

# **DOCUMENT**

**PROGRAMME OF RESEARCH  
AND ACTIONS ON THE DEVELOPMENT  
OF THE LABOUR MARKET**

**JOB CREATION IN SMALL  
AND MEDIUM SIZED  
ENTERPRISES**

**SPAIN  
IRELAND  
DENMARK  
GREECE  
PORTUGAL**

**VOLUME III : MAIN REPORT**



**COMMISSION  
OF THE EUROPEAN COMMUNITIES**

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Commission of the European Communities

Programme of Research and Actions  
on the Development of the Labour Market

**JOB CREATION IN SMALL AND MEDIUM SIZED ENTERPRISES**

Spain  
Ireland  
Denmark  
Greece  
Portugal

VOLUME III

Main Report

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Document

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CHAPTER 9

JOB GENERATION IN SMALL AND MEDIUM SIZED ENTERPRISES : SPAIN

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September, 1986

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## 9.1 Introduction

### 9.1.1 The Economy of Spain

Spain has undergone one of the most dramatic economic transformations of any European Community (EC) Country in the past twenty five years. Years of growth following the opening of the economy in the 1960s, sustained by inflows of foreign capital and tourist receipts, increased income levels substantially. However, in the more recent period of slower European growth, Spain too has suffered, both from depressed export markets and its heavy dependence on imported fuels. There has been some further growth in GDP per capita (0.5% pa over 1975-85) taking the average level to almost \$4,000 pc in 1985 (Table 9.1). An essential element in the start of this rise to relative affluence was the emergence of a large industrial sector, which now accounts for almost one third of national production (Table 9.1). This change is also reflected in the trends in employment during the period (Table 9.2), with industrial jobs increasing their share at the expense of agriculture in the 1960, but falling subsequently as service sector employment has expanded. The other important feature of these years has been the growth of external trade, especially with the European Community. Exports now run at about 14% of GDP, but imports are still higher (18% of GDP), so that the commercial balance is usually in deficit (Table 9.3).

### 9.1.2 Recent Changes in the Labour Market

The reduction in the rate of economic growth from the trends of +6% pa. in the late 1960s (Table 9.4) has meant a slower rate of economic reorganisation but there are still significant changes taking place. One set of these, which provide a context for questions about job creation, involves the deterioration of conditions in the labour market. Table 9.5 provides evidence of the widespread loss of jobs since 1977 and highlights the poor performance of industrial employment as manufacturing firms have taken drastic steps to restore their international competitiveness. In services too, there have been cuts in

employment in some types of activity and the major source of job creation here has been in the public sector (trends explored in more detail in Cuadrado Roura, 1986), The diminution of employment opportunities within Spain has coincided with a loss of demand for Spanish workers elsewhere in Europe (Table 9.6) so that emigration, a traditional response to employment problems at home, no longer serves as an alternative for the same number. Linked to this is the reduction in remittances sent back to Spain as the number of workers abroad has fallen: in 1984 these were worth only \$520 million, less than the 1970 figure and worth far less in real terms (Table 9.7).

However, these negative changes in the availability of employment have occurred at the same time as an increase in the size of the potential labour force (due to both a rising female participation rate and the large number of young people entering the labour market) (Table 9.8). Some of this growth has been absorbed in the few expanding sectors but the most obvious manifestation has been in the rapid and serious increase in unemployment. In 1975, some 300,000 or 2.3% of the active population were out of work, by April 1986 this had risen to 2,777,000 (20.8%), almost half of them aged under 25. It is in these difficult circumstances that the questions of processes of job generation and policies to stimulate them have gained increasing attention and it is clear that small and medium sized enterprises are central to the answers.

Population (millions), 1981	37.7
Population Growth, % per annum 1970-81	1.0
GDP, 1985 (billion (\$US))	151.7
GDP per capita, 1985 (\$US)	3,993
Annual Growth of GDP per capita, 1975-85 (%)	0.5
GDP from Agriculture (%)	7
GDP from Industry (%)	28
GDP from Construction (%)	7
GDP from Services (%)	58

Sources: Banco de Bilbao (1986a), OECD (1986)

Table 9.1: Basic Demographic and Economic Indicators

	<u>1960</u>	<u>1970</u>	<u>1980</u>	<u>1985</u>
Agriculture	41.7	29.2	18.8	16.7
Industry	24.7	28.6	27.3	24.8
Construction	6.8	8.3	9.0	7.4
Services	26.8	33.9	44.9	51.1

Source: Banco de Bilbao (1986a)

Table 9.2: Employment by Sector (Percentage), 1960-1985

	<u>1978</u>	<u>1981</u>	<u>1985</u>
Imports	18,665	32,252	29,963
Exports	13,082	20,395	24,247
Deficit	5,583	11,857	5,716

Source: Banco de Bilbao (1986a)

Table 9.3: External Trade (million \$US), 1978-1985

	<u>1970</u>	<u>1975</u>	<u>1980</u>	<u>1985</u>
	5.9	1.1	1.3	2.1

Source: Banco de Bilbao (1986a)

Table 9.4: Rate of GDP growth per annum, 1970-85

	<u>1977</u>	<u>1984</u>	<u>Difference(%)</u>
Agriculture & Fishing	2,499.9	1,837.0	-5.1
Extraction Industry	119.9	102.1	-3.3
Electricity, Gas & Water	82.2	81.0	+0.5
Mineral Industries	488.1	396.3	-2.9
Metal Industries	963.1	777.1	-3.7
Other Manufactures	1,708.7	1,296.0	-4.1
Construction	1,200.2	789.5	-5.0
Commerce	2,022.8	1,893.8	-0.7
Transport	647.8	599.2	-0.1
Financial Services	399.4	418.5	+1.0
Public Services	1,278.8	1,522.9	+2.7
Personal Services	723.2	673.9	-0.9

Source: Ministerio de Trabajo y Seguridad Social (1985)

Table 9.5: Employment by Sector, 1977-84

<u>1960</u>	<u>1965</u>	<u>1970</u>	<u>1975</u>	<u>1980</u>	<u>1984</u>
30.5	74.5	97.7	20.6	14.1	17.1

Sources: SOPEMI (1985); Hudson & Lewis (1985); Unpublished Statistics, Instituto Español de Emigracion.

Table 9.6: Assisted Emigrants to Europe ('000), 1960-84

<u>1960</u>	<u>1965</u>	<u>1970</u>	<u>1975</u>	<u>1980</u>	<u>1984</u>
55	300	625	968	1155	520

Source: SOPEMI (1985).

Table 9.7: Emigrants' Remittances (million \$US), 1960-84

	<u>1970</u>	<u>1975</u>	<u>1987</u>	<u>1985</u>
Males	9,920	10,108	9,573	9,599
Females	3,129	3,649	3,818	4,164
Total	13,049	13,757	13,391	13,763

Source: OECD (1986)

Table 9.8: Labour Force ('000), 1970-1985

	<u>Number ('000)</u>	<u>%</u>
1975	302	2.3
1976	448	3.4
1977	662	5.0
1978	908	6.9
1979	1,130	8.6
1980	1,416	11.0
1981	1,744	13.5
1982	2,151	16.5
1983	2,342	17.7
1984	2,604	19.7
1985	2,731	20.6
1986(April)	2,777	20.8

Sources: Banco de Bilbao (1986a), Ya 15.5.86

Table 9.9: Registered Unemployment, 1975-1985

## 9.2 The Distribution of Small and Medium Sized Enterprises

### 9.2.1 Definition and Official Sources

There is no official definition of the characteristics of small and medium sized enterprises (SME) in Spain. Each of the relevant Central and Regional Government Ministries (and Institutes) divides enterprises into size bands according to their own criteria. Thus in a single book the Secretary of State for Social Security in 1984 used the employment of under 100 employees to define SME's (Garcia de Blas, 1984), while his Under Secretary identified small enterprises as those employing 50 or under and medium sized firms as those with 51 to 500 employees (Crespo Valera, 1984) and The Director General for Coordination of the Plan defined industrial enterprises as small (1-99 employees) or medium (100-499 employees) (Garcia Santacruz, 1984). The Instituto Nacional de Estadística (INE) used 10 size bands to present the results of the 1978 Industrial Census (see section 9.2.2) but 5 for the Industrial Survey of the same year. The Instituto de la Pequeña y Mediana Empresa Industrial (IMPI) (see Section 9.4.2.), created in 1976 to assist Industrial SME's does not use a fixed definition but regards enterprises employing up to 5 persons as handicrafts - dealt with by another part of the Ministry of Industry and Energy - those with 6-99 employees as small and those with 100-500 employees as medium sized. There have not been any scientific studies of the relationships between such employment criteria and financial ones (eg. annual turnover) nor any separate definitions developed for service sector activities.

In these circumstances, it has been necessary to follow EC practice and use employment size as the sole criterion (despite the difficulties associated with comparisons of different sectors). Unfortunately, the use of the internationally accepted division of enterprises by number of employees into small (1-100), medium (101-500) and large (over 500) means that 99.8% of Spanish enterprises are classified as SME's; although the 0.2% that are defined as large do account for about 20% of employment. Thus the review that follows concentrates where possible on

SME's but often considers the whole set of employers. Likewise, the importance of subdividing SME's to identify the dynamics of different components rather than treating almost all firms as an undifferentiated mass means that other, finer, classifications of enterprises are used at a number of points.

It is also important at the outset to recognise that definitions and studies of SME's based on official statistics present only a partial picture of current employment change in Spain. This is not only because of the problems associated with out of date surveys or censuses that are encountered everywhere but also due to their incompleteness at a time when the economía sumergida (underground economy) appears to be growing. The phenomenon is not unique to Spain but the extent of unrecorded economic activity is probably greater than in most EC member states. The size of the sumergida is, by definition, difficult to judge and depends on the types of activity that are included but it is large enough to have caused the INE to publish a review of the statistical problems associated with it. The estimates of its size presented there vary from 2.5% to 6.5% of GDP in the early 1980's (with an accelerating growth rate) and from an employment of 1 to 3 million people (10-25% of the active population) (Ruesga Benito, 1986; Sanchis, 1986). Its importance has also been officially recognised by the Minister of the Economy when he argued in July 1986 that the 'true' level of unemployment was 15% (not 22%) due to the number of unemployed who were working while receiving benefit. Several aspects of the creation of employment in the sumergida are examined in greater detail in Section 9.3.1 when evidence from local case studies is reviewed, but an appreciation of its existence is essential before a consideration of the features of officially recorded SME's.

#### 9.2.2 Industrial SME's

As there has never been an official national census of agricultural or service sector enterprises, the only set of SME's which can be analysed on the basis of a complete sectoral coverage is the industrial one.

Only one industrial census has been undertaken since 1978 when INE assumed responsibility for all industrial statistics (many of which had previously been produced by the Servicio Sindical de Estadística). This was conducted in two stages : the first involved interviews with all single establishment enterprises in Divisions 1-4 of Clasificación Nacional de Actividades Económicas (C.N.A.E. - See Appendix I) and was carried out in May and June of 1978. In the second stage, interviews were conducted in December 1978 and January 1979 with multi-establishment enterprises in CNAE divisions 1-4 and all firms engaged in construction (CNAE 501-503) and electricity production or distribution (CNAE 152). The results of these interviews are known collectively as the Censo Industrial 1978 and have been published in three volumes : Industrial Establishments (INE, 1980), Industrial Enterprises (INE, 1982a) and Electricity & Construction (INE 1982b). The content of the Industrial Establishment volume is simplest to interpret but the exclusion of 8,544 multiplant firms and 36,837 enterprises which are involved in construction or electricity does reduce the number of industrial workers considered by 1 to 2 million. Hence the distribution of SME's in this census will be studied by reference to the data on Industrial Enterprises. However, it must be borne in mind that 452 of the firms included in these results had activities in sectors such as commerce, transport and agriculture so that 137,703 of the employees and 2,073 of the establishments are not industrial at all.

Table 9.10 gives the number of firms, establishments and employees for enterprises involved in CNAE Division 1 (Energy & Water), 2 (Extraction and Processing of Minerals, including chemicals), 3 (Transformation of Metals), 4 (Other Manufacturing) and 5 (Construction) subdivided by employment size of firm. It is immediately apparent that SME's account for the vast majority of all enterprises and establishments (99.7% and 96.9% respectively) and most industrial employment (65.2%). Such is the small scale of Spanish industrial structure that over half the firms employ no more than 4 workers and the average size of firm is 18 workers. At the other end of the distribution it should be noted that



<u>Size of Firm (Employees)</u>	<u>Firms</u>	<u>Establishments</u>	<u>Employment</u>
1 - 4	128,062 (60.6)	131,042 (51.8)	252,943 ( 6.6)
5 - 9	34,558 (16.3)	42,866 (16.9)	225,697 ( 5.9)
10 - 19	21,598 (10.2)	27,939 (11.0)	293,290 ( 7.7)
20 - 49	17,363 ( 8.2)	24,112 ( 9.5)	533,522 (14.0)
50 - 99	5,061 ( 2.4)	8,579 ( 3.4)	351,306 ( 9.2)
1 - 99	206,642 (97.7)	234,538 (92.7)	1,656,758 (43.4)
100 -199	2,510 ( 1.2)	5,559 ( 2.2)	348,252 ( 9.1)
200 -499	1,579 ( 0.7)	4,991 ( 2.0)	482,373 (12.6)
100 -499	4,089 ( 1.9)	10,550 ( 4.2)	830,625 (21.8)
500 -999	261 ( 0.1)	2,639 ( 1.1)	179,627 ( 4.7)
1000 -4999	424 ( 0.2)	4,043 ( 1.6)	646,182 (16.9)
Over 5000	39 ( 0.02)	1,230 ( 0.5)	504,576 (13.2)
Over 5000	724 (0.3)	7,912 ( 3.1)	1,330,385 (34.8)
Total	211,455 (100)	253,000 (100)	3,817,768 (100)

Source: Table 1.2 INE (1982a)

Table 9.10 : Number of Industrial Firms, Establishments and Employees  
(and Percentages) by size of firm, 1978.

some 700 firms were responsible for the employment of one third of the industrial labour force (1.3 million people).

These summary figures conceal considerable variation in the distribution of industrial SME's between sectors and regions so these are indicated by examining the patterns of establishment and employment in the most important sectors and in two of the major regions. Table 9.11 summarises the employment features of the sub-divisions of the CNAE that contain more than 1% of all industrial employees. In activities such as the fabrication of wood products, clothing or mechanical machinery, the share of employment provided by SME's is well above the all industry figure at 97.9, 86.5 and 86.3 per cent respectively. Yet their role in employment in several other subsectors is minimal: 22.1% in Basic Metals, 22.3% in Vehicle Production and 28.5% in Shipbuilding. Such variation is a reflection of the differences between types of industrial production in terms of corporate organisation and efficient plant size.

Turning to variations between the industrial structures of the Autonomous Communities, it is necessary to use data from the first stage of the Industrial Census (ie. omit both multi-plant firms and electricity and construction activities) as only these are readily available at regional or provincial level. Because of this change, and the use of only six major size bands, the national distribution of establishments and employees according to the Industrial Establishments data (INE, 1980) is also given in Table 9.12. As might be expected, these differ little from the results for Industrial Enterprises in terms of number of establishments (SME's accounting for 99.7% rather than 96.9%) but there is a noticeable change in the proportion of employment accounted for by SME's (up from 65.2% to 75.8%). The two Autonomous Communities chosen as illustrations are the long established industrial areas of Northern Spain : Cataluna (Catalonia) and Pais Vasco (The Basque Country). Cataluna, with just over a quarter of national industrial employment and a similar share of industrial output (Banco de Bilbao, 1983), remains the most important concentration of industrial activities in the country. The Pais Vasco has lost its traditional second place in industrial terms in recent years to Madrid but still

Size (Employees per Firm)

Subdivision of Activity	1 - 99	100 - 499	500 +	Total
11. Solid Fuels	3,539 ( 5.9)	8,115 (13.6)	47,885 (80.4)	59,539
15. Electricity & Gas	5,077 ( 6.6)	6,603 ( 8.6)	64,882 (84.7)	76,562
22. Basic Metals	8,294 ( 7.1)	17,651 (15.0)	91,664 (77.9)	117,609
24. Non-metallic Minerals	112,590 (54.3)	58,224 (28.1)	36,426 (17.6)	207,240
25. Chemicals	38,892 (22.9)	56,744 (33.4)	74,135 (43.7)	169,771
31. Metal Products (except Machines)	195,348 (58.3)	78,001 (23.3)	61,888 (18.5)	335,237
32. Mechanical Machinery	78,387 (52.1)	51,393 (34.2)	20,520 (13.4)	150,200
34. Electrical Machinery	26,049 (20.0)	28,394 (21.8)	75,857 (58.2)	130,294
35. Electronic Machinery	7,680 (11.6)	11,514 (17.4)	47,056 (71.0)	66,250
36. Vehicles	20,386 (11.7)	18,478 (10.6)	135,280 (77.7)	174,144
37. Shipbuilding & Repair	10,133 (15.2)	8,846 (13.3)	47,576 (71.5)	66,555
41/42 Food, Drink & Tobacco	244,529 (55.8)	99,866 (22.8)	94,094 (21.5)	438,489
43. Textiles	76,284 (36.2)	89,549 (42.5)	44,641 (21.2)	210,474
45. Clothing	119,818 (58.9)	56,159 (27.6)	27,621 (13.6)	203,598
46. Wood Products	195,514 (86.6)	25,560 (11.3)	4,611 ( 2.0)	225,685
47. Paper & Printing	71,767 (48.8)	37,657 (25.6)	37,733 (25.6)	147,157
48. Rubber & Plastic	49,942 (47.2)	24,157 (22.8)	31,686 (30.0)	105,785
<b>TOTAL (CNAE 1 - 5)</b>	<b>1,656,758 (43.4)</b>	<b>830,625 (21.8)</b>	<b>1,330,385 (34.8)</b>	<b>3,817,768 (100)</b>

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Source: Table 3.2, INE (1982a)

Table 9.11 : Number of Industrial Employees (and Percentages) by Size of Firm and Selected subdivision, 1978

	<u>Cataluña</u>		<u>Pais Vasco</u>		<u>Spain</u>	
	<u>Establishments</u>	<u>Employees</u>	<u>Establishments</u>	<u>Employees</u>	<u>Establishments</u>	<u>Employees</u>
1 - 9	25,746 (70.4)	81,624 (11.4)	5,672 (61.5)	19,399 (6.1)	140,027 (76.7)	392,159 (14.0)
10 - 19	4,474 (12.2)	59,518 ( 8.3)	1,309 (14.2)	17,464 (5.5)	18,439 (10.1)	240,635 ( 8.6)
20 - 49	3,817 (10.4)	117,345 (16.4)	1,157 (12.6)	34,693 (11.0)	15,012 ( 8.2)	447,717 (15.9)
50 - 99	1,215 ( 3.3)	84,831 (11.8)	499 ( 5.4)	34,334 (10.8)	4,516 ( 2.5)	302,031 (10.7)
1 - 99	35,252 (96.4)	343,318 (47.9)	8,637 (93.7)	105,890 (33.4)	177,994 (97.5)	1,382,542 (49.2)
100 - 499	1,180 ( 3.2)	232,161 (32.4)	499 ( 5.4)	101,361 (32.0)	3,935 ( 2.2)	746,973 (26.6)
500 +	130 ( 0.4)	140,317 (19.6)	81 ( 0.9)	109,529 (34.6)	558 ( 0.3)	681,645 (24.2)
TOTAL	36,562 (100)	716,196 (100)	9,217 (100)	316,780 (100)	182,487 (100)	2,811,160 (100)

Sources: Eceolaza Moreda (1982), INE (1980), Milà i Masoliver (1984)

Table 9.12 : Number of Industrial Establishments and Employees (and Percentages) by Size of Establishment, Cataluña, Pais Vasco and Spain, 1978

accounts for some 10% of employment and production. Table 9.12 shows that both have marginally fewer SME's than the country as a whole when measured by number of establishments but Cataluna has a greater share of its industrial employment in SME's (80.3%) than the national figure (75.8%), while the Pais Vasco is well below this, with only 65.4% of employees in SME's. These differences are largely a reflection of the industrial composition of the two regions - Cataluna still has substantial textile and metal transforming sectors (Flos et al, 1978) but the dominant industrial activity of the Pais Vasco are basic metal production and transformation (Eceolaza Moreda, 1982). It is also evident that the size of typical SME's in these two more industrialised parts of the country is greater than the national average. Despite their differences in industrial composition, both Cataluna and the Pais Basco have fewer establishments and employees in the 'handicraft' size band of 1-9 employees but proportionately more than the national share in the top 'small' and 'medium' groups (50-99 and 100-499 employees respectively).

It is not possible to examine changes in these distributions of SME's by size, sector and region using the comprehensive coverage of an industrial census as the 1978 exercise has not been repeated. However, the alternative source of information on industrial activities alone, the Industrial Survey (INE, 1984, 1985), does allow temporal change to be studied, albeit over the brief period 1978 to 1982. It must be stressed at the outset that this annual survey does not provide a complete cover of all establishments but rather it aims to obtain data from every establishment employing 20 or more persons and from a 10% sample of smaller establishments (results which are later 'expanded'). There is a refusal rate by firms of some 25% but estimates of various sorts are used to replace their replies. INE provide no details on the effects of these procedures but the Banco de Bilbao (1986b) point out that the industrial employment covered by the 1981 Industrial Survey was 2,553,245 while the Population Census that year recorded 2,974,724 and the quarterly labour force survey estimated the industrial labour force to be 3,014,000. In the same year, the Banco de Bilbao's own estimating methods suggested an industrial employment of 3,057,144 - almost 20% above that of the Industrial Survey. The degree of discrepancy between

the Survey and the Bank's figures is especially marked in those sectors where SME's are of greatest importance; for example, in textiles and clothing, the survey employment is only 65% of that derived by the Banco de Bilbao and in the wood products sub-sector it is only 80%.

As there are no published national summary tables of data disaggregated by size, the classification of activities used by the survey is not directly derived from the CNAE and the grouping of establishments by size is different from that of the Census in a number of cases, there is no scope for direct comparison with Table 9.11. It is possible, though, to pick certain sub-sectors, which correspond as closely as can be managed to the 17 used in Table 9.11, and examine the distribution of establishments in them. This is done in Table 9.13 for 16 sub-sectors (Solid Fuels was excluded due to the use of different size bands) and the most striking feature of the table is the falling numbers of establishments and employees in one activity after another - no subdivision recorded an increase in total establishments while only Gas, Shipbuilding and the Dairy Industry showed any employment growth. Within the overall pattern of falling totals the distribution of SME's was remarkably static, even over the short period of 5 years. The dominant trend was for SME's to account for a slightly small share of establishments (eg. in electronic machinery, their share fell from 97.0 to 95.9 per cent) but they lost a substantial share of establishments in gas (97.1 to 91.2 per cent) and shipbuilding (90.1 to 79.4 per cent). Given the Industrial Survey's problems of incomplete coverage and possible underestimation of SME activity, too much weight should not be placed on this suggestion of a small reduction in the weight of SME's.

### 9.2.3 Industrial and Service SME's

The only way of examining the role of non-industrial SME's in employment provision at a national scale is through the records on social security payments kept by the Ministerio de Trabajo y Seguridad Social. Since these cover industrial enterprises as well as those in services and some agricultural activities, it is also possible to explore some of the tendencies reviewed in Section 9.2.2 in greater detail and with data

Size (Employees per Establishment)

CNA	Subdivision	Year	< 20	20-99	50-99	100-499	> 500	Total Establishments	Total Employees
152	Gas	1978	13 (37.1)	12 (34.3)	6 (17.1)	3 ( 8.6)	1 ( 2.9)	35	3,749
		1982	13 (38.2)	13 (38.2)	3 ( 8.8)	2 ( 5.9)	3 ( 8.8)	34	3,871
221-223	Iron & Steel	1978	159 (42.5)	84 (22.5)	36 ( 9.6)	6 (16.3)	34 ( 9.1)	374	94,720
		1982	155 (46.7)	68 (20.5)	25 ( 7.5)	49 (14.8)	35 (10.5)	332	82,354
244,245,249	Rocks & Abrasives & other mineral products	1978	2,189 (90.4)	178 ( 7.3)	30 ( 1.2)	25 ( 1.0)	0 ( 0.0)	2,422	23,051
		1982	2,044 (91.4)	147 ( 6.6)	26 (1.2)	20 ( 0.9)	0 ( 0.0)	2,237	18,651
2511,2512	Petrochemicals	1978	36 (46.8)	21 (27.3)	7 ( 9.1)	13 (16.9)	0 ( 0.0)	77	4,297
		1982	18 (30.0)	21 (35.0)	11 (18.3)	10 (16.7)	0 ( 0.0)	60	4,133
311	Metal Foundries	1978	544 (65.9)	163 (19.7)	53 ( 6.4)	59 ( 7.1)	7 ( 0.8)	826	31,256
		1982	486 (66.7)	139 (19.1)	40 ( 5.5)	54 ( 7.4)	10 ( 1.4)	729	28,776
322-326,329	Industrial Machinery	1978	3,450 (71.3)	880 (18.2)	279 ( 5.8)	212 ( 4.4)	16 ( 0.3)	4,837	128,853
		1982	2,477 (70.0)	655 (18.5)	219 ( 6.2)	175 ( 4.9)	12 ( 0.3)	3,538	100,640
341-347	Electrical Machinery	1978	1,717 (70.7)	410 (16.9)	111 ( 4.6)	143 ( 5.9)	48 ( 2.0)	2,429	114,431
		1982	1,529 (74.2)	273 (13.2)	94 ( 4.6)	121 ( 5.9)	43 ( 2.1)	2,060	95,356
351-355	Electronics Machinery	1978	449 (67.8)	108 (16.3)	40 ( 6.0)	45 ( 6.8)	20 ( 3.0)	662	58,993
		1982	188 (62.3)	86 (18.6)	31 ( 6.7)	39 ( 8.4)	19 ( 4.1)	462	44,776
361-363	Vehicles	1978	718 (61.4)	242 (20.7)	86 ( 7.4)	84 ( 7.2)	40 ( 3.4)	1,170	154,604
		1982	621 (62.2)	188 (18.8)	77 ( 7.7)	81 ( 8.1)	32 ( 3.2)	999	144,269
371,372	Shipbuilding	1978	129 (63.9)	23 (11.4)	12 ( 5.9)	18 ( 8.9)	20 ( 9.9)	202	50,072
		1982	52 (51.0)	10 ( 9.8)	5 ( 4.9)	14 (13.7)	21 (20.6)	102	51,493
414	Dairy Industry	1978	928 (82.9)	85 ( 7.6)	43 ( 3.8)	56 ( 5.0)	7 ( 0.6)	1,119	25,776
		1982	837 (81.7)	87 ( 8.5)	39 ( 3.8)	53 ( 5.2)	9 ( 0.9)	1,025	26,237
431-434	Fabric Preparation	1978	1,510 (66.2)	354 (15.5)	157 ( 6.9)	241 (10.6)	19 ( 0.8)	2,281	97,803
		1982	961 (63.3)	232 (15.3)	132 ( 8.7)	180 (11.9)	12 ( 0.8)	1,517	69,756
453-55	Clothing	1978	3,175 (70.4)	853 (18.9)	251 ( 5.6)	218 ( 4.8)	13 ( 0.3)	4,510	118,164
		1982	2,247 (64.5)	843 (24.2)	221 ( 6.3)	160 ( 4.6)	11 ( 0.3)	3,482	96,267
462-465	Wood Products	1978	19,195 (96.1)	636 ( 3.2)	93 ( 0.5)	56 ( 0.3)	3 ( 0.02)	19,983	91,186
		1982	15,996 (96.6)	452 ( 2.7)	68 ( 0.4)	37 ( 0.2)	0 ( 0.0)	16,553	66,124
471-472	Pulp & Paper	1978	71 (31.1)	62 (27.2)	32 (14.0)	52 (22.8)	11 ( 4.8)	228	24,646
		1982	50 (28.1)	48 (27.0)	21 (11.8)	51 (28.7)	8 ( 4.5)	178	19,065
482	Plastic Products	1978	1,965 (73.8)	471 (17.7)	129 ( 4.8)	94 ( 3.5)	5 ( 0.2)	2,664	58,343
		1982	1,598 (66.1)	452 (22.0)	115 ( 5.6)	82 ( 4.0)	5 ( 0.2)	2,252	49,070

Source: IIE (1904,1905) Table 9.13 : Number of Industrial Establishments (and Percentage) by Size of Establishment, 1978 and 1982

that is more up to date. However, before this can be attempted it is necessary to draw attention to three of the limitations of this particular source.

The first is that it only provides information on those workers whose social security payments come under the general regulations or those for coal miners (régimen general y régimen especial de la minería del carbón), thus excluding the self-employed (autónomos). In 1983, this meant the exclusion of 1,651,771 people - all by definition working in small-scale establishments - from the total social security coverage of 8,062,658. To this figure, some 20 per cent of the legal labour force, should be added the exclusion of two further groups of unknown size : those covered by the Special Agricultural and Domestic Workers Regulations. The effect of these limitations in types of workers included are impossible to judge exactly but their omission clearly reduces the share of SME's in total employment. Using data on the distribution of the self-employed by province in 1983, this underestimation is most serious in areas with a high proportion of agricultural activity, such as Cuenca, whose 38% of the labour force is self-employed, Avila (37%) and Lerida (35%) and less important is the major urban centres like Madrid (14%), Viscaya (16%) or Barcelona (19%) (García de Blas, 1984).

Secondly, the use of social security payments as a means of recording the labour force means that employment in the sumergida is not considered, for it is precisely this kind of transaction that is avoided by enterprises operating illegally. Any attempt to estimate the effects of this limitation in coverage is likely to be unsatisfactory, especially if it involves the use of other official sources that have their own limitations. However, a simple starting point for judging the underestimation of employment in data from the Ministerio de Trabajo y Seguridad Social is to compare them with figures from the quarterly labour force survey (Encuesta de Población Activa : EPA) published by INE. In the last quarter of 1985, the EPA recorded a total of 10,411,500 employed persons (INE 1986), while the social security count gave 6,436,099. After allowing for the addition of the self-employed to



this latter figure, there is still about 25% of the officially active labour force missing from the social security records. Fortunately, there seems to have been little damage in the overall relationship between the number of workers according to the social security records and the results of the EPA over time: in 1981, this stood at 60.6% and remained at about this level until a slight improvement to 61.8% in the 1985 figures just given (1981-84 EPA figures from Argandona & Garcia-Duran, 1985). The discrepancy is currently greatest in the agricultural sector, where only 2% of employees are counted in the regimen general, but in construction the proportion was 82%, in industry it reached 90% and for services, with their higher component of self-employment, the coverage was 64%. As in the case of the self-employed already noted, the 'missing' workers indicated here - as well as those recorded as unemployed by the EPA but who are actually employed - are in SME's so their role in employment provision will be understated using social security data.

Thirdly, the employment and establishment figures are grouped and classified according to the number of workers and their activity in each social security recording centre but these centres do not necessarily correspond to either single enterprises or individual establishments. For single establishments enterprises, the size of recording centre is the size of that establishment but for multi-establishment enterprises, the recording centre covers all workers of that enterprise in each province. There is thus a degree of aggregation in the figures for the employment of multi-establishment activities which only produces an equivalence between the dimensions of a recording centre and that of the enterprise when all establishments of an enterprise are in the same province. The (unmeasurable) effect of this procedure is to give a classification by size, in employment terms, that overstates the average size of establishments but which understates the average size of enterprises. As for the classification of recording centres into economic activities, the use of provincial recording centres causes no problems for single establishment enterprises and is preferable to a single classification for those multi-establishment enterprises which have a variety of types of business.

With these reservations in mind, the first step in identifying the role of SME's is an examination of their distribution in terms of shares of establishments and employment. Table 9.14 presents this distribution for 1984 using unpublished data from the Ministerio de Trabajo y Seguridal Social. The proportion of the 663,574 recording centres (referred to have as enterprises) with 500 or fewer workers is 99.9%, with a remarkable 86.5% of enterprises employing 10 or less. However, as elsewhere in the world, the SME's share of total employment is much lower at 78.1% - a proportion particularly concentrated in two subgroups, the smaller enterprises, employing 1-30 workers (40.4%), and those with 100-250 workers (12.0%).

The share of SME's in employment does appear to be increasing at present; not least because the reduction in employment noted nationally has been most marked in large enterprises. Although the details of changing proportions between size groups between one year and the next could reflect changes in the social security coverage and movement in or out of self employment, the general picture presented in Table 9.15 for the years 1981 to 1986 is clear enough. As total employment has fallen from 6,681,836 to 6,442,239 (-3.6%) over the period, so a small increase in the numbers employed in small firms (3,768,642 to 3,777,377: +0.2%) and a larger loss amongst medium sized enterprises (1,345,118 to 1,289,567: -4.1%) have been sufficient to ensure a steadily rising share of the total in SME's. In 1981 it was 76.5%, by 1983 it was 78.2% and had increased further to 78.6% by early 1986. Again, it should be stressed that, as a whole, SME's experienced an absolute loss in employment and the only sorts of enterprises to record an absolute increase in jobs were the ones employing 10 or less.

As was evident in the review of industrial SME's (section 9.2.2), their importance varies between sectors and regions as well as over time. In the absence of earlier comparable data, these variations are examined here only for 1986 but there is little reason to expect that the patterns revealed are very different from those of earlier years. In Table 9.16 the main sectors of the CNAE (defined in full in Appendix 1) are used to explore intersectoral variation. This shows an obvious

Size (Employees per Centre)	Enterprises	Employees
1 - 5	502,223 (75.7)	975,116 (15.4)
6 - 10	71,351 (10.8)	540,384 ( 8.5)
11 - 30	60,863 ( 9.2)	1,049,188 (16.5)
31 - 49	12,620 ( 1.9)	487,308 ( 7.7)
50 - 100	8,998 ( 1.4)	619,417 ( 9.8)
1 - 100	656,055 (98.9)	3,671,413 (57.8)
101 - 250	4,969 ( 0.8)	763,099 (12.0)
251 - 500	1,527 ( 0.2)	528,042 ( 8.3)
101 - 500	6,496 ( 1.0)	1,291,141 (20.3)
501 - 750	454 ( 0.1)	276,221 ( 4.45)
751 - 1,000	192 ( 0.03)	165,829 ( 2.6)
1,001 - 5,000	346 ( 0.05)	647,681 (10.2)
5,000 +	31 ( 0.01)	295,153 ( 4.7)
501 +	1,023 ( 0.2)	1,384,884 (21.8)
TOTAL	663,574 (100)	6,347,438 (100)

Source : Unpublished Statistics, Ministerio de Trabajo y Seguridad Social

Table 9.14 Number of Enterprises and Employees (and percentages) by Size of Social Security Recording Centre, 1984.

Size (Employees per Centre)	Year					
	1981	1982	1983	1984	1985	1986
1 - 5	959,059 (14.4)	940,094 (14.6)	962,381 (15.0)	975,116 (15.4)	994,006 (15.4)	1,014,272 (15.7)
6 - 10	540,505 ( 8.1)	534,318 ( 8.3)	541,667 ( 8.4)	540,384 ( 8.5)	554,818 ( 8.6)	563,722 ( 8.8)
11 - 30	1,096,794 (16.4)	1,076,302 (16.2)	1,075,573 (16.8)	1,049,188 (16.5)	1,075,125 (16.7)	1,090,186 (16.4)
31 - 49	526,671 ( 7.9)	518,021 ( 8.0)	499,510 ( 7.8)	487,308 ( 7.7)	495,577 ( 7.7)	491,197 ( 7.7)
50 - 100	645,463 ( 9.7)	637,246 ( 9.9)	631,430 ( 9.8)	619,417 ( 9.8)	625,102 ( 9.7)	620,000 ( 9.7)
1 - 100	3,768,642 (56.4)	3,705,980 (57.5)	3,710,561 (57.8)	3,671,413 (57.8)	3,744,627 (58.2)	3,777,377 (58.6)
101 - 250	809,270 (12.1)	792,784 (12.3)	778,309 (12.1)	763,099 (12.0)	773,625 (12.0)	769,410 (11.9)
251 - 500	535,848 ( 8.0)	536,085 ( 8.3)	527,664 ( 8.2)	528,042 ( 8.3)	529,042 ( 8.2)	520,157 ( 8.1)
101 - 500	1,345,118 (20.1)	1,328,869 (20.6)	1,305,973 (20.4)	1,291,141 (20.3)	1,302,667 (20.2)	1,289,567 (20.1)
501 - 750	289,522 ( 4.3)	287,925 ( 4.5)	282,141 ( 4.4)	276,221 ( 4.4)	293,476 ( 4.6)	290,652 ( 4.5)
751 - 1000	155,368 ( 2.3)	150,815 ( 2.3)	160,558 ( 2.5)	165,829 ( 2.6)	165,130 ( 2.6)	164,638 ( 2.6)
1001 - 5000	662,559 ( 9.9)	660,555 (10.2)	666,214 (10.4)	647,681 (10.2)	606,943 (10.2)	648,998 (10.2)
5000 +	460,777 ( 6.9)	313,970 ( 4.9)	289,686 ( 4.5)	295,153 ( 4.7)	273,256 ( 4.2)	271,007 ( 4.2)
501 +	1,568,226 (23.4)	1,413,265 (21.9)	1,398,599 (21.8)	1,384,884 (21.8)	1,388,805 (21.5)	1,375,295 (21.3)
TOTAL	6,681,836 (100)	6,448,114 (100)	6,415,133 (100)	6,347,438 (100)	6,436,099 (100)	6,442,239 (100)

Source: Unpublished Statistics, Ministerio de Trabajo y Seguridad Social

Note: 1 31 December, except for 1986 which is 31 March

Table 9.15 : Number of Employees (and Percentage) by Size of Social Security Recording Centre, 1981 - 1986

contrast between sectors in which SME's dominate employment provision - such as Agriculture (95.8% of employment in SME's), Construction (93.8%) and Commerce (94.4%) - and those, like Energy and Water (42.5%), Metal Production (66.5%) and Transport (70.4%), with a below-average proportion. In each of the SME dominated sectors, the majority of employees are to be found in enterprises employing under 50 people, underlining the generally small scale of Spanish SME's. As the sectors each contain a great diversity of activities, it is easier to appreciate the variation in importance of SME's by further disaggregation.

In the interests of simplicity, only these 29 sub divisions (of the 63 CNAE 2 digit groups) which accounted for at least 1% of all employment are analysed in Table 9.17. SME's account for an above average share of employment in sectors like wood products (99.6%), Restaurants and Cafes (98.4%), Hotels and Inns (97.3%) and Repairs (96.4%) but represent under half the employment of Vehicle production (19.1%), Communication (30.9%), Basic Metals (38.5%) and Public Administration (46.9%). As a number of the subdivisions presented in Table 9.17 are the same as those selected for Table 9.11, it is initially tempting to compare the 1978 and 1986 sectoral profiles but little of value would emerge. Not only have the statistics been collected in very different ways but, more importantly here, the breaking up of multi-establishment enterprises into provincial groups by the Ministerio de Trabajo y Seguridad Social does increase the proportions of "SME's" in 1986 over and above any real changes associated with corporate organisation and employment structure in any subdivision. Such an effect is particularly evident in those branches of activity most closely associated with the activities of multi-establishment firms (eg Basic Metals, where SME's have an inflated 1986 share of employment of 38.5%, compared with 22.1% in the 1978 census) rather than those genuinely dominated by SME's (eg Clothing with 91.2% of 1986 employment in SME's rather than 86.4% in 1978).

Evidence of regional variation in the importance of SME's in 1986 is given in Table 9.18. If the exceptional cases of Ceuta and Melilla are disregarded, then the highest proportions of employment in SME's are found in the less industrialised areas like La Rioja (92.5% of

**SECTOR OF ACTIVITY (CNAE)**

Size (Employees per Centre)	0 Agricultural	1 Energy & Water	2 Minerals	3 Metals	4 Other Manufactures	5 Construction	6 Commerce	7 Transport	8 Financial	9 Other Services	Unclassified	TOTAL
1 - 5	6,157 (20.4)	4,384 (3.0)	28,987 (6.7)	63,888 (8.6)	110,630 (11.3)	111,367 (18.1)	386,607 (32.0)	62,219 (18.1)	70,861 (13.1)	147,259 (11.5)	19,913 (16.9)	1,012,272 (15.7)
6 - 10	3,014 (10.0)	2,804 (1.9)	23,797 (5.5)	57,798 (7.0)	89,709 (9.1)	79,148 (12.9)	175,478 (14.5)	32,569 (9.5)	37,612 (7.0)	60,267 (4.7)	7,526 (6.4)	563,722 (8.8)
11 - 30	5,193 (17.2)	6,941 (4.8)	64,464 (14.8)	111,359 (15.1)	209,585 (21.3)	152,970 (24.8)	260,622 (21.5)	54,878 (16.0)	60,008 (11.1)	149,485 (11.6)	14,681 (12.4)	1,090,186 (16.9)
31 - 49	2,665 (8.8)	4,408 (3.1)	31,698 (7.3)	49,782 (6.7)	102,348 (10.4)	62,042 (10.1)	94,770 (7.8)	20,994 (6.1)	29,655 (5.5)	86,714 (6.8)	6,121 (5.2)	491,197 (7.6)
50 - 100	3,131 (10.4)	8,277 (5.7)	44,931 (10.3)	63,695 (8.6)	131,739 (13.4)	74,678 (12.1)	97,980 (8.1)	22,009 (6.4)	43,878 (8.1)	122,085 (9.5)	7,597 (6.4)	620,000 (9.6)
1 - 100	20,160 (66.8)	26,814 (18.6)	193,877 (44.5)	340,522 (46.1)	644,011 (65.5)	480,205 (78.0)	1,015,457 (83.9)	192,669 (56.1)	242,014 (44.9)	565,810 (44.1)	55,838 (47.3)	3,777,377 (58.6)
101 - 250	5,227 (17.3)	17,095 (11.9)	76,144 (17.5)	78,566 (10.6)	159,977 (16.3)	68,791 (11.2)	86,374 (7.1)	28,839 (8.4)	74,502 (13.8)	163,034 (12.7)	10,866 (9.2)	769,410 (11.9)
251 - 500	3,531 (11.7)	17,341 (12.0)	56,587 (13.0)	72,468 (9.8)	81,912 (8.3)	28,287 (4.6)	40,350 (3.3)	20,381 (5.9)	66,973 (12.4)	127,125 (9.9)	5,202 (4.4)	520,157 (8.1)
101 - 500	8,758 (29.0)	34,436 (23.9)	132,731 (30.5)	151,034 (20.4)	241,884 (24.6)	97,078 (15.8)	126,724 (10.5)	49,220 (14.3)	141,475 (26.2)	290,159 (22.6)	16,068 (13.6)	1,289,567 (20.0)
501 - 750	503 (1.7)	10,892 (7.6)	23,074 (5.3)	35,653 (4.8)	39,006 (4.0)	13,388 (2.2)	16,575 (1.4)	13,695 (4.0)	41,442 (7.7)	91,771 (7.1)	4,653 (3.9)	290,652 (4.5)
751 - 1000	773 (2.6)	14,785 (10.3)	15,843 (3.6)	21,806 (3.0)	15,914 (1.6)	3,386 (0.5)	2,697 (0.2)	10,579 (3.1)	19,159 (3.6)	54,482 (4.2)	5,214 (4.4)	164,638 (2.6)
1001 - 5000	0 (0.0)	36,070 (25.0)	43,836 (10.1)	112,802 (15.3)	42,468 (4.3)	21,582 (3.5)	37,486 (3.1)	38,961 (11.3)	89,684 (16.6)	211,616 (16.5)	14,493 (12.3)	643,998 (10.1)
5000 +	0 (0.0)	21,108 (14.6)	25,848 (5.9)	76,908 (10.4)	0 (0.0)	0 (0.0)	11,050 (0.9)	38,443 (11.1)	5,353 (1.0)	70,589 (5.5)	21,708 (18.4)	271,007 (4.2)
501 +	1,276 (4.2)	82,855 (57.5)	108,601 (25.0)	247,169 (33.5)	97,388 (9.9)	38,356 (6.2)	67,808 (5.6)	101,678 (29.6)	155,638 (28.9)	428,458 (33.4)	46,068 (39.0)	1,375,295 (21.3)
<b>TOTAL</b>	<b>30,194 (100)</b>	<b>144,105 (100)</b>	<b>435,209 (100)</b>	<b>738,725 (100)</b>	<b>983,283 (100)</b>	<b>615,639 (100)</b>	<b>1,209,989 (100)</b>	<b>343,567 (100)</b>	<b>539,127 (100)</b>	<b>1,284,427 (100)</b>	<b>117,974 (100)</b>	<b>6,442,239 (100)</b>

Source Unpublished Statistics, Ministerio de Trabajo y Seguridad Social

**Note**

1 See Appendix I for full definition of section

Table 9.16 : Number of Employees (and Percentage) by Size of Social Security Recording Centre and Sector of Activity 31 March 1986.

employment in SME's), the Balearic Islands (90.5%), Extremadura (90.6%), Castilla - La Mancha (90.1%) and the Canary Islands (96.9%). Since the social security data neglect much agricultural activity, this dominance of SME's is due to the relatively limited development of manufacturing enterprises and the presence of a significant small scale service sector (especially in the case of the two island communities where it is linked to tourism). At the other extreme are those parts of the country like the Asturias (where SME's account for 60.8% of employment), Madrid (68.0%), Cantabria (71.7%) and the Pais Vasco (76.0%), well known as the centres of large-scale heavy industry and service activities operating on a national scale. Such a degree of difference in the weight (and type) of SME's lends support to the general arguments in favour of transferring responsibility for many aspects of economic policy (including the promotion of SME's) to the Autonomous Communities under the 1978 constitution.

#### 9.2.4 The Changing Importance of SME's

Both of the major official sources reviewed here - the 1978 Industrial Census and the records of the Ministerio de Trabajo y Seguridad Social for the 1980, - reveal the extent to which the current and future development of Spanish industry and services is dependent on SME's. If such enterprises are defined in employment terms as those with 500 or less, they account for some two thirds of industrial jobs and over three quarters of those in the service sector. Furthermore, the evidence of the 1980's is that their role as employers is becoming more important as large enterprises reduce their labour forces. However, these general patterns conceal important variations between different sectors of activity and regions of the country. Even after the recent labour shedding by large firms, these are still parts of the economy, like metal and vehicle productions, in which SME's have a minor role, while activities such as cafes, hotels and wood products manufacturing are largely the preserve of SME's, especially the very smallest in size.

## SIZE (EMPLOYEES PER CENTRE)

	1 - 100	101 - 500	501 +	TOTAL
22. Basic Metals	17,219 (17.2)	21,383 (21.3)	61,665 (61.5)	100,267
24. Non-Metallic Mineral Products	76,396 (60.4)	36,935 (29.2)	13,104 (10.4)	126,435
25. Chemicals	84,006 (47.2)	68,997 (38.8)	24,860 (14.0)	177,863
31. Metal Products (except Machinery)	201,607 (68.1)	61,604 (20.8)	32,804 (11.1)	296,015
32. Mechanical Machinery	47,077 (63.5)	20,832 (28.1)	6,230 ( 8.4)	74,139
34. Electrical Machinery	53,207 (43.6)	29,885 (24.5)	38,832 (31.8)	121,924
36. Vehicles	11,013 ( 8.5)	13,779 (10.6)	104,990 (80.9)	129,782
Food, Drink & Tobacco	171,572 (60.4)	86,227 (30.4)	26,163 ( 9.2)	283,962
43. Textiles	78,348 (50.3)	57,361 (36.8)	20,207 (13.0)	155,916
45. Clothing	115,944 (73.5)	27,867 (17.7)	13,941 ( 8.8)	157,752
46. Wood Products	130,206 (90.8)	12,588 ( 8.8)	568 ( 0.4)	143,362
47. Paper & Printing	82,241 (63.1)	31,392 (24.1)	16,712 (12.8)	130,345
50. Construction	480,205 (78.0)	97,078 (15.8)	38,356 ( 6.2)	615,639
61. Wholesale Commerce	223,496 (82.8)	34,891 (12.9)	11,548 ( 4.3)	269,935
64. Retail Commerce	442,978 (83.3)	42,824 ( 8.1)	46,075 ( 8.7)	531,877
65. Restaurants & Cafes	163,668 (92.7)	9,896 ( 5.6)	2,904 ( 1.6)	176,468
66. Hotels & Inns	64,855 (66.0)	30,749 (31.3)	2,638 ( 2.7)	98,242
67. Repairs	100,837 (89.8)	7,360 ( 6.6)	4,060 ( 3.6)	112,257
72. Surface Transport (except Rail)	131,495 (73.7)	19,778 (11.1)	27,030 (15.2)	178,303
76. Communication	4,716 ( 7.2)	15,464 (23.7)	45,041 (69.1)	65,221
81. Financial Institutions	38,008 (15.9)	83,767 (35.1)	116,917 (49.0)	238,692
84. Business Services	143,827 (67.3)	36,975 (17.3)	32,869 (15.4)	213,671
91. Public Administration	97,491 (20.6)	124,775 (26.3)	251,905 (53.1)	474,171
92. Public Cleaning Services	54,913 (51.5)	40,675 (38.1)	11,069 (10.4)	106,657
93. Education	148,264 (71.9)	21,871 (10.6)	35,996 (17.5)	206,131
94. Health Services	44,304 (26.5)	45,085 (27.0)	77,724 (46.5)	167,113
95. Social Services	84,046 (53.5)	32,076 (20.4)	40,991 (26.1)	157,113
96. Recreational Services	62,797 (80.9)	10,928 (14.1)	3,882 ( 5.0)	77,607
97. Personal Services	55,507 (73.4)	13,850 (18.3)	6,293 ( 8.3)	75,650
TOTAL (All Sectors)	3,777,377 (58.6)	1,289,567 (20.0)	1,375,295 (21.3)	6,442,239

Source : Unpublished Statistics, Ministerio de Trabajo y Seguridad Social

Note

1 See Appendix I for full definition of Subdivisions

Table 9.17 : Number of Employees (and Percentage) by Size of Social Security Recording Centre and Selected Subdivision 31 March 1986.



## Size (Employees Per Centre)

Autonomous Community	1-100	101-500	501+	TOTAL
Andulucía	437,061(59.7)	148,198(20.2)	147,122(20.1)	732,381
Aragon	129,378(60.7)	40,515(19.0)	43,350(20.3)	213,243
Asturias	82,576(43.2)	33,511(17.5)	74,906(39.2)	190,993
Baleares	95,751(73.7)	21,850(16.8)	12,348 (9.5)	129,949
Canarias	147,563(64.5)	51,313(22.4)	29,849(13.1)	228,725
Cantabria	46,468(52.7)	16,754(19.0)	25,010(28.3)	88,232
Castilla-La-Marcha	125,204(68.3)	39,923(21.8)	18,156 (9.9)	183,283
Catilla y-Leon	203,713(59.7)	69,021(20.2)	68,757(20.1)	341,491
Cataluna	779,931(59.4)	285,448(21.7)	247,891(18.9)	1,313,270
Comunidad Valenciana	429,664(67.5)	110,073(17.3)	97,040(15.2)	636,777
Octramadura	62,171(67.9)	20,769(22.7)	8,602 (9.4)	91,542
Galicia	198,294(63.3)	60,653(19.4)	54,125(17.3)	313,072
Madrid	623,799(49.9)	226,581(18.1)	399,995(32.0)	1,250,375
Murcia	80,798(66.2)	22,508(18.4)	18,753(15.4)	122,059
Navarra	57,062(59.0)	22,328(23.1)	17,340(17.9)	967,300
Pais Vasco	234,449(51.9)	108,989(24.1)	108,658(24.0)	452,096
La Rioja	31,994(70.8)	9,820(21.7)	3,393 (7.5)	45,207
Ceuta	6,469(87.9)	889(12.1)	0 (0.0)	7,358
Melilla	5,032(92.2)	424(7.8)	0 (0.0)	5,456
<b>Total</b>	<b>3,777,377(58.6)</b>	<b>1,289,567(20.0)</b>	<b>1,375,295(21.3)</b>	<b>6,442,239</b>

Source : Unpublished Statistics, Ministerio de Trabajo y Seguridad Social

TABLE 9.18: Number of Employees (and Percentages) by Size of Social Security Recording Centre and Autonomous Community, 31 March, 1986

Within the country too, there are major differences in the importance of SME's between the less industrial regions of the interior or islands, where they provide almost all employment, and the areas characterised by large-scale industrial or service activities in Northern Spain and Madrid.

### 9.3 Case Studies of Job Creation in SME's

#### 9.3.1 Employment Change in SME's

Attempts to examine in greater detail the processes involved in the changing roles of SME's as a source of employment opportunities are limited by a severe shortage of studies using 'components of change' or 'job generation' methodologies. Without these, the best recent information available has resulted from research in the industrial suburbs of Madrid and a number of projects analysing the growth of industries in rural areas, a feature that is well summarised in Vazquez Barquero (1986). Although it was shown in Section 9.2.3 that it is often the more rural areas which are most affected by changes in SME's, the relative absence of comparable information from urban areas outside the capital is a matter of great regret. Likewise, the fact that there are no case studies of service sector SME's means that the dynamics of a major component of national employment are not properly comprehended. However, within the constraints of the availability of literature, it is possible to identify several of the key processes.

The industrial suburb of Vilaverde, some 7 km south of the centre of Madrid, has been studied by del Rio Lafuente (1984, 1986) in the most up to date review of industrial SME's in a small area. Originally developed in the 1940's as an alternative centre to Madrid for large scale industries like Marconi, Villaverde also had some SME's by 1975; in that year just over 10% of industrial employment was in establishments employing 5-250 workers. Using the municipal census of industrial areas for 1975 and 1985, del Rio Lafuente established an increase in the number of enterprises from 124 to 203 (65%), a process

most marked in Villaverde Alto to the west of the study area. However, the employment in these enterprises fell from 30,577 to 23,227 (-24%). These changes can be broken down into those occurring in firms present in both 1975 and 1985, those due to firm creation and those resulting from firm closure, and her results from doing so are presented in Tables 9.19, 9.20, and 9.21. Employment change in surviving industries (Table 9.19) shows a substantial reduction in general and much of this can be attributed to rationalisation by the three largest firms (Talbot, Marconi and Standard Eléctrica), which accounts for 6,601 of the 7,336 job losses. Complete closures of enterprises by 1985 (Table 9.20) meant the loss of 43 firms and 2,823 jobs, especially in metal production. The average size of firm closed was 66 employees and only two of the firms employing 500 and 502 people respectively, could be regarded as other than SME's in 1975. Of the 43 closures, most (36) had been started in the fifteen years before 1975, when industrial growth in Villaverde was at its peak (Mendez Gutierrez del Valle, 1986). These closures have been partly offset by the creation of 125 new enterprises and 2,809 jobs (Total 9.21), again concentrated in the new industrial area of Villaverde Alto. With an average size of 22 employees and a maximum employment of 150 (in Interlimen), these new firms are all SME's and over 70% were started in the period 1980-85.

Although these components of change have not been broken down into size groups and the official sources used means that employment changes either away from the areas designated for industry or in the sumergida are ignored, the role of SME's in Villaverde is clear. Many of the closures and all of the openings during the period 1975-85 were accounted for by SME's. However, differences in the average dimension of firms opening and closing has meant that the jobs created in the higher number of new establishments only just match the employment losses of the relatively young firms closing. Within Villaverde this match has not been perfect, with a negative job balance for the SME's of Villaverde Bajo but a net gain in employment from these changes for the larger industrial area of Villaverde Alto. However, in both areas there has been an absolute loss of industrial jobs because there has not been sufficient job creation to replace the reductions in employment in

surviving firms. The bulk of these reductions have been in the largest enterprises (Table 9.19) but even the named firms of medium size (eg Campsa) have been losing jobs. It is the recurrence of imbalances such as these that have given the southern suburbs of Madrid the highest levels of unemployment today, in place of their rapid economic growth in the 1960's.

Further evidence of the changing size of new firms in the Madrid area is provided by Lara (1986), who also used the official census of industrial areas. She shows that the average employment in enterprises opening in the Madrid region as a whole has fallen in recent years from 47 in 1981 to 37 in 1983 and 28 in 1985. In the city of Madrid alone, the reduction in average size has been dramatic - from 106 in 1981 to 58 in 1985 and a similar trend can be observed in the industrialised southern periphery. However, to the North of the City, the average size has actually increased from 13 to 18 over the period. While these figures indicate the general direction of change, there is no doubt that they overstate the actual size of typical new SME's because of their dependence on evidence from officially designated industrial areas alone.

The relationship between employment size and date of opening is also a theme of the comparative study of Arganzuela and Himanes, an old and a new industrial suburb to the South of Madrid City, by Crespo Valero et al (1986). Both areas have a high proportion of SME's in their industrial and service sectors at present: 92% of firms in Arganzuela and all those in Himanes employ under 500 people (Tables 9.22 and 9.23). The only large enterprises in either area are the 6 firms in Arganzuela which date back to the period before 1975 and the generally low rate of new firm formation there in recent years has been almost entirely due to small rather than medium sized SME's.

a) Total Employment

		<u>1975</u>	DIFFERENCE <u>1985</u>
<u>1975/85</u>			
Villaverde Bajo	3,414	2,873	-541
Villaverde Alto	24,476	17,681	-6,795
TOTAL	<u>27,890</u>	<u>20,554</u>	<u>-7,336</u>

b) Specific Firms Employment

	<u>1975</u>	<u>1985</u>	DIFFERENCE <u>1975/85</u>
TALBOT	10,582	6,500	-4,082
BOETICHER Y NAVARRO	1,133	750	-343
ASTILLEROS ESPANOLES	713	700	- 13
TAFESA	277	250	- 27
MARCONI ESPANA	3,883	2,765	-1,118
CAMPSA	390	345	- 45
J. Ma ARISTRAIM	516	650	+134
STANDARD ELECTRICA	5,151	3,750	-1,401
TOTAL	<u>23,800</u>	<u>15,750</u>	<u>-8,050</u>

Source : del Río Lafuente (1986)

Table 9.19 : Employment in Surviving Industries, 1975-85

a) VILLAVERDE BAJO

<u>Sector of Activity</u>	<u>Closed Firms</u>	<u>Employment</u>
Chemicals	7	266
Metal Products	3	78
Other Manufacturing	4	98
Repairs	1	35
	—	—
TOTAL	15	477

b) VILLAVERDE ALTO

<u>Sector of Activity</u>	<u>Closed Firms</u>	<u>Employment</u>
Chemicals	3	237
Metal Products	20	1,554
Other Manufacturing	2	520
Repairs	3	35
	—	—
TOTAL	28	2,346
TOTAL VILLAVERDE	43	2,823

Source : del Rio Lafuente (1986)

Table 9.20 : Employment in Industries that Closed, 1975-85.

a) VILLAVERDE BAJO

<u>Sector of Activity 1</u>	<u>New Firms</u>	<u>Employment</u>
Chemicals	3	15
Metal Products	5	37
Other Manufacturing	1	8
Repairs	12	20
	—	—
TOTAL	21	180

b) VILLAVERDE ALTO

<u>Sector of Activity</u>	<u>New Firms</u>	<u>Employment</u>
Chemicals	12	642
Metal Products	18	762
Other Manufacturing	31	568
Repairs	32	377
Transport	11	280
	—	—
TOTAL	104	2,629
TOTAL VILLAVERDE	125	2,809

Source : del Rio Lafuente (1986)

Table 9.21 : Employment in New Industries 1975-85.

On the other hand, Humanes shows considerable dynamism at present, with one third of all enterprises in the area in 1985 having been created in the previous two years (compared with 16% in Arganzuela), largely due to SME's with under 15 employees. It appears from Table 9.23 that the 'build up' of employment in surviving establishments is taking place but relatively slowly, for only 7.5% of those created before 1975 have over 25 employees, compared with 5.6% of those from 1976-79 and 1.3% of the 1980-83 vintage. It should also be noted that new SME's in Humanes are in different sectors of activity to those that started the industrialisation of the area. Whereas in 1981 the three most common types of activity were metal products (31.6% of firms), wood products (22.0%) and wholesale (15.5%), a fivefold increase in the number of wholesalers by 1985 meant that the shares had changed to metal products (29.1%), wood products (18.9%) and wholesale (24.9%).

In addition to these studies of SME development based on official sources there have been two attempts to cover the full range of industrial enterprises around Madrid by the use of questionnaires in selected areas. Both sought to investigate the activities of firms that operate on the margins of legality (for example by occupying an approved site but not observing all the requirements of worker safety legislation) or wholly within the sumergida. The smaller of the two projects was also based in the Southern part of Madrid and focussed on an area of Leganes known as La Fortuna. Here Jimenez Cobo (1986) surveyed 65 firms, all industrial or warehousing SME's, and the bulk of these employed under 20 persons (Table 9.24). Altogether these provided 561 jobs in 1985, mainly in metal products and shoe making. Contrary to initial expectations, the creation of these enterprises was not obviously a recent phenomenon, in response to the shortage of employment opportunities elsewhere in Southern Madrid, but rather 61% had been there since before 1978 (although a high non-response to the question about date of origin may have distorted the true picture). The most important conclusion from the study is that the inclusion of SME's in the sumergida does not necessarily mean a marked reduction in the average size of firm in an area: the proportion of very small firms (employing 5 or less) is actually lower in La Fortuna than that derived



YEAR OF OPENING	BEFORE 1940		1941-1960		1961-1975		1976-1980		1981-1985		TOTAL	
	FIRMS	%	FIRMS	%	FIRMS	%	FIRMS	%	FIRMS	%	FIRMS	%
5 or less	-	-	2	(8.3)	1	(5.0)	2	(40.0)	5	(33.3)	10	(13.4)
6 - 15	3	(27.3)	3	(12.5)	7	(35.0)	1	(20.0)	5	(33.3)	19	(25.3)
16 - 25	2	(18.2)	2	(8.3)	2	(10.0)	2	(40.0)	-	-	8	(10.7)
26 - 35	-	-	-	-	1	(5.0)	-	-	1	(6.7)	2	(2.7)
36 - 50	2	(18.2)	3	(12.5)	2	(5.0)	-	-	1	(6.7)	8	(10.7)
51 - 100	-	-	1	(4.2)	3	(15.0)	-	-	-	-	4	(5.3)
100 - 250	1	(9.1)	4	(16.7)	1	(5.0)	-	-	1	(6.7)	7	(9.3)
251 - 500	2	(18.2)	6	(25.0)	1	(5.0)	-	-	2	(13.3)	11	(14.7)
501 - 1000	-	-	2	(8.3)	1	(5.0)	-	-	-	-	3	(4.0)
1000 +	1	(9.1)	1	(4.2)	1	(5.0)	-	-	-	-	3	(4.0)
<b>TOTAL</b>	<b>11</b>	<b>(100)</b>	<b>24</b>	<b>(100)</b>	<b>20</b>	<b>(100)</b>	<b>5</b>	<b>(100)</b>	<b>15</b>	<b>(100)</b>	<b>75</b>	<b>(100)</b>

Source : Crespo Valero et al (1986)

Table 9.22: Number of Firms by Employment Size and Year of Opening, Arganzuela

YEAR OF OPENING	BEFORE 1975		1975-1979	1980-1983	1984-1985	TOTAL
	FIRMS	%	FIRMS %	FIRMS %	FIRMS %	FIRM %
5 or less	24	(35.8)	65 (52.8)	180 (59.0)	196 (76.9)	465 (62.0)
6 - 15	22	(32.8)	34 (27.6)	93 (30.5)	45 (17.6)	194 (25.9)
16 - 25	14	(20.9)	14 (11.4)	9 (3.0)	4 (1.6)	41 (5.5)
26 - 35	1	(1.5)	3 (2.4)	2 (0.7)	1 (0.4)	7 (0.9)
36 - 50	3	(4.5)	2 (1.6)	1 (0.3)	0 (0.0)	6 (0.8)
51 - 75	1	(1.5)	2 (1.6)	0 (0.0)	1 (0.4)	4 (0.5)
75 +	0	(0.0)	0 (0.0)	1 (0.3)	0 (0.0)	1 (0.1)
No employees	2	(3.0)	3 (2.4)	19 (6.2)	8 (3.1)	32 (4.3)
<b>TOTAL</b>	<b>67</b>	<b>(100)</b>	<b>123 (100)</b>	<b>305 (100)</b>	<b>255 (100)</b>	<b>750 100</b>

Source : Crespo Valero et al (1986)

Table 9.23: Number of Firms by Employment Size and Year of Opening, Humanes de Madrid

from official sources in nearby Humanes by Crespo Valero et al (1986). In part, this reflects the inclusion of some service activities characterised by very small establishments in the latter study, but it is also a reminder that some of the establishments operating illegally have relatively large labour forces - amongst the shoe factories, which, according to Jiménez Cobo, mainly employ young women illegally, the average size is 35.

<u>Size (Employees)</u>	<u>Firms</u>
4 or less	24 (40.0%)
5-10	23 (38.0%)
10-20	13 (21.6%)
20-50	4 (6.6%)
50+	1 (1.6%)
<hr/> TOTAL	<hr/> 65 (100)

Source : Jiménez Cobo (1986)  
Table 9.24 : Firms by Employment Size, La Fortuna

The larger of the Madrid questionnaire projects (Celada et al, 1985) covered four contrasting areas : Fuenlabrada and Humanes, two of the Southern suburbs; Paracuellos, part of the newly industrialised belt to the North-East of the City; the quarter of Tetuan in Madrid City and an industrial estate at Arroyo de Butarque, close to Villaverde. Much of their evidence came from the first two of these areas so attention will be primarily directed towards them in this review. The size of industrial firms in Paracuellos is summarised by year of opening in Table 9.25 and shows there to have been little difference in the size

<u>Year of Opening</u>	<u>1975-1977</u>		<u>1978-1980</u>		<u>1981-1982</u>		<u>TOTAL</u>	
<u>SIZE (Employees)</u>								
0 - 4	14	(56.0)	20	(50.0)	29	(59.2)	63	(55.3)
5 - 14	10	(40.0)	14	(35.0)	17	(34.7)	41	(36.0)
15 - 24	0	(0.0)	6	(15.0)	0	(0.0)	6	(5.3)
25 - 49	0	(0.0)	0	(0.0)	3	(6.1)	3	(2.6)
50 - 99	0	(0.0)	0	(0.0)	0	(0.0)	0	(0.0)
100 +	1	(4.0)	0	(0.0)	0	(0.0)	1	(0.9)
<hr/> TOTAL	<hr/> 25	<hr/> (100)	<hr/> 40	<hr/> (100)	<hr/> 49	<hr/> (100)	<hr/> 114	<hr/> (100)

Source : Celada et al (1985)

Table 9.25: Firms by Employment Size and Year of Opening, Paracuellos

profile of the SME's according to their starting date. This information on year of opening also allows a comparison with the number of firms in the area according to the 1978 Industrial Census, which suggests that 33 of the 1978 enterprises had closed by 1982 - a failure rate of 46% in four years. For Fuenlabrada - Humanes, Celada et al (1985) report on size distribution in employment terms only, with 81.9% of employees in firms with 50 or less employees and 93.5% in SME's employing no more than 100. In both areas, metal production was the major activity, with 39% of firms in Paracuellos and 40% in Fuenlabrada - Humanes. In terms of the creation of enterprises in these areas, an important influence in these two cases has been the relocation of activity, either from Madrid itself or, in Fuenlabrada - Humanes alone, from within the surrounding industrial ring (for a general review of industrial deconcentration in Madrid see Mendez Gutierrez del Valle, 1986). Likewise, in their analysis of industrial growth south of Barcelona, Belil & Clos (1985) established that about one fifth of new SME's, had relocated there.

One other study of SME's in an urban environment is worth noting here for it sought to identify the role of activities in the sumergida and also provides evidence of change away from the influence of Madrid. The case chosen is Sabadell, a city of some 200,000 people located 25 km from Barcelona (Casals Couturier and Vidal Villa, 1983; Casals Couturier 1986). It has had recorded levels of unemployment above 20% throughout the 1980s and the proportion reached 32.5% in 1985, largely as a result of the problems facing its major industrial sector : wool textiles. However, despite a reduction in the recorded labour force of 12% and cut of 34% in the industrial machinery during the late 1970s and early 1980's, levels of textile output have been rising. The reason for the coexistence of high levels of official unemployment and continued textile production is basically the shift from factories to the traditional system of homeworking and small workshops in the sumergida. There is evidence of this in the changing pattern of employment by size within the textile industry - while existing large enterprises (with over 500 workers) have lost 5,300 jobs in recent years, medium ones have lost 2,000 and those SME's with 50-100 workers have cut 136 jobs, the smallest SME's have gained 112 jobs. The growth of homeworking is more

difficult to demonstrate but Casals Couturier (1986) estimates that one third of textile output now comes from this source and she cites the increase in domestic electricity consumption of 34% between 1977 and 1983 (compared with an increase of only 9% for industrial purposes) as a sign of the introduction of textile machinery into homes.

The second major set of case studies of SME formation and employment relate to industrial development in rural areas and many of them have been reviewed in Vazquez Barquero (1983). These show that almost all the current industrial expansion in the small towns of non-metropolitan Spain is associated with SME's and Vazquez Barquero (1986) has subsequently sought to establish the extent to which such expansion is indigenous. Just as in the urban case studies considered above, there are important local variations in the process by which new firms have been formed but an indication of the most significant trends can be obtained from a review of only four cases: Puente Genil, Southern Cordoba, Aranda de Duero and Galicia.

Puente Genil is located in the South of Cordoba province, where agricultural employment has halved since 1950 and industrial employment doubled (Granados Cabezas et al, 1984). The industrial structure of this urban centre is dominated by the food industry (22.5% of firms and 43.5% of employees) and construction (44.4% of firms and 30.6% of employees) and only 2 of the 151 firms employ more than 100 workers. Indeed, 84.8% of firms have under 20 employees: a proportion that reaches 100% amongst timber workshops and 94.0% in construction. All but the largest food processing firms are oriented towards the regional market and had recorded limited employment growth in the years preceding the survey. Within each sector of activity, the amount expended on wages varied with the size of firm: the smallest food processors (under 20 workers) allocate 35% to wages while the largest ones (over 100 workers) used only 18% of the expenditure for this, allowing 10% for commercialisation and management. Likewise amongst the metal workshops, the smallest SME's spent 45% of their funds on wages but those with 20-99 workers used only 39%. All the firms, but especially the larger

ones, make use of seasonal labour for an average of 31% of their requirements - in the food processing plants this proportion is 45%.

The clothing industry of rural Southern Cordoba which allows a closer look at the processes of change in SME's within a single sector, using the reports of Garcia Verdugo et al (1983) and Sanchez Lopez et al (1984). They surveyed 50 enterprises, mostly in the town of Priego with the others scattered amongst 13 small towns and villages. 12 of these were cooperatives which employed 670 people, compared with 704 in the other firms. Details of their size distribution are given in Table 9.26 and it is immediately clear that these are all SME's. The majority of both types of enterprise employ under 50 people but the presence of two big cooperatives means that medium sized SME's account for a large share of all employment. The oldest surviving firm dates from 1950 and 20% of them existed before 1970. A further 48% were started in the 1970's and

SIZE (Employees)	COMMERCIAL FIRMS		COOPERATIVES	
	FIRMS	EMPLOYMENT	COOPERATIVES	EMPLOYMENT
1 - 5	7 (18.4)	23 (3.3)	0 (0.0)	0 (0.0)
6 - 10	10 (26.3)	69 (9.8)	3 (25.0)	22 (3.3)
11 - 20	10 (26.3)	141 (20.0)	3 (25.0)	48 (7.2)
21 - 50	8 (21.1)	238 (33.8)	3 (25.0)	86 (12.8)
51 - 100	3 (7.9)	233 (33.1)	1 (8.3)	59 (8.8)
101 - 250	0 (0.0)	0 (0.0)	2 (16.7)	455 (67.9)
TOTAL	38 (100)	704 (100)	12 (100)	670 (100)

Source : Garcia Verdugo et al (1983)

Table 9.26 : Firms and Employment (and Percentages) by Size of Firm in the Clothing Industry of Southern Cordoba.

30% had been created in the three years prior to this study. As to the circumstance of their creation, Sanchez Lopez et al (1984) have considered the background of the enterprise founders and show their strong links to the clothing industry. 30% of the initial entrepreneurs

in clothing SME's were previously commercial agents in that sector and a further 32% were ex-workers in the industry. Only 6% had an agricultural background and 2% were accountants. Over half had no more than primary education, although the larger enterprises were run by people with at least some industrial training behind them.

The third rural study area is Aranda de Duero, a town of some 20,000 in Northern Castilla-Leon, in which Sancho Hazak (1984) has examined both indigenous industry and the effects of the opening of a plant by Michelin in 1971. Although no details of firm size are provided, it is clear that most of the indigenous sector consists of SME's, so an idea of the turnover of SME's in such an environment can be obtained from his data presented as Table 9.27. The overall rates of firm formation and closure are higher in the second part of the period studied at 57% and 55% respectively, but, unfortunately, it is not possible to trace the employment consequences of this. Table 9.27 also indicates the degree of variability in rates of enterprise birth and death, with the contrast between metal products (in which new firms in 1975-82 increased the initial stock by 88%) and wood products (a 30% increase through new firms). However, even the highest rates of firm formation in this case study fail to match those observed amongst the smallest SME's (employing under 10 people) in the food industry of Cantabria. Over a similar period, 1967-85, the the initial stock of 124 firms has been added to by 187 new ones and reduced by 158 to give a total of 153 in 1985 (Araoz et al, 1986).

	<u>Existing</u> <u>Firms</u>	<u>Firm</u> <u>Closures</u>	<u>New</u> <u>Firms</u>	<u>Existing</u> <u>Firms</u>	<u>Firm</u> <u>Closures</u>	<u>New</u> <u>Firms</u>	<u>Existing</u> <u>Firms</u>
Sector	1970	1970-75	1970-75	1975	1975-82	1975-82	1982
Food	46	11	8	43	22	26	47
Textiles	21	7	7	21	15	25	21
Wood Products	20	5	5	20	5	6	21
Metal Products	27	9	6	24	18	21	27
Others	31	11	9	29	15	16	24
<b>TOTAL</b>	<b>145</b>	<b>43</b>	<b>35</b>	<b>137</b>	<b>75</b>	<b>78</b>	<b>140</b>

Source : Sancho Hazak (1984)

Table 9.27 : Industrial Firm Openings and Closures, Aranda de Duero, 1970-82

The question of the balance between employment growth through in situ change or firm creation can be explored further by reference to the study of rural Galicia by Precedo Ledo et al (1985). Again, their data on firms and employment is not subdivided but Galicia is a region with an above average share of employment in SME's (Table 9.18) and the average size of firms used in their study was 13.9 employees so the likelihood is that SME's have had an important role in the trends observed. For 228 firms in the rural areas which had received credits from the government and were compared over the period 1981 to 1985, 78 had no increase in employment. The growth in jobs was accounted for by 96 firms, who added 443 new workers to a 1981 stock of 1996 (+22.2%), and 51 new firms, with 383 employees between them. In other words, new SME formation was responsible for 46.4% of employment created by these credits and the expansion of existing firms provided the bulk of new jobs.

### 9.3.2 The Contribution of SME's to Job Creation

It is difficult to reach firm conclusions about the actual or potential contribution of SME's to the solution of the national unemployment problem in the short or long term because the evidence available is so fragmentary. The case studies viewed have been reinforced the findings from official statistics (Section 9.2) that employment reductions in larger enterprises are making SME's a more important element in the industrial and service structure of Spain. However, it appears that SME's themselves are becoming smaller, not least as a higher proportion are found in the service sector, and increasing their own employment once started quite slowly. High rates of births and deaths amongst SME's are apparent in both rural and urban environments and these rates are probably increasing in the 1980s. The very parts of SME activity that seem from these studies to be the most dynamic - those in the sumergida and/or the service sector - are those which are least well understood.



## 9.4 Policies on the Development of SME's

### 9.4.1 Economics Policy Formation in Spain

The Spanish government has sought to encourage economic development by a variety of means over the years. The actual measures have included fiscal policy, a range of subsidies to indigenous and foreign firms, labour market policy, the creation and operation of the Institute Nacional de Industria and different forms of regional assistance. All have had some effect, as intended or not, on the SME's that dominate the national economy and some may continue to outweigh the actual impact of policies directed at SME's in particular. Extracting the single set of SME policies from the whole would never be easy, but in Spain today it has been made much more difficult by changes in the allocation of responsibility for economic policy between national and regional governments. Under the 1978 constitution, the governments of the Autonomous Communities have considerable freedom in formulating their own economic policies, most of which influence SME's to a greater or lesser extent. Thus SME's are likely to be eligible for training and financial assistance from the regional government, as well as through the channels of central government. For SME's in the service sector, the Autonomous Communities are already the major influence but for industrial ones, the Ministerio de Industria y Energia has retained some important responsibilities. It is these alone that will be discussed in detail in section 9.4.2 but the great diversity of strategies at regional level needs to be borne in mind throughout.

### 9.4.2 The Activities of IMPI

The importance of specific policies to assist SME's has only recently been recognised in Spain but there are now numerous agencies involved in their design and delivery. Olle (1986) provides a comprehensive coverage of this with an indication of this type of assistance available. From her list it is worth emphasising the contribution of three institutions in addition to the obvious one, IMPI. First, the Instituto Nacional de Empleo, part of the Ministry of Labour, as this

offers preferential treatment to SME's in its temporary employment programmes by allowing a higher proportion of their employees to have short-term contracts with reduced social security payments. Secondly, the Centro para el Desarrollo Tecnológico e Industrial which can help SME's both by financing technological innovation projects and by helping firms to participate in international fairs. Finally, the Banco de Crédito Industrial which can finance up to 75% of new installations at a lower rate of interest for SME's. Each of these agencies has a key role alongside the activities of IMPI.

IMPI was created in October 1976 and has undergone a number of organisational changes, the latest of which should see it emerge as a public company at the end of 1986. It operates with a staff of about 60 and offices in the 17 Autonomous Communities as well as its base in Madrid. The actual roles of these offices have been changing, following agreements between IMPI and the regional governments about their tasks and financing. At present, their main function is as part of IMPI's activities in the provision of 'software' - each of which will be introduced before considering its 'hardware' support.

The first of these 'software' activities is the one for which the regional offices were originally opened : the Sistema de Información Empresarial (SIE), which makes information about exhibitions, laws, training courses, potential partners in subcontracting, exporting or innovation and the like available to SME management. It is intended that the present network of office should be further extended, both by increasing its number to 25 and linking into the EC's 'BC-NET' to broaden the base of possible inter-firm collaboration.

Another way in which IMPI is involved in the promotion of subcontracting among SME's is through its participation in the Comisión Nacional de la Subcontración Industrial. This has a collection of information about the practicalities of subcontracting for interested firms, as well as providing publications, conferences and training courses on the subject. The Commission also organises subcontracting fairs and seeks to coordinate promotional activity in this field.

Subsidised management training is a long standing feature of IMPI's programme and from 1979 to 1985, it has held 1,259 courses or seminars with an attendance of over 36,000. However, the peak year for courses was 1982 (9,000 enrollment) and the numbers participating had fallen to only one third of this by 1985. How far future plans to run courses specifically on subcontracting and jointly with the Autonomous Communities will lead to a higher level of activity remains to be seen.

In addition to the spread of information through the SIE and courses, IMPI has a publication programme which includes 25,000 copies of a monthly journal (Cuadernos IMPI), a set of manuals on topics like the management of stocks or applications of VAT, monographs and textbooks for SME management courses.

The current allocation of IMPI resources between these information providing activities is not available but data for the years 1979 to 1982 (first half only) are given in Olle et al (1984). These give a useful indication of trends to that date so they are presented in Table 9.28 even though the categories do not correspond perfectly to the present structure of activities.

Activity	1979	1980	1981	1982*	TOTAL
Management Training	7.6	11.2	25.8	20.2	64.8
Management Advice	7.8	5.5	10.2	1.5	25.0
Studies	14.1	27.5	44.9	13.2	99.7
Publications	39.5	37.0	31.2	40.8	148.5
Assistance for Fair-participants	0.4	5.8	9.1	2.2	17.5
TOTAL	69.4	87.0	121.2	77.9	355.5

Source : Olle et al (1984)

\* = 1st half

Table 9.28: Expenditure on 'software' by IMPI, 1979-82 (million pesetas)

The importance of the publication programme and research studies (many of which are subsequently published) is evident throughout the period. However, the major part of IMPI expenditure (some 79% to 1982) goes into 'hardware' assistance of various sorts. The three basic elements are the interest subsidies, financial mutual fund societies and

participating in collective societies so these will be presented in turn.

The availability of credit to SME's with a rate of interest fixed at 12.5-13.5%, or, later, 3.5 points below the general rate, has been a part of IMPI's activities since 1983. The precise rules and channels of finance have been changed several times since then but now includes reduced interest on part of investment for modernisation of an SME or the initial costs of setting up a firm. In 1983 and 1984 earlier forms of such help cost IMPI 1,737 million pesetas and could have resulted in the creation of 5,500 new jobs - a cost of 0.32 million pesetas per job (IMPI, 1986).

A different way of assisting SME's to obtain finance by IMPI has been the creation of Sociedades de Garantia Reciproca (SGR) or mutual fund societies since 1978. These exist to guarantee loans made to SME's and start with up to 45% of their capital from IMPI (and, since 1981, further guarantees from the Sociedad Mixta del Segundo Aval). By 1985, there were 24 of these SGR's with 36,335 members. IMPI accounts for 19% of the 8,683 million pesetas capital and the Autonomous Communities provided 17%. It is intended that the number of SGR's falls to at most 22 through absorption in 1986 and IMPI increases its holding to improve their financial base (for further details see IMPI, 1986 p 17-29).

Thirdly, there are Sociedades de Accion Colectiva - collective societies - groups of SME's which seek to collaborate in a specific task (eg. exporting; sharing a common service, such as quality control; bulk purchasing). IMPI can assist these by providing up to 45% of their capital for up to six years. By 1986 there were 65 such societies linking 1506 SME's and IMPI was directly involved in 25 of them, as shown in Table 9.29. The considerable importance of these societies in terms of the employment that they affect in the Pais Valenciano is especially striking. During 1986 another 12 societies should be created, particularly in Cataluña and Anadlucia. IMPI provides further help for these societies by collaborating in their management and investment decisions.

Taken together these three types of financial aid dominated the expenditure data collected by Olle et al (1984) and summarised in Table 9.30 below.

	Societies	Capital ( '000 pesetas)	Participacion by IMPI (%)	Associated SME's	Employment in SME's
Andalucia	3	315,000	18.6	172	5,010
Aragon	2	70,025	36.4	11	241
Asturias	1	45,000	40.0	3	100
Baleares	6	344,380	40.4	124	2,400
Canarias	1	90,000	20.0	--	--
Castilla-La Mancha	2	16,000	31.2	30	124
Cataluna	5	191,640	39.9	131	679
Madrid	1	10,000	35.0	23	650
Murcia	1	240,000	16.1	96	1,200
Pais Valenciano	3	126,780	39.4	283	13,863
<b>TOTAL</b>	<b>25</b>	<b>1448,825</b>	<b>29.9</b>	<b>873</b>	<b>24,267</b>

Source : IMPI (1986)

Table 9.29: Sociedades de Accion Colectiva by Autonomous Community, 1986

Activity	1979	1980	1981	1982*	TOTAL
Participation in SGR's	20.0	100.6	372.5	50.0	543.1
Interest Subsidies	0.0	0.0	0.0	300.0	300.0
Participation in Collective Societies	24.0	161.6	207.1	134.6	527.7
TOTAL	44.4	262.2	579.6	484.6	1307.8

Source : Olle et al (1984)

\* 1st half

Table 9.30 : Expenditure on 'hardware' by IMPI, 1979-82 (million pesatas)

#### 9.4.3 Government Policy and SME's

The value of IMPI's work is difficult to judge because of the impossibility of isolating its impact from those of market changes, other central government policies (such as the Zonas de Urgente Reindustrializacion) and initiatives by regional or local government (eg. Aguire Kerexeta, 1985). Furthermore, the structure of IMPI's own policies has changed throughout its relatively short life. It is thus not surprising that there has not been a systematic review of its impact published. However, the report prepared for IMPI by Olle et al (1984) does contain an initial assessment of its record so far. They are critical of the effectiveness of much of IMPI's 'hardware' assistance. In the case of the subsidised interest payments, they argue that its spread is limited by poor publicity and excessive documentation required of SME's and the operation of the SGR's is criticised for their lack of professional management and poor record of involvement of financial institutions. In relation to the collective societies, they claim that public money has supported private interests and 80% of the societies have not realised their initial proposals. On the 'software' side, IMPI has had greater success, especially in its publishing, though the management courses are criticised as underfunded and, initially, too rigid in structure. Olle et al (1984) also comment on the need for better coordination in relation to subcontracting regulations and changes in the labour laws to give SME's greater flexibility. This set of criticisms has not been responded to formally but some of the current changes in IMPI appear to be moving the institute in the directions suggested by their authors.

## 9.5 Conclusions

SME's represent a large and growing part of the Spanish economic structure. Whatever the problems of precise measurement, some two-thirds of industrial employment is provided by SME's and about three quarters of service jobs are in SME's. Many of the firms are very small indeed: three quarters of all establishments registered by the Ministerio de Trabajo y Seguridad Social have 5 workers at most. While this predominance of SME's is not found in all sectors of economic activity or in all regions of the country, the reduction in employment by the large industrial firms evident in the 1980's could be producing a convergence in the size distribution of activities, as the 'large plant' economies of areas like Villaverde (section 9.3.1) or whole regions like the Asturias move closer to this average pattern. Indeed, this process may have gone further than official statistics show if this increasing absolute employment in the smallest SME's is being matched by growth in the SME's of the sumergida. Until there is a marked improvement in our knowledge of the dynamics of this part of the economy (presumably through case studies), there is a strong possibility that we will know more about the processes of job loss, through labour force reductions and SME deaths, than those of job creation. Until the analysis of the wide variety of SME's in the sumergida moves from collecting anecdotes to examining aggregate statistics, advice on the possibilities of tackling Spain's employment problems will remain incomplete and inaccurate.

The lack of information on the sumergida is also evident in relation to the service sector; the very parts of the economy that could be leading the way in terms of job generation are the least understood and furthest from the concerns of SME policy makers. This places two challenges before the Spanish authorities. First, they need to turn an analytical rather than a blind eye to the sumergida. Not, in the first instance, with a view to regulating parts, or all of it, but rather in order to identify the reasons, both economic and social, for the break-up of existing enterprises and their replacement by SME's operating on, or beyond, the margins of legality. How often is the decision of

entrepreneurs to flout important parts of the law due to the possibility of paying lower wages or reducing investment in worker protection? Is it a response to slow planning procedures or ineffective inspections of premises? Who are the people most likely to find the jobs created in the sumergida rather than the formal economy? How does the activity of SME's in this part of the economy relate to those operating legally? These are the sorts of questions that need to be answered in order to take a difficult decision about the desirability of making policy interventions. Can central and regional governments risk interfering with a significant section of industrial and service enterprises, which are helping to provide jobs and cushion the unemployed, because some of their activities are undesirable and some of their working conditions are unacceptable?

The response to that challenge is partly dependent on the way in which a second challenge is met. This one concerns the design of both SME policy and the mechanisms for its delivery. Not only are SME's in the submergida - and the smallest legal SME's - unable to benefit from the publically funded assistance of IMPI or regional agencies but the service sector has been largely neglected too. Thinking of ways in which agencies like IMPI can reach 'the unreachable' amongst SME's, leaving those SME's that can be assisted by the conventional sources of finance and information to fend for themselves, is part of the challenge. However, it also involves a clarification of the prime objectives of such policies - are they designed to speed job generation or to produce viable SME's? Finally, the reformulation of SME policies has to address the unequal treatment of industrial and service activities. Whether the aims are job generation or enterprise creation, the means are 'hardware' or 'software' and the sumergida is to be included or ignored, SME policies for the manufacturing sector alone are unlikely to be able to cope with the magnitude of the employment problem in Spain.

Both challenges to governments with an interest in economic management and employment promotion exist in some form elsewhere in the European Community but the particular history of enterprise development, the



marked regional diversity of the country, the magnitude of the unemployment problem and the emerging division of responsibilities between levels of government mean that the Spanish responses to them should be different and distinctive. Without a prompt and imaginative reaction to these challenges, Spanish SME's will do little to counterbalance the negative employment effects of large enterprises. However, greater knowledge of the SME's as a whole and a re-evaluation of policies directed towards them, the SME's could be the foundation of a new wave of employment growth and prosperity in Spain.



APPENDICES



Appendix 1

CNAE : Classification of Economic Activities (1975)

<u>Division</u>	<u>Group</u>	<u>Activity</u>
0		AGRICULTURA, GANADERIA, CAZA, SILVICULTURA Y PESCA
	01	Producción agrícola
	02	Producción ganadera
	03	Servicios agrícolas y ganaderos
	04	Caza y repoblación cinegática
	05	Silvicultura
	06	Pesca
1		ENERGIA Y AGUA
	11	Extracción, preparación y aglomeración de combustibles sólidos y coquerías
	12	Extracción de petróleo y gas natural
	13	Refino de petróleo
	14	Extracción y transformación de minerales radioactivos
	15	Producción, transporte y distribución de energía eléctrica, gas, vapor y agua caliente
	16	Captación, depuración y distribución de agua
2		EXTRACCION Y TRANSFORMACION DE MINERALES NO ENERGETICOS Y PRODUCTOS DERIVADOS INDUSTRIA QUIMICA
	21	Extracción y preparación de minerales metálicos
	22	Producción y primera transformación de metales
	23	Extracción de minerales no metálicos ni energéticos; turberas
	24	Industrias de productos minerales no metálicos
	25	Industria química

<u>Divison</u>	<u>Group</u>	<u>Activity</u>
3		INDUSTRIAS TRANSFORMADORAS DE LOS METALES, MECANICA DE PRECISION
	31	Fabricación de productos metálicos (excepto máquinas y material de transporte)
	32	Construcción de maquinaria y equipo mecánico
	33	Construcción de maquinas de oficina y ordenadores (incluida su instalación)
	34	Construcción de maquinaria y material eléctrico
	35	Fabricación de material electrónico (excepto ordenadores)
	36	Construcción de vehículos automoviles y sus piezas de repuesto
	37	Construcción naval, reparación y mantenimiento de buques
	38	Construcción de otro material de transporte
	39	Fabricación de instrumentos de precisión, optica y similares
4		OTRAS INDUSTRIAS MANUFACTURERAS
	41/42	Industrias de productors alimenticios, bebidas y tabaco
	43	Industria textil
	44	Industria del cuero
	45	Industrias del calzado y vestido y otras confecciones textiles
	46	Industrias de la madera, corcho y muebles de madera
	47	Industria del papel y fabricación de articulos de papel: artes gráficas y edición
	48	Industrias de transformacion del caucho y materias plásticas

49	Otras industrias manufactureras
49	Otras industrias manufactureras



<u>Division</u>	<u>Group</u>	<u>Activity</u>
5		CONSTRUCCION
	50	Construccion
6	61	Comercio al por mayor
	62	Recuperacion de productos
	63	Intermediarios del comercio
	64	Comercio al por menor
	65	Restaurantes y cafes (sin hospedaje)
	66	Hosteleria
	67	Reparaciones
7		TRANSPORTE Y COMUNICACIONES
	71	Transporte por ferrocarril
	72	Otros transportes terrestres
	73	Transporte maritimo y por vias navegables interiores
	74	Transporte aereo
	75	Actividades anexas a los transportes
	76	Comunicaciones
8		INSTITUCIONES FINANCIERAS, SEGUROS, SERVICIOS PRESTADOS A LAS EMPRESAS Y ALQUILERES
	81	Instituciones financieras
	82	Seguros
	83	Auxiliares financieros y de seguros. Actividades inmobiliarias
	84	Servicios prestados a las empresas
	85	Alquiler de bienes muebles
	86	Alquiler de bienes inmuebles

<u>Division</u>	<u>Group</u>	<u>Activity</u>
9		OTROS SERVICIOS
91		Administración Pública, Defensa nacional y Seguridad Social
92		Servicios de saneamiento de vías públicas, limpieza y similares
93		Educación e investigación
94		Sanidad y servicios veterinarios
95		Asistencia social y otros servicios prestados a la colectividad
96		Servicios recreativos y culturales
97		Servicios personales
98		Servicios domésticos
99		Representaciones diplomáticas y Organismos internacionales

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## 10. Small and Medium Sized Enterprises and Employment Creation: Ireland

### 10.1 Recent Trends in employment and unemployment

In 1983, Ireland had a total population of 3,508,000 and a total labour force of 1,309,000 of whom 184,000 (14.1 per cent) were unemployed. Of the employed population, 16.8 per cent were involved in agriculture, forestry and fishing, 29.4 per cent in industry and construction, and 53.8 per cent in services. Figure 10.1 summarises trends in employment and unemployment in Ireland between 1970 and 1983. It can be seen that the total level of employment grew steadily between 1970 and 1980, and in common with most OECD countries, has declined since 1980 with a corresponding rise in the level of registered unemployment. The latest figures for Ireland (June 1986) reveal a total level of unemployment of 232,500 or 18 per cent of the civilian working population.

The aggregate figures presented in Figure 10.1 mask the significant changes which have taken place since 1970 in the industrial structure of employment. Table 10.1 shows that agricultural employment declined by almost 100,000 (over 30 per cent) between 1970 and 1983, whereas service employment increased steadily over that period. The trend for industrial employment is slightly more complex with increases taking place in most years during the 1970s, but with a 15 per cent decline occurring between 1979 and 1983. Thus, service employment has increased its share of the labour force by 10 per cent, and the share of agricultural employment has declined by a similar amount, whereas industry has remained steady at around 30 per cent of the workforce.

Of particular interest to this study is the trend in self employment in Ireland which is shown in Table 10.2 for the years 1970-1983. If we examine the total figures, it can be seen that self employment declined in both absolute and relative terms between 1970 and 1981, with a small increase taking place between 1981 and 1983. However, these figures are distorted by the inclusion of agriculture, where over 85 per cent of workers are self employed and which has suffered a huge decline in numbers over this period. Table 10.3 illustrates the trend in

non-agricultural self employment. The unemployment rate for each year is also given. Non-agricultural self employment remained stable in absolute and relative terms between 1970 and 1974. In 1975, self employment increased by 12,000 at a time when unemployment rose by almost five percentage points. A similar pattern can be observed for the 1981 to 1983 period, when unemployment and non-agricultural self employment increased in parallel. These figures lend some support to the hypothesis that unemployment 'forces' some workers into self employment.

#### 10.2 Trends in the firm size distribution of employment

Data is available for the size distribution of employment by establishment for manufacturing industry from two main sources. The Central Statistics Office (CSO) carries out a Census of Industrial Production on an annual basis, with analyses by size being published at regular intervals, the latest available figures being for 1980. The Industrial Development Authority (IDA) have carried out an Annual Employment Survey since 1973. The two sets of data differ in many respects (see Kennedy et.al. (1985) for details) and in particular, an extension of the coverage of the CSO survey in 1979 means that comparisons over time are difficult. The relevant tables are reproduced here as Tables 10.4 and 10.6.

Table 10.4 shows that a majority of industrial establishments in Ireland employ less than 20 workers, and around 85 per cent of plants could be described as small or medium sized. Of course, some small plants may be part of larger enterprises; nonetheless it appears that small and medium sized firms account for well over three-quarters of all enterprises. The figures for employment by establishment size are presented in Table 10.5. This shows that small plants account for only 11.5 per cent of industrial employment. Large plants (100+ employees) employ the majority of industrial workers (60 per cent), with very large establishments accounting for one in five industrial workers in 1980.

The trend over time is difficult to discern due to the extended coverage of small plants in the 1980 CSO survey. However, it is clear that, in common with other OECD countries, small firms significantly reduced their share of employment from 1929 to the end of the 1960s. The share of small firms has increased slightly over the 1970s (Table 10.5) with small-medium (50-199) firms exhibiting the highest growth in terms of percentage of total employment. Although the trend for small firms is rather mixed, the changing position of large plants is clear. Employment in plants with 200-499 workers grew relatively slowly between 1973 and 1980, and large plant (500+) employment suffered a decline.

Thus the static data on employment by plant size suggests that around one-quarter of Ireland's manufacturing employees work in plants with below 50 employees, and the trend appears to be a decline in large plant employment, and an increase in the share of small and medium sized firms in total manufacturing employment.

### 10.3 Small Firms and Job Creation in Manufacturing 1973-81

The static figures presented in Section 10.2 tell us little about the dynamic processes by which changes in the size structure of employment occur. There is only one study for Ireland which traces the development of individual firms through time and quantifies the contribution of SMEs to job creation. This is the study by O'Farrell (1986) of employment change in manufacturing establishments between 1973 and 1981.

The O'Farrell study is based upon the records of the Irish Industrial Development Authority (IDA), who conduct an annual survey of employment in manufacturing establishments with 3 or more employees. The number of employees includes executives, drivers and sales staff, but excludes part-time or temporary workers. The survey is a full census of all eligible establishments, except that only a sample of plants in County Dublin employing less than 50 people was covered prior to 1979. Estimates for 1973 employment are available for plants in County Dublin which survived through the 1973-79 period, and employment figures are available for the year of opening of plants which started between 1973

and 1979. It is also possible to calculate figures for employment loss due to closure of County Dublin firms with less than 50 employees (O'Farrell, 1986, Appendix I), but it is not possible to categorise these losses by size group, industry or other characteristics. Hence, the figures reproduced in Table 10.7 include a separate category called "plants < 50 in Dublin".

Table 10.7 shows that plants with less than 300 employees experienced net increases in employment over the 1973-1981 period, whereas plants with 300 or more employees lost a total of 8,061 jobs. It should be emphasised at this point that these results are based upon establishment rather than enterprise data. A small establishment may be part of a larger enterprise, rather than being a small firm as such. This means that the figures in Table 10.??overstate the contribution of small firms to employment growth, as some of the 17,441 net increase recorded by plants will be accounted for by branches or subsidiaries of larger firms. Indeed, O'Farrell's figures (1986, p30, Table 3.3) suggest that branches of multinational enterprises were particularly important in job generation, with a net increase of 22,834 jobs over the 1973-81 period. This contrasts with a loss of 6,570 jobs in Irish-owned multi-plant companies, and a net increase of 3,128 in indigenous single plant firms.

Returning to Table 10.7, it is useful to examine the individual components of employment change in some detail. A total of 57,594 jobs were created in the 2,047 plants which opened after 1973 and survived to 1981. Over half of the new plants had less than 11 employees in 1981, and these plants contributed 10 per cent of new jobs in openings, an average of 5.4 jobs per plant. In contrast the 108 new plants which had more than 100 employees in 1981 contributed 25,324 new jobs (244 jobs per plant). It seems that many of these large births are new branches of multinational enterprises.

Small and medium-sized establishments accounted for a disproportionately high number of new jobs in expansions of existing plants. Plants with less than 100 employees accounted for almost two-thirds of all new jobs created in expansions. Conversely, large plants (ie with more than 100

employees) contributed 25,860 of the 36,312 jobs lost through contractions. These findings are not entirely unexpected. Large firms, faced with deficient demand on structural change, may choose to reduce their workforces. This option is often not available to smaller plants, which cannot make marginal adjustments to employment, and are thus more likely to close in response to difficult economic circumstances than are large plants. This seems to be confirmed by the fact that the rate of closure of establishments is much higher for small than for large plants (O'Farrell, 1986, p33), although job loss due to closure is evenly spread across all size categories.

O'Farrell compares the job-generating performance of small plants, defined by the IDA as having less than 50 employees, with that of large plants with over 100 employees. Small plants accounted for 26.9 per cent of manufacturing employment in 1973, but generated 42.4 per cent of gross new employment between 1973 and 1981. Large plants (>100) generated 41.4 per cent of gross new jobs, despite accounting for 60 per cent of employment in 1973. O'Farrell notes that the "performance of permanent small plants (ie those present in 1973 and 1981) which expanded was particularly impressive since they generated 49.1 per cent of all new jobs created by expansions; while their employment loss through contractions was well below their national employment share" (1986, p35). However, small plants accounted for a disproportionately high level of job loss through closure.

O'Farrell provides some useful international comparisons which are reproduced in Tables 10.8 and 10.9. These tables show that openings of both new firms and new branches (particularly externally controlled branches) are more important contributors to employment change in Ireland than they are in Scotland, East Midlands and Tyne and Wear (England) over similar time periods. Conversely expansions contribute proportionately more new jobs in the UK than in Ireland. Table 10.8 shows that Ireland experienced a more rapid rate of change in employment for all components except contractions, where the rate of change was broadly comparable to that recorded in the UK studies. Finally, Table 10.9 shows that the pattern of employment change by plant size was

similar to that experienced in the USA and the UK, but with a faster percentage rate of growth of small plants in Ireland.

In Chapter 5 of his book, O'Farrell examines in more detail the employment performance of the 3,031 plants (outside Dublin) which existed in 1973. Plants are categorised according to ownership status and employment size in 1973, and net employment change between 1973 and 1981 is examined. Table 10.10 shows that, if openings are excluded from the analysis, only branches of multi-plant corporations employing less than 100 people exhibit a net increase in employment. Of particular importance is the contribution of the 96 branches of multi-national enterprises with less than 25 employees which generated an average of 15 net new jobs each over the 1973-81 period. In contrast the 1,770 indigenous single plant firms recorded a net loss of 707 jobs over this period.

Table 10.11 analyses the employment size mobility of the 1973 industrial plant stock. This corroborates the findings of job generation studies in other countries that it is relatively few firms which create the majority of new jobs. For instance, of the 1,278 plants with less than 10 employees in 1973, 27 per cent had closed by 1981 and 59 per cent remained in the 0-10 size category. Less than one per cent (10 firms) employed more than 50 employees in 1981. A similar pattern can be observed for all small and medium sized plants, although closure rates tend to decline as plant size increases. Tables 10.12 and 10.13 show that the probability of expansion is greater for branches of multinational corporations than it is for indigenous single plant firms. Seven per cent of multinational branches with less than 50 workers in 1973 expanded into the 100+ category by 1981. In contrast, only nine of the 2,066 indigenous single plant firms with less than 50 workers in 1973 employed over 100 in 1981. It should also be noted, however, that the closure rate for multinational branches is much higher than that for indigenous firms.

The influence of various factors on the employment performance of surviving firms (ie excluding closures) is analysed by O'Farrell in a regression model. He finds that age and size are negatively associated with employment growth (ie younger and smaller firms grow faster). Other variables which are considered to be important include industry sector (Textiles and other manufacturing have negative coefficients), type of grant received (positive for three types of grant - this is discussed in more detail below) and nationality of ownership (USA and others outside Europe and US positively associated with employment change).

An extremely interesting result is obtained when a period of recession (1974-1976) is compared with an expansionary period (1977-80). During the recessionary period, size of plant is not significantly related to employment growth, whereas age and receipt of grants remain significant. During the expansionary period, size of plant is positively associated with employment growth - that is, it appears that larger plants grow faster in an expansionary period.

To summarise this section, a components of change analysis reveals that small manufacturing plants experienced net employment growth in Ireland over the period 1973-81, whilst large plants recorded net job losses. The extent to which small firms contributed to job creation over that period is unclear. Branches of multinational companies contribute most strongly to employment growth in surviving firms, and also provide over half of the employment created by new openings between 1973 and 1981. Youth, as well as size, appears to be an important factor influencing the rate of job creation. Finally, there is evidence to suggest that the small firm contribution to net employment growth is lower in a period of economic expansion than it is in a recession.

#### 10.4 Employment Change in New Manufacturing Firms

New firms are a subsector of the small firm population which have received a great deal of attention by both researchers and policy makers in recent years. There is a general belief that high rates of new firm

formation are essential for national economic prosperity and that new firms are particularly important in job generation. The O'Farrell study demonstrates that the formation rate of new manufacturing firms in Ireland is higher than the equivalent rate for the UK and on a par with formation rates in North America (O'Farrell, 1986, pp122-124). He also shows that formation rates are higher in industries with a high proportion of small and young plants, and lower in industries which have a large number of multi-plant firms (p128). Formation rates also vary spatially, with plant size and age being negatively associated with formation rates. Other factors which influence new firm formation rates include the percentage of managerial/professional workers in a county (positive) and the number of people living in large towns (negative).

Table 10.14 illustrates the performance of indigenous single plant firms which were formed between 1967 and 1981, and survived to 1981. The main points to note from this table are the relatively small median plant size, and the small number of new firms which grow to any appreciable size in terms of employment. Of the 2,291 new firms covered in Table 10.14, only 99 (4.3 per cent of survivors) employed more than 50 workers by 1981. Indeed, only nine of the 93 firms which started in 1967 and survived to 1981 reached an employment level of more than 50. Over two-thirds of these firms had 20 or fewer workers in 1981. These figures confirm the results of similar analyses of new firms in the UK (Storey, 1985), that a large percentage of new firms fail within a short time, the majority of survivors remain small and only a tiny percentage of new firms ever become large.

#### 10.5 Small Firms Policies in Ireland - a Brief overview

Industrial policy in Ireland is largely carried out by the Industrial Development Authority (IDA) and the Shannon Free Airport Development Company (SFADCo) for the mid-west of Ireland. In common with the trend in many other countries, industrial policy in Ireland has shifted its emphasis away from the support of relatively large firms and the attraction of overseas investment towards the stimulation of new indigenous enterprises and the development of existing ones. This trend



reflects a recognition that employment in branches of multinational corporations tends to be unstable, that the 'branch plant' economy does not tend to stimulate new innovations in products and processes. Small indigenous firms appear to be a source of the growth of relatively stable employment, not subject to the decisions of remote owners, and also a source of indigenous potential for innovation.

Although the IDA had been in existence since 1950, policies which were specifically aimed at small firms were only introduced in 1967, when the Small Industry programme (SI) was launched and a special Small Industries Division was established within the IDA in order to aid the development of existing small industries and the establishment of new ones. Although the SI programme is a national scheme, there is a spatial differentiation in grants with Designated Areas (DA) receiving higher levels of grant. Special mention should be made of SFADCo, which has responsibility for the implementation of the SI programme in the Mid West, and has an additional mandate to develop indigenous small industry in an intensive way, primarily through the provision of support services.

The SI programme applies to firms with 50 or less employees and with a written down value of fixed assets below IRL 500,000. The IDA provides grants for sites and buildings, for plant and equipment, for the training of workers (administered by IDA and AnCo - the industrial training authority) and for feasibility studies for product and process developments. Grants for fixed asset investment are negotiable up to 60 per cent in Designated Areas and 45 per cent elsewhere. Applications for SI grants are channelled through the regional office of the IDA or the local County Development Officer, whose role is to advise the potential entrepreneur in completing a project proposal and to seek out and encourage prospective entrepreneurs.

Other important elements of new and small firms policy in Ireland are the Matchmaker Service, started by SFADCo in 1981 to promote the sale of products by small firms in the Mid West to large firms throughout the country; the Limerick Innovation Centre, operated by SFADCo in

conjunction with the National Institute for Higher Education; the IDA Project Identification Unit which aims to identify import substitution possibilities for Irish small firms, and the Enterprise Development Programme which aims to stimulate moves into entrepreneurship by professional, managerial and technical staff previously employed in semi-state and private enterprise. The EDP scheme supplements the provisions of the SI programme by guaranteed loans for working capital, interest subsidies on loans for working capital, equity participation by IDA and an intensive after-care service.

Finally, the Enterprise Allowance Scheme was introduced in December 1983. This scheme provides an allowance of IRL50 per week for a married person and IRL30 per week for a single person who is unemployed and who wishes to establish a business. By September 1984, over 3500 people had joined the Enterprise Allowance Scheme. It should be noted that the reduction in the level of unemployment resulting from this scheme is likely to be less than 3500, because of deadweight and displacement effects (see discussion of the UK Enterprise Allowance Scheme in Chapter 3).

#### 10.6 Future developments in Irish small firms policy

In 1982, the National Economic and Social Council (NESC) published a report by the by the Telesis Consulting Group, entitled "A Review of Industrial Policy" (NESC, 1982), generally referred to as the Telesis Report. This report greatly influenced the development of Irish industrial policy, and many of its recommendations were incorporated in the 1984 White Paper on Industrial Policy.

The broad thrust of the Telesis Report and the 1984 White Paper is that industrial policy should be directed towards selectively assisting firms which have the potential to trade in overseas markets, to supply technologically advanced goods and services to internationally trading companies or to displace imports. In order to receive assistance, firms should demonstrate that financial assistance is necessary in order for an investment to take place that the investment is commercially viable.

Firms applying for assistance should also have prepared a company development plan.

This change in emphasis in Industrial Policy towards selective rather than general assistance has important implications for small firms policy. The Small Industries programme will become more selective, with the aim of promoting the establishment of new firms and the expansion of existing firms which have the capacity to develop into export businesses or to meet the sub-supply requirements of existing large industry. Other developments in small firms policies include the development and implementation by the IDA of a National Linkage Programme, the decentralisation of small industry services, the provision of incubator factories and the building of an Enterprise Centre in Cork. The Government have also decided to establish a National Development Corporation (NDC) which will invest in new or existing private enterprises and in the establishment of development companies to provide services to small businesses.

#### 10.7 The job creation impact of small firm policies

The Telesis Report (NESC, 1982) provides a great deal of information on the allocation of grants under the various schemes operated by the IDA, SFADCo and Gaeltarra Eireann (covering the Gaeltacht area) over the period 1970-83. Telesis estimates the total cost of aid to industry in Ireland to be IRL289.3 million, of which IDA accounted for IRL179.3 million (62 per cent). The Small Industries program accounts for approximately 11 per cent of IDA grant payments to indigenous companies, and Telesis estimates that over the period 1970-79 IRL34 million was allocated under this scheme to Irish Indigenous firms (Table 10.15). The SI programme has increased its share of IDA grant payments over the period of the 1970's, reaching 18 per cent in 1977-1979. The sectoral distribution of grant allocations to indigenous companies is illustrated in Table 10.16. This shows that the metal and engineering sectors received over two-fifths of the money allocated under the Small Industries Programme.

Table 10.17 shows that over the period 1972-1978, grants to indigenous firms were approved under the new and small industry programmes with a total employment potential of 51,900 jobs. In fact, only half of these approved jobs were actually created over the period 1973 to 1979, and once allowance is made for job losses over that period, only one-fifth of approved jobs remained in place by 1979. The actual cost per job sustained is calculated at IRL 12,500 for these programmes. This compares with an approved cost per approved job (including those grant approvals which are not actually implemented) of IRL 4,600, and a cost of IRL 7,041 per sustained job created by programmes to attract foreign firms to Ireland (NESC, 1982; pp390-391).

Table 10.18 illustrates that indigenous firms aided under the New and Small Industry programmes exhibited a net growth of 10,300 jobs between 1973 and 1979, as compared with a 8,400 loss in firms aided by Re-equipment Grants and a small growth in employment by non grant-aided firms. Similar results are presented by O'Farrell (1986), reproduced here as Tables 10.19 and 10.20. This shows that Small Industry grant-aided firms exhibited a net job growth of 11,000 between 1973 and 1979, compared with a 25,501 growth in New Industry firms (mainly foreign-owned) and a loss of 4,515 jobs in non grant-aided firms. Table 10.20, suggests that NI and SI aided firms have lower closure and contraction rates and higher expansion rates than do non grant aided firms.

Another analysis of the employment impact of the SI programme (SIP) has been carried out by Kennedy et.al. (1985). The authors point out (p.116) that the figures which they present for levels of employment and for employment change in SIP aided firms do not necessarily imply that SIP was responsible for all of the employment in assisted firms. They also discuss the possibility of displacement effects (p.117).

Table 10.21 shows the level of employment in 1973 and 1980 of establishments assisted by SIP at any time between 1967 and 1979 and which were in business either in 1973 or 1980. This table shows that SIP-aided firms which survived from 1973 to 1980 created a total of 2,588 net new jobs. An additional 9,658 jobs were created in firms

which began business after 1973 and survived to 1980. The 524 firms which increased their employment between 1973 and 1980 created 5,649 new jobs, an average of over ten jobs per assisted firm.

A comparison of the employment performance of SIP-aided firms with that of firms aided by the New Industry Programme (NIP) and non-assisted firms (Tables 10.22 and 10.23) shows that in percentage terms, SIP-aided firms exhibited the most rapid net employment growth and in absolute terms these firms were second only to NIP-aided foreign firms in numbers of jobs created. Non-assisted large firms performed particularly badly, losing over 14,000 jobs during the seven years covered by the analysis. These results corroborate those of O'Farrell discussed above, although the time period covered differs slightly, as does the method of approach.

The figures presented in this section seem to suggest that the SI programme has been fairly successful at creating jobs, but at a relatively high cost per job. However, it should be noted that it is likely that there are strong deadweight effects, in that some of the jobs may have been created in the absence of grant aid, and displacement effects, with assisted firms displacing jobs in non-assisted firms. No information is available regarding deadweight and displacement effects; but the Telesis report (NESC, 1982; p.410) suggests that around 50 per cent of SI grants in the Metals and Engineering sector are allocated to 'non-traded' firms, for which displacement effects are likely to be high. If one assumes a combined deadweight and displacement effect of 50 per cent, this would increase the cost per job for indigenous firms aided under NI and SI schemes to IRL 25,000.

#### 10.8 Summary

This chapter has illustrated that small plants in Ireland have tended to grow more rapidly in employment than have larger plants over the 1973-81 period. Much of this growth is attributable to the growth of branches of multinational corporations locating in Ireland, but indigenous new and small firms have also increased their employment. The impact of

policies to assist new and small firms is difficult to assess from the available data, but a cost per job of IRL 12,500 is a minimum estimate for grants paid to indigenous firms under the NI and SI programmes. The impact of the new selective approach to industrial and small firms policies remains to be seen.

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FIGURE 10.1(a)

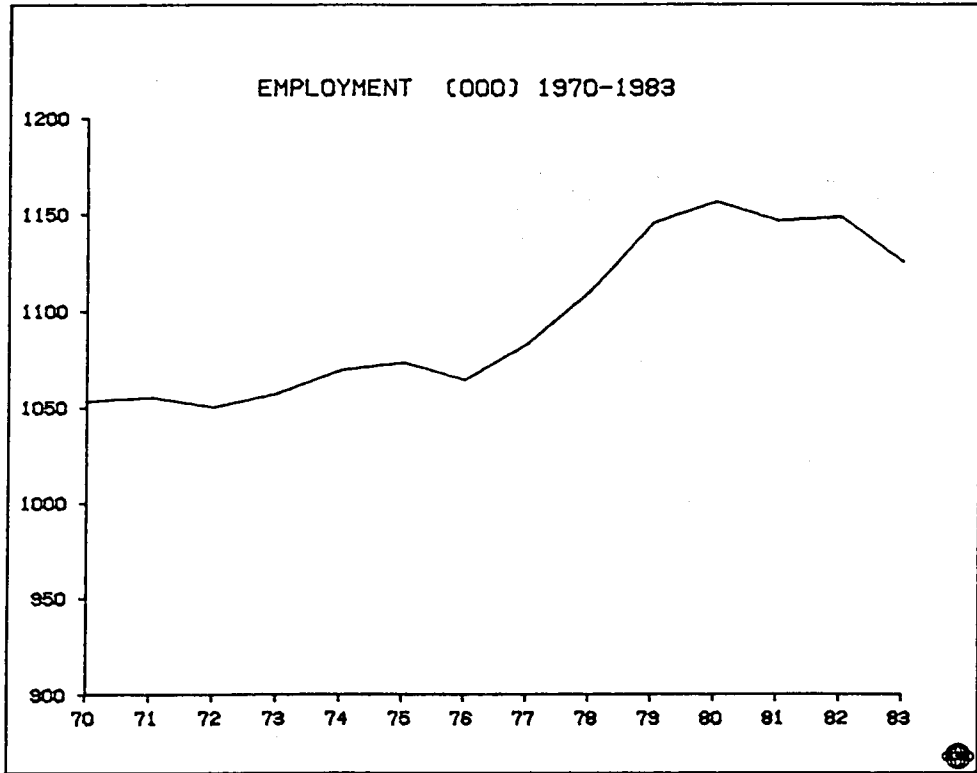


FIGURE 10.1(b)

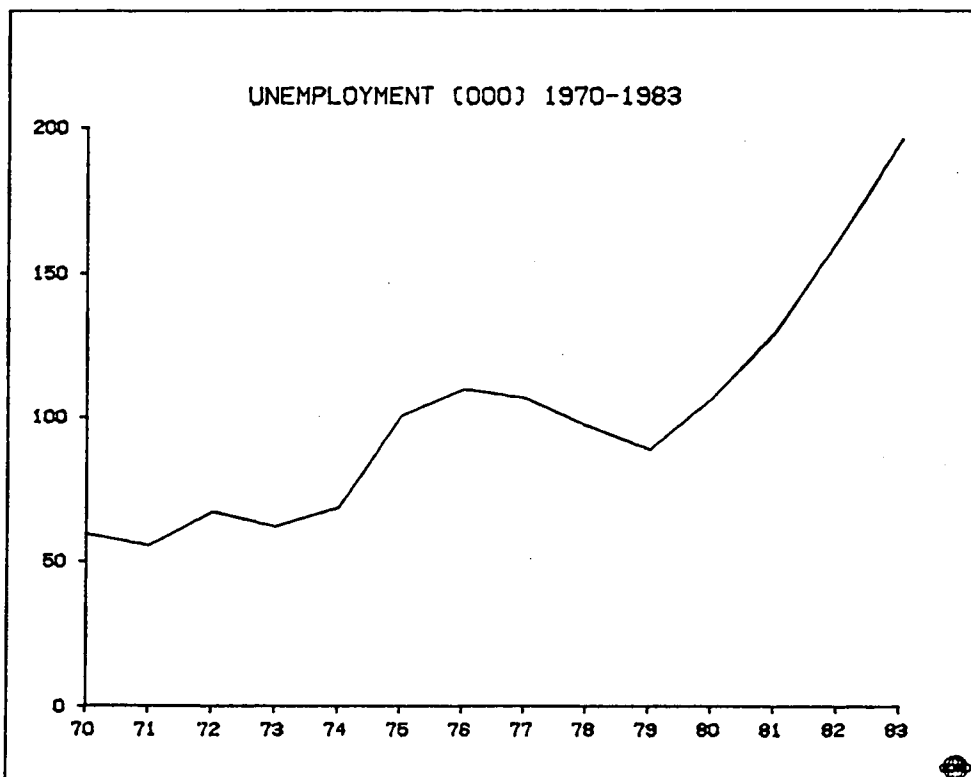




TABLE 10.1

EMPLOYMENT BY SECTOR IN IRELAND 1970-1983 ('000)

	<u>AGRICULTURE</u>		<u>INDUSTRY</u>		<u>SERVICES</u>		<u>TOTAL</u>
	No.	%	No.	%	No.	%	No.
1970	283	26.9	312	29.6	458	43.5	1053
1971	273	25.9	323	30.6	459	43.5	1055
1972	267	25.4	317	30.2	466	44.4	1050
1973	260	24.6	322	30.5	473	44.7	1057
1974	254	23.8	334	31.2	481	45.0	1069
1975	238	22.2	337	31.4	498	46.4	1073
1976	232	21.8	325	30.5	507	47.7	1064
1977	228	21.1	334	30.8	519	47.9	1083
1978	226	20.4	350	31.5	534	48.1	1110
1979	221	19.3	387	33.8	559	48.8	1145
1980	209	18.1	371	32.1	576	49.8	1156
1981	196	17.1	363	31.7	587	51.2	1146
1982	193	16.8	355	30.9	600	52.3	1148
1983	189	16.8	331	29.4	605	53.8	1125
<b>% Change</b>							
1970-1983	-33.2		+6.1		+32.1		+6.8

Source : EUROSTAT

TABLE 10.2

SELF EMPLOYMENT IN IRELAND 1970-1983 ('000)

	SELF EMPLOYED	EMPLOYEES IN EMPLOYMENT	WORKING POPULATION	SELF EMPLOYED AS % OF WORKING POPULATION
1970	328	725	1053	31.1
1971	318	737	1055	30.1
1972	314	736	1050	29.9
1973	308	749	1057	29.1
1974	304	765	1069	28.4
1975	302	771	1073	28.1
1976	297	767	1064	27.9
1977	294	789	1083	27.1
1978	294	816	1110	26.5
1979	293	852	1145	25.6
1980	282	874	1156	24.4
1981	269	877	1146	23.5
1982	276	872	1148	24.0
1983	275	850	1125	24.4
<b>% Change</b>				
1970-1983	- 16.2	+ 17.2	+ 6.8	

Source : EUROSTAT

TABLE 10.3NON-AGRICULTURAL SELF EMPLOYMENT IN IRELAND 1970-1983

YEAR	NUMBER OF SELF EMPLOYED (000)	PERCENTAGE OF EMPLOYED POPULATION (%)	UNEMPLOYMENT RATE* (%)
1970	82	10.6	6.8
1971	81	10.4	6.5
1972	81	10.3	7.6
1973	81	10.2	6.6
1974	81	9.9	7.4
1975	93	11.1	12.1
1976	93	11.2	12.0
1977	94	11.0	11.5
1978	96	10.9	10.1
1979	100	10.8	9.0
1980	100	10.6	10.6
1981	96	10.1	13.4
1982	106	11.1	16.8
1983	108	11.5	20.8

\* percentage of insured population.

Source : EUROSTAT, OECD.

TABLE 10.4

*Number of establishments in Irish manufacturing industry classified by size, various years, 1929-1980 (C.S.O data)*

Establishment size (in terms of numbers engaged)											1980 (extended coverage) <sup>a</sup>
	1929	1931	1936	1938	1946	1958	1963	1968	1973	1975	
<20	1,546	1,558	1,999	2,135	1,769	1,808	1,649	1,512	1,508	1,693	2,878
20- 49	366	388	563	581	607	703	717	793	792	771	962
Total <50	1,919	1,946	2,562	2,716	2,376	2,511	2,366	2,305	2,300	2,464	3,840
50- 99	141	145	220	215	237	291	336	353	411	411	475
100-199	122	114	190	210	147	161	199	223	234	250	301
200-499	11	9	19	15	21	31	45	51	59	52	55
500+	—	—	—	—	—	—	—	—	—	—	71
Non-attributable	—	—	—	—	—	—	—	—	—	—	71
Total	2,186	2,214	2,991	3,156	2,864	3,106	3,077	3,074	3,180	3,320	4,891

<sup>a</sup>As explained in the text, the data for 1980 are based on an extended coverage and include several hundred small establishments not previously recorded. They cannot, therefore, be compared with the data for earlier years.

Source: *Census of Industrial Production*. Figures for 1946 and earlier years were adjusted for comparability with later years.

Source : Kennedy et.al. (1985)

TABLE 10.5

*Distribution of employment in Irish manufacturing industry by establishment size, various years, 1929-1980 (C.S.O data)*

Establishment size (in terms of numbers engaged)																	1980 extended coverage <sup>a</sup>	
	1929		1938		1946		1958		1963		1968		1975					
	No.	% of	No.	% of	No.	% of	No.	% of	No.	% of	No.	% of	No.	% of	No.	% of	No.	% of
	'000	Total	'000	Total	'000	Total	'000	Total	'000	Total	'000	Total	'000	Total	'000	Total	'000	Total
<20	11.3	17.1	15.4	15.4	14.1	12.8	15.0	10.6	14.2	8.4	13.1	7.1	15.5	7.9	26.0	11.5		
20- 49	11.0	16.6	17.4	17.4	18.4	16.7	22.5	15.9	22.7	13.5	25.1	13.6	24.3	12.5	30.3	13.4		
Total	22.2	33.6	32.8	32.7	32.5	29.5	37.5	26.4	36.8	21.9	38.2	20.8	39.8	20.4	56.4	24.9		
50- 99	9.0	13.7	13.8	13.8	15.2	13.8	20.6	14.5	23.1	13.7	24.6	13.4	29.0	14.9	33.3	14.7		
100-199	23.0	34.8	39.6	39.5	19.5	17.7	21.7	15.3	27.7	16.5	31.9	17.3	34.8	17.9	42.2	18.6		
200-499	11.8	17.9	14.2	14.2	18.9	17.2	29.6	20.9	41.8	24.9	47.2	25.7	48.1	24.7	48.6	21.4		
500+	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1.7	0.7		
Non-attributable	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—		
Total	66.1	100	100.2	100	110.0	100	141.8	100	168.2	100	183.9	100	194.8	100	226.8	100		

<sup>a</sup>See note to Table 2.1.

Source: *Census of Industrial Production*, for 1958, 1963, 1968, 1975 and 1980. The figures for 1938 and 1946 are taken from Lincham (1962). The figures for 1929 are estimates based on the data available for the number of establishments in each size range in these years; the average employment in each size range was taken to be the same as in 1938, except for the 500+ class which was derived residually as the difference between total manufacturing employment and the estimated total of employment in the other size ranges. As in Table 2.1, the figures for 1946 and earlier years were corrected for comparability with later years.

Source : Kennedy et.al. (1985)

TABLE 10.6

*Number of establishments and employment in Irish manufacturing, classified by size, 1973 and 1980 (IDA data)*

<i>Establishment size (in terms of numbers engaged)</i>	1973				1980				<i>% change in employment 1973-80</i>
	<i>Establishments</i>		<i>Employment</i>		<i>Establishments</i>		<i>Employment</i>		
	<i>No.</i>	<i>% of Total</i>	<i>No. (‘000)</i>	<i>% of Total</i>	<i>No.</i>	<i>% of Total</i>	<i>No. (‘000)</i>	<i>% of Total</i>	
Small (<50)									
<5	1,241	25.7	3.0	1.4	1,438	26.0	3.3	1.4	11.7
5- 9	819	17.0	5.6	2.6	951	17.2	6.5	2.7	15.8
10-14	544	11.3	6.4	2.9	575	10.4	6.8	2.8	6.1
15-19	336	7.0	5.6	2.6	377	6.8	6.3	2.6	12.8
20-29	476	9.9	11.5	5.3	542	9.8	13.0	5.3	12.7
30-49	497	10.3	18.7	8.6	568	10.3	21.6	8.9	15.5
Total Small	3,913	81.0	50.7	23.3	4,451	80.5	57.4	23.7	13.2
Small-medium (50-199)									
50- 99	411	8.5	28.9	13.3	498	9.0	34.9	14.4	20.8
100-199	275	5.7	37.4	17.2	338	6.1	46.7	19.3	25.0
Total small-medium	686	14.2	66.2	30.4	836	15.1	81.6	33.7	23.2
Medium-large (200-499)	170	3.5	51.1	23.5	180	3.3	54.0	22.2	5.6
Large (500+)	60	1.2	49.7	22.8	61	1.1	49.5	20.4	-0.3
	4,829	100	217.6	100	5,528	100	242.5	100	11.4

*Source: IDA Annual Employment Survey.* Data relate to 1 January in the year concerned. As explained in the text, there may be some understatement in the 1973 figures for establishments with less than 50 persons — due to deficiencies in the Dublin data — and hence an overstatement of the rise in employment for 1973-80. Also, the data in relation to establishments with one or two persons engaged is thought to be collected erratically; however, this would not greatly affect the employment position given above because of the small aggregate employment involved in such firms.

**Source :** Kennedy et.al. (1985)

TABLE 10.7

Components of Manufacturing Employment Change by Establishment Size,<sup>1</sup>  
1973-81

Establishment Size	Total Losses				Total Increases				
	Closures		Contractions		New Openings <sup>2</sup>		Expansions		Net Change <sup>3</sup>
	Establishments	Employment	Establishments	Employment	Establishments	Employment	Establishments	Employment	
0-10	431	2,376	693	1,183	1,075	5,841	591	4,716	+6,998
11-25	259	4,294	429	2,367	514	8,412	384	6,277	+8,028
26-50	161	5,695	295	2,882	221	7,808	263	5,987	+5,218
51-100	77	5,491	203	4,020	129	9,209	131	5,802	+5,500
101-200	45	6,404	126	5,488	63	8,519	96	4,529	+1,156
201-300	19	4,776	45	3,428	22	5,388	29	3,369	+ 553
301-500	12	4,865	45	5,676	13	5,037	17	1,842	-3,662
>500	4	2,576	39	11,268	10	7,380	15	2,065	-4,399
Plants <50 in Dublin	—	8,303							-8,303
Total	1,008	44,780	1,875	36,312	2,047	57,594	1,526	34,587 <sup>1</sup>	+11,089

1. The Dublin closures <50 which employed 8,303 in 1973 are missing from the file and cannot be included in the size groups. Some 229 closures of plants <50 in Dublin which employed 4,024 in 1973 are included since detailed data is available for them. All Dublin expansions, contractions and new openings are included.

2. Establishment size expressed as number of employees in 1981 (new openings) and 1973 (closures, contractions

and expansions).

3. Net change in the 0-50 group, when allowance is made for 8,303 closure losses in Dublin, is +11,941. Source: O'Farrell (1984b)

Source : O'Farrell, (1986)

TABLE 10.8

## A Components of Manufacturing Employment Change: Irish and UK Comparisons

Area	Period	Openings		Expansions	Closures	Contractions	Net Change	
		New Firms <sup>1</sup>	New Indigenous Branches <sup>1</sup>					Externally Controlled Branches <sup>1</sup>
Ireland (a)	1973-81	19.6	7.8	35.1	37.5			
		18,032	7,197	32,365	34,587	44,780	36,312	+11,089
Scotland (b)	1968-77	9.4	3.3	29.2	58.0			
		12,194	4,308	37,636	74,853	82,719	113,203	-66,913
East Midlands (England) (c)	1968-75	16.5	23.2	60.3				
		23,108	32,492	84,600	68,200	80,800		- 8,800
Tyne and Wear (England) (d)	1965-78		23,329 <sup>2</sup>	48.0	21,564	31,508	46,257	-32,872

## B Components of Manufacturing Employment Change as a Percentage of Base Year Employment: Irish and UK Comparisons

Area	Period	Base Year Employment	Openings		Survivors		Closures	Net Change
			New Firms	All New Branches	Expansions	Contractions		
Ireland	1973-81	227,967	+7.9	+17.4	+15.2	-15.9	-19.6	+4.9
UK: East Midlands	1968-75	568,000	+4.1	+5.7	+14.9	-14.2	-12.0	-1.5
Scotland	1968-77	708,858	+1.7	+5.9	+10.6	-16.0	-11.7	-14.9
Tyne and Wear	1965-78	203,905		+11.4	+10.6	-22.7	-15.4	-16.2

1. Percentage contribution of each component of new employment to total new employment including expansions.

2. No detailed data on categories of new openings available.

Sources: (a) This study; (b) Cross (1981); (c) Fothergill and Gudgin (1979); (d) Storey (1983).

TABLE 10.9

Net Manufacturing Employment Change by Establishment Size in Britain, the USA<sup>1</sup> and Ireland as a Percentage of Total Manufacturing Employment in the Base Year<sup>2</sup>

	Establishment Size					Total
	0-20	21-50	51-100	101-500	> 500	
USA 1969-76	+3.2	+0.5	-0.2	-1.5	-2.9	-0.9
Britain (i) East Midlands, 1968-75	+2.7	+2.3	+1.5	-2.2	-5.9	-1.5
(ii) North of England, 1965-78 <sup>3</sup>	+8.1	+3.0	-5.7	-4.9	-15.2	-10.7
Ireland, 1973-81 <sup>4</sup>	+19.5		+18.4	-2.2	-9.0	+4.9

1. Sources: East Midlands: Fothergill and Gudgin (1979); North of England: Storey (1983); and USA: Birch (1979).

2. Openings for Ireland and Britain are placed in terminal size band; *in situ* plants and closures according to base year size. This procedure is assumed to be identical to that adopted by Birch. UK and Irish figures are by size of plant; USA by size of firm.

3. North of England data includes the counties of Cleveland, Durham, Tyne and Wear.

4. Irish data includes loss due to closures < 50 in Dublin. Since it is not known how these plants were distributed within the 0-20 and 21-50 categories, the Irish figure for < 50 is reported.

Source: O'Farrell (1985b)

Source : O'Farrell (1986)

TABLE 10.10.

*Employment Change between 1973-81 of the 1973 Stock of Plants<sup>1</sup> by Size and Ownership<sup>2</sup>*

Ownership Category	Establishments 1973	Employment Size in 1973 (Net Change)				All Plants	Net Employment Change 1973-81 as % of 1973
		0-25	26-100	101-200	> 200		Total
Multinational Enterprises	299	+1,454(96)	+139(144)	-1,127(47)	-4,457(42)	-3,991	-11.8
Irish Multi-plants	456	+494(114)	+87(198)	-1,383(76)	-5,353(68)	-6,155	-12.0
Indigenous Single Plants	2,276	-707(1,770)	-2,495(424)	-2,489(57)	-2,766(25)	-8,457	-16.5
All Plants	3,031	+1,241	-2,269	-4,999	-12,576	-18,603	
Net Employment Change as a % of 1973 total		+6.7	-6.3	-20.2	-22.0		-13.6
Leicestershire, 1968-75		+19.2	-4.8		-18.6 <sup>3</sup>		-13.4

1. Dublin is excluded. Table incorporates employment change due to closure, contraction and expansion.

2. Figures in parenthesis are establishment frequencies (1973).

3. Plants 101-500.

Sources: Leicestershire: Fothergill and Gudgin (1979); Ireland: O'Farrell (1985a).

TABLE 10.11

*Closures and Movement Between Size Bands of all 1973 Plant Stock: Probability Matrix<sup>1</sup>*

Employment Size 1973	Closures	Employment Size Band in 1981								Number of Plants in 1973
		0-10	11-25	26-50	51-100	101-200	201-300	301-500	> 500	
0-10	0.27	0.59	0.10	0.03	0.005	0.002	0.0008	0	0	1278
11-25	0.24	0.20	0.39	0.12	0.04	0.01	0.003	0.001	0	702
26-50	0.22	0.02	0.18	0.37	0.18	0.03	0.002	0	0	474
51-100	0.18	0	0.03	0.21	0.40	0.19	0	0.003	0.003	262
101-200	0.18	0.006	0.006	0.02	0.24	0.44	0.08	0.02	0	180
201-300	0.15	0	0	0.02	0.03	0.40	0.25	0.13	0.02	60
301-500	0.14	0.02	0	0	0.05	0.10	0.24	0.31	0.14	42
> 500	0.06	0	0	0	0.03	0	0.06	0.24	0.61	33

Source : O'Farrell, (1986)



TABLE 10.12

575

Closures and Movement Between Size Categories of all 1973 Indigenous Single Plants: Probability Matrix<sup>1</sup>

Employment Size 1973	Closures	Employment Size in 1981										Number of Plants in 1973
		0-5	6-10	11-15	16-20	21-30	31-50	51-100	101-150	151-200	> 200	
0-5	0.27	0.53	0.13	0.04	0.01	0.01	0.002	0.002	0	0	0	694
6-10	0.27	0.22	0.29	0.10	0.03	0.06	0.02	0.004	0.004	0	0	500
11-15	0.23	0.07	0.23	0.18	0.12	0.11	0.04	0.01	0	0	0	268
16-20	0.26	0.05	0.10	0.16	0.16	0.14	0.09	0.05	0	0	0	174
21-30	0.21	0.007	0.05	0.09	0.15	0.27	0.15	0.06	0.007	0	0	252
31-50	0.20	0.02	0.01	0.006	0.05	0.17	0.35	0.17	0.02	0.01	0	178
51-100	0.17	0	0	0.008	0.02	0.05	0.22	0.38	0.11	0.04	0.008	128
101-150	0.17	0	0.03	0	0	0	0.06	0.31	0.20	0.03	0	35
151-200	0.32	0	0	0	0	0	0.05	0.09	0.18	0.23	0.14	22
> 200	0.04	0	0.04	0	0	0	0.04	0.04	0.12	0.32	0.40	25
Total												2,276

TABLE 10.13

Closures and Movement between Size Categories for all 1973 Multinational Branches: Probability Matrix<sup>1</sup>

Employment Size 1973	Closures	Employment Size Category 1981										Number of Plan. 1973
		0-10	11-25	26-50	51-100	101-150	151-200	201-300	301-400	401-500	> 500	
0-10	0.48	0.24	0.10	0.14	0.03	0	0	0	0	0	0	29
11-25	0.36	0.09	0.19	0.16	0.09	0.03	0.03	0.03	0.01	0	0	67
26-50	0.40	0	0.15	0.26	0.14	0.02	0.02	0.02	0	0	0	65
51-100	0.29	0	0.04	0.12	0.27	0.22	0.04	0	0	0	0.02	49
101-150	0.21	0	0	0	0.36	0.26	0.10	0.08	0	0	0	39
151-200	0.25	0	0	0	0	0.13	0.38	0.25	0	0	0	8
201-300	0.26	0	0	0	0	0.16	0.11	0.26	0.16	0	0.05	19
301-400	0	0	0	0	0	0	0	0.33	0.50	0	0.17	6
401-500	0.66	0	0	0	0	0	0	0.33	0	0	0	3
> 500	0.07	0	0	0	0.07	0	0	0	0.14	0.07	0.86	14

TABLE 10.14

Employment Growth of Indigenous Single Plant Firms,<sup>1</sup> 1967-81

Year of Opening <sup>2</sup>	Number of Plants	Median Size 1981	Size Distribution 1981											
			1-2	3-5	6-10	11-20	21-30	31-50	51-75	76-100	101-150	151-200	201-300	301-400
1967	93	11	10	15	20	18	12	9	7	0	1	0	0	1
1968	152	6	12	39	26	39	14	12	2	3	4	1	0	0
1969	140	6	20	27	33	25	14	10	9	1	0	1	0	0
1970	173	6	20	31	44	29	15	15	8	3	2	4	1	1
1971	146	11	16	24	25	32	20	17	10	1	0	1	0	0
1972	105	6	16	18	29	15	12	10	4	0	0	1	0	0
1973	142	11	14	27	26	44	9	15	5	1	1	0	0	0
1974	109	6	4	21	31	27	11	12	2	0	1	0	0	0
1975	119	6	15	41	29	17	9	5	2	1	0	0	0	0
1976	169	6	10	44	42	37	14	12	4	3	1	2	0	0
1977	238	6	12	54	66	57	28	17	3	1	0	0	0	0
1978	273	6	13	94	80	50	21	12	1	1	0	0	1	0
1979	247	6	5	84	86	50	13	7	2	0	0	0	0	0
1980	185	3	0	106	51	21	5	1	1	0	0	0	0	0
Total	2,291		167	625	588	461	197	154	60	15	10	10	2	2

Source : O'Farrell, (1986)

TABLE 10.15IDA GRANT PAYMENTS BY PROGRAM

## Indigenous Companies

	<u>1970-1979 (Constant ₧ 1980)</u>	
	<u>Million ₧</u>	<u>%</u>
Re-equipment	131	43
New Industry	127	42
Small Industry	34	11
Joint Ventures	10	3
Product and Process	4	1
Enterprise Development	1	-
TOTAL (Excluding Services)	307	100

Source : NESC (1982)

TABLE 10.16

IDA GRANT PAYMENTS BY PROGRAM AND SECTOR 1970 - 1979  
 Indigenous Companies  
 (Constant £ M 1980)

	Reequipment		New Industry		Small Industry		Total	
	£ M	%	£ M	%	£ M	%	£ M	%
Food	59	46	36	23	3	9	98	34
Drink & Tobacco	12	9	1	1	-	-	13	4
Textiles	7	5	13	10	-	-	20	7
Clothing & Footwear	8	6	9	7	2	7	19	7
Wood & Furniture	3	2	1	1	3	9	7	2
Paper & Printing	12	9	3	2	1	3	16	5
Chemicals	4	3	13	10	4	11	21	7
Clay & Cement	15	12	19	15	3	9	37	13
Metals & Engineering	7	5	25	20	14	41	46	16
Other	4	3	7	6	4	11	15	5
<b>Total</b>	<b>131</b>	<b>100</b>	<b>127</b>	<b>100</b>	<b>34</b>	<b>100</b>	<b>292</b>	<b>100</b>

Source : NESC (1982)

TABLE 10.17

## IDA NEW AND SMALL INDUSTRY PROGRAMMES

## Indigenous Companies

Job Targets Against Actual Results (000)

	Employment Potential from Grants Approved 1972 - 1978	Actual Job Creation by New & Established Companies 1973 - 1979	Actual Jobs in Place Net of Losses 1979 vs. 1973
Food	11.9	6.0	3.7
Drink & Tobacco	.9	.4	.4
Textiles	3.9	1.2	(3.0)
Clothing & Footwear	5.7	2.0	(1.8)
Wood & Furniture	3.6	1.7	.6
Paper, Printing & Packaging	2.1	.9	.5
Chemicals	1.6	1.2	1.1
Clay, Cement, Glass	3.9	2.1	1.5
Metals & Engineering	13.4	8.8	6.2
Other	4.9	1.9	1.1
	<hr/>	<hr/>	<hr/>
Total	51.9	26.3	10.3
Index	100	51	20
Total Excluding Textiles and Clothing	42.3	23.1	15.2
Index	100	55	36

Source : NESC (1982)

TABLE 10.18

## CHANGES IN IRISH INDIGENOUS EMPLOYMENT

IDA Grant Aided Versus Non-Grant  
Aided Firms (Manufacturing)

1973-1979

	Net Changes (000)			Total
	<u>New + Small Industry</u>	<u>Re-equipment Grants</u>	<u>Non-Grant Aided</u>	
<u>Increasing Employment Among All Firms</u>				
- Metals and Engineering	5.2	(2.0)	1.1	5.3
- Paper, Printing & Packaging	.5	.7	1.4	2.6
- Cement, Clay and Glass	1.5	.4	.3	2.2
- Wood and Furniture	.6	(.2)	.3	.7
<u>Increasing Employment Among IDA Firms</u>				
- Food	3.7	(1.1)	(.7)	1.9
- Drink and Tobacco	.4	.5	(.4)	.5
- Other	1.1	(.5)	(.1)	.5
- Chemicals	1.1	(1.0)	(.6)	(.5)
<u>Decreasing Employment Among All Firms</u>				
- Clothing and Footwear	(1.8)	(2.7)	(.7)	(5.2)
- Textiles	(3.0)	(2.5)	-	(5.5)
<b>Total</b>	<b>10.3</b>	<b>(8.4)</b>	<b>.6</b>	<b>2.5</b>

Source ; NESC (1982)

TABLE 10.19

*Components of Manufacturing Employment Change by Grant Type, 1973-81*

<i>Grant Type</i>	<i>Total Losses</i>				<i>Total Increases</i>			
	<i>Closures</i>		<i>Contractions</i>		<i>New Openings</i>		<i>Expansions (In Situ)</i>	
	<i>Establish- ments</i>	<i>Employ- ment</i>	<i>Establish- ments</i>	<i>Employ- ment</i>	<i>Establish- ments</i>	<i>Employ- ment</i>	<i>Establish- ments</i>	<i>Employ- ment</i>
New Industry	186	13,342	373	16,787	444	35,102	431	20,528
Small Industry	154	2,664	329	1,802	926	11,594	410	3,872
Re-Equipment	150	9,771	430	11,972	38	1,607	275	5,566
Gaeltarra	8	146	31	132	82	1,596	6	52
Shannon	10	297	20	1,394	113	1,655	24	642
Non Grant-aided Plants < 50 in Dublin	500	10,257 8,303	692	4,225	444	6,040	380	3,927
<b>Total</b>	<b>1,008</b>	<b>44,780</b>	<b>1,875</b>	<b>36,312<sup>1</sup></b>	<b>2,047</b>	<b>57,594</b>	<b>1,526</b>	<b>34,587<sup>1</sup></b>

TABLE 10.20

*Grant Type Distribution of Closures, Contractions and Expansions.<sup>1</sup>  
1973-81*

<i>Grant Type</i>	<i>Establish- ments 1973</i>	<i>Closures<sup>2</sup></i>		<i>Contractions</i>		<i>Expansions</i>	
		<i>No.</i>	<i>%</i>	<i>No.</i>	<i>%</i>	<i>No.</i>	<i>%</i>
New Industry	754	158	21.0	273	36.2	323	42.8
Small Industry	686	127	18.5	260	37.9	299	43.6
Re-Equipment	521	81	15.5	256	49.1	184	35.3
Gaeltarra	45	8	17.8	31	68.9	6	13.3
Shannon	54	10	18.5	20	37.0	24	44.4
Non-Grant-Aided	971	334	34.4	413	42.5	224	23.1
<b>Total</b>	<b>3,031</b>	<b>718</b>	<b>23.7</b>	<b>1,253</b>	<b>41.3</b>	<b>1,060</b>	<b>35.0</b>

Source : O'Farrell (1986)

**TABLE 10.21***: Employment in SIP establishments 1973 and 1980\**

	1973			1980		
	<i>No. of Establishments</i>	<i>Employment</i>	<i>Average size</i>	<i>No. of Establishments</i>	<i>Employment</i>	<i>Average size</i>
Began business after 1973	—	—	—	728	9,658	13.3
In business in 1973	907	12,000	13.2	740	14,588	19.7
<i>Total</i>	907	12,000	13.2	1,468	24,246	16.5
<i>Breakdown of "in-business" in 1973:</i>						
Gone out of business by 1980	167	1,880	11.3	—	—	—
Experienced employment decline	216	3,592	16.6	216	2,411	11.2
Experienced employment increase or no change	524	6,528	12.5	524	12,177	23.2
<i>Sub-total</i>	907	12,000	13.2	740	14,588	19.7

\*The data show the number of establishments and their employment in 1973 and 1980 for all establishments which received approval for a SIP grant at any time from 1967 to 1979, and which were in business in either 1973 or 1980. They do not therefore include (i) establishments which were approved for a SIP grant and which had gone out of business before 1973; (ii) establishments which had come and gone in the years 1974-79; or (iii) establishments which had not started by 1 January 1980.

Source: IDA *Annual Employment Survey 1980*. In this and all subsequent tables, SFADCo firms are included unless specifically excluded.

Source : Kennedy et.al. (1985)

TABLE 10.22

*Components of employment changes in various types of IDA grant-aided and other establishments, 1973-1980*

	Gross changes								
	1973 total employment	1980 total employment	Total net change 1973-80	Gains			Losses		
				New entrants	Employment increases	Total gains	Closures	Employment decreases	Total losses
SIP Industry	12,000	24,246	12,246	9,658	5,649	15,307	1,880	1,181	3,061
NIP: indigenous	49,624	50,820	1,196	5,115	9,258	14,373	6,500	6,677	13,177
NIP: foreign	35,566	58,954	23,388	24,567	9,259	33,826	5,593	4,845	10,438
Other Small	31,711	33,683	1,972	6,825	6,382	13,207	7,538	3,697	11,235
Other Large	88,858	74,815	-14,043	5,625	6,544	12,169	11,529	14,683	26,212
<b>Total</b>	<b>217,759</b>	<b>242,518</b>	<b>24,759</b>	<b>51,790</b>	<b>37,092</b>	<b>88,882</b>	<b>33,040</b>	<b>31,083</b>	<b>64,123</b>

*Note:*  
 "Other Small" represents establishments which employed between one and 49 persons in 1973 (or in the first year of entry subsequently) and which did not receive a SIP or NIP grant.  
 "Other Large" represents establishments with employment of 50 or more persons in 1973 (or in the first year of entry subsequently) and which did not receive a SIP or a NIP grant.  
 "New entrants" are those establishments which had no employment in 1973 but had in 1980. New entrants which did not receive a NIP or a SIP grant were included in "Other Small" where they began with less than 50 persons engaged; otherwise they were included in "Other Large".  
 "Increases" refer to employment changes in establishments in existence in both 1973 and 1980 and where the 1980 employment was greater than or equal to the 1973 level.  
 "Closures" refer to job losses in establishments which were in employment in 1973 but had closed by 1980.  
 "Decreases" refer to employment changes in establishments in existence in both 1973 and 1980 and with lower employment in the latter year.  
*Source:* IDA Annual Employment Survey 1980. The qualifications to the data noted in Chapter 2 (pp. 21 and 24) and in Table 4.6 are relevant here also.

TABLE 10.23

*Percentage change in employment in various types of industry (1973-80)<sup>a</sup>*

	Percentage change in employment							
	Total net change in employment 1973-1980	Gains			Losses			Total losses
		New entrants	Employment increases	Total gains	Closures	Employment decreases		
	%	%	%	%	%	%	%	
SIP Industry	102.1	80.5	47.1	127.6	15.7	9.8	25.5	
NIP: indigenous	2.4	10.3	18.7	29.0	13.1	13.5	26.6	
NIP: foreign	65.8	69.1	26.0	95.1	15.7	13.6	29.3	
Other Small	6.2	21.5	20.1	41.6	23.8	11.7	35.4	
Other Large	-15.8	6.3	7.4	13.7	13.0	16.5	29.5	
<b>Total</b>	<b>11.4</b>	<b>23.8</b>	<b>17.0</b>	<b>40.8</b>	<b>15.2</b>	<b>14.3</b>	<b>29.4</b>	

<sup>a</sup>Percentage changes in employment are in all cases expressed relative to total employment in each category in 1973.

*Source:* Kennedy et al. (1985)



## 11. Job Creation in Small and Medium Sized Enterprises : Denmark

### 11.1 Recent trends in employment and unemployment

Denmark is a relatively small country with a total population of 5,209,000 in 1984. Total civilian employment in 1984 was 2,482,000 of whom 177,000 (7 per cent) worked in agriculture; 499,000 (20 per cent) in manufacturing industry; 877,000 (35 per cent) in private services and 763,000 (31 per cent) in the Government sector. In June 1986, 184,000 people (6.6 per cent) were registered as unemployed in Denmark. This figure is historically very high, but is one of the lowest rates of unemployment recorded in the EEC countries.

Recent trends in employment and unemployment in Denmark are shown in Figure 11.1. Total employment levels grew throughout the 1970s, apart from during the 1974-75 oil crisis. There has been a slight decline in employment since 1979, resulting in an overall growth rate over the 1970-1983 period of 6.1 per cent. Service sector employment has grown from 1.2 million in 1970 to 1.6 million in 1983, whilst agricultural and manufacturing employment have declined over most of this period. Unemployment levels have grown dramatically in percentage terms since 1970, with particularly rapid increases occurring in 1974-75 and 1979-83. Since 1983, however, the level of unemployment has declined in Denmark.

Self employment declined by over 100,000 between 1970 and 1983 (Figure 11.2), with all sectors of the economy experiencing a similar trend. Table 11.1 shows that non-agricultural self employment has declined steadily in both absolute and percentage terms throughout the 1970s and early 1980s. There appears to be little evidence that higher rates of unemployment have led to increased self employment in Denmark, although modest increases in self employment were recorded in 1974-5 and 1982-3, periods of rapid growth in unemployment.

## 11.2 The size distribution of employment

Table 11.2 clearly illustrates that the vast majority of firms in Denmark can be described as SMEs. Unfortunately, detailed figures are only available for manufacturing industry, and the industrial census covers only firms with 6 or more employees. Table 11.2 shows that around half of Danish manufacturing firms have less than twenty employees and 90 per cent employ less than 100 workers. There appears to have been a slight shift in percentage terms towards smaller firms between 1965 and 1980.

With regard to employment, Tables 11.3 and 11.4 show that 40 per cent of manufacturing employees work in small or medium-sized establishments and 35 per cent in small or medium-sized enterprises. The discrepancy between these two figures is due to the fact that some small establishments are part of larger enterprises.

Table 11.4 shows that small firms are the only group within Danish manufacturing to have increased employment in both absolute and percentage terms over the period 1973-1983. During these ten years, employment in small manufacturing firms increased by 3,700 or 13 per cent, whereas large firms (over 100 employees) lost over 60,000 jobs.

Two points should be emphasised at this stage. Firstly, these figures do not necessarily imply that small firms are generating jobs at a faster rate than are large ones. The increase in small firm employment may have occurred through medium-sized and large firms contracting into the smallest site category. A clear picture of the job-generating potential of different sizes of firm can only be obtained by tracing the development of individual firms through time. Such a study has not, so far, been carried out in Denmark. Secondly, the jobs which appear to have been created by small firms are clearly insufficient to offset the massive job losses which have occurred in the larger firms, with the result that manufacturing employment fell by 68,000 (16.2 per cent) between 1973 and 1983.

The only conclusion that can be unambiguously drawn from the data in Tables 11.3 and 11.4 is that manufacturing employment in Denmark is becoming more concentrated in smaller firms and in smaller plants. Firmer conclusions regarding the role of SMEs in employment creation await a more detailed analysis of the dynamic processes which underly the changes which have been noted in the size distribution of manufacturing employment in Denmark.

### 11.3 Entrepreneurship and New Firm Formation

The annual rate of births and deaths of small firms in the manufacturing, building and construction sectors between 1973 and 1980 is illustrated in Table 11.5. Between 1973 and 1977, births exceeded deaths in every year apart from 1974, leading to an increase in the number of small firms in these sectors. The trend is reversed from 1977 onwards, with deaths exceeding births and the number of small firms suffering a decline. Detailed figures for the 1980s are unavailable, but it seems that the number of small businesses in Denmark has remained fairly stable since 1980, as has employment in such firms (Table 11.4).

Regional figures for new firm formation between 1977 and 1980 are illustrated in Figure 11.3. These show that formation rates are highest in parts of the less-developed region of Jutland, and lowest in the urbanised Copenhagen area.

Some authors [Madsen (1986), Illeris (1986)] have suggested that there exists a strong entrepreneurial culture or 'special Danish spirit' in Denmark, resulting in relatively high rates of new firm formation and self employment. The agricultural and fishing background of many parts of Denmark and the lack of any major large-scale industries, such as Iron and Steel, mean that many families have a history of self employment and a majority of workers have some experience of working in small firms. Some concern has been expressed by groups such as the Chamber of Danish Trades and Crafts that the 'Danish spirit' is being eroded by high rates of taxation (marginal rates of up to 73 per cent according to Madsen (1986)) by increasing levels of public sector employment, and by the apparent increase in the number of demands made upon the administration of an enterprise by public authorities.

With regards to the employment effects of new firms, the most comprehensive data is that provided by Wickmann (1983) based upon a survey of 1325 entrepreneurs who started or took over an enterprise between 1977 and 1980. Wickmann suggests that the 'typical' entrepreneur is a male craftsman between the ages of 30 and 40, with a family background of self employment. Around two-thirds of entrepreneurs use external labour shortly after start-up and the first employee is usually taken on immediately or within the first year. In the newly established firm, the average employment including the entrepreneur and in some cases his/her spouse is 3.5. Where an entrepreneur has taken over an existing firm, average employment is much higher, at 8.9. Many of the new firms employ apprentices or trainees. Wickmann estimates that 40 per cent of entrepreneurs take on an apprentice shortly after start-up. Wickmann also suggests that there are also considerable indirect employment effects of new firm formation.

New firms serve mainly domestic markets, with exporting only being significant in manufacturing industry. This suggests that there may be considerable displacement effects of new firm formation, a possibility which is not explored by Wickmann. In one-quarter of all the firms studied, and in over half of the new manufacturing firms, the majority of turnover was accounted for by sub-contracting to other firms. Thus, employment in many new firms may simply be a transfer from other, probably larger, firms.

With regard to expected future trends in new firms, Wickmann estimates that the majority of firms will stay in business, but remain small or medium sized, with around 10 per cent likely to expand and in some cases become large enterprises. Finally, around 10-15 per cent of firms must be expected to close down within a few years. These figures seem highly optimistic when compared to results from Britain [Ganguly (1985)] which show that 40 per cent of new firms close within three years. However, this is not entirely surprising, given that Wickmann's analysis is based upon survey responses; entrepreneurs are extremely unlikely to predict their own failure.

In summary, new firm formation rates are declining in Denmark, whilst closure rates are increasing. Formation rates are highest in under-developed rural regions and lowest in urban areas. New firms provide an average of 3.5 jobs within the first two to three years, but many of these jobs may be transfers from larger firms who are subcontracting work to small units.

#### 11.4 Small firms policies in Denmark

Industrial policy in Denmark has tended to be characterised by a strong liberal or 'laissez faire' emphasis, with the result that the range of public grants, subsidies and other interventions has been more limited than is the case in many other European countries [Braendengaard (1986)]. With regard to small firms policies, it has already been established in this chapter that the vast majority of Danish firms are 'small' and thus the industrial policy instruments which do exist are, almost by definition, 'small firms policies'.

The Danish government has set up an industrial services system, which the enterprises are entitled to make use of according to the principle of 'help to those who help themselves'. The system concentrates on three questions of particular importance to an enterprise : technology, exports and financing. Below a description will be given of the measures and schemes that aim particularly at and are created in favour of SMEs.

##### Financing

SMEs may at favourable conditions obtain credits for establishment, expansion and modernisation (the so-called artisans' loans). The loans are granted for investments in machinery and buildings. The rate of interest is approximately 9 per cent (normal rate of interest 20 per cent) and the loan is repayable over a period of 10 years at a maximum. In some cases a grace period of two years is granted. For the construction of new premises building loans are granted up to a coverage of 45 per cent of the value of the new buildings. For reconstruction

loans are granted up to a maximum of 80 per cent of the value of the building, each loan amounting to a maximum of one million kroner. The enterprise must furnish a contribution of at least 20 per cent of the investment.

A finance company established by The Chamber of Danish Trade and Crafts, Dansk Handvaerks Finansierings-selskab A/S, grants long-term loans for investments in buildings, machinery, development work, new establishments, sale by the older generation to the younger, purchase of another enterprise as well as the reorganisation of debts. Loans are granted up to 80 per cent of the total investment cost and are payable over 7 to 15 years at a rate of interest of a little above 19 per cent. There is a possibility of a grace period of up to two years. It should be mentioned that this scheme is entirely private and not subsidised by public authorities.

#### Assistance from consultants

SMEs may obtain two days of expert assistance free of any fees for counselling as regards the range of available products, production machinery and production techniques, economic management, administrative management, marketing and exports. Furthermore SMEs can be granted free assistance for the working-out of applications for subsidies for product development.

At a strongly reduced fee SMEs may get assistance from consultants for a longer period of time. Assistance is granted in order to obtain larger sales, perhaps larger exports. The consultants will assist the enterprise in evaluating and/or planning product policies, product range, the introduction of a changed method of production, expansion of the production capacity, marketing and exports. The enterprise is only required to pay about half of the costs in connection with expert counselling. The amount should be no less than Kr. 20.000 and should not exceed Kr. 100.000.

The Chamber of Danish Trades and Crafts offer SMEs the services of an exports consultant for a shorter period of time (exports manager for rent). The consultant will analyse and estimate the export prospects of the enterprise. If he finds that there is a satisfactory basis for undertaking exports the main task may be : to collect market information at home and abroad, to elaborate market analyses, establishment of contacts and training of the sales staff in knowledge of this field. The preliminary investigation (normally 4 days) is free of charge for members of The Chamber, afterwards the minimum period of rent is 20 working days and maximum 60. Fees : due to public subsidies the rent per day does not exceed Kr. 1.400 including travelling expenses for the consultant at home and to a certain extent abroad.

In addition to the schemes described above, the government supports a Regional Development Council through a special financing scheme. This involves the application of special financing schemes for capital expenditure on new buildings and machinery in the Regional Development Areas (RDAs) such as North and West Jutland. In all RDAs a special loan scheme is available for building 'Community Industrial Houses', which accommodate several small businesses at favourable rent levels, and often include advisory and counselling services.

It is difficult to measure the impact of Danish industrial and small firms policy upon job creation; indeed, only aggregate figures are available for the amount of money spent on industrial policy (Table 11.6). A discussion by the Chamber of Danish Trades and Crafts (n.d), which presumably is not unbiased in its views, suggested that much more should be done by the government to promote new firm formation and the growth of small businesses. Measures suggested by the CDTC include changing attitudes in educational and research establishments, reduction of income tax to encourage investment by entrepreneurs, extending the technological services system in to areas of management and investment and a reduction in administrative burdens on small enterprises. It remains to be seen whether any of these proposals are enacted, and what impact they would have upon job creation in SMEs.

### 11.5 Summary and Synthesis

In common with many OECD countries, the share of small firms in total manufacturing employment in Denmark has increased since 1970. However, in absolute terms, small firm employment has remained relatively stable and has declined slightly since 1979. Employment in larger manufacturing firms has declined rapidly over the 1970-1983 period, with the result that it appears that small firms have been more successful at generating jobs than have large firms. This hypothesis has yet to be rigorously tested by a longitudinal study of employment change.

The level of self employment and the rate of new firm formation has declined since the late 1970s, prompting fears that the 'Danish spirit' of enterprise is being eroded by high values of taxation and increased government bureaucracy. Detailed evidence to support this view is thin.

A survey of new firms in Denmark suggested that each firm creates between 3 and 4 jobs in its early years, and that most firms stay at around this level of employment. Only a few firms expand sufficiently to create large numbers of jobs.

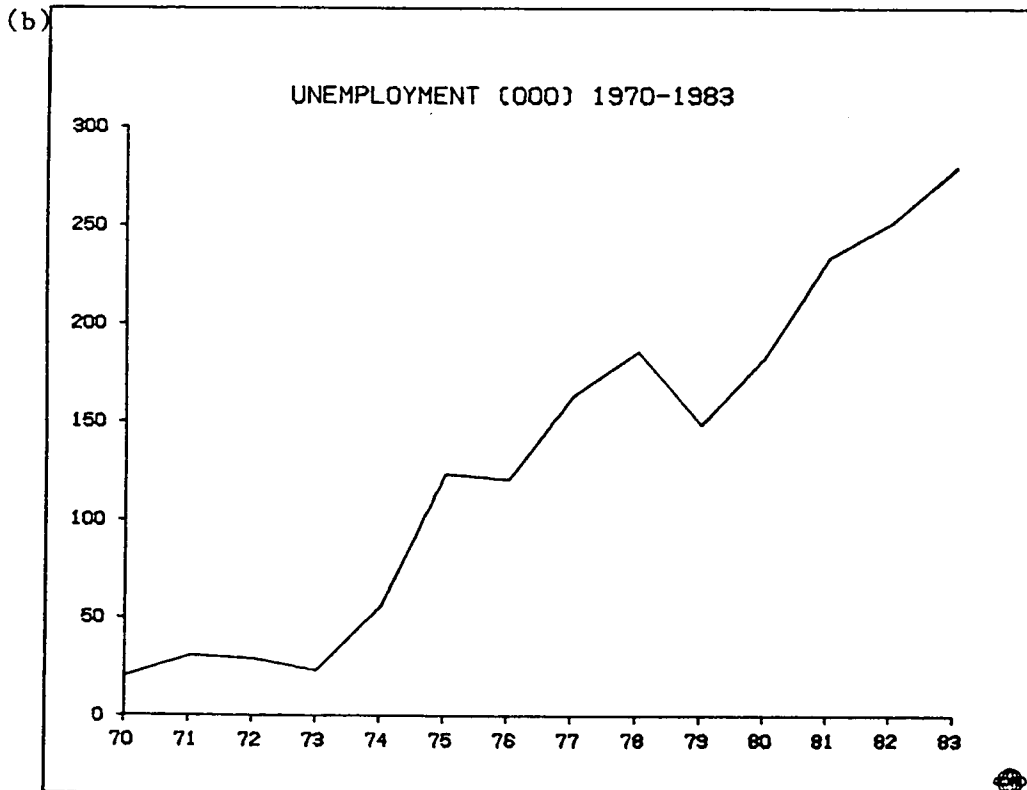
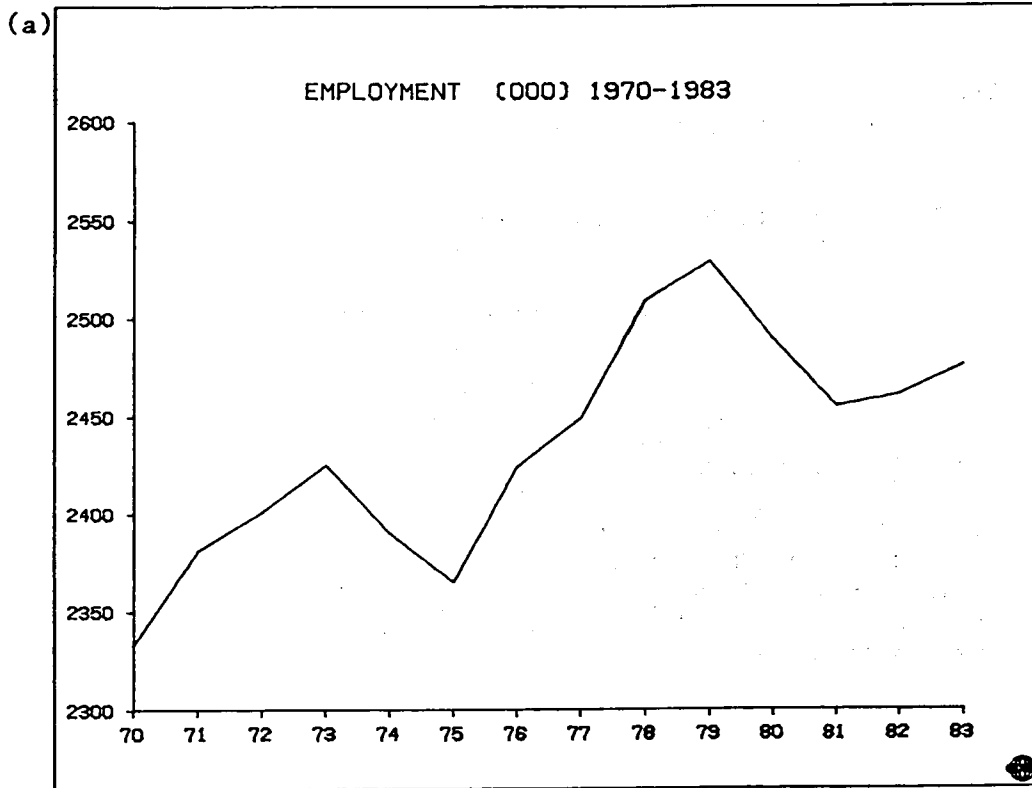
No specific 'small firms policy' exists in Denmark, although many industrial policy instruments are particularly helpful to SMEs. The job creation impact of these schemes is unclear, but some commentators have suggested that a stronger and more effective small firms policy in Denmark may have some success.



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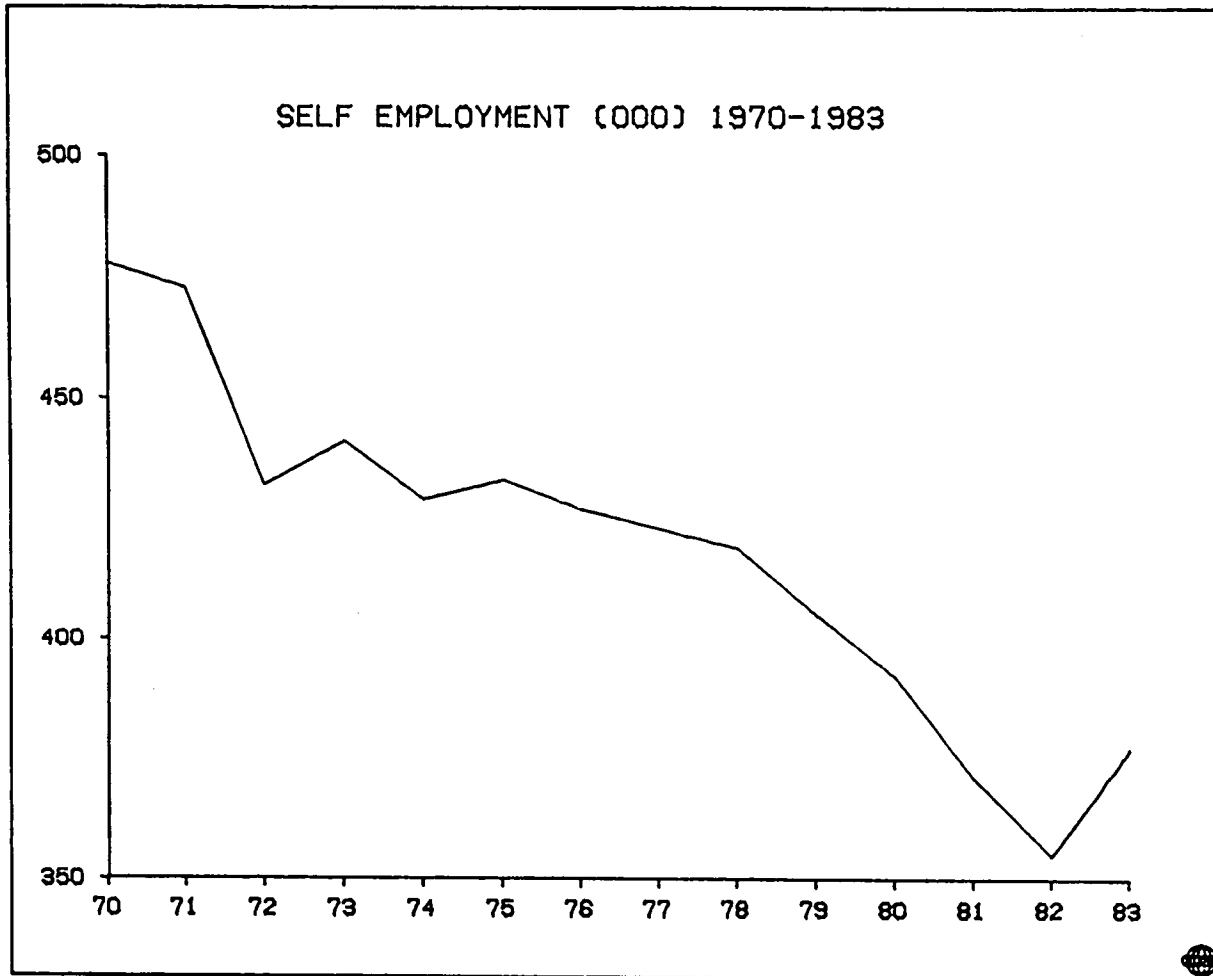
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FIGURE 11.1



Source : EUROSTAT, O.E.C.D.

FIGURE 11.2



Source : EUROSTAT.

TABLE 11.1

NON-AGRICULTURAL SELF EMPLOYMENT AND UNEMPLOYMENT 1970-1983

	<u>SELF EMPLOYED</u> (000)	<u>TOTAL WORKING POPULATION</u> (000)	<u>SE AS % OF WORKING POPULATION</u> (%)	<u>RATE OF UNEMPLOYMENT</u> (%)
1970	275	2098	13.1	0.5
1971	276	2125	13.0	1.1
1972	253	2171	11.7	0.9
1973	260	2198	11.8	0.6
1974	249	2163	11.5	2.2
1975	258	2137	12.1	5.3
1976	257	2201	11.7	5.4
1977	257	2231	11.5	7.3
1978	257	2294	11.2	6.7
1979	249	2321	10.7	5.3
1980	242	2289	10.6	6.5
1981	211	2248	9.4	8.1
1982	193	2251	8.6	8.8
1983	219	2200	10.0	9.8
<b>% Change</b>				
1970-1983	- 20.4	+ 4.9		

Source : EUROSTAT; OECD.

TABLE 11.2

NUMBER OF ENTERPRISES, DISTRIBUTION BY SIZE, MANUFACTURING INDUSTRY

Number of employees	<u>Percentage</u>			
	<u>1965</u> <sup>*</sup> %	<u>1970</u> %	<u>1975</u> %	<u>1980</u> %
6 - 9	16 (16)	18 (18)	19 (19)	19 (19)
10 - 19	28 (44)	29 (47)	29 (49)	31 (50)
20 - 49	29 (73)	28 (76)	29 (77)	27 (77)
50 - 99	14 (87)	12 (89)	12 (89)	11 (89)
100 - 199	7 (94)	7 (96)	6 (95)	6 (95)
200 - 499	5 (99)	4 (99)	3 (99)	4 (99)
500 -	1 (100)	1 (100)	1 (100)	1 (100)
Total (6-)	100	100	100	100
Total number of enterprises	6,304	6,921	6,582	6,684

Remarks : ( ) figures indicate accumulated distribution.

\* Cannot be compared without corrections with later years.

Source : Chamber of Danish Trades and Crafts (n.d).

TABLE 11.3

DISTRIBUTION OF MANUFACTURING EMPLOYMENT BY ESTABLISHMENT SIZE

	ESTABLISHMENT SIZE (employees)								
	<u>6-19</u>		<u>20-99</u>		<u>100-499</u>		<u>500+</u>		<u>TOTAL</u>
	No.	(%)	No.	(%)	No.	(%)	No.	(%)	No.
1970	36,172	8.6	120,678	28.8	148,814	35.5	112,951	27.0	418,615
1973	33,753	8.0	120,033	28.3	154,300	36.4	116,045	27.4	424,131
1975	35,970	9.7	110,269	29.6	122,682	32.9	103,577	27.8	372,498
1979	37,366	9.6	113,116	29.2	137,597	33.5	99,396	25.7	387,475
1982	36,339	10.1	106,393	29.7	124,097	34.6	91,716	25.6	358,545
<b>% Change</b> 1970-1982	+ 0.5		- 11.8		- 16.6		- 18.8		- 14.3

Source : O.E.C.D.

TABLE 11.4

DISTRIBUTION OF MANUFACTURING EMPLOYMENT BY ENTERPRISE SIZE

	ESTABLISHMENT SIZE (employees)									
	<u>6-19</u>		<u>20-99</u>		<u>100-499</u>		<u>500+</u>		<u>TOTAL</u>	
	No.	(%)	No.	(%)	No.	(%)	No.	(%)	No.	
1973	28,830	6.8	103,598	24.5	134,261	31.7	156,882	37.0	423,571	
1974	30,781	7.5	97,548	23.8	125,532	30.6	156,204	38.1	410,065	
1975	31,341	8.4	94,282	25.3	109,102	29.3	137,863	37.0	372,588	
1976	29,406	7.9	95,692	25.6	115,818	31.0	132,975	35.6	373,891	
1977	33,264	8.7	97,707	25.6	116,136	30.4	135,289	35.4	382,396	
1978	32,662	8.6	96,867	25.4	111,240	29.2	140,231	36.8	381,000	
1979	32,849	8.5	97,091	25.1	113,469	29.3	143,252	37.0	386,661	
1980	32,997	8.7	92,127	24.3	112,467	29.7	141,010	37.2	378,601	
1981	33,560	9.3	89,863	25.0	104,640	29.1	131,836	36.6	359,899	
1982	32,404	9.1	89,002	24.9	107,059	29.9	129,218	36.1	357,683	
1983	32,544	9.2	92,039	25.9	105,235	29.6	125,297	35.3	355,115	
<b>% Change 1973-1983</b>	<b>+ 12.9</b>		<b>- 11.2</b>		<b>- 21.6</b>		<b>- 20.1</b>		<b>- 16.2</b>	

Source : O.E.C.D.

TABLE 11.5SMALL FIRMS IN MANUFACTURING AND CONSTRUCTION

	TOTAL NUMBER OF SMALL FIRMS	BIRTHS %	DEATHS %
1973	76,162	14.0	9.5
1974	75,825	9.5	10.1
1975	76,213	10.5	10.0
1975*	67,518	--	--
1976	68,220	11.0	10.0
1977	68,986	11.3	10.1
1978	68,128	9.6	10.8
1979	67,942	9.8	10.1
1980	66,350	9.5	11.8

\* Change in definitions of industries.

Source : Madsen (1986)



TABLE 11.6

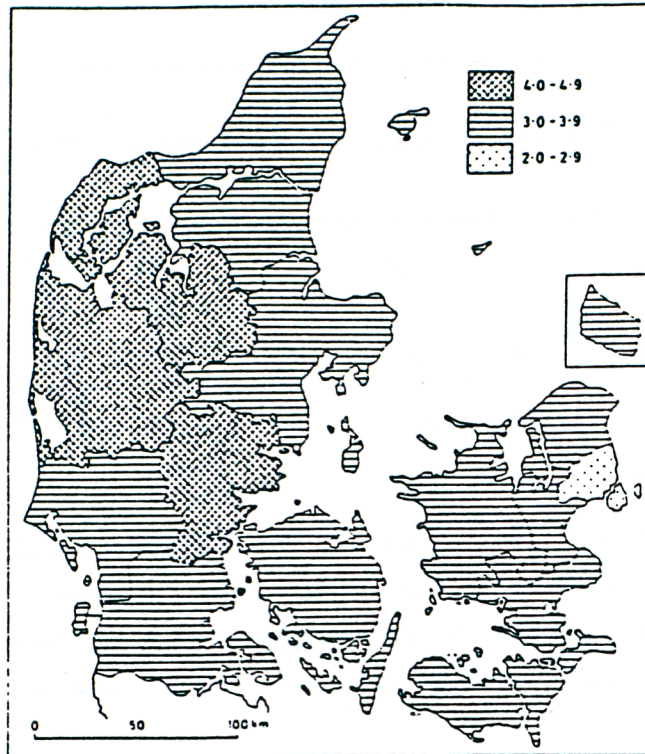
STATE DISBURSEMENTS TO INDUSTRY BY PURPOSE 1970/71 TO 1982/83

Millions annually (Kroner)	70/71	72/73	74/75	75/76	78/79	80/81	82/83	Percentage of Total 82/83
Crisis subsidy	-	-	50	-	54	162	-	-
Investment subsidy	50	150	210	260	830	1.300	1.850	18%
Ship finance	1.100	1.300	1.950	2.800	2.100	2.750	4.300	42%
R & D subsidy	18	18	40	70	70	160	250	3%
Export finance	15	25	60	470	1.050	2.200	3.900	37%
<b>TOTAL</b>	<b>1.183</b>	<b>1.493</b>	<b>2.310</b>	<b>3.600</b>	<b>4.104</b>	<b>6.572</b>	<b>10.300</b>	<b>100%</b>
Current prices in the budget	83	198	300	390	554	782	1.000	10%

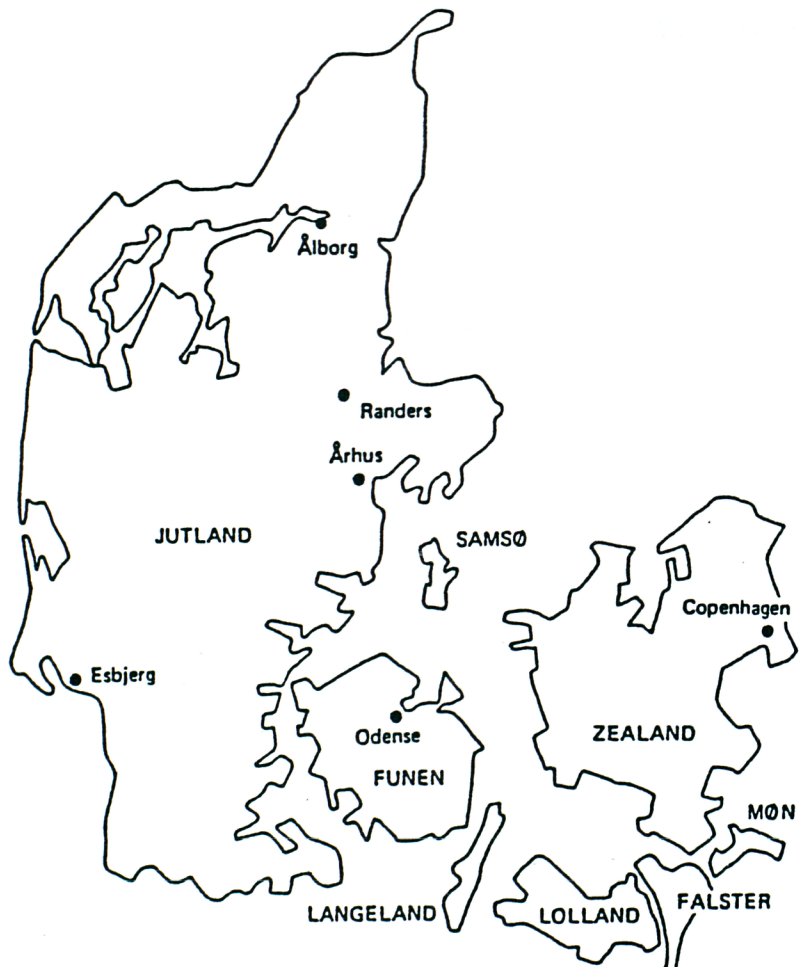
Sources : Braendengaard (1986)

FIGURE 11.3

New firms 1977-80 per 1000 men aged 30-39.



Source : Illeris (1986)



## 12. SME'S AND EMPLOYMENT CREATION : GREECE

### 12.1 Introduction

This chapter is in five parts. The first will consider the reasons for the interest in SME's in Greece and the second will consider the expectations of SME's in economic development. The third section will consider the pattern of SME's in Greece and the fourth, and most substantial section will consider the policies which have been adopted by the Greek government to promote the growth of SME's. Finally a concluding section will consider the implications of these developments for future policy.

### 12.2 The interest in SME's in Greece

There are five main reasons for the current interest in SME's in Greece. Some of these reasons parallel the more general interest in SME's in developed countries whilst others have a uniquely Greek dimension.

The first is that traditionally the SME has been a powerful force for distributing and redistributing power within society. As we shall show the small family business in many less developed areas is a key influence upon economic development. Since the SME is clearly linked to the family it can combine traditional values with economic development.

The second reason is the familiar economic argument that market concentration by large firms, especially when they are owned overseas can lead to market inefficiencies in the form of high prices and profits and/or inefficiencies in production.

Thirdly the SME's sector can provide an important safeguard to consumer demand, since products or services which large scale industry is unwilling to provide can be economically provided by smaller firms. Associated with this is that there may be limits to the willingness of

the consumer to accept mass produced goods; and that when incomes rise quality and individuality become more highly prized attributes.

Fourthly the SME sector can provide both an alternative to unemployment for many individuals and an important buffer in the economy where the large firm suffers fluctuating demand. In such circumstances it may choose to make increasing use of sub contracting which will generally be undertaken by small firms.

Finally in Greece it is thought that the quality of working life in a small firm may be better than in a large firm. It is more likely to be associated with the family and although the wage/formal working conditions may be inferior this is more than compensated by the additional commitment of the worker.

### 12.3 The Expectation of SME's

Although the vast majority of SME's in Greece are of the traditional, family-type, enterprise interest in SME's is heavily concentrated upon the capacity of the sector to introduce new ideas, products and processes. In particular the role of technological change is closely associated with the small firm. For example it has been noted that large and small firms can combine symbiotically to provide an environment in which rates of technological change are maximised. For example the large firm can provide the resources to finance R & D and the capacity to market the product/service once it is developed. The small firm, on the other, can provide the base for the creativity necessary to facilitate new innovations or inventions. In the small firm, with its flexible working practices and the opportunity for creativity, rates of invention are likely to be maximised, and it is for this reason that the small firm sector in many countries has been the focus for radical inventions.

#### 12.4 The Patterns of SME's in Greece

There is a considerable shortage of data on SME's in Greece and so we rely heavily upon the analyses of Dokopoulou (1986). The most recent data is for the Census of 1981 dealing with the year 1978 and this makes it clear that in Greece the fortunes of the SME sector and those of the national economy as a whole are closely connected. For example Table 12.1 shows that, if we define small as less than 10 employees, then 94% of establishments, employing just over half (52%) of the manufacturing labour force, are in this category. In fact the importance of very small establishments is even more stark than demonstrated by these figures, since out of the 129,000 manufacturing establishments 85% have less than 4 employees.

Table 12.1

% OF TOTAL ESTABLISHMENTS AND TOTAL MANUFACTURING  
EMPLOYMENT, BY SIZE BAND, IN GREECE 1978

<u>% of</u>	<u>1-9 Employees</u>	<u>10-50 Employees</u>	<u>50+ Employees</u>	<u>Total</u>
<u>Manufacturing Establishments</u>	94	3	3	100
<u>Manufacturing Employment</u>	52	17	31	100

In Greece a medium sized enterprise is defined as having between 11 and 50 employees. This group constitutes only 3% of manufacturing establishments but provides 17% of employment, and so in total the SME sector constitutes 97% of all manufacturing establishments and 69% of all employment. Finally a large firm is defined in Greece as having more than 50 employees and this group provides the remaining 31% of manufacturing employment.

Table 12.2 shows the changes in employment in small establishments over the period 1960-1978. It shows that over that period employment in small plants increased by 78,000 jobs or an annual growth rate of 1.17%, whereas the annual employment growth of all plants was 2.91%. This clearly indicates that employment growth in small plants was lower than that in large plants.

TABLE 12.2 : Employment change in small establishments  
1960-1978

	Total	Mining	Manufac- turing	Industries				Real estate insur. banking
				Gas water electr.	Restaur. Hotels Commerce	Transp. Stor. Commun.		
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	
Small plants:								
Employment								
1978 000s:	782.8	3.6	264.1	2.4	429.4	20.3	26.3	
Change								
000s:	78.0	-0.9	+16.6	+0.1	+55.7	+4.0	+8.9	
Annual growth								
rate:	+1.17	-2.49	+0.72	+0.49	+1.56	+2.49	+4.70	
All plants:								
Annual growth								
rate:	+2.91	-0.49	+3.30	+4.14	+2.13	+4.82	+5.69	
Small plants:								
Distribution:	100.0	0.5	33.7	0.3	54.8	2.6	3.4	
% in sector:	51.7	17.0	39.3	9.2	82.2	13.3	36.8	

Sources: National Statistical Service of Greece (NSSG), 1981, Résultats du Recensement des Industries Manufacturières-Artisanats, du Commerce et autres Services, effectué le Septembre 1978, Athens; and NSSG (1971), Recensement des Etablissements Industriels et Commerciaux, effectué le Septembre 1969, Athens.

Table 12.2 also shows that within the manufacturing sector the employment growth of small plants has been markedly inferior to that of all plants. Annualised employment growth in small plants is only 0.72% compared with 3.3% for all plants. This result is confirmed in Table 12.3 which examines employment changes over the shorter period 1973-1978. It shows that over the period annual average employment rate increase was 0.71% for establishments with less than 10 workers, compared with 3.91% for those with more than 50 workers.

Table 12.3 Changes in manufacturing 1973-1978.

	Average Size (emps.)		Estab- lishm.		Employment	
	1978	% aver. annual	% aver. annual	net change	% aver. annual	rate: per an. /1000 in man.
	(1)	(2)	(3)	(4)	(5)	(6)
1- 9	2.19	-0.54	+1.18	+9124	+0.71	+3.02
10-49	19.49	+0.24	+1.49	+11500	+1.74	+3.87
over 50	175.51	-0.19	+4.11	+46832	+3.91	+15.50
Total	5.21	+0.91	+1.23	+67456	+2.13	+22.39

Sources: NSSG, 1975, Resultats du Recensement des Industries Manufacturières-Artisanats et des Industries Extractives, effectué le Septembre 1973, Athens: NSSG (1981) op. cit.

The geographical distribution of this change is illustrated in Table 12.4. It shows that whilst for Greece as a whole there was a 1.18% increase in employment in small establishments between 1973 and 1978 it was concentrated in the regions of Greater Athens, Macedonia and Thraki. In fact all other Greek regions experienced a decline. This indicates that economic development, both in SME's and in other sized employment units has concentrated along the 'S' curve of the main highway running from North to South along the Aegean Coast. In contrast in the more peripheral areas, notably in the Islands, there has been a decline in employment with the existing SME's concentrating on production for primarily local markets and frequently providing a somewhat inferior import substitution.

Table 12.4 Urban and regional changes in small manufacturing establishments 1973-1978.

	Employment			Aver. Size		Establishments
	Total	1-9	1-9	(empl./plant)	1-9	1-9
	Growth	Growth	Change	Growth	Growth	Growth
	rate	rate	of share	rate	rate	rate
	per	per	in	per	per	per
	annum	annum	region*	annum	annum	annum
	(1)	(2)	(3)	(4)	(5)	(6)
<u>Regions</u>						
Greece	+2.13	+0.71	-2.9	+0.91	-0.54	+1.18
Greater Athens	+0.14	+1.15	+1.8	-1.81	-1.10	+2.26
Macedonia	+4.29	+2.10	-4.5	+1.67	-0.27	+2.43
Rest of Sterea	+5.75	+0.33	-6.9	+5.24	+0.40	-0.10
Peloponnisos	+2.97	-0.36	-7.3	+2.29	-0.10	-0.24
Thessalia	+3.10	-0.78	-9.1	+3.46	-0.29	-0.49
Crete	+0.58	-0.54	-3.9	+0.27	-0.42	-0.10
Aegean Islands	-3.45	-3.93	-1.7	+0.61	-1.19	-2.71
Thraki	+8.62	+2.51	-18.6+	+5.55	-0.10	+2.61
Ipiros	+1.65	-0.41	-6.7	+1.64	-0.29	-0.12
Ionian Islands	-1.07	-1.20	-0.5	-0.26	-0.43	-0.81
<u>Urban-Industrial</u>						
Centres	+2.45	+1.29	-2.1	+0.26	-0.91	+2.21
Thessaloniki	+0.57	+1.51	+1.9	-1.69	-0.96	+2.48
Elefsis	+6.10	+5.49	-0.2	+1.24	+2.54	+2.91
Patras	+3.79	+3.40	-0.6	-1.09	-1.59	+5.11
Volos	+5.18	-0.37	-8.9	+4.56	-1.00	+0.67
Larissa	+3.64	+2.52	-1.9	+0.09	-0.92	+3.43
Heraklion	+1.32	+1.21	-0.4	-0.86	-1.00	+2.25
Canea	+1.50	-0.63	-5.9	+1.10	-0.82	+0.17
Kalamata	+3.01	-2.43	-11.0	+5.08	-0.42	-2.05
Kavalla	+2.78	-1.35	-8.8	+1.55	-2.17	+0.88
Ptolemais	-0.91	-1.15	-0.4	-0.71	-0.78	-0.36

\* The share of employment of small plants in the regions manufacturing employment in 1978 minus the corresponding share in 1973.

+ Employment in small manufacturing establishments in the region of Thraki rose from 5795 in 1973 to 6561 in 1978, an annual growth rate of 2.51 per cent; but this was only one-third as fast as the growth of total manufacturing in the region (8.62 per cent per annum). As a result, the share of small establishments in the regions manufacturing employment fell from 73.9 to 55.3 per cent, giving a change in share of -18.6

Sources: NSSG (1975 and 1981), op. cit.



The second half of Table 12.4 also illustrates the interesting point that SME's growth has been concentrated primarily upon the urban industrial areas. For example it shows that in these urban centres employment growth in small units was 2.21% compared with 1.18% for Greece as a whole. Secondly it shows that all of the major urban areas, except for Kalamata and Ptolemais showed a growth in employment.

In conclusion the statistical evidence suggests that for Greece there is evidence of increasing concentration but that small firms are also increasing their labour forces - with their growth rates, however, being lower than those of large firms. It also appears that small firms perform better in the urban areas rather than in the rural/island locations. Nevertheless the growth in small firms in Greece is of importance and is attributed by Dokopoulou to three factors. The first is the familiar recessionary conditions imposed by the 1973 oil price increase. The second is the strengthening of industrial incentives in 1971, 1978 and 1982 and the third is the policy of developing Industrial Estates - of which there were only 3 in 1977, but which currently exceed 30.

### 12.5 The Problems of SME's

It appears true that in Greece SME's are unlikely to be a major factor in the future development of the national economy since they are constrained by the structural problems of the areas in which they operate. For example it is the large cities, rather than the rural areas which are the main incubators of SME's and particularly of the type of high-technology firms which are the particular focus of policy. Too frequently the traditional SME is family-owned and operated in isolation from each other - so limiting the extent of between-firm co-operation which characterises the more successful small firm development found in the North-East-Central Italy. In the traditional sectors such as leather, ceramics, jewellery, textiles etc. Greek SME's are frequently competing with SME's in Italy, yet their products are generally of a significantly inferior quality. In many cases the Greek

SME has no professionally qualified staff amongst its employees, little contact with Universities or institutions of Higher Education or Research Centres. The firms are frequently dependent upon imported raw materials and exhibit little vertical integration.

#### 12.6 Public Initiatives to promote the growth of SME's : EOMMEX

The prime public sector organisation designed to promote the development of SME's is EOMMEX. [The Hellenic Organisation of Small and Medium Sized Industries and Handicrafts]. EOMMEX was established in 1982 and in 1985 spent 3.3 b dr - approx, £16m sterling - much of which was provided by the European Community. Technically the organisation is under the control of the Ministry of Industry, Energy and Technology.

The functions of EOMMEX are:

- Provision of technical assistance to SME's and information on technological, economic and legal matters.
- Support of concerted actions and SME co-operatives.
- Promotion of subcontracting and public sector procurement for SME's.
- Organisation of exhibitions and fairs abroad and in Greece, promoting the sales of SME's.
- Provision of training of SME entrepreneurs in the fields of management, new technologies etc.
- Subsidy for investment by SME's under Law 1262/82
- Promotion of industrial design.

Industrial incentives for all sizes of enterprise are currently administered under Law 1262/82. The whole of Greece has a system of industrial incentives but for these purposes the country is sub-divided into 4 Regions where differential rates of incentives apply. This is shown in Table 12.5.

Table 12.5% Rates of Incentives

Region	A	B	C	D
Grant	30	10-25	15-40	20-50
Investor	30	35	25	15
Loan	40	40-55	35-60	35-65

Key Region    A = Athens and Thessoplonika  
                   B = Developed 'S' (Main Highway Area)  
                   C = All other areas  
                   D = Borders and Islands

Under Law 1262/82 each project is in three parts. The first is the personal contribution made by the investor or the company, and it is inversely related to the problems of the area. For example in the Islands and Borders (Region D) the investor is expected only to make a contribution of 15%, compared with 35% in the Developed Areas. The second part of the project is the loan from the Bank which is related to the level of grant a project may expect to receive. For example in Region D a project may expect to receive a grant of up to 50% - although grant could also be as low as 20%.

The actual grant paid depends on a complex calculation of factors which vary according to:

- The sector of the enterprise. More is paid to enterprises in sophisticated growth sectors, than in declining traditional sectors.
- The proportion exported. More grant is paid to enterprises which export than to those where sales are primarily to local markets.
- The origins of the raw materials. More grant is paid where the raw materials come from Greece than where they have to be imported.

- The size of the enterprise. A higher rate of grant is paid to larger firms than to smaller firms.
- The extent of verticalisation. A higher rate of grant is paid where vertical integration between firms is higher.
- The currency cost of the investment.

Finally special incentives are available for investment in co-operatives, by certain local authorities, by Greeks returning home from abroad; in pollution control technologies and in new laboratories or high technology investments.

#### 12.7 The Innovation and Technology Department of EOMMEX

Of particular interest as a new initiative is the Innovation and Technology Department of EOMMEX, the function of which is to enhance the technical level of SME's in Greece. The Department was established because it was recognised that the development of new products by SME's in Greece was low and that where new products were introduced they were frequently copies of imported products, production of which was aimed at local markets.

Now, under a scheme for technical entrepreneurs, the individual applies for a grant and is visited by an EOMMEX official and a formal application is made. If appropriate the application is then vetted by an outside technical expert and a recommendation is made to a Committee of EOMMEX.

Originally this scheme started in Athens but it has now been extended to 10 EOMMEX Offices with a total of 850 applications having been handled - about half of which have been financed. Total spending on the scheme has totalled about 250 m dr. (just over £1m). The scheme started nearly 3 years ago and is now under review along with other projects. For projects of less than 40 m dr. EOMMEX itself undertakes the appraisal. For larger schemes of up to 200 m dr. appraisals are conducted by the

Office of Regional Development, whereas for the largest appraisals are undertaken by the Central Ministry of Financial Economy.

These appraisals have suggested that, for the technical projects, a number of new initiatives might be tried. For example there is an observed tendency for entrepreneurs to accept only the grants when it is clear that other forms of assistance might be of greater benefit to the business. This has meant that there is now consideration being given to linking financial assistance with an agreement to co-operate with other firms, or with appropriate experts in Universities or Research Centres. In this sense therefore the Innovation and Technical Department of EOMMEX sees itself as a technical catalyst between firms and other firms/organisations.

Another new initiative is to provide the entrepreneur with encouragement to develop his product. EOMMEX may finance a market research study for a new or different product, and it may then help the entrepreneur to obtain credit to finance the development. In its proposed Business and Innovation Centre there will be facilities for building of Prototype models using the most sophisticated modern electronic design equipment.

### 12.8 Conclusion

In Greece the 1970's saw an increase in employment in the small firm sector but, in contrast to many other EEC countries, a faster increase in employment in larger firms. Nevertheless the Greek economy continues to be dominated by very small plants the growth of which is closely linked to the family. The Greek Government, through its establishment of EOMMEX, however, is adopting a number of innovative policies to promote SME's particularly in the peripheral regions where SME growth has been weak. It is too early to judge the effectiveness of these schemes but several look to be promising.



CHAPTER 13

JOB GENERATION IN SMALL AND MEDIUM SIZED ENTERPRISES : PORTUGAL

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## 13.1 Introduction

### 13.1.1 The Economy of Portugal

On 1 January 1986, Portugal became a member of the European Communities (EC), a step that indicated the scale of economic, political and social change there in recent decades. The country is now the seventh largest EC member in terms of population - and area - but twelfth in terms of income per head (using GDP per capita). This low income level of around \$ 2000 p.c. (Table 13.1) - is despite the rapid economic growth of the 1960s, when Portugal became more closely integrated into the expanding North European economy and less confined within the boundaries of its fading empire. Since the international economic and internal political changes of 1974, GDP growth rates have generally been lower, but the structure of the economy has continued to change, so agriculture now accounts for only 9% of GDP and 22% of employment (Tables 13.1 and 13.2) as industrial and service activities have expanded (most markedly in the major cities of the coastal regions). Much of this change is related to Portugal's external trading position with imports of both raw materials and agricultural produce and exports of industrial goods growing at unequal rates so that large public debts and periods of domestic austerity have been necessary to cope with the chronic balance of trade deficit (Table 13.3) Other international flows of income, like tourist receipts, emigrant remittances and foreign investment, have also increased in importance (Hudson & Lewis, 1985) but the magnitude of trade flows best underlies the extent to which Portugal is influenced by external events (such as oil price charges or growth in demand for its exports) as exports were equivalent to 39% of GDP in 1984 and imports, 41%. In such circumstances, the Portuguese government obviously attaches considerable importance to developments in the other members of the EC, its major trading partners.

Table 13.1Basic Demographic and Economic Indicators

Population (millions), 1981	9.8
Population Growth, % per annum, 1970-81	1.3
GDP, 1984 (billion \$US)	19.3
GDP per capita, 1984 (\$US)	1,906
Annual Growth of GDP per capita, 1979-84	1.3
GDP from Agriculture	9.2
GDP from Industry	40.2
GDP from Services	50.6

Sources: INE (1985); OECD (1986)

Table 13.2Employment by Sector (Percentage), 1960-86

	<u>1960</u>	<u>1970</u>	<u>1980</u>	<u>1986</u> <sup>1</sup>
Agriculture	43.6	39.9	28.3	21.8
Industry	28.9	32.7	35.7	26.0
Construction	6.8	8.6	8.3	7.6
Services	20.7	28.8	27.7	44.6

NOTE: 1. Estimates for 1st Quarter of 1986, on a different basis from 1960-80.

Sources: INE (1986c); OECD (1984)

Table 13.3External Merchandise Trade (million \$US)

	<u>1975</u>	<u>1980</u>	<u>1984</u>
Imports	3,839	9,271	7,975
Exports	1,939	4,633	5,208
Deficit	1,900	4,638	2,767

Source: OECD 1986Table 13.4Rate of GDP Change per annum, 1975-85

<u>1975</u>	<u>1977</u>	<u>1979</u>	<u>1981</u>	<u>1983</u>	<u>1985</u>
-4.3	+5.6	+6.1	+0.5	-0.3	+3.0

Source: OECD 1986

### 13.1.2 The Portuguese Labour Market

A succession of democratic governments since 1974 have sought to cope with rising domestic expectations and deteriorating external conditions with a series of consumer-led economic booms and periods of austerity, so that economic growth rates have fluctuated dramatically (Table 13.4) (Hudson, 1986). However, the average rate of growth of 1.3% p.a. (1979-84) has not been sufficient to generate enough employment for a growing labour force. Indeed, Table 13.5 shows that total official employment in the non-agricultural sectors was slightly less in 1983 than in 1974. Employment growth has been confined to service sectors such as Banking (+61%), Transport (+6%), Other Services (essentially public services) (+5%) and, almost certainly, Utilities like Electricity, Gas and Water distribution. The national employment problem has been made more serious by the substantial reduction in opportunities for labour emigration (Table 13.6), especially elsewhere in the EC, since about 20% of the country's labour force worked abroad in the 1960s. Their gradual return, and the dramatic repatriation of some 3/4 million people (known as retornados) from the African colonies in 1975, has both increased the labour force living in Portugal and resulted in declining levels of the remittances which had once paid for one third of the import bill (Lewis & Williams, 1985a, 1987a). This growth in the labour force due to return migration combined with increasing female participation rates and natural population growth to give annual rates of expansion in the numbers available for employment of 2.3% in the 1970s and 1.9% in the 1980s (Table 13.7). Since total employment appears to have remained static after 1974, there has thus been an increase in recorded unemployment from 2% to 8.6% at present (Table 13.8) - though the rate has not changed greatly since 1981. Amongst the 400,000 defined as unemployed at the end of 1985, it should be noted that the unemployment rate was higher for women than for men and almost reached a level of one in five for those aged under 25.

These general conditions in the labour market are evident in different ways from one region of the country to another, for the numerous changes

Table 13.5Employment Index (1974 = 100) by Sector, 1979-83

	<u>1979</u>	<u>1983</u>
Fishing	77.1	63.1
Mining	96.0	87.0
Manufacturing	100.5	97.1
Construction	89.0	89.8
Electricity, Gas & Water	129.2	n.a.
Transport	107.4	105.5
Trade	98.0	97.2
Banking, Insurance & Real Estate	129.6	161.3
Other Services	103.2	104.6
	—	—
Total	100.3	99.5
	—	—

Source: OECD (1986)Table 13.6Legal Emigration and Emigrant Remittances, 1960-84

	<u>1960</u>	<u>1965</u>	<u>1970</u>	<u>1975</u>	<u>1980</u>	<u>1984</u>
Legal Emigrants ('000)	32.3	89.1	66.4	24.8	18.0	6.6
Remittances (million \$US)	70	130	550	1097	2925	2155

Source: Lewis & Williams (1987a)

Table 13.7Economically Active Population ('000), 1960-84

	<u>1960</u>	<u>1970</u>	<u>1980</u>	<u>1984</u>
Males	2,817	2,539	2,705	2,649
Females	606	857	1,478	1,924
Total	<u>3,424</u>	<u>3,396</u>	<u>4,183</u>	<u>4,573</u>

Source: Soares (1986)

Table 13.8Rate of Registered Unemployment (%) by Sex and Age, 1974-86

	<u>Male</u>	<u>Female</u>	<u>Under 15</u>	<u>Total</u>
1974	1.3	2.3	5.5	2.1
1975	2.3	4.1	8.0	3.0
1976	5.2	6.1	12.0	5.6
1977	4.9	8.5	14.9	6.3
1978	4.8	11.1	17.5	7.2
1979	4.6	12.4	17.9	7.7
1980	3.5	12.1	16.2	7.0
1981	3.8	14.6	16.9	8.2
1982	3.7	12.3	n.a.	8.3
1983	4.7	12.0	17.8	7.8
1984	5.9	12.1	19.3	8.4
1985	6.3	11.4	19.4	8.5
1986	6.8	10.9	n.a.	8.6

Sources: OECD (1984, 1986); INE (1986d)



of recent decades have occurred unevenly between areas in the North and South, between those in coastal locations and those in the interior and between rural and urban places. Thus, for example, the rural areas of the Northern interior, bypassed by much of the economic growth of the 1960s, now face an unemployment problem for the children of returned emigrants, while the heavy industrial zone on the south bank of the river Tejo is now suffering from the reduction of employment and wages in publicly owned firms. Likewise, there are example of contrasts between the labour markets of the latifundios areas of the Southern interior and those growing parts of the rural North where multiple-activity by families with minifundios is possible. These kinds of regional difference are an importance theme in the analysis of job generation, as there are in so many aspects of Portuguese life.

### 13.2 The Distribution of Small and Medium Sized Enterprises

#### 13.2.1 Definitions

Small and medium sized enterprises (SME's) were first officially defined in Portugal after the creation of the Comissão de Apoio as Pequenas e Medias Empresas (CAPME) in 1974. This Commission had to propose a legal definition relevant to extractive and manufacturing industries, construction, transport activities and, later, both tourism and fishing. However, early in 1975, CAPME was succeed by the establishment of Instituto de Apoio às Pequenas e Medias Empresas Indústriais (IAPMEI) with the Ministerio da Indústria e Emergia, so the definition then formalised referred only to industrial and construction enterprises. The essential features of this initial definition of SME's were its use of a size limitation in terms of number of employees - between 5 and 400 - and an upper limit on the volume of sales per annum - of 250,000 contos (1 conto is 1000 escudos). These criteria were varied slightly to include larger enterprises with shift working or a substantial share of exports in their turnover, lower limits of both employment and turnover were set for construction firms and restrictions on the degree of ownership by other companies were imposed.

In April 1984 these criteria were revised further so that SME's are now regarded as eligible for assistance from IAPMEI if they meet the following conditions:

- (i) their activities are predominantly extractive or manufacturing;
- (ii) their employment is greater than 5 but not less than 500 (or 600 if there is shift work);
- (iii) their annual sales are under 400,000 contos in value (or 500,000 contos if at least 100,000 contos are sold as exports);
- (iv) they do not own another company and are not more than 50% owned by another company or shareholder(s) owning other companies.

In addition, IAPMEI can assist similar sized firms engaged in the provision of business services (Classificação das Actividades Economicas (CAE) 832), enterprises that exceed the size limits as a result of IAPMEI assistance in the previous 3 years, voluntary groups of SME's constituted in accordance with IAPMEI rules and enterprises with less than 6 employees if they are expanding and located in industrial parks (IAPMEI, 1984a). The basic definition included about 63% of industrial enterprises - with over 70% of industrial workers - as SME's if applied to 1982 data, with 36% of firms (accounting for 3% of employment) employing up to 5 people and the remaining 1% regarded as large enterprises which employed some 25% of the industrial labour force.

The existence of such a definition in relation to government assistance (reviewed in Section 13.4.2) is an advantage when discussing policy and its upper limit in employment terms fits well with the practice elsewhere of treating 500 employees as the divide between medium- and large- sized enterprises. However, the exclusion of the smaller firms, - however limited their total employment - does reduce the usefulness of the definition in reviewing the overall distribution of SME's. So does

the fact that the Institutio Nacional de Estatisticas (INE) presents its industrial statistics with a division between establishments employing under 5 (which complete a simplified census return) and those employing 5 or more, for this makes it difficult to compare patterns of SME's with ones derived from the use of IAPMEI's dividing line of 6 employees. The third problem is that the IAPMEI definition does not apply to service activities, yet SME's are a key element in this sector. For these reasons, this part of the review of employment in SME's will follow the convention established elsewhere in the EC and define firms employing up to 100 people as small and those with 100 to 499 as medium-sized. Since that placed 99.8% of establishments and 83.1% of employees in SME's on 1985 data, these two large groups are subdivided here when appropriate. Furthermore, the case studies considered in Section 13.3 use a number of other classification by size and the material relating to IAPMEI in Section 13.4.2 has a combination of both 'old' and 'new' definitions to bear in mind.

#### 13.2.2 SME's in Sectoral Censuses

Information on job generation in SME's in Portugal is limited by the relative scarcity of comprehensive official surveys. Until 1972, there had not been an industrial census that covered all the relevant establishments and the slow production of the results of the 1984 industrial census means that this remains the only complete survey - fifteen years and many economic changes later. The only census of service enterprises took place in 1977 and was confined to distributional, some producer services and private sector consumer services. However, despite their datedness, it is widely accepted that both censuses were conducted in such a way as to present an accurate picture of the then current situation, so their results will now be summarised in turn.

In 1972 Industrial census covered mainland Portugal and the adjacent islands (the Azores and Madeira), with particular reference to the activities of establishments during 1971. Industrial establishments

were defined as those active in CAE 2 (Extraction Industry), CAE 3 (Manufacturing Industry), CAE 4 (Electricity, Gas and Water) and CAE 5 (Construction and Public Works) - for full details of the 1973 version of the CAE, see Appendix 1. The results were published at both distrito and concelho level for the mainland, with separate volumes for the Azores and Madeira (INE, 1977), and also in a form with the greater detail obtained for establishments with 5 or more employees (INE, 1978a). Tables 13.9 and 13.10 present the details of industrial establishments and employees by employment size for the 18 distritos and 2 autonomous regions (as they now are) of the Azores and Madeira. The national distribution of establishments by size is clear - only 0.4% of establishments were not SME's (as so many firms in Portugal were single establishments enterprises, the proportion of enterprises with over 500 employees was also 0.4%). Indeed, over two-thirds had under 5 employees and only 2.3% were even medium-sized. Half the distritos and islands had no more than 1 establishment with over 500 workers. Further evidence of this degree of regional imbalance is evident in Table 13.10, for while SME's accounted for 75.6% of employment nationally, they were the only source of industrial employment in the interior distritos of Braganca and Vila Real, the island of Madeira and the southern rural distritos of Evora and Faro. In contrast, the area around the capital had 37% (Lisboa) and 44% (Setúbal) of its industrial employment in large firms and the coastal industrial belt of Northern Portugal recorded levels of large firm employment of 30% in Braga and 23% in Porto.

Part of this variation in SME presence is explicable in terms of the total number of industrial establishments and employees in each distrito, for the more rural areas had, at that time, few of any sorts of non-agricultural enterprises but it also reflects the differences in importance of SME's, between the subsectors of industry. Table 13.11 shows that industrial subdivisions like CAE 33 (Wood & Cork) and CAE 31 (Food, Drink and Tobacco) are dominated by SME's which account for 93.9% and 94.2% of employment respectively. At the other extreme are those activities like Basic Metal production with almost half their employment in large firms. Even the textile and clothing industry, the largest

Table 13.9

Number (and Percentages) of Industrial Establishments,  
by Size of Establishments by Distrito, 1971

Distritos and Regions	1-4	5-9	10-19	20-49	50-99	1-99	Size (Employees)					Total	
							100-199	200-499	100-499	500-999	1000+		500+
Aveiro	3,152(0.1)	451(8.6)	692(13.2)	586(11.2)	204(3.9)	5,085(96.9)	100(1.9)	46(0.9)	146(2.8)	7(0.1)	5(0.2)	12(0.2)	5,243
Beja	1,168(86.8)	88(6.5)	40(3.0)	35(2.6)	8(0.6)	1,339(99.5)	5(0.4)	1(0.1)	6(0.5)	1(0.1)	0(0.0)	1(0.1)	1,346
Braga	2,345(60.8)	189(10.1)	450(11.7)	372(9.6)	158(4.1)	3,714(96.2)	63(1.6)	58(1.5)	121(3.1)	14(0.4)	11(0.3)	25(0.7)	3,860
Bragança	830(90.3)	30(3.3)	28(3.0)	23(2.5)	5(0.5)	916(99.7)	2(0.2)	1(0.1)	3(0.3)	0(0.0)	0(0.0)	0(0.0)	919
Castelo Branco	1,561(78.3)	154(7.7)	99(5.0)	117(5.9)	34(7.6)	1,965(98.6)	20(1.0)	4(0.2)	24(1.2)	3(0.2)	0(0.1)	4(0.2)	1,993
Coimbra	2,169(79.9)	144(5.3)	164(6.0)	118(4.3)	65(2.4)	2,660(98.0)	32(1.2)	17(0.6)	49(1.8)	4(0.1)	0(0.0)	4(0.1)	2,713
Evora	956(72.9)	127(9.7)	114(8.3)	78(5.9)	22(1.7)	1,197(98.9)	11(0.8)	3(0.8)	14(1.1)	0(0.0)	0(0.0)	0(0.0)	1,311
Faro	1,743(77.4)	178(7.9)	167(7.4)	81(3.6)	49(2.2)	2,218(98.5)	26(1.2)	8(0.4)	34(1.5)	0(0.0)	0(0.0)	0(0.0)	2,252
Guarda	1,299(87.8)	53(3.6)	59(3.4)	35(2.4)	13(0.9)	1,459(98.6)	12(0.8)	6(0.4)	18(1.2)	2(0.1)	1(0.1)	3(0.2)	1,480
Leiria	2,133(71.4)	245(8.2)	233(7.8)	221(7.4)	84(2.8)	2,916(97.6)	42(1.4)	20(0.7)	62(2.1)	8(0.3)	2(0.1)	10(0.3)	2,988
Lisboa	5,154(60.6)	1,001(11.8)	958(11.3)	685(8.1)	288(3.4)	8,086(95.1)	198(2.3)	132(1.6)	330(3.9)	60(0.7)	25(0.3)	85(1.0)	8,507
Portalegre	1,182(84.2)	93(6.6)	76(5.4)	31(2.2)	101(0.7)	1,342(99.2)	7(0.5)	3(0.2)	10(0.7)	1(0.1)	0(0.0)	1(0.1)	1,403
Porto	7,205(60.8)	1,403(11.8)	1,431(12.1)	1,021(8.6)	353(3.0)	11,413(96.3)	254(2.1)	127(1.1)	381(3.2)	45(0.4)	14(0.1)	59(0.5)	11,853
Santarem	3,363(79.4)	304(7.2)	262(6.2)	184(4.3)	71(1.7)	4,184(98.8)	28(0.7)	20(0.5)	48(1.1)	2(0.0)	1(0.0)	3(0.1)	4,235
Setúbal	1,824(64.5)	363(12.8)	261(9.2)	175(6.2)	95(3.4)	2,718(96.1)	54(1.9)	32(1.1)	86(3.0)	16(0.6)	8(0.3)	24(0.8)	2,828
Viana Do Castelo	1,202(78.9)	121(7.9)	105(6.9)	64(4.2)	21(1.4)	1,513(99.3)	4(0.3)	5(0.3)	9(0.6)	0(0.0)	1(0.1)	0(0.1)	1,523
Vila Real	978(87.3)	44(3.9)	47(4.2)	26(2.3)	15(1.3)	1,110(99.1)	8(0.7)	2(0.1)	10(0.9)	0(0.0)	0(0.0)	0(0.0)	1,120
Viseu	2,097(81.2)	205(7.9)	156(6.0)	92(3.6)	23(0.9)	2,573(99.6)	6(0.2)	4(0.2)	10(0.4)	1(0.0)	0(0.0)	1(0.0)	2,584
Mainland Total	40,361(69.4)	5,393(9.3)	5,342(9.2)	3,945(6.8)	1,517(2.6)	56,558(97.3)	872(1.5)	488(0.8)	1,360(2.3)	164(0.3)	70(0.1)	234(0.4)	58,152
Azores	974(75.7)	100(7.8)	92(7.1)	31(6.3)	18(1.4)	1,265(98.3)	11(0.9)	10(0.8)	21(1.6)	1(0.1)	0(0.0)	1(0.1)	1,287
Madeira	1,090(71.9)	156(10.3)	131(8.6)	74(4.9)	42(2.8)	1,493(98.5)	18(1.2)	4(0.3)	22(1.5)	0(0.0)	0(0.0)	0(0.0)	1,515
Total	42,425(69.6)	5,649(9.3)	5,565(9.1)	4,100(6.7)	1,577(2.6)	59,316(97.3)	901(1.5)	502(0.8)	1,403(2.3)	165(0.3)	70(0.1)	235(0.4)	60,954

Sources: Recenseamento Industrial, 1972 (INE, 1977, 1978a)

Table 13.10

Number (and Percentages) of Industrial Employees by size of Establishment by Distrito

Distritos and Regions	Size (Employees)							Size (Employees)					Total
	1-4	5-9	10-19	20-49	50-99	-99	100-199	200-499	100-499	500-999	1000+	500+	
Aveiro	5,736(6.3)	3,306(3.6)	9,661(10.6)	18,127(19.9)	14,121(15.5)	50,951(55.9)	14,226(15.6)	14,637(16.0)	28,863(31.6)	4,560(5.0)	6,839(7.5)	11,399(12.5)	91,21
Beja	2,040(31.9)	596(9.3)	535(8.4)	1,088(17.0)	534(8.4)	4,793(75.0)	671(10.5)	230(3.6)	901(14.1)	693(10.9)	0(0.0)	693(10.9)	6,38
Braga	4,289(4.9)	2,671(3.0)	6,277(7.2)	11,641(13.3)	10,551(12.0)	35,429(40.4)	8,379(9.6)	16,967(19.3)	25,346(28.9)	9,773(11.1)	17,162(19.6)	26,935(30.1)	87,71
Bragança	1,081(33.8)	206(6.4)	360(11.2)	715(22.3)	329(10.3)	2,693(84.1)	303(9.5)	206(6.4)	509(15.9)	0(0.0)	0(0.0)	0(0.0)	3,20
Castelo Branco	2,352(12.8)	1,018(5.5)	1,360(7.4)	3,512(19.1)	2,404(13.0)	10,646(57.8)	2,837(15.4)	1,587(8.6)	4,424(24.0)	2,145(11.6)	1,211(6.6)	3,356(18.2)	18,42
Coimbra	3,386(12.5)	1,003(3.7)	2,287(8.4)	3,670(13.5)	4,449(16.4)	14,795(54.6)	4,416(16.3)	5,325(19.7)	9,741(36.0)	2,553(9.4)	0(0.0)	2,553(9.4)	27,08
Evora	1,856(16.7)	889(8.1)	1,506(13.8)	2,325(21.3)	1,481(13.6)	8,057(73.7)	1,595(14.6)	1,275(11.7)	2,870(26.3)	0(0.0)	0(0.0)	0(0.0)	10,92
Faro	2,335(13.0)	1,237(6.9)	2,320(12.9)	2,459(13.7)	3,640(20.3)	11,991(66.9)	3,578(19.9)	2,366(13.2)	5,944(33.1)	0(0.0)	0(0.0)	0(0.0)	17,93
Guarda	1,994(17.4)	377(3.3)	803(7.0)	1,065(9.3)	938(8.2)	5,177(45.1)	1,567(13.6)	1,893(16.0)	3,460(30.1)	1,492(13.0)	1,361(11.8)	2,853(24.8)	11,49
Lisboa	3,787(9.4)	1,703(4.2)	3,279(8.0)	6,959(17.2)	5,786(14.3)	21,464(53.1)	5,968(14.8)	5,709(14.1)	11,677(28.9)	5,021(12.4)	2,241(5.5)	7,262(18.0)	40,40
Lisboa	10,823(4.9)	7,008(3.2)	13,223(6.0)	21,251(9.6)	20,050(9.1)	72,355(32.7)	26,772(12.1)	39,540(17.9)	66,312(30.0)	41,376(18.7)	41,300(18.7)	82,676(37.4)	221,34
Portalegre	2,162(27.0)	629(7.9)	1,037(12.9)	969(12.1)	742(9.3)	5,539(69.2)	956(11.9)	993(12.4)	1,949(24.3)	522(6.5)	0(0.0)	522(6.5)	8,01
Porto	15,524(6.9)	9,858(4.4)	19,475(8.7)	32,508(14.0)	23,889(10.6)	100,254(44.6)	35,267(15.7)	36,873(16.4)	72,140(32.1)	31,774(14.1)	20,804(9.2)	52,578(23.4)	224,97
Santarém	5,576(15.7)	2,076(5.9)	3,556(10.0)	5,625(15.9)	4,819(13.6)	21,652(61.1)	3,899(11.0)	6,559(18.5)	10,418(29.5)	1,479(4.2)	1,840(5.2)	3,319(9.4)	35,42
Setúbal	2,623(3.9)	2,464(3.7)	3,577(5.3)	5,379(8.0)	6,786(10.1)	20,829(31.0)	7,345(10.9)	9,561(14.2)	16,906(25.2)	10,579(15.8)	18,820(28.0)	29,399(43.8)	67,13
Viana Do Castelo	2,279(20.3)	859(7.6)	1,438(12.8)	2,036(18.1)	1,460(13.0)	8,072(71.7)	541(4.8)	1,405(12.5)	1,946(17.3)	0(0.0)	1,233(11.0)	1,233(11.0)	11,25
Vila Real	1,287(22.0)	289(4.9)	639(10.9)	782(13.4)	1,009(17.3)	4,006(68.5)	1,063(18.2)	775(13.3)	1,838(31.5)	0(0.0)	0(0.0)	0(0.0)	5,84
Viseu	2,870(21.2)	1,370(10.1)	2,160(15.9)	2,777(20.5)	1,534(11.3)	10,711(78.9)	880(6.5)	1,252(9.2)	2,132(15.7)	724(5.3)	0(0.0)	724(5.3)	13,56
Mainland Total	71,980(7.8)	37,559(4.2)	73,443(8.1)	121,888(13.5)	104,522(11.6)	409,392(45.4)	120,263(13.3)	147,153(16.3)	267,416(29.6)	112,691(12.5)	112,811(12.5)	225,502(25.0)	902,31
Azores	1,560(13.2)	687(5.8)	1,207(11.0)	2,449(20.7)	1,198(10.1)	7,191(60.8)	1,370(11.6)	2,675(22.6)	4,045(34.2)	588(5.0)	0(0.0)	588(5.0)	11,82
Madeira	1,976(14.2)	1,087(7.8)	1,903(13.7)	2,374(17.1)	2,816(20.3)	10,156(73.2)	2,466(17.8)	1,248(9.0)	3,714(26.8)	0(0.0)	0(0.0)	0(0.0)	13,87
Total	75,516(8.1)	39,333(4.2)	76,643(8.3)	126,711(13.6)	108,536(11.7)	426,739(46.0)	124,099(13.4)	151,076(16.3)	275,175(29.7)	113,279(12.2)	112,811(12.2)	226,090(24.4)	928,00

Sources: Recenseamento Industrial, 1972 (INE, 1977, 1978a)

Table 13.11

Number (and percentages) of Industrial Employees  
by Size of Establishment, by Subdivision, 1971

<u>CAE</u>	<u>Industry</u>	<u>Size (Employees)</u>			<u>Total</u>
		<u>1-99</u>	<u>100-499</u>	<u>500+</u>	
2	Extractive Industry	9,079(56.1)	3,512(21.7)	3,605(22.3)	16,196
31	Food, Drink & Tobacco	62,147(61.1)	33,631(33.1)	5,912(5.8)	101,693
32	Textiles, Clothing & Leather	87,379(39.4)	73,632(33.2)	60,860(27.4)	221,871
33	Wood & Cork	61,167(75.6)	14,781(18.3)	4,940(6.1)	80,888
34	Paper & Printing	18,770(49.5)	12,249(32.3)	6,874(18.1)	37,893
35	Chemicals, Rubber & Plastics	15,393(29.3)	20,632(39.2)	16,570(31.5)	52,595
36	Non-metallic Mineral Products	24,887(46.3)	16,149(30.1)	12,691(23.6)	53,727
37	Basic Metals	3,637(19.9)	6,207(33.9)	8,459(46.2)	18,303
38	Metal Products	52,441(32.0)	46,572(28.4)	64,907(39.6)	163,860
39	Other Manufactures	8,516(72.3)	3,269(27.7)	0(0.0)	11,785
4	Electricity, Gas & Water	7,714(36.3)	8,003(37.7)	5,512(26.0)	21,229
5	Construction & Public Works	75,606(51.1)	36,598(24.7)	35,760(24.2)	147,964
<b>Total</b>		<b>426,739(46.0)</b>	<b>275,175(29.7)</b>	<b>226,090(24.4)</b>	<b>928,004</b>

Sources: Recenseamento Industrial, 1972 (INE, 1977, 1978a)

employer, had over one quarter of its employees in establishments with over 500.

Although it is not possible to examine changes in these patterns of SME's for the whole country, results from the 1984 census are now appearing distrito by distrito. Unfortunately, the first results to appear relate to the least industrialised parts of the country but they could still reveal trends that will eventually be demonstrable at a national scale. The published results refer to the same set of activities as the 1972 census and are available for Beja, Bragança, Castelo Branco, Guarda, Portalegre and Vila Real. A comparison of their distributions of individual establishments and employees for the two years is given in Table 13.12. Problems of statistical confidentiality have limited the data published on the larger firms in 1984 but it is clear that these six distritos fall into two groups. In Beja, Castelo Branco and Portalegre, industrial activity has declined. Employment has fallen by 15%, 8% and 13% respectively and the number of establishments has also shrunk. These contractions are most marked amongst the smaller enterprises, so their share of employment has declined from 75.0% in 1972 to 69.2% in 1984 in Beja, from 57.8% to 55.2% in Castelo Branco and from 69.2% to 62.7% in Portalegre. The opposite has happened in the second group, the three adjacent distritos of Bragança, Guarda and Vila Real in the North-East. In the less industrial distritos of Bragança and Vila Real, there has been a substantial growth in total employment - +25% in Bragança and +17% in Vila Real, while Guarda's much larger employment figure fell by 8% in 1972-84. However, the employment increase amongst small enterprises has been dramatic: +51% in Bragança (using an upper limit of 49 employees), +46% in Guarda and + 39% in Vila Real. This expansion has taken their shares of employment in establishments of under 100 (or 50 in the case of Bragança) up to 89.2%, 71.8% and 81.5% respectively. Even given the low initial levels of industrial development in two of these distritos, such rates of increase are remarkable and could well reflect the positive impact of the high proportions of retornados in their populations (Lewis & Williams, 1985a).



Table 13.12

Number (and Percentages) of Industrial Establishments  
and Employees, by Size of Establishment for Selected Distritos,  
1971 and 1984

Distrito	Year	Units	Size (Employees)					Size (Employees)					Total		
			1-4	5-9	10-19	20-49	50-99	1-99	100-199	200-499	100-499	500-999		1000+	500+
Beja	1971	Establishments	1,168(86.8)	88(6.5)	40(3.0)	35(2.6)	8(0.6)	1,339(99.5)	5(0.4)	1(0.1)	6(0.5)	1(0.1)	0(0.0)	1(0.1)	1,346
		Employment	2,040(31.9)	596(9.3)	535(8.4)	1,088(17.0)	534(8.4)	4,793(75.0)	671(10.5)	230(3.6)	90(14.1)	693(10.9)	0(0.0)	693(10.9)	6,387
	1984	Establishments	900(84.3)	92(8.6)	41(3.8)	22(2.1)	6(0.6)	1,055(98.9)	n.a.	n.a.	n.a.	n.a.	0(0.0)	n.a.	1,067
		Employment	1,494(27.8)	595(11.1)	571(10.6)	598(11.1)	463(8.6)	3,721(69.2)	716(13.3)	n.a.	n.a.	n.a.	0(0.0)	n.a.	5,377
Braganca	1971	Establishments	830(90.3)	30(3.3)	28(3.0)	23(2.5)	5(0.5)	916(99.7)	2(0.2)	1(0.1)	3(0.3)	0(0.0)	0(0.0)	0(0.0)	919
		Employment	1,083(33.8)	206(6.4)	360(11.2)	715(22.3)	329(10.3)	2,693(84.1)	303(9.5)	206(6.4)	5,109(15.9)	0(0.0)	0(0.0)	0(0.0)	3,202
	1984	Establishments	875(82.3)	124(11.7)	45(4.2)	14(1.3)	3(0.3)	1,061(99.8)	2(0.2)	0(0.0)	1(0.1)	0(0.0)	0(0.0)	0(0.0)	1,063
		Employment	1,754(43.8)	784(19.6)	604(15.1)	430(10.7)	n.a.	n.a.	n.a.	0(0.0)	n.a.	0(0.0)	0(0.0)	0(0.0)	4,007
Castelo Branco	1971	Establishments	1,561(78.3)	154(7.7)	99(5.0)	117(5.9)	34(1.7)	1,965(98.6)	20(1.0)	4(0.2)	24(1.2)	3(0.2)	1(0.0)	4(0.2)	1,993
		Employment	2,352(12.8)	1,018(5.5)	1,360(7.4)	3,512(19.1)	2,404(13.0)	10,646(57.8)	2,837(15.4)	1,587(8.6)	4,424(24.0)	2,145(11.6)	1,211(6.6)	3,356(18.2)	18,426
	1984	Establishments	1,241(76.4)	159(9.8)	84(5.2)	83(5.1)	29(1.8)	1,596(98.3)	15(0.9)	n.a.	n.a.	n.a.	n.a.	n.a.	1,624
		Employment	2,455(14.5)	1,068(6.3)	1,217(7.2)	2,508(14.8)	2,104(12.4)	9,352(55.2)	2,196(13.0)	3,262(19.2)	5,458(32.2)	n.a.	n.a.	2,146(12.7)	16,956
Guarda	1971	Establishments	1,299(87.8)	53(3.6)	59(4.0)	35(2.4)	13(0.9)	1,459(98.6)	2(0.8)	6(0.4)	18(1.2)	2(0.1)	1(0.1)	3(0.2)	1,480
		Employment	1,994(17.4)	377(3.3)	803(7.0)	1,065(9.3)	938(8.2)	5,177(45.1)	1,567(13.6)	1,893(16.5)	3,460(30.1)	1,492(13.0)	1,361(11.8)	2,853(24.8)	11,490
	1984	Establishments	1,331(80.3)	170(10.3)	72(4.3)	46(2.8)	24(1.4)	1,643(99.2)	10(0.6)	n.a.	n.a.	n.a.	n.a.	n.a.	1,657
		Employment	2,564(24.4)	1,092(10.4)	962(9.0)	1,365(13.0)	1,601(15.2)	7,564(71.8)	1,518(14.4)	n.a.	n.a.	n.a.	n.a.	n.a.	10,524
Portalegre	1971	Establishments	1,182(84.2)	93(6.6)	76(5.4)	31(2.2)	10(0.7)	1,392(99.2)	7(0.5)	3(0.2)	10(0.7)	1(0.1)	0(0.0)	1(0.1)	1,403
		Employment	2,162(27.0)	629(7.9)	1,037(12.9)	969(12.1)	742(9.3)	5,539(69.2)	956(11.9)	993(12.4)	1,949(24.3)	532(6.5)	0(0.0)	522(6.5)	8,010
	1984	Establishments	853(80.6)	103(9.7)	61(5.8)	26(2.5)	7(0.7)	1,050(99.2)	3(0.3)	4(0.4)	7(0.7)	1(0.1)	0(0.0)	1(0.1)	1,058
		Employment	1,596(22.9)	675(9.7)	798(11.5)	842(12.1)	457(6.6)	4,368(6.5)	455(2.8)	1,517(21.8)	1,972(28.3)	624(9.0)	0(0.0)	624(9.0)	6,964
Vila Real	1971	Establishments	978(87.3)	44(3.9)	47(4.2)	26(2.3)	15(1.3)	1,110(99.1)	8(0.7)	2(0.2)	10(0.9)	0(0.0)	0(0.0)	0(0.0)	1,120
		Employment	1,287(22.0)	289(4.9)	639(10.9)	782(13.4)	1,009(17.3)	4,006(68.5)	1,063(18.2)	775(13.3)	1,838(31.5)	0(0.0)	0(0.0)	0(0.0)	5,844
	1984	Establishments	962(79.7)	123(10.2)	60(5.0)	43(3.6)	13(1.1)	1,201(99.5)	4(0.3)	2(0.2)	6(0.5)	0(0.0)	0(0.0)	0(0.0)	1,207
		Employment	1,855(27.1)	805(11.8)	814(11.9)	1,267(18.5)	838(12.1)	5,579(81.5)	533(7.8)	734(10.7)	1,267(18.5)	0(0.0)	0(0.0)	0(0.0)	6,846

Source: Recenseamento Industrial, 1972 (INE, 1977, 1978a)  
and Recenseamento Industrial, 1984 (INE, 1986a)

The other major set of activities for which a census has been conducted are the services, excluding transport and public sector services. The 1977 census covers CAE 6 (Commerce, Restaurants and Hotels) and parts of CAE 8 (Business Services but not Banks or Insurance Companies) and CAE 9 (Personal Services but not Public Administration, Cleaning, Health, Education or Recreation) - further details of the classes included and excluded are in Appendix 1. Only mainland Portugal was considered and the results were published in three volumes, each containing information on 6 distritos (INE, 1978b). Only 350 establishments (0.3%) from the total of 135,576 surveyed had more than 100 employed, so the tables do not subdivide establishments of that size. Since there is no variation in the share of larger establishments not evident in the data on employment only these results are shown in Table 13.13. As elsewhere in the EC, service activities in Portugal are very much the preserve of SME's and 85.0% of employment in 1977 was in establishments of under 100 employees. At the other end of the scale, over one third of employment came from establishments of under 5 employees. Here too, though, there are marked variations from one part of the country to another: Lisboa had only 72% of its employment in small establishments and the large hotels of the Algarve depressed Faro's share to 80%. Yet in the interior, distritos like Bragança and Guarda had a small share of the national total and no services with over 100 employees.

### 13.2.3 SME's in Annual Surveys

It would be useful to be able to identify the dynamics of SME's from data that was available more frequently than censuses. However, the very fact that such a large part of the Portuguese economy is composed of SME's has made this difficult to achieve. Annual surveys with data on firm size do exist, most notably for extractive and manufacturing industry, transport and tourism, but their collection is done on a voluntary basis, which produces a small sample, biased towards the larger establishments. For example, INE (1980) compared the number of returns to its annual survey with that for the Industrial Census of 1972

Table 13.13

Number (and Percentage) of Service Employees by Size of Establishment by Distrito, e 1976

<u>Distrito</u>	<u>Size (Employees)</u>						<u>1-99</u>	<u>100+</u>	<u>Total</u>
	<u>1-4</u>	<u>5-9</u>	<u>10-19</u>	<u>20-49</u>	<u>50-99</u>				
Aveiro	12,069(47.8)	4,424(17.5)	3,358(13.3)	3,211(12.7)	1,832(7.3)	24,894(98.7)	331(1.3)	25,225	
Beja	4,867(65.6)	876(11.8)	574(7.7)	479(6.5)	499(6.7)	7,295(98.3)	124(1.7)	7,419	
Braga	10,117(50.6)	3,425(17.1)	2,514(12.6)	2,432(12.2)	996(5.0)	19,484(97.4)	579(2.6)	20,003	
Braganca	3,707(74.6)	608(12.2)	310(6.2)	347(7.0)	0(0.0)	4,972(100.0)	0(0.0)	4,972	
Castelo Branco	5,335(56.9)	1,239(13.2)	1,172(12.5)	888(9.5)	737(7.9)	9,371(100.0)	0(0.0)	9,371	
Coimbra	9,799(45.5)	3,116(14.5)	2,436(11.3)	3,167(14.7)	1,232(5.7)	19,750(91.8)	1,774(8.2)	21,524	
Evora	4,723(56.7)	1,268(15.2)	804(9.6)	1,062(12.7)	265(3.1)	8,122(97.1)	211(2.5)	8,333	
Faro	10,272(42.9)	3,321(13.9)	1,916(8.0)	1,859(7.8)	1,775(7.4)	19,143(79.9)	4,812(20.1)	23,955	
Guarda	3,961(65.5)	758(12.5)	569(9.4)	364(6.0)	399(6.6)	6,057(100.0)	0(0.0)	6,057	
Leiria	9,832(48.9)	3,652(18.2)	2,799(13.9)	2,138(10.6)	870(4.3)	19,291(95.9)	819(4.1)	20,110	
Lisboa	42,004(24.6)	22,663(13.3)	19,784(11.6)	23,572(13.8)	14,578(8.5)	122,601(71.8)	48,038(28.2)	170,639	
Portalegre	3,722(61.0)	818(13.4)	474(7.8)	699(11.4)	279(4.6)	5,992(98.1)	113(1.9)	6,105	
Porto	28,629(33.6)	12,556(14.7)	11,903(14.0)	13,232(15.5)	6,841(8.0)	73,161(85.8)	12,082(14.2)	75,243	
Santarem	12,227(48.8)	4,039(16.1)	3,047(12.2)	1,835(7.3)	1,327(5.3)	22,475(89.7)	2,586(10.3)	25,061	
Setubal	13,093(51.1)	4,368(17.0)	2,965(11.6)	2,218(8.7)	1,589(6.2)	24,233(6.2)	1,403(5.5)	25,636	
Viana Do Castelo	4,857(62.1)	1,221(15.6)	759(9.7)	336(4.3)	528(6.8)	7,701(98.5)	114(1.5)	7,815	
Vila Real	4,647(58.6)	1,318(16.6)	463(12.1)	588(7.4)	420(5.3)	7,936(100.0)	0(0.0)	7,936	
Viseu	6,933(52.2)	2,062(15.5)	1,509(11.4)	1,534(11.6)	868(6.5)	12,906(97.2)	369(2.8)	13,275	
Total	190,794(39.0)	71,732(14.7)	57,856(11.8)	59,961(12.3)	35,035(7.2)	415,378(85.0)	73,295(15.0)	488,673	

Source: Recenseamento a Distribucao end Servicos 1977, (INE, 1978b)

and found that only 31% of establishments were covered in the former. These did account for 70% of the employment in manufacturing because their average size was 33.6 employees, as against the census figure for all establishments in the sector of 14.9. Even by 1982 the total sample of firms was only 18,000 (INE, 1986b), a small increase on the figure of some 15,000 the years previously (INE, 1976), so the problem of limited coverage has not been solved yet. Nor do the published tabulations include details of employment by size of establishment so the production of comparative tables for CAE subdivisions over a number of years would be limited to consideration of the number of establishments. Given severe reservations about the representativeness of the sample, such an exercise is not justified.

Instead of INE annual surveys, a number of those interested in SME distributions - such as IAPMEI - have preferred to use the data collected by the Ministerio de Trabalho for their social security records. This should cover all employees, regardless of their sector of activity, but in practice, there appears to be under reporting. The only published attempt to measure the apparent discrepancy came in a study which sought to identify the dimensions of the underground economy (economia subterranea) by comparing the numbers of employees in each sector according to the 1981 Population Census and the Ministerio de Trabalho (Instituto Damiao de Gois, 1985). Their results were only given by CAE subdivision (and by distrito) but it is immediately obvious that the inaccuracy of this classification gives numerous instances of 'over reporting' so it is more helpful to deal with CAE divisions only (though this problem still occurs once). The comparison between the census records and social security count for 1981 is given in Table 13.14, which shows that between 50.6% (Construction) and 8.1% (Extractive Industries) of employees are not registered for social security.

Ironically, some of the highest proportions of non-registration are in branches where the government is a major employer (e.g. Education, 87% or Health 82%), lifting the overall figure for services (CAE9) to a surprising level. This suggests that the method is not an especially

Table 13.14

Total and Undeclared Employees by Sector, 1981

<u>CAE</u>	<u>Activity</u>	<u>Employees (Census)</u>	<u>Undeclared Employees</u>	<u>(%)</u>
2	Extractive Industries	16,090	1,296	8.1
3	Manufacturing Industries	900,056	77,226	8.6
4	Electricity, Gas & Water	26,726	5,299	19.8
5	Construction	352,670	178,408	50.6
6	Commerce	292,839	- 15,894	- 5.4
7	Transport & Communications	171,434	23,088	13.5
8	Banks & Financial Institutions	90,153	11,858	13.2
9	Services	828,992	354,625	42.8

Source: Instituto Damiano de Gois (1985)

good one for defining the size of the underground economy (independently estimated at 20% of GDP by Hudson (1986)). It also draws attention to the need for caution in relying on Ministerio de Trabalho data in identifying SME's and should serve as a reminder that not all Portuguese SME's operate within the formal economy.

With these reservations in mind, Ministerio de Trabalho records can be used to examine the distribution of establishments and employees according to the number of employees in the establishment. Such information has been made available for subdivisions of the CAE at national, distrito and concelho level and the most recent year for consideration is 1985. This does not allow sufficient time from the first version of such data (in 1978) to permit the identification of clear trends, especially given uncertainties about the annual variations in the degree of coverage. For a single year, however, these data are valuable, both for an overview of SME's in much of the economy and their role within particular regions. Each of these will be examined in turn.

Table 13.15 presents the number of employees according to the size of establishment for the main divisions of the CAE for mainland Portugal. On this basis, SME's account for 83% of employment in total and are especially significant in Commerce (98.6%), Agriculture (96.7%) and Construction (93.9%). In contrast, the large enterprises employ over one quarter of the workers in Banks (27.2%), Extractive Industries (28.2%) and Transport (42.1%). Such patterns can be explored at finer levels of disaggregation, though the uncertainty about the coverage increases. Of those branches employing over 20,000 people in 1985, the most heavily dominated by SME's were Social Services (100% in establishments of under 500), Personal Services (100%), Retailing (99.5%), Wholesaling (98.8%) and Agriculture (97.6%). Their role was least in Basic Metals (47.8%), Communications (55.3%), Transport (59.0%) and Banking (63.8%). To examine the regional variations in importance of SME's it is necessary to focus on the size distribution of enterprises alone, as disaggregated employment data for distritos is not readily available for 1985. Such data are presented in Table 13.6. The fact that these refer to whole firms rather than the individual

TABLE 13.15 : NUMBER OF EMPLOYEES (AND PERCENTAGE) BY SIZE OF ESTABLISHMENT BY SECTOR, 1985

CAE	ACTIVITY	0-99	10-499	500+	TOTAL
1	Agriculture, Hunting & Fishing	32,271 (75.8)	8,896 (20.9)	1,385 (3.3)	42,552
2	Extractive Industries	9,015 (59.8)	1,818 (12.1)	4,250 (28.2)	15,083
3	Manufacturing Industries	373,521 (43.8)	287,761 (33.7)	191,961 (22.5)	853,243
4	Electricity, Gas & Water	7,896 (32.3)	14,436 (59.1)	2,095 (8.6)	24,427
5	Construction	106,569 (70.2)	36,056 (23.7)	9,279 (6.1)	151,904
6	Communications	310,334 (86.6)	42,457 (12.0)	4,840 (1.4)	358,131
7	Transport & Communications	43,663 (31.4)	36,657 (26.4)	58,516 (42.1)	138,836
8	Banks & Financial Institutions	56,209 (55.3)	17,858 (17.6)	27,636 (27.2)	101,703
9	Services	117,295 (78.8)	22,102 (14.8)	9,449 (6.3)	148,846
	TOTAL	1,056,866 (57.6)	468,541 (25.5)	309,411 (16.9)	1,834,818

Source : Unpublished Statistics, Ministeria de Trabalho.

TABLE 13.16 : NUMBER OF ENTERPRISES (AND PERCENTAGE) BY SIZE  
OF ENTERPRISES BY DISTRITO, 1985

	SIZE (Employees)			TOTAL
	1-99	100-499	500+	
Aveiro	6,933 (97.1)	190 (2.7)	18 (0.3)	7,141
Beja	1,230 (99.4)	6 (0.5)	1 (0.1)	1,237
Braga	6,161 (96.0)	219 (3.4)	32 (0.5)	6,417
Braganca	779 (99.6)	2 (0.2)	1 (0.1)	782
Castelo Branco	1,795 (97.9)	36 (2.0)	3 (0.2)	1,834
Coimbra	3,572 (98.0)	67 (1.8)	7 (0.2)	3,646
Evora	1,937 (98.8)	24 (1.2)	0 (0.0)	1,961
Faro	3,039 (98.5)	43 (1.4)	2 (0.1)	3,084
Guarda	1,288 (98.5)	17 (1.3)	3 (0.2)	1,308
Leiria	3,725 (97.6)	83 (2.2)	7 (0.2)	3,815
Lisboa	29,686 (97.0)	748 (2.4)	164 (0.5)	30,598
Portalegre	1,284 (98.9)	12 (0.9)	2 (0.2)	1,298
Porto	18,102 (96.7)	530 (2.8)	87 (0.5)	18,719
Santarem	4,003 (98.5)	57 (1.4)	6 (0.1)	4,066
Setubal	5,528 (98.5)	72 (1.3)	11 (0.2)	5,611
Vian do Castelo	2,110 (99.3)	13 (0.6)	2 (0.1)	2,125
Vila Real	1,082 (98.9)	11 (1.0)	1 (0.1)	1,094
Viseu	2,889 (99.0)	273 (0.9)	1 (0.0)	2,917
TOTAL	95,143 (97.4)	2,157 (2.2)	348 (0.4)	97,648

Source:

Unpublished Statistics, Ministerio de Trabalho.



establishments, which have been preferred so far, makes little difference to the overall proportions as only 0.2% and 0.4% of firms had over 500 employees. Although variation between distritos in the proportions of SME's taken together are small, the share of small firms alone can be used as a more sensitive indicator. This brings out the difference between the areas with numerous firms and an above average proportion of medium or large enterprises - such as Braga (with 96.0% in small enterprises), Porto (96.7%), Lisboa (97.0%) and Aveiro (97.1%) - and parts of the country where what firms there are lie in the smallest size category (e.g. Bragança with 99.6%, Beja with 99.4% and Viana de Castelo with 99.3%).

#### 13.2.4 Patterns of SME Development

In the absence of comparable results from successive sectoral censuses or a sufficiently long sequence of a reasonably comprehensive annual survey, it is hard to establish any trends in SME development over time. If the Ministerio de Trabalho series is examined for the 1980s, it does suggest that the proportion of employment in SME's is higher in 1985 (at 83.1%) than it was in 1981 (80.0%). Great caution should be attached to this evidence as it could be partly due to better collection amongst the smallest firms but the 11% fall in employment in establishments of over 500 when recorded employment in SME's was rising is unarguably also a cause. However, it is beyond doubt that SME's account for about 75% of the country's industrial labour force at present and likely that, when agriculture and services are also considered, their share of the labour force rises to over 80%. How those figures have varied in recent years can not safely be judged on the basis of industrial census results for six rural distritos (Table 13.12) which show conflicting trends in SME growth, so the publication of the remaining volumes is eagerly awaited.

Spatial patterns of SME development are, however, much more straightforward. The long standing distinction between the North and South of Portugal has in recent years been overlain by a pattern of uneven development between the coastal and interior areas. Although

such a scheme is over simplified, as Ferrao & Jensen-Butler (1984) show, it provides a starting point for analysing the distribution of SME's. In both industrial and service sectors, there is a marked concentration of enterprises in the major urban centres of the littoral. Such a concentration is more marked amongstst the largest enterprises and has even been encouraged in previous government policies such as the Sines growth centre. In the interior, distritos like Vila Real have all their industrial and service employment in SME's, and a large share of that is often in the smallest size categories. Until the past decade, such a size structure was due to a lack of investment but the growing problems of the large establishments elsewhere may make the absence of large plants a relative advantage for such distritos in the future.

### 13.3 The Formation and Development of Manufacturing SME's: Case Studies

#### 13.3.1 Employment Characteristics

In the light of the difficulties associated with official statistics, the alternative way of establishing how SME's are changing in Portugal is to review survey-based case studies of particular sectors or areas. Unfortunately, there are relatively few of them and all that there are focus exclusively on manufacturing enterprises. Another obvious limitation at the outset is that none contain any 'job generation accounts', attributing employment change over time to firm births, deaths or in situ variations. Finally, the location of the studies reviewed here in the central region of the country, which is an advantage in so far as that region contains elements of both Northern and Southern characteristics, as well as reflecting the national divide between littoral and interior areas but it also means that no major city is considered.

The large study of SME's in this region involved a survey of 69 firms during 1983/84 in 4 concelhos with recent industrial growth. The selection of these four areas and of four typical sectors (textiles & clothing, wood furniture, metal products and non-metallic minerals) is

Table 13.17 Distribution of firms by employment and sectoral characteristics

<u>Concelho</u>	(Percentages)				<u>Total</u>
	<u>Employment</u>				
	<u>0 - 10</u>	<u>11 - 50</u>	<u>&gt;50</u>		
Carregal do Sal	67	20	13		100
Gouveia	44	12	44		100
Miranda do Corvo	70	20	10		100
Oliveira do Bairro	18	25	57		100

	<u>Sector</u>				<u>Total</u>
	<u>Metal products</u>	<u>Non metallic minerals</u>	<u>Wood products</u>	<u>Textiles &amp; Clothing</u>	
	<u>(CAE 381)</u>	<u>(CAE 361, 369)</u>	<u>(CAE 332)</u>	<u>(CAE 321,322)</u>	
Carregal do Sal	27	0	73	0	100
Gouveia	19	0	12	69	100
Miranda do Corvo	0	90	0	10	100
Oliveira do Bairro	32	46	7	14	100

Source: Lewis and Williams (1987b)

discussed at length in Lewis & Williams (1987b) and Margarido (1985) and was intended to allow a comparative analysis of the roles of size, location and sector in SME growth. Within this sample all firms were SME's but were subdivided, according to their functional characteristics, into three groups - small (under 10 employees), medium (11-50 employees) and large (over 50 employees - which were distributed as shown in Table 3.17. While the majority of enterprises in two of the concelhos (Carregal do Sal and Miranda do Corvo) with a strong artesanal tradition (in wood furniture and pottery) were small-sized, the older industrial centre of Gouveia and rapidly growing were of Oliveira do Bairro both had more firms in the medium and large groups.

The present stock of firms has been built up over a relatively long time- with two of the enterprises having been established in the nineteenth century and about a third having been set up before 1970. Of these 18, 3 and 13 per cent, respectively, had been established before 1950, in the 1950s and in the 1960s. After 1970 the rate of enterprise created increased, and almost a half of all surviving firms were set up after 1975. The smallest firms have the most polarised distribution, with large proportions created prior to 1970 as well as in the 1980s. The latter is partly to be expected, given the gradual build up of employment in new firms but more surprising is the fact that about a fifth of the large firms have been established in the last three years. The most dramatic growth rates have been in ceramics and construction materials where 41% of firms were established in just the three preceding years. Amongst concelhos, Carregal do Sal and Miranda do Corvo have the largest proportions of pre-1970 firms, while the industrial depression in Gouveia is reflected in the small number of firms established since 1980. In contrast, Oliveira do Bairro has the strongest industrial dynamism with 61% set up since 1975

It is difficult to evaluate the total volume of jobs created from the results of this particular survey for there is no directly usable information available on firms which have closed. Instead, meaningful data for change in any given period is only available for firms which

TABLE 13.18 - EMPLOYMENT IN SAMPLE SME'S, CENTRAL PORTUGAL

<u>Employment</u>	<u>Employment in 1983</u>	<u>Percentage males in labour force</u>	<u>Manual workers: Qualified/ Non-Qualified</u>	<u>Change in employment</u>	
				<u>1982-3<sup>1</sup></u> %	<u>1977-83<sup>2</sup></u> %
1 - 10	134	69	0.95	- 12	- 27
11 - 50	398	64	0.50	+ 4	+ 30
> 50	2561	69	1.57	+ 9	+ 27
<u>Concelho</u>					
Carregal do Sal	218	90	1.44	- 2	- 20
Gouveia	1058	59	4.30	- 2	+ 11 <sub>3</sub>
Miranda do Corvo	221	88	2.33	+ 7	+280 <sub>3</sub>
Oliveira do Bairro	1596	73	0.51	+ 19	+ 43
<u>Sector</u>					
Metal products	544	83	0.59	- 1	+ 23
Non-metallic minerals	1115	75	0.73	+ 28	+ 84
Wood products	231	94	1.20	+ 2	- 14
Textiles & Clothing	1203	51	3.78	- 1	+ 14

1 65 firms included

2 42 firms included

3 Only 5 firms in Miranda do Corvo - one of which had an exceptional employment increase of 121 between 1977 and 1983

Source : Lewis & Williams (1987b)

existed throughout these years. The changes recorded in surviving firms in 1977-83 and 1982-83 are shown in Table 13.18. There were substantial employment gains in the larger firms but precipitous losses (-27% but only 29 jobs in absolute terms) in the smallest enterprises, representing the rapid demise of artisanal production. There are also clear divisions between economic sectors : wood products were in decline in both periods; textiles experienced a net gain between 1977-83, which included a loss in 1982-83, as the general recession in this sector affected firms in the study area; only in the non-metallic minerals sector was there evidence of sustained growth throughout. There are also local environmental differences to note. Both Carregal do Sal and Gouveia had major job losses over the years. Employment changes in Miranda do Corvo are difficult to disentangle: while most firms stagnated, the aggregate totals were disproportionately affected by gains of over 120 jobs in a single firm. Only in Oliveira do Bairro is there evidence of continuous absolute and relative employment increase in a broad range of firms.

A number of features of the type and quality of jobs are also important, including the gender composition of the labour force and the skills associated with it. In terms of gender there is remarkably little variation in composition according to the size of the firm (Table 13.18). The greatest variation is by sector - with textiles and clothing having the largest proportion of females. However, this is a very mixed sector for, while the production of textiles is male dominated, clothing manufacture is female dominated. There are also variations within the non-metallic minerals sector : artisanal pottery works and building materials factories are male dominated, while modern ceramics factories employ large numbers of women. In contrast, wood products - where artisanal or factory based - are very male dominated, and this is still a sector dependent on traditional apprenticeship systems. The sectoral differences dominate the variations between concelhos.

Variations in terms of the quality of jobs created do not present such a clear picture. The most salient point to note is that the ratio of

qualified to non-qualified labour (as defined by the owners/managers) does not have a simple relationship such as that found by Springer and Uwiegler (1983) in the Cora da Beira. Their results suggested that small firms were largely staffed with highly skilled artesans and larger firms had almost half unqualified labour. Examples of both types exist although larger firms have relatively more skilled workers; this is particularly influenced by the high level of qualified workers in textiles. In addition, the pattern is made more complex because skill requirements and, hence, criteria for defining skills vary between industries. However, the area of most modern industry - Oliveira do Bairro - does have the lowest ratio of qualified workers, and this can be related to the opening of new factories utilising relatively capital intensive and deskilling technologies.

Employment in industrial SME's in two concelhos of the central region was also examined by Ferrao (1985). His questionnaire results covered 70 firms in Oliveira de Azameis and 95 firms in the distrito capital of Viseu - the average employment of the former in 1984 being 46 and in the latter, 28. Both locations showed a similar trend towards older established firms having larger labour forces, with those founded before 1960 having an average size of 84 in Oliveria de Azemeis and 35 in Viseu but the firms founded after 1979 averaged only 32 and 25 employees respectively. In general there had been a modest growth in the previous five years amongst the firms that had survived but this is not broken down by size of firm. As regards th mix of jobs, he found 82% of the labour force of Olivair de Azameis to be wage workers, without much sectoral variation, but this proportion fell to 75% in Viseu as more office staff were used in branches like printing. Of the wage labourers, some 45% were skilled in both cases but there were considerable differences between activities like construction with 20-30% skilled and printing with 50-75%. Finally, the proportion of females in employment was similar to the average figure noted above in Oliveira de Azemeis (35%) but much lower (20%) in Viseu. Again, there is no evidence of this reflecting differences in firm size but rather it is due to the industrial composition of the areas.

### 13.4 Government Policies on the Promotion of Industrial SME's

#### 13.4.1 Industrial Policies

Compared with most other member states of the EC, Portugal has a limited range of policies directly related to enterprise development. Obviously, the succession of governments since 1974 have adopted policies that have affected the macroeconomic environment and mediated the influence of international changes. In the next decade there will also be an increasing role for EC-wide policies with the passing of the periods of transition to the adoption of the acquis communautaire according to the 1985 Treaty of Accession (Comissao para a Integracao Europeia, 1985). At present, though, the management of the problems of the large public sector firms seems to have a higher priority with government than general issues of economic restructuring or specific ones related to the stimulation of firm formation.

There is no promotion policy directed primarily at service sector activities and reviews of industrial policy, such as Barata (1984), Instituto Damiao de Gois (1983), Oliveira Rendeiro (1984) or OECD (1984), have had little to discuss since the short-lived experiment with the Sistema de Incentivos aos Investimentos Industrial (SIII) ended. The SIII was set up in 1980 in order to provide fiscal and financial aid to investors according to the industrial subsector, productivity and regional location of their project. Despite the apparently straightforward set of rules governing the calculation of assistance, the system was slow to administer and never popular. It was revised in 1983 then suspended in 1984 and has just been replaced by the Sistema de Estimulos de Base Regional (SEBR). The full details of this are given in Decreto Lei 283 - A/85 of 5 September 1986 and a clear summary is provided by IAPMEI (1987). It will provide financial assistance for industrial activities alone but is not restricted to SME's (as defined by IAPMEI). The amount of assistance is to be calculated according to a formula which has components for the regional location, number of jobs created and degree of innovation in the project.



The other major attempts at industrial promotion are either very limited in their actual impact after several years of operation (such as the Empresa Publica da Parques Industriais which ran the country's six industrial estates) or very recent - for example, the creation of six sectoral technology centres as part of the Plan of Technological Development - which makes it hard to judge their effectiveness. Hence the focus of attention in this review will be the activities of the one agency specifically linked to industrial SME development, IAPMEI, alone.

#### 13.4.2 IAPMEI

The general review of types of assistance available to SME's provided by Lopez Paulo (1986) establishes the dominance of IAPMEI over the whole range of promotional activities. These will be considered in turn, after a summary of the changing character of the Institute, but, before that, it is important to note the work of three other related official bodies as it sets the framework for IAPMEI's independent and collaborative ventures. First, there are the training courses and financial aid provided by the Instituto de Emprego e Formação Profissional (IEFP) which is primarily concerned with employment issues. Jointly with IAPMEI, the IEFP offers courses for graduates to prepare them for work in SME's and will provide grants for selected types of training. Secondly, SME's have access to the three Bolsas de Subcontracção which are intended to stimulate subcontracting (both nationally and internationally). To this end, they offer technological and management advice as well as information about potential relationships. Here too, IAPMEI provides some financial help. The third set of partially collaborative activities are those of the Caixa Geral de Depositos, the leading investment bank, which offers preferential financial treatment to projects identified in a competition run annually with IAPMEI. The bank also has some information packages aimed at the management of SME's.

The major part of IAPMEI's efforts has been undertaken independently, however, and remained relatively unchanged in the first ten years of the

Institute's existence. From its creation in 1975, IAPMEI has used a combination of 'hardware' activities, such as the provision of loan guarantees, and 'software' programmes, ranging from one on publications to analyses of the viability of new projects. Its recent growth in financial terms has largely been a consequence of the EC's own assistance since 1982 under the Pre-Accession Aid agreement, for the Commission of the EC supplied about 12% of a budget of 404 million escudos in that year and 41% of the 972 million escudos budget for 1984. Staff numbers have risen to 220 and there has also been a geographical expansion, with the current operation of nine offices, including three in the interior distritos of Braganca, Castelo Branco and Viseu plus one at Evora, in the heart of the Alentejo. However, there was a fundamental reevaluation of the objectives of IAPMEI in 1984, which caused a switch in emphasis towards three new schemes - on Restructuring, New Technologies and the Use of National Resources - and this revision of priorities was then further reformulated by the newly-elected government in 1985. One immediate consequence of this instability has been the delay in publication of both the plan for 1986 and the annual report for 1985, so the discussion of expenditure patterns that follows is not as up to date as might be desired.

The main features of IAPMEI's early activities on the financial side are summarised in Table 13.19. It is clear that most of the assistance to the 'old definition' SME's has been provided in the form of loans guarantees, with the falling amount of money involved in 1982 and 1983 reflecting both the deteriorating economic climate and the switch of IAPMEI's own attention towards the implementation of the EC's programmes for SME's. The declining role played by interest rate subsidies towards the end of the period considered reflects a more specific change: the advent of a system of subsidies for all firms in 1981. Although not tabulated by year, IAPMEI also acted to guarantee 3,231 loans from banks in 1978-83. The effects of these 'hardware' measures can be judged in part by the number of firms (and associated employment) assisted as given in Table 13.20. These steadily increasing numbers include those who have received loans or subsidies under the programmes for both structural assistance (covering projects for expansion, modernisation or improving

TABLE 13.19 : LOANS AND SUBSIDIES PROVIDED BY IAPMEI, 1975-83

Year	<u>LOANS</u>		<u>INTEREST RATE</u> <u>SUBSIDIES</u>		<u>SUBSIDIES</u>	
	Number	Amount (Contos)	Number	Amount (Contos)	Number	Amount (Contos)
1975-78	990	920,591	73	15,473	-	-
1979	114	236,715	180	44,162	193	12,359
1980	138	278,107	181	42,313	218	12,359
1981	168	543,254	33	8,277	241	10,234
1982	180	446,025	12	2,166	183	7,566
1983	76	282,753	18	3,123	78	11,514

Source : IAPMEI (1984a)

TABLE 13.20 : NUMBER OF FIRMS ASSISTED (with their employment)  
by IAPMEI, 1978-82

YEAR	NEW FIRM CREATION		FIRMS RECEIVING STRUCTURAL ASSISTANCE		FIRMS RECEIVING SHORT-TERM ASSISTANCE
	Number	Employment	Number	Employment	Number
1978	21	475	-	-	-
1979	43	1172	121	7465	670
1980	51	1583	257	19220	1721
1981	62	1710	283	18782	3573
1982	58	2415	293	19709	4443

Source : IAPMEI (1984a)

**TABLE 13.21 : NEW FIRMS CREATED WITH IAPMEI ASSISTANCE BY SECTOR AND REGION, 1983**

REGIONS SECTORS	NORTH		CENTRE		SOUTH		TOTAL	
	No.	Employees	No.	Employees	No.	Employees	No.	Employees
Extractive	1	12	-	-	1	17	2	29
Food	5	90	-	-	5	93	10	183
Textiles & Clothing	13	736	7	270	2	58	22	1064
Footwear	4	323	-	-	3	23	7	346
Wood & Cork	3	104	3	62	3	101	9	267
Paper & Publishing	1	20	-	-	1	20	2	40
Chemicals	2	27	-	-	4	30	6	62
Non-metallic Minerals	5	117	4	80	6	153	15	350
Metal Products	5	128	7	132	27	284	39	544
Other Manufacturing	-	-	1	11	-	-	1	11
<b>TOTAL</b>	<b>39</b>	<b>1557</b>	<b>22</b>	<b>559</b>	<b>52</b>	<b>784</b>	<b>113</b>	<b>2896</b>

Source : IAPMEI (1984b)

TABLE 13.22 : NEW FIRMS CREATED WITH IAPMEI ASSISTANCE BY SECTOR AND REGION, 1984

REGIONS SECTORS	NORTH		CENTRE		SOUTH		TOTAL	
	No.	Employees	No.	Employees	No.	Employees	No.	Employees
Extractive	-	-	-	-	3	31	3	31
Food	-	-	2	34	3	43	5	77
Textiles & Clothing	-	-	5	107	3	26	8	133
Footwear	5	275	-	-	-	-	5	275
Wood & Cork	2	43	1	40	4	36	7	119
Paper & Printing	1	20	-	-	2	34	3	54
Chemicals	6	70	3	44	2	65	11	179
Non-Metallic Minerals	1	13	3	82	3	56	7	151
Metal Products	2	32	6	90	12	157	20	279
Other Manufacturing	-	-	1	21	-	-	1	21
<b>TOTAL</b>	<b>17</b>	<b>453</b>	<b>21</b>	<b>418</b>	<b>32</b>	<b>448</b>	<b>69</b>	<b>1319</b>

Source : IAPMEI (1985)

financial conditions) and short term aid. In the case of new firm formation, a process that usually involves some management assistance as well as financial aid, there are more recent figures which provide greater information on the type and location of the projects. For 1983 (Table 13.21), the growth in the total number of firms and employees continued but the sectoral pattern was very unbalanced, with over half of the SME's being in metal products (especially in the South) or textiles (especially in the North). The average investment per job created was 1062.5 contos but it is not clear how much of that came from IAPMEI. The poor economic conditions in 1984 contributed to a sharp fall in the total number of firms created (Table 13.22) and the dominance of metal and textile production was reduced by the expansion of interest in chemicals. In both years the southern region had the largest share of new SME's but these were noticeable more capital intensive than elsewhere - with an average investment per job of 2,865 contos compared with 1,393 contos nationally and 917 contos in the North in 1984.

IAPMEI's initial set of policies also included a range of 'software' activities, ranging from the publication of a bulletin through the provision of training courses to assist with the costs of visiting exhibitions. Expenditure on these activities is hard to trace because the project numbering/lettering in the text of annual reports does not match that of their accounts, but between 1978 and 1983 some 62,000 contos were spent on training courses for 4,825 participants and 30,904 contos was devoted to 979 exhibition visits in 1978-82 (IAPMEI, 1984a).

The reorganisation of IAPMEI's priorities during 1984 was first reflected in the Plan for 1985 (IAPMEI, 1984c). In it, the two major sets of financial activities - Restructuring, Modernization & Development and Assistance in Finance & Credit - were subdivided and integrated more closely with the previously distinct information programmes such as Management Improvement. The result was the creation of three new groups of projects, a separate programme for the EC aid plan and a reorganised information and internal management section. The resulting structure and proposed budgets were as follows:

<u>Activity</u>	<u>Proposed Expenditure (contos)</u>
1. <u>Restructuring of Firms in Industrial Sectors</u>	
1.1 Restructuring Aid	27,500
1.2 Technical Assistance	22,500
Share of Financial Incentives	570,000 (of which: 465,000 as capital).
2. <u>Creation &amp; Expansion of New Technology Firms</u>	
2.1 Research on Innovative Opportunities	16,500
2.2 Creation & Expansion of Technologically Developing Firms	2,500
2.3 Technical & Managerial Assistance	21,000
Share of Financial Incentives	280,000 (of which: 200,000 as capital).
3. <u>Development of Firms based on Natural Resources</u>	
3.1 Creation & Expansion of Firms	2,000
3.2 Promotion of Industrial Development in the Interior	33,000
3.3 Technical & Managerial Assistance	15,000
Share of Financial Incentives	350,000 (of which 285,000 as capital).

<u>Activity</u>	<u>Proposed Expenditure (contos)</u>
4. <u>EC Aid to SME's (Final Phase)</u>	
4.1 Management Training	20,000
4.2 Improvement of Services to SME's	303,900 (of which 278,400 as capital).
4.3 Administrative Training	12,000
5. <u>Information, Studies and Internal Management</u>	
5.1 Information	32,000
5.2 Studies	8,000
5.3 Internal Management	191,340

With the addition of expenditure on the first phase of the creation of an industrial information network (30,000 contos), expected expenditure came to 1,937,240 contos. 68% was capital expenditure, concentrated, as noted above in the financial incentives components. Approximately one third was allocated to the largest group of activities (Restructuring), with some 20% for the Natural Resource programme and 16-17% for the New Technology and EC Plans respectively. Overall the balance of total expenditure is heavily weighted to the provision of 'hardware', with about two thirds of the budget allocated to direct financial incentives, but the closer links between studies, training, consultancy and the various types of loans on offer is a step towards the more efficient use of the funds available.

Given the tendency for IAPMEI to underspend its non-administrative allocations - rates of expenditure were 22%, 35% and 52% in 1982, 1983 and 1984, respectively - it remains to be seen how effectively the 1985 Plan has been implemented. Furthermore, there have not yet been any detailed studies of the impact of IAPMEI generally, or of specific parts of its activity. Nor is the Institute's reputation amongst entrepreneurs as being too bureaucratic. There is a strong possibility that this



reputation combines with the still-limited geographical spread of IAPMEI staff to deter potential entrepreneurs in the industrial sector from making contact. This kind of possibility would be hard to establish but some suggestion of the atypicality of IAPMEI's clients comes from comparing their data on SME entrepreneurs with the national average. In their review of the characteristics of the proposers of 68 projects for the Third Industrial Projects competition, IAPMEI (1983) found that only 35% of entrepreneurs expected their enterprise to employ less than 20 workers after 3 years, while over half were anticipating the employment of 20 to 100 people. Even allowing for the automatic exclusion of SME's with under 6 employees from consideration for the competition and some optimism by the founders, these proportions are a long way from the 60% of industrial establishments with under 20 employees and 31% with 20-100 employees evident in the national figures of Table 13.9. IAPMEI could thus be providing assistance to those who are already capable of helping themselves - an obvious advantage to such people who are spared some effort and saved some expense but not necessarily the best use of very scarce government resources.

#### 13.4.3 Policy on SME's

During the early 1970s the Portuguese government was content to restrict its industrial policies to ones supporting foreign investment and large-scale manufacturing activities - a strategy most clearly evident in the design and funding for the ill-fated growth centre of Sines (Lewis & Williams, 1985b). The return to democracy, the changes in world economic activity and a great sensitivity to the problem of regional imbalance have all combined to lift SME's up the policy agenda since then but a coherent approach to policies 'after Sines' has not emerged. The SIII was a hesitant step in the direction of integration and had the additional merit of a regional element in its calculation. Its better features seem to be reproduced in SERB but there is also the risk that it too will suffer from slow administration. In the absence of other effective measures to stimulate industrial growth a considerable weight of responsibility has fallen on IAPMEI, for it does

deal with much of the sector. Here too the first steps have been hesitant - not least to numerous changes in government - but a clearer picture of its priorities is now emerging. Financial support from the EC (and World Bank) is making it easier to back these priorities with resources, although there is perhaps an undue emphasis on making up for the inefficiencies of the financial system by providing funding rather than improving the management of SME's as a first priority.

Even without a proper evaluation of the effect of IAPMEI's work, there are important gaps that will need to be filled before a comprehensive SME policy is in place. The extent of IAPMEI's operations, even with additional funding, is limited by its small staff numbers and incomplete decentralisation. It seems likely that IAPMEI's clients are drawn from a narrow section of SME founders and managers, some of whom are already on the road to success, so that more attention to swifter procedures and better publicity is needed if the bulk of industrial SME's are to gain from IAPMEI's growing expertise. Likewise, the relaxation of eligibility rules to allow IAPMEI assistance to firms with under 6 employees if they are located in industrial parks is a welcome recognition that the smallest enterprises could benefit from some of the programmes. It does not go far enough though, and should be extended by the replacement of the minimum firm size threshold by a minimum need threshold. IAPMEI has been able to collaborate usefully with other central government bodies like the IEFPP but has not yet become as involved in the wide range of local government initiatives (or those of the island autonomous regions) that have developed following the reallocation of public finance towards the municipalities. Finally, there remains the obvious injustice of a concentration of SME promotional activity on industries, even though services now account for half of Portugal's GDP. The original intentions of the CAPME in 1974 included the development of firms in the transport and tourism sector and the inclusion of business services in IAPMEI's new 'definition' of eligible firms, is a reminder of the interdependence of manufacturing and services nowadays. Yet the only official efforts to improve SME's in the service sector are limited in scope and specific to particular Departments (e.g. Tourism). There is a remarkable opportunity for the

government, in conjunction with the EC, to boost a large section of the economy - and probably help to reduce problems of unemployment as manufacturing firms require less labour - by initiating a programme of 'software' assistance to private service sector SME's. If this could be accompanied by general reductions in interest rates or improvements to the banking system, it might not even be necessary to complement such a programme with financial aid.

### 13.5 Conclusions

No examination of the problems and prospects of Portugal's present economic structure can ignore the questions raised by its SME sector and consideration of the character of future job generation would be meaningless without an understanding of this vast majority of enterprises. On any indicator, Portugal is a country of SME's. Over 99% of firms and over 80% of jobs are to be found among SMEs and many of these are very small indeed, with 73% of firms employing under 10 people. Nor is there any evidence that the importance of SME's is being reduced, as it may have appeared to be during the 1960s and 1970s. If anything, the national evidence suggests that job losses in the large scale firms are being partly compensated for by the cautious expansion of SME's (both legal and illegal). However, a consistent theme of this study has been the extent of regional variation around the national norm and the balance between trends in SME's and those in other organisations needs to be considered location by location. When this is done, there is some scope for optimism about SME's developing in the future not only in littoral regions but also in the interior. It may not be easy to repeat the sort of SME growth that has been recorded in the North-East during the 1970s but the fact that it has happened at all is a boost to those who believe that regional imbalance in Portugal can be reduced.

The extent to which the role of SME's as job generation continues is crucially dependent on Portugal's changing position in the world economy but also on the way in which even larger sums of financial aid and 'software' activities have managed. It is thus clear that the performance of IAPMEI is becoming more important, although there is also likely to be an increase in other local or regional initiatives directed more at job creation than enterprise management. Can the existing organisation of IAPMEI adjust to the changing situation and take on added responsibilities like the SERB? Will the existing policy emphases cope simultaneously with the unemployment problems of the heavy industrial centres and rural interior? Above all, is the government willing to treat SME's - in all sectors - as the key to Portugal's future rather than an encumbrance from the past? The answer in words to

these questions may be 'yes' but it is the answer in actions that will matter far more.



Appendix 1

CAE : Classification of Economic Activities (1973)

<u>Division</u>	<u>Subdivision</u>	<u>Activity</u>
1		AGRICULTURA, SILVICULTURA, CACA E PESCA
	11	Agricultura e caca
	12	Silvicultura e exploração florestal
	13	Pesca
2		INDÚSTRIAS EXTRACTIVAS
	21	Extracção do carvão
	22	Extracção de petroleo bruto e gas natural
	23	Extracção de minérios metalicos
	29	Extracção de minerais não metalicos e rochas industriais
3		INDUSTRIAS TRANSFORMADORAS
	31	Indústrias da alimentação, bebidas e tabaco
	32	Indústrias texteis, do vestuario e do couro
	33	Indústrias da madeira e da cortica
	34	Indústrias do papel; artes graficas e edição de publicações
	35	Indústrias quimicas dos derivados do petroleo e do carvão e dos produtos de borracha e de plastico
	36	Indústrias dos produtos minerais não metalicas, com excepção dos derivados do petroleo bruto e do carvão
	37	Indústrias metalurgicas de base
	38	Fabricação de produtos metalicos e de maquinas, equipamento e material de transporte
	39	Outras indústrias transformadoras



<u>Division</u>	<u>Subdivision</u>	<u>Activity</u>
4		ELECTRICIDADE, GAS E AGUA
	41	Electricidade, gas e vapor
	42	Abastecimento de agua
5		CONSTRUCAO E OBRAS PUBLICAS
	50	Construção e obras publicas
6		COMERCIO POR GROSSO E A RETALHO, RESTAURANTES E HOTELS
	61	* Comercio por grosso
	62	* Comercio a retalho
	63	* Restaurantes e hoteis
7		TRANSPORTES, ARMAZENAGEM E COMUNICACOES
	71	Transportes e armazenagem
	72	Comunicações
8		BANCOS E OUTRAS INSTITUICOES FINANCEIRAS, SEGUROS, OPERACOES SOBRE IMOVEIS E SERVICOS PRESTADOS AS EMPRESAS
	81	Bancos e outras instituições monetarias e financeiras
	82	Seguros



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