CISC Working Paper No.3 October 2003

The Role of Dublin’s International Financial Services Centre in Irish Regional Development

Mark C. White¹

¹ Centre for Innovation & Structural Change, National University of Ireland, Galway, Ireland. mark.white@nuigalway.ie
Abstract:

This paper examines the manner and extent to which the International Financial Services Centre (IFSC) in Dublin contributes to regional development in Ireland. Since its 1987 launch, the IFSC created over 10,000 jobs and promoted urban renewal in a previously derelict section of Dublin. Although it stands as one of Ireland most prominent development projects, empirical examination of the IFSC remains limited. This study looks specifically at issues such as the kinds of activities and employment created at the IFSC, as well as local linkage formation. Based on published data, a mail survey and corporate interviews, this paper argues that most international financial services activities remain contingent on cost-driven activities, and are attracted primarily by Ireland’s relatively favorable regulatory regime. These findings therefore raise several issues about the extent to which many IFSC can act a catalyst for long-term sustainable development.

Key Words: Republic of Ireland, International Financial Services, Foreign Direct Investment, Regional Development
1. Introduction

During the 1990s, Ireland’s ‘Celtic Tiger’ economy pulled this once peripheral country closer to the core of the world economy. Inflows of foreign direct investment (FDI) partially fueled this economic boom, but unlike previous rounds of inward investment these inflows included higher quality investment from sectors like computers and pharmaceuticals (Breathnach, 1998). Most recently, internationally-traded services such as software (Coe, 1997; O’Riain, 1997) and teleservices (Breathnach, 2000) have grown to occupy a more significant position in Ireland’s inward investment profile. International financial services represents another prominent area for investment, and in many ways the power dressed buildings of the International Financial Services Centre (IFSC) in Dublin symbolize Ireland’s ‘Celtic Tiger’ period of economic growth (Murphy, 1998). The story of how Ireland became an international financial centre over the past 15 years is lauded as, “…a remarkable case study of how to achieve a national development dream against all the odds (MacSharry and White 2000: 317)”. This paper therefore examines empirically the manner and extent to which the IFSC contributes to regional development in Ireland.

Given the growing number of places using financial services to stimulate for economic growth (Warf, 1995), this case study raises issues of growing importance. Recent research improved understanding about the role of both large and small financial centres for organizing the global financial system (e.g. Sassen, 1991; Drennan, 1995; Hampton, 1994; Roberts, 1994), but comparatively less is known about the direct consequences of financial services for regional development (Hampton and Christensen, 2002; Abbott, 2000). This is particularly true for regional financial centres that do not garner the same attention as world cities like New York.
or London (e.g. Sassen, 1991), or small island Offshore Financial Centres (OFCs) like the Cayman Islands (e.g. Roberts, 1994). Through a detailed examination of Dublin’s IFSC, this study sheds light on the effects of financial services FDI, in terms of the kinds of activities and employment created and local linkage formation. Based on published data, a mail survey and corporate interviews, this paper argues that most financial services FDI remains contingent on cost-driven activities attracted primarily by Ireland’s relatively favorable regulatory regime. These findings therefore raise questions about this investment’s potential to act a catalyst for long-term sustainable development.

The rest of the paper is organized as follows. I begin by outlining some of the key theoretical and conceptual concerns about financial centres and their capacity for stimulating economic development. After a brief discussion of the research methods used, the subsequent section offers the background behind the IFSC’s genesis and development. The following section, based primarily on field research undertaken in Dublin, examines several aspects of the IFSC’s basic contribution to economic development. These include the nature and extent of IFSC activities, employment and labor pool dynamics, locally-based linkages and the decentralization of financial services investment within Ireland. Finally, I offer several conclusions about the future of international financial services in Ireland.

2. Financial Services and Regional Development in Peripheral Locations

ICT development and the deregulation of financial services not only increases the scale and pace of financial flows (Warf, 1989; Grosse, 1997), but also allows more places to play active roles in the functioning of the international financial system. The control and coordination of these seemingly footloose capital flows
remains concentrated within large financial centers like New York, London or Tokyo (Sassen, 1991; Thrift, 1994). These large agglomerations offer banks and other financial services providers the best access to skilled labor and the most advanced ICT infrastructure, as well as allowing them to achieve economies of scale (Drennan, 1995). These locations also serve as depositories of tacit knowledge created and supported by dense networks of social relations (Amin and Thrift, 1992; Thrift, 1994; Pryke and Lee, 1995). Given their importance for organizing the world economy, these activities create significant opportunities for value creation and capture. For instance, financial services represent one of the main engines of growth in the Southeast of England (Allen et al., 1998).

By establishing OFCs, many small island economies also seek to capture the economic growth potential of financial services (e.g. Johns and LeMarchant, 1993; Hampton, 1994; Roberts, 1994; Hudson, 1998; Corkill Cobb, 1998). OFCs first came to prominence in the 1960s and 1970s as tax havens for the growing Eurodollar market (Roberts, 1994), but now assume significant positions in the global financial system with almost half of the world’s stock of money either residing in, or passing through the approximately 70 OFCs (Palan, 2002). The defining feature of OFCs is that they offer regulatory environments different, and legally separate from those available onshore (Hudson, 1998). These favorable regulatory regimes often allow OFCs to draw employment out of onshore financial centres. However, many of the operations established in OFCs represent little more than ‘brassplate’ offices so they are often small in size and less restrictive immigration laws allow for expatriates to fill most managerial positions (Howland, 1995).

This previous research provides greater understanding about the role played by smaller financial centres in organizing the world economy, but their actual
contribution to regional development remains less understood (Hampton and Christensen, 2002; Abbott, 2000). As a growing number of places attempt to establish themselves as financial centres for the purpose of economic development (Warf, 1995), this omission becomes more glaring and necessitates the need for more research to uncover their direct consequences for economic development. Currently, the perceived benefits of financial services activities include increased government revenues, direct employment of locals in the financial sector, and linkages with other sectors such as hotels, restaurants and office suppliers (Abbott, 2000). Moreover they provide economic diversity for many small island economies, making them less dependent on agriculture and tourism (Howland, 1995).

Nonetheless, adopting development programs focused around financial services involves several inherent risks. For instance, those places lacking diversified economies may become over-exposed to the booms and busts endemic to contemporary casino capitalism (Strange, 1986). This clearly affects the long-term sustainability of the employment created, much of which involves low-skill, back-office work. Back-office activities are either ‘hived off’ from head offices and moved to lower cost locations, or ‘stripped out’ out of branch offices and centralized in dedicated back-office facilities (Gillespie et al., 2001). In both instances however, these are cost-driven processes that lead to continuous rounds of cost-based competition. In addition the employment created in global back-offices often involves low-skill routine tasks and takes advantage of a low-paid, non-unionized and predominantly female labor (Pearson and Mitter, 1993). As a result, the dynamic benefits generated by this employment are limited in nature.

The nature of the activities in various financial centres obviously influences their economic development contributions. To better understand this phenomenon,
Hampton (1996) developed a typology classifying OFCs according to the activities undertaken, local employment and their contribution to GDP. This typology divides OFCs into three groups—functional, compound and notional OFCs. Functional OFCs, such as Bermuda and the Isle of Man, offer a wide range of financial activities and actually host full branches of international banks and other services such as offshore fund management. Conversely notional OFCs, like Vanuatu, Seychelles and Labuan, represent the stereotypical ‘brassplate’ bank operations. They do little but make paper transactions, allowing multinationals and the world’s wealthiest people to avail of their low tax regimes. OFCs like Barbados and the Cayman Islands are compound OFCs that combine aspects of both notional and functional OFCs. This typology provides a useful heuristic device for understanding the relevance of offshore finance in different places, but it is most appropriate when applied to small island economies. It is however, less appropriate when applied to regional financial centres possessing larger, more diverse economies like Luxembourg, Singapore or Dublin.

While the Hampton typology provides one useful heuristic, other insights are gained from the literature that more directly addresses the relationships between MNC affiliates and host regions, and the consequences of these relationships for processes of economic development. This issue is a common subject in mainstream economic geography with most of the literature seeking to assess the quality and sustainability of FDI as a tool for economic development (Turok, 1993; Amin et al., 1994; Dicken et al., 1994; Henderson et al., 2003; Phelps et al., 2003). Phelps et al. (2003; see also Phelps and Fuller, 2000), for instance, identify three broad types of relationships between MNC affiliates and host regions. First, the enclave economy describes a situation where foreign firms may create large levels of direct employment, but with few local linkages are poorly integrated with the rest of the economy. Moreover, their
relationships with local institutions like universities or development agencies are shallow and generally inconsequential. The locally embedded firm stands at the other end of the continuum from the enclave scenario. In this scenario, foreign firms undertake high value-added activities, establish and maintain a wide array of developmental linkages with local firms, and create many knowledge spillovers. Embedded firms therefore contribute many of the dynamic benefits of FDI, so often used to justify FDI-led development policies (Mackinnon and Phelps, 2001). The extended enclave scenario falls between these two scenarios. The extended enclave involves firms establishing stable relationships with suppliers, some collaborative R&D linkages and regular contact with local institutions.

Much like the Hampton typology, this conceptualization presents categories that are not mutually exclusive, but rather offer a range of possibilities from complete firm isolation to complete immersion. Again similar to the Hampton typology, this conceptualization does not translate perfectly to all aspects of financial services. Like many other studies of FDI embeddedness, it is derived primarily from research on large-scale manufacturing FDI (Griapos et al., 1997). Consequently, its utility for examining services activities, which are often smaller in scale and less driven by material inputs, remains subject to debate. Nonetheless, these schemes do highlight several factors that determine the contribution FDI makes to economic development. Drawing insights from both schemes therefore provides a starting point from which to begin analyzing the regional development effects of FDI in financial services.

3. Methodology

This paper employs a case study method. Case studies are proven methods for social science research (Yin, 1993), and more specifically corporate case studies are
effective methods for research in economic geography (Schoenberger, 1991; Markusen, 1994). Through the use of multiple data sources, case studies move beyond the dichotomous relationship between ‘stylized facts’ and ‘close dialogue’ (Clark, 1998). Given this need for methodological pluralism, evidence for this project is derived by ‘triangulating’ between three sources of data—published and secondary data sources, mail surveys and corporate and government interviews (Yeung, 2002).

Published data are drawn from several sources including, but not limited to, information published by state agencies such as IDA Ireland and Forfás, publications by industry observers like the IFSC Yearbook and studies commissioned, for instance, by the Institute for Bankers in Ireland. A mail survey designed to identify basic firm characteristics complements these published data. The survey was undertaken in Fall 2000 as part of dissertation research examining software and financial services MNCs in Ireland (White, 2002). IDA Ireland provided firm names and addresses and these were crosschecked with those provided in the IFSC Yearbook (Fintel Ltd, 1999). 93 firms responded from the 214 financial services firms receiving surveys, for an overall response rate of 42.5 percent. There was no significant statistical difference between the size of firms in the original sample and the size of the respondents (White, 2002).

While these data provide breadth to the research, 15 interviews with financial services affiliates and relevant public and private agencies in Ireland add depth to the study. These interviews both complement and enhance the analysis derived from the quantitative data (Schoenberger, 1991). Given the relative youth of international financial services in Ireland and its rapidly changing nature, firm specific data are limited in nature. By combining these methods and formulating a detailed case study, this paper provides an in depth examination of Ireland’s IFSC. This research strategy,
therefore, identifies both patterns and processes influencing the development of international financial services in Ireland.

4. FDI and International Financial Services in Ireland

4.1 The Origins of Dublin’s International Financial Services Centre

The genesis of an Irish financial services centre emerged during the 1980s when Ireland suffered from both double-digit unemployment and inflation. As early as the 1970s, Irish policy makers identified international financial services as an opportunity to begin reversing this trend. It was not until the 1980s, however, that a concerted effort was made to exploit the broader changes in the financial services industry (MacSharry and White, 2000). Ireland’s educated, English-speaking and relatively cheap labor force and more importantly, its competitive tax regime made it a particularly suitable location for financial services (Buckley, 1991).

Ultimately, two objectives motivated the Irish government’s decision to launch the IFSC—employment creation and urban renewal. Employment creation formed the primary motivation behind the IFSC as the government established an initial target of 7500 jobs in ten years time (MacSharry and White, 2000). In fact, the European Union allowed Ireland to launch the IFSC in 1987 in recognition of this need to create employment. From the outset, the government sought to avoid the new centre developing a reputation as a tax haven. Before qualifying for the IFSC tax regime and its ten percent corporation tax, the government required firms to submit applications for an IFSC license. Application approval relied on the firm’s ability to prove they were undertaking activities of substance, largely by making specific employment commitments. Once receiving initial approval from the IDA’s financial services division, applicants needed further approval from a second body—the
Certification Advisory Committee (CAC). The CAC consisted of representatives from the IDA, the Department of Finance, the Department of Enterprise, Trade and Employment, and the Irish Central Bank. These screening procedures effectively rooted out ‘brass plate’ operations, so often associated with other financial centres like the Cayman Islands or the Bahamas (Murphy, 1998).

Although Ireland’s other special tax area—the Shannon Free Zone, received initial consideration, Irish policy makers placed the IFSC in the Dublin Docklands to spur urban renewal. By creating demand for new office space and services, the IFSC was intended to provide an important catalyst for the redevelopment of a previously derelict urban area\(^2\) (MacSharry and White, 2000). The regulatory regime supported these objectives by requiring firms to locate their activities within the Dublin Docklands. If adequate accommodation was not available at the time of investment, firms could locate in temporary offices, but then had to relocate to the docklands once reasonable accommodation became available. Together, these regulations established the IFSC as both a legally and spatially discreet entity within the Irish economy. According to one industry observer, these regulations made Dublin, “…almost like a separate country (Financial Times, 1999)”, in that the IFSC is almost completely disconnected from developments in the domestic economy. Although these regulations placed Ireland in a more advantageous position within the international financial system (Murphy, 1998), the context in which the EU allowed Ireland to establish this regulatory regime also changed.

4.2 Regulatory Reform: the IFSC comes onshore

\(^2\) This area on the River Liffey, located very close to the City Centre, once served as the main docking location for ships arriving in Dublin. With the development of containerization however, larger ocean-going vessels required deeper harbors. Ships could no longer make it this far up the River Liffey
As noted above, the IFSC was borne out of a specific set of economic conditions. As unemployment became less problematic during the 1990s, supranational bodies like the OECD and European Union gave greater scrutiny to Ireland’s low tax regime. These powerful extra-local actors often constrain the actions of local regulatory authorities (Hudson, 1998), and this is particularly true for Ireland. Unlike places like Switzerland for instance, Ireland chose to construct a more transparent regulatory regime in order to remain within the good graces of its European regulators. Nevertheless, in 1999 the Irish government reformed the original regulations governing the IFSC in order to meet the demands of EU regulators and preserve its reputation as a well-regulated site for financial services. These regulatory reforms changed both the preferential tax regime and the conditions imposed on financial services firms. In effect, these changes brought the IFSC onshore. The elimination of the preferential tax treatment enjoyed by IFSC companies is part of a larger change in the Irish corporation tax rates. The distinction between firms engaged in internationally-traded goods and services and purely domestic industries no longer holds. IFSC companies arriving before 1998 will continue using the 10 percent corporation tax until 2006, at which time the rate increases to 12.5 percent. Companies investing after July 1998 received the ten percent rate until 2003, at which time the 12.5 percent rate took effect.\(^3\)

In addition to reforming the tax regime, the Irish government also eliminated many of the conditions required of financial services firms. Consequently the Central Bank, and not the IDA and the CAC, now screens incoming firms. Moreover, the new Irish Financial Services Regulatory Authority (IFSRA) now regulates the entire

---

because it was too shallow. The main docking area moved further down the river to an area closer to the ocean and the Custom House Docks became a derelict and even dangerous part of the city.
industry, whereas in the past the Department of Enterprise, Trade and Employment regulated insurance activities and the Central Bank regulated all others. These reforms also ended the employment commitments placed on financial services firms. Given that most firms exceeded their initial employment commitments, this is not viewed as a significant reform (IDA Financial Services, Research Interview, 3/19/03). The new regulations further removed the locational requirements forcing firms to operate in the Dublin Docklands. This particular investment condition irritated many firms because of the shortage of office space, high rents and long leases associated with IFSC locations (MacSharry and White, 2000). As discussed later, eliminating the spatial restrictions on international financial services allows the IFSC to become part of a national program for economic development rather than being restricted to Dublin. Through a variety of indicators, the next section illustrates the extent to which this high profile development project achieved its objectives.

5. Assessing the IFSC’s Contribution to Regional Development

5.1 The Nature of International Financial Services in Ireland

IFSC-related FDI represents a significant portion of overall inward FDI. Table 1 shows that as recently as 1999, IFSC-related FDI comprised two-thirds of all inward FDI. The significant drop in US FDI accounts for the large drop from 2000 to 2001, although Central Statistics Office (CSO) data indicate that inflows from non-EU sources fell only slightly during the first half of 2002 (Forfás, 2002). Further evidence shows that most inflows originating from other Euro-zone countries go into companies associated with the IFSC. These IFSC-related flows are the product of large capital movements by foreign-owned companies to their financial subsidiaries

---

3 Those industries that previously did not qualify for the 10% corporation tax saw their tax rate lowered
located at the IFSC, generally with the intent of later reinvestment in the firm’s overseas assets. These direct investments are matched roughly by outward flows of portfolio investments and therefore have a limited impact on the productive potential of the economy (Barry et al., 2003). Consequently the reduced flows experienced from 2000 to 2001, did not affect significantly issues such as employment.

The IFSC’s impact on the Irish economy is clearly not in line with the scale of IFSC-related FDI, but it is not inconsequential. Figure 1 shows that starting from a very small base, the IFSC exceeded its the initial target of 7500 jobs, and now employs directly over 10,000 people. Table 2 breaks down IFSC licensed firms by both activity and origin. By the end of 1999, 490 ‘stand alone’ companies operated out of the IFSC. Stand-alone companies establish a physical presence in Ireland and are managed, staffed and controlled by the parent company. Geographically, over 80 percent of these companies are non-Irish companies, thereby confirming the IFSC’s international focus. American companies represent the largest segment of stand-alone companies. Most IFSC activities do not include front office tasks like lending, trading or fund management. Instead Dublin specializes in back office activities (The Economist, 1996; Murphy, 1998). Although the low corporate tax regime and wide network of double tax treaties remains Dublin’s most attractive qualities, the IFSC does specialize in four niche activities—fund administration, treasury operations, corporate banking and insurance.

---

4 Overall, the financial services industry in Ireland employs approximately 50,000 people, although almost 80 percent of those are involved in the domestic financial services industry and are not directly involved in activities taking place at the IFSC.

5 These data are only available through 1999, because they are based on the number of CAC approvals. One of the consequences of the new regulations is that firms associated directly with the IFSC are no longer as readily identified.
Fund administration accounts for almost a half of all IFSC employment (IDA Financial Services, Research Interview, 3/19/03). In only fifteen years, Ireland now rivals Luxembourg as one of the premier European centres for fund administration (IFSC, n.d.). While New York, Boston or London-based offices market and manage funds; places like Dublin handle the administrative business created by these activities. These back-office activities include such tasks as providing safe custody for bonds and shares and preparing financial statements (The Economist, 1996). Often third parties such as Citibank or Chase Manhattan undertake this administrative work on a subcontract basis. Globally recognizable names like Dresdner Bank, Fidelity, Commerzbank and Goldman Sachs all administer IFSC-based funds (IFSC, n.d.).

Treasury operations constitute the ‘financial engine rooms of companies and banks’ (The Economist, 1996: 83) and are another prominent Dublin activity. This is an increasingly popular activity as more companies centralize their European treasury operations. Similar to fund administration, treasury management involves routine, back-office tasks like handling payments and receipts and coordinating lending and borrowing between different divisions of a company (The Economist, 1996). Many IFSC-based treasury operations are recognizable names in other industries—companies like Bristol-Myers Squibb, Ericsson and Volkswagen. Although relatively small in size, averaging around six to ten employees, these corporate treasury operations do move significant amounts of capital (IDA Financial Services, Research Interview, 5/22/00).

The IFSC has also become a key location for corporate banking. As mentioned above, the IFSC is a corporate banking center, so IFSC banks provide large loans to corporations and governments for large purchases such as airplanes or power plants. Over half of the world’s largest banks like Citibank, Chase Manhattan and ABN
Amro maintain an IFSC presence (IFSC, n.d.). The IFSC also attracts a number of niche banking activities. For instance, the presence of such companies as Boeing Capital Corp, Airbus Finance Co. and KLM Financial Services, means that Dublin rivals London as a leading center for aircraft leasing. While many banks do employ significant numbers of people—Rabobank and ABN Amro both employ over 50 people, aircraft leasing operations are usually smaller (Fintel Ltd., 2002). KLM Financial Services for instance, employs only three people (KLM Financial Services, Research Interview, 1/31/01).

Finally, the IFSC houses a significant number of life and non-life insurers. The insurance ‘passport’ established by the EU Third Life Directive, resulted in the IFSC attracting an increasing number of life insurance companies. These EU regulatory changes enacted during the mid-1990s allow life insurers headquartered in one EU country, to sell insurance elsewhere in the EU. The same directive further permits non-EU companies with EU-based affiliates to offer products and services throughout the entire EU (IFSC, n.d.). In this instance, full EU membership provides the IFSC with a distinct advantage over competing financial centres specializing in insurance, like Guernsey and the Isle of Man, which are considered outside the European Union for trade in financial services (Corkill Cobb, 1998). At the beginning of 1998, 15 IFSC licensed life assurance companies operated out of Dublin, but by the end of 1999 that number nearly doubled to 29 (Dublin Report, Summer 1999). Averaging around twenty employees, life insurance operations are often larger than many IFSC firms (IDA Financial Services, Research Interview, 5/22/00). In spite of the recent growth in life insurance, non-life insurers like captive insurance and reinsurance remain more prevalent (IFSC, n.d.).
Dublin’s IFSC has garnered a reputation, not as a site for tax evasive activities, but rather for routine, back-office activities. Many of the activities described above were once performed in larger financial centres like Frankfurt, London or New York. Processes of both centralization—as in the case of corporate treasury, and decentralization—as in the case of fund administration, motivated their location in Ireland. In either case this reorganization is a cost-driven process, as it is for many other service activities (Gillespie et al., 2001). While these cost-driven activities dominate, efforts are being made to move the IFSC toward more sophisticated, knowledge-driven activities. To date however, Ireland has been most successful in attracting other niche activities such as marine insurance and E-commerce (Department of the Taoiseach, 1999).

5.2 The impact of the IFSC on employment and labor pool dynamics

As noted above, the IFSC created approximately 10,000 jobs since 1987. Several very sizable financial service firms operate out of the IFSC, but most firms are quite small. Survey data displayed in Table 3 illustrate several basic characteristics of IFSC companies. Most firms employ small numbers of people with 43 percent employing fewer than ten people and over two-thirds employing fewer than 25. Only 16 percent of firms employ over 50 people, with Citibank and its 1500 employees representing one of the more prominent examples. While Irish people occupy most IFSC positions, expatriates comprise a significant portion of IFSC employment, particularly amongst managers. Only 41 percent of firms indicated that more than 90 percent of their managers were Irish. This should not be entirely surprising given that high mobility, particularly amongst the most skilled people in the industry, characterizes the financial services industry as a whole (Beaverstock and
Boardwell, 2000). Expatriates are commonly assigned to set up and establish the Dublin office, after which Irish managers often replace the expatriates (IDA Financial Services, Research Interview, 5/22/00). This pattern of nationalizing management is a common practice in many MNC affiliates (Yeung et al., 2001). Regarding the general education level of the workforce, only 41 percent of financial services MNCs indicated that over 90 percent of their staff holds a third-level education. As will be shown later, third-level graduates are not always necessary and for some positions requiring graduate labor the requisite skills are not always available.

Several issues arose during the economic boom that disrupted the financial services labor pool. An Institute of Bankers in Ireland (IBI) study assessing the staffing and skills needs of the Irish financial services industry highlights some of these issues. First, almost 90 percent of the companies surveyed noted a lack of available IT staff, with skills shortages inflating the costs of IT staff. IT skills shortages are not unique to the IFSC, but rather the Irish economy as a whole. The most striking result, however, relates to the high turnover rate amongst IFSC staff. Table 4 shows staff turnover at the IFSC. At 16 percent, IFSC turnover exceeded the 9 percent found in the entire Irish financial services industry. Overall, junior administration and customer service jobs had a 10 percent turnover, but IFSC companies experienced a 21 percent turnover rate in the same category. Although other areas of IFSC employment experienced similarly high levels of turnover (notably ‘Intermediate-Other Specialists’), junior administration and customer service comprise almost 50 percent of all IFSC jobs. Fund administration continues to account for almost half of all IFSC related investment (IDA Financial Services, Research Interview, 3/19/03). Whereas in other sectors of the economy like software,
the most pressing problem during the economic boom was recruiting and retaining skilled personnel, in financial services it is retaining staff at entry levels (White, 2002).

With the exception of IT staff, a mismatch between the people’s skills set and the available jobs causes the high turnover rate among junior staff at the IFSC. In many instances, the people taking entry-level positions are overqualified. When companies first located in Dublin, they hired third-level graduates for entry-level, back-office jobs. As noted by a representative of the Financial Services Industry Association (FSIA) however, this recruitment strategy proves increasingly untenable.

It’s backfired a bit because now they have all these highly qualified people but just for entry-level, bare minimum jobs that don’t get people off the ground (FSIA, Research Interview, 5/26/00). The unchallenging and routine nature of this work, along with limited opportunities for advancement, creates an unstable labor pool with a great deal of churning in the lower levels. In such instances, people are more likely to find different lines of work, or similar but better paying work elsewhere.

While staff turnover often contributes to the circulation of knowledge within specific industrial clusters (Henry and Pinch, 2000), this does not necessarily hold true where low-skill, routine jobs prevail. Rather, staff churning is more likely to have negative consequences for both companies and employees. Many companies prefer not to hire or create opportunities for people with a history of leaving after six months or a year (Citco, Research Interview, 2/7/01). Moreover, staff poaching between firms further fuels salary inflation, in turn raising labor costs. High turnover rates also inhibit the long-term firm development because firms must devote greater resources to staff recruitment training, rather than developing its existing staff’s capabilities.

---
6 The study incorporated both the domestic financial services industry and the IFSC (Institute of Irish
(Malmberg et al., 1996). The industry responds to these developments by looking increasingly to people without third-level educations. Specifically, IFSC firms target school leavers and women returning to the workforce for internal training (FSIA, Research Interview, 5/26/00). The shift toward non-graduate labor further indicates that IFSC-based firms are not moving into more sophisticated, knowledge-driven activities.

Firms that do employ greater numbers of highly skilled employees are not as effected by staff retention difficulties. For instance, in expanding its Dublin operations, one reinsurance company recruited from outside of Ireland.

Actually the positions needed experienced people, and it is actually easier to recruit outside of Ireland now. It is very difficult to find local staff, and in our particular business [reinsurance], which is different. It required us to find people who had that kind of experience and there isn’t a lot of that in Ireland right now. We are too small to bring in raw recruits and train them up. We needed to bring people with at least the base knowledge. (ESG Re, Research Interview, 10/23/00)

What is noteworthy about this statement is that the local labor market does not currently possess enough people with the requisite skills for more advanced activities—in this instance, specific reinsurance skills. According to this managing director, it was relatively easier finding people with IT skills than reinsurance skills because IT skills are more universal. These labor pool dynamics do not dispel the notion that companies locate in the IFSC for reasons other than the favorable tax treatment and low labor costs. If companies are more willing to bring in people from abroad that have no intention of living in Ireland long-term, then it will be difficult for the labor pool to develop these specialized skills. Given that high mobility—particularly amongst the most skilled people in the industry, characterizes the
financial services industry as a whole (Beaverstock and Boardwell, 2000), expatriates will continue to fill many of the most advanced positions.

While the employment generated by the IFSC provides many people with opportunities to acquire general business skills and experience, it remains unclear as to whether the labor pool will develop the more specialized skills necessary to support more sophisticated activities. Several efforts are being made to infuse the labor pool with more advanced skills. For instance, Irish people entering careers in financial services are encouraged to pursue assignments in other larger financial centres like New York or London, with the hopes that they will acquire advanced skills and then return to Ireland (IDA Financial Services, Research Interview, 3/19/03). Moreover, government agencies like IDA Ireland and organizations like the FSIA regularly inform third-level institutions about the industry’s specific skill needs (FSIA, Research Interview, 5/26/00). As Ireland loses its cost advantage in many of the lower value-added activities in which it come to specialize, it must continue developing labor capable of undertaking activities in more sophisticated niches.

5.3 Linkages with other locally-based firms

Local linkages not only serve as key sources for positive spillovers into the local economy, but also indicate whether an agglomeration of firms represent a functionally connected production system. The promotional material surrounding the IFSC often claims that in addition to the centre’s direct employment contribution, it creates indirectly many other high quality jobs in ancillary services like law and accounting. While IFSC-based firms are involved extensively with other firms, these linkages are more likely formed with firms outside of Ireland, than within Ireland. This is indicative in the large number of agencies specializing, for instance, in
managing the fund administration operations for firms not physically present in Ireland. In addition to interacting with firms outside Ireland, many firms are captives offering services only for other affiliates within their corporate organization. Notwithstanding, local linkages remain sparse within the financial services sector, although several other producer service industries benefit from the IFSC’s development.

Few local industries benefit more from the continued development of international financial services than the Irish legal industry. Almost all financial services multinationals purchase legal services locally. These legal firms guide financial services MNCs through the local legal and regulatory system. Within the context of international financial services, several large firms dominate the legal industry. Table 5 presents a rough picture of which legal firms dominate IFSC-related business; of the 323 firms identifying their lawyers, 92 percent identify only one of six firms. Over 50 percent of financial services firms identify one of two legal firms—McCann FitzGerald and A&L Goodbody (Fintel Ltd., 2002). The increased demand for legal services associated with the IFSC’s growth, led firms to establish offices in the Custom House Docks catering specifically to international financial services. Since lawyers are the technicians of the regulations governing the IFSC and the financial services industry, their role in the IFSC’s development is noteworthy. In crafting regulation conducive to business, they by extension, create more demand for their services (Fintel Ltd., Research Interview, 10/27/00).

Tax and auditing services represent the other prominent, locally purchased producer services. Several very large firms also dominate these activities, but unlike legal services they are global leaders not Irish firms. Table 6 shows that predictably, the ‘Big Five’ accounting firms—KPMG, PricewaterhouseCoopers, Arthur Anderson,
Ernst and Young and Deloitte and Touche⁷ provide the bulk of accounting and auditing services for IFSC-based firms. These firms follow the internationalization strategy that Dunning (1993) distinguishes as client following. Client followers chase multinationals into new markets in order to provide them with the same kind of services they rely upon in their home markets. Every financial service firm interviewed indicated that their Irish auditor also served the entire corporation. This further reinforces the IFSC’s outward, non-local focus.

Given that people are key inputs for financial services MNCs, the personnel recruitment industry is another professional service benefiting from the IFSC’s growth. These firms depend greatly on the industry’s overall economic health. When the industry experiences significant growth there is obviously great demand for their business. Recruitment companies are also one of the first to feel the effects of an economic downturn, as workers are more willing to stay in their current positions and companies are less likely to add new employees (SkillsGroup International, Research Interview, 5/29/01).

The regulations bringing IFSC activities onshore do not alter the fundamental relationship between financial services firms and the rest of the Irish economy. When the IFSC was a spatially and legally discreet entity, it was essentially an exclave economy. Now that it has been brought onshore it represents an enclave economy, disconnected from the rest of the Irish economy and with a strong outward focus. The primary support services are either other MNCs locating in Dublin primarily to serve financial services MNCs as in the case of the Big Five accountancies, or like personnel recruitment firms, dependent on the business created by MNCs. The benefits created by these jobs, and jobs in other activities relying on the IFSC such as

---

⁷ The number of firms providing accounting and auditing services will become even more concentrated
cleaning, catering or accommodations should not be discounted. Nevertheless, the highly dependent nature of these linkages means that these relationships do not present a source of long-term sustainable growth and do not deepen firm embeddedness.

5.4 The Changing Geography of Financial Services FDI in Ireland

Whereas the previous section demonstrates that the IFSC is a weakly linked production system, this subsection shows that several factors are causing a spatial dispersal of activities. Requiring firms to locate in the Dublin Docklands proved to be a contentious issue, as the total space provided at the IFSC never matched the needs of the approved companies. As a result, office space often costs double that of other suitable accommodation in Dublin (MacSharry and White, 2000). This mismatch between supply and to some extent, forced demand, is one reason why Dublin ranks as the world’s 9th most expensive commercial property market (CB Richard Ellis, 2003). In addition, IFSC lease terms are more demanding than in other locations, with IFSC leases lasting typically 25 years (with a 15 year break)—a period five times longer than other places throughout Dublin (Hamilton Osborne King, 2000). Furthermore, the congestion associated with the Dublin region’s rapid growth makes a city centre location increasingly difficult, expensive and time consuming for commuters (Ellis and Kim, 2002; Williams and Shiels, 2001). While the new locational freedom presents opportunities for the creation of regionally-based financial services employment, it also hinders the development of the Docklands as a hub for financial services activities (Department of the Taoiseach, 2000).

As KPMG intends to absorb most of Arthur Anderson’s Dublin operations.
Establishing the Dublin docklands as a hub for international financial services in Ireland remains a stated objective. According to the Irish government, “…there are clear advantages to having an identifiable financial services location from the perspective of marketing and achieving synergies and economies of scale (Department of the Taoiseach, 1999: 10).” Other benefits include increased opportunities for networking and greater proximity to expert support services (Department of the Taoiseach, 2000). Essentially, this strategy attempts to replicate the dense network of social relations that underlie the success of other, larger financial centres like London or New York (Thrift, 1994). Proximity is seen as playing an important role in allowing for these deep networks of social relations to develop over time (O’Farrell and Wood, 1998), but as noted above several factors are causing a dispersal of the industry.

The high price and lack of office space are among the more prominent factors causing firms to relocate some aspects of their operations to less costly locations in Ireland (Department of the Taoiseach, 2000). The lack of office space inhibits office expansions at the IFSC and forces firms to look elsewhere. In many cases, this dispersal takes firms no further than across the River Liffey. For instance, a number of fund administration operations relocated to a new office development on Georges Quay immediately opposite the IFSC (IDA Financial Services, Research Interview, 3/19/03). Nevertheless, several MNCs shifted activities to places outside of Dublin in response to the tight labor market, high costs and congestion. Approximately one in five firms surveyed considered moving some or all of their operations elsewhere in Ireland (White, 2002). One financial services recruiter claims this has been good for both companies and job seekers,

Financial Services companies have responded to this [Dublin’s rising costs and congestion] and a number of companies have chosen to set
up operations in the South and South East of the country. These opportunities have proved attractive to job seekers as they want to move back to parts of the country where they were originally from (Skillsgroup International, Research Interview, 5/29/01).

**Figure 2** shows the locations of IFSC-related activities that do not take place in Dublin. The most prominent firms to decentralize their activities out of Dublin include Fortis in Galway, PFPC International in Wexford, Citco Bank Nederland in Cork, and Deutsche International in Kilkenny. It should also be noted that these firms are all involved in fund administration, which relative to other IFSC activities constitutes lower value-added activities, yet still constitutes half of all IFSC-related employment (IDA Financial Services Division, Research Interview, 3/19/03).

Several case studies are instructive in order to better understand the processes transforming the geography of international financial services activities in Ireland. For instance, a lack of available office space at the IFSC largely contributed to Citco’s move to Cork. Citco’s choice of its Dublin affiliate as the site for all new European business necessitated an expansion of the workforce. Citco could not, however, gain access to the floor beneath them at the IFSC, so began considering locations outside of Dublin. They eventually settled on a facility at the Cork airport. In Cork, the facilities costs are not only cheaper, but Citco finds it easier to both hire and retain people (Citco, Research Interview, 2/7/01).

Another prominent IFSC company, Deutsche International established a regional office in Kilkenny in order to reduce facilities costs and ease the pressure created by Dublin’s tight labor market. Staff from the Dublin office, particularly senior management, filled the initial 20 positions. For the other 60 positions, Deutsche

---

8 This section is based on a phone interview with Deutsche International’s Business Development manager on 5/15/02. It should also be noted that in December 2000, Deutsche Bank announced that it is selling part of its Irish-based operations to the US financial house State Street. Nevertheless it was committed to maintaining a presence in Ireland and was set to add another 60 jobs in the next two years at its Kilkenny facility (*The Irish Times*, 12/4/02).
International received approximately 1000 applications. The applicant pool included people from a variety of sources like other IFSC companies, the local Kilkenny labor pool and people with business degrees either looking to return to Kilkenny or people simply not wanting to live in Dublin. Moreover, the Kilkenny office encounters a much lower turnover rate than Dublin-based financial services firms. Consequently, they can actually build and develop institutional knowledge because they are not constantly hiring and training entry-level staff.

In terms of the activities taking place at Deutsche International’s Kilkenny office, it initially involved relocating some of the firm’s most basic fund administration activities, with the more sophisticated, higher value-added activities remaining in Dublin. Since opening in April 2001, however, the Kilkenny office expanded to take on several other ancillary services. Deutsche International’s business development manager anticipates that the Kilkenny office eventually mirroring the Dublin office in terms of sophistication and perhaps surpassing the Dublin-based office because greater staff retention permits the continuous development of the Kilkenny office’s capabilities. The distance from the Dublin office does not impede the Kilkenny office’s development. This distance affects only senior management, and while Dublin is two hours away by train, most of the necessary communication can be accomplished through phone or video-conferencing.

These decentralization strategies present opportunities for other locations in Ireland to benefit from the country’s attractiveness to financial services firms. In doing so it contributes to efforts to achieve more balanced regional development throughout Ireland (Department of Finance, 2000; Department of the Environment and Local Government, 2002). Firms become more embedded not only by maintaining their cost competitiveness, but also by achieving higher retention rates
they can develop institutional knowledge and capacity. In addition, less time is lost to long commutes. In a sense, these firms become more embedded in Ireland, by becoming less embedded in Dublin. Workers benefit because it affords them the opportunity for a higher quality of life outside the pale of congested and expensive Dublin. Their wages go much further in places outside of Dublin where the cost of living is much lower. According to the managing director of one prominent recruitment firm, people leaving Dublin may expect a small drop in their salary, but the drop is negligible. While salaries may fall up to 3 percent, there is a 20 percent difference in the cost of living (The Irish Times, 9/22/00). Moreover, people selling homes in the Dublin region are virtually receiving giant bonuses given the differences in house prices between Dublin and the rest of the country.

Although continued decentralization of the financial services sector outside of Dublin seems inevitable, with the slowing economy financial services MNCs appear less likely to leave Dublin (Deutsche International, Phone Research Interview, 5/15/02). Property prices are no longer rising as quickly as during the height of the Irish boom, and fewer opportunities lead to less churning and hence less wage inflation. Nevertheless, the decentralized activities tend to be the most routine, and relatively lower value-added activities. These firms are enhancing their competitiveness primarily though cutting costs, rather than becoming more innovative and taking on higher value-added activities. These activities can take place anywhere throughout the country, and do not require the presence of other similar firms or firms providing specialized inputs. This indicates that these activities may not offer much long-term potential for affiliate evolution. In a sense, the movement of firms into cheaper locations throughout Ireland demonstrates the artificiality of Ireland’s competitiveness in some financial services niches. The clients of these financial
services MNCs do not care if the work takes place in Dublin or Kilkenny or Wexford, so long as they receive quality service and importantly, the benefits of the Irish tax regime. Similar processes of dispersal are occurring in the UK financial services industry, with more cost-driven activities being relocated out of London and into cities like Bristol (Gripaios and Munday, 2000). The difference is that while London stands as one of the world’s premier financial centres, Dublin has yet to firmly establish itself as a centre for anything other than routine, back-office activities.

6. Conclusions

Dublin’s IFSC is lauded as a national development dream (MacSharry and White, 2000), but this paper shows that there are several aspects of this development project that should curb this enthusiasm. First, routine back-office activities continue to comprise most of the activities undertaken at the IFSC. Second, high rates of staff turnover exist in the lowest skill positions and a lack of necessary skills exists in some higher-level positions. Third, local linkages are limited to a small number of local legal firms and global accounting firms. Fourth, although Dublin is the financial capital of Ireland, its environment of rapid growth causes some firms to take advantage of new locational freedoms to relocate some of their activities to the regions. In addition to illustrating the cost-driven nature of IFSC activities, this development potentially threatens the continued development of the Dublin Docklands as a hub for international financial services. These conclusions empirically support the notion that some elements of the IFSC resemble a financial branch plant (Murphy, 1998).

When the IFSC was both spatially and legally entity (and thus an OFC), it could be classified loosely as a functional OFC in the Hampton (1996) typology. With
the move onshore, the IFSC now represents an enclave economy in the Phelps et al. (2003) scheme. These structural weaknesses lead some, like financier Dermot Desmond, to claim that over the next decade there will be massive job losses at the IFSC (The Irish Times, 28 August 2000). Although aspects of IFSC activities do resemble some of the branch plant weaknesses associated with earlier rounds of foreign investment, it is difficult to be too critical of this component of Ireland’s growth phenomenon. At the most basic level, the IFSC achieved both of its original objectives. Regarding urban redevelopment, modern office buildings and apartments are now located in a formerly derelict part of Dublin. In terms of employment creation, the IFSC now exceeds the target initially established. Moreover, this employment has instilled in the labor force general business skills and knowledge of how to operate in a global marketplace. Many Irish people in the financial services industry are now enmeshed within the wider corporate networks of global firms and have consequently gained access to knowledge and opportunities elsewhere in the industry. In addition, while many firms establish Irish operations to take advantage of the low tax regime, the tax they actually do pay makes considerable contributions to the exchequer. In 2001, IFSC-related firms contributed an estimated 15 percent of all corporate taxes collected (The Irish Times, 16 June 2003).

In addition to local issues such as increased congestion and rising labor and commercial property costs, at a larger scale there are also European issues that could further threaten the continued development of Dublin as a financial centre. Although EU membership contributed significantly to the establishment and initial success of the IFSC, several aspects pertaining to the EU’s future development could have the opposite effect. For instance, EU enlargement creates new challengers in the competition for investment. Already places like Hungary and Estonia have created
similarly low tax regime. These new EU entrants already present significant challenges for manufacturing FDI (Barry and Hannan, 2002). However, the perceived weakness of their institutions and Dublin’s close proximity to London, means that Ireland’s position in the financial system should not be challenged by Eastern European centres any time in the near future. The more imminent threat to Ireland would be the implementation of tax harmonization throughout the EU. Eliminating Ireland’s low tax regime would seriously undermine its attractiveness as a financial centre. The current 12.5 percent tax regime is assured through 2010, but large countries like Germany and France are keen to establish a single European corporate tax rate. The Irish government opposes vehemently to the introduction of a single tax rate (Department of the Taoiseach, 1999), as does the United Kingdom. Although international financial services are now firmly established in Ireland, the continued presence of these activities rests heavily upon Ireland maintaining an advantageous tax and regulatory regime.
Works Cited


THE FINANCIAL TIMES. (1999), Old centres are new havens, Ireland Survey, 4 November, p. 2.


Acknowledgements: I would like to thank Richard Grant, Laura Martinez-Solano, Konstanze Höchtberger and Seamus Grimes for their comments on earlier drafts of this paper. This research was made possible by a doctoral dissertation improvement grant from the Geography and Regional Science Division of the National Science Foundation (BCS-0082487).
List of Tables and Figures

Tables:
- Table 1: IFSC-Related FDI as a percentage of Total FDI
- Table 2: Origins and Activities of IFSC Licensed Firms
- Table 3: IFSC Firm Characteristics
- Table 4: IFSC Staff Turnover
- Table 5: Legal Firms used by IFSC Firms
- Table 6: Accounting and Auditing Firms used by IFSC companies

Figures:
- Figure 1: Growth in IFSC-related Employment
- Figure 2: IFSC-related activities located outside of Dublin
## Table 1: IFSC-Related FDI as a percentage of Total FDI

<table>
<thead>
<tr>
<th></th>
<th>1998</th>
<th>1999</th>
<th>2000</th>
<th>2001</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total inward FDI (€ millions)</td>
<td>7905</td>
<td>17365</td>
<td>28706</td>
<td>17524</td>
</tr>
<tr>
<td>IFSC-related FDI (€ millions)</td>
<td>4332</td>
<td>11720</td>
<td>14006</td>
<td>5796</td>
</tr>
<tr>
<td>IFSC-related FDI as a Percentage of total inward FDI</td>
<td>54.8%</td>
<td>67.5%</td>
<td>48.8%</td>
<td>33.1%</td>
</tr>
</tbody>
</table>

*Source: Forfas International Trade and Investment Report 2002*
Table 2: Origins and Activities of IFSC Licensed Firms

<table>
<thead>
<tr>
<th>STAND ALONE</th>
<th>Total</th>
<th>Banking &amp; Asset Financing</th>
<th>Mutual Funds</th>
<th>Treasury</th>
<th>Insurance</th>
<th>Securities Trading &amp; Other</th>
</tr>
</thead>
<tbody>
<tr>
<td>USA</td>
<td>106</td>
<td>18</td>
<td>21</td>
<td>22</td>
<td>20</td>
<td>25</td>
</tr>
<tr>
<td>Ireland</td>
<td>86</td>
<td>18</td>
<td>2</td>
<td>10</td>
<td>9</td>
<td>47</td>
</tr>
<tr>
<td>UK</td>
<td>59</td>
<td>4</td>
<td>24</td>
<td>9</td>
<td>15</td>
<td>7</td>
</tr>
<tr>
<td>Germany</td>
<td>43</td>
<td>20</td>
<td>4</td>
<td>6</td>
<td>7</td>
<td>6</td>
</tr>
<tr>
<td>Italy</td>
<td>39</td>
<td>18</td>
<td>4</td>
<td>1</td>
<td>12</td>
<td>4</td>
</tr>
<tr>
<td>Japan</td>
<td>15</td>
<td>12</td>
<td>-</td>
<td>-</td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td>Holland</td>
<td>14</td>
<td>3</td>
<td>3</td>
<td>5</td>
<td>3</td>
<td>-</td>
</tr>
<tr>
<td>Canada</td>
<td>14</td>
<td>4</td>
<td>3</td>
<td>2</td>
<td>4</td>
<td>1</td>
</tr>
<tr>
<td>Sweden</td>
<td>10</td>
<td>-</td>
<td>1</td>
<td>3</td>
<td>6</td>
<td>-</td>
</tr>
<tr>
<td>Denmark</td>
<td>9</td>
<td>5</td>
<td>2</td>
<td>1</td>
<td>1</td>
<td>-</td>
</tr>
<tr>
<td>Belgium</td>
<td>8</td>
<td>6</td>
<td>-</td>
<td>2</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Switzerland</td>
<td>6</td>
<td>-</td>
<td>-</td>
<td>1</td>
<td>5</td>
<td>-</td>
</tr>
<tr>
<td>Others</td>
<td>81</td>
<td>31</td>
<td>13</td>
<td>11</td>
<td>8</td>
<td>18</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>490</strong></td>
<td><strong>139</strong></td>
<td><strong>77</strong></td>
<td><strong>73</strong></td>
<td><strong>92</strong></td>
<td><strong>109</strong></td>
</tr>
</tbody>
</table>


<table>
<thead>
<tr>
<th>AGENCIES</th>
<th>Total</th>
<th>Treasury</th>
<th>Insurance</th>
</tr>
</thead>
<tbody>
<tr>
<td>USA</td>
<td>88</td>
<td>82</td>
<td>6</td>
</tr>
<tr>
<td>Germany</td>
<td>24</td>
<td>12</td>
<td>12</td>
</tr>
<tr>
<td>UK</td>
<td>23</td>
<td>21</td>
<td>2</td>
</tr>
<tr>
<td>Canada</td>
<td>20</td>
<td>19</td>
<td>1</td>
</tr>
<tr>
<td>Sweden</td>
<td>18</td>
<td>17</td>
<td>1</td>
</tr>
<tr>
<td>Holland</td>
<td>12</td>
<td>9</td>
<td>3</td>
</tr>
<tr>
<td>Others</td>
<td>37</td>
<td>32</td>
<td>5</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>222</strong></td>
<td><strong>192</strong></td>
<td><strong>30</strong></td>
</tr>
</tbody>
</table>


<table>
<thead>
<tr>
<th>CAPTIVES</th>
<th>Total</th>
<th>Treasury</th>
<th>Insurance</th>
</tr>
</thead>
<tbody>
<tr>
<td>USA</td>
<td>90</td>
<td>50</td>
<td>40</td>
</tr>
<tr>
<td>UK</td>
<td>32</td>
<td>23</td>
<td>9</td>
</tr>
<tr>
<td>Sweden</td>
<td>29</td>
<td>4</td>
<td>25</td>
</tr>
<tr>
<td>Canada</td>
<td>20</td>
<td>18</td>
<td>2</td>
</tr>
<tr>
<td>Holland</td>
<td>20</td>
<td>2</td>
<td>18</td>
</tr>
<tr>
<td>Belgium</td>
<td>15</td>
<td>2</td>
<td>13</td>
</tr>
<tr>
<td>Germany</td>
<td>13</td>
<td>3</td>
<td>10</td>
</tr>
<tr>
<td>France</td>
<td>12</td>
<td>2</td>
<td>10</td>
</tr>
<tr>
<td>Others</td>
<td>64</td>
<td>22</td>
<td>42</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>295</strong></td>
<td><strong>126</strong></td>
<td><strong>169</strong></td>
</tr>
</tbody>
</table>

Table 3: IFSC Firm Characteristics

<table>
<thead>
<tr>
<th>Firm Size</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Firms with less than 10 employees</td>
<td>43.0%</td>
</tr>
<tr>
<td>Firms with between 11 and 24 employees</td>
<td>25.8%</td>
</tr>
<tr>
<td>Firms with between 25 and 49 employees</td>
<td>15.1%</td>
</tr>
<tr>
<td>Firms with 50 or more employees</td>
<td>16.1%</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Firm Characteristics</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Firms with greater than 90% Irish management</td>
<td>41.3%</td>
</tr>
<tr>
<td>Firms with less than 40% Irish management</td>
<td>28.3%</td>
</tr>
<tr>
<td>Firms with greater than 90% Irish staff</td>
<td>49.4%</td>
</tr>
<tr>
<td>Firms with less than 40% Irish staff</td>
<td>14.0%</td>
</tr>
<tr>
<td>Firms with more than 90% of the work force possessing a third-level education</td>
<td>40.9%</td>
</tr>
</tbody>
</table>

Number in Sample: 93

Source: Author Questionnaire, Fall 2000
Table 4: IFSC Staff Turnover

<table>
<thead>
<tr>
<th>Job Category</th>
<th>Staff Turnover*</th>
</tr>
</thead>
<tbody>
<tr>
<td>Junior - Administration/Customer Service</td>
<td>21%</td>
</tr>
<tr>
<td>Junior - IT Specialists</td>
<td>12%</td>
</tr>
<tr>
<td>Junior - Other Specialists</td>
<td>14%</td>
</tr>
<tr>
<td>Intermediate - Administration/Customer Service</td>
<td>11%</td>
</tr>
<tr>
<td>Intermediate - IT Specialists</td>
<td>16%</td>
</tr>
<tr>
<td>Intermediate - Other Specialists</td>
<td>22%</td>
</tr>
<tr>
<td>Senior - Administration/Customer Service</td>
<td>5%</td>
</tr>
<tr>
<td>Senior - IT Specialists</td>
<td>3%</td>
</tr>
<tr>
<td>Senior - Other Specialists</td>
<td>6%</td>
</tr>
<tr>
<td>Total</td>
<td>16%</td>
</tr>
</tbody>
</table>

*Staff Turnover: # departed / average # employed during 1997

Source: The Institute of Bankers in Ireland (1997)
Table 5: Legal Firms used by IFSC Firms

<table>
<thead>
<tr>
<th>Firm</th>
<th>Banks/Finance</th>
<th>Corporates</th>
<th>Fund/Port. Management</th>
<th>Re/Insurance</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>A&amp;L Goodbody</td>
<td>29</td>
<td>3</td>
<td>19</td>
<td>32</td>
<td>83</td>
</tr>
<tr>
<td>McCann Fitzgerald</td>
<td>43</td>
<td>4</td>
<td>8</td>
<td>24</td>
<td>79</td>
</tr>
<tr>
<td>Arthur Cox</td>
<td>18</td>
<td>7</td>
<td>10</td>
<td>5</td>
<td>40</td>
</tr>
<tr>
<td>Dillon Eustace</td>
<td>9</td>
<td>1</td>
<td>21</td>
<td>6</td>
<td>37</td>
</tr>
<tr>
<td>Matheson, Ormsby &amp; Prentice</td>
<td>11</td>
<td>2</td>
<td>10</td>
<td>7</td>
<td>30</td>
</tr>
<tr>
<td>William Fry</td>
<td>8</td>
<td>4</td>
<td>12</td>
<td>5</td>
<td>29</td>
</tr>
<tr>
<td>12 Others</td>
<td>6</td>
<td>7</td>
<td>4</td>
<td>8</td>
<td>25</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>124</strong></td>
<td><strong>28</strong></td>
<td><strong>84</strong></td>
<td><strong>87</strong></td>
<td><strong>323</strong></td>
</tr>
</tbody>
</table>

Source: IFSC Yearbook 2002 (Fintel Publications)
Table 6: Accounting and auditing firms used by IFSC companies

<table>
<thead>
<tr>
<th>Firm</th>
<th>Banks/Finance</th>
<th>Corporates</th>
<th>Fund/Port. Management</th>
<th>Re/Insurance</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>KPMG</td>
<td>41</td>
<td>6</td>
<td>21</td>
<td>33</td>
<td>101</td>
</tr>
<tr>
<td>PricewaterhouseCoopers</td>
<td>34</td>
<td>12</td>
<td>31</td>
<td>24</td>
<td>101</td>
</tr>
<tr>
<td>Arthur Anderson</td>
<td>30</td>
<td>4</td>
<td>9</td>
<td>8</td>
<td>51</td>
</tr>
<tr>
<td>Ernst and Young</td>
<td>9</td>
<td>6</td>
<td>9</td>
<td>13</td>
<td>37</td>
</tr>
<tr>
<td>Deloitte and Touche</td>
<td>9</td>
<td>0</td>
<td>5</td>
<td>9</td>
<td>23</td>
</tr>
<tr>
<td>7 others</td>
<td>5</td>
<td>1</td>
<td>3</td>
<td>1</td>
<td>10</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>128</strong></td>
<td><strong>29</strong></td>
<td><strong>78</strong></td>
<td><strong>88</strong></td>
<td><strong>323</strong></td>
</tr>
</tbody>
</table>

*Source: IFSC Yearbook 2002 (Fintel Publications)*
Figure 1: Growth in IFSC-related Employment

Source: Forfas Annual Employment Report, various years
Figure 2: IFSC-related activities located outside of Dublin

Dublin (See Inset): International Financial Services Centre (IFSC)

Galway: Fortis Fund Services

Cork: Citco Data Processing Services

Kilkenny: Deutsche International

Wexford: PFPC International
About CISC

The Centre for Innovation & Structural Change (CISC) is a multidisciplinary research centre which undertakes programmes of research and research training related to the innovation processes and policies that underpin the knowledge-based economy and society. CISC is based at NUI Galway is partnered with DCU Business School and the Michael Smurfit Graduate School of Business at UCD, with other national and international collaborative arrangements.

The origins and consequences of innovation and technological change can be interrogated at many levels, and interpreted from different perspectives. Thus, CISC’s research is interdisciplinary and its structure collaborative. The complexity of innovation and structural change motivates CISC’s disciplinary openness and methodological diversity within the community of scholarship. Participants include economists, geographers, management scientists, as well as specialists in industrial relations, human resource management, and information systems. Research at CISC is structured into five priority research areas:

- Systems of innovation.
- Industry clustering
- Internationally traded services
- Inter-organisational systems
- High performance work systems

CISC Working Papers Series

CISC Working Papers represent work in progress by CISC personnel and their co-authors, and as such, do not represent final conclusions. It is requested to check with authors before quotation. Working papers are available online from our web site (see below)

Contact Details

For further information, please visit [www.nuigalway.ie/cisc](http://www.nuigalway.ie/cisc)

or contact:

**Angela Sice**
Development Officer
angela.sice@nuigalway.ie
Tel: +353 (0)91 512363

**Dr Aidan Kane**
Director
aidan.kane@nuigalway.ie
Tel: +353 (0)91 512362