SERC
Spatial Economics Research Centre

SERC DISCUSSION PAPER 4

Foreign Direct Investment and Prospects for the Northern Region

Jonathan Jones (Newcastle University Business School)
Colin Wren (SERC, Newcastle University Business School)
August 2008

This work was part of the research programme of the independent UK Spatial Economics Research Centre funded by the Economic and Social Research Council (ESRC), Department for Business, Enterprise and Regulatory Reform (BERR), the Department for Communities and Local Government (CLG), and the Welsh Assembly Government. The support of the funders is acknowledged. The views expressed are those of the authors and do not represent the views of the funders.

Foreign Direct Investment and Prospects for the Northern Region

Jonathan Jones* and Colin Wren**

August 2008

* Newcastle University Business School
** Economics, Newcastle University Business School

Acknowledgements
The authors are grateful to the Regional Development Agency *One NorthEast* for supplying the data on which this article is based, and to numerous individuals for their assistance with this work, including Lesley Boughton, Graham Adams, Joan Davison, John Elliott, Mark Lea, Joanne Newton, Gordon Ramsey and David Wood. The authors take responsibility for the views expressed in this paper. The paper is forthcoming in the *Northern Economic Review*.

Abstract

This paper's purpose is to review the recent experience of foreign direct investment (FDI) in North East England, and to explore the implications of this for the region's prospective economic development. Foreign-owned plants are reckoned to account for more than half the North East's employment in manufacturing, so that the future economic prospects of the region rest heavily on the performance of this stock of FDI plants. Further, the attraction of FDI continues to be a vital component of the region's economic strategy (*One NorthEast*, 2005), while the Regional Development Agency (RDA) supports initiatives to both develop and 'embed' these plants in the region.

Foreign Direct Investment and Prospects for the Northern Region

Jonathan Jones and Colin Wren

1: Introduction

This paper's purpose is to review the recent experience of foreign direct investment (FDI) in North East England, and to explore the implications of this for the region's prospective economic development. Foreign-owned plants are reckoned to account for more than half the North East's employment in manufacturing, so that the future economic prospects of the region rest heavily on the performance of this stock of FDI plants. Further, the attraction of FDI continues to be a vital component of the region's economic strategy (*One NorthEast*, 2005), while the Regional Development Agency (RDA) supports initiatives to both develop and 'embed' these plants in the region.[1]

The paper has three aims. The first is to examine FDI trends and the North East region's success in attracting this investment. Second, making use of a unique dataset on FDI in North East England, it seeks to analyse the characteristics of the foreign-owned investment at both project and plant levels. Finally, it considers the implications of this FDI for employment, focusing on the number of the jobs and the survival of plants. The article draws on a recent book by the authors (Jones and Wren, 2006), so that it gives an overview of the book's findings in relation to the North East. However, it also updates this analysis, and presents new results on the survival of the FDI plants commencing in the region since the mid-1980s.

[1]These include the North East Productivity Alliance and Investor Development Programme. The RDA strategy recognizes that with the emergence of low-cost locations elsewhere the region must focus on knowledge-based and higher value-added FDI industries (*One NorthEast*, 2005, p. 63).

The paper finds that half the FDI plants arriving over the period 1985-98 have now closed, and that employment in these plants has fallen by about a quarter since the turn of the century due to exit and contraction. It therefore has strong implications for economic development and policy. The paper is organized as follows. It begins by considering the scale of FDI and recent trends in the North East relative to the UK. It then sets out the dataset that forms the basis for the paper, and it examines FDI in relation to both investment and employment. Plant exit is then explored, and finally the paper draws implications for the region's prospective development.

2: Recent FDI Trends

There has been an unprecedented increase in global foreign direct investment over the last twenty-five years, and the UK has been the major world recipient of this FDI.[2] In terms of the number of projects, Figure 1 shows there was about a seven-fold increase in inward FDI to the UK over the period 1980-2005, with a step-change in the mid-1980s, a further acceleration over the 1990s and renewed growth since the turn of the century. The recent strong increase in FDI has been largely fuelled by a mergers and acquisitions boom, which mainly affected the service sector in South East England. Indeed, in 1995 the South East (including London) received 89 FDI projects (19 per cent of the Great Britain total), but this has increased to 472 FDI projects by the year 2000 (55%) but 373 in 2005 (46%). Excluding these service projects, Figure 1 shows that the number of FDI manufacturing projects has been steady or falling over the last ten years, although still at reasonably high levels by historical standards.

As regards the North East of England, the number of FDI projects and the associated jobs are shown in Figure 2. In terms of the number of projects, a similar pattern is evident for the North East region as for the UK as a whole. There is the same strong increase in the number of FDI projects since the turn of the century, such that the number of projects is now about 80 per annum, although only 6 per cent of the UK total. It compares with 40 to 50 projects over much of the 1990s, but which is 15% of the UK total. Figure 2 shows the number of jobs associated with the projects in the region, based on data reported for the UK as a whole by the inward investment agency, *UK Trade and Investment*. In the case of the start-ups, which is often taken as

[2] The reasons for the increase in global FDI are discussed in Jones and Wren (2006).

synonymous with 'greenfield' investment, the jobs are prospective, in that they are what the investor plans to have in place within two years of a formal commitment to the project (Stone and Peck, 1996), although not all of these jobs may subsequently have been realised, on which more is said below.

What is interesting from Figure 2 is that the number of jobs closely follows the number of projects up to the late 1990s, but since when these series have moved in opposite directions, implying a much smaller average project scale. In fact, over the period 1985-98 the typical inward investment is small – the median scale across all projects is only around 60 jobs, with more than half the start-up projects promising no more than 50 jobs on entry – so that what has changed is that the very large inward investment projects are no longer taking place. Thus, FDI promised around 10,000 jobs per annum to the region at its peak in the mid-1990s, but it is now around 7,000 jobs a year, although still above the annual 5,000 jobs in the late 1980s. In fact, many of the large investments in the mid-1990s failed to realize their job scales (Jones and Wren, 1994a), and there have been several notable failures, e.g., Samsung, Siemens and Fujitsu. Nevertheless, what we conclude from this is that FDI continues to make a substantial contribution to the region's employment.

2.1 The Attraction of Foreign-Owned Investment

The North East of England has traditionally punched above its weight in terms of the attraction of FDI, reflecting the operation of UK regional policy and regional grants (Wren and Jones, 2008), and the activities of the regional development bodies. Thus, relative to the UK, the region's share of new FDI jobs was 8% in 1985, but increasing to 15% in 1989 and 14% in 1995 and 11% in 2005. Clearly, the share of jobs has held up, since while the North East gets a smaller share of total UK projects (and the very large investments are no longer occurring), the average size of the service projects in the South East region is actually quite small in size.[3]

The North East's performance in attracting FDI can be further explored by calculating what is known as an index of Relative Regional Performance (RRP). This is a location quotient, which gives a region's share of FDI projects relative to its share of UK employment. In logarithmic form an index number greater than zero indicates

[3] Thus, the 1,613 projects in the South East region over 1999-2005 promised just 29 jobs on average.

that a region has been relatively successful in attracting FDI projects, and conversely. The RRP is reported in Figure 3 for the North East region and for selected regions and countries, comprising South East England, Scotland and Wales.

Along with Wales, Scotland and West Midlands (not shown), the North East has been the best-performing region or country, having traditionally attracted a large number of FDI projects relative to its total employment share. Indeed, it is the best-performing of all English regions, as nearby regions (not shown), such as the North West and Yorkshire and Humberside, have RRPs that indicate they have attracted an FDI share comparable to their employment share. However, Figure 3 shows that the share of FDI projects going to the North East region has been declining since the early 1990s. This is similar to Wales and Scotland, but where the decline in FDI projects is in fact much more pronounced. Clearly, a major factor underlying this is the dramatic increase in FDI going to South East England, but which now appears to have leveled off (Figure 3). Nevertheless, the North East seems to be doing relatively well, and especially if compared to Scotland, although it now attracts a number of FDI projects that it is only slightly greater than its share of employment.

3: The Foreign Investment Dataset

The nature of the foreign-owned investment in the North East of England is explored using a dataset on FDI that was supplied from the RDA, *One NorthEast*. Since 1985, the RDA and its predecessor organization, the Northern Development Company, have collected information on projects by foreign-owned plants in the region, which is shortly after the opening of the Nissan car plant at Washington. These data are now collected for all UK regions and are used by the inward investment agency, *UK Trade and Investment* (the former *Invest in Britain Bureau*) to report inward FDI flows to the country as a whole. The RDA collates the project data through its contacts at the local, regional and national levels, including the Government Office, from various agencies, scrutiny of the local and national media and its dealings with the inward investors, for which it carries out periodic surveys and maintains directories. It represents the best source of information on FDI projects in the region over a long period.[4]

[4] The data were supplied on the basis of confidentiality, with details of sensitive investments, including more recent cases, not disclosed. Griffith (1999) reports that the UK *Annual Business Inquiry* samples

The data collected by the agency date back to the increase in FDI in the mid-1980s (Figure 1) and it has three distinguishing features: it is project based; it includes 'significant' investments only; and it is prospective, so that not all of the jobs may have been realized, although all the included FDI plants went ahead. A project is a discrete identifiable investment carried out within two years of the commitment to the project. Projects are 'significant', in that they include start-ups, acquisitions and joint ventures, for which standard definitions apply (see Jones and Wren, 2006), but they also include re-investments, or what the agency describes as 'expansions'. These are projects that include an increase in the scale or productive capacity of the plant, so that they exclude the routine activities, such as replacement investment.

The project data were put on a plant basis, where a plant is a production unit at which broadly the same activity is carried out continuously over time in the region. It reflects the interest in the use to which the assets provided by the investor are being put for economic development, so that a unit is treated as on-going even though it may have changed its name, location or ownership within the region.[5] A comprehensive checking of the data was undertaken, which is described in Jones and Wren (2006). It is difficult to know if all re-investments went ahead, although nothing came to light in our analyses to make us think otherwise. Overall, it is believed that the data provide a comprehensive account of FDI into the North East region for the period 1985-98. We would have liked data on more recent projects and plants, but the employment and survival of the plants is investigated below at the year 2007.

4: The Nature of Foreign Investment

The dataset comprise 550 FDI projects undertaken by 337 foreign-owned plants in the North East region over the period 1985-98. Of the 337 plants, 265 plants undertook their first investment from 1985 onwards, and these are referred to as 'New' plants, whereas the other 72 plants were located in the region at 1985, i.e., 'Mature' plants. There is a complete set of projects for the New Plants up to 1998, but for the Mature Plants the projects are not observed prior to 1985. For a New plant a distinction is made between an Initial investment, by which it commenced in foreign ownership,

a proportion of smaller companies, which is as little as 1 in 5 for firms with less than 100 employees, but we find that three-quarters of foreign-owned start-ups have less than 100 employees on entry.

[5] A unit that anglicizes its name after start-up or relocates within the region is treated as the same plant.

and a Subsequent investment, which is any further project carried out. The Initial investment defines the New Plant type, i.e. start-up, acquisition or joint venture.

The number of plants and projects according to plant type is shown in Table 1, but for the New plants only. Of the 265 plants commencing in foreign ownership over 1985-98, 164 entered by start-up, 79 by an acquisition of a UK-owned plant and 22 by joint venture. In total, the New Plants carried out 416 projects, which is an average of 1.57 projects per plant, and this differs little across the plant types. Of the 265 New plants, 167 carried out an Initial investment only, but 98 plants went on to implement at least one further project by 1998. In fact, most of these undertook one Subsequent investment only by 1998, with just 14 per cent of the New Plants implementing more than two projects. Projects after 1998 are not observed, so that there is data censoring, but elsewhere we find that the start-up plants either carry out their first re-investment within 7 years or not at all, while the acquisitions in fact do so much sooner, such that few of these undertake a first re-investment after 5 years (Jones and Wren, 2006).

4.1 The Scale of Investment

The investment scale is known for only 364 of the 550 projects (about two-thirds), but by comparing it with the distribution of employment scales, which is known in nearly all cases, it is possible to infer that it is broadly representative of all projects.[6] The dataset identifies £8,714 million in FDI over the period 1985-98, and scaling this up pro-rata by project type gives total investment of £14,267m for all 550 projects (all at 1995 prices). Of this, roughly a third is by start-up, a third through re-investment and the remainder by acquisition or joint venture. The larger investment projects may be slightly over-represented in the dataset, so if anything this is an over-estimate, while it is prospective and not all of the investment may have been achieved.[7] Nevertheless, it indicates investment of up to £1 billion a year over 1985-98 (1995 prices), which is about 4 per cent of regional annual GDP over this period, or 15% of manufacturing output. It again indicates the substantial contribution of FDI to the economy.

A feature of the investment is that it is heavily concentrated in a small number of projects, leading to its concentration in a small number of activities, locations and

[6] Comparison is made both for the 364 projects and for all projects. The correlation coefficient between the investment and job scales where both are known is +0.66. Except at either tail, the distributions of project investment and job scales are remarkably similar, which is confirmed by a Spearman rank test.

[7] See discussion on the jobs below.

so on. Investments are generally in the range £2m to £10m, but there are a small number of very large investments, with 14 investments each in excess of £150 million (1995 prices) that combined account for two-thirds of the total known investment over the study period. In fact, the 28 largest projects, each in excess of £50m, account for nearly 80 per cent of investment, but only 8% of the number of projects.

4.2 The Pattern of Investment

The nature of the very large projects determines the overall pattern of investment. For the £8,714 m investment in the 364 projects this can be summarised as follows:

- Half the investment is in Tyne and Wear (46 per cent), about a quarter in each of County Durham (26%) and Teesside (24%), and only a very small share is in Northumberland (5%).
- Manufacturing accounts for 84% of investment (86% of projects), and within this there is a further heavy concentration, with the four activities accounting for 89% of investment.
- The four activities where the FDI is concentrated are chemicals; machinery and equipment (including domestic electrical appliances); radio, television and communications equipment (including electronic components); and transport equipment (including motor vehicles).[8]
- Investment in chemicals is mainly by acquisition; in machinery and equipment and in communications equipment it is by start-up and re-investment, and in transport equipment it is primarily re-investment by existing plants.[9]
- Most projects originate from Western Europe, followed by North America and the Far East, but by volume half the investment is from the Far East (47%) and similar to that from all of North America (29%) and Western Europe (24%).
- Investment mainly arises from just three countries: Japan (38%), USA (28%) and Germany (16%), which combined represent 82 per cent of FDI. When Korea is included this increases to 88 per cent.

[8] These are NACE industrial codes 24, 29, 32 and 34 respectively. Much of the latter is associated with the Nissan car plant that set up in 1984, just prior to the study period.
[9] Acquisitions in chemicals account for nearly a half of all the acquisitions taking place in the region.

- Investment from the USA is more broadly based than that from the other three countries. Manufacturing accounts for only half of US investment and a third of this goes to activities outside the four main activities.

4.3 Location Factors

The location of the FDI plants is shown in Figure 4, which reveals that most plants are located on Eastern seaboard and close to the conurbations. Several factors appear to be at work in determining this location pattern. First, the FDI tends to locate near the A19 and A1 trunk roads, running north-to-south through the region, giving easy inter- and intra-regional access, including coastal ports and airports, and on the periphery of the areas from which these plants draw their labour. Second, the industrial history and operation of policy are important factors, so that there are concentrations of FDI in the former New Towns of Newton Aycliffe, Peterlee, Washington and Cramlington, and in the closure areas of shipbuilding, steel and coal, where policy has worked to attract plants both by laying-out industrial estates and business parks and through incentive programmes, e.g. Sunderland, Wallsend and Consett. Finally, there seems to be a strong concentration of FDI on Teesside, but this is mainly through acquisition in chemicals and heavy engineering, so that it reflects the existing industrial structure of this area rather than its past structure that is reflected in closures.

5: Employment in Foreign-Owned Plants

The number of projects jobs is known in nearly all cases, i.e. for 511 of 550 projects. In total, this amounts to 80,318 jobs promised by the inward investors over 1985-98. A comparison is made by Jones and Wren (2004a) between the project jobs and actual employment of the start-up plants at the end of this period. This finds that the larger plants were proportionately less likely to realize the jobs, although plants of about the median size on entry (i.e., 50 jobs) achieved their targets.[10] Since the study period is characterised by reasonably stable economic conditions (save for a sharp recession in the early 1990s), and there were few unanticipated economic 'shocks', it suggests the investors exaggerated the number of jobs (deliberately or otherwise), perhaps to get

[10]For example, a plant promising 250 jobs had employment of 150 at the end of the study period, while a plant promising 1250 jobs had about half this number of jobs in place (Jones and Wren, 2004a).

favourable treatment from the inward investment agencies, e.g. with land, premises, financial support, etc. This should be borne in mind below.

Of the 80,318 jobs the vast majority are in manufacturing and the contribution to regional employment is substantial. Thus, the 337 plants in the dataset are reckoned to have employment of 62,400 jobs at 1999, which compares with manufacturing employment for the region as a whole at this time of 175,000 jobs. This is more than a third of manufacturing employment, while it excludes those plants that set up prior to 1985 and did not undertake a 'significant' investment by 1998, and so are not included in the dataset. At 1999, the RDA believes there were nearly 500 foreign-owned plants in the region, so the contribution is likely to be much greater than a third, and probably greater than a half of manufacturing jobs, demonstrating the importance of FDI to the manufacturing base of the region. Of course, this has shown a dramatic increase since the 1960s, so that Hudson (1995) reports that there were no more than 8,500 jobs in foreign-owned plants in the North East region at 1963, increasing to 53,000 by 1978 and 80,000 by the year 1993. The nature of these jobs is now considered.[11]

5.1 The Nature of Jobs Created

The above analysis shows a heavy concentration of investment, with 8% of projects accounting for 80 per cent of investment. This concentration is much less marked in the case of the jobs since the very large investment projects are less labour-intensive. This is evident from Figure 5, which for each activity within manufacturing shows the number of jobs and labour-intensity of FDI, i.e. ratio of jobs to investment. In fact, the four manufacturing activities that account for most of the investment are the least labour-intensive.[12] Thus, while the distribution of project jobs is still heavily skewed (i.e. the four activities account for about two-thirds of jobs), this is much less so than is the case for investment. In this case, the 29 largest projects, that each promise more than 500 jobs (i.e. 6% of projects), account for 36 per cent of jobs.

The dataset distinguishes between 'new' and 'safeguarded' jobs, where 'new' jobs are *net* additions to plant employment (i.e., they do not pre-exist the project) and *gross* additions are the 'net' plus 'safeguarded' jobs. Both kinds of job may depend

[11] A project-based analysis of variance of the project jobs is given in Jones and Wren (2004b).
[12] These are transport [NACE code 34]: 22% of jobs (26% of investment); communications [32]: 21% (40%); chemicals [24]: 13% (14%); and machinery and equipment [29]: 12% (9%).

on project implementation, although the 'new' jobs may be of greater interest as they represent additions to the plant employment scale. Of the 80,318 jobs promised by the projects, 57 per cent (45,684 jobs) are 'new' and 43 per cent jobs 'safeguarded'. The distribution of the project jobs according to the county location is shown in Table 2. Overall, most jobs are located in Tyne and Wear, with half the remainder in Country Durham, which is in line with investment. However, Northumberland has 13 per cent of jobs but only 5% of investment and Teesside has 17 per cent of jobs but as much as 24% of the investment. This reflects the different nature of FDI in these areas, which has been referred to. As Table 2 shows, half the 'new' jobs are in Tyne and Wear arising from start-ups, although 'safeguarded' jobs are more evenly distributed, but arising for different reasons. In Durham there is a large amount of re-investment, in Teesside it is due to acquisitions and in Northumberland it is due to both these

In terms of the origin of the jobs, roughly equal proportions come from each of Western Europe, North America and the Far East, with only 1,400 jobs from other parts. In the case of the projects from the Far East, Table 3 shows that 90 per cent are 'new', which reflects the higher proportion of start-ups, and nearly all these jobs are in manufacturing, but compared with 87% overall. The job-investment ratio is lower for the Far East projects, but since these investments tend to be larger the mean number of jobs provided by these projects is higher. Thus, Far Eastern plants have an average of 200 project jobs compared with about 140 jobs for other plants.

5.2 Plant Exits

The 337 plants are associated with 80,318 jobs, but it was noted above that the actual employment in these plants at 1999 was only 62,400. There are several explanations for this difference. First, the jobs are prospective, i.e. what plants plan to have in place within two years of the formal commitment, and it may be that not all of the jobs are realized. Second, nearly half of the 80,318 jobs are 'safeguarded', which refers to jobs already in place so that there is some 'double-counting'. Finally, not all of the plants survived to this time, so that jobs were lost through closure.

In relation to the first of these two issues, this has been explored in Jones and Wren (2004a), and the findings of this study have already been referred to. Here, the focus is on the issue of plant closure. This has assumed greater importance since the Eastern enlargement of the European Union from 2004, which has eroded the region's

advantage as a low-cost location within the European Union (EU), such that most FDI within the EU is now cross-border. Clearly, it has implications for the closure of FDI plants already located in the region, especially in manufacturing. The exit of plants is examined in relation to the 265 New Plants arriving between 1985 and 1998.

For these plants, extensive efforts were made to check their survival at the year 2000 and more recently up to 2007. It involved the use of computerized telephone and business directories, discussions with numerous regional and local bodies, Internet searches of news media and telephone contact with the firms themselves or other firms in similar activities. The fact that a plant is no longer listed in a directory or its 'phone line is 'dead' does not necessarily mean it has closed, and where possible independent corroborating evidence was sought. For 2007 the Internet enables some sophisticated search methods to be deployed, so that it was possible to search separately by name, the previously known postcode and sector, and by activity within a particular locality, region or even for the UK. Through these methods it is also possible to establish the exit of plants, as well as the employment size of surviving plants.

The plant exit data are summarized in Table 4. This shows that a remarkably large number of plants have closed, so that of the 265 plants commencing in foreign ownership over 1985-98, 50 had exited by the year 2000 (19%) but 118 had exited by 2007 (45%). It suggests plant exit may have accelerated since the turn of the century, and the position is worse for the start-up plants where exactly a half had exited by the year 2007. In some sense, this is not unexpected as, even at the year 2000, Jones and Wren (2006) estimate a median survival duration for a start-up plant of only 14 years, which is similar to other studies (McCloughan and Stone, 1998), i.e. the probability of exit by a 'greenfield' plant is about a half after 14 years.[13] Of course, some plants go on to survive many more years than this, while closure can be beneficial for a region, so that there are several cases where a multi-plant business consolidated its activities to a single site in the region, potentially strengthening its operation. However, most exits involve a withdrawal of productive capacity from the region, and possibly as a result of relocation overseas or even in some cases to elsewhere in the UK.

[13] This is estimated using time duration analysis, which allows for the fact that not all plants in the dataset are observed to exit, i.e. there is data censoring. These techniques have previously been applied to North East FDI data by McCloughan and Stone (1998).

5.3 Job Losses through Exit

An attempt was made to establish the significance of the plant exits, by calculating the number of jobs in the Initial Investment for the plants that later exited. As Table 4 shows, this amounted to 9,797 jobs at 2000 and 18,061 jobs at 2007. The table makes comparison with all the jobs promised by these plants over 1985-98 in their Initial and Subsequent investments. This gives a very cautious estimate of the job loss rate, as the Subsequent investments are not included in the jobs lost figure reported just above. Nevertheless, it gives a rate of job loss through exit in all New Plants of around a third at 2007, and which is 43% for the start-up plants.

Finally, for the 147 plants that commenced in foreign ownership over 1985-98 and survived to 2007 (i.e. 265 plants - 118 exits), we have actual employment data for the year 2007. Summing this gives employment of 29,350 jobs at 2007, which can be compared with the 18,061 lost jobs in Table 4. Further, this same group of 265 plants had employment of 37,850 at 1999, so that through exit and contraction the foreign-owned plants that arrived over 1985-98 have lost 8,500 jobs over the last eight years, which is about a quarter of their employment.[14] This excludes the Nissan car plant – established in 1984 and the shining light of the North East's inward investment – but it highlights the vulnerability of the region's FDI stock. Further, this has occurred at a time of benign economic conditions, but as we have indicated the expansion of the EU may have promoted some loss of manufacturing, both in the run-up and subsequent to enlargement, although it is difficult to assess the extent of this.

6: Conclusions

There is little doubt that foreign direct investment has been a major contributor to the economic development of North East England over the past 25 years, but equally this study has highlighted the vulnerability of this investment to closure and to the attrition of its employment. Indeed, from the outset, it was possible to identify several major weaknesses in the way in which FDI has agglomerated in the region. These include its heavy concentration in a few projects and by activity and source country, making it vulnerable to events affecting these. It is reflected in the high failure rate, with half of

[14] All 337 plants in the dataset that invested over 1985-98 had 62,400 jobs at 1999, of which the New Plants form a subset, with 37,850 jobs at this time.

the plants starting-up over 1985-98 now closed and taking with them half the jobs on entry. Indeed, about a quarter of the jobs in these plants have been lost since the turn of the century, perhaps reflecting the low-cost alternatives opening-up elsewhere in the European Union and beyond.

As we have seen, the North East has traditionally done well in attracting FDI, but several factors have threatened this position, although with some mixed blessings. First, FDI has changed in nature and since 1998 most inward FDI projects are now no longer in manufacturing, although these seem to be much smaller in scale on average. Second, South East England has seen a dramatic increase in its FDI share since 1990, and now receives up to about a half of all the UK's FDI projects. This has meant that the North East has received a smaller share of UK projects, although it is still doing better than expected based on its employment level, and it is fared much better than Wales or Scotland. Further, since the overall number of UK inward FDI projects has increased dramatically over recent years, the region still attracts a substantial number of jobs, which compares well by recent historical standards.

Nevertheless, it is important not to be complacent, and given the vulnerability of the 'second wave' of FDI, associated with that from the Far East in the 1980s and 1990s, it is clear that the region needs to develop strategies to both attract and retain the latest wave of FDI in service activities. The focus on knowledge-based and higher value-added FDI industries may well help with this. If FDI follows the same pattern as the 'first wave' in the post-war period it is possible that it will spread out from the South East, but its location in the regions can no longer be taken for granted. For one thing, there is no longer an active regional policy, and the grants under this were vital for attracting the earlier investment to the regions from the early 1960s.[15] Further, the UK is now part of an increasingly integrated European market, and as FDI moves from the South East in search of lower cost locations it is conceivable that it will not just locate to other UK regions, but potentially will seek locations overseas.

[15] This can be seen by noting that FDI was negligible in the West Midlands prior to its designation for regional policy in the mid-1980s (it had 3 projects in 1980), but by 2000 it was one of the major UK destinations (103 projects).

Table 1: Projects Implemented by New Plants

	All New Plants		SU	AC	JV
Total plants	265	(100%)	164	79	22
1 project only	167	(63%)	100	53	14
2 projects only	62	(23%)	43	16	3
3 projects only	25	(10%)	14	6	5
4 projects only	8	(3%)	5	3	0
5 projects only	0	(0%)	0	0	0
6 projects only	3	(1%)	2	1	0
7 + projects	0	(0%)	0	0	0
Projects per plant	1.57		1.58	1.53	1.59
Total Projects (%)	550 (100%)		260 (48%)	121 (22%)	35 (6%)

Note: A New Plant commenced in foreign ownership over 1985-98.
SU = start-up, AC = acquisition and JV = joint venture.

Table 2: Distribution of Jobs by County

	Total Jobs		'New' Jobs		'Safeguarded' Jobs	
	No.	%	No.	%	No.	%
Northumberland	10,349	13	3,468	7	6,971	20.
Tyne and Wear	34,590	43	22,669	50	11,921	35
Durham	21,920	27	12,135	27	9,785	28
Teesside	13,369	17	7,412	16	5,957	17
Total	80,318	100	45,684	100	34,634	100

Table 3: Characteristics of Jobs by Country of Origin

	No. of jobs	% 'New'	% Start-up	% Manufacturing
Far East	26,983	90	42	99
North America	24,300	41	17	86
Western Europe	27,698	40	14	79
Rest of the World	1,337	15	6	63
Total	80,318	57	24	87

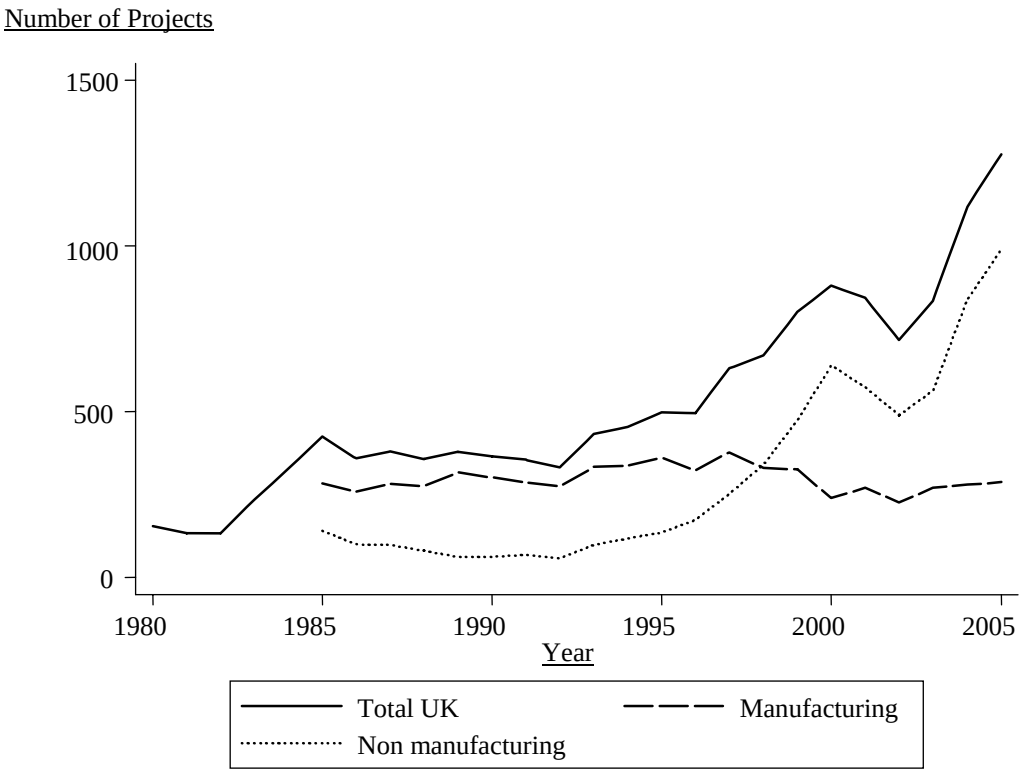
Note: Jobs refer to prospective jobs.

Table 4: New Plant Exits

	SU	AC	JV	All
Number of Entrants	164	79	22	265
Number of Exits:				
At year 2000 (%)	35 (21%)	12 (15%)	3 (14%)	50 (19%)
At year 2007 (%)	82 (50%)	27 (34%)	9 (41%)	118 (45%)
Prospective Jobs[1]	27,183	24,853	4,228	56,264
Job Loss from Exit:[2]				
At year 2000 (%)	7,533 (28%)	2,146 (9%)	118 (1%)	9,797 (17%)
At year 2007 (%)	11,739 (43%)	5,910 (24%)	412 (10%)	18,061 (32%)

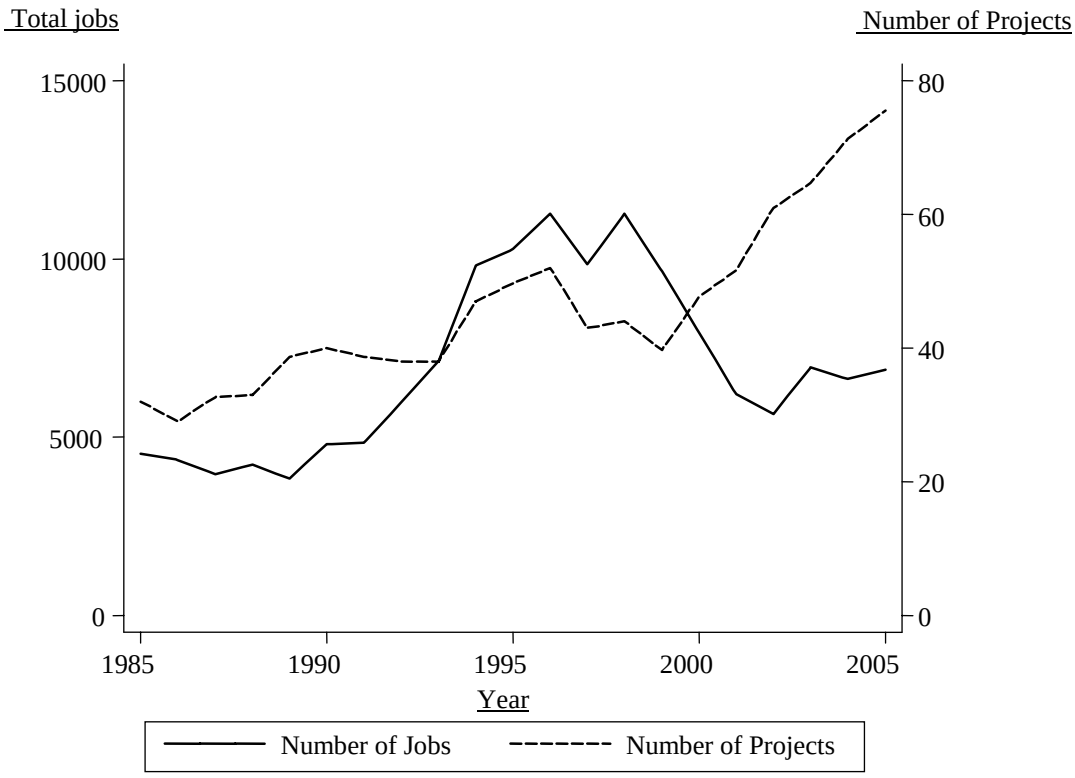
Notes: New Plant entrants over 1985-98, where SU = start-up, AC = acquisition and JV = joint venture. 1 = Jobs in Initial and Subsequent Investments. 2 = Jobs in the Initial investment only.

Figure 1: UK FDI, 1980 - 2005



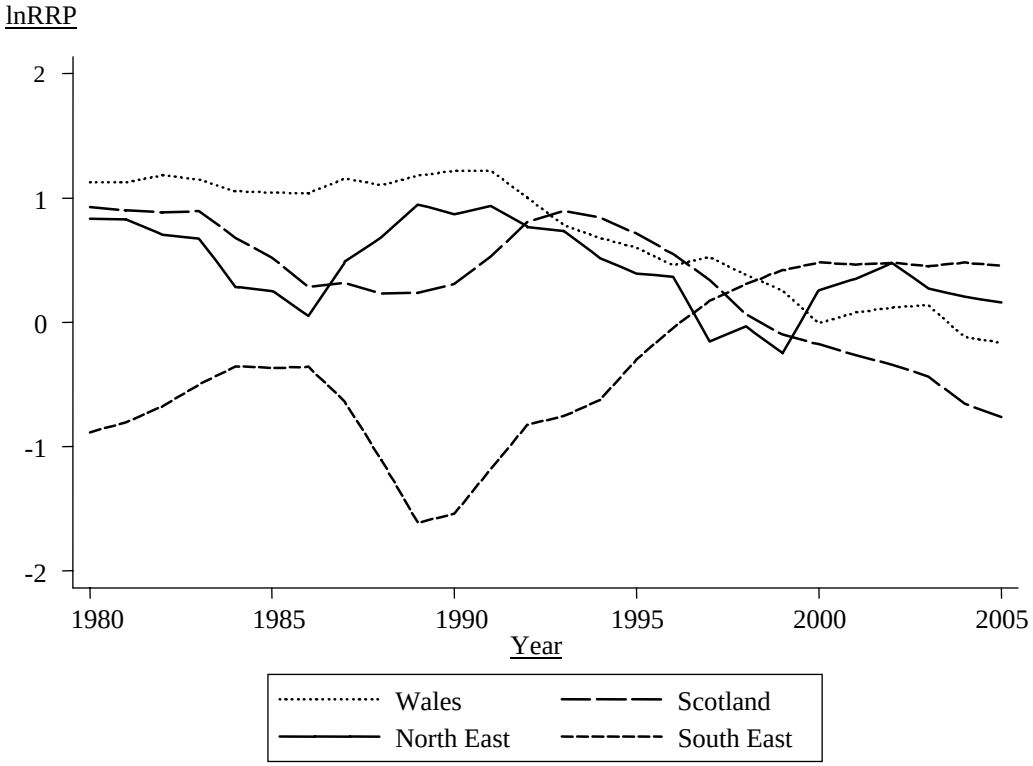
Source: Hill and Munday (1992), *Regional Trends*, Office for National Statistics and *UK Trade and Investment*, London.
Note: Breakdown by sector not available prior to 1985.

Figure 2: FDI in the North East Region



Note: Total jobs are the number of proposed project jobs by date of commitment. Three-year moving averages of jobs and projects.

Figure 3: Relative Attraction of FDI to the North East



Sources: Hill and Munday (1992), *Regional Trends*, Office for National Statistics, and *UK Trade and Investment*, London.
Note: Natural logarithm of Relative Regional Performance index, relative to UK employment. Three-year moving averages.

Figure 4: Location of the FDI Plants

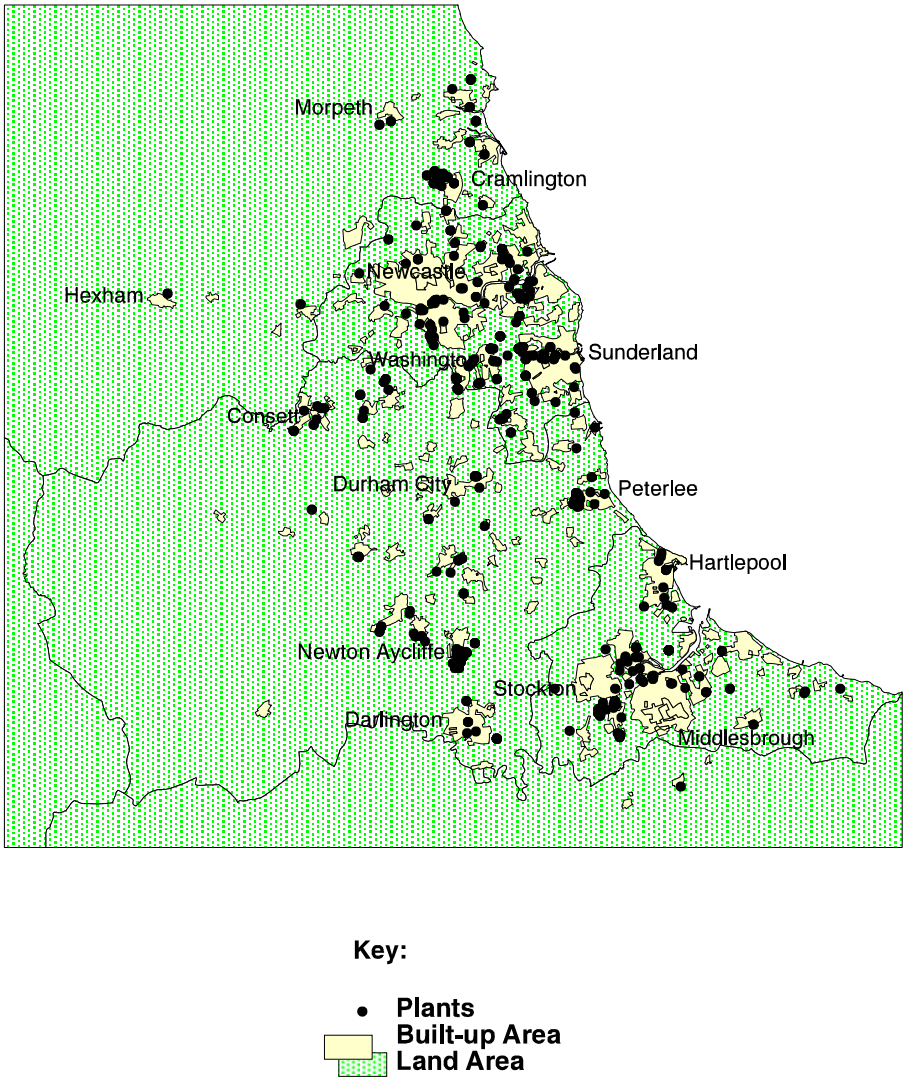


Figure 5: Distribution of Jobs by Manufacturing Activity

Note: Figures for investments in North East over 1985-98, all at 1995 prices. Activities with zero jobs not shown. Job-investment ratio for activity 37 is 300 and not shown. NACE two-digit classification, as follows: 15 = Food Products and Beverages; 17 = Textiles; 18 = Wearing Apparel; 20 = Wood and Wood Products; 21 = Pulp, Paper and Paper Products; 24 = Chemicals and Chemical Products; 25 = Rubber and Plastic Products; 26 = Other Non-Metallic Products; 27 = Basic Metals; 28 = Fabricated Metal Products, except Machinery and Equipment; 29 = Machinery and Equipment not elsewhere classified; 30 = Office Machinery and Computers; 31 = Electrical Machinery and Apparatus not elsewhere classified; 32 = Radio, Television and Communication Equipment and Apparatus; 33 = Medical, Precision and Optical Instruments, Watches and Clocks; 34 = Transport Equipment; 36 = Furniture; Manufacturing not elsewhere classified; and 37 = Recycling.

References

Griffith, R. (1999), 'Using the ARD Establishment Level Data to Look at Foreign Ownership and Productivity in the United Kingdom', *Economic Journal*, F416-41.

Hill, S. and Munday, M. (1992), 'The UK Regional Distribution of Foreign Direct Investment: Analysis and Determinants', *Regional Studies*, 26, 535-44.

Hudson, R. (1995), 'The Role of Foreign Investment', in L. Evans, P. Johnson, and B. Thomas, *The Northern Region Economy: Progress and Prospects in the North of England*, Mansell, London.

Jones, J. and Wren, C. (2004a), "Do Inward Investors Achieve Their Job Targets?" *Oxford Bulletin of Economics and Statistics*, 66.4, 483-513.

Jones, J. and Wren, C. (2004b), "Inward Foreign Direct Investment and Employment: A Project-Based Analysis in North-East England", *Journal of Economic Geography*, 4.5, 517-44.

Jones, J. and Wren, C. (2006), *Foreign Direct Investment and the Regional Economy*, Ashgate Press, Aldershot.

McCloughan, P. and Stone, I. (1998), 'Life Duration of Foreign Multinational Subsidiaries: Evidence from UK Northern Manufacturing Industry, 1970-93', *International Journal of Industrial Organisation*, 16, 719-47.

One NorthEast (2005), *Leading the Way: Regional Economic Strategy 2006*, (Subject to DTI Approval), *One NorthEast*, Newcastle.

Phelps, N., MacKinnon, D., Stone, I. and Braidford, P. (2003), 'Embedding the Multinationals? Institutions and the Development of Overseas Manufacturing Affiliates in Wales and North East England', *Regional Studies*, 37.1, 27-40.

Stone, I. and Peck, F. (1996), 'The Foreign-owned Manufacturing Sector in UK Peripheral Regions, 1978-93: Restructuring and Comparative Performance', *Regional Studies*, 30, 55-68.

Wren, C. and Jones, J. (2008), 'Grants and the Location of Foreign Direct Investment: Evidence from the UK Regions', in M. Farschi, O. Janne, and P. McCann (eds), *Technological Change and Mature Industrial Regions: Firms, Knowledge, and Policy*, Edward Elgar.

Spatial Economics Research Centre (SERC)
London School of Economics
Houghton Street
London WC2A 2AE

Tel: 020 7852 3565
Fax: 020 7955 6848
Web: www.spatialeconomics.ac.uk

SERC is an independent research centre funded by the Economic and Social Research Council (ESRC), Department for Business, Enterprise and Regulatory Reform (BERR), the Department for Communities and Local Government (CLG) and the Welsh Assembly Government.