Final Author's Draft, submitted to Critical Perspectives on Accounting, published in 2005

Where's the harm in tax competition? Lessons from US multinationals in Ireland

Sheila Killian

Kemmy Business School, University of Limerick, Ireland

Abstract

The term "harmful tax competition" has become endemic. It is taken as a tautology that competition among nations for the favors of multinational companies, using their tax systems as bait, is harmful. This is a view held even by those who believe competition to be an inherently good thing in most other areas of business. However, the nature of the harm is rarely analyzed, nor are the parties most harmed identified. This paper attempts to redress the balance. Using the case of technology-based US multinationals located in Ireland, it analyses the benefits and hazards to major stakeholders of tax rules that encourage multinationals to locate part of their operation offshore.

I argue that tax competition, even that not considered harmful by the OECD, can damage not only the home country of the emigrating multinational, but also the host country gaining the investment, local communities and the environment.
© 2005 Published by Elsevier Ltd.

Keywords: Tax competition; Multinational; Double tax treaty; Stakeholders; Nation state; OECD; Ireland; Tax haven; Transfer pricing; Power

1. Introduction

Shackelford and Shevlin (2001), in a comprehensive review of empirical tax research in accounting, reduced the literature so far to three questions: Do taxes matter? If not, why not? If so, how much?

The first question is critical. If taxes do not matter, then any tax competition between nations for the attention of multinational companies is irrelevant and potentially harmless.

E-mail address: sheila.killian@ul.ie.

This issue has mainly been addressed in previous studies by exploring the idea of tax neutrality—the design of a tax system that will not affect taxpayers' choices. Arguably, though, it should go further. In a non-neutral system, one designed to encourage taxpayers to take certain actions there is always the possibility that taxpayers will not respond as expected to incentives. Even where the tax system is neutral, the presence of taxation may in itself influence behavior in some way. There is, for example, anecdotal evidence that many taxpayers prefer to pay fees to tax advisors than taxes to government.

If taxes do influence the location choice of multinationals, then the third question becomes important. How much do the tax policies matter, for the economies concerned, and the major stakeholders of the business, employees, local communities, shareholders and governments in home and host countries? Do the home and host countries' tax systems interact to produce a range of incentives, planned or unintended? Are these policies coordinated, or are there rogue tax states producing policies perceived to be in their own best interest, at the expense of more civic-minded, less competitive nations? Is there, in fact, harmful tax competition?

And if there is tax competition of some sort between countries, whom does it harm? Are there benefits as well as hazards for stakeholders in a world where multinational businesses can move freely from one jurisdiction to another? What impact does this mobility have on those connected to the companies concerned? What, in short, are the policy implications?

Research into these questions feeds into a number of debates. Answers are essential for future policy decisions, Rawlings (2005) makes the case that for effective multilateral policies to be developed, it is important to establish whether tax competition exacerbates or curtails the inequalities of globalization. Tax competition also speaks to the wider issues of social conflict, as defined by Tinker and Neimark (1987) to include struggle between nations for drivers of economic success. War on Want (2003) considers research on the relative benefits and hazards of engaging in tax competition to be essential in tackling world poverty.

The paper uses the case of US investment in Ireland, in technology-based industry, to throw light on the relationships between the actors affected by tax competition. The choice was a considered one for two main reasons. Ireland is arguably one of the most successful of the tax competing nations, and technology is a clean, high-tech industry with few attending environmental problems. Ireland and the US enjoy good diplomatic ties, the tax treaty between the two countries is uncontested, and there are few issues of conflict between the two revenue services. As such, the case centres on perhaps the least contentious of all relationships between home and host country, the best possible set of circumstances for tax competition to be seen as a good thing for all concerned. Harmful effects that surface in this "best case scenario" are likely to generalize to less symbiotic relationships between home and host countries.

Secondly, where a multinational firm has subsidiaries overseas, the complex interaction of the tax systems of the home and host countries, perhaps channeled through a third jurisdiction to avail of a wider network of double tax treaties, is difficult, if not impossible, to model using publicly available company accounts data. However, the set of incentives placed on offer by a single jurisdiction, such as Ireland is easier to understand, particularly in relation to a single source of investment, such as the US.

The paper is structured as follows: first, the concept of tax neutrality is briefly explored, and the previous literature on impact of tax on the decisions of multinational

and transnational enterprises is summarized. Next the idea of harmful tax competition is discussed. The case of Ireland and its success in attracting US technology-based multinationals is used to illustrate these ideas, so the background to the Irish economy is briefly presented, the strategy of attracting multinationals described. Next the benefits and hazards for the major stakeholders of multinational responses to tax are outlined, and the paper concludes by drawing inferences about the harmful nature of tax competition, and tentatively exploring the issues of power and responsibility around the design of a tax system in the presence of tax competition.

1.1. Tax neutrality

Tax neutrality is the idea that the tax system should not distort the choices that people are already making about how to live their lives. Proponents of tax neutrality would argue not alone that taxes do not matter for human behavior, but also that they should not. Tax neutrality is often cited as a goal of reform legislation, yet tax systems are rarely neutral.[1] Governments continue to use the tax system, not only as a source of revenue, but also as a tool to influence taxpayer behavior, despite the associated costs. Scholes and Wolfson (1992, p. 4) identified three non-neutral aims in the design of a tax system: wealth redistribution, provision of infrastructure and incentive effects.

There is ample anecdotal evidence that taxation influences corporate financial decision-making, although the degree of planning involved is unclear. Certainly the professional journals of tax advisors and practitioners contain regular articles on tax-planning opportunities that may be of value to clients, which indicate that tax is a factor in decision-making. Valles (1985, p. 287) describes taxes as an inseparable part of financial management. McCutchen (1993) is also adamant that tax is a factor that must be considered by management for most decisions. He quotes extensively from strategic management theorists, arguing that organizations will change their strategy in response to changes in their fiscal environment. Robinson (2000), writing of his time as Paymaster General in the UK Treasury, describes how policy was formed on the assumption that firms would seek to manage their affairs to minimize taxation. Assessing the potential yield from a windfall tax on utilities introduced in 1997, he writes that some options were rejected because of the risk that "companies would be tempted into financial manipulation" (Robinson, 2000, p. 71).

Nevertheless, Chirinko (1992) in a comment on US tax reform legislation, questions whether the introduction of tax incentives motivates managers to take the action desired by government. Similarly, Scholes and Wolfson (1992, p. 221) note that tax incentives can have a negative, or unexpected effect. They analyze the effect of tax incentives on the growth in Employee Stock Ownership Plans (ESOPs) in 1989. They find that "The case is very weak for tax provisions being the primary motivation in establishing an ESOP".

The difficulty with this area of research is that data may be clouded by non-tax factors, as noted by Kern (1994, p. 248). As well as clouding empirical results, on-tax factors may also cause certain firms to be less motivated by tax changes and incentives. Shackelford (1996, p. 246) finds that regulated industries in particular are less responsive to tax incentives.

[1] See (Mintz, 1996, p. 41) for a discussion, and Norregaard and Owens (1992) for comment on this trend.

However, it seems clear that taxes have the potential to affect both personal and corporate behavior. What is less clear is whether or not they can overcome the competing effects of non-tax influences.

There is also the question of which taxes should motivate corporate behavior. In particular, do companies only respond to corporate taxes, or can shareholder-level taxes have an impact? Since shareholders have the residual claim to corporate wealth, and control the remuneration of management, one might expect rational managers endeavor to minimize the aggregate tax liability of firm and shareholder. However, there is only limited evidence that shareholder-level taxes have anything approaching the influence on behavior of taxes imposed directly on the firm.

It is also unclear whether responses to tax changes are permanent or transitory. Particularly in the areas of investment, or earnings management, it may be that responses to incentives represent short-term opportunism, rather than long-term changes in behavior.

In summary, the literature shows that tax systems are rarely neutral in design, and never neutral in effect. This suggests that tax competition is likely to have real impact. It has also been established that corporate-level taxes will influence corporate decisions. The literature also indicates that it is difficult to design a tax to achieve a particular effect, since unintended consequences are at least as pervasive as the predicted responses to a tax break. This again highlights the importance of measuring the actual, rather than intended impact of tax competition on local communities and the environment.

1.2. Taxes and multinationals

In a way, it is a nonsense to talk about tax affecting "the behavior of multinationals", as though there was such a thing as a thinking, feeling multinational company, capable of making decisions, or having an observable behavior to which some behavioral psychology might be applied. Ultimately, all decisions about corporate action or inaction are made by individuals in the employ of the firm, with various relationships to the shareholders and directors, and a correspondingly varied set of public and personal motivations. Taking this agency perspective to its logical extreme, it is the impact of tax on the behavior of individuals that will tell us most about the response of firms to taxes.

However, the literature on tax and individual behavior has focused on the impact of capital gains tax on trading activity,[2] and to a lesser extent on income tax changes.[3] Many individuals are on salary, or other fixed income, which limits the planning opportunities available to them. They may also fall below the income levels needed to justify engagement of a tax consultant. Most research concludes, as articulated by Sumner (1991, p. 9) is that the personal sector is limited by current income. The literature has not found that individuals are indifferent to tax changes, but that they may lack the knowledge, resources or flexibility to minimize their personal taxes.

Since the actions of corporations can have a greater proportional effect on local economies, wage earners and the environment, the impact of taxes on the actions taken

[2] For example, studies see Erikson and Maydew (1998), Guenther and Willenborg (1999), Griffiths and White (1993).

[3] For example Schaafsma (1992) or Blundel (1995).

by companies is, in any case, more pertinent. The literature shows that the greatest tax influence on corporate action is corporate tax, rather than taxes levied at a shareholder or employee level. It is sometimes contended[4] that corporate taxes are irrelevant, since they are not ultimately borne by the firm. The idea is that the costs will be passed on to the individuals contracting with the company, so that shareholders may receive a lower return on their investment, employees may be paid less, or consumers may pay more for the product. Since the costs of corporate tax are thus borne by shareholders, employees and consumers rather than by corporations, economists subscribing to this view assume that corporate taxes can, in themselves, have no impact.

There is, however, another party to be considered, and that is the taxing authority itself. Before passing on costs to individual stakeholders, financial managers in the employ of the firm will take action to minimize the share of profits going to the taxing authority in the form of corporate taxes. This could affect stakeholders far more profoundly than the simple passing on of costs. At the extreme, because of the interaction of corporate taxes in different jurisdictions, multinational companies may relocate all of part of their facilities, which in turn could cause shareholders to receive a more or a less tax-efficient return on their investment, employees to be laid off and hired, or consumers to be receive a different-quality product.

Relocation is not the only option available to multinational and transnational enterprises. One obvious action to be taken in response to changes in tax rates is to manage earnings levels across accounting periods to minimize the tax liability of the firm through time. When tax rates are known to be in decline, firms are motivated to decelerate the recognition of income. This phenomenon, often called earnings management or income smoothing has been extensively studied through the late 1980s and1990s, particularly in the context of the US Tax Reform Act of 1986. There are, of course, significant non-tax costs associated with this tactic. They include the financing and other problems associated with reducing reported profit, the logistics of moving income and expense, damage to goodwill and efficiency of delays in shipping and invoicing; risk of tax audit and agency problems associated with managerial compensation based on profit.[5]

In spite of these factors, there is evidence that earnings management occurs as a direct result of tax changes. In study typical of the genre, Scholes et al. (1992)[6] look at the effect on the profit figures of US firms of the 1986 Tax Reform Act, and successfully relate the degree of earnings management to the percentage tax saving that would result from deferral. A range of similar studies[7] confirms that firms engage in inter-temporal earnings management in response to tax rate changes. Nevertheless, the literature is unclear on which companies react most, or the methods used.

Another, perhaps less costly form of earnings management, and one only available to multinationals is geographical earnings management. Most obviously, multinational firms may transfer income rather than production from a highly taxed location to a tax-favored one. Klassen et al. (1993) find that larger, more global firms are more likely to transfer income

[4] See Mintz (1996) for an example.
[5] Scholes et al (1992, p. 164).
[6] As extended and confirmed by Childs (1994).
[7] Such as Boynton et al. (1992) and Guenther (1994).

between different tax jurisdictions in response to local tax rate changes, while smaller, more locally cantered companies are less likely to do so. Companies within the same group are not generally subject to identical tax rules, by reason of geographic location, organizational form, or tax loss carry-forwards. This often creates scope to reduce the overall group tax liabilities by means of inter-group charges.[8] As a result, taxing authorities carefully monitor the pricing structure on any intra-group transfers.

Brown Gianni (1997) sets out a comprehensive list of circumstances in which transfer pricing may be used to manage the tax liabilities of a group of companies. These include shared facilities, transfer of assets, intra-group services, loans, leases, licenses and royalties. With increasing globalization, most jurisdictions introduced specific anti-avoidance regulations in the last fifteen years to counter aggressive use of transfer pricing in tax planning. The relevant US legislation, Code Section 482 has roots as far back as 1921. Bonfiglio (1995) highlights the concern of taxing authorities in this area. He writes:

> The IRS has made it clear in the final regulations that from its perspective, intercompany pricing is a tax determination, not a financial or a business decision. (Bonfiglio, 1995, p. 13)

Because intra-group prices are not generally explicitly reported outside the group, there is relatively little empirical work in this area. What evidence there is broadly supports the use by multinational firms of transfer pricing to minimize the overall tax liability of the group. In a way, this facility open only to multinationals, acts as an incentive to trans-national firms to locate in more than one overseas location, in order to increase flexibility in tax planning.

As well as transferring some income from different tax jurisdictions, multinational companies are also free to relocate facilities. This is not a new phenomenon. Valles (1985) cites a number of examples of aggressive location planning by US firms. They include US companies' response to tax incentives to locate in Puerto Rico, and investment in the Euro-dollar markets by Irish subsidiaries of US firms. While inter-temporal and geographical earnings management can be difficult to detect, hidden in the management accounting system of the firm, a geographical relocation is always clearly observable, and usually has a more obvious impact on employees and the local community than other tax responses. The open question is, what motivates these shifts of facilities across borders?

Multinational firms are well placed to manage their tax liabilities, so arguably, the tax rate in a single jurisdiction is less important in their decision-making than the impact of a relocation on the overall profitability of the group. Norregaard and Owens (1992) identify significant non-tax elements for global firms, including the economic outlook in various markets, the cost of capital, the profitability of investments, the availability of finance and government grants and the quality of public infrastructure. To this list could reasonably be added political risk, cultural and language differences, logistical considerations and skill requirements. Norregaard and Owens (1992) contend that while such factors may be more important than taxation in the short run, tax still matters for location decisions. Devereux et al. (2002) also find that the tax rate on offer by a particular country to be the biggest influence

[8] See Dennis (1997) for a practical illustration of transfer pricing and Yancey and Cravens (1998) for a description of other multinational tax issues.

on the decision to locate there, and that multinationals and transnationals do complete on tax rates.

In summary, there is evidence that multinational firms may manage earnings, set transfer prices, or relocate facilities in response to tax changes and incentives. The impact that these actions have on the environment in which they operate, and the jurisdiction they choose to vacate, has not yet been extensively studied.

1.3. Harmful tax competition

A view can be taken that all competition is healthy, including tax competition.[9] Even the OECD in its briefing note to "The OECD's project on harmful tax practices says, "*the starting point for the project is that tax competition is good*". This begs the question why the term "tax competition" is so often prefaced by the word "harmful".

Generally competition is considered to be a good thing when and if it benefits consumers by triggering improvement in efficiency and quality. This will only happen when consumers have the opportunity to discriminate between efficient and less-efficient providers of a good or service, thus rewarding the efficient, creating a Darwinian improvement in the overall industry. This can lead, for example, to a commodity, such as bread being provided to the public at the most economically efficient price. If you apply this logic to tax systems, the key underlying assumption has to be that taxpayers, citizens, those dependent on the welfare of the country, are as mobile and free to shop around for a suitable government or country as customers in the market for bread. This is patently not the case. Given a dependent, non-mobile population, it is clear that tax competition should not, in a knee-jerk reaction, be labeled helpful, simply because it is competition.

In fact most tax competition is labeled, on what appears to be a knee-jerk basis, as harmful. The brand of "tax haven" is not sought after. On some level, to compete for investment using your tax system as bait is considered not sporting. Many countries offering a suite of incentives for foreign investment are internationally categorized as tax havens, and this label makes repatriation of under-taxed profits from the host to the home country problematic. Tax havens are unable to sustain a network of bilateral tax treaties. This generally means that profits taxed in a tax haven at a low rate trigger home-country taxes on repatriation, while repatriation of previously taxed profits from a non-haven country are relatively free of home-country tax consequences.

The label of tax haven can also induce more widespread international rejection. Christensen (2003) claims that tax havens are only used to obtain an unfair tax advantage, for money laundering or for tax evasion. Mitchell et al. (2002) put it even more bluntly, entitling the opening chapter of their monograph "Tax havens damage people".

For a system to be described as a tax haven, four conditions must apply[10]:

(1) a low or zero rate of tax applied to profits;
(2) a lack of transparency;

[9] For an articulation of this perspective, see http://www.freedomandprosperity.org.
[10] From OECD's project on harmful tax practices, available online at http://www.oecd.org/ctp.

(3) a lack of effective exchange of information; and
(4) either no real economic activity, or the ring fencing of the low tax rate to target firms.

Condition four describes a situation where a country offers a low tax rate only to targeted inward investment, and charges a higher one to domestic business. In this case, it is effectively preserving the revenue stream from its own domestic tax base, while sniping at the revenue streams of its neighbors—considered by OECD to be a harmful activity. A low rate in itself is a necessary, but not sufficient condition for a tax haven.

There are observable general trends in taxation policy, in part driven by competition on the rate applied to profits. Christensen et al. (2004) argue that national governments are driven to increase regressive taxes on labor, simply because it is less mobile than capital,[11] and an easier target for revenue in a world of tax competition. According to the European Environment Agency,[12] in Europe at present, labor taxes are increasing, capital taxes are falling, and environmental tax revenue is relatively stable, while at the same time "green tax reforms" are being introduced in several European countries in an effort to use the new stream of revenue to reduce labor taxes.

In this context, perhaps the most difficult decision to be made is whether to "go it alone" in terms of taxation, or to swing in behind a regional strategy. Globalization has eroded the autonomy of the nation state in many ways, and tax competition is one of the new challenges to be faced in a world of mobile capital.

1.4. The Irish strategy

Ireland's economy went through a boom period in the late 1990s and early 2000s, earning the nickname, *the Celtic Tiger*. The growth rates achieved were largely due to the success of the Irish government in attracting foreign direct investment, mostly from the US. Ireland is the largest exporter of computer software in the world,[13] almost all of it produced in the Irish subsidiaries of American multinational and transnational firms.

This success did not come naturally. Ireland is an island, located on the periphery of Europe, not well endowed with natural resources, and up to the 1960s was largely dependent on agriculture and fishing. In the late 1960s and 1970s, a concerted effort was made to bring manufacturing industry to Ireland. In the 1980s, a decision was made to concentrate the efforts of the industrial development authority on attracting high-value industries, mainly software and pharmaceuticals.[14]

Many non-tax factors combine to make Ireland an attractive location for a US subsidiary, particularly one producing high-tech product, such as computer hardware or software. It is located in the EU, which ensures that all goods produced in Ireland can be freely marketed throughout this region. It has a large, highly educated and English-speaking workforce. Government grants are available for employee training and in some cases for capital investment. Infrastructure is reasonably good, cultural differences between Ireland and the US

[11] A view echoed by Avi-Yonah (2001).
[12] The European Environment Agency, "Environmental taxes—Implementation and Environmental Effective- ness" (1996) Environmental issue report no. 1 at page 3.
[13] Source: UK trade an investment report in the software industry; Enterprise Ireland, etc.
[14] See http://www.nsd.ie/htm/ssii/back.htm for a good background to the software industry in Ireland.

are minimal and manageable, and the time difference is lower than in most other European countries.

All of these factors are shared with countries, such as Scotland, England or Wales. What made Ireland unique, and led directly to the successful marketing of the country as a location for foreign direct investment, was the winning combination of a low corporate tax rate, and an extensive network of over forty favorable double tax treaties.

Ireland's original strategy was to refrain completely from taxing foreign investment,[15] to the extent that the goods produced there were exported rather than sold locally. This export sales relief came to an end on 5 April 1990, but was followed immediately by a wide application of manufacturing relief, whereby manufacturing profits were subject to Irish tax at the reduced rate of 10%. Manufacturing is not defined in Irish tax legislation, so a series of legal challenges combined to provide the precedent that where an irreversible process produced a commercially different product, the end result was deemed to have been manufactured in Ireland. This led to the rather ridiculous outcome of gas oil marked with a red dye for sale at reduced excise rates to commercial vehicles, basic computer components assembled from imported parts, and bananas artificially ripened in fruit warehouses being deemed to be manufactured in Ireland. The 10% rate also applied to companies operating in a tax free zone around Shannon airport, and to financial services companies in a Financial Services Centre in Dublin (IFSC), both schemes requiring licensing from the government.

This situation could not be sustained, falling foul, as it did, of many of the conditions identified in OECD (1998) publication "Guidelines on Harmful Preferential Tax Regimes", and a 1997 EU "Code of Conduct on Business Taxation" which Ireland helped to draft. The various 10% tax reliefs were due for renewal between 2000 and 2010. In the late 1990s, they came under attack from the EU, led by Germany, which had lost considerable revenue to the IFSC, and the UK, which was skeptical about manufacturing relief. There was considerable political disquiet in Ireland at the possible loss of the low rate. Fitzgerald (1997) writing on the decision of companies to locate in the financial services centre in Dublin, cites the tax rate as an immediate concern. He quotes an industry representative as saying:

> At an effective [tax] rate of 20%, a lot of business would be killed. A rate in excess of 15% would cause projects to walk, or never come in the first place. (Fitzgerald, 1997, p. 30)

It was critical for Ireland to keep rates low, in order to retain the foreign investment so carefully built up over the previous decades. It was equally important to avoid being labeled as a tax haven, becoming an international pariah and damaging the valuable double tax treaty network.

The response was a two-part strategy. The tax rate on manufacturing firms and firms located in the Shannon Free Zone and the IFSC was increased marginally, to $12\frac{1}{2}$ %. This was not enough to satisfy the EU in itself. The innovation lay in extending this low rate to trading income generated within the state by all firms, manufacturing or otherwise. This was a significant departure form the previous policy of offering an attractive regime to foreign multinationals, and a more "normal" set of tax rules to indigenous industry. As a result of these moves, the mainstream corporate tax rate in Ireland is currently $12\frac{1}{2}$%.

[15] A policy described by Avi-Yonah (2001) as "the standard advice by economists to small open economies".

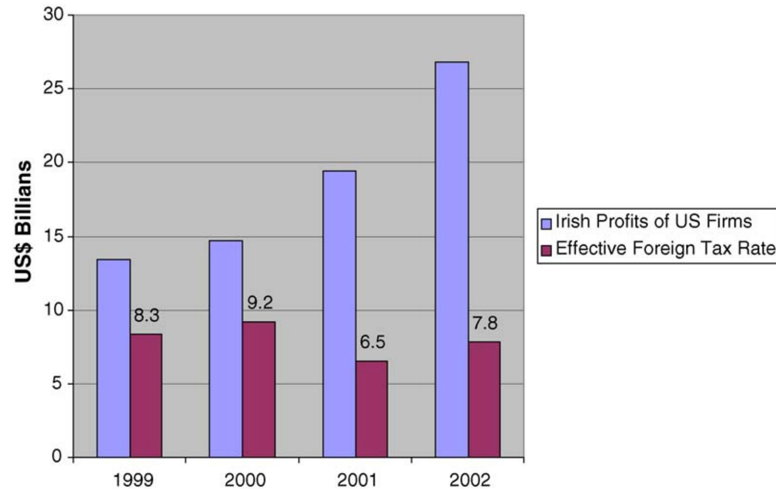

Fig. 1. Profits of US multinationals in Ireland. Source: Sullivan (2004).

By offering the same low rate to all enterprises local and multinational, Ireland has slipped past the ring-fencing test for low tax rates cited in the OECD's project on harmful tax practices, and retained international status as a tax treaty partner. It is a difficult dance. While the EU accepted the new universal rate of $12\frac{1}{2}\%$ on its introduction, the UK, in 2002, relisted Ireland as a tax haven for the purposes of its Controlled Foreign Company (CFC) legislation. This means that like Bermuda, the Bahamas, the Channel Islands and the Isle of Man, Ireland is considered a "low tax jurisdiction", so Irish subsidiaries of UK companies will have to satisfy a series of tests if their Irish profits are not to be charged to UK tax on repatriation.[16] Fergal O'Rourke, tax partner with Price WaterHouse Coopers in Ireland, typified the Irish response to the UK move, saying "We are a legitimate low-tax jurisdiction, not a tax haven, and we need to challenge any country that seeks to paint us as being anywhere near the wrong side of that divide".[17]

Despite playing close to the wind on tax haven legislation, overall the strategy has been very successful. By retaining status as a non tax haven, Ireland ensures that profits can be repatriated to the US with minimal adverse tax consequences. Sullivan (2004)[18] reports Ireland to be the most profitable global location for US firms. Fig. 1, from that article, shows the pre-tax profits generated by US multinationals in Ireland, as well as the effective foreign rate of tax paid, in each year from 1999 to 2002.

The trend in Fig. 1 shows profits rising with low, but not linearly related tax rates. This could, on a surface level, be interpreted as meaning that growth of US multinationals in Ireland is independent of tax. An alternative explanation is that once the effective tax rate falls below a group-specific threshold, transfer pricing kicks in, and profits flow into the low-tax jurisdiction at an increasing rate.

[16] See Short and Craig (2002) for a fuller explanation.

[17] Reported in the Irish Independent, June 2002.

[18] Who incidentally describes Ireland as a tax haven in the cited article.

An important sector currently targeted for FDI from the US is information and communications technology (ICT). Ireland's Industrial Development Authority reports that seven of the worlds top ten ICT companies have a substantial base in Ireland.[19] As mentioned earlier, Ireland is the world's leading exporter of software. At the end of 2003, the Irish software industry comprised about 900 firms, of which almost 85% were indigenous Irish firms. However, while the exports totaled almost D 14 billion in the year, Irish firms accounted for less than 8% of that figure,[20] and only 9% of the total tax revenue generated in the year. Clearly, the industry remains heavily dependent on attracting and retaining multinationals.

The two largest exporters of ICTs from Ireland are, respectively, Dell and Intel. Dell was founded in 1984, and floated on the stock market in 1988. It opened its manufacturing plant in Limerick, a mid-sized city in the South West of Ireland in 1990. This was the company's first non-US plant. Now the firm has a presence in 33 countries, with six manufacturing plants in five countries including the US. The company employs about 46,000 worldwide, of whom just under half are within the US.

Dell's exports amount to almost 8% of all Irish exports, making the company Ireland's No. 1 exporter (source: Irish Exporter's Association—2004). The company is involved in a wide range of community programs, based around local sports clubs and community based organizations. It operates a free recycling scheme for computer parts, supplies high-quality equipment to many schools, enabling one local second-level school to supply all its students with laptops. It is regarded as a good employer in the Limerick area, particularly welcomed when it set up in the wake of the closure of a large Wang Computers plant, employing many of the recently redundant, formerly employed by the Japanese multinational. Dell now employs about 5000 people in Limerick.

Intel is the second largest exporter of ICTS from Ireland. Avi-Yonah (2001) reports that as of 2001 Intel had operations in more than 30 countries, with major manufacturing plants in the US, Puerto Rico, China, Malaysia, the Philippines, Israel and Ireland. Four years later, the company's website in 2005[21] variously reports a presence in 45–48 countries, with 11 manufacturing plants and six assembly and test facilities, employing a total of 85,000 people.

Intel established in Ireland in 1989, and now employs approximately 4700 people in its plant in Leixlip, a small town near Dublin and a smaller number in Shannon. It is not an exaggeration to say that the presence of Intel dominates the village. In 1998, the town's largest new property development was to be named Cyber Plains, until some locals objected and requested a name more sensitive to local history.[22] At the time of writing, Intel was planning a $2 billion investment to further expand employment. The company makes contributions to local charities, facilitates outreach activities by employees, kits out local schools and clubs with computer equipment, and is widely welcomed by the local community. There are very few murmurs of dissent.[23]

---

[19] Source: http://www.ida.ie.

[20] Estimated by author from figures from Enterprise Ireland, available online at http://www.nsd.ie/htm/ssii/stat.htm.

[21] Accessed on 14 June 2005.

[22] The estate is now called Glen Easton.

[23] One notable exception is a growth in health concerns, specifically focussing on breast cancer, the incidence of which has risen alarmingly in the area in the last nine years. At the time of writing a study on this Leixlip effect

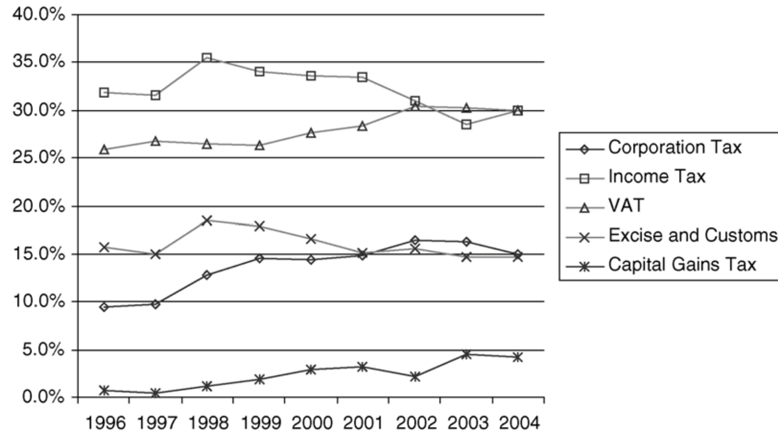

Fig. 2. Tax take as a percentage of overall Irish government revenue, 1996–2004. Derived from Revenue (2004), Revenue (2003), Revenue (2001), Revenue (1999) and Revenue (1997).

Dell's investment in Limerick is enormously important to the local economy, but represents just over 10% of the firm's total worldwide employment. Leixlip largely revolves around Intel, yet to Intel, Leixlip is the location of just 6% of its employees, just one of 11 manufacturing plants worldwide. The company has invested over D 5 billion in the plant, a staggering amount for this area, but a figure that represents less than 4% of the market capitalization of the firm. These relationships between multinational firm and local community cannot realistically be described as symbiotic, or as mutual dependence. This is not a meeting of equals.

Irish host communities are clearly dependent on the continued presence of multinationals, which support employment, infrastructure, community projects, schools and other needs formerly met by government. The multinationals are now fulfilling part of the social contract between taxpayer/citizen and government, in return for low rates of direct taxes. In effect, the government has outsourced part of its social contract to the multinational firms.

The impact on Irish life of this outsourcing is difficult to quantify. Certainly the fact that all firms now pay the same low rate has eliminated the previously regressive aspect of business taxation, with the 2003 statistical report from the Revenue Commissioners[24] showing that the average corporate tax paid on almost all ranges of income is about 10% (Revenue, 2003a). On a basic level, as a percentage of GNP, the overall tax take fell from 40% in 1986 to 33.7% in 2002. More interestingly, the internal makeup of the tax take also changed, as shown in Fig. 2.

Income tax and excise duties fell in relative terms, while the take from Corporation Tax rose. Arguably, this is a progressive policy, reducing the burden on individuals. However, Value Added Tax also increased sharply. This is an indirect tax on spending, which does not represent a cost to business as it is passed on in its entirety to customers. As such, it places

---

is being undertaken by a Dublin hospital.

[24] Ireland's taxing authority.

a disproportionate burden on the poor. The take from Capital Gains Tax, mainly levied on increases in wealth, grew slightly but remained very low relative to Income Tax and Value Added Tax. Overall the effect is regressive, as exemplified by Brennock (2005) reporting in March 2005 that twenty-nine individuals with reported Irish income of more than a half a million Euro paid no tax at all in Ireland. While the take from Corporation Tax grew steadily up to 2002, it has declined slightly since then, perhaps reflecting leaner times for the US multinationals that make up so much of Ireland's corporation tax base, and illustrating the impact of Ireland's dependence on the health of the US economy.

Consistent with this, in May 2005, a National Economic and Social Council report found that inequality in Ireland had grown in parallel with wealth, so that the benefit of inward investment was becoming concentrated in a relatively small group, while those at the margins of society were not catered for as well by government as they would have expected in the pre-boom Ireland (NESC, 2005). The NESC report catalogues increased social spending by the Irish government over the past fifteen years. The balance of welfare payments has changed, with a far lower proportion going on unemployment assistance (16.2% of expenditure in 2002 as against 51.3% in 1993) and a higher proportion addressing newer social issues, such as single parent families (26.5% in 2002 as against 10.9% in 1993). The overall percentage of the population in receipt of social assistance form the government fell from 24.6% in 1993 to 19.8% in 2002. This is partly due to increased employment and prosperity, but also reflects a move away from supporting the more marginalized in society.

The crises in Ireland centre on those who have little or no connections to multinationals firms. The health service is widely acknowledged to be in crisis,[25] particularly care of the elderly which has been the subject of two recent scandals, with retrospective legislation hastily introduced earlier this year to prevent victims of overcharging by state-run nursing homes seeking refunds. Ireland has a wide network of state schools, and apart from books, exams and some extra-curricular activities, education is free at primary and second level. Spending on education has declined as a percentage of GNP, but has increased in absolute per-learner terms due to smaller numbers at primary level. Despite this, and while noting that participation in education is good by international standards, the NESC report notes a lack of improvement in the relative achievement levels of socially disadvantaged children. According to the Combat Poverty Agency, one in fifteen children in Ireland live in consistent poverty, mostly in homes with no regular employment income. While consistent poverty levels have fallen in recent years, relative income poverty[26] has risen from 15.6% to 22% from 1994 to 2001. Homelessness continues to be a problem, with about a quarter of all homeless people being children.[27] Travelers, an indigenous ethnic minority in Ireland, remain firmly outside of the boom, still experiencing far lower employment than the rest of the population. They have a life expectancy more than ten years shorter than the general population, and traveler infants are more than twice as likely to die in their first year.[28]

---

[25] See numerous reports in the Irish Times at http://www.ireland.com or Nesc (2005, p. 89) for examples.

[26] The Combat Poverty Agency defines relative income poverty as having less than 60% of the average household income. For a further discussion see http://www.cpa.ie.

[27] Source: Combat Poverty Agency Factsheet.

[28] Source, Pavee Point factsheet, available online at http://www.paveepoint.ie.

Ireland is now one of the most successful economies in Europe, but social problems remain stubbornly persistent for those with no access to the benevolence of multinationals.

In the national parliament, the leader of the opposition, Enda Kenny questioned the government leader, Bertie Ahern[29] on this point, asking for his agreement that Ireland had become one of the world's most unequal countries despite our economic success. This agreement was unsurprisingly not forthcoming, but Mr. Ahern conceded that the report was useful, and that problems it highlights do exist (Dáil report, 2005). Without exception, these relate to the people outside of regular employment. With the welfare of the well-educated workforce entrusted to multinational firms at the cost of the tax system, the government is unwilling or unable to provide for the rest of society, the children, the elderly, the homeless and disadvantaged ethnic minorities. The main government party in Ireland has now been in power for twenty years. It may be that the rising tide of inward investment has created a moral hazard for government, allowing them to retain the support of the increasing middle classes without really having to govern, or to provide for the marginalized in society.

1.5. Impact on main players

So who are the stakeholders in this game of tax competition? Who are the players? Most obviously, we have the shareholders and employees of the corporations concerned, governments of the countries in which they choose to locate and the governments of the corporations' home countries. Secondly, we can see a potential impact on the government of those countries which lowered tax rates in a failed effort to attract them, service providers, both local and international, on suppliers and the supply chain management industry, on the communities in which the firms operate, their competitors at a local and international level, on consumers, customers and clients, and champions of the natural environment and wider society. This section takes each of these groups in turn and highlights the benefits and costs of tax competition for them.

For the home government, the obvious consequence of emigrating business is that tax revenues are lost. This damages their ability to deliver the social contract to tax payers and citizens in terms, for example, of healthcare, education and protection of the natural environment. Concern within the US at the building up of profit abroad, and the consequent loss of revenue to the US exchequer prompted the US Congress to pass a Corporate Tax Bill in October 2004, granting a partial amnesty to US multinationals, whereby a reduced rate of 5.25% would be levied on repatriation of deferred overseas earnings. At the time of writing it is difficult to assess the impact of this amnesty, but it is likely that while it will provide a short term boost to US firms' investment within the US, and a corresponding short-term dent on expansion plans overseas, the build-up of earnings in profitable locations, such as Ireland will continue.[30] As well as a loss of direct revenue, there is also a loss of income tax arising from the employment income. Where businesses relocate from dependent home-country communities, there is likely to be increased unemployment, putting a

[29] Bertie Ahern's formal title is Taoiseach.

[30] Commentators, such as Sullivan (2004) expect that in time, when overseas unremitted profits again reach a critical level, the multinational firms will successfully lobby for a second amnesty to allow further repatriation of profits.

strain on the welfare system of the home state. Collection of tax from the headquarters of the multinational becomes more costly and expensive, as foreign tax credits need to be calculated, and intra-group transactions monitored for transfer pricing irregularities. The only possible benefit to the home country would arise where the industry, which has relocated abroad, is an environmental or health hazard, and the home country is thus protected from harmful emissions etc. This is unlikely to be a serious consideration in the ICT industry moving from the US to Ireland, but may be more important in heavier industries locating in developing countries.

Nonetheless, the US, which has "lost" a great deal of tax revenue through tax competition, not least to Ireland, remains in favor of the underlying principal. In 2001, the US Treasury Secretary Paul O'Neill flagged the intention of the US government to remain outside of the OECD approach to harmful tax practice, saying "The United States does not support efforts to dictate to any country what its own tax rates or tax system should be, and will not participate in any initiative to harmonize world tax systems" (Treasury, 2001).

For the host government, the benefits are obvious. The government gains some revenue, even at low tax-rates, that would not otherwise have accrued. It also garners revenue from tax on the salaries of employees, and the profits of suppliers of goods and services, as well as Value Added Tax or sales taxes. The Irish Industrial Development Authority reports, for example, that

> Dell's significant value to the Irish economy, for the year ended January 2004, totaled over D 200 million, in salaries, purchase of raw material and services and its contribution to the exchequer. Source: www.ida.ie.

There is also reduced unemployment, which saves on welfare costs, and possible spillover effects,[31] whereby the local workforce will gain skills enabling them to set up their own firms. There are infrastructural advantages: the presence of a critical mass of multinational subsidiaries in an industry will support development of the services they need, in turn making it easier for both foreign and local firms to set up in the main industry.

There are also significant hazards for the host government. Most obviously, the introduction of a low corporate tax regime for all firms puts pressure on the system to raise revenue elsewhere, introducing the risk of a more regressive regime. Some more serious issues relate to the dependence that multinationals create, and the imbalance of power referred to above. If Intel were to withdraw from Leixlip, the impact on the local community would be immense. The impact on Intel, however, with ten other manufacturing plans around the globe, would be relatively slight. This means that as a multinational, such as Intel becomes more embedded, it acquires power in its negotiations with the Irish government, an effective erosion of the political power of the elected authorities. This was graphically illustrated by Smyth (2005) report that Intel announced it would "have to reassess the Republic's attractiveness for future investment" following the Irish government's failure to get EU clearance to grant-aid its expansion plans. This led the Irish government to engage in an intensive lobbying campaign to get the rules changed to allow it to give the grants, and ultimately to calls by the European Commission to radically overhaul the rules on state aid to industry, to

[31] Economists disagree on the degree of spillover in the Irish ICT sector, but Enterprise Ireland, the government body charged with nurturing domestic industry, argues that it is minimal.

prohibit government grants to such large multinationals.[32] Smyth (2005) estimates Ireland's direct grant aid to Intel since its establishment in Ireland at D 218 m.

There is also the question of adverse selection when multinationals consider coming to Ireland—the risk of the IDA supporting the wrong firms with incentives, only to lose the investment in a short time. On the other end of the scale, a low tax rate will reduce the value from those investments that would have come to Ireland even in the absence of tax incentives. There may be some expensive damage control in the immediate aftermath of the withdrawal of a multinational.[33] In a bid to enhance the tax advantages, the host country may also invest in inappropriate or underused infrastructure, such as advance factories, or the current range of digital parks being built by the Irish industrial development authority.

There are also potential behavioral hazards for the host country. Obvious tax benefits conferred on inward investment can lead to resentment from local taxpayers, leading to an increased risk of tax avoidance and evasion. This is less of a risk in Ireland now that the low rate has been extended to all incorporated businesses. There is an increased risk of corruption, with government officials effectively acting as gatekeepers to tax benefits which are lucrative to multinationals. And once a country gets involved in tax competition, there is an inevitable bidding war for the largest players, a race to the bottom in terms of tax rates.

Then there is the question of managing a relationship with a large and arguably more powerful multinational. This is not a new problem. Tinker and Neimark (1987) writing on GM notes that the "socially contradictory character of the relations between the state and private enterprise" is shaped by the efforts of the firm to manage the relationship with government to the advantage of what are perceived to be the major stakeholders.

Many of these hazards, and by definition none of the benefits are experienced by those countries that bid for, but fail to secure foreign investment. See Sharman (2005) for a discussion of the plight of South Pacific island nations that are unsuccessfully endeavoring to establish themselves as tax havens.[34] This is likely to be a particular problem for developing countries, which are forced to lower their tax rates to unsustainable levels to compete with the integrated packages of grants and low taxes on offer from more developed countries. Developing countries are rarely in a position to use capital grants to any significant degree, because of the up-front cost involved (Morisset and Pirnia, 2000).

For employees the benefits almost certainly outweigh the hazards. In general, multinational firms attracted to a low-tax and low-wage[35] economy offer training, good pay and conditions relative to local norms, the opportunity to travel and the sense of community obtained in a large firm. On the downside, the employment is more precarious than with smaller, more domestically centred firms, the skills obtained may not be transferable, and there is increasing dependence. The dependence issue is particularly pronounced in Ireland,

---

[32] See Staunton (2005a,b) for an account of the Irish efforts and EU response.

[33] For example, when redundancies in Digital Equipment in Galway led to public demands for accountability on incentives to multinationals, the government introduced a failed Seed Capital Scheme—a tax incentive for the recently unemployed to create indigenous technology-based companies.

[34] See also War on Want (2003) for a discussion of the impact of the "race to the bottom" on developing countries.

[35] Ireland's minimum wage rates have traditionally been higher than the US, but lower than most of the EU. This ranking has changed dramatically with the entry to the EU of many new countries in 2004. It remains, however, lower than much of Western Europe, and critically, just below the rate paid in the only English-speaking competitor for EU investment, the UK.

a culture in which it is the norm to borrow heavily to buy a home, the mortgage often secured on a couples two salaries from the same multinational.

For local communities the benefits also outweigh the costs. There is a flow of funds into the locality, increased infrastructure, opportunities for service providers and suppliers, the rejuvenation of depopulated centres with a knock-on effect on schools and local businesses, and in the case of most ICT subsidiaries of US multinationals, extensive community sponsorship. On the negative side, property prices tend to rise dramatically, sometimes placing local homes out of the reach of those not employed in the multinational, or giving rise more borrowing for homebuyers. If the business relocates out of the host country, the consequent

Table 1
Benefits and hazards to stakeholders of corporate tax competition

Stakeholder	Benefits	Hazards
Home Government	Possible export of environmental hazards	Loss of revenue Welfare cost of loss of employment Complexity of revenue collection Creation of tax avoidance culture
Host Government	Increased revenue unemployment Possible spillovers Creation of critical mass	Dependence on multinationals Reduced Adverse selection for initial incentives Need for damage-limitation legislation Investment in inappropriate infrastructure Erosion of political power Regressivity in tax system Creation of tax avoidance culture Loss of value from investment "Race to the bottom" Risk of corruption
Failed bidder		Investment in inappropriate infrastructure Erosion of political power Regressivity in tax system Creation of tax avoidance culture Race to the bottom Risk of corruption
Employees	Training Good pay and conditions Opportunity to travel Community of a large firm	More precarious employment Investment in non-transferable skills Institutionalization
Local community	Increased infrastructure Community-based sponsorship Opportunities for service industries Increased skill set in community	Increase in property prices High personal borrowing secured by employment Dependence Possible health and environmental risks
Shareholders	Less tax paid, greater retained earnings	Delayed dividends from profits overseas
Environment	Occasional environmental work by firm Flow of capital to developing countries	Location of high risk activities in low-standard locations Abandoned sites inadequately restored

collapse in property prices can cause significant hardship to mortgage holders. In some cases there may be increased health or environmental risks associated with the location nearby of a large manufacturing plant, although this is less of a consideration for a relatively clean industry, such as ICTs.

Shareholders generally enjoy the benefit of a lower corporate tax liability, meaning more residual retained earnings available for dividend payment. On the downside, there may be a delay in repatriating profits, leading to lower dividends in the short run, or the broader problems of free cash flow.

Taking a broader perspective, the flow of capital to less-developed tax-bidding countries can be a good thing, creating employment and spreading the benefit of prosperity. It can however lead to the concentration of high-risk activities in low-regulation locations. There are environmental issues around the need for the departing multinationals to adequately restore abandoned facilities.[36] Against this may be set the environmental projects taken on by multinationals as part of their community outreach work. For developing countries, the erosion of political power as multinationals become embedded can pose a significant threat to young democracies. This may be further exacerbated by a loss of credibility in the democratic process triggered by the reduced tax take, as suggested by Sikka and Hampton (2005), and may build on a loss of sovereignty to such supra-national entities as the World Bank, WTO, etc. as suggested by Tinker and Gray (2003). Finally, efforts to curb the harmful effects of tax competition may hit these countries hardest. Rawlings (2005) writing about offshore finance centres, notes that any regulation of tax havens has a disproportionate impact on developing countries.

Table 1 below summarizes the main advantages and disadvantages described above seven broad categories of stakeholders.

2. Conclusions

Tax systems in general are not neutral, and governments make widespread use of the tax system to influence taxpayer behavior. Even if a tax system exhibits ex ante neutrality, the stated aims of a tax system may not be met ex post, as regulations may have unintended consequences and taxpayers have an incentive to develop tax avoidance techniques. Not all taxpayers are in a position to respond to incentives. In particular, individual taxpayers have limited opportunities for tax planning. Within the limits of their income and liquidity, there is evidence that individuals attempt to minimize their personal tax burdens.

Tax influences corporate behavior, but the trade-off between tax incentives and non-tax considerations remains empirically elusive. There is strong anecdotal, but weak empirical evidence of transfer pricing and choice of location as tax avoidance techniques. This is an exploratory paper, intended only to provide an overview of issues around tax competition. More detailed studies would be welcome. Quantitative research into these areas is inhibited by the complexity of multinational tax arrangements, and the extensive anti-avoidance legislation covering non-commercial transfer pricing and the use of tax havens. The dazzling array of tax planning opportunities available to multinational firms makes large sample

[36] See Stoianoff and Kaidonis (2005) for a discussion of the role of tax in the rehabilitation of abandoned sites.

research into their tax responses very problematic. It is likely that a case-study approach based on particular jurisdictions will prove at least as informative.

A view can be taken that the government is a stakeholder in every business enterprise, taking its return in the form of taxes, just as shareholders, bondholders and employees take their return, respectively, in the form of dividends, interest and salaries. This gives government a dual mandate. As the stakeholder providing the firms with vital infrastructure, it needs to design a tax system to collect revenue from firms to meet this cost. As government of the wider community, it needs to ensure that the taxation system motivates firms to act in a community-minded manner, limiting the damage their activities cause to the environment, providing sound employment to dependent communities, pricing fairly for consumers. Many interest groups in society are concerned about tax policy, including politicians, revenue officials, tax practitioners, environmentalists, economists and other academics, and lobby groups representing citizens and taxpayers in various categories. In its capacity as guardian of the public interest, at the very least, government needs to ensure that the tax system does not inadvertently motivate behavior that is anti-social in some way to one or more of those groups. These government goals are often incongruent, and the ideal tax system to optimally meet the demands of a particular country depends on the specific circumstances prevailing in that jurisdiction.

In the old world of nation-states, having a discrete set of national tax systems made sense. This enabled government to collect revenue from those actors who used the resources of the country, to provide infrastructure and fulfill a social contract with citizens. However, such national legislation may not be able to cope with increased globalization, and free flows of capital and enterprise. One response of governments is to forego some revenue by lowering tax rates to attract multinational enterprises that they hope will provide salaries for employees, employment in spin-off industries, and a boost to the communities in which they operate. In doing so they are effectively outsourcing part of their social contract to the multinational firms. Outsourcing carries with it certain risks: a loss of control, questions about the quality and consistency of service, concerns about the continuity of supply and stability of price. All of these concerns apply to the outsourcing by government of their obligations to citizens.

It is difficult to recommend policy to counter tax competition, and the consequent shift of power from government to corporation. A unified approach to tax policy by countries competing for multinational investment seems unlikely in the absence of some externally imposed regulation from the OECD or WTO. The first question raised by Shackelford and Shevlin (2001), “Do taxes matter”? seems to have been addressed. Taxes clearly matter. The answer to the third question, “If so, how much”? remains empirically elusive. Perhaps a more interesting question should now be asked: “Given that tax competition can damage the environment and local communities, how should it be managed”?

Acknowledgment

I am grateful to participants at the Critical Perspectives on Accounting 2005 Conference for helpful feedback on an earlier version of this article. Any remaining errors remain the responsibility of the author.

References

Avi-Yonah, R. Globalization and tax competition: implications for developing countries, Instituto para la Integración de America Latina y el Caribe working paper; 2001.
Blundel R. Tax policy reform: why we need macroeconomics. Fiscal Stud 1995;16:3.
Bonfiglio J. Tax planning strategies for multinationals under the new transfer pricing regulations. Int Tax J 1995;214.
Boynton C, Dobbins P, Plesko G. Earnings management and the corporate alternative minimum tax. J Acc Res 1992;30(Suppl.).
Brennock, M. 29 of top earners again paid no tax. Irish Times, March 15, 2005.
Brown Gianni M. Transfer pricing penalties, a tougher standard. Pract Accountant 1997.
Childs, B. The impact of firm type on tax preference shifting in 1986. Purdue University Working Paper; 1994.
Chirinko R. Do tax incentives work? The real effects of the tax reform act: comment. Natl Tax J 1992;45.
Christensen J, Coleman P, Kapoor S. Tax avoidance, tax competition and globalization: making tax justice a focus for global activism. As presented to the Global Tax Workshop, Finland, 18–20 November 2004; 2004.
Christensen J. Tax havens and the age of unenlightened self-interest. Presented at the Association for Accountancy and Business Affairs, Westminster, March 2003.
Dáil report, Transcript of Taoiseach's Question Time, 30th May 2005.
Dennis, A. Mapping out a tax plan, J Acc 1997;184:3.
Devereux M, Lockwood B, Michael R. Do countries compete over corporate tax rates? Centre for Economic Policy Research working paper DP3400; 2002.
Erikson M, Maydew E. Implicit taxes in high dividend yield stocks. Acc Rev 1998;73:4.
Fitzgerald K. IFSC: is there life without tax breaks? Business Finance 1997.
Griffiths M, White R. Tax-induced trading and the turn-of-the-year anomaly: an intraday study. J Finance 1993;48:2.
Guenther D, Willenborg M. Capital gains tax rates and the cost of capital for small business: evidence from the IPO market. J Financial Econ 1999;53.
Guenther D. The relation between tax rates and pre-tax returns: direct evidence from the 1981 and 1986 tax rate reductions. J Acc Econ 1994;18:379–93.
Kern B. The redistribution of corporate plant and equipment as a result of the economic recovery tax act of 1981. J Acc Public Policy 1994;13.
Klassen K, Lang M, Wolfson M. Geographic income shifting by multinational corporations in response to tax rate changes. J Acc Res 1993;31(Suppl.).
McCutchen Jr W. Strategy changes as a response to alterations in tax policy. J Manage 1993;19:3.
Mintz J. The corporation tax: a survey. Fiscal Stud 1996;16:4.
Mitchell A, Sikka P, Christensen J, Morris O, Filling S. No accounting for tax havens. Assoc Acc Business Aff 2002.
Morisset J, Pirnia N. How tax policy and incentives affect foreign direct investment: a review, SSRN working paper 632579; 2000.
NESC, The Developmental Welfare State in Ireland, National Economic and Social Council report, May 2005.
Norregaard J, Owens J. Taxing profits in a global economy. OECD Observer 1992.
OECD, Guidelines on harmful preferential tax regimes, OECD; 1998.
Rawlings G. Mobile people, mobile capital and tax neutrality: sustaining a market for offshore finance centers. Acc Forum 2005;29(3):289–310.
Revenue, finance accounts: audited financial statements of the exchequer. Dublin: Irish Government Publications; 1997.
Revenue, finance accounts: audited financial statements of the exchequer. Dublin: Irish Government Publications; 1999.
Revenue, finance accounts: audited financial statements of the exchequer. Dublin: Irish Government Publications; 2001.
Revenue, finance accounts: audited financial statements of the exchequer. Dublin: Irish Government Publications; 2003.
Revenue, Office of the Revenue Commissioners Statistical Report. Dublin: Irish Government Publications; 2003.
Revenue, finance accounts: audited financial statements of the exchequer. Dublin: Irish Government Publications; 2004.

Robinson G. The unconventional minister: my life inside new labour, Penguin Group; 2000.
Schaafsma J. Forward shifting of the persona income tax by self-employed Canadian dentists. Can J Econ 1992;25:3.
Scholes M, Wolfson M. Taxes and Business Strategy. Prentice-Hall; 1992.
Scholes M, Wilson P, Wolfson M. Firms response to anticipated reductions in tax rates: Tax Reform Act 1986. J Acc Res 1992;30(Suppl.).
Sharman JC. South Pacific tax havens: from leaders in the race to the bottom to laggards in the race to the top? Acc Forum 2005;29(3):311–23.
Sikka P, Hampton M. The role of accountancy firms in tax avoidance: some evidence and issues. Acc Forum 2005;29(3):325–43.
Shackelford D. Earnings, regulatory capital and tax management: comments. J Acc Econ 1996;22.
Shackelford D, Shevlin T. Empirical tax research in accounting. J Acc Econ 2001.
Short J, Craig A. Ireland under attack? Int Tax Rev; September 2002. http://www.internationaltaxreview.com/default.asp?Page=5&PUBID=35&ISS=12617.
Smyth J. Intel warns it will have to 'reassess' future Irish investment. Irish Times, 3 March 2005.
Staunton D. Ahern tells EU summit rules on state aid must be changed. Irish Times, 24 March 2005.
Staunton D. Overhaul urged for rules on state aid. Irish Times, 8 June 2005.
Stoianoff N, Kaidonis M. Rehabilitation of mining sites: do taxation and accounting systems legitimize the privileged or serve the community? Crit Perspect Acc, January, 2005.
Sullivan M. Economic analysis: data show dramatic shift of profits to tax havens. Tax Notes; 2004.
Sumner M. Consumers' expenditure and the timing of income tax changes. Oxford Bull Econ Stat 1991;53(1).
Tinker A, Neimark M. The struggle over meaning in accounting and corporate research: a comparative evaluation of conservative and critical historiography. Acc Auditing Acc J 1987;1(1):55–74.
Tinker A, Gray R. Beyond a critique of pure reason: from policy to politics to praxis in environmental and social research. Acc Auditing Acc J 2003;16(5):727–61.
Treasury, Treasury Secretary O'Neill statement on OECD tax havens, US Office of Public Affairs press release, 10 May 2001.
Valles J. Taxes and corporate management: comments Altman and Subrahmanyam. Recent Adv Corporate Finance 1985.
War on Want, Tax havens and tax competition: one rule for the poor, no rules for the rich. Acc Business Public Interest 2003;2(1):34–8.
Yancey WF, Cravens KS. A framework for international tax planning for managers, Journal of International Accounting. Auditing Taxation 1998;7(2).