividend is franked (i.e. paid out of profits taxed at the Australian company tax rate), the dividend is not subject to the withholding tax.

c) In New Zealand the foreign investor tax credit and the imputation system for corporate taxes effectively reduces combined corporate tax and non-resident withholding taxes to 33 per cent.

d) The UK does not levy withholding tax on the payment of dividends at home or abroad. The non-resident parent company, however, is entitled to repayment of a proportion of tax credit under the tax treaty.

Source: OECD Tax database 2000, European handbook (2001) and Ernst&Young (2002).

Tax parameter data, 2001 (cont.)

C. Host country's withholding tax on cross-border payments of dividend, per cent ^a		Korea	Luxembourg	Mexico	Netherlands	New Zealand	Norway	Poland	Portugal	Slovak Republic	Spain	Sweden	Switzerland	Turkey	UK	USA
from / to																
Australia ^b		15.0	30.0	30.0	15.0	15.0	15.0	15.0	30.0	15.0	15.0	15.0	15.0	30.0	15.0	15.0
Austria		10.0	0.0	25.0	0.0	25.0	15.0	10.0	0.0	10.0	0.0	0.0	5.0	25.0	0.0	5.0
Belgium		15.0	0.0	5.0	0.0	15.0	0.0	10.0	0.0	5.0	0.0	0.0	10.0	5.0	0.0	5.0
Canada		15.0	10.0	10.0	5.0	15.0	15.0	15.0	25.0	10.0	15.0	5.0	5.0	25.0	10.0	5.0
Czech Republic		5.0	5.0	25.0	0.0	25.0	5.0	5.0	10.0	5.0	5.0	0.0	5.0	25.0	5.0	5.0
Denmark		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Finland		10.0	0.0	0.0	0.0	15.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	15.0	0.0	5.0
France		10.0	0.0	0.0	0.0	15.0	0.0	5.0	0.0	10.0	0.0	0.0	5.0	15.0	0.0	5.0
Germany		10.0	0.0	5.0	0.0	15.0	5.0	5.0	0.0	5.0	0.0	0.0	5.0	15.0	0.0	5.0
Greece		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Hungary		5.0	5.0	20.0	5.0	20.0	10.0	10.0	10.0	5.0	5.0	5.0	10.0	10.0	5.0	5.0
Iceland		20.0	20.0	20.0	0.0	20.0	0.0	5.0	20.0	20.0	20.0	0.0	5.0	20.0	5.0	5.0
Ireland		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	22.0	0.0	0.0
Italy		10.0	0.0	15.0	0.0	15.0	15.0	10.0	0.0	15.0	0.0	0.0	15.0	15.0	0.0	5.0
Japan		12.0	5.0	0.0	5.0	15.0	5.0	10.0	20.0	20.0	10.0	10.0	10.0	10.0	10.0	10.0
Korea		10.0	0.0	0.0	10.0	15.0	15.0	5.0	10.0	20.0	10.0	10.0	10.0	15.0	5.0	10.0
Luxembourg		10.0		25.0	0.0	25.0	5.0	5.0	0.0	5.0	0.0	0.0	0.0	25.0	0.0	5.0
Mexico		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Netherlands		10.0	0.0	0.0	0.0	15.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	5.0	0.0	5.0
New Zealand ^c		15.0	30.0	30.0	15.0		15.0	30.0	30.0	30.0	30.0	15.0	15.0	30.0	15.0	15.0
Norway		15.0	5.0	0.0	0.0	15.0	5.0	5.0	10.0	5.0	10.0	0.0	5.0	20.0	5.0	15.0
Poland		5.0	5.0	15.0	0.0	15.0	5.0	0.0	15.0	5.0	5.0	5.0	5.0	10.0	5.0	5.0
Portugal		10.0	0.0	25.0	0.0	25.0	10.0	10.0		25.0	0.0	0.0	10.0	25.0	0.0	10.0
Slovak Republic		15.0	5.0	15.0	0.0	15.0	5.0	5.0	15.0		5.0	0.0	5.0	5.0	5.0	5.0
Spain		10.0	0.0	5.0	0.0	25.0	10.0	5.0	0.0	5.0		0.0	10.0	25.0	0.0	10.0
Sweden		10.0	0.0	5.0	0.0	15.0	0.0	5.0	0.0	0.0	0.0	0.0	0.0	15.0	0.0	5.0
Switzerland		10.0	0.0	5.0	0.0	15.0	5.0	5.0	10.0	5.0	10.0	0.0	0.0	35.0	5.0	5.0
Turkey		15.0	16.5	16.5	10.0	16.5	16.5	10.0	16.5	5.0	16.5	15.0	16.5		15.0	15.0
United Kingdom ^d		0.0	-0.3	0.0	-0.3	0.0	0.0	0.0	0.0	0.0	0.0	-0.3	-0.3	0.0		-0.3
United States		10.0	5.0	5.0	5.0	15.0	10.0	5.0	10.0	5.0	10.0	5.0	5.0	15.0	5.0	

a) When the treaty rate on cross-border payment of dividends or interest income is higher than corresponding domestic rates, the domestic rate applies.

b) When the dividend is franked (i.e. paid out of profits taxed at the Australian company tax rate), the dividend is not subject to the withholding tax.

c) In New Zealand the foreign investor tax credit and the imputation system for corporate taxes effectively reduces combined New Zealand corporate tax and non-resident withholding taxes to 33 per cent.

d) The UK does not levy withholding tax on the payment of dividends at home or abroad. The non-resident parent company, however, is entitled to repayment of a proportion of tax credit under the tax treaty.

Source: OECD Tax database 2000, European handbook (2001) and Ernst&Young (2002).

Tax parameter data, 2001 (cont.)

from / to	Australia	Austria	Belgium	Canada	Czech Republic	Denmark	Finland	France	Germany	Greece	Hungary	Iceland	Ireland	Italy	Japan	
Australia	10.0															
Austria	0.0	10.0														
Belgium	10.0	15.0	10.0													
Canada	15.0	15.0	15.0	10.0												
Czech Republic	10.0	0.0	10.0	10.0	10.0											
Denmark	0.0	0.0	0.0	0.0	0.0	10.0										
Finland	10.0	0.0	10.0	10.0	0.0	0.0	10.0									
France	0.0	0.0	0.0	0.0	0.0	0.0	0.0	10.0								
Germany	10.0	0.0	15.0	15.0	0.0	0.0	0.0	0.0	10.0							
Greece	37.5	0.0	15.0	37.5	10.0	8.0	10.0	10.0	10.0	10.0	10.0	37.5	37.5	10.0	10.0	37.5
Hungary	10.0	0.0	15.0	10.0	0.0	0.0	0.0	0.0	0.0	10.0		18.0	0.0	0.0	0.0	10.0
Iceland	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Ireland	10.0	0.0	15.0	22.0	0.0	0.0	0.0	0.0	0.0	22.0	0.0	22.0	0.0	10.0	10.0	10.0
Italy	10.0	10.0	12.5	12.5	0.0	12.5	12.5	10.0	10.0	10.0	0.0	12.5	10.0			10.0
Japan	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	15.0	10.0	15.0	10.0	10.0		10.0
Korea	15.0	10.0	10.0	15.0	10.0	15.0	10.0	10.0	10.0	8.0	0.0	25.0	0.0	10.0	12.0	12.0
Luxembourg	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Mexico	10.0	10.0	4.9	4.9	10.0	4.9	4.9	4.9	4.9	10.0	10.0	10.0	4.9	4.9	4.9	4.9
Netherlands	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
New Zealand ^b	10.0	15.0	10.0	15.0	15.0	10.0	10.0	10.0	10.0	15.0	15.0	15.0	10.0	10.0	15.0	15.0
Norway	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Poland	10.0	0.0	10.0	15.0	10.0	0.0	0.0	0.0	0.0	0.0	10.0	10.0	10.0	10.0	10.0	10.0
Portugal	20.0	10.0	15.0	20.0	10.0	20.0	15.0	12.0	15.0	20.0	10.0	20.0	15.0	15.0	20.0	20.0
Slovak Republic	10.0	0.0	0.0	10.0	0.0	0.0	0.0	0.0	0.0	10.0	0.0	25.0	0.0	0.0	10.0	10.0
Spain	10.0	5.0	15.0	15.0	0.0	10.0	10.0	10.0	10.0	18.0	0.0	18.0	0.0	12.0	10.0	10.0
Sweden	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Switzerland	10.0	5.0	10.0	10.0	0.0	0.0	0.0	0.0	0.0	10.0	10.0	0.0	0.0	12.5	10.0	10.0
Turkey	13.2	13.2	13.2	13.2	13.2	13.2	13.2	13.2	13.2	13.2	10.0	13.2	13.2	13.2	10.0	10.0
United Kingdom	10.0	0.0	15.0	10.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	10.0	10.0	10.0
United States	10.0	0.0	15.0	10.0	0.0	0.0	0.0	0.0	0.0	30.0	0.0	0.0	0.0	15.0	10.0	10.0

a) When the treaty rate on cross-border payment of dividends or interest income is higher than corresponding domestic rates, the domestic rate applies.

b) The approved issued levy regime in New Zealand sets the effective impost on debt to 1.34% where the borrower and lender are operating at arms-length.

Source: OECD Tax database 2000, European handbook (2001) and Ernst&Young (2002)

Tax parameter data, 2001 (cont.)

D. Host country's withholding tax on cross-border payments of interest income, per cent^a

from / to	Korea	Luxembourg	Mexico	Netherlands	New Zealand	Norway	Poland	Portugal	Slovak Republic	Spain	Sweden	Switzerland	Turkey	UK	USA
Australia	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0
Austria	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Belgium	10.0	15.0	15.0	10.0	10.0	15.0	10.0	15.0	10.0	15.0	10.0	10.0	15.0	15.0	15.0
Canada	15.0	15.0	15.0	10.0	15.0	15.0	15.0	25.0	10.0	15.0	10.0	10.0	25.0	10.0	10.0
Czech Republic	10.0	0.0	25.0	0.0	25.0	0.0	10.0	10.0	0.0	0.0	0.0	0.0	25.0	0.0	0.0
Denmark	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Finland	10.0	0.0	10.0	0.0	10.0	0.0	0.0	15.0	0.0	10.0	0.0	0.0	15.0	0.0	0.0
France	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Germany	15.0	0.0	15.0	0.0	10.0	0.0	0.0	15.0	0.0	10.0	0.0	0.0	15.0	0.0	0.0
Greece	8.0	8.0	37.5	8.0	37.5	10.0	10.0	37.5	10.0	37.5	10.0	10.0	37.5	0.0	0.0
Hungary	0.0	0.0	18.0	0.0	18.0	0.0	10.0	10.0	0.0	0.0	0.0	10.0	10.0	0.0	0.0
Iceland	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Ireland	0.0	0.0	5.0	0.0	10.0	0.0	10.0	15.0	0.0	0.0	0.0	0.0	22.0	0.0	0.0
Italy	10.0	10.0	12.5	10.0	10.0	12.5	10.0	12.5	0.0	12.0	12.5	12.5	12.5	10.0	12.5
Japan	12.0	10.0	10.0	10.0	15.0	10.0	10.0	15.0	15.0	10.0	10.0	10.0	10.0	10.0	10.0
Korea	0.0	10.0	10.0	10.0	10.0	15.0	10.0	15.0	25.0	10.0	10.0	10.0	10.0	10.0	12.0
Luxembourg	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Mexico	4.9	10.0	0.0	4.9	10.0	4.9	10.0	10.0	10.0	4.9	4.9	4.9	10.0	4.9	4.9
Netherlands	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
New Zealand ^b	10.0	15.0	15.0	10.0	10.0	10.0	15.0	15.0	15.0	15.0	10.0	10.0	15.0	10.0	10.0
Norway	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Poland	10.0	10.0	20.0	0.0	20.0	0.0	0.0	10.0	10.0	0.0	0.0	10.0	10.0	0.0	0.0
Portugal	15.0	20.0	20.0	20.0	20.0	15.0	10.0	10.0	20.0	15.0	20.0	10.0	20.0	10.0	10.0
Slovak Republic	25.0	0.0	25.0	0.0	25.0	0.0	10.0	25.0	0.0	0.0	0.0	10.0	10.0	0.0	0.0
Spain	10.0	10.0	15.0	10.0	18.0	10.0	0.0	15.0	0.0	0.0	15.0	0.0	18.0	12.0	10.0
Sweden	0.0	0.0	15.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Switzerland	10.0	10.0	15.0	5.0	10.0	0.0	10.0	10.0	10.0	10.0	5.0	0.0	35.0	0.0	5.0
Turkey	10.0	13.2	13.2	10.0	13.2	13.2	10.0	13.2	13.2	13.2	13.2	13.2	13.2	13.2	13.2
United Kingdom	10.0	0.0	15.0	0.0	10.0	0.0	0.0	10.0	0.0	12.0	0.0	0.0	15.0	13.2	0.0
United States	12.0	0.0	15.0	0.0	10.0	0.0	0.0	10.0	0.0	10.0	0.0	0.0	15.0	0.0	0.0

a) When the treaty rate on cross-border payment of dividends or interest income is higher than corresponding domestic rates, the domestic rate applies.

b) The approved issued levy regime in New Zealand sets the effective impost on debt to 1.34% where the borrower and lender are operating at arms-length.

Source: OECD Tax database 2000, European handbook (2001) and Ernst&Young (2002)

Bibliography

- ALTSHULER, R., H. GRUBERT and T.S. NEWLON (1998),
“Has U.S. investment abroad become more sensitive to tax rates?”, *NBER Working Paper* No. 6368.
- ALTSHULER, R., and H. GRUBERT (2002),
“Repatriation taxes, repatriation strategies and multinational financial policy”, *Journal of Public Economics* Vol. 87.
- CAREY, D. and H. TCHILINGUIRIAN (2000),
“Average effective tax rates on capital, labour and consumption”, *OECD Economics Department working paper* No.258.
- CLAUSING, K.A. (1998),
“The impact of transfer pricing on intrafirm trade”, *NBER Working Paper* No. 6688.
- COLLINS, J.H. and D.A. SHACKELFORD (1995),
Corporate domicile and average effective tax rates: the cases of Canada, Japan, the UK and USA, *International Tax and Public Finance*, Vol. 2.
- DESAI, M.A., F. FOLEY and J.R HINES (2002),
“Chains of ownership, regional tax competition and foreign direct investment”, *NBER Working Paper* No. 9224.
- DEVEUREUX, M.P. and R. GRIFFITH (1998),
“Taxes and the location of production: evidence from a panel of US multinationals”, *Journal of Public Economics* 68.
- DEVEUREUX, M.P. and R. GRIFFITH (1999),
“The taxation of discrete investment choices”, *Institute for Fiscal Studies Working Paper* No.W98/16.
- ERNST AND YOUNG (2002),
Worldwide Corporate Tax Guide.
- EUROPEAN COMMISSION (2001),
Company taxation in the internal market, *European Commission Staff Working Paper* COM(2001)582.
- GRESIK, T.A. (2001),
“The taxing task of taxing transnationals”, *Journal of Economic Literature* Vol. 39, September.
- GRUBERT, H. (1998),
“Taxes and the division of foreign operating income among royalties, interests, dividends and retained earnings”, *Journal of Public Economics* 68.
- GRUBERT, H. (2001),
“Enacting dividend exemption and tax revenue”, *National Tax Journal* Vol. 54/4.

- GRUBERT, H. and J. MUTTI (1991),
“Taxes, tariffs and transfer pricing in multinational corporate decision making”, *Review of Economics and Statistics* 73/2.
- HARRIS, D.G (1993),
“The impact of US tax law revision on multinational corporations’ capital location and income shifting decisions”, *Journal of Accounting Research* 31.
- HINES, J.R and G. HUBBARD (1990),
“Coming home to America: dividend repatriations by US multinationals”, in *Taxation in the Global Economy*, edited by A. Razin and J. Slemrod, Chicago: University Press.
- HINES, J.R. and E.M. RICE (1994),
“Fiscal paradise: foreign tax heavens and American business”, *Quarterly Journal of Economics* 109/1.
- INTERNATIONAL BUREAU OF FISCAL DOCUMENTATION (various years),
European Tax Handbook, Amsterdam.
- KING, M.A. and D. FULLERTON (1984),
The Taxation of Income From Capital: A Comparative Study of the United States, the United Kingdom, Sweden and West Germany, University of Chicago Press.
- KPMG (1998),
Taxfacts.
- MENDOZA, E.G., A. RAZIN and L.L. TESAR (1994),
Effective tax rates in macroeconomics: cross-country estimates of tax rates on factor incomes and consumption, *NBER working paper No. 4864*.
- OECD (1991),
Taxing Profits in a Global Economy, Paris.
- OECD (1995),
Transfer Pricing Guidelines for Multinational Enterprises and Tax administrations, Paris.
- OECD (various years),
OECD Tax Databases.
- PAPKE, L.E (1991),
“Interstate business tax differentials and new firm location: evidence from panel data”, *Journal of Public Economics* 45.
- PRICE WATERHOUSE (1997),
Corporate Taxes: A Worldwide Summary.
- ROUSSLANG, D.J. (1997),
“International income shifting by US multinational corporations”, *Applied Econometrics* 29.
- SLEMROD, J.(1990),
“Tax effects on foreign direct investment in the United States: Evidence from a cross-country

comparison”, In *Taxation in the Global Economy*, edited by A. Razin and J. Slemrod, Chicago, University of Chicago Press.

SWENSON, D.L. (1994),
“The impact of U.S. tax reform on foreign direct investment in the United States”, *Journal of Public Economics* 54/2.

WEICHENRIEDER, A. (1996),
“Fighting international tax avoidance: the case of Germany”, *Fiscal Studies* 17.

WILSON, J.D. (1991),
“Tax competition with interregional differences in factor endowments”, *Regional Science and Urban Economics* 21.

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