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Fast Growth Firms in Ireland
An Empirical Assessment

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FAST GROWTH FIRMS IN IRELAND - AN EMPIRICAL ASSESSMENT [1.2]

1.1 THE FAST GROWTH FIRM

Research indicates that only a small proportion of new small firms grow to become large employers (Storey, 1994), (Storey et al., 1987), (Gallagher and Miller, 1991) and (Turok, 1991). Storey (1994) postulates that for each 100 new firms 40 per cent will have failed after ten years and the fastest growing four will have created 50 per cent of all jobs created by the cohort (Storey 1994, op. cit., pp. 1 14-115). This latter type of firm is referred to in the literature as a fast growth firm.

Of course different definitions are used to categorise and identify fast growth firms and these influence comparisons. However, a recent study suggests that, in comparison with other regions, fast growth firms are less in evidence in Ireland (Task Force on Small Business, TFSB. 1994). The TFSB (1994) was the first study to specifically examine the contribution of fast growth firms to employment creation in Ireland and is based on data derived from the industrial database. Of the 455 indigenous start-ups grant assisted in manufacturing and internationally traded services in 1983, five or I per cent grew to employ 50 or more employees by 1992 and these firms accounted for IS per cent of employment creation (TFSB, op. cit., 1994, p. 42). These findings are consistent with the low levels of transformation found amongst indigenous start-ups in two other studies (Department of Industry and Commerce, 1990) and (McCluskey, 1992).

The need to raise the transformation rate of indigenous start-ups has become a central focus of industrial policy in Ireland in the nineteen eighties and nineteen nineties. In a report commissioned by the Culliton Group, Kinsella (1992) highlighted the importance of fast growth firms for employment creation and the need to provide adequate financing for their development. As a result, the Culliton Report (1992, p. 23) recommended that industrial policy in the nineteen nineties should focus on raising the number of fast growth firms in Ireland. Even earlier, the Telesis Report (1982) identified the need to be selective in focusing on high potential firms.

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1 This paper is based on research undertaken for the degree of Master in Business Studies by research at DCU Business School.

2 We are grateful for comments made by Professor Ray Kinsella.

This paper focuses on the performance of what can be described as 'high potential' start-ups. These are firms which have been grant assisted under the Enterprise Development Programme (EDP) from 1978 to 1992 inclusive. The survival rate of EDP start-ups has been estimated using information obtained from the Companies' Office, Dun and Bradstreet and telephone directories. Consequently, the survival rate has been calculated independently of IDA/Forbairt/Forfas data. The distribution of employment by firm size in surviving EDP start-ups is reported and the paper examines the contribution of fast -growth firms to employment creation. In addition, the sectoral composition and geographical distribution of fast growth firms are identified.

1.2 DEFINING FAST GROWTH

Fast -growth is usually defined in terms of growth in employment. However, the threshold set for growth in employment is arbitrary and varies from study to study. This is illustrated by the different definitions of fast growth identified in two studies conducted in Scotland. Turok (1991) defined fast growth firms, in the West Lothian region of Scotland, as those start-ups formed between 1983 and 1987 which either had increased their employment by four in the previous 12 months or employed ten people by 1989 (Turok, 1991, op. cit., p. 34). Gallagher and Miller (1991) defined fast growth firms, in a study of the whole Scottish economy, as those firms formed between 1980 and 1982 which in 1987 employed 50 people or more (Gallagher and Miller, 1991, op. cit., p. 101).

In Ireland a small firm is generally defined as one with less than 50 employees and this figure is the threshold set for fast growth by the TFSB (1994). In general most studies do not examine initial employment levels in the cohort of start-ups but instead assume that the numbers employed at the time of foundation are small. Original employment should be compared with the threshold set for employment growth to ensure that firms did exhibit fast growth and were not already large at the time of start-up. The TFSB defined fast growth firms as start-ups which had fewer than 50 jobs in 1983 but more than 50 jobs in 1992 (TFSB, op. cit., 1994, p. 42). Unfortunately, this definition is consistent with the inclusion of a firm with 49 employees which grew to employ 51 employees after 9 years as well as the firm with two employees at the time of start-up which grew to employ 50 employees after 9 years. Clearly, there is a large difference in the performance of both firms. We define fast growth firms as EDP start-ups grant assisted over the period 1978 to 1992 which had 25 or less employees at the time of start-up and which grew to employ 50 or more persons by 1994.

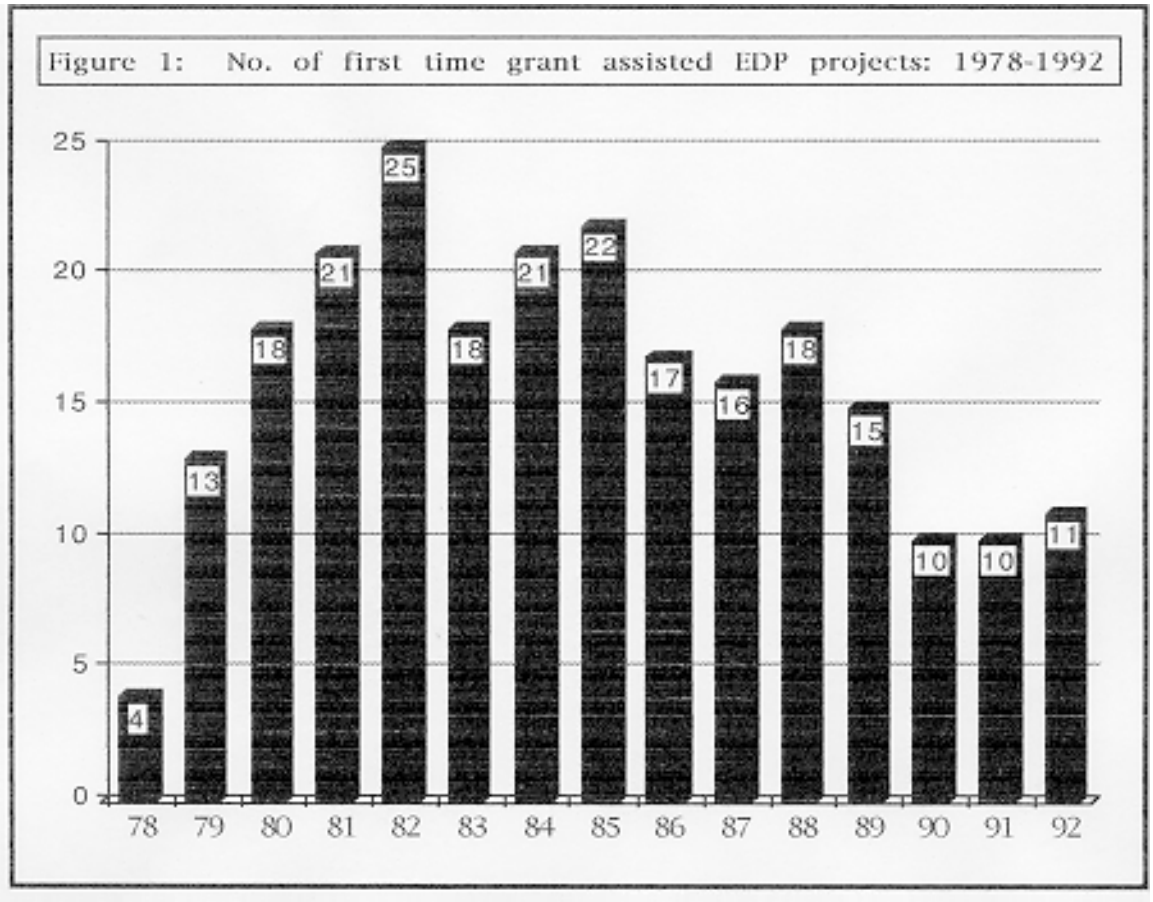
1.3 THE EDP SAMPLE FRAME

The data requirements for fast growth studies are not easily fulfilled. Firstly, all new firms formed in a given region within a specific time period must be identified, including those that subsequently fail. Secondly, the number of jobs in each surviving firm, after a designated number of years, must be obtained. Internationally, insufficient data on new small firms has limited research on the contribution of fast growth firms to employment. Ireland is no exception. There is no directory of new firms in Ireland. To date research on employment creation in new small firms has mainly been generated by government sources. In this study the sample frame is based on start-ups which were grant assisted under the state administered Enterprise Development Programme from 1978 to 1992 inclusive.

The EDP was specifically set up to encourage experienced professionals to establish firms with the 'potential to achieve significant employment and output in the long-run' (IDA, 1978, p. 22). Some of the country's most successful new businesses were assisted under the EDP, including Green Isle Foods, Monaghan Mushrooms, Rye Valley Foods, and Cornel Electronics. Hence, a sample frame based on EDP projects represents 'growth potential' start-ups and it is to be expected that a higher proportion of EDP start-ups would exhibit fast growth than a sample of Small Business Programme projects.

EDP start-ups were identified from the Details of Capital Expenditure which is published by the IDA as a supplement to its Annual Report. The total grant payment approved, the allocation in the current year and the total payment to date, for each EDP firm, by product type and county of origin, is given in the Details of Capital Expenditure. This excludes EDP projects assisted by the Shannon Free Airport Development

Company (SFADCo.). Figure I shows the number of EDP projects grant assisted for the first time each year over the period 1978 to 1992.



A total of 239 start-ups were grant assisted over the period 1978 to 1992. The year of start-up in this paper is defined as the year in which a project was grant assisted for the first time. It should be noted that the year in which a project receives its first grant payment may not necessarily coincide with the year of start-up. Some firms will have set-up prior to receipt of grant payment on the basis of having received grant approval. The number of EDP start-ups grant assisted rose from four in 1978 to a maximum of 25 in 1982 and declined slowly thereafter. In the four year period from 1989 to 1992, 46 start-ups were grant assisted for the first time under the programme compared with 73 for the previous four year period, from 1985 to 1988. EDP start-ups represent a very small proportion of indigenous start-ups. Over the period 1981 to 1990, 4,863 indigenous start-ups were established in Ireland of which 3,404 (70 per cent) were grant assisted (McCluskey, 1992, Appendix 2, Table 2). Over the same period, 183 start-ups were grant assisted under the EDP. EDP start-ups represented 3.8 per cent of indigenous start-ups and 5.4 per cent of indigenous grant assisted start-ups formed over the period 1981 to 1990.

1.4 THE SECTORAL COMPOSITION OF EDP START-UPS

Table I shows the distribution of EDP start-ups established from 1978 to 1992, by broad industrial sector, using 2-digit NACE classifications.

Table 1: The sectoral composition of EDP start-ups and indigenous firms (excluding the Mid-West region and the Gaeltacht)

Nace Code	Industry	EDP		Indigenous Industry	
		No. Of Firms	% of Total	No. Of Firms	% of Total
22,31-37	Metal and Engineering	114	47.7%	1488	27%
411-422	Food	32	13.4%	784	14%
N/A	International Traded Services	30	12.6%	401	7%
25-26	Chemicals and Pharmaceuticals	21	8.8%	158	3%
44-45	Footwear and Clothing	14	5.9%	368	7%
14,48-49	Miscellaneous Industries	10	4.2%	577	11%
47	Paper and Printing	8	3.3%	360	7%
66	Timber	5	2.1%	669	12%
43	Textiles	3	1.3%	204	4%
24	Non Metal Products	2	0.8%	358	7%
23-29	Drink and Tobacco	0	0.0%	62	1%
	Total	**239**	**100%**	**5429**	**100%**

Source: Column 3: IDA, 1992, Annual Report, Part 1, p. 8.

The 239 projects are made up of 209 start-ups in manufacturing and 30 start-ups in internationally traded services. The engineering. and metals sector had the highest proportion of EDP start-ups. There were 1 14 start-ups (47.7 per cent) in this sector. The food sector had the second highest proportion with 32 start-ups (13.4 per cent). It was followed by internationally traded services with 30 start-ups (12.6 per cent), chemicals and pharmaceuticals with 21 start-ups (8.8 per cent), footwear and clothing with 14 start-ups (5.9 per cent) and miscellaneous industries with 10 start-ups (4.2 per cent). The proportion of EDP start-ups in the remaining, four sectors was very small. There were 18 start-ups (7.5 per cent) in the four sectors incorporating timber, textiles, paper and printing and non-metal products.

Table I also shows the sectoral distribution of indigenous firms in 1992 excluding the Mid-West region and the Gaeltacht. The highest concentration of indigenous firms was in the metals and engineering sector which represented 27 per cent of indigenous firms in 1992. The highest concentration of EDP firms was also in **this** sector. The proportion of EDP start-ups in the metals and engineering sector (47.7 per cent) is almost double the proportion of all indigenous firms in this sector.

1.5 THE GEOGRAPHICAL DISTRIBUTION OF EDP START-UPS

The IDA was responsible for the administration of the EDP nationwide through its network of regional managers. Since 1994, Forbairt has taken responsibility for the programme. The programme covers 24 counties. Two counties, Limerick and Clare, which come under the jurisdiction of SFADCO. are excluded. Table 2 shows the distribution of EDP start-ups by county.

Of the 24 counties covered under the programme 23 are represented in the sample frame. There were no projects assisted in County Leitrim over the 15 year period. The majority of EDP start-ups were located in Dublin. There were 126 EDP firms (52.7 per cent) grant assisted under the programme in Dublin.

Table 2: Distribution of EDP start-ups and indigenous manufacturing firms by counts, (excluding the Mid -West region)

Rank	County	EDP Start-ups Per County		Total No. Of Firms Per County	
		No.	%	No.	%
1	Dublin	126	52.7%	1342	30.1%
2	Cork	22	9.2%	557	12.5%
3	Wicklow	11	4.6%	141	3.2%
4	Galway	10	4.2%	215	4.8%
5	Wexford	9	3.8%	124	2.8%
6	Louth	8	3.3%	181	4.1%
7	Kildare	7	2.9%	143	3.2%
8	Waterford	6	2.5%	144	3.2%
9	Carlow	5	2.1%	69	1.5%
10	Monaghan	5	2.1%	108	2.4%
11	Roscomon	5	2.1%	49	1.1%
12	Mayo	4	1.7%	118	2.6%
13	Meath	4	1.7%	135	3.0%
14	Longford	3	1.3%	41	0.9%
15	Tipperary	3	1.3%	172	3.9%
16	Offaly	2	0.8%	80	1.8%
17	Sligo	2	0.8%	62	1.4%
18	Kerry	2	0.8%	119	2.7%
19	Cavan	1	0.4%	83	1.9%
20	Laois	1	0.4%	61	1.4%
21	Donegal	1	0.4%	161	3.6%
22	Kilkenny	1	0.4%	93	2.1%
23	West Meath	1	0.4%	71	1.6%
24	Leitrim	0	0.0%	37	0.8%
	Not Attributed	-		153	3.4%
	Total	**239**	**100%**	**4459**	**100.0%**

Source: Column 3: Census of Industrial Production 1990, Central Statistics Office, Dublin: Stationery Office.

The next highest concentration was in Cork, where 22 EDP start-ups (9 per cent) were established. There were 11 EDP firms established in Wicklow and 10 in Galway. Start-ups in these four counties represented 71 per cent of all EDP start-ups grant assisted over the period 1978 to 1992. Four counties, Wexford (9), Louth (8), Kildare (7) and Waterford (6), had between six and nine EDP start-ups. Three counties, Carlow, Monaghan and Roscommon, had five projects. The number of EDP firms in other counties was very small. The remaining 13 counties had a total of 25 EDP start-ups. Five counties had only one EDP firm each.

The concentration of EDP firms in Dublin reflects the overall concentration of industry in this county. Table 2 also shows the distribution of indigenous manufacturing industry in 1990, excluding the Mid-West region. 30 per cent of indigenous manufacturing firms in 1990 were located in Dublin. The proportion of EDP start-ups established in Dublin (52.7 per cent) is much higher than the proportion of indigenous manufacturing firms in the county. Apart from Dublin, only five counties (Wicklow, Wexford, Carlow, Roscommon and Longford) had a higher proportion of EDP start-ups than their overall share of industrial firms.

1.6 THE SURVIVAL RATE OF EDP START-UPS

The sample frame includes all firms grant aided under the programme including those firms which failed. Information on the survival of EDP start-ups was sourced at the Companies' Registration Office. This was double checked using current and past editions of the telephone directory and Dun and Bradstreet's credit checking service. Table 3 shows the survival rate of EDP firms. One firm was not registered at the Companies's Office nor did it appear in the telephone directory or in the Dun and Bradstreet files. According to Companies' Office records 109 of the 239 EDP firms (45.6 per cent) were no longer trading normally in 1994. Of these 109 firms , 59 (24.7 per cent) had been dissolved, 34 (14.2 per cent) were in liquidation, 14 (5.8 per cent) were in receivership and both a receiver and a liquidator had been appointed to one company. The status of the firms in receivership was double checked using Dun and Bradstreet's credit checking service. The 1994/1995 telephone directory was used to check that all remaining survivors registered at the Companies' Office were still trading. A further 20 firms were not listed in the telephone directory, of which 15 were listed as 'not trading' in the Dun and Bradstreet database.

Table 3: The trading status of EDP in 1994 (1)

Designated Indicator*	Trading Status	Firms	
		No.	%
D	Dissolved	59	24.7%
L	Liquidation	34	14.2%
R	Receivership	14	5.9%
M	Liquidation & Receivership	1	0.4%
	Not registered (2)	1	0.4%
	Total Companies' Office	**109**	**45.6%**
	Other failures (3)	20	8.4%
	Total failures	**129**	**54.0%**
	Sample Size	**239**	

1. Based on Companies; Office and other data sources
2. This firm never registered and did not appear in the telephone directory or in the Dun and Bradstreet database.
3. Other failures represent firms registered as normal with the Companies' Offices which were not listed in 1994/1995 telephone directory and found to be no longer trading.

The remaining five were tracked using back issues of the telephone directory. Three had gone out of business and two were either not trading or trading on a limited basis[3]. The final estimate for the number of EDP start-ups surviving in 1994 was I 10 out of 239. A total of 129 were no longer trading, giving a failure rate of 54 per cent in 1994, for the cohort of EDP start-ups grant assisted from 1978 to 1992 inclusive.

1.6.i The survival rate of EDP start-ups by sector

Table 4 presents the survival rates for EDP start-ups in different sectors. The overall survival rate was 4,6 per cent. The small numbers in some sectors limit the usefulness of intra-sectoral relativities and comparisons.

3 One was a non-trading campus based R&D company, the other had an answering machine but no contact could be made with the owner-manager.

Table 4: The survival rate of EDP firms by sector

Industry	Total No. of Firms	No. Survivors	Survivors % Total
Metals and Engineering	114	53	46.5%
Food Drink and Tobacco	32	15	47.0%
Chemicals and Pharmaceuticals	21	9	43.0%
Footwear and Clothing	14	5	36.0%
Internationally Traded Services	30	16	53.0%
Miscellaneous Industries	10	5	50.0%
Paper and Printing	8	2	25.0%
Timber	5	2	40.0%
Textiles	3	2	66.0%
Manufacture of Non-Metal Products	2	1	50.0%
Total	**239**	**110**	**46.0%**

Start-ups in the metals and engineering sector had a 46.5 per cent survival rate which was similar to that for start-ups in the EDP as a whole. Start-ups in the chemicals and pharmaceuticals sector had a lower than average survival rate. Nine out of 21 start-ups (43 per cent) in chemicals and pharmaceuticals were still operating in 1994. Firms in internationally traded services had a higher survival rate (53 per cent) than the EDP as a whole. Food's performance was similar to the overall performance.

Two of what are described as traditional sectors, paper and printing and footwear and clothing, recorded the lowest survival rates. Firms in the paper and printing sector recorded a survival rate of 25 per cent and firms in the textiles sector recorded a 36 per cent survival rate. But the numbers involved are very small. Two other traditional sectors, textiles and non-metal products recorded above average survival rates. Two of the three start-ups in textiles survived and one of the two start-ups in non-metal products survived. The number of start-ups in these two sectors is also very small.

1.6. ii The survival rate of EDP start-ups by county

Table 5 shows the distribution of EDP survivors by county. While Dublin had by far the highest information rate the survival rate of Dublin-based firms was similar to that for start-ups in the EDP as a whole.

Table 5: The survival rate of EDP start-ups by county

Rank	County	Total	Survivors	
			No.	% of Total
1	Dublin	126	58	46%
2	Cork	22	9	41%
3	Wicklow	11	6	55%
4	Galway	10	5	50%
5	Wexford	9	2	22%
6	Louth	8	4	50%
7	Kildate	**7**	6	86%
8	Waterford	6	1	17%
9	Carlow	5	3	60%
10	Monaghan	5	5	100%
11	Roscommon	4	2	40%
12	Mayo	4	0	0%
13	Meath	3	1	25%
14	Longford	3	1	33%
15	Tipperary	2	1	33%
16	Kerry	2	2	100%
17	Offaly	2	0	0%
18	Sligo	2	1	50%
19	Cavan	1	0	..0%
20	Donegal	1	1	100%
21	Kilkenny	1	1	100%
22	Laois	1	0	0%
23	West Meath	1	1	100%
24	Leitrim	0	0	0%
	Total	**239**	**110**	**46%**

Of the 126 start-ups grant assisted in Dublin, 58 firms (46 per cent) survived until 1994. Start-ups in Galway and Wicklow had above average survival rates. In Wicklow, six out of eleven EDP start-ups (-54 per cent) were still operating in 1994. In Galway, five out of ten EDP start-ups were still operating in 1994. All five EDP start-ups in Monaghan survived.

Only nine out of the 22 EDP start-ups (42 per cent) in Cork survived until 1994. In Wexford only two out of nine EDP start-ups (22 per cent) and in Waterford one out of six EDP start-ups (17 per cent) survived. Four counties had no surviving EDP firms in 1994, including Mayo where all four EDP start-ups failed.

1.7 IDENTIFYING FAST GROWTH FIRMS

Employment is a generally accepted index of size in small firms. It is also the index of size used in most fast growth studies. However, other financial measures such as turnover, net assets, total assets and profit could also be used to measure a firm's growth. The principal advantage of using employment as a measure of growth is that employment data is more readily available in the case of small firms. Furthermore, unlike financial indices of growth the threshold set for growth in employment will not be effected by inflation.

As already pointed out, the definition of fast growth is arbitrary and reflects variations in the sample of firms covered in different studies. Previous studies use 50 employees as a benchmark in the transition of firms in Ireland (TFSB,1994). In this study fast growth firms are defined as EDP start-ups grant assisted from 1978 to 1992 which had 25 or less employees at foundation and which grew to employ 50 or more persons by 1994.

The number of jobs in EDP start-ups surviving in 194 was sourced primarily from Kompass Ireland. 89 of the surviving EDP start-ups were listed in the 1994 edition of Kompass Ireland. The number of jobs in the remaining 21 were obtained through contacting the firms directly. Table 6 shows the distribution of employment in surviving firms my firm size.

Table 6: The distribution of employment in surviving EDP start-ups in 1994

FIRM SIZE 1994	FIRMS Number	%	%	EMPLOYMENT Number	%	%
< 5	10	9.1		32	0.7	
5 - 14	29	26.4	78.2	277	5.9	
15-24	22	20		401	8.6	33
25 - 49	25	22.7		832	17.8	
50-74	7	6.4		410	8.8	
100 - 149	4	3.6		320	6.9	
150 - 199	7	6.4	21.8	858	18.3	67
200 +	2	1.8		300	6.4	
	4	3.6		1240	26.6	
Total	110	100		4670	100	

The majority of surviving EDP start-ups remained small. In 1994, 86 or 78.2 per cent of surviving EDP start-ups, grant assisted from 1978 to 1992, had less than 50 employees. 61 or 55 per cent of surviving, EDP start-ups had less than 25 employees in 1994. 24 or 21.8 per cent of survivors had 50 or more employees. These firms represented 10 per cent of the total number of EDP start-ups.

Total employment in surviving EDP firms in 1994 was 4,670 and the average firm size was 42 employees. Survivors which have more than -50 employees in 1994, generated 3,128 jobs or 67 per cent of the total employment in surviving EDP start-ups. The remaining 86 surviving EDP start-ups generated 1,542 jobs or 33 per cent of the total employment in surviving EDP start-ups in 1994.

Whilst the average size of surviving firms was 42 employees the average size of firms with less than 50 employees was 18, compared with 130 for firms with 50 or more employees. Four EDP start-ups each bad 200 or more employees in 1994. These four firms generated 1,240 jobs or 26.6 per cent of jobs created in surviving EDP start-ups.

Since the EDP was set up to promote fast growth start-ups, it is to be expected that the 24 start-ups with 50 or more employees in 1994 would have started with very few employees. Original employment for these firms was supplied by Forbairt. Original employment is defined as the

number employed in the year the firm was first included in the Annual Survey of Employment (ASE) and normally coincides with the year in which the firm was first grant-aided.

16 firms had ten employees or less in the first year employment was recorded by Forbairt. Five firms had between IS and 25 employees at start-up. One firm had 42 employees at the time when employment was first recorded by Forbairt. However, this firm was three years old at the time. Forbairt confirmed that the number of employees in this firm at start-up was less than 25. Two food firms were much larger at start-up, with 80 and 88 employees each. These firms originated in the takeover of dissolved companies within the sector. These two firms cannot be defined as fast growth firms under the definition used in this study. This illustrates the importance of examining original employment in the cohort of firms when identifying fast growth firms. The number of firms which qualify as fast growth firms under our definition is 22. A summary of the findings to date are presented in Table 7.

Table 7: The contribution of fast growth firms to employment

	Firms		Employment	
	No.	**% of Total**	**No.**	**% of Total**
Sample Size	239		4,670	
Survivors	110	46.0%	4,670	
Firms with 50 plus persons	24	10.0%	3,128	67.0%
Fast Growth Firms	**22**	**9.2%**	**2,888**	**61.8%**
Firms with less than 50 persons	86	36.0%	1,542	33.0%

The table shows that the 22 fast growth which represented 9.2 per cent of EDP start-ups created 2,888 jobs or 61.8 per cent of employment in surviving EDP firms. Thus a small proportion of fast growth firms were responsible for the majority of jobs created in surviving, EDP firms. Table 8 shows original employment and current employment in the 22 fast growth firms.

Table 8: Original and current employment in fast growth firms

Fast Growth Start-ups	Employment 1994	Employment at start-up
1	50	10
2	50	3
3	60	10
4	60	15
5	60	2
6	65	1
7	70	25
8	70	25
9	75	2
10	80	8
11	110	3
12	130	5
13	110	5
14	118	2
15	120	42
16	130	25
17	140	3
18	150	10
19	200	8
20	210	4
21	230	10
22	600	24
Total Employment	**2888**	**242**
Mean	**131**	**11**

***** This firm was three years old at the time original employment was first recorded. Forbairt confirmed that the level of employment in this firm was less than 25 eprsons at start-up.

Original employment in the 22 firms was 242 compared with 2,888 in 1994. The fast growth firms were on average 12 times larger in 1994 than at start-up. Fast growth firms employed an average of I I employees at start-up and an average of 131 in 1994. There was large variation in the level of employment growth recorded by firms. Firm 22 had 24 employees at start-up and grew to employ 600 employees. Firm 8 had 25 employees at start-up and grew to employ 70 employees.

1.8 COMPARISON OF THE PERFORMANCE OF EDP START-UPS AND OTHER START-UPS IN IRELAND AND THE UK

Table 9 compares the results of the EDP study with other Irish studies and with those reported by Storey et al. (1987). This comparison is fraught with methodological and definitional difficulties. Different definitions of fast growth are used. In addition, different sample frames and time periods are covered in the studies. In particular, the sample frame used in this paper is self-selecting in that potentially all EDP projects would be fast growth firms. There is a clear need for international and inter regional research on fast growth firms which is based on a common definition and methodology. Nonetheless, one of the most relevant issues to both policy makers and researchers is the difference in fast growth **firm** performance attained by individual economies and regions. Because of this we resent this brief comparison, albeit with a strong "health warning". Similar caveats apply with regard to comparisons of failure and survival rates.

Only I per cent of the 1983 cohort of grant assisted industries employed 50 or more workers by 1992 (TFSB, 1994). This rose to 2.7 per cent in 1990 for the total population of indigenous start-ups established over the nine year period from 1981 to 1990 (McCluskey, 1992). This compares with 9.2 per cent in 1994 for EDP start-ups grant assisted over the 15 year period from 1978 to 1992.

Table 9: Performance of EDP and other new Firms in Ireland and the UK

Study	Fast growth firms as % of start-ups	% of net job creation in fast growth firms	Failure rate
McCluskey, 1992 Ireland	2.7%	n/a	53% after 9yrs (1)
TFSB, 1994 Ireland	1.0%	15.0%	56% after 9yrs (2)
Storey et al, 1987 North East of England	4.0%	34.0%	32.4% over 13yrs (3) 54% over 17yrs
EDP	9.2%	62.0%	

Source: Storey et al., 1987, op. cit., Table 5.11, p. 153. McCluskey, 1992, op. cit., Appendix 2 Table 16. TFSB, 1994, op. cit.,p. 42.

1. **The TFSB reports the number of fast growth firms in 1992 as a percentage of the 1983 cohort of grant assisted indigenous start-ups and the failure rate for the 1983 cohort of grant assisted indigenous and overseas start-ups, after 9 years.**
2. **McCluskey reports the number of fast growth firms in 1990 as a percentage of the cohort of indigenous start-ups formed over the 9 year period 1981 to 1990 and the failure rate for 1981 cohort of indigenous start-ups in 1990.**
3. **Storey et a]. report the number of fast growth firms in 1978 as a percentage of the cohort of independent start-ups formed over the 13 year period 1965-1978 and the failure rate in 1978 for the same cohort.**

Fast growth EDP start-ups made a relatively greater contribution to overall employment growth, when compared with other indigenous start-ups,. In the TFSB (1994) study, fast growth firms were responsible for 15 per cent of total employment created in the 1983 cohort of grant assisted indigenous start-ups after nine years. This compares with 62 per cent for fast growth EDP start-ups. McCluskey (1992) does not report the relative contribution of fast growth firms to overall employment growth.

In comparison with independent start-ups in the North East of England, the EDP sample **f**rame produced a higher proportion of fast growth and fast growth EDP firms also created a higher proportion of jobs. Fast growth firms in the North East of England represented 4 per cent of start-ups and generated 34 per cent of jobs. While the proportion of fast growth EDP firms is higher than Storey's estimate, the findings confirm his original hypothesis on the relative importance of a small proportion of new firms to overall employment growth.

The failure rate in 1994 for EDP start-ups, grant assisted over the 15 year period 1978 to 1992, does not compare favourably with that of firms in the North East of England. The failure rate for

EDP start-ups between two and less than 17 years old in 1994 was -54 per cent. Start-ups have a much higher tendency to fail in the first three years of business (McCluskey, 1992). Therefore, the survival rate of EDP start-ups which excludes firms less than two years old is even less impressive, in relation to firms in the North East of England. The failure rate for independent start-ups in the North East of England formed over the 13 year period 1965 to 1978 was 32.4 per cent. Again, it should be stressed that these studies are not directly comparable. In particular, the sample frame of start-ups in the North East of England included a relatively high proportion of 'long life companies' (Storey et al., 1987).

All three Irish studies in table 9 report similar failure rates despite differences in the methodologies and time periods covered. McCluskey (1992) reports a failure rate of 53 per cent for the 1981 cohort of indigenous start-ups after nine years. The TFSB (1994) reports a failure rate of 56 per cent for the 1983 cohort of grant assisted indigenous and overseas start-ups after nine years. The failure rate in 1994 for EDP start-ups grant assisted over the 15 year period 1978 to 1992 was 54 per cent. However, the EDP study covers a much longer time period.

As already pointed out, fast growth EDP firms made a relatively greater contribution to employment than fast growth firms drawn from the population of grant assisted indigenous start-ups, as reported by the TFSB (1994). However, overall employment creation in EDP firms was modest when compared with government expectations. In total 4,670 jobs were created in EDP start-ups over the 17 year period 1978 to 1994. The projected employment for the 122 EDP projects approved in the first four years of the programme was 4,628 jobs (IDA, Annual Report, cl 1982, p. 27).

1.9 THE SECTORAL COMPOSITION OF FAST GROWTH FIRMS

Table 10 shows the distribution of fast growth firms by sector. Metals and engineering had the highest proportion of fast growth firms. Ten of the 22 fast growth firms (45.5 per cent) were in this sector.

Table 10: The sectoral composition of fast growth firms

Industry	No. of fast growth firms	% of Total
Metals and Engineering	10	45.5%
Food	5	22.7%
Footwear and Clothing	3	13.6%
Internationally Traded Services	1	4.5%
Non Metal Products	1	4.5%
Miscellaneous Industries	1	4.5%
Paper and Printing	1	4.5%
Timber	0	0.0%
Textiles	0	0.0%
Chemicals and Pharmaceuticals	0	0.0%
Total	**22**	**100%**

There were five fast growth firms (22.7 per cent) in the food sector and three (13.6 per cent) in footwear and clothing... Four other sectors, internationally traded services, miscellaneous industries, paper and printing and non-metal products, each had one fast growth firm. There were no fast growth **firms** in chemicals and pharmaceuticals, timber or textiles.

1.10 THE GEOGRAPHICAL DISTRIBUTION OF FAST GROWTH FIRMS

Table 11 reports the distribution of EDP start-ups and fast growth firms by county. Only eight of the 23 counties with an EDP start-up (35 per cent) had a fast growth firm. As expected, Dublin had the highest proportion of fast growth firms. Ten of the 22 fast growth firms (45.5 per cent) were located in Dublin. The proportion of fast growth firms in Dublin was slightly lower than its 52.7 per cent share of all EDP start-ups.

Table 11: The distribution of fast growth firms by county

Counties with fast growth firms	Fast Growth Firms No.	%
Dublin	10	45.5%
Cork	1	4.5%
Wicklow	1	4.5%
Galway	2	9.1%
Kildare	2	9.1%
Carlow	2	9.1%
Monaghan	3	13.6%
Kilkenny	1	4.5%
Total	**22**	**100%**

Monaghan had the second highest concentration of fast growth firms. Three fast growth firms were located in Monaghan. Three counties, Galway, Kildare and Carlow, each had two fast growth firms. Three counties, Cork, Wicklow and Kilkenny, each had one fast growth firm.

1.11 CONCLUSIONS

This paper provides two main outputs. Firstly, it presents an empirical analysis of the performance of the EDP. This analysis includes the identification of the role of fast growth firms, as defined in this paper, i.e. EDP projects formed between 1978 and 1992 which had 25 or less employees at foundation and which -grew to employ at least 50 persons in 1994. This is, of course, an arbitrary definition of fast growth firms and alternatives are possible. There are also methodological weaknesses in the approach used. Notably, farms which were fast -growth within the time period 1978 and 1992 which had ceased operation by 1994 are excluded, as are firms which exceeded the growth requirement at some point within the period but had declined below the required threshold by 1994.

The paper's empirical analysis also includes -geographical and sectoral characteristics and details of survival/failure rates for EDP projects.

The main empirical conclusions are:

- 129 out of 239 EDP start-ups (-54 per cent) did not survive

- 46 per cent of EDP firms did survive
- 22 or 9.2 per cent of EDP firms were fast -growth firms
- Fast growth firms created 62 per cent of the employment in surviving EDP firms (2,888 out of 4,670 jobs)
- Fast growth firms crew from 242 persons at start-up to employ 2,888 in 1994
- The 22 fast -growth firms were concentrated in metals and engineering (10) and food (5). Clothing and footwear had three and the other fast -growth firms were spread, one each, over other sectors
- There was a broad and not surprising. geographical distinction between the Dublin performance and the rest of the country
- Dublin had 57.2 per cent of the EDP total of 239 start-ups
- Only three other counties bad 10 or more EDP start-ups
- Five counties had only one EDP each and one bad no EDP projects
- The 22 fast growth firms were distributed as follows

Dublin	10
Monaghan	3
Galway, Kildare and Carlow	2
Cork, Wicklow and Kilkenny	1
Total	**22**

The second output of the paper is the identification of the significant methodological and definitional issues which arise in fast growth studies. These differences negate to a substantial degree the usefulness of inter regional and inter country comparisons. There is a need for an inter country/inter regional examination of fast growth firms based on a common methodology and definition. Given the recognised importance of fast growth firms within the EU such a study would be a very useful input to effective public policy making at both the EU and national levels.

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NOTES

1. This paper is based on research undertaken for the degree of Master in Business Studies by research at DCU Business School.

2. We are grateful for comments made by Professor Ray Kinsella.

3 One was a non-trading campus based R&D company, the other had an answering machine but no contact could be made with the owner-manager.