The role of I.T. migrants working in Ireland: the uneasy and unstable relationship between skills shortages and career choices

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Abstract

The stunning success enjoyed by the Irish economy over a sustained period of time has made it a model for other countries to emulate when seeking to develop their economies. This paper provides a more sceptical commentary than many contemporary analysts and observers, using the economy's increasing dependence on skilled migration in key sectors such as software and ICT as its starting point, rather than the spectacular macroeconomic statistics. The assumption that Ireland will in the future continue to receive the immigrants it requires to resolve its skills shortages has masked the defects existent in its economy. Therefore, should fewer 'suitable' immigrants move to Ireland, which is certainly a good possibility, then Ireland's dependence on immigration for economic success will be exposed, potentially leading to serious economic consequences.

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Introduction: the problems of prosperity[1]

Ireland's economy has undergone a remarkable transformation in the last twenty years. From a country lagging well behind comparable European countries in both

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[1] Some of the text utilises interview data generated by the "Transnational migrants and the Dublin labour market" project run by the Institute of International Integration Studies and the Employment Research Centre at Trinity College Dublin, Ireland, between 2002 and 2006. In 2005 27 semi-structured qualitative interviews in Dublin were conducted with 32 people, 25 of whom were migrants (the rest being human resource managers and policy-makers). Of these, 15 were from non-EU countries (of which 8 were Indian), 7 from the EU15 countries, 3 from the EU10 countries which joined in 2004, and 4 from CEE countries. 19 of the interviewees were men and 6 were women – broadly reflecting the gender composition of the workforce – and the age range was 23-41 years old, with the majority clustered in the 27-36 age bracket. Pseudonyms are used in order to mask the identity of the given interviewee.

national income and unemployment terms, the stunning turnaround in the 1990s made the country known worldwide as the 'Celtic Tiger'. Ireland experienced high economic growth throughout the 1990s (more than 6% per annum), on a par with or exceeding the performance of the East Asian 'tigers', and even in the 2000s the lower rate of expansion has been and continues to be substantially above the EU average (Schweiger and Wickham 2005). With regard to the unemployment rate, this fell from more than 15% in 1993 to less than 5% by the end of the decade (Smith 2005), and has remained at that level ever since. In addition, such a profound change was, despite Ireland's low-tax status, accompanied by a strengthening of the role of trade unions in the political economy – at the policy-making level at least (Nolan *et al.* 2000) – thereby ensuring that the Irish experience cannot be categorised as a copy of US-style capitalism.

Thus Ireland has provided a model of development for poorer European countries, in particular those which joined the EU in 2004. Indeed, many of Ireland's policies, such as low taxation – especially on corporations, in order to encourage Foreign Direct Investment (FDI) – and taking advantage of EU membership seem to have made a lasting impression. However, now Ireland is one of the richest countries in Europe the challenges facing the economy are significantly different: how to deal with the problems of prosperity rather than those of poverty. One of the most pressing challenges facing the economy is the skills shortages that have afflicted key economic sectors since the end of the 1990s. What originally seemed to be a shortage of labour as a result of the rapid economic growth now appears to be more entrenched, as demonstrated by the reappearance of skills shortages soon after the resumption of strong growth in 2003.

This paper will examine the reasons for the emergence and entrenchment of skills shortages in the software sector. Ireland is the largest exporter of software in the world (Hoffman 2005), and the software sector is more important not only for the broader Information and Communication Technology (ICT) sector but also the economy as a whole than in other countries (Ó Riain 2004) (Haynes *et al.* (2005: 22) report that in 2000 "[v]alue added in the ICT sector accounted for 11.6% of Ireland's GDP, compared with an EU average of 5.1%"). Moreover, software is perhaps the foremost example of a knowledge-based economic sector, meaning that assessing skills shortages in this industry is important for Ireland and also for Europe as a whole, for the Lisbon Agenda is predicated on knowledge-based industries making the EU the most dynamic economic region in the world by 2010.

Concurrent to the explosive economic growth has been the reversal of a historical trend: Ireland is now a country of immigration rather than emigration. These two factors – high economic growth and high net inflows of migrants into Ireland – are often viewed to be inextricably linked; that is, the growth forced employers to search for suitable labour outside Ireland because the supply was exhausted in the Republic.

In contradistinction to this position, I argue that immigration is being used by Ireland to mask the defects in its education and training systems, which are the real causes of the skills shortage. Instead of addressing the problems that exist in education and training, Ireland is becoming increasingly dependent on immigration to resolve its skills shortages. However, the career choices made by software migrants, which could involve moving country, have not been addressed adequately by policy-makers: the assumption that Ireland will continue to receive the immigrants it needs is unrealistic and could have significant consequences for the Irish 'model'.[2]

Education and training in Ireland

In addition to factors such as low taxation and positive attitudes to EU membership, Ireland is also deemed to be a model for other countries because of its education system. It is oft-repeated that the existence of a well-educated and skilled labour force allowed companies to have the best of both worlds during the 1990s: low labour costs and high-quality workers. But this was not quite the case: companies benefited from low labour costs and high-*quantity* workers. A favourable demographic structure combined with an education policy emphasising the low-cost production of a large volume of technical graduates on short-cycle courses that kept them out of the labour market for a relatively short period of time, to give the ICT sector the critical mass of workers required to make returns on their investment (Wickham and Boucher 2004).

What is more, while Ireland is a middle-ranking country when one looks at the average secondary school student across developed countries, a significant minority of school students do much less well: one notable example is the 15%-20% of school leavers who according to the OECD's 1995 International Adult Literacy Survey lack basic literacy, well above the figure for many other European countries (*ibid.*). Also symbolic of the lower educational standards are high rates of failure and poor overall results in maths and science subjects (i.e. the subjects important for students aspiring to work in the ICT sector) at secondary school level, and the picture is disappointing when one considers lifelong learning as well (Enterprise Strategy Group 2004). Moreover, spending per person, at primary, secondary and tertiary level, has not only been below the average for OECD countries as a proportion of national income, but it also fell as a proportion of national income in the 1990s (O'Connell 2001) (a trend that has continued into the new century (Schweiger and Wickham 2005)).

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[2] Indeed, the first public comment on the link between immigration and the entrenchment of skills shortages was not made until the end of 2006, when the general secretary of the Irish Congress of Trade Unions asked "But how long with they stay? What will happen when economic convergence of the 10 new EU countries begins to occur, or when the rest of Europe opens its markets to the highly skilled?" Even then, it was an aside in a long op-ed piece in the *Irish Times* which mostly dealt with other issues (Begg 2006).

Therefore, the Irish system does not produce the quality labour commentators assume to be the case. Since the dotcom crash the quantity has also proved lacking: it seems many Irish students do not want to study the subjects deemed necessary for entry into industries such as software. Courses more likely to guarantee stable, secure employment, such as management and nursing, have become more popular relative to computer science and electronic engineering degrees. For instance, a Dublin City University survey found that half the numbers entered computer courses at university level in 2005 as compared to 2000 (Donnelly 2006).

Given the above evidence, it is not surprising that the use of skilled migrants to deal with skills shortages is now seen as crucial for the present and future success of the software industry, and to some extent the wider economy as well. The software sector is one of the few which qualify for the fast-track work visa and work authorisations – initially *ad hoc* measures introduced at the turn of the century but which are now intended to become the basis of a formalised "skilled and highly skilled migrant worker programme" (Ruhs 2005, p.16) – for sectors suffering from skills shortages, because it is assumed *a priori* that the sector suffers from a skills shortage. Moreover, this assumption is so entrenched that the work visa and work authorisation regulations do not require employers to prove that an absence of suitable workers in Ireland made it necessary for them to employ the migrant (Ruhs 2005) (this is in contrast to the most widely-used means of entering Ireland, the work permit, which since the introduction of work visas and work authorisations is primarily for low-skill occupations and is significantly more restrictive on the rights of the immigrant). Therefore, even if there is a revival in the popularity of subjects associated with high tech sectors such as software, and an improvement in the quality of the graduates, Irish regulations leave the door open for the use of migrants to become integral to the functioning of these sectors regardless of any developments in this direction.

To some extent the problems in the education system may not matter if company training compensates through enabling employees to improve and update their skills set. However, this is generally not the case: Nina Brown's (2002) study of the Irish software industry found that there is a tendency to 'buy' rather than 'make' skills, and this study confirmed her findings. Companies prefer this strategy because the software industry is characterised by rapidly changing technologies. Thus the costs of adapting to new technologies are not sunk in existing employees who may subsequently leave the company, but can be transferred to the employment of new workers who have the required skills (not least because the migrant can be in the country in a matter of weeks due to the fast-track nature of the work visa and work authorisation regimes (*ibid.*)). In addition, companies gain from using recruitment as a training policy because the migrants are often over-qualified for their position.

Migrant career choices and their importance for the Irish economy

The previous section established the role of immigration in the entrenchment of skills shortages in Ireland. As hopefully could be seen, the use of migrants to resolve skills shortages deals only with the symptoms and not the causes of the shortages. The causes, i.e. the inadequate education and training systems, are being ignored in favour of the easier but less sustainable option of covering short-term needs with migrant labour. Unfortunately, as was elaborated at length in the theoretical text in this theme, this approach to immigrants fails to take into consideration the possibility that they have the capacity to choose differently should they so desire. The global and generic nature of ICT and software skills in particular, coupled with the decreasing cost of travel, gives skilled migrants in the knowledge industries autonomy that could have significant consequences for the Irish economy.

How this autonomy is exercised depends on the individual migrant, but some trends were detected by this study, and they revolve around the life cycle. Broadly speaking, many skilled immigrants do not plan to stay in Ireland in the long-term, with a return to the home country the ultimate goal, and those that will remain in Ireland are likely to move into management-oriented positions within or even outside the sector. With regard to the first intention:

We are planning to move back even if the economy is doing well. I really would like our daughter to start her schooling in India, because after that it would be difficult to move back…So we are hoping that we can go back in two years (Murali, 36, Indian, has worked in the Irish software industry for several years).

Especially with our children growing and our parents getting older…we feel that we are somehow stealing from both sides (Pavel, 36, Czech, has worked in the Irish software industry for several years).

As for the second:

While my position now is a senior software developer…[and] it's good, I would like to move towards designing something or be [a software] architect. And later I would like to be a technical team leader – the person who knows the technology, but rather than designing or developing something, manages people who know how to design and how to develop things. I don't really want to be a manager: computers are much easier to handle than people. But I have seen my colleagues – especially back in Hungary – after 35, 40 years [of age], people have had enough of the daily program code-crunching. They are much more interested in leading projects or managing teams. And ideally, I think I would like to end my career as an IT Director, or something like a Chief Information Officer, although I want to participate in open source developments in the background at home, just to keep up with the technical level of knowledge. But for the salary, I would like to be a kind of technical manager

than [working on] code (Tibor, 34, Hungarian, has worked in the Irish software industry for several years).

This means that the more traditional positions in the sector – for example, software engineer – will experience significant turnover of employees due to the desire to move either into management or to another country. So who will fill the gap? Not many from the Irish workforce, as was argued above.   Thus Ireland needs a *continuously high* inflow of skilled migrants into the sectors which need them most. While the 2004 figure stating that 11% of the computer analysts and programmers employed in Ireland were non-Irish (Skills and Labour Market Research Unit, 2005: 70) may seem low, this is only the *stock* of non-Irish at one point in time. The *flow* of migrants is likely to be higher. Therefore, should the number of skilled migrants fall, or future skilled inflows work in other industries (for example, civil engineering), then the fallacy of resolving the skills shortage with the employment of immigrants rather than the improvement of education and training will be exposed. In other words, while inward migration is presently 'resolving' the skills shortage it is questionable whether the circle will be squared in the future, potentially leading to serious economic consequences.

For instance, it is possible that future poor performance vis-à-vis other countries – perhaps catalysed by the current high inflation rate and cost of living – could bring with it lower inflows of skilled migrants. Thus future skilled migrant cohorts may consider it more desirable to move to other countries, or perhaps, given the growing strength of the Russian, Indian and Chinese economies, choose not to migrate in the first place. An example is the experience of Ferenc, 38, who worked in the Irish software industry for several years before returning to Hungary in 2004. By the end of his time in Ireland he found the cost of living so great – particularly with regard to the housing market – that there was, in effect, no long-term future for him there.

Conclusion

The political economy of immigration is demonstrated to good effect in the Irish case. Its rapid transformation from confronting the problems of poverty to the problems of prosperity has led to the situation where previous economic defects have been masked by continued good macroeconomic performance. The chief problem now for Ireland is that, to some extent, future economic performance is in the hands of future migrants. This makes for an uneasy and unstable relationship between the skills shortages that exist and the immigrants that are expected to resolve them, for skilled labour, particularly in knowledge industries such as software, enjoy more autonomy over their career decisions than many other workers. Therefore, there is a mismatch between the expectations of policy-makers and the actions of immigrants. The *timing* and the *destination* of the movement is beholden to the migrant and not the policy-

maker, meaning that even if migration trends can be detected the future cannot be predicted with certainty (see also the theoretical text in this theme and my article on this website entitled "Is immigration the saviour of the welfare state?"). This is the case for both migrants already in Ireland and first-time migrants considering which country to move to.

The relevance for developing European economies seeking to emulate Ireland's success is clear: the problems of prosperity are just as challenging as the problems of poverty, albeit in a different way. In addition, while immigration can help the country overcome short-term economic problems such as skills shortages, the *causes* of these problems should be tackled rather than the *symptoms*; otherwise the problems will grow unnoticed and prove more difficult to deal with later on.

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