

Migration and EU enlargement: the case of Ireland v Denmark¹

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ABSTRACT

Since the EU enlargement, European migration policies were characterised by a fundamental inconsistency: faced by changes in public opinion toward migrants, the majority of the EU Member States have chosen to effectively restrict the mobility of European citizens despite the increasing economic returns to immigration experienced in the three states (UK, Sweden and Ireland) that opted out of such restrictions. In this paper we compare the experiences with migration in Denmark and Ireland – two states that have, up to now, exhibited dissimilar attitudes towards migration, and chosen different approaches to migration policy vis-à-vis the Accession States. The importance of this comparison rests on the fact that prior to the Accession, both countries exhibited some of the most liberal immigration policies in the EU. Yet, these policies were also fundamentally different. While Ireland embraced liberal market-based approach, Denmark chose to follow migration policies that favoured humanitarian reasons for granting residency over economic. Thus, the two countries represent a perfect example of similar overarching migration flows with differing selection mechanisms prior to the Accession and diametrically opposing policies following the Accession. Using a computable general equilibrium model, we show that the economic benefits from international migration imply a gain of 0.5 and 1.07% of GDP for Denmark and Ireland, respectively, per each 1% of the labour force taken up by migrant workers. We attribute the differences in economic gains to the nature of migration flows and labour markets specifics in the two countries. We further discuss various differences between the two states in their approach to migration as potential drivers behind the economic returns to migration experienced in Ireland and Denmark.

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¹ This paper is based on the research originally conducted for CEPOS, Copenhagen in 2006. As customary, all errors and omissions are author's own.

1. INTRODUCTION

From an economic theory point of view there is a strong case for more open migration within the EU. With respect to open labour markets, theory suggests that the gains from allowing free mobility of labour within a common trade zone include:

- Macroeconomic benefits of greater economies of scale in hiring labour (greater access to skills-specific pools of labour), better matching of productivity to wages and lower cost of some of the inputs into production (wages, costs of specific skills, social, human and, under certain conditions, financial capital);
- Labour market benefits of greater search efficiencies for workers and employers;
- Dynamic structural labour and product markets improvements: more specialized output mix and greater gains from trade (both standard gains from trade under Heckscher-Ohlin-Samuelson framework and extended gains from trade due to labour supply-induced specialisation changes – more on this in section 4.3); increased specialization in natives' human capital investment (a push factor incentivising greater human capital investments and more specialisation amongst the natives) along with gains from enhanced mobility of labour across sectors and EU Member States.

These theoretical predictions are further discussed in the context of Irish and Danish immigration policies below. However, little empirical analysis on the effects of opening up the labour markets for citizens of the New Member States (EU10 and Bulgaria and Romania) is available at this time. Consequently, much of the policy debate has taken place in the context of anecdotal evidence, hypothetical discussions of incentives and the theoretical framework. The present paper uses the case of Ireland and Denmark prior and after the Accession 2004 to shed some light on the effects of two different approaches to the immigration flows triggered by the EU Enlargement.

In many aspects of immigration experiences and specifically in the area of dealing with migration from the EU10 states, Ireland and Denmark represent opposite policy extremes. While Ireland adopted a completely unrestricted mobility approach to the EU10, Denmark chose to restrict new labour inflows. On the other hand, both countries had a similar approach to regulating access for the EU10 citizens to their welfare services (Gurdgiev, 2006:2).

In February 2006, the European Commission assessment of the migration policies of the Member States unequivocally defined the Commission view on the transitional restrictions placed on the new member states (EU10) by the majority of the EU15 states. Recognizing the importance of migrant labour in increasing the competitiveness of the European economies, the Commission urged all of the EU15 Governments to lift existing restrictions on EU10 migrants in advance of the 2011 deadline. This position mirrors the Presidency of European Council conclusions from November 2004 which devoted nearly two thirds of its report to migration policies and called for a more harmonized approach to immigration within the EU. In March 2006, the EU Commission issued its conclusions concerning the results of investigation into whether Ireland experienced displacement of the native workers with immigrants in 23 months since May 1, 2004 Accession. According to the report, “in the aggregate there is no evidence that immigration flows into Ireland have caused any important disruption to the labour market. On the contrary they have actively contributed to a strong economic performance” (reported in *The Irish Times*, 2006).

However, in contrast to EU leadership, some of the Member States, including those with previously open doors policy for economic migrants, e.g. Ireland and Denmark, have recently experienced a renewed debate about the desirability, advantages and costs of labour mobility. Most notably, in Ireland, after a year and a half of permit-free admission of the EU10 citizens, both the voters and some opposition parties have seemingly reversed their previously expressed support for unrestricted migration. In late December 2005, the leader of the Irish Labour Party (the third largest party in the Republic), Pat Rabbitte publicly questioned the merits of allowing Eastern European workers unrestricted access to the Irish labour markets. This was followed by a major public opinion poll recording a 78% support for a reintroduction of the work-permit system for admission of EU10 migrants. Interestingly, the same poll showed a 54% majority support for the idea that immigration has a positive impact on Ireland’s economy in general. The Labour Party leadership continued to insist on existence of evidence for displacement due to increased migration from the New Member States (EU10) with the latest remarks to this extent made in August 2006 (Gurdgiev, 2006:1). Another political party, Sin Fein, occasionally resort to anti-immigrant arguments to stir up nationalist vote at the grass roots level.

In 2007 parliamentary elections, immigration issues played only a secondary role in the electoral debates held in public. Yet, the need for tighter immigration restrictions, more direct selectivity

measures in admittance policies and immigration-related labour laws and regulations strengthening were all a part of the platforms on which the three main parties campaigned. The importance of immigration in the overall policy debate was highlighted by the fact that immediately following the elections, the Government created a new Ministerial portfolio with responsibilities for immigration and integration policies – a portfolio that bridges three previously separate ministries.

Within the EU25, there is no delegation of authority away from the national governments and although Qualified Majority Voting principle is now accepted on measures tackling illegal migration, legal migration remains subject to the unanimity rules. This situation will remain in place even under the provisions of the Reform Treaty, signed in December 2007 in Lisbon. The implications of these policy failures were brought to light by the 2004 Enlargement. According to Boeri and Brucker (2005: 2) “there was a “race to the top” of migration restrictions with 12 out of the 15 Member States of the European Union (EU) reneging on their previous commitment not to restrict worker flows from the New Members”.

In Ireland, recent concern about increased inflow of foreign workers is, in part fuelled by the argument that due to restrictive policies of the other Member States, Ireland and the UK are being forced to accept *all* surplus labour from the EU10 countries. On the other hand, in the countries that adopted severe restrictions on labour migration, such as Denmark, there is growing fear of possible deterioration of economic competitiveness vis-à-vis the states with more liberal migration regimes, which may benefit from capturing the better quality labour from the EU10 states. Finally in the countries with extensive welfare state spending the migration restrictions are motivated by the argument that some migrants are likely to abuse the welfare state services (this argument was extensively used in Denmark during the 2001 debate preceding immigration policies reforms). In all cases there is a tendency on behalf of the policy makers to move toward tighter immigration controls and centralised migration management².

This paper is designed to summarise the evidence on the Irish labour markets experiences with

² According to economic theory, the main costs of the failure to coordinate migration regime amongst the EU15 states arises from the possible diversion of migration flows. In words of Boeri and Brucker (2005:2), this “means that migration cannot fully play a spatial arbitrage function, “greasing the wheels” of otherwise immobile labour markets.”

migration and relating it to Denmark. In sections 2 and 3 we provide some evidence on the benefits and costs of immigration. In section 4 we use the US and EU-wide experiences and recalibrate one of the models of wage and growth effects of migration for the cases of Ireland and Denmark in order to highlight the different effects of migration policies in two countries. We also provide extensive discussion of which policy-specific differences in Ireland and Denmark can explain their divergent experiences. Section 5 concludes. Appendix 1 provides a summary of Irish immigration policies and experiences in the recent past. Appendix 2 summarises the nature and effects of the differences in labour market and migration policies in Ireland and Denmark.

2. EU10 ACCESSION AND IMMIGRATION POLICY: Background.

The accession treaties regulating admission of the EU10 states into the European Union on May 1, 2004 contain separate transitional arrangements governing labour mobility between the EU15 and the EU10 states. These involve postponement of the opening of labour markets for up to a maximum period of seven years – a clause, prior to 2006, utilised by 12 countries of the EU15, with exception of Ireland, Sweden and the UK. Table 1 below illustrates the existent transitional procedures, while Table 2 outlines the procedures adopted by the EU15 member states vis-à-vis the EU10 states.

According to the EU15 regulations, significant uncertainty concerning the overall migration policy outlook vis-à-vis EU10 accession states will remain in place at least until the end of 2008. Beyond 2008, a final two-year extension is subject to open interpretation as to what constitutes effective damages to labour markets and how these damages will be assessed.

Table 1. Permitted Transitional Arrangements.

Timing	Procedure	Source of Law
2004-2006	EU15 states can choose to apply national rules on access to labour markets.	National legislation
End of 2005	Choice to continue applying national rules through 2008 or implementing the EU rules on free labour mobility	Choice of National legislation or EU rules
2006-2008	Choice made at the end of 2005 applies: 1. National rules chosen	1. No change from 2004

	2. Community rules apply There is an automatic review of procedures at the end of 2007 – beginning 2008.	2. Community Rules apply but have an option to temporarily reintroduce national legislation
End of 2008	EU rules must be introduced with exception of the states that can establish evidence of adverse effects of migration on their labour markets. Maximum extension – 2 years	Barring exceptions, EU rules apply. Decision to claim exception rests with the national Government.
End of 2010	EU rules apply without exception	EU rules

Source: <http://europa.eu.int/scadplus/leg/en/s17000.htm>

Table 2. Actual Transitional Arrangements in EU15 states, 2004-2008.

Country	Access to labour market	Access to welfare benefits
Austria, Belgium, Finland, France, Germany, Greece, Luxembourg, Italy, Portugal, Spain	Access to labour markets restricted through 2006, quotas for work permits. Germany and France are currently considering further extension of restrictions for up to 3 years. In Spain, bilateral agreement with Poland permits limited number of Polish nationals to work.	Restricted.
Denmark	General access to labour market, but obligations for work and residence permits. Work permits have 1-year duration and are subject to quotas and administrative restrictions.	Restricted residence and work permits can be withdrawn in case of unemployment.
Ireland	General access to labour market.	Benefits are granted only to the residents after two years of job tenure.
Sweden	Community rule for free labour mobility applies.	Equal treatment.
United Kingdom	General access to labour market, but obligation to register for work and residence permits. Work permits issued first for limited time.	As in Ireland

Source: Boeri and Brucker 2005: 8, Table 2.1 and author own information on Ireland.

Prior to May 1st 2004, only the governments of Denmark, Ireland, the Netherlands, Sweden and the UK promised not to restrict the access of EU10 citizens to their labour markets. The actual outcome has been even less liberal. The Danish government decided to allow work permits only to the EU10 citizens, who can prove that they have a job which meets wage and working conditions standards will have access to work permits. In addition to restricting job search possibilities, authorities can withdraw residence permits for those EU10 citizens who lose their job, thus reducing the portability of the Danish work permits. The latter reality implies that the Danish model selects against higher skilled individuals who choose their employment location, in part, on the basis of quality of the job

matching permitted within the location.

Immigration policy indexes from research conducted by Fondazione Rodolfo De Benedetti and other sources show that over time, there has been a general tendency on behalf of the EU15 states to tighten regulations of migration flows vis-à-vis non-EU nationals. Equally important is that the countries with initially more liberal attitudes toward migration, such as the UK, Ireland, Austria, the Netherlands and Denmark, experienced more tightening of their policies over time than the countries with originally restrictive policies, as discussed in more details in the following section.

Combined with the fact that current EU legislation allows for wide-ranging variation in migration policies vis-à-vis the Accession States, the uncertainty highlighted in table 1 above about the future migration climate implies that potential migrants will view restrictions in 2004 as being likely to continue through 2008. This means that countries like Denmark will face continued difficulties in attracting higher quality job candidates from the EU10.

3. IMMIGRATION POLICIES HISTORICAL BACKGROUND: Ireland and Denmark.

The end of the 1990s and the beginning of the 21st century saw acceleration in the race to the top amongst the EU15 states in placing restrictions on migration. Denmark's degree of immigration restrictions in 1994 was lower than that of Italy, Portugal, Greece and Spain and almost at a level with Germany. By 2004 Denmark had in place more restrictive migration policies than any other country within the EU. A major tightening of immigration restrictions by Denmark in 2002 is also commonly cited as an impetus for similar restrictions in Finland. The Danish reforms of 2002 were themselves driven by exogenous factors (such as immigration pressures taking place in Spain and Italy) and endogenous factors (such as the 2001 electoral debate about the costs of non-economic migrants settling in Denmark).

In 1994, Ireland was the third most liberal country in terms of migration restrictions within the EU15. By 2004, the country was more restrictive in its migration policies than the UK, Germany, Finland, Austria and Greece with respect to non-EU nationals. In part, Ireland's policy tightening in 1999 was necessitated by two reforms in the UK in 1996 and 1998. However, the subsequent reforms of 2003-2004 were driven by internal political demands for tighter immigration controls

and the external opportunity to regularize and standardize labour flows under the Accession of the EU10 states. Another important driver for Irish policy tightening was the peaking of the asylum and refugees inflows in 2000-2002. Finally, the forthcoming immigration reforms – expected to pass the Dail (Parliament) before the end of 2006 – appear to be driven by opposition pressure aimed at reducing inflow of migrants from non-EU states in order to partially offset the ever-growing supply of labour from the EU10 countries.

The policy spillovers across the borders take fundamentally different form in Denmark and Ireland. Denmark, as a part of the Schengen agreement, has broader scope of policy integration incentives that encompasses policy changes across the EU15 states. Thus, Denmark protested against the large-scale changes in the admission process in Spain, and the Government has repeatedly referred to policies changes in Germany, UK and Sweden when advocating for policy-tightening reforms. In Ireland, the reference case for reforms is invariably the UK – a situation that is driven by the close links between the two countries and the common travel zone.

Prior to Accession, in Ireland and Denmark, the share of foreigners in the total population ranged between 3.7 and 3.4 percent respectively – by any measure not a dramatic number of foreigners when compared with Switzerland (18.3%) Austria (10.5), Germany (8.8) or even rather closed France (6.0%). This similarity, however, was eroded by the Accession, as Ireland experienced major new inflows from EU10 relative to Denmark. According to preliminary results of the latest census the immigrants now account for approximately 8.1% of Irish population.

4. LABOUR MARKETS EFFECTS OF MIGRATION

4.1. Applying the US experience.

The overall conclusions emerging from recent studies is that the average aggregate income accruing to U.S. natives is largely unaffected by immigration inflows. For example, Borjas (1995 and 2003) show that foreign born workers effect on US born residents' average capital and labour income is around 0.1%. Ottaviano and Peri (2005) calculate that the average wage of U.S. born workers increased between 2% and 2.5% in response to the inflow of foreign-born workers in the 1990-2000 period. At the same time, the inflow lowered the real wage of native low skilled workers by 1%, but increased the real wage of native workers with intermediate level of skills by as much as 3-4%.

Hanson et al (2001) consider how US regional economies absorb immigration inflows. The study concludes that “despite the geographic concentration of recent immigrants, wages have not fallen perceptibly in the gateway communities in which migrants settle”. The authors note that the various states absorbed impacts of immigration through skills upgrading of the native workers, outward migration of the natives, and a shift in output mix in favour of migrant-labour intensive goods.

It is important to distinguish the two different sources of migration: demand-based migration, generated by the employers demand for specific labour, and supply-based migration, driven by the availability of surplus labour outside the host country. Borjas (2003 and 2005) studies the effects of supply-based migration in the US and finds that since such migration flows do not select workers that are complimentary to the natives (as in the case of demand-based migration), over time, large scale inflows of migrants did result in small decrease in the relative wages of specific types of labour. Borjas estimates that a 10% increase in immigration inflows tends to reduce earnings of comparable native worker by up to 4%. In contrast negative effects in the case of the demand driven migration appear to be negligible.

The implications of these findings are apparent in the case of Ireland and Denmark. As argued above, Ireland experienced more demand-driven migration prior to the Accession, with a subsequent increase in the supply-based migration following since 2004. In Denmark, the opposite trends took place. Prior to 2002 reform, the majority of immigrants arriving into Denmark were of the supply-driven type – dominated by refugees and asylum seekers. Following the reforms, Denmark started to pay more attention to selective migration.

An interesting dimension of migration benefits in the context of the US is represented by short-term high skilled migration. Tani (2006) shows that in Australia, US and the UK, short-term skilled labour movements have non-trivial positive effects on economic growth. Specifically, calibrated model matching US and UK data yields short-term migration benefits of 0.19 and 0.15 percent of GDP per each percentage rise in migration inflows. Although no analysis is available on short-term skilled migration in Denmark or Ireland, it is likely that these effects will be similar to those in the UK. Ireland serves as a major MNCs hub, offering significant opportunities and synergies for skilled short-term migration. Highly skilled migrants arriving into Ireland face no depreciation of their internationally recognised skills. However, unlike Ireland, Denmark does not present the same

opportunities for such migration.

4.2. Labour markets effects of Migration: Denmark v Ireland.

The impact of migration on welfare in the receiving and the sending countries depends heavily upon the flexibility of labour markets. In theory, in the presence of severe wage rigidity, firms hire until their marginal product equals the pre-set wage rate agreed through a centralized bargaining arrangement. In reality, some skill-induced premia do arise even in heavily regulated wage markets. As part of the labour force remains unemployed, not all migrants are absorbed by the host labour markets. Assuming that native and non-native employees are not perfect substitutes – due to, for example differences in language skills, high non-economic to economic migrants ratios and aptitude deficit (a problem more pronounced in Denmark than in Ireland) implies that the unemployment risk is partially shifted from natives to immigrants.³

Boeri and Brucker (2005) report the results of their simulations of the labour markets mobility effects on overall economic growth for the EU15. We use these results as a benchmark comparison model. We extend these results by recalibrating the model to reflect the differences between Denmark and Ireland and the rest of the EU 15 (see table 4 for the list of underlying assumptions) to generate the set of estimates, presented in table 3 below. Technical specifications of the model are provided in Boeri and Brucker (2005) Appendix 2.

The authors assume that the risk of unemployment is twice as large for foreigners than for natives. This is in line with observed unemployment differentials between domestic and foreign population for the EU15, but not for Ireland and Denmark. In Ireland, the probability of unemployment for non-EU15 nationals is below that of the natives. Denmark is distinguished as a country with the unemployment rates amongst the migrants at almost three times higher than of the natives (see for example CEPR Bulletin, 2001). The importance of this assumption lies with the costs of immigration transmission through the welfare system. In countries with higher unemployment

³ Commander et al (2006) show that for the UK, the perception that job security has declined as a result of globalisation is also not consistent with the facts. Instead, the evidence suggests that immigrants in the UK have largely been complements to native workers. Once again, this is probably true in the case of Ireland with more balanced immigration than for Denmark where migration falls predominantly into low-skilled sectors.

amongst immigrants, social welfare payments to immigrants will be higher and the fiscal burden will be greater. This is the case in Denmark. In countries like Ireland, lower unemployment amongst the migrants coupled with more restricted access to welfare benefits implies that this cost channel is less pronounced. These differences are reflected in our assumptions (table 4) and in the subsequent discussion in section 4.4.

In addition, as fiscal tightening takes place due to additional inflows of low-skilled migrants, some of these migrants either move out of the country or shift into employment. Wages decline supports higher demand for labour. In what follows we assume that wages decline is proportional to a decline in unemployment of unskilled foreigners by the factor of 0.9 (the higher range of income replacement ratio for Denmark's unemployment benefits). The same rate applies for Ireland's native low skilled workers, but not for foreign workers who have no access to unemployment benefits.

Although the Danish economy experienced strong employment growth since 1994, the country has persistently had high unemployment among immigrants from less developed countries throughout the 1990s. In addition, Denmark has a greater share of migrants from non-economic immigration groups and the structure of its migration from the EU10 is similar in skills patterns to the migration from non-EU countries. For example, Blume et al (2005:3) state that in Denmark and Sweden during the 1980s and 1990s both countries "have followed the same principles regarding immigration policy, i.e. immigration from low income countries has been restricted to tied movers and refugees". We can therefore strengthen the Boeri-Brucker assumption on relative employment disadvantages for Denmark as reflected in table 4.

In Ireland, average level of skills for the EU10 migrants is probably below that of non-EU migrants. This conjecture is warranted by the relative distribution of the migrants across various sectors. The majority of EU10 migrants find employment in the construction, retail and hospitality sectors that require lower skills utilization than higher skills intensive software, manufacturing, healthcare and IT sectors – traditional magnets for non-EU migrants. We assume, in the case of Ireland, that there is no difference in employment rates between the natives and the migrants. This is consistent, largely, with available evidence – arrival of increasing numbers of migrants over the last 10 years has been positively correlated with falling unemployment. Since 2004, arrival of a large number of

new migrants from the EU10 states was coincident with stable low unemployment. We assume that the share of manual labour in the total foreign population is 50% for EU15, for Ireland – 40% and for Denmark – 60% to reflect the differences in skills demands outlined above.⁴ For example, Tranaes and Zimmermann (2004) found that the migrants to Denmark had lower skills than the migrants to Germany. The importance of this assumption is further illustrated in section 4.3 below.

Finally, in contrast with Boeri and Brucker (2005) we drop the assumption of similar population size between the sending and receiving countries, since neither Ireland nor Denmark are comparable in size to the EU10 states total pool of population. For the case of pre-Accession 2004 migration, we assume that Ireland and Denmark represent approximately 6 times (Denmark) and 9 times (Ireland) smaller market than the domestic labour market of the sending states. For post-2004 period, we assume that the respective ratios were 30x for Ireland and 10x for Denmark to reflect the fact that the pool of migrant labour available for migration to Ireland increased significantly due to Accession, while remaining relatively constant for Denmark. The issue of relative country size is important within the context of policy debate as well as the context of theory. If the host country is of similar size to the sending country, large-scale migration inflows can generate pricing power for single country. Alternatively, a small country is a price-taker in wage markets under free trade and free mobility assumptions. Furthermore, the recent debate in Ireland about the costs and benefits of EU10 migration is shaped by concerns that some of the sending countries of the EU10 are vastly larger than Ireland and that Ireland can find itself ‘flooded’ with migrants.

Table 3. Impact of Migration on Income and Employment (% change in response to 1% increase in migrants’ share of the labour force).

⁴ The assumption for Ireland is warranted by the relative inflows of migrants into skilled and unskilled professions. For example, according to the OECD (2006) 44% of all recent migrants found jobs in construction industry, catering and hotel services, all of which are characterised by low skills intensity. Noting that in Ireland recent migration flows were skewed in favour of low-skilled labour from EU10, the figure of 40% for unskilled labour share of migration inflows is likely to be a slight overestimate. Golinowska (2002) identifies a general pattern in migration flows from Poland and the former Communist Block states. “Under communism, most emigrants were in the category of skilled labour. Since 1990, however, the majority of them have only basic vocational qualifications. This reflects not only the stronger demand in the EU10 states for qualified and highly-qualified workers but also the fact that economic conditions in the region have improved and are expected to improve further in the years ahead.” For Denmark, no such statistics are available. Extrapolating from data shown in Table 5, Ireland/Denmark ratio of proportion of foreign labour in lower skills industries to higher skilled industries is ca -2.7/-4.1 or 0.66. Thus, if Ireland has skills ratio of 40% to 60% as justified by the OECD (2006) figures, then Denmark ratio is closer to $40\% \times 1/0.66 = 60.7\%$.

	Country	Rigid Wages. Share of non-manual labour 50%.*	Ireland (pre 2004). Share of non-manual labour 60%.	Denmark (pre 2004). Share of non-manual labour 40%.	Ireland (post 2004). Share of non-manual labour 50%.	Ireland (post 2004). Share of non-manual labour 40%.
Total GDP, % change	Host	0.48	1.07	0.5	0.35	0.56
	Source	-0.45	-0.48	-0.59	-0.41	-0.57
Native income, % change	Host	-0.1979	0.205	-0.0093	0.177	0.014
	Source	0.2575	-0.0673	0.0141	0.0235	0.046
Migrants income, % change		146.54	149.9	137.63	135.8	140.5
Post-tax wages	Host	-0.13	0.02	-0.17	-0.0016	0.0013
	Source	0.20	0.00	0.38	0.00	0.21
Unemployment	Host	0.3	0.00	-0.03	0.00	-0.05
	Source	-0.3	-0.07	-0.28	-0.11	-0.21

* Boeri & Brucker, 2005 results.

Estimation model is supplied in Appendix 2 of Boeri & Brucker (2005).

Ireland and Denmark results – author’s own estimation.

The first column of Table 3 displays the results of Boeri and Brucker (2005) scenario for 50% lower probability of employment for migrants than for the native workers and that the migrant skilled labourers represent 50% of the total migrant labour force. It assumes that all wages are set under centralized bargaining arrangements. The following two columns capture specifics of the Irish and Danish markets as discussed earlier and summarized in table 4 below for the pre-2004 Accession period. The last two columns show changes in Denmark and Ireland due to post-Accession 2004 policies implementation.

Comparing the three pre-2004 scenarios above, the case of Irish migration yields the highest GDP increases per 1% rise in immigration for the host country – nearly 1.07% increase in the GDP. In Denmark, due to lower productivity of the incoming migrants, the net effect of migration on GDP is 0.5% (nearly identical to that in Boeri and Brucker, 2005) per 1% increase in migration. On the source country side, losses due to emigration for the EU10 states are lower in the case of migration to Ireland than in the case of migration to Denmark due to higher after-tax income levels attained by the immigrants in Ireland than in Denmark (skills differential) and higher remittances.

Table 4. Assumptions of the Model

	Boeri & Brucker (2005)	Ireland	Denmark
1. Wage setting arrangement	Rigid wages for manual and non-manual labour	Fixed manual wage	Rigid wages for non-manual labour
2. Relative unemployment rate for foreigners	2x of natives	Same as natives	3x of natives
3. Share of manual labour amongst the foreigners relative to non-manual workers	50%	40% (pre 2004) 50% (post 2004)	60% (pre 2004 and post 2004)
4. Size of host country relative to sending country	identical	9x smaller (pre 2004) 30x smaller (post 2004)	6x smaller (pre 2004) 10x smaller (post 2004)
5. Remittances	none	15% of income (pre 2004) 25% of income (post 2004)	15% of income (same for both periods)
6. Tax rates	Flat tax on income set to clear the wage income replacement costs for unemployed workers (both foreign and domestic)	Same as Boeri & Brucker (2005) but benefits apply only for unemployed domestic workers	Same as Boeri & Brucker (2005)
7. Elasticity of transition employment rate for unskilled workers	none	None for foreigners, 0.9 for domestic low skilled workers	0.9 for all workers

Pre-Accession, native incomes increase in the host country in the case of migration to Ireland and decrease in the case of migration to Denmark, although the latter effect is significantly smaller than the decrease in income for the EU15 average attained under the Boeri and Brucker (2005) assumptions. After-tax wages of the natives rise in Ireland due to the lack of higher welfare services demand from migration in Ireland. The opposite occurs in Denmark. These are captured by the differences in assumptions on tax rates employed in simulations and outlined in table 4 above.

Post-Accession, more careful selection of migrants for skills and aptitude under the Danish model yield higher economic benefits relative to those attained in pre-Accession policy setting. The opposite applies to Ireland. Comparing across the two countries, Ireland continues to lead Denmark in benefits of migration in post-2004 period primarily due to the fact that its policies currently retain

restricted welfare access of the previous period.

To elaborate on these effects: as foreign and domestic incomes increase in Ireland in the wake of migration, tax revenues collected by the state improve, generating a fall in tax rate needed to balance the fiscal expenditure. Unemployment does not change, so the demand for new unemployment benefits is zero. This means that the fiscal channel transmission of migration benefits acts to increase after-tax wages of the natives in Ireland. Furthermore, there is a net increase in *per capita* GDP in Ireland due to (1) GDP elasticity with respect to migration flows being greater than 1, and (2) higher skills intensity of migrant population than the native population implying above average GDP per capita inflow for each immigrant worker. In contrast, in Denmark, inflow of average quality of migrants, as reflected under our assumptions 2, 3 and 7 in table 4 above, implies that the increase in tax revenue to the state is below the increase in welfare payments associated with migrant inflow. Demand for tax-financed services rises, post-tax wages fall and per capita GDP falls as well despite the overall increase in GDP.⁵

The unemployment rate remains stable in Ireland due to higher economic growth and jobs creation across both sectors, while in Denmark the unemployment rate falls due to lower wages triggering higher demand for low-skilled labour.⁶ In addition, under our assumptions, Denmark experiences higher rates of transition into employment from unemployment benefits than Ireland, as lower wages for migrants and domestic workers trigger lower tax revenue and thus lower unemployment benefits. In Ireland this effect should apply only to domestic workers, but this category of labour experiences a rise in overall income as the result of migration.

Overall, the results of this exercise highlight the importance of the following factors in determining

⁵ It is important to recognise here that these results are based on the assumptions reflecting the status quo conditions that exist in Denmark and Ireland today, and a cumulative effect of the past migration policies. The latest reforms in both countries tend to partially reverse these conditions. Most importantly, in Ireland, the latest reforms in the direction of accepting EU10 migrants in place of non-EU migrants and extending the welfare benefits to the former group of migrants after 1 year residency in Ireland will most likely reduce the skills intensity of migrant inflows and increase welfare dependency ratios of migrants in the near future. In Denmark, the present policies act in the opposite direction. Despite this, years of high level migration flows in the past will continue to determine the relative effects of migrants in the economy for the foreseeable future.

⁶ In part the effect on the wages of the natives in Ireland is skewed upwardly due to the retained assumption that rising incomes are not associated with rising government consumption. This is consistent with our assumption in Table 4, but has not been the case in Ireland over the last 6 years.

the economic effects of migration and the differences between Denmark and Ireland. The higher share of skilled workers migrating into Ireland contributes to increase in wages at the destination and rising incomes. After-tax wages rise in the host country since migration of predominantly skilled labour into the country with predominantly lower average skills yields an increase in unskilled domestic labour wages, while generating a lower tax burden (due to the Irish system of social benefits restricted to the natives alone). In Denmark, a higher tax burden combined with a higher incidence of unemployment amongst the migrants implies that wages of the skilled natives rise, but this increase is not sufficient to offset the decline in the unskilled wages and increased welfare payouts. More on these effects in section 4.4.

4.3. Labour markets structures and gains from migration: Denmark v Ireland.

4.3.1. Theoretical Basis.

Blume et al (2005) analyse immigration patterns in Sweden and Denmark with respect to the propensity of the immigrants to fall into poverty relative to the natives. They argue that Sweden and Denmark have similar labour market structures: “high levels of unionization, high relative minimum wages, a low variance in the earnings distribution and a big role for the public sector as employer... Further, both countries have experienced a secular shift away from low-skilled industrial jobs towards service sector jobs with higher demands on social and language skills, i.e. ... industrial jobs with people working to a great extent alone, based on simple instructions, have been replaced to a large extent by jobs in more or less self-governing groups putting emphasis on communicative and social skills.” It is clear that language requirements alongside the less flexible structure of the labour markets form a greater barrier to promotion and integration in Denmark than in Ireland.

Denmark differs significantly from Ireland in terms of the burden of the state on the economy with Danish government spending to GDP or GNI ratios well in excess of the EU15 average. This spending, in return, is distributed largely without restrictions on the nationality of the Danish residents. On the other hand, the Irish welfare state is both smaller in scope than that of Denmark and offers only limited general welfare benefits to non-nationals. The Danish system of unemployment benefits is based on the Ghent principle and is heavily dependent on the labour unions. This system is augmented by the means-tested welfare benefits. The unemployment benefits

are not available to the non-nationals from outside EU15 states. Similarly to Ireland there are non-means tested child benefits, which only recently (2005) became available to the non-nationals. Housing benefits are means tested in both countries, but in contrast to Denmark, these benefits are not available to non-nationals in Ireland.

In general, literature analysing the effects of welfare systems on migration flows in countries like Denmark, Sweden and the Netherlands shows that economies with labour markets characterised by high degree of unionisation may experience difficulties in attracting high skilled migrants and simultaneously experience higher incidence of poverty and unemployment amongst the migrants relative to the natives.

This is consistent with the theoretical frameworks for modelling labour markets effects of migration in the presence of unionised sectors. Fuest et al (1999) develop a model where welfare effects of immigration are distributed within an economy characterized by wage bargaining between unions and employers. The model shows that immigration is unambiguously beneficent if the wage elasticity of labour demand in the competitive sectors is smaller than in the unionised sectors. This condition is present in Ireland where competitive sectors, most notably those led by the Multinational Corporations (MNCs) and other export-oriented sectors are not subject to significant union penetration but face acute shortages of qualified labour.⁷

In the opposite case, the welfare effects of immigration are not as clear-cut. Low levels of immigration reduce the welfare of the natives, while large scale immigration tends to enhance native welfare. Since the issue at stake is economic migration, most of the Nordic countries, including Denmark have only a limited experience in attracting inflows of high quality migrants, as

⁷ In all of our analysis, we do not address the issue of how labour migration may act to reduce the threat to jobs from offshoring. Like other forms of skill-biased technological change, offshoring reduces the demand for low-skilled workers while increasing the demand for high-skilled workers in high-wage economies. According to several studies (see Commander et al, 2006) “these effects have been most pronounced in the US because American multinationals have relied on offshoring in manufacturing to a greater extent than their European counterparts... In the US, the offshoring of manufactured products has contributed to the decline in both the absolute and relative wages of low-skilled workers compared to the wages of workers with a college education as well as growing wage inequality. One view is that about a quarter of the wage inequality in the US over the last twenty-five years is the result of low-wage competition from immigration, imports of labour-intensive products, and the offshoring of manufacturing production by American companies...” Little of such analysis exists for the EU, although similar effects were found in the UK data.

in the recent past these countries were open primarily to non-economic migrants with extremely low levels of human capital.

Fuest et al (1999) estimate that in an economy with half of the labour force unionised and almost any reasonable level of wage elasticity of production, an immigrant labour force of 10% is required to elevate welfare above the autarky level. Clearly, no Nordic country has reached this point when one considers economic migrants only. However, the degree of unionisation in these countries may be well above 50%. If the level of unionisation rises to 90% of the domestic employers, immigration levels required for welfare improvement are in excess of 28%.

Zhao and Kondoh (2002) develop a theoretical model of immigration in presence of unionised labour markets. They show that in a two-sector economy coexistence of unionised and non-unionised firms, permanent immigration brings positive effects on all variables with exception of competitive wages. The degree of unionisation is directly positively correlated with the negative effects of immigration on wages. Temporary migration yields mixed results. If temporary migrants are allowed to work only in manufacturing, all wages and the union/non-union wage gap fall. Otherwise, if the migrants are permitted to work in any sector, the gap increases, while wages may or may not fall.

The above discussion suggests that Ireland, with more flexible less unionised labour markets and lower wage elasticity of labour demand will attain higher benefits from economic migration than Denmark. Prior to the Accession of 2004, inflows of migrants into Ireland were dominated by the longer-term settlers composed of returning Irish emigrants, high-skilled EU15 and non-EU foreigners and non-EU refugees. This implies that under the above theory prior to Accession, wages in Ireland should exhibit slower growth and falling gap between union wages and private sector wages. This is exactly what took place during the period of the wage moderation in the mid- to late 1990s. Since Accession, as immigration into Ireland became less permanent and less skilled in nature, consistent with the skills mix of the Eastern European workers, immigration became concentrated in few sectors, most notably construction and low-wage services. According to the theoretical discussion above we should expect amelioration of wages decline relative to pre-2004 period and a widening gap between wages in unionised and non-unionised sectors. Once again, this trend is now apparent in the Irish data.

Another important differential aspect of the labour markets effects on benefits from immigration arises in the relation to the skills variation present in the economy. While little research on the topic exists in European context, some recent research from the US sheds light on the issue. Orrenius and Zavodny (2003) use US data for 1994-1998 to consider the effects of immigration on wages of the natives in the presence of skills differentials.

In general, in the US, foreign workers make up over 8% of workers in low-skilled occupations (similar to Ireland's 10% and less than in Denmark – 16%). Foreign labour within the US captures around 6% of the high and medium skilled labour force (in Ireland – around 15%, while in Denmark less than 5%). The study estimates that "...when controlling for fixed effects, immigrant inflows have different effects on natives' wages depending on the occupation group and the type of immigrant. Higher immigrant shares are generally associated with positive wage effects on high-skilled natives." A one percentage point increase in the total immigrant share is associated with an increase in native-born executives' average wages of 0.25 percent, and 10.9 percent among natives in high-skilled occupations. For low-skilled natives (service workers, laborers, and farm workers), the respective wage impacts of all immigrants is -1.14 percent. Finally, "natives in medium-skilled occupations (clerical and sales jobs) are less affected—either positively or negatively—by immigration than natives in more or less skilled occupations."

4.3.2. Evidence.

Once again, these figures are of importance in the context of capturing some of the differences between Denmark and Ireland. In Ireland, recent changes in economic environment imply a shift within the domestic economy away from the low-skilled to high and medium skilled patterns of production. Until the Accession of 2004, main inflows of immigrants were relatively evenly divided between the low and high skilled sectors. At the same time, there was continued strong demand for low skilled labour and subsequently the negative effects of the migration outlined above did not have any effect on wages in the low skilled sectors. Hence, it is safe to conclude that Ireland did not experience net losses in welfare in either skilled or unskilled sectors. Table 5 below shows relative flows of immigrants to each labour market category in Ireland and Denmark.

Table 5. Proportion of total employment of the nationals less foreigners in each occupation.⁸

	Agriculture		Industry		Services	
	1995-1998	2003-2004	1995-1998	2003-2004	1995-1998	2003-2004
Denmark	-0.5	-0.8	3.7	4.8	-8.2	-8.1
Ireland	7.3	5.3	3.1	4.5	-10.4	-12.5
OECD	1.0	1.0	-2.2	-1.8	0.9	0.8

OECD Labour Force Statistics, Eurostat,

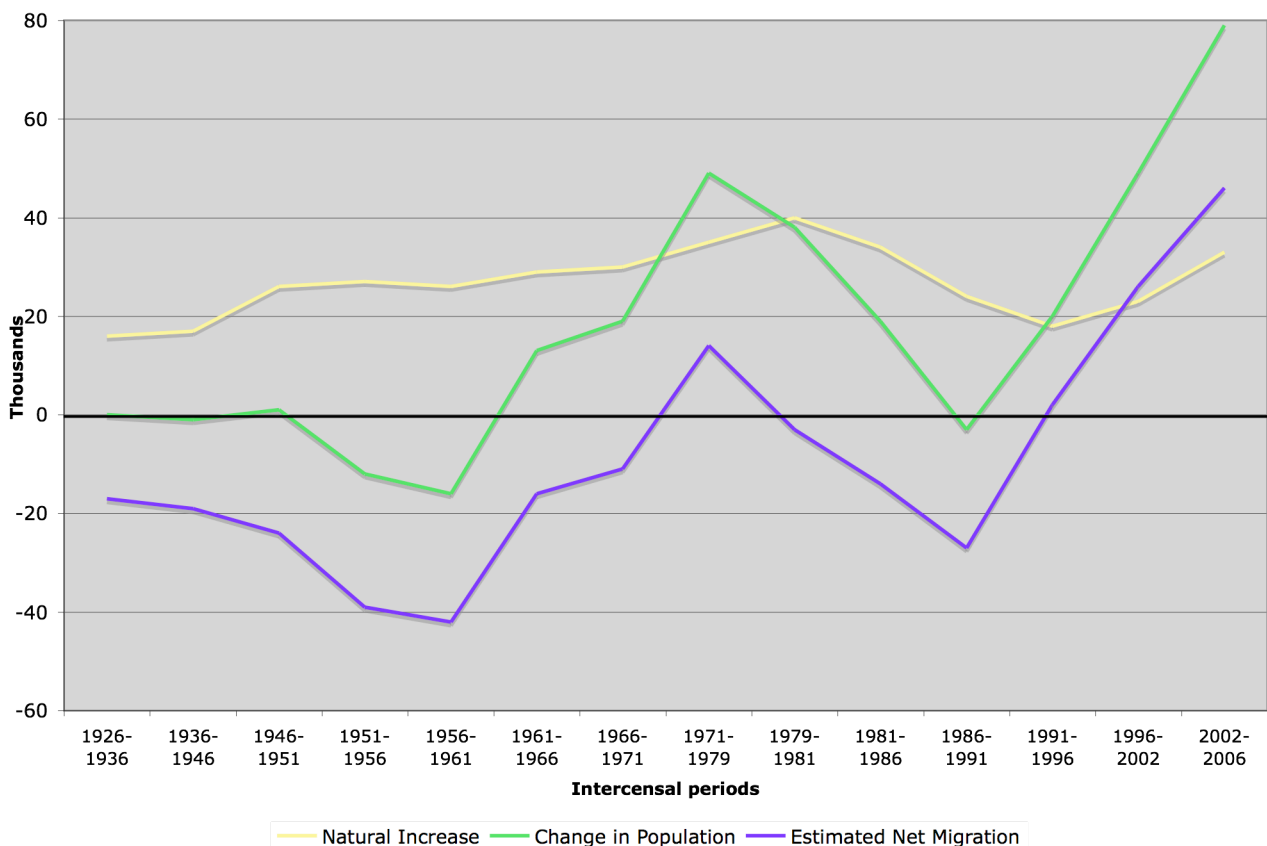
In Denmark, immigration was concentrated mostly in the low skilled sectors, with a result that intra-sector distribution of wages was shifting the burden of migration to less skilled workers, adversely affecting the levels of unemployment and poverty amongst the domestic low skilled workers and earlier cohorts of migrants (e.g. Pedersen, 2000). Over time, the share of foreigners relative to the natives employed in agriculture increased, while the share employed in industry and services had fallen. In Ireland, the share of foreigners employed in agriculture also increased, but so did the share of foreigners employed in services. In both countries, these trends do not reflect changes in migration that took place since the 2004 Accession.

In Ireland, according to the OECD (2006) estimates, between 2000 and 2004, net immigration has averaged 1.1% of the working age population (some 40% of whom are returning Irish citizens), so that by 2005 around 8-9% of jobs were filled by non-nationals. “Immigrants are predominantly young (80% are aged 15-44) and well dispersed across the country (only 30% go to Dublin).” Using these figures and assuming that around 50% of the previous migration flows were within medium to high skilled categories, with net value added of ca €70,000-75,000 per worker per annum, the annual immigration inflows contribution to the overall economy was around 5.7-6.8% of potential GDP or 6.84-8.1% of potential GNI. Over the same period, net new inflows of immigrants since 2000 into Ireland combined to about 4% of the labour force, confirming our estimated effect of migration to Ireland in table 3 above. Barrett *et al.*, 2005 produce a slightly lower estimate for the immigrants that arrived between 1993 and 2003, although their assumptions do not distinguish between the temporary and seasonal workers and the full time, longer-term migrants.

⁸ These figures apply to pre-Accession periods. Since then, some of the migration inflows in Ireland have shifted more in favour of less-skilled labour employed in agriculture and industry, as well as in low-skilled services.

Recent data cited by The Irish Times (2006) claims that only 2% of the working age population in the Republic is composed of the EU10 migrants, or roughly 52,000 individuals – a grossly underestimated figure when compared with that shown in the Census 2006 preliminary results. According to the OECD (2006), much closer to the Census 2006 results, net immigration into Ireland averaged around 1.1% pa since 2000, with just 40% of these returning Irish citizens. 29% of recent migrant workers found employment in the construction industry with an additional 15% working in the catering and hospitality industry. Overall, OECD (2006) suggests that some 8% of the Irish workforce were comprised on the foreigners. “Their contribution to potential output is difficult to estimate, but if it is assumed that the average immigrant is relatively unskilled and works in either construction or retail services with a value added of € 45,000 per employee, collectively they would have added around 3% to potential GNP over the last couple of years.” Overall, post-Accession 2004 cohort of migrants yields lower economic benefits to the Irish economy.

Figure. Average Annual Natural Rate of Increase in Population, Total Change in Population and Net Migration for each Intercensal Period, 1926-2006.



Source: Census 2006, Table A.

These results are broadly in line with those reported in table 3 above and with the results reported in the Census 2006.⁹ According to the Census 2006 preliminary results, for the period of 2002-2006 the rate of net immigration in Ireland was around 1.14% per annum (see Figure above). In Dublin, this figure was 0.47% pa, while Mid-Eastern region and the Midlands (both comprising primarily of the Dublin commuter belt) saw 2.28% pa and 1.91% pa increases in net immigration respectively. Majority of the new arrivals were absorbed in the construction industry and low-wage services, such as tourism and retail sectors.

The latest figures for the first quarter 2006, published by CSO (2006) show that year on year, net immigration has risen from 53,400 in April 2004-2005 to 69,900 in April 2005-2006. Approximately two-thirds of the population increase in the year up to April 2006 was accounted for by migration. Nearly half (43 per cent) of immigrants were nationals of the 10 new EU accession states, which joined the EU on 1 May 2004. 26 per cent (22,900) of immigrants were from Poland while 7 per cent (6,100) were from Lithuania. Only 22.7 per cent of all immigrants originated from outside the EU and USA, down from 36.4 per cent in 2001 and 44.7 per cent in 2002. More than half (54 per cent) of immigrants were aged 25-44 while a further 28 per cent were aged 15-24. Approximately 1 in 10 of the immigrants were children under the age of 15.

For Denmark, absent specific data on the composition of recent migrants' inflows it is impossible to make similar estimates, as noted for example in Pedersen (2000). However, considering that prior to 2002 the majority of migrants entering Denmark were non-economic and given the vastly higher rates of unemployment amongst the foreigners in Denmark relative to Ireland, the benefits of economic migration in Denmark are somewhere between 1 and 1.1% of the potential GDP. These benefits may have been fully offset by large numbers of foreigners on social welfare assistance – something that virtually does not occur under the Irish system of social welfare.¹⁰ Furthermore, lack of growth in foreign employment share in Denmark in the services sector, coupled with faster growth of the foreign share in agricultural employment, shown in Table 5, suggest that the benefits

⁹ Note, that accounting for GDP-GNP gap in Ireland, 3% increase in potential GNP implies 2.5% increase in potential GDP. Taking a present value of 2-years increase rate of 1.07% per 1% in the labour force, as reported in table 3 and accounting for ca 1.1% increase in foreigners' net arrival rate and for the skills-specific value added in low skills sectors of €45,000 and in high skilled sectors of €75,000 we have total potential GDP increase of 2.31%, which is proximate to 2.5%. This confirms our results in Table 3.

¹⁰ According to Pedersen (2000), by 2000, the stock of people in the population being immigrants or descendants of immigrants has risen from a very low level to around 6-7 per cent – close to EU15 average. The main trend in the last quarter of a century has been immigration due to family reunions and an inflow of refugees, especially in the years after 1980.

of the Danish migration policies were much lower than those in the post-Accession Ireland.

It is worth noting that in the recent years, especially following the Accession of 2004, Danish authorities implemented work permit and immigration system reforms that allow for selection of individuals on the basis of their skills and discourage asylum seekers and refugees. These reforms are partially reflected in table 2 above. According to table 2, Ireland elected a less targeted approach to selection of specific professions from the Accession states pool of labour, while Denmark adopted a more targeted one. Denmark actively restricts entry of individuals for the purpose of job search, requiring instead that any potential EU10 migrants must obtain a job prior to applying for a permit. Ireland does not have such a requirement.

In the case of Denmark, while offering more control over unemployment amongst the incoming foreigners, these restrictions also play a role of reducing foreign resident capacity to search for their first employment in Denmark. Furthermore, the Danish system reduces search opportunities for migrants interested in switching from one job to another by making it possible for the government to revoke the permit to reside in the country in the case of a job loss. Such restrictions do not apply in Ireland for the migrants from the EU10 states, although they do apply for those from outside the EU.

Finally, it is necessary to point out that all of the current restrictions on EU10 citizens' mobility are temporary, as indicated in Table 1. This implies that potential migrants to countries with strong restrictions on Accession states mobility have an added incentive to enter their host destinations illegally in anticipation of the forthcoming lifting of restrictions by the end of 2008. Similar effects of front-loading migration have taken place in anticipation of Accession in the UK and Ireland where large numbers of Accession states' citizens have entered the countries illegally in expectation of legalizing their position once Accession takes place. In the case of Ireland, the actual figures of such individuals are unknown, but the fact that the peak of registrations took place in the first 2 months after Accession indicates that such phenomena did take place. In the UK various reports, cited above, give more direct evidence.

4.4. Recent fiscal effects of migration.

In general, immigration influences welfare through an impact on production, employment, real wages, and the wage distribution discussed above, as well as through public sector finances in the receiving country. According to Pedersen (2000) throughout the 1990s, the first channel was “of inferior importance in the Danish context” due to low levels of economic migration into the country and high rates of unemployment among foreigners. For earlier cohorts of migrants, the employment rate for the group was 1-1.5% of the economy wide level of employment. With subsequent displacement of refugee, asylum and family unification flows by economic migration since 2001, this effect is likely to increase over time. A significant factor in this will be the high rate of income taxation, which can result in a family switching into full employment facing some 90% marginal tax brackets on their income relative to social welfare benefits.

The fiscal channel for transmission of immigration effects into the host economy operates through the fiscal revenue-expenditure pathways. The basic idea is that immigration can be associated with stronger demand for welfare services by the migrants and deterioration of fiscal balance in the host country. Additional pressure on fiscal solvency can be caused by rising unemployment amongst the natives displaced by foreign workers.

According to data reported by Pedersen (2000) in 1995, non-OECD immigrants contributed negative 11.3 billion DKK (net loss in fiscal balance) while OECD immigrants contributed a positive 1 billion DKK net of benefits collected. Thus, due to higher rates of welfare dependency, non-OECD migrants did exert a significant drag on the social welfare system in Denmark. In addition to welfare payments and subsidies, the refugees and asylum seekers required significant spending on processing, detention centers and integration programs. Even after 10 years of residence, the average non-OECD immigrant in Denmark shows negative net contributions of some 48,000 DKK per annum. The distribution of these costs is also uneven as the unemployed non-OECD immigrants in Denmark tend to be concentrated in few areas.

In Ireland the first channel of fiscal transmission is extremely important, as economic migrants contribute significantly to wage competitiveness and alleviate labour supply shortages in the economy. The second channel is also non-trivial: non-EU foreign residents do not have access to

social welfare and housing subsidies, with exception of refugees and asylum seekers, whose numbers never reached those encountered in Denmark. At the same time, economic migrants do contribute to fiscal revenue via general income, labour and consumption taxes and indirect levies and charges. Finally, as mentioned above, there are no negative distributional effects of Irish immigration experience, as immigrants tend to locate fairly evenly across the country and within the larger cities. Thus, the fiscal scenario for Ireland stands as a reversed case of that in Denmark.

4.5. Future Fiscal Effects.

More importantly, looking into the future, the change in immigration patterns for Denmark in favour of selecting only those migrants who are employed and restricting their access to welfare benefits should generate significant net added revenue as in the case of Ireland. However, these benefits are going to be offset by a rising cost of increasing unemployment amongst the resident foreigners present in Denmark as they directly compete with cheaper and better selected economic migrants. Thus, present policies are unlikely to be sufficient in generating substantial fiscal benefits due to a continued high cost of past policies.

Pedersen et al (2004) look at the effects of immigration in OECD countries from the point of view of distinguishing different types of welfare state in destination countries. The authors identify a group of social democratic welfare states (Denmark, Finland, Iceland, Norway and Sweden), a group of liberal welfare states (Australia, Canada, Ireland, Japan, New Zealand, UK and the USA), a group of continental/conservative welfare states (Austria, Belgium, France, Germany, Luxemburg, the Netherlands and Switzerland) and a group of Southern European welfare states (Greece, Italy, Portugal and Spain). This division allows authors to capture the effect of the tax pressure (and to a limited extent – the level of social expenditure, omitting the consideration of whether or not welfare benefits apply to the immigrants). In the conservative EU continental countries the social services are generous, but access is limited only to individuals who have earned their rights to the system, so newly arrived immigrants are not eligible to a number of social services. In the social democratic welfare states high social welfare levels and fairly universal access to welfare schemes are available to the newly arriving immigrants.

The authors show that data confirms a priori expectations concerning the selection effects variation between different types of welfare states. “The unemployment rate in destination countries has a significantly negative effect on migration flows, and especially for the liberal countries, where social safety nets are limited compared to the European welfare states, we find a large negative effect from a high unemployment level in the destination country. The effect of the magnitude of the tax pressure also varies across welfare state groups. If selection effects dominated the gross migration flows, we should expect that the most negative effects of a high tax pressure were found for high-income source countries and less negative effects were found for low-income source countries. We do find this pattern for the liberal welfare states... For the Scandinavian welfare states, we find the strongest negative tax pressure effect for the migration flows from the poorest countries”.

The latter implies that the generous welfare system, coupled with higher taxation, in Denmark as opposed to Ireland act to select lower quality migrants and to reduce gains from productive employment exacerbating fiscal pressures in the Nordic states. In dynamic setting this effect is far more important than the direct effect of the welfare dependency amongst the foreigners relative to the natives. While the direct cost to taxpayers and the economy at large of the foreign migrants receiving social welfare is easy to compute and restrict, the positive selection of immigrants on the basis of their propensity to use welfare services distorts both within and intra-generational human capital investments and entrepreneurship amongst the selected immigrants.

5. Conclusions

Ireland undoubtedly benefited significantly from the large-scale inflows of economic migrants prior to Accession. Changes in patterns of migration away from market-based selection of the candidates for admission toward artificial standards based on giving preferences to EU10 natives over non-EU migrants is yielding a set of results which is still favourable but less so. Lower quality of labour skills brought into Ireland by the EU10 natives is largely reflected in continued shortages of high skilled workers in the country, while alleviating pressures in supply of low skilled labourers. This policy is changing the skills mix within Ireland by reducing the gap between the foreign residents’

skills and those of the natives. As the result, there is an increasing concern that post-Accession, immigration pits foreign workers more directly against the domestic ones.

Overall, the latest Eurobarometer 2005 shows that immigration is not perceived to be a major issue by the Irish public. Asked to identify the two most important issues facing the country, 51 per cent of Irish respondents identified crime, followed by 49 per cent for healthcare and 28 per cent for rising prices. Only 12 per cent point at immigration. This despite the fact, that in the most recent Irish Times survey, conducted in December 2005, nearly 78% of the respondents agreed with the proposition that foreigners do take Irish jobs when they locate into Ireland.

As a small open economy with a high degree of exports and foreign direct investment dependency, Ireland cannot afford to restrict significantly inflows of new labour into the country. With continued strong growth projected into the near future, it is also unlikely that Ireland will experience a sudden substantial loss of jobs. OECD (2006) states that in Ireland “there is room to increase labour supply further. The main avenues here are to continue to attract immigrants – especially the highly skilled – and to facilitate the participation of women and older workers.” Thus, the overall migration pressures in the Irish context will remain confined to the realm of political speculation and electoral manipulation.

According to Holzman and Munz (2004), in the future most countries of Europe will have to recruit highly and semi-skilled immigrants. The EU member states will have to compete with both traditional and new countries in attracting best qualified and most suitable migrants. Holzman and Munz state that “opening economically motivated ‘gates of entry’ might in part reduce pressure in the asylum and family reunion ‘gates’ But ... to attract qualified potential migrants, select them according to Europe’s needs, and integrate them economically as well as socially, the EU and its member states will have to embrace cultural and institutional changes.”

The most recent debates concerning the future direction of immigration policies in Ireland have focused on the arguments of whether or not Ireland should adopt the Denmark-style flexicurity model of labour markets by enhancing state unemployment and training benefits provision (Gurdgiev, 2006:3). The problem with the flexicurity model is that it is unsuitable to states like Ireland as it demands an extremely high degree of social consciousness and obedience – something

not found outside the Nordic states. The flexicurity model appears to be unsustainable in the presence of the labour markets open to migration as it creates powerful welfare traps for the immigrants and exerts significant fiscal costs on a recipient country. Finally, the Danish model also generates lower remittances and skills spillovers to the sending country.

For all its benefits, the flexicurity model is under threat in Denmark as well. As the country is moving away from low skilled migration focus in favour of more tailored high-skills migration and a more focused economic migration model, the high rates of taxation and social spending will undoubtedly retard Denmark's ability to attract high quality migrants. Even with temporary and partial benefits offered to some sectors, such as academics, high taxes represent a problem for retaining high skilled migrants over the long term. Appendix 2 below provides a summary of the labour markets policies bottlenecks identified in the present paper.

However, for all economic consequences of migration, a major source of controversy over immigration in Denmark and Ireland is related to public opinion. Today, popular views of immigration appear to be more concerned with the social implications of immigration, assimilation and integration of immigrants into broader society. In so far as such concerns spill over into immigration and naturalization policies in the specific countries, the costs associated with achieving these objectives falling on the shoulders of immigrants will further reduce the welfare states' ability to attract quality migrants.

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APPENDIX 1: IMMIGRATION EFFECTS IN IRELAND, 1995-2006.

The decade of the 1990s saw a dramatic transformation of Ireland: between 1992 and 2000 the average Irish growth rate of more than 8% of GDP per annum was the highest in the OECD area. More importantly, rapid growth continued after the slight correction in 2001. According to the latest forecasts, Irish economy is expected to expand at 5-5.5% of GDP in 2006.

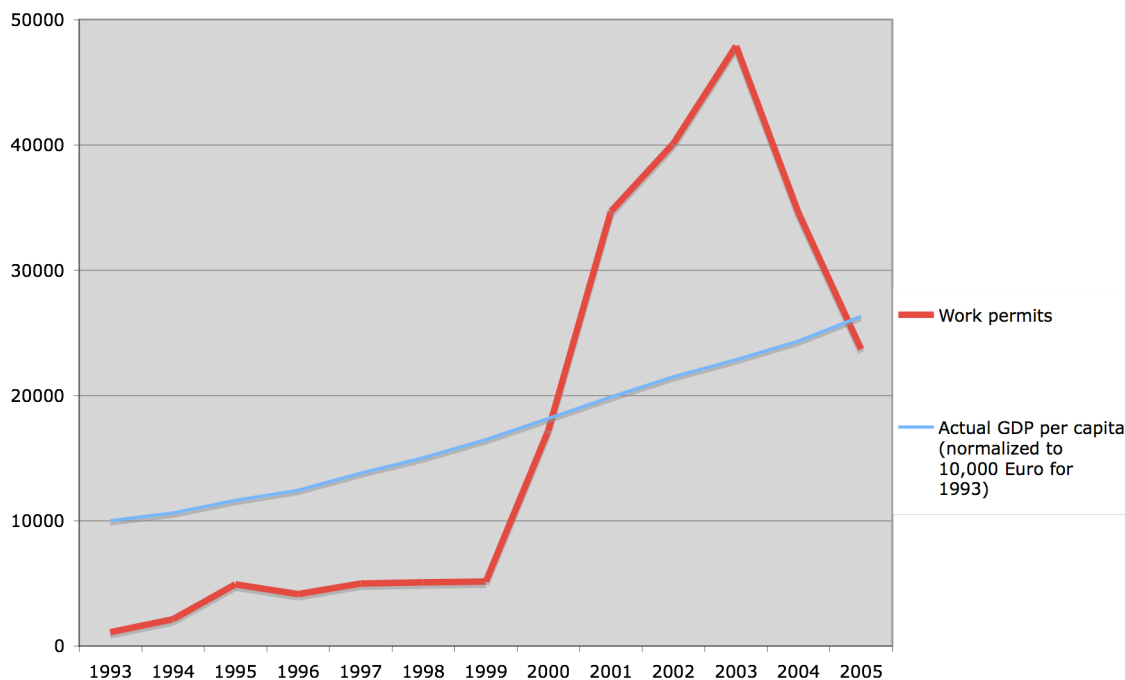
The growth of GDP in Ireland was accompanied by very strong jobs creation. Between 1991 and 2005 as Ireland created nearly a million new jobs, unemployment fell from 15.9% in 1993 to below 5% in 2000, and employment grew at 3.1% in 2001, 1.8% in 2002, 1.9% in 2003 and 3% in 2004. Unemployment remained low, currently standing at around 4.3-4.5% in seasonally adjusted terms. As figure A1 below shows, the per capita real income grew at a robust rate throughout the period of increasing migration flows. In the early stages of the boom, excess demand for labour was alleviated by the increasing participation rate, primarily due to women entering the labour force on the strength of economic growth and lower income taxation. Strong gains in employment were also made in the early years from re-entry by the long-term unemployed and returned migration from abroad.

OECD (2006) figures for net migration show that in 2004 Ireland was the third largest recipient of new migrant labour in the OECD, with 7.9% of labour force composed on foreign nationals. Adding to this figure the substantial increases in migration from the EU10 states following May 1, 2004 accession, Ireland can be expected to have in excess of 9% share of the foreigners in its labour force. In 1989 net emigration reached over 41,000. By 2002 the net immigration steadily climbed to the same number. In the first Census of the Population to include the question about the respondents' nationality, conducted in 2002, there were about 88,500 non-EU-15 nationals resident in Ireland.

Changes in immigration flows into Ireland can be traced to the evolution of the demand for labour. The latter can be traced to the numbers of work permits issued prior to the Accession of May 1, 2004, since following the Accession a large share of migrants fell out of work permit scheme. Figure A1 below shows the total numbers of work permits issued in Ireland.

In terms of the relative composition of inflows, EU15 less UK, plus US and South America have generated 39,145 permits in 1996, while in 2002 the number of work permits issued for these countries rose to 101,065 – a 258% rise in 5 years. For Asia, Australia and New Zealand the numbers were: 11,786 in 1996 and 36,495 in 2002. Citizens of the African countries obtained 4,867 work permits in 1996 and 26,515 in 2002. This implies that in 1996 3,605 permits were issued to the Eastern Europeans and formers USSR states, with this figure rising to 26,235 in 2002.

Figure A1: Number of Work Permits Issued, Ireland



In addition to showing dramatic increases in numbers of migrants over time, the migration patterns exhibit some other noteworthy regularities specific to Ireland. These include:

- 1) Increased propensity of Irish businesses to hire foreign workers and most notably, non-EU workers;
- 2) A relatively even distribution of skilled and unskilled migrants throughout Irish economy and geographically;
- 3) Emergent emphasis on using migrants from the EU10 states to replace earlier migrants from non-EU states, especially in low-skilled areas of employment;

- 4) A decline in migration from UK and slowdown in the growth rates of migration inflows from the EU15 states;
- 5) According to some surveys, up to 1/3 of all non-nationals employed in Ireland in 2004 came from the EU10 states;
- 6) Approximately 40% of non-nationals stay for the period of 1-2 years and ca 20% stays for the period of longer than 2 years.
- 7) Of all countries that did not restrict mobility of EU10 citizens, Sweden received 2,100 workers in May-November 2004 and the UK received 176,000 during the May 2004 – March 2005 period. Between May 2004 and end of April 2005, Ireland received 85,115 in May 2004-April 2005 period. Of these, 41,000 came from Poland, 20,000 from Lithuania, 9,200 from Latvia, 7,200 from Slovakia and 4,400 from Czech Republic.
- 8) According to the latest data (see The Irish Times, 2006), as of January 2006, EU10 nationals comprised only approximately 2% of the working-age population of Ireland, or approximately 52,000.
- 9) Increases in EU10 citizens' migration were associated with a fall in non-EU migrants due to both the displacement factor and policy changes that saw a significant reduction in the number of labour categories eligible for work visas. In 2004, the decline was 28% on 2003 figures with just 10,900 new work permits issued. In January-June 2005, only 4,000 new work permits were issued, representing a drop of some 20% of new permits from non-EU states. There was a marked decline in the numbers of asylum seekers and refugees over the last 5 years. The number of persons applying for asylum in Ireland declined by ca 60% from a peak of 11,598 in 2002 to 4,625 in 2004.

Thus, within a decade, Ireland experienced a reversal of migration patterns from massive outward emigration of natives in the 1980s to strong inward migration of the EU15 and non-EU citizens, coupled with net return immigration of the Irish nationals from the UK, US, Australia and Europe. In addition, the country immigration flows became diversified, combining short and long term migrants, immigrants from the English speaking countries and those with low language and cultural symmetry to the natives, asylum seekers and undocumented immigrants, high skilled workers and low skilled labourers. This resulted in a significant strain on the existing legislation aimed at regulating migration flows. Both immigration and integration were pitted against lack of experience in dealing with foreign residents, a rapidly changing environment and a largely homogenous

indigenous cultural tradition.

Over the last few years, the Government instituted several policy measures to address these bottlenecks. These include:

- 1) The Immigration Act 2003 which established liability for illegal aliens carriers and arrangements for the removal of illegal aliens, the Act introduced the safe country of origin concept and streamlined asylum applications processing;
- 2) The Immigration Act 2004 clarified lawful and unlawful residence and defined Ministerial authority of immigration officers;
- 3) The Employment Permits Act 2003 introduced new legislative basis for work permits, including penalties for employers for illegal employment of non-nationals.
- 4) The 2004 Citizenship Referendum and the related Irish Nationality and Citizenship Act 2004 replaced the principle of ‘automatic’ citizenship based on *jus sanguinis* or *jus soli* by a new principle according to which a child born in Ireland will be entitled to automatic citizenship only if one of his/her parents was already an Irish citizen or a long-term resident of the Republic.
- 5) In 2005, publication by the Minister for Justice, Equality and Law Reform of a discussion document *Immigration and Residency in Ireland*, concerning a proposed immigration and residence bill.
- 6) The *Employment Permits Bill 2005* concerning the regulation of employment permits provides for the application, grant, renewal, refusal and revocation of employment permits. Under the new legislation, employment permits will be granted to the employee and will define certain rights and entitlements of the employee.

APPENDIX 2. SUMMARY OF FINDINGS.

	Effect on welfare	Redistributive effects	Denmark	Ireland
Demand-based migration	Positive	Small as migrants are largely complimentary to natives	Problem in the past, new policies are addressing it.	Strong inflows prior to Accession. Accession reduced effectiveness of demand-driven migration by introducing large-scale substitution away from demand-based selection in favour of substitution of non-EU migrants with those from EU10.
Supply-based migration	Mixed, with some negative effects especially in the case of non-economic migrants	Economic migrants: negative effect to reduce income of the natives in competition for jobs with supply-driven migrants. Non-economic migrants, added losses in welfare will arise due to fiscal pressures.	Supply-based migration was dominant prior to 2001 and is falling since 2002. Majority of foreigners residing in the country are supply-based non-economic migrants. Very strong fiscal pressures arising from welfare state provisions.	Supply-side migration was small and declining throughout the second half of the 1990s. Since 2004, most of migration flows are supply-driven immigration from EU10 states.
Short-term high skilled migration	Positive although relatively small	None	Least suited to benefit from these inflows as Denmark does not act as a major international business hub in the area of services	Major potential benefactor, but is hampered by the lack of normalised visa-less travel regimes with Schengen states.
Wage rigidities and unionization	Higher wage rigidities and degree of labour markets unionisation are associated with lower benefits of migration. Unionisation yields negative returns to migration.	Migration tends to reduce wages gap between the unionised and non-unionised natives.	Due to high degree of unionisation & wage rigidity the country is likely to experience negative effects of migration. Partial alleviation of this problem is possible via attracting high-skills migration.	Less of a problem. Further reduction in union cover and wage rigidity (minimum wage laws & social partnership agreements) will ensure transfer of significant positive gains from migration.
Taxation and welfare state	Higher taxation & social welfare spending and income maintenance translate into lower quality of migrants and greater skills differential in favour of the natives.	Negative: transfers from working natives to non-working migrants	Denmark is exposed to potentially severe costs of migration on welfare system and suffers low ability to attract quality migrants. Selection bias under generous welfare system reduces quality of the subsequent generations of residents born into foreign families.	Because of the restrictions placed on foreigners' access to welfare system, Ireland is less susceptible to these threats. Lower income taxes generate significant attraction for selecting quality migrants. Tax brackets creep & high cost of living undermine this competitive edge.
Cultural and language barriers	More liberal and open cultural and linguistic environments should be conducive to more efficient transfer of benefits.	Welfare transfers to assimilation programmes exert added burden on fiscal positions. Negative selection mechanism operating amongst the migrants ensures lower efficiency of spending programmes.	Linguistic barriers & mono-cultural environment are likely to reduce incentives for migration of skilled individuals as they increase costs of assimilation & lower potential benefits from transferring work experience to the rest of the world.	Major beneficiary of being an English-speaking country with liberal and open attitude toward migrants. One potential bottleneck is the perception of immigration as a temporary phenomena by the policy-makers and employers.