

**Taxing Thoughts: Ireland, Tax Competition and the Cost of Intellectual
Capital.**

by

Dr Sheila Killian
University of Limerick
(corresponding author: sheila.killian@ul.ie)

Dr Martin Mullins
University of Limerick

Abstract

This paper examines the impact of tax competition on the commodification of ideas, and points towards a particular set of negative consequences that affect the developing world. As multinational business becomes increasingly independent of national borders, the power relationship between business and government has shifted from one in which governments imposed tax on business in return for the privilege of operating within its jurisdiction, to one in which governments distort their tax system to suit business, in the hope of enticing them to locate on their shores. The race to the bottom in terms of tax rates has been well-chronicled in studies such as Christensen et al (2004), and Murphy (2006)

Countries which were successful at the first round of tax competition are now finding that tax rates alone will not hold the multinationals on which they have become so dependent. The economic growth associated with their earlier success has brought high operating and wage costs. Multinationals who have remained lightly rooted in the soil of these countries can easily move their manufacturing to cheaper, emerging economies, taking with them their coveted jobs and exports. In order to retain them, these first round winning countries are now encouraging multinationals to locate their research and development as well as their production facilities with them. They hope that this is a less mobile activity, less easily replicated in a developing country, and so will anchor the multinational firmly in their territory.

In this new level of the tax competition game, incentives are given not only for gross production, but for the production of knowledge. As a consequence, knowledge itself becomes commodified, and intellectual capital widely defined and privatised. This means that ideas previously shared must now be bought, and products previously sold at a price determined by the local market may now only be sold if the market can support their original, patent-protected form.

This paper tracks the development from the old to the new rules of tax competition, using the example of Ireland to illustrate the strategies adopted at each stage. The rational, self-serving response of multinationals is explored, and the immediate downstream effects for developing countries discussed. The writings of Michel Foucault are used to gain perspective on the idea of intellectual capital. Finally, the sustainability of the new form of tax competition is questioned, and some hypotheses are formed about the long-term consequences.

Taxing Thoughts: Ireland, Tax Competition and the Cost of Intellectual Capital.

Introduction

Nations have traditionally used their tax systems as a means of exerting power, as well as a means of raising revenue. Power, for Foucault, relies upon surveillance and the ability to discipline. However, this ability to govern business through the taxation system faces challenges. Nationally-centred tax systems are increasingly ineffective at governing very mobile capital. As multinational firms become more dominant, countries compete to host their facilities. The taxation system ceases to be a means of governing companies, and becomes the lure used to attract them to locate production facilities in a particular country. Power correspondingly shifts from the state to the multinational firm. This process by which firms vie for the attentions of multinational firms using their tax systems as bait is known as tax competition.

In the past, tax competition has involved the relatively simple strategy of having low tax rates or narrow tax bases, to reduce the cost to business of operating in a competing country. As more countries enter the game, this is unsustainable in the medium term, and as described below, the new round of tax competition centres instead on the creation of intellectual property. Intellectual property rights have long been accepted as a hazard to countries in the South, and most research in the area explores how they have developed based on international agreements such as TRIPS. This paper makes the connection with tax competition, and describes how self-interested actions by developed countries engaging in the new round of tax competition have unforeseen and damaging impact on developing countries

Foucault had little to say on taxation itself but his work on the state, practices of bureaucracies, surveillance, self governance and power is highly relevant to this area of research. Foucault's concentration on practices or technologies have tended to place phenomena such as accounting and tax practice at the

centre of any analysis of wider social issues. Both the realist and the Gramscian school suggest that power centres can impose a set of certain practices on the world. The flow of ideas corresponds to the contours of power in the world and in a given society. The distinction here would be that while the realist school would tend to focus on the power relations, Gramscian theory accepts the importance of relative power but adds emphasis to ideological hegemony. Foucauldian thought, whilst accepting the salience of the above, would seek to examine the impact of practices themselves. In the area of TRIPS for example, the US was eventually successful in introducing a more strident regime in the area of TRIPS enforcement. For the realist school, given the dominance of the US globally this was the expected outcome. Gramscian theorists would tend to focus on the power of the ideas inherent in TRIPS and on their ability to convince. Foucauldian theory would also highlight the type of thinking that fed into negotiating process and the manner in which certain practices are rendered somehow natural, and in becoming such, take on a power of their own. If this prism is applied to the fact that most patents reside in the northern hemisphere, and royalties are charged to the south, both Realists and Gramscian theorists would see this as an inevitable outcome of a world power imbalance, Foucauldian analysis would examine the way in which intellectual property is built up in individual nation states, and the differing reported motivations of the multinational firms and the countries which host them. Whilst accepting the impact of asymmetrical power relations, such an analysis would examine the role played by language surrounding the practice and the manner in which practice itself gains prestige and ultimately power. This paper takes the latter approach, using insights from a reading of Foucault to illuminate the idea of intellectual property and so to critique its use as a strategy for tax competition.

Ireland has been chosen to illustrate the strategies for a number of reasons. The first is that Ireland is undeniably very successful as a tax competitor, having built a booming economy around foreign direct investment, largely attracted by the tax regime. The tactics adopted by Ireland have, by definition, been effective, and are therefore likely to be followed by other competing

nations. Secondly, Ireland has little by way of natural resources or geographical advantages, which simplifies the task of isolating the reasons for multinationals to locate there. Finally, since the overwhelming bulk of Ireland's foreign direct investment comes from one source – the US – it is relatively straightforward to see the patterns in the movement of the multinational firms.

This paper is set out as follows: the next section briefly reviews the idea of tax competition, and the traditional strategies employed by countries, followed by the newer tactics centring on intellectual capital. Ireland is used as an illustration in both cases. The predictable responses of self-interested multinationals are then outlined, and the consequences for global flows of capital described. Next, Foucault's writings on the nature of the author are used to illuminate and critique the concept of intellectual capital motivated by the new tax competition rules. In conclusion, some hazards are identified for developing countries, and tentative lessons drawn from the Irish experience.

Traditional strategies in tax competition

Tax competition may be loosely defined as the process by which nations compete to persuade multinational companies to locate within their borders, using their tax systems as the primary means to gain advantage over other competing countries¹. The main motivation for corporate internationalism is cost reduction in one form or another. Business is most profitable where costs are low, so low wages, operating costs and taxes make for an attractive operating environment. Sikka et al (2005) describe how large firms "roam the world" in search of attractive locations, in the process acquiring more power than the governments that host them. Multinational companies have grown to such an extent that Clarke (1999) noted that 52 of the top 100 economies in the world in 1999 were corporations rather than companies. Mitchell (2002) describes this shifting of influence from countries to corporations as "the quiet retreat of sovereign power".

¹ See TJN (2006) for a more complete definition of tax competition

Traditionally, countries seeking to attract such firms have tried to produce the low-cost environment they favour by moderating wage demands, subsidising infrastructure, and/or maintaining low taxes. Of the three, taxes are the easiest to manipulate. Research on the response of firms to changing tax rates has produced mixed results, mainly due to the difficulty in isolating tax variables, externally establishing a firm's undisclosed tax position, or establishing the precise motivation for actions that may have been taken in response to tax incentives. Nevertheless studies as far back as Valles (1985) have produced evidence of tax-motivated relocations by US firms. Clearly tax is not the only factor that triggers a relocation or location decision, but studies from Norregaard and Owens (1992) to Devereux et al (2002) consistently show that while many factors need to be considered, the tax rate remains a critical element in the decision to locate in a particular jurisdiction.

The practice of tax rate competition has become so widespread as to cause concern beyond NGOs, in the international community, leading to guidelines being issued by the EU on tax competition in 1997, and the establishment by the OECD in 1998 of a project on harmful tax competition. As outlined in OECD (1998) a country will be designated by the OECD as a tax haven provided it lacks transparency or exchange of information and offers a very low rate of tax which is either available with little or no real economic activity, or is restricted to particular classes of companies. The latter condition aims to deter the practice of offering a low tax rate only to targeted inward investment, while charging a higher one to local business. This, if permitted, would allow a government to preserve the revenue stream from their own domestic firms while poaching tax from their neighbours. A low rate is therefore a necessary, but not sufficient condition for a tax haven.

The "race to the bottom" in terms of tax rates is unsustainable as a long-term single strategy, and is a dangerous tactic for countries wishing to attract multinationals. Where the tax rate alone is used to attract investment, the logical response of multinationals is to locate high-profit, highly-mobile activities within the target jurisdiction. In general these are low-skill activities,

such as manufacturing, which can be easily moved to a new location if tax rates rise, or if a more attractive proposition presents itself. A country which has cut its tax rates and secured some inward investment may at any time may be undercut by a new location, and lose the investment after a relatively short period. Avi Yonah (2001) notes that

..taxes do in fact play a crucial role in determining investment location decisions [but] ... given the need for tax revenues, developing countries would in general prefer to refrain from granting tax incentives, if only they could be assured that no other developing country would be able to grant such incentives (Avi-Yonah 2001:8).

However, while the local rate of tax is critical to the decision to establish a subsidiary or branch, it is not the only tax factor. Given the complexity of multinational structures, large international firms try to ensure that profits not only escape taxation in the host country in which they have been generated, but can also be repatriated to the home country with minimal tax. Studies find that multinational firms are attracted not only by the rate, but also by the presence of a tax treaty between the home and host countries. For example, Hines (1998) found that Japanese firms establishing subsidiaries overseas were more likely to invest in countries where a Japanese tax credit was granted for the overseas tax paid. This has led those countries competing successfully for foreign direct investment to put effort into developing and maintaining their network of international tax treaties, as well as offering a low rate of tax.

International tax treaties are negotiated independently by the countries concerned but are based on a standard template. This incorporates elements from the OECD model, or less commonly, the UN model, the latter being generally considered to be more favourable for developing countries. This represents a departure from the state as an organic, indivisible entity, as the inter-relationship between them becomes critical to their ability to attract capital. Tax treaties have traditionally been negotiated on a bilateral basis between countries, although more recently multi-lateral treaties have been negotiated covering whole regions. They govern such issues as the primary and secondary taxing rights on income generated in one country by a firm

resident in a second, or of the remittance of dividends, royalties or interest from one country to another. For example, if a US-based multinational group establishes a manufacturing plant in Ireland, article XX of the Ireland-US double tax treaty determines that Ireland has primary taxing rights on the profits of the subsidiary. When these are remitted to the US, the treaty stipulates that tax may be withheld by Ireland on dividend payments, and that the US government will allow a credit for this Irish tax paid against the US liability. Similar articles govern the taxation of interest or royalties paid from one country to another, the taxation of salaries earned in one jurisdiction and paid in another, etc. Davies (2003) notes that in 1997, there were over 2,000 such bilateral treaties in operation worldwide, covering most aspects of foreign direct investment.

Without treaties, the benefits that accrue to a multinational firm operating in a low-tax host country are eroded when profits are repatriated. Conversely, with an extensive network of treaties, a country with very low tax rates can attempt to hold multinationals for a longer period, including the phase in which the subsidiary is remitting profits back to the home country. Consequently the maintenance of treaties is seen as critical to the long-term success of any low-tax jurisdiction. However, if a country is designated as a tax haven by the OECD, this will significantly damage the tax treaty network, and make it far more difficult for the multinational firms operating within its borders to repatriate profits. The designation of tax treaty is therefore one which all tax competing countries seek to avoid.

The case of Ireland

Ireland is a useful illustration of these points. It is a small island on the periphery of Europe, with few natural resources. Colonisation by Britain effectively wiped out the infant industries present in the 1800s, and by independence in the early 20th Century, there was no real entrepreneurial class. From the 1930s protected national industry failed to produce economic growth, and in the 1960s, unemployment and emigration were accepted as part of Irish life. At this point, the policy reversed engines, abandoned

protections and began to actively seek foreign investment in export-oriented business.

As set out in Killian (2006), initially, this was done through export sales relief, which zero-rated profit on goods exported from the country. At the time, indigenous firms which had operated within a protectionist regime were small and inward looking, and in general did not benefit. Multinational firms looking to establish a base in Europe were attracted by the zero rate, and became the main beneficiaries of it. When Export Sales Relief ran out in 1980, it was followed the introduction of manufacturing relief, which afforded a low 10% rate of tax to profit on goods manufactured in the state. Critically, the definition of “manufacture” was left to case law rather than legislation, and over time developed to include any irreversible process resulting in a commercially different product. This came to include assembly of computer parts, the cloning of plants, the ripening of bananas and the grading of coal. When the low rate on offer to manufacturing companies came under attack from the EU and under threat from the OECD, it was raised slightly and extended to all companies resident within the state. The application of the low rate to all sectors, not just manufacturing, enabled the country to sidestep the accusation of ring-fencing the low rate to foreign firms, and so to avoid being tagged a tax haven. Currently the corporation tax rate in Ireland is just 12.5%, but unusually the country maintains a network of forty-three favourable double tax treaties with eight more under negotiation. Hanley (2006) quotes the American Chamber of Commerce Ireland as follows

The reason people come to Ireland is because of our tax treaty network on top of the 12.5% rate. Tax treaties do not have tax treaties (Hanly (2006:4).

As a direct result of this strategy, Ireland has become the number one exporter of software in the world, with full employment, net immigration, and a booming economy derived almost exclusively from foreign direct investment, mainly from US firms drawn in by the low tax rates. While the corporation tax rate is low, the overall tax take has increased, mainly due to Value Added Tax

(VAT), a form of sales tax not ultimately borne by exporting multinational firms, and so, socially regressive in nature. Inequality has grown in tandem with wealth in Ireland, with a relatively small group reaping the benefits of inward investment, and those at the margins of society, mainly the elderly, ethnic minorities and ill, remaining outside of the boom (NESC 2005). The National Economic Social Council 2006 Strategy Report notes that “there is also a risk of deepening dualism in Ireland’s welfare state, which should be avoided.” (Nesc 2006) While supporting exports and competitiveness, the report goes on to say that the solution lies in

Escaping from the idea ... that Irish prosperity is virtually all created in the exporting, mostly foreign-owned enterprises, with the rest of economic activity merely a recycling of that value (NESC 2006:2)

Killian (2006) observes that the people most vulnerable in modern Ireland are those outside the reach of employment; that in effect, Ireland has out-sourced some of its social contract with its citizens to the multinationals, with all of the short term benefits and long term hazards that outsourcing brings.

The large firms located in Ireland have become pivotal to the communities in which they operate: generating employment, supporting service industries and schools, contributing to community initiatives and drawing in a new population from EU accession states. This boosts the local economy, and property prices, and creates an asymmetrical dependence which is sometimes exploited by the multinational firm in its negotiations with the Irish government².

Ireland has become prosperous. Wages have increased, and the new affluence has led to rising prices. Its success as a tax competitor carried within it the seed of its own undoing. Despite the low tax rates, Ireland is now an expensive country. As noted by Christensen et al (2004), tax is viewed by multinational firms as just one of the costs to minimise. Now that Ireland is a

² See Killian (2006) for a more complete discussion of the power imbalance between multinational firms and the Irish government

high-wage economy, it has begun to lose low-value manufacturing jobs to Eastern Europe and Morocco. Its response takes it to the next level in the game of tax competition – targeting intellectual property.

Ireland's new game: IP and tax

Since Ireland has found that competing successfully on tax rates no longer provides the low-cost environment in which manufacturing multinationals like to operate, the government is seeking to embed the multinationals by encouraging them to locate their R&D facilities in Ireland. The logic is that while manufacturing jobs are easily shifted to low wage or low tax locations, research jobs enhance the value of individual Irish workers, and make them more difficult for the multinationals to replace. In this way, they root the multinationals within Ireland for a longer period, despite the increased costs of operating here. The relevant government minister is Micheál Martin, and he is quoted in Madden (2006) as follows:

“That’s the key strategy – to improve our capacity on research and development and innovation It’s a critical area. If you’re bringing in investments of that kind, you’re copper-fastening the company’s contribution to Ireland for another 20-odd years.”
(Madden 2006:12)

Miscellaneous incentives offered by Ireland include a tax deduction for know-how on setting up a trade, no rules on transfer pricing, and a stamp duty exemption in transfers of intellectual property. However the two main planks in the strategy are a specific tax credit for research and development (R&D) Expenditure, and a patent income exemption.

In 2004, the annual Finance Act introduced a new 20% tax credit for qualifying expenditure on R&D by companies subject to Irish tax. The aim was squarely to root investment by multinational firms. The government had, in the words of the then government Minister for Enterprise, Trade and Employment, “placed Research and Development at the heart of our economic development strategy.” (Harney, 2004)

The Irish Department of Enterprise, Trade and Employment have published regulations setting out what activities or expenses qualify for the R&D tax credit. The list is broad and inclusive, and would cover, for example, most activities in chemistry, medicine or pharmacy except market research, quality control, legal and administrative work. Where a firm's qualifying R&D expenditure is increasing, the company's Irish tax liability can be reduced by 20% of the increment since 2003. In December 2006, this was extended for a further three year period. Given that the tax rate in Ireland is currently 12.5%, this is a generous measure, effectively allowing a 160% tax deduction for qualifying expenditure. It is clearly therefore to the advantage of all companies paying tax in Ireland to designate as much of their costs as possible as R&D expense. The regulations ensure that this can be done with relative ease.

The second "anchoring" strategy of the Irish government is a complete exemption from income tax for patent income where the associated R&D work has taken place in Ireland. This is currently the subject of a challenge at EU level, on the basis that it is incompatible with the freedom of establishment and the free movement of services within the EU. From the Irish government point of view, however, the exemption as originally enacted is the logical foil to the R&D tax credit. If companies locate their R&D activities in an Irish subsidiary, this will lead to a build-up of intellectual property there. Patent royalties can then be paid into the Irish firm by licensed manufacturers and by other plants in the group using the technology. The patent income exemption reduces the Irish tax on this stream of patent royalties to 0%. Furthermore, dividends paid by the Irish company from this qualifying patent income are to be completely disregarded for Irish tax purposes. This means that no income tax is payable on their receipt by, for example, Irish resident executives, and no withholding tax is imposed by the Irish firm where these dividends are paid to other jurisdictions.

"Unenlightened self-interest" - the response of MNCs

When multinationals respond to these incentives with what Christensen (2003) described as unenlightened self-interest, the consequences are

predictable. Where the conditions are satisfied, R&D activity carried on in Ireland will effectively shelter other profits in the firm through the windfall R&D tax credit. The resulting product can be patented, and manufacturing plants can be established in, say, a low-cost developing country. Profit arising in this country can be moved to Ireland in the form of a patent royalty. Since, as previously noted, royalties are generally paid free of any withholding tax under the OECD model double tax treaty, this means that payment is free from any withholding tax in the developing country. Neither is it taxed in Ireland under the patent income exemption. The proceeds can then be repatriated to the home country of the multinational free from any Irish withholding tax. Thus the entire web of double tax treaties can be navigated to enable profits to be remitted to the home country, through Ireland, from any manufacturing location with which Ireland has a standard double tax treaty. This royalty pipeline will operate as long as the expenditure in Ireland is classified as R&D, and the income received from the manufacturing plant is classified as a royalty.

The effect is that multinational firms will locate their R&D divisions in countries such as Ireland, mainly in the Northern hemisphere, and their manufacturing facilities in low-cost, developing countries, mainly in the South. Chui et al (2001:334) noted the beginning of a new pattern of production, whereby goods formerly produced in the North are now increasingly manufactured in the South. Patent income will then flow from South to North. Because these patent royalties are paid within the group, and probably not outside of it, the transfer pricing will be relatively opaque, with no external benchmark with which taxing authorities can challenge the rate paid.

Three facets of the tax system, the standard OECD tax treaty, the R&D tax credit and the patent income exemption therefore combine to entice multinationals to designate as much of their activity as possible as the creation and exploitation of intellectual property, rather than the simple sale of goods.. As shown above, these aspects of the international tax system also combine to ensure that the economic relationship between actors from the

South to the North is couched in terms of intellectual property rights, rather than trade. Products developed under this model will appear costly because so much expense has been directly attributed to their development. The pricing of these products can then be made relatively immutable, even when the market clearly demands a discount. It is far easier to defend a high price on, say, medicines sold to developing countries when it is linked to the sacrosanct idea that intellectual property must earn a rent.

This has consequences unintended by the original policy-makers in the competing countries. A good, if extreme, example is the sale of anti-retroviral medicines. Most agencies active in the field of HIV Aids, such as the Aids Foundation of South Africa, agree that the roll-out of anti-retrovirals by the South African government in 2003 is the single most significant recent step towards alleviating the pandemic. However, such anti-retrovirals were for many years unaffordable in sub-Saharan Africa. The high price at which they were sold there reflected in part the need to recoup the investment made in the patent (Jensen, 2000). This investment, and consequently the price demanded for the goods sold, is inflated by the tax rules outlined above.

A knock-on effect is that if R&D costs cannot be recouped on products designed for people in poorer nations, the R&D effort of private firms will be concentrated on products which can be profitably be sold in developed countries, on obesity drugs, for example, rather than malaria medication. At the same time, intellectual property rights as protected by the TRIPS agreement prevent the process of “learning by copying”, and the ultimate production of generic drugs by local companies, even where they have the technological know-how. As noted by Oxfam (2001), this exacerbates the technological divide in all areas protected by intellectual property rights.

The ideological underpinnings of the process are unclear. Competing states such as Ireland set out to achieve a defined objective – the anchoring of inward investment, and the discouragement of the flight of capital. However, the measures they take to achieve these aims inadvertently contribute to an

uncompromising pricing policy on the goods or processes designed there, and a protection of the process, preventing imitation. This in turn impoverishes the South in ways that would not have been predicted. There is, however, no sign of concern in Ireland's Industrial Development Authority about the impact of Ireland's tax competition on less successful countries. Staunton (2006) quotes the head of their Manhattan office as follows: "*All we want is more than our fair share*".

What is clear is that the system suits the multinational firms at every turn. As long as their activities are couched in terms of intellectual property rather than the simple production of saleable goods, their taxes are minimised, their transfer pricing is rendered opaque, their high selling prices are facilitated, and they are provided with an ideological defence when they do not respond, for example, to a moral imperative to sell life-saving drugs to dying people at affordable prices.

Conclusions

The damage caused to developing countries by intellectual property rights, and the TRIPS agreement are well documented³. The connection with tax competition is less well known. As outlined above, tax competition among developed countries with high costs, predominantly in the North, has led to a particular tax structure combining low rates, R&D credits, patent income exemptions and tax treaties. This aims to achieve a situation where the R&D facilities of multinationals are located in the North, long after the manufacturing plants have moved to low-cost countries in the South.

The tax structure presents a triple hazard to the developing country hosting the manufacturing plant. First, there is a massive incentive to ensure that royalty payments are set at as high a level as possible, to maximise the amount of profit that can be channelled through the royalty pipeline. Secondly, under the OECD model tax treaty, the developing country will be starved of

³ See Oxfam (2001) for a good discussion on how intellectual property rights adversely impact on developing countries.

corporation tax from the manufacturing plant, as its profits are reduced by the royalty payments. Finally, because of the status given to intellectual property, it will be difficult if not impossible for lobbyists in the developing country to argue against the scale of royalty payment. The old arguments on incentives to innovate, and property rights make royalties far more defensible for multinational firms than other forms of transfer pricing.

For countries in the North, such as Ireland, as long as they achieve success at the new round of tax competition, there will continue to be widespread employment, political success for the current government, net immigration and in the short term, economic growth. The costs, as set out in Killian (2006) centre around making the tax system more regressive through heavier dependence on labour or sales taxes, damage or neglect of indigenous industry, and the need to tailor non-tax to the needs of multinationals. Tax incentives alone will not trigger the location of R&D facilities, as shown by studies such as Mansfield (1986). In Ireland, most aspects of government policy are now co-ordinated to cater for the multinationals. Already the effort to attract R&D facilities has moved beyond tax, to target the education system. In 2004, a steering group appointed by the government Department of Enterprise, Trade and Employment produced a report entitled "Building Ireland's Knowledge Economy" setting out the steps to be taken to boost investment in R&D with a view to securing economic growth. At university level, it recommends, *inter alia*:

The commercialisation of research and knowledge for Ireland's economic benefits through effective intellectual property management and technology transfer needs to be a priority in all higher education and public research institutes (Forfás 2004:29).

At second level it is recommended to increase spending on science and maths, with an inevitable withdrawal of resources from arts and business. This strategy is now accepted by all political parties in Ireland⁴ Worryingly, unlike

⁴ See, for example, Enright (2006) for an articulation of the main opposition party's plans to accentuate science for second level learners

countries such as South Africa, entrepreneurship is not taught at primary level. Basic business skills are not incentivised in the same way as science. The education system is aiming to produce scientists for the multinational firms, rather than business-starters and entrepreneurs. Ireland's economic future is hitched, precariously, to multinational firms.

Ultimately, the new round of tax competition is no more sustainable than the old. When manufacturing jobs move to low-cost economies, they bring with them fuller employment, which has a knock-on effect on the education systems in these developing countries. As these countries move through the phase of attracting manufacturing jobs with low costs, to developing a highly skilled workforce, Ireland will no longer enjoy an advantage in this area. The only winners are the multinational firms, who will have a choice of locations with well-trained employees, low costs, and minimal taxes.

There are clearly lessons for developing countries to learn from Ireland's experiences. Most importantly, the tax system should not be tailored for the needs of fickle multinational firms at the expense of indigenous entrepreneurship. Countries recovering from a colonial past which wiped out local industries may deal with this as Ireland did, by seeking out large export-oriented firms to establish in their territory. However, they would be well advised to foster small to medium enterprises at the same time, so as to have a base to fall back on when multinationals move on.

This is particularly important for regional development. Despite Ireland's booming economy, remote areas such as Donegal on the north west coast have been damaged by the process of enticing, and then losing manufacturing jobs. Traditionally, this was a fishing community, but these old skills were de-prioritised in the wave of new investment. In August 2005, two large multinational manufacturing firms announced that they were closing their Donegal plants and moving to a low-cost developing country, with a loss of over two thousand jobs. The presence of the factories in Donegal had led to prosperity, rising property prices and corresponding debt among the young

workers. As McKay (2005) reports, with fishing in decline, there is little to fall back on when the multinationals decide to leave.

In negotiating terms with multinationals, developing countries should try to ensure that at least some of the R&D is done locally, as well as the manufacturing. That will not only anchor the investment a little more firmly, but it will also prevent the skimming of the tax base through royalty payments. Similarly, when negotiating tax treaties, countries with any negotiating power should seek to use the UN rather than the OECD model for the article on patent royalties.

Finally, all countries, and all actors in civil society should resist the privatisation of ideas, the limitations that ownership puts on research, the defence of dubious intellectual property rights and the immutability of price on products linked to intellectual property. The private appropriation of previously public knowledge is an implicit theft from society. The first round of tax competition was already harmful; the second round could bring new levels of damage, particularly to developing countries.

References

Avi-Yonah, R., Globalisation and tax competition: implications for developing countries. *Instituto para la integración de América Latina y el Caribe*, February, 2001.

Boyle, J., Fencing off ideas: enclosure and the disappearance of the public domain, in *A Patented World? Privatisation of Life and Knowledge*, Agostino and Ashton (ed), Heinrich Boll Foundation, Johannesburg, 2006.

Christensen, J., Tax havens and the age of unenlightened self-interest, paper presented to the *Association for Accountancy and Business Affairs*, Westminster 2003

Christensen, J., P. Coleman and S. Kapoor, "Tax avoidance, tax competition and globalisation: making tax justice a focus for global activism", paper presented at the *Global Tax Workshop*, Finland, November 2004

Chui, M, Levine, P. and Pearlman, J., Winners and losers in a North-South model of growth, innovation and product cycles, *Journal of Development Economics*, 65, 2001, pp 333-365

Clarke, T., Twilight of the corporation, *The Ecologist*, May/June 1999, pp24-29

Davies, R., Tax treaties, renegotiations and foreign direct investment, *University of Oregon* working paper, June 2003

Deveruex, M., B. Lockwood and M. Redoana Do countries compete over corporate tax rates?, *Centre for Economic Policy Research* working paper DP3400, 2002.

Enright, O., "Knowledge Economy" demands science, maths and ICT investment, *Fine Gael National Press Office Press Release*, December 2006

Forfás, Building Ireland's knowledge economy – the Irish action plan for promoting investment in R&D to 2010, *Irish Government Publications Office*, Dublin, 2004.

Foucault, M., What is an author? In *Aesthetics, method and epistemology, essential works of Foucault Volume 2*, pp 205-222, Faubion, J. D. (ed), Allen Lane, Penguin Press, 1994

Hanly, C., Ireland has little to fear from US tax concerns, *Irish Times*, June 30, 2006.

Harney, M., "A Stronger European-based Pharmaceutical Industry for the Benefit of the Patient", Speech by Mary Harney TD, Deputy Prime Minister and Minister for Enterprise, Trade and Employment, *Borschette Centre*, Brussels 3 June, 2004.

Hines, J., Tax sparing and direct investment in developing countries, *NBER* working paper, N6728, September 1998.

Killian, S., Where's the harm in tax competition? *Critical Perspectives on Accounting*, December 2006.

Jensen, G., Letter to EU Commissioners from six non-governmental organisations, September 2000, available online at <http://www.cptech.org/ip/health/eu/lamynielson27092000.html>

Mansfield, E., The R&D tax credit and other technology policy issues, *American Economic Review*, 76, 2, 1986

McKay, S., "Another knife to Donegal's heart", *Irish Times*, August 2005

McSharry, R. and P. White, The making of the Celtic Tiger: the inside story of Ireland's boom economy, Mercier Press, Cork, 2001

Mitchell, L., American corporations: the new sovereigns, *The Chronicle of Higher Education*, January 18, 2002, pp18-19

Murphy, R., Mind the tax gap: how companies could help beat poverty, *Tax Justice Network*, London, 2006.

NESC, The Developmental Welfare State in Ireland, *National Economic and Social Council* report no 113, Dublin, May 2005

NESC Strategy 2006: people, productivity and purpose, *National Economic and Social Council* report no 114, Dublin, December 2006

Norregaard, J. and Owens, J. Taxing profits in a global economy, *The OECD Observer*, 1992.

Organisation for Economic Cooperation and Development, "Guidelines on harmful preferential tax regimes, *OECD*, Paris, 1998

Organisation for Economic Cooperation and Development, Model Tax Convention on Income and on Capital, *OECD* Paris, 1997

Oxfam, Intellectual property and the knowledge gap, paper prepared for the 2002 *World Social Forum*, December 2001. Available online at <http://www.oxfam.org>

Sikka, P. and Hampton M. The role of accountancy firms in tax avoidance: some evidence and issues, *Accounting Forum*, 2005

TJN (2006), Tax Justice Network, "Tax Justice Briefing: A Tax Justice Glossary", *Tax Justice Network*, September 2006

United Nations, Model double taxation convention between developed and developing countries, *UN*, New York, 2001

Valles, J. Taxes and corporate management: comments, Altman and Subrahmanyam: "*Recent advances in corporate finance*", 1985.