THE POTENTIAL FOR A BELFAST-DUBLIN ECONOMIC CORRIDOR¹

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ABSTRACT This article considers whether a Belfast-Dublin Economic Corridor would a road to prosperity for the economies of the Northern Ireland (NI) and Republic of Ireland (ROI) or whether it in fact represents more of a distraction from the basic lack of competitiveness in many sectors of both economies. The analysis, which focuses on the economic aspects of the issue, concludes that a Belfast-Dublin economic Corridor may represent yet another expedient in a long line of last best hopes for the Irish economies, all of which failed to realise the high hopes vested in them. The economic gains which can be realistically expected should not be exaggerated.

1. INTRODUCTION

This paper is presented in several sections. Section 2 provides a brief background and defines the Corridor, noting the extent of trade between Northern Ireland (NI) and the Republic of Ireland (ROI) and by outlining previous measures to promote co-operation. Since the Corridor will only bring substantial economic benefits to the extent that it boosts competitive performance, Section 3 attempts to benchmark competitive performance by considering levels of living standards, sectoral moductivity and unit labour costs. Section 4 attempts to place into perspective the relative scale of benefits likely to emerge from development of the Corridor and Section 5 provides a brief conclusion.

The ideas expressed in this article have been developed over several years and the authors muld like to express their thanks to the large number of individuals who assisted in this. For apple, Professor Kieran Kennedy and others made helpful comments on an earlier draft of of the text when it was presented as a paper at a Statistical and Social Inquiry Society reland seminar on the evaluation of the Culliton Report (March 1992). Through comments a paper presented by the authors at the Queen's University Institute of Irish Studies (March Professors Brendan Walsh and Bob Rowthorn and Paul Teague helped sharpen our on the role of human capital and the scope for economic co-operation. Philip Donagh (Coopers and Lybrand) introduced us the importance of the Corridor as a policy Most of the data presented on ROI/UK productivity comparisons derive from Birnie Our discussion of comparative performance in producer services was based on the of a project conducted jointly by David Hitchens and Professor Patrick O'Farrell parts of a project Conway). The usual disclaimer applies.

2. BACKGROUND

There has been a longstanding perception that the economy of the island of Ireland has under-performed relative to its potential. A case has been put for promotion of a Belfast-Dublin economic corridor (Coopers and Lybrand/Indecon, 1994; Bradley, 1995; Bradley, 1996). The logic of this case is that with greater economic linkage both the Northern Ireland (NI) and Republic of Ireland (ROI) economies would be stronger (e.g., through economies of scale). Indeed, the whole might be greater than the sum of its parts through the realisation of the external economies and synergies which are held to exist within other corridors such as Vancouver-Seattle or Sydney-Newcastle-Wollongong.

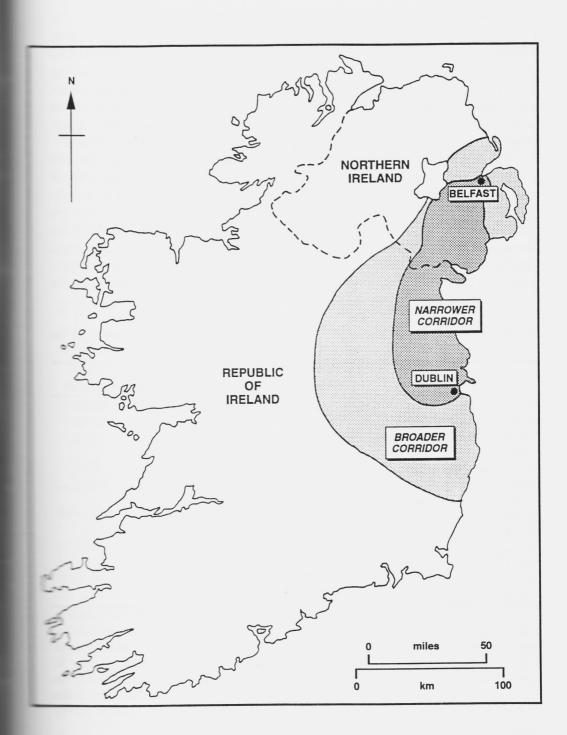
Some would go further and argue that the political division of the island since 1921, whereby the ROI gained independence from Britain but NI remained part of the UK, has been a fundamental impediment to economic development given that a distortion was introduced which prevented trading and other links between NI and the ROI realising their 'natural' potential. The scope for development of fruitful linkages might seem to be greatest on the eastern seaboard of the island where the density of population and industrialisation is highest.

The analysis in this paper focuses on the narrow economic aspects of the issue whilst the inevitable political economy undertones have been considered more fully by the authors elsewhere (Hitchens and Birnie, 1994). This paper is concerned with the scope for co-operation between NI and the ROI to increase the competitiveness and hence performance of the tradeable sectors.

2.1 Defining the Corridor

The so-called Belfast-Dublin economic Corridor (Quigley, 1992) could be defined as the two conurbations of Belfast and Dublin together with the principal towns on the connecting transport routes (Lisburn, Portadown, Lurgan, Newry, Dundalk and Drogheda) and the intervening rural areas.

Whilst this is not a precisely defined region, it has been claimed that it includes about half of the population of the island as a whole and probably a similar proportion of total industrial output (Banking Ireland, 1992). The map illustrates the narrow and broad definitions of the Corridor. The Corridor includes at least 35 per cent of the total population of the ROI (i.e. Dublin and the Counties of Meath and Louth between Dublin and the Border). If one also includes the Counties of Cavan, Monaghan, Kildare and Wicklow since these represent the rest of the North East and East planning regions in the ROI, the share of total population increases to 44 per cent. The core of the corridor in NI can be identified with the five District Council areas which fall along the main transport routes between Dublin and Belfast. Together these areas include 36 per cent of the total population of NI. It is arguable how much more of NI should be considered to fall within the Corridor, given that any benefits from external economy or clustering effects are likely to be felt over the greater Belfast conurbation as a whole. If the Corridor were to include the whole of County Down and County Antrim as far north as Antrim-Larne, a further 28 per cent



Map 1. Map of Ireland

of NI's population would be brought into the Corridor.

A number of conclusions can therefore be drawn about the importance of the Corridor in terms of population. Under the narrow definition, at least one-third of the ROI's population live within the area of the Corridor and on the broad definition up to 45 per cent. In the case of NI, up to 64 per cent of the total population live within the Corridor. It seems safe to conclude that the Corridor is relatively more significant in the case of NI. Taking the island as a whole the Corridor represents between one-third and one-half of total population depending on how the Corridor is defined.

The data in Table 1 show that using the narrow definition the Corridor represents roughly one-third of total industrial activity with the ROI (i.e. very similar to the share of total population). Using the broad definition, the share of industrial activity increases to roughly two-fifths. Workers in industries within the Corridor are indicated to be slightly better paid in per capita terms than their counterparts throughout the rest of the ROI (it is unclear whether this reflects higher wages and salaries at the level of matched occupations or a structural bias towards more highly paid activities within the firms in the area of the Corridor). Unfortunately, the

Table 1. Relative Importance of the Corridor in Terms of Industrial¹ Activity in the ROI, 1989

	Narrow ²	Broad ³	Narrow ⁴	Broad
	Definition	Definition	Definition	Definition
Number Establishments	1689	2179	(34%)	(45%)
Number in Employment	67400	84182	(32%)	(40%)
Administrative and Technical	8903	10363	(34%)	(40%)
Staff				
Net Output (IR£m)	3295	3843	(34%)	(40%)
Net Capital Expenditure (IR£m)	270	327	(32%)	(38%)
Average Wage & Salary (IR£)	13254	12718		
Average Wage & Salary	110	103		
(% of average level in ROI)				
Average Net Output per Head	48893	45656		
(IR£)				
Average Net Output per Head	109	98		
(% of average level in ROI)			171.	

All industries, i.e. NACE codings 1-4. Manufacturing represents the bulk of all industries with mining and quarrying and the utilities representing about 10 per cent of the total output and employment. It should be noted that the ROI Census is based on those establishments with 3 or more persons engaged. By implication therefore, the absolute number of establishments operating with the Corridor is probably substantially under-estimated in this Table (because of the exclusion of the smallest operations from the survey) but the estimates of the level of output and employment are likely to be reliable (the absolute levels of activity in the smallest operations would be small).

- Narrow definition = Dublin, Meath and Louth.
- ³ Broad definition = East and North-East Region.
- ⁴ Values in parenthesis are per cent of ROI total.

Source: Data at County level in the ROI Census of Industrial Production.

published NI Census of Production data on manufacturing activity does not include any breakdown by geographical sub-region. However, as an approximation it might be assumed that the share of manufacturing activities lying within the Corridor would, as in the case of the ROI, be similar to the share of total population found within the Corridor. To provide a range of possible outcomes the share of manufacturing in the Corridor was assumed to be either one-tenth higher or lower than the share of population. The estimated values of manufacturing activity within the Corridor in NI (using either a narrow or broad definition) were then added to the appropriate values for the Corridor in the ROI as shown in Table 1. Table 2 outlines the results.

Table 2. Relative Importance of Corridor in Terms of Industrial/Manufacturing Activity¹ in the ROI and NI Combined², 1989

	Net Output	Employment	Net Capital	Wage and
			Expenditure	Salary Bill
	(IR£m)	(000's)	(IR£m)	(IR£m)
NI Total Manufacturing	2469.5	111.7	323.5	1137.8
ROI Total Industries	9670.2	209.9	853.0	2617.2
MI Corridor				
Narrow ³	809-989	37-45	106-130	373-456
Broad ⁴	1422-1739	64-79	186-228	655-801
M Corridor Combined wi	th ROI Corridor	•		
Narrow ⁵	4104-4284	104-112	376-400	1265-1349
(% of NI+ROI)	(34%)-(35%)	(32%)-(35%)	(32%)-(34%)	(34%)-(36%)
Broad ⁶	5266-5582	149-163	514-555	1726-1872
(% of NI+ROI)	(43%)-(46%)	(46%)-(51%)	(44%)-(47%)	(46%)-(50%)

ROI data based on a wider definition of industries including mining and quarrying and te utilities. The NI data are restricted to manufacturing alone.

NI data in £ sterling converted to IR £ using the average market exchange rate for 1989 0.9298 £ sterling= 1 IR £).

Using narrow definition of the Corridor in NI as discussed in the text. The lower results in the ranges relate to a manufacturing share one-tenth lower than the share of population in the narrowly defined Corridor (which was 36.4 per cent). The higher result in the higher results in the ranges relate to a manufacturing share one-tenth higher than the share of population in the narrowly defined Corridor.

Adding the District Council areas included in the broader definition of the Corridor in 1. The lower results in the ranges relate to a manufacturing share one-tenth lower than the share of population in the Corridor defined broadly (which was 64 per cent). The higher result in the higher results in the ranges relate to a manufacturing share one-tenth higher than the share of population in the broadly defined Corridor.

Narrow definition of Corridor in both NI and the ROI (see Table 1).

Including the areas included in the broader definition of the Corridor in both NI and the ROI (as discussed in text).

Source: Table 1 and the CSO, Business Monitor PA 1002 Report on the Census of Production Managery Volume 1989.

Table 5.	Trade Detween 141 and the ROT (Cross-Dorder Merendinese Exports)					
	From N	I	From the F	ROI		
	£M (current prices)	% of GDP	£M (current prices)	% of GDP		
1960	7.4	2.4	20.3	3.7		
1972	30.9	2.9	66.9	2.9		
1991	496.2	4.7	789.5	3.3		

Table 3. Trade Between NI and the ROI (Cross-Border Merchandise Exports)

Source: Simpson (1993).

The estimates presented in Table 2 indicate that the areas within the Corridor comprise between one-third and one-half of total industrial activity of the island depending on whether the Corridor is defined narrowly or broadly. The shares of total investment and wages and salaries are of a similar range of magnitude.

The scope for a Belfast-Dublin Corridor as part of the larger question of the extent of potential for NI-ROI economic co-operation will now be examined. The Corridor is a special case relative to the rest of the island to the extent that its rural surplus population is smaller, agriculture is more modernised, the amenity value of land is higher, there is more scope for agglomeration or external economies and tourist activity is mostly limited.

Focus will be made on tradeable activities (particularly agriculture, tourism, producer services and manufacturing) because these sectors are subject to international competition and are most likely to create net additions to output and employment.

2.2 The Extent of Trade Between NI and the ROI

Trade between the two Irish economies provides the most visible manifestation of their inter-relationship and this area has been stressed by those who claim large benefits from further linkage between the two economies (CII, 1990; Banking Ireland, 1992,).

In fact, as Table 3 illustrates, the extent of trade appears small both in absolute terms and relative to the size of the two economies. The Table shows that a ROI trade surplus relative to NI has been a longstanding feature but in neither case is the scale of exports within Ireland large relative to total GDP. This conclusion has been reinforced by a detailed study of the export destinations of NI manufactured products (Scott and O'Reilly, 1992). Of total sales of £6 billion in 1990 six per cent were directed to the ROI. However, Scott and O'Reilly also cast some doubt on whether the extent of trade integration between NI and the ROI is actually lower than would be expected given that both are very small markets within a world or even European Community (EC) perspective. For example, in proportional terms the trade flows between Denmark and Sweden or Denmark and Norway are of a similar size. Or, as MacEnroe and Poole (1995) noted, in 1991 NI sold about £120 of manufactured goods to each person in the ROI compared to NI sales of only about £40 per head to Great Britain, i.e. there was already stronger trade integration between the two Irish economies than there was between NI and the rest of the national UK market.

2.3 Previous Measures to Promote Co-operation

Perhaps the main area of intervention has been with respect to industry and trade (Gray, 1992). The Confederation of British Industry and Confederation of Irish Industry have been jointly working at a sectoral level to identify opportunities for greater trade. Chambers of Commerce in NI and the ROI have sponsored schemes to promote cross-border trade. Development agencies have attempted to encourage local sourcing (e.g., by multinational plants in NI or the ROI) on an all Ireland basis. There has also been some pooling of research activities (e.g., by the Institute for Advanced Microelectronics which links universities in both economies).

In agriculture, fishing and forestry there have been some longstanding and successful initiatives (Matthews, 1992). For example, the common management of the Foyle Fisheries since 1952 and reciprocal fishing rights in coastal waters (this is of mutual benefit given the NI specialism in shellfish and that of the ROI in whitefish). Animal health programmes have also been run in parallel. Difficulties were however caused in the 1980s as divergent exchange rate movements and the consequent differences in prices to farmers provided incentives for disruptive and variable movements of animals across the Border. (One consequence of the current BSE crisis has been that the ROI has closed its border to prevent the movement of cattle from NI to further processing in the ROI.)

There are a number of institutional links between the financial systems in the two economies (Kinsella, 1992). Once again, the breaking of the Irish pound-pound sterling parity in 1978 and the subsequent variation of the ROI/UK exchange rate has made co-operation more difficult. This would be even more true if, as seems likely, the ROI attempts to be amongst the first group of members of a new European single currency but the UK decides to exercise its opt-out for at least another couple of years. Moreover, post-1979 the regulatory regime in NI has probably moved further away from that in the ROI. Both economies have a stock exchange but the Belfast exchange does not perform a capital raising function. Ironically, ROI firms through their use of the exchange in Dublin are more integrated into the London exchange.

Eight per cent of ROI's out-of-state tourist revenue derives from visitors from the NI and the equivalent in the NI represents 17 per cent of total tourist revenues. Cross-Border tourist flows are therefore especially important to the NI economy (Fitzpatrick and McEniff, 1992). There is already co-operation in terms of joint marketing and booking facilities.

In the early 1970s a 300 MW electricity interconnection probably yielded a total benefit of IR £10 million annually in terms of pooling generation capacity and lowering the marginal cost of supply (McGurnaghan and Scott, 1981). Repeated terrorist attack over the years brought a halt to this form of co-operation which is only now being re-instated. A number of standby links between electricity supply in the north west of NI and the ROI have however been maintained and the feasibility of interconnection of gas supplies in the late 1990s is being considered (Convery, 1992).

A number of formal and informal links exist in the area of transport (Crowley, 1992). The Dublin-Belfast railway is jointly operated. NI firms use the ports of

Rosslare and Waterford and ROI firms use Larne harbour.

There is therefore evidence of a reasonable quantity of initiatives seeking to promote economic co-operation. These differ in the way in which government is involved. Some schemes are sponsored by local government, others by semi-state organisations, central government or supranational agencies (mainly the EC). In aggregate the measures are quite small relative to the total size of the economies. They tend to reflect piecemeal reaction to circumstances rather than any overall planning design. Measures to promote NI-ROI economic co-operation have hitherto been allowed to develop in a pragmatic and decentralised way. This may have been the most appropriate approach unless it is thought there was some alternative which would have generated larger benefits. It will be considered later whether a larger scale and more tightly directed government attempt to promote co-operation would yield benefits likely to be larger than the costs involved.

3. THE COMPETITIVENESS OF THE IRISH ECONOMIES

3.1 Living Standards

Porter (1990) has defined competitiveness as the ability of a country to generate a high and rising standard of living for its population. Table 4 compares levels of GDP and GNP per capita in NI, ROI and the UK and also includes, given the current emphasis on cohesion within the EC, three other member states of the EC with low GDPs and GNPs.

Until 1986 the ROI's level of GDP per capita was equivalent to about two-thirds that of the average for the EC as a whole as during the 1970s and 1980s the economy had made little progress in narrowing the gap relative to the more prosperous members of the EC. Between 1990 and 1995, the GDP per capita figures suggest

Table 4.	Living Standards Relative to the EC
	(EC12 Average = 100)

	19	86	19	90	1995		
	GDP GNP		GDP GNP		GDP	GNP	
Arial To any	per capita	per capita	per capita	per capita1	per capita	per capita1	
ROI	63	56	71	62	90	79	
NI	78	n.a. ²	74	n.a.	81	n.a.	
UK	102	104	101	103	99	101	
Greece	61	56	57	n.a.	63	n.a.	
Spain	70	72	74	n.a.	76	n.a.	
Portugal	54	51	59	n.a.	67	n.a.	

Comparative GNP per capita figures were not readily available for 1990 or 1995; ROI GNP in 1990 has been estimated at 62 per cent of the EC12 average. The GNP per capita figures for 1995 were estimated by the authors.

Source: For GNP 1986 NESC (1989), for GNP 1990 Kennedy (1993) and SOEC (1996).

Not available; no official estimate of net income from abroad available for NI as a regional economy within the UK.

powerful convergence though this impression may be exaggerated given technical problems in the Irish national accounts (Murphy, 1994, 1996; Birnie and Hitchens, 1996). In recent years comparisons based on GDP per head certainly overstate the ROI's relative position given the substantial outflow of net factor income. This outflow has two major components; the repatriation of profits by the externally owned firms in the ROI and the payment of interest on the ROI's substantial foreign debt. The ROI's performance in terms of comparative GNP per capita is even worse and, as Table 4 shows, is broadly similar to that of one other peripheral member of the EC (Spain) and even after the improvements of 1990-95 is probably not far above that of Portugal. NI, for its part, may soon be overtaken by Spain in terms of levels of GDP per capita.

3.2 Comparative Sectoral Productivity

Table 5 considers the sectoral productivity data for 1985 in terms of average market exchange rates as well as purchasing power parities (PPPs). Both are given: PPPs are more likely to give a more reliable indication of output price differences than the average market exchange rate, although the more limited availability of PPP data for more recent years explains the reliance on comparisons.

Whilst both economies have had some success in raising their aggregate productivity relative to the UK, the comparisons indicate that in seven out of the eleven sectors, the ROI has a lower level of output per head than the UK. Where the ROI's comparative performance falls short of that in the UK, it does so by a wide margin, e.g. in fuel, retail, transport, services of credit, etc. On the other hand, in four sectors, manufacturing, building etc., lodgings and catering etc. and other market services, productivity levels in the ROI exceed those in the UK when comparisons are based on PPPs² (in non-market services the productivity levels are indicated to be similar).

A similar picture can be drawn in the case of NI though the comparative productivity shortfall is concentrated in those sectors other than the services (i.e., in the public and private services the output per head of NI is indicated to be comparable to the UK average). Inspection of the sectoral productivity results reveals that although overall productivity in the Irish economies stands at about ninetenths of the UK level, the non-service sectors fall far short of this level of comparative productivity. Kravis (1976) argues that in principle one would expect more labour intensive activities to have less scope for international productivity differences.

Given the need to compare NI and ROI at a disaggregated level whilst using PPPs it was necessary to base these comparisons on the now rather dated standard of 1985. The table in the Appendix presents more up-to-date comparisons albeit these were only possible for the ROI relative to the UK (a different method, use of the census of production and comparison of the prices of principal products, was used).

3.3 Labour Force Activity Rate

It has already been indicated in Section 3.1 that whereas GDP per capita in the ROI stood at roughly two-thirds of the level in Britain in the late 1980s and in NI at about three-quarters, the relative productivity achieved is more impressive (in both cases GDP per person in employment is about 90 per cent of the level attained in the UK - *if* the ROI GDP figures for 1986 are accurate they would imply that ROI aggregate productivity now exceeds that of the UK). The relatively low living standards achieved are therefore partly a function, as the following Tables show, of

Table 5. ROI and NI Comparative Sectoral Productivity, 1985

Value Added per Head

	ROI/UK	ROI/UK	NI/UK
	Exch. rate ³	PPP^4	
	(UK = 100)	(UK = 100)	(UK = 100)
Agriculture, Fishing & Forestry	88	73	67
Fuel & Power	39	29	50
Manufacturing	119	110	81
Building & Construction	83	91	78
Recovery & Repair, Wholesale & Retail	88	76	
Services			106
Lodgings & Catering Services	137	137	
Inland Transport, Maritime, Air &	78	51	
Auxiliary Transport Services			99
Communication Services	60	80	
Services of Credit & Insurance	42	43	99
Institutions			
Other Market Services	149	163	102
Non-Market Services	107	99	102
GDP Market Prices ⁵	93	89	86

Sectors defined using the NACE except manufacturing and fuel and power (which were defined using the pre-NACE classification of activities).

Source: Commission of the European Communities (1988), CSO (1990), CSO (Ireland) (1986), ILO (1988), SOEC (1991).

The ROI/UK comparison is based on output (GVA market prices) per person engaged in the industry (i.e. inclusive of the self-employed) (comparisons for agriculture etc. are based on GDP at factor cost). Because of difficulties of apportioning the self-employed on a regional basis within the UK and also between sectors, the NI/UK comparison is based on output (GDP factor cost) per employee in employment.

Using an exchange rate of 1 IR £=0.8235 £.

Where PPPs using both ROI and UK output weights were available the geometric average was taken. Source of PPPs; Commission of the European Communities (1988).

Value added tax could not be allocated on a sectoral basis but the sectoral incidence of other indirect taxes is included. The aggregate of VAT payments is included in total GDP at market prices. That part of the income of the banking system which derives from net interest receipts to financial intermediaries (i.e. the excess of interest paid by borrowers over that received by depositors) is not treated as a contribution to GDP.

Table 6. Per Cent of Population in Dependent Age Groups¹, 1988

Table	o. I ci cent of I o	pulation in Depe	naemerige orear	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,
	ROI	NI	EC12	USA
Per Cent	39.3	41.3	32.7	33.9

Age 0-14 and 65+, except in NI where the groups cover ages 0-15 and 60+ for females and 65+ for males.

Source: CSO (1990), Kennedy (1991).

Table 7. Overall Participation Rate (Employed Labour Force as Per Cent of Population) 1986

Fopulation), 1980								
	ROI	NI	UK	USA	Japan	West	France	Canada
						Germany	1	
Participation	30	36	43	45	48	41	38	46
Rate								

Source: HM Treasury (1989), CSO (1990), Hitchens, Wagner and Birnie (1990).

comparatively low participation rates and high dependency ratios as well as the relatively low productivity of those who are in work (Haughton, 1991).

The persistence of the living standards gap between the ROI, NI and the UK and EC average is therefore the outcome both of the relatively low productivity of many of those who are in work and also of the relatively small number of persons who are productively employed. The fact that the ROI is the only European country where the total number of persons employed today is lower than it was in the 1920s testifies to a dismal performance which is only partially attributable to initial structural disadvantage, i.e. the preponderance of agriculture (Kennedy, 1991, 1993). The lack of employment growth in turn reflects the inadequate expansion of the high productivity sector, particularly manufacturing.

3.4 Labour Cost Competitiveness

In the ROI

Gross wage levels in the ROI are now comparable to those in Great Britain. Some commentators have argued that large scale migration from the ROI to Britain means that for a number of decades the two labour markets have been highly integrated as far as skilled workers are concerned (Haughton, 1991). This would imply that there will be little scope to decouple wage levels in the ROI from those in Great Britain (if the wage rate for skilled occupations in the ROI fell below that in Great Britain this would give rise to increased outmigration and the consequent bidding up of wage levels). In short, comparative wage levels in the ROI in the Irish owned sector are probably higher than could be warranted by relative productivity levels (a high incidence of personal taxation has also exerted some upward pressure and the labour costs to employers are further inflated by taxes on employment). During the early 1990s relative wage levels in NI as compared to those in Great Britain did fall back (Gudgin, 1995). Nevertheless, the institutional resistance to any

further widening of the gap in wage rates would probably be very great (Black, 1987). It may be more realistic for policy to aim to raise comparative productivity levels than to lower relative wage levels.³

It is also worth emphasising that whereas wages and the exchange rate relate to cost competitiveness, success in international markets is probably now more strongly influenced by the non-price characteristics of products (Kravis and Lipsey, 1971; Schott and Pick, 1983) such as quality, design, finish, reliability and safety. Reductions in wages or the exchange rate are unlikely to have a favourable impact on these non-price characteristics. A consideration as to how such non-price characteristics might be fostered implies a review of the dynamic and long run aspects of competitiveness.

Given such considerations less stress can be placed on indicators of cost competitiveness as opposed to those which measure productivity, product quality or innovational capacity. However, cost competitiveness is at least significant in the short run and especially for the labour intensive parts of manufacturing (i.e. parts of the indigenous sector in the ROI). The maintenance of cost competitiveness could therefore be considered as a necessary though not sufficient consideration for further expansion in the tradeables sectors (NESC, 1993).

Measures of relative wage costs in the ROI suggest a mixed picture in terms of cost competitiveness. NESC (1993) considered relative unit labour costs an unreliable indicator of underlying competitive performance given that the measure is distorted by the very rapid productivity growth of the externally owned manufacturing sector. According to estimates of Honohan, ROI wage competitiveness during 1975-1993 declined by 1.3 per cent per annum (NESC, 1993) relative to a weighted average of UK, West Germany and the USA. Performance relative to the UK alone was more variable. An index of relative wage levels (increases indicates worsening competitiveness) increased from 84 in 1971 to a peak of 111 in 1986 and 108 in late 1992, though after devaluations in the late 1970s and in early 1993 the index fell to levels of 85 and 99 respectively (1985 = 100).

In NI

Table 8 shows the development of relative unit costs in NI relative to the UK. These results suggest that the NI economy as a whole is less competitive than the UK

Ideally productivity would be raised so as to maintain higher wage levels. This is not to deny that if the comparative productivity of the Irish economies cannot be improved (and past performance suggests such improvement may not be easily attained) then notwithstanding the political difficulties some way should be found of bringing the market wage, particularly for the unskilled, closer to what may be a relatively low equilibrium wage. The undesirable social consequences of such low wages might be ameliorated by some form of workfare arrangement, i.e. the state would make cash payments to bring take-home pay up to a guaranteed minimum level. By implication those already in work would have to be prepared to pay for such a scheme through higher taxes which raises the question whether there is a widespread political consensus in either NI or the ROI to make whatever sacrifices may be necessary to reduce high unemployment (Kennedy, 1991; Quigley, 1993).

Table 8. NI Relative Cost Competitiveness and Cost Competitiveness as a Per Cent of the UK Average Level (NI/UK, UK = 100)

	Unit Labour Cost		GDP per Per	son Engaged
	1989	1992	1989	1992
Agriculture	83	88	74	68
Utility	123	114	89	86
Manufacturing	106	106	82	83
Construction	96	99	91	83
Distribution	90	87	91	93
Transport &	96	100	95	91
Communications				
Financial	82	83	107	103
Other Services	88	81	103	113
Total Economy	103	103	89	87

Source: NIERC quoted in DFP (1993).

economy as a whole though responsibility for these relatively high unit costs is concentrated in the utilities and manufacturing sectors.

4. THE POTENTIAL FOR A ECONOMIC CORRIDOR

4.1 The Impact of the Corridor on the Constraints on Expansion of Tradeables Sectors

This section examines to what extent greater development of the Corridor is likely to bring benefits in terms of the expansion of four key tradeables sectors: manufacturing, agriculture and food processing, tourism and producer services (there are other tradeable activities but these four probably have the greatest potential for growth). In each case it attempted to identify the crucial supply side or demand side constraints on sectoral growth and then it is considered whether the Corridor is likely to have a favourable impact on such constraints.

Taking ROI and NI agriculture as a whole, the extent of any gains from cooperation per se, whether within the Corridor or beyond, is likely to be limited. This is because the main supply side constraints on performance (e.g., relatively small size of farms or lack of training of farmers; Hitchens and Birnie (1994)) are not likely to be amenable to much improvement through co-operation. There could however be some gains to co-operation between food processors within the area of the Corridor in terms of improving conditions on the demand side. For example, consumer food products are likely to be aimed at urban markets and given that the Corridor represents the most densely populated part of the island it would make sense for NI and ROI producers to treat this area as a single one for marketing purposes. The trend towards cross-border mergers, acquisitions and alliances which be begun in recent years is likely to continue and improve performance on the supply side through exploitation of greater economies of scale though it should be

recognised that even all-Ireland champion firms are likely to remain small in wider European terms (though this is subject to the threat of monopoly and monopsony power).

A sample survey study involving one of the authors (Hitchens, O'Farrell and Conway, 1993) indicated that producer service firms in NI and the ROI (which were almost entirely located in Belfast and Dublin) shared certain supply side weaknesses relative to counterparts in south east England (e.g., absence of certain management skills or advanced items of equipment). It seems doubtful that greater development of the Corridor would have much influence on such factors. Whilst mergers, partnerships and alliances between Belfast and Dublin producer service companies would have the potential to lead to the growth of larger companies in Ireland economies of scale in most of these activities may in any case be limited. What may be crucial is the ability to achieve cost economies and favourable learning effects through specialisation in a narrowly defined activity. Given the enormous London market, sample English firms were advantaged in this respect (Hitchens, O'Farrell and Conway, 1993). In the same way, Dublin firms, given their local metropolitan market, are advantaged relative to those in Belfast. In the context of the Corridor there might be some scope for ROI service firms to sell more in NI by displacing purchases which had previously been made from suppliers in Great Britain. If policy makers were to promote a greater awareness of service sourcing on an all-Ireland basis this might lead to some NI manufacturers buying in producer services for the first time (previously distance from suppliers in Great Britain had held them back from making purchases). In such circumstances not only would the ROI suppliers gain but the NI purchasers would probably experience improved competitiveness as the use of the services enhanced the value added of their products.

A series of supply side factors have been identified which constrain the growth of tourism: possible uncompetitiveness in terms of price and non-price characteristics, unprofessional and poorly qualified management and congestion at popular destinations (BBC/RTE, 1992; HMSO, 1993; *Report of International Tourism Marketing*, 1994, January 18). The development of the Corridor *per se* is unlikely to bring many improvements with respect to such difficulties. Admittedly, co-operation between the NI and ROI tourist authorities could yield returns with respect to demand side conditions; e.g., joint marketing arrangements. However, given that many of the most obvious initiatives have already been applied it is not clear what more could be done. In any case, there are two major constraints which are not likely to be amenable to alteration through further development of the Corridor. First, substantial growth in the number of tourists coming to NI is unlikely in the absence of a permanent end to the 'Troubles' and, second, the major tourist destinations in Ireland mostly lie to the west of the areas contained within the Corridor (NESC, 1993).

Development of NI-ROI economic links in the manufacturing sector, whether in the Corridor or beyond, is unlikely to have more than a marginal effect. This is because most firms in NI and the indigenous sector in the ROI suffer from a syndrome of low productivity, unsophisticated products, over-emphasis on long and standardised production runs as opposed to flexible manufacturing, lagging standards

in terms of human capital and cautious and out-dated management strategies. When both areas are far behind European best practice is unclear how co-operation by itself could lead to a narrowing of the gap. Indeed, it could simply be a case of the blind leading the blind. Whilst it might appear desirable to develop external economies through co-operation within the Corridor (for example, because NI and ROI enterprises are generally too small in comparative international terms to develop substantial internal economies of scale; Pryke (1993)) it is not going to be straightforward for policy makers to generate some sort of Marshallian industrial district or Porter cluster of firms. Even without any of the frictions imposed by the Border the Belfast-Dublin Corridor may not be large enough, may not have a high enough density of industrial activity and may not have a sufficient range of firms to create the necessary agglomeration economies. Government policy should certainly be aimed at removing any remaining frictions impeding marketing, sourcing, company financing or partnership on an all-Ireland basis (many of these obstacles should be going anyway given the Single European Market). However, beyond this it should probably be left to the firms themselves whether they wish to carry cooperation any further.

4.2 Estimating the Relative Scale of Benefits Arising From a Corridor

Such an estimation can be made by considering by how much ROI and NI output and employment would expand if competitiveness improved by comparison with the most optimistic projections of increased North-South trade (this being seen as the major and most immediate means be which co-operation would yield benefits). Although there is obviously no precise measure of the extent to which the Irish economies would gain if competitiveness improved, it could however, be proxied by the gain to employment which would be achieved if the rate of participation in the employed labour force were to rise to the level of the UK average. (This is assuming that the relatively low current rate of participation is largely a function of the encompetitiveness of the tradeable activities and their consequent inability to expand sufficiently to absorb more of the available labour supply, though admittedly demographic factors, a young population, would also have some role. Section 3 suclined the evidence that NI and ROI sectoral productivity levels have remained low across most sectors and indicated that this is a major explanation of inadequate expansion of employment in the tradeable sectors.) Table 9 sets out the results.

It can be seen that the scale of forecast benefit from greater competitiveness (as proxied by variations in the level of participation in the employed labour force) far netweigh those of which were projected for higher North-South trade. Indeed, the from trade at even the most favourable projection of increased trade megration, would be only 16 per cent of those from increased competitiveness. Of provided the variation of the 462,000 jobs arising from higher participation could be attained simply by greater competitiveness (some of NI and ROI shortfall in participation is the consequence of the age structure of the population and there is also the influence of the negative factors such as the impact of the 'Troubles'). However, even if it is samed that only half of these 462,000 jobs could potentially be realised through

Table 9. Estimation of Relative Scale of Gains From Greater Competitiveness as Opposed to More NI-ROI Trade

	Actual Employment	Employment if	Estimated Gain
		"More Competitive"	
	(000's)	(000's)	(000's)
Gain from Greater C	ompetitiveness		
	1992	19921	
NI	614 ²	685³	71
ROI	1125	1516³	391
NI+ROI	1739	2201	462
Gain From Greater C	Co-operation		
A. Most Favourable Sc	enario:		
NI+ROI with £3 billion	n of extra trade		75 ⁴
B. More Realistic Scen	ario:		
NI+ROI with £0.5 billi	on of extra trade		7.5^{5}

Assuming the UK participation rate in the employed labour force applied.

Source: As above.

greater competitiveness, such a gain would be more than three times that envisaged from greater North-South trade on the most generous assumptions (e.g., no displacement of other Irish producers and a multiplier of 2.2 such that each additional manufacturing job also generates 1.2 jobs in the service sectors).

The actual gains from greater trade would almost certainly be smaller. Scott and O'Reilly (1992), for example, projected total gains to manufacturing employment throughout the island of only 5700 (the multiplier effect takes the gain to total employment to only 7500). (They assumed that manufacturing exports in both directions would double with a 50 per cent rate of displacement of foreign products, in other words total sales of the two economies would grow by £ 0.5 billion). Such gains to output and employment would represent only around 0.4 per cent for NI and ROI combined.

There are in fact a range of measures at the microeconomic level which could attempt to tackle the longstanding shortfall in terms of productivity and competitiveness and could be introduced alongside the 'shock' provided by the downgrading of traditional industrial policy and the high rates of general subsidy which often accompanied such policies. Such a new direction for policy would be consistent with the current commitment by the authorities to move towards a more

² Assuming number of self employed to be the same as recorded for 1991 (74000).

All participation rates were estimated using 1992 total employment figures and population Census results for 1991 (the participation rates were 39 per cent, NI; 32 per cent, ROI; and 43 per cent UK).

⁴ As estimated by CBI/CII, CII (1990). Assuming a tripling of total trade volumes from 1990 levels as each Irish economy would sell as much to its neighbour, per head of the population there, as was sold at home (per capita).

As estimated by Scott and O'Reilly (1992). Assuming that the total volume of trade increased by about one-half.

selective and 'software' orientated grant regime; DED (1990), Culliton (1992), Government of Ireland (1993), HMSO (1993). There should be more recognition that the shortfall in productivity and competitiveness is probably caused partly by relatively low levels of product quality as well as by relatively low levels of physical productivity (Hitchens, Wagner and Birnie, 1992). Issues of physical productivity such as scale, capital intensity and industrial relations have traditionally been emphasised by economists and governments. However, much less is known as to how and why economies differ in terms of the range of products produced, their qualities, markets served and future prospects (Porter, 1990). Questions of product quality lead on to investigations of management training and experience and company strategy. Policy intervention in the future should be directed towards promoting higher value added products and this would imply that policy makers will require much better information about the relative quality of management in NI and the ROI (one possible research methodology to untangle why strategies and quality differences could be achieved through managerial exchanges between matched firms; Hitchens, Wagner and Birnie, 1991; Hitchens and Birnie, 1993, 1994).

Our scepticism about the prospects for a Corridor is one reflection of a wider disillusionment as to the potential for so-called 'super regions' within western Europe. It had been envisaged that the EC Single Market would facilitate the creation of huge transnational economic regions. The Atlantic Arc including the island of Ireland, the 'Celtic fringe' of Great Britain and the coast of 'mainland' Europe from Brittany to Portugal was to be one of these. More sober reflection has suggested that there are limits to the extent to which increased integration between these economies can be envisaged (Gripaios and Gripaios, 1992). Moreover, it may be over-optimistic to suppose the Atlantic Arc can imitate the apparent success of the Pacific Rim economies. The priority for all the Atlantic Arc economies, and this is especially so since the Single Market is likely to increase competitiveness and centralising pressures within western Europe, is probably to intensify and improve their transport, logistical, technological, human capital and other links with the relatively more successful core regions of the EC.

5. CONCLUSION

In summary, if the various frictions imposed as a result of the partition of the island and the Corridor by the Border could be shown to be key explanations of the relatively weak long run supply side performance then there might be a large gain from co-operation as a consequence of removing those frictions. However, detailed consideration on a sectoral basis suggests that in farming, business services, tourism and manufacturing most supply side weaknesses have little to do with any lack of co-operation. This is not to deny that some gains can be identified but these are not likely to be substantial. It is not co-operation *per se* which will be significant but initiatives to upgrade competitiveness in both economies.

It has been demonstrated that the potential benefits from greater competitiveness (as proxied by variations in the level of participation in the employed labour force) far outweigh those which were projected for higher North-South trade.

Policy makers should therefore consider whether any investment in developing a Corridor would in fact yield greater benefit than if such funds were placed into policies more directly designed to improve economic competitiveness.

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APPENDIX

Table A1. Irish Comparative Productivity by Broad Sector, 1930s-1990s Net
Output per Head as a Per Cent of the Level in the UK
Ireland/UK (UK 100)

ireland/ork (ork 100)						
	1935	1968	1985	1990¹	1995¹	
Manufacturing	88	82	110 ²	130	159	
Agriculture	61	55	77	81	85^{1993}	
Construction	n.a.	66	91	63	71^{1992}	
Mining and quarrying	65	132	57	53	591994	
Utilities	54	47	27	39	29^{1994}	
Transport	n.a.	62	n.a.	54	n.a.	
Telecommunications	n.a.	n.a.	n.a.	54	n.a.	
Postal services	n.a.	n.a.	n.a.	62	n.a.	

Indices of the change in the volume of net output during 1985-90 and of the change in the level of employment were used to update the 1985 benchmark comparisons. Volume indices were then used again to up-date as far beyond 1990 as was possible (deflated series of total sectoral gross value added were used for construction; SOEC (1991, 1994)).

Including an adjustment for transfer pricing (see below). Source: Birnie (1996) and Birnie and Hitchens (forthcoming).